

FOR ORDERS AND INFORMATION IN USA & CANADA CALL

**1-800-759-6565**

Order Hours: Mon-Thurs, 9am-7pm / Fri, 9am-6pm / Sat-Closed / Sun, 9:30am-6pm(ET)

WE CAN RECONFIGURE ANY OF OUR COMPUTER SYSTEMS TO YOUR SPECIFICATIONS. ALL SYSTEMS SUPPORT MGA, CGA, VGA, MULTISCAN. ALL SYSTEMS AVAILABLE WITH 20, 30, 40, 60, 80, 100 MB HARD DRIVES. WE CARRY MODEMS, DRIVES, CARDS, MONITORS, MEMORY UPGRADES AND ALL OTHER ACCESSORIES FOR YOUR COMPUTER. CALL FOR INFORMATION.

# MONTGOMERY GRANT

OUTSIDE USA & CANADA CALL **(718)692-0790**

OR WRITE TO:

MONTGOMERY GRANT MAIL ORDER DEPARTMENT  
P.O. BOX 58 BROOKLYN NY, 11230  
FAX #7186923372 / TELEX 422132 MGRANT  
RETAIL OUTLET PENN STATION, MAIN CONCOURSE  
(Beneath Madison Sq. Garden) NYC NY 10001

Store Hrs: MON-THURS, 9-7:30 / FRI, 9-6 / SAT-CLOSED / SUN, 9:30-7

ESTABLISHED 1967  
23 YEARS OF EXPERIENCE

**C=64C**  
**\$119<sup>95</sup>**

INCLUDES:  
1 JOYSTICK  
(A \$19.95 VALUE)

**C=128=D**  
**\$369<sup>95</sup>**

C-128D with Built-in Disk Drive includes 2 FREE Games (a \$39.95 Value)



**COMMODORE C-64-C COLOR PACKAGE**  
C-64-C with Excelsior Plus FSD-2 Disk Drive  
-1 Joystick

**\$239**

**COMMODORE C-64-C COMPLETE PACKAGE**  
-Commodore C-64/C Computer  
-Commodore 1541 Disk Drive  
-Commodore Color Printer  
-12" Monitor  
-Box of 10 Diskettes - 1 Joystick

**\$289**

**COMMODORE C-64-C COLOR PACKAGE**  
-Commodore C-64/C Computer  
-Commodore 1541 Disk Drive  
-Commodore Color Printer  
-Color Monitor  
-Box of 10 Diskettes - 1 Joystick

**\$339**

WE CAN RECONFIGURE ANY COMMODORE PACKAGE TO FIT YOUR NEEDS!

**COMMODORE PERIPHERALS**

1700 RAM Expansion.....\$119.95	C-1670 Modem.....\$79.95	XETEC S. Graphix Jr. Interface.....\$29.95
1764 Expansion Module.....\$129.95	Commodore 1350 Mouse.....\$26.95	XETEC S. Graphix Sr.....\$49.95
CARDCOG-WIZ Interface.....\$49.95	Commodore 1351 Mouse.....\$49.95	XETEC Supergraphix Gold.....\$74.95
C-64C-64C Power Supply.....\$29.95		

**PRINTER SPECIALS**

<b>STAR PRINTERS</b>	<b>HEWLETT-PACKARD</b>	<b>NEC PRINTERS</b>
NX-1000I.....Call	Deskjet.....Call	P2200XE.....Call
NX-1000C.....Call	Call Laserjet IIP.....Call	<b>CANON</b>
NX-1000 Rainbow.....Call	Call Laserjet IIID.....Call	BJ-130E.....Call
NX-1000C Rainbow.....Call	<b>CITIZEN PRINTERS</b>	<b>PANASONIC PRINTERS</b>
Color Option Kit for XR, XB Printers.....Call	GSX 140.....Call	KXP-1180.....Call
<b>OKIDATA PRINTERS</b>	Color Option Kit.....Call	KXP-1124.....Call
Okimate 20.....Call		<b>EPSON PRINTERS</b>
380.....Call		LX-810.....Call

ALL OTHER MODELS IN STOCK / ALL MODELS DISCOUNTED

**COMMODORE PC40 III IBM AT COMPATIBLE**

•80286/12MHz •1MB RAM  
•40MB Hard Drive •1.2MB Floppy Drive • Video Graphics Card • MS DOS 3.3 •GW Basic •12" Monitor

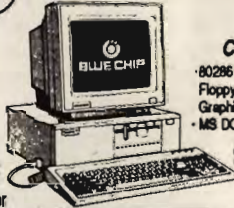
**\$1269**



**BLUE CHIP 286 IBM AT COMPATIBLE**

•80286 Microprocessor •1.2MB Floppy Drive • EGA/CGA/MGA Graphics • Serial/Parallel Ports • MS DOS • GW Basic

**\$569**



**MONITORS**

SAMTRON 452 CGA.....	\$169.95
Blue Chip EGA.....	\$249.95
Blue Chip EGA Monitor & EGA Card.....	\$349.95
Magnavox VGA.....	\$329.95
Magnavox VGA Monitor & VGA Card.....	\$458.95



**EPSON EPSON EQUITY I+ IBM XT COMPATIBLE PACKAGE**

•640K RAM • 4.77-10MHz • One 360K Drive • Serial & Parallel Ports • 12" Monitor • Box of 10 Diskettes • MS DOS 3.3 • GW Basic • Wordprocessing, Database & Spreadsheet Software

**\$479**



**EPSON EPSON EQUITY II+ IBM AT COMPATIBLE**

•640K RAM •12MHz •80286 Microprocessor • 1.2MB Floppy Drive •12" Monitor •MS DOS 3.3 • GW Basic • Wordprocessing, Database & Spreadsheet Software

**\$759**

**AMIGA**

**500 \$519**



**AMIGA 500 w/RGB COLOR MONITOR \$719**

AMIGA 500 With 1084.....\$789

**AMIGA 2000 \$1269**

AMIGA 2000 w/1084 Monitor.....\$1539  
AMIGA 2000 w/40MB H.D.....\$1759

AMIGA 2000 H.D.....\$1879  
AMIGA 2500/30.....\$3229

AMIGA 1010 Disk Drive.....\$129  
A-2088D Bridge Card.....\$489  
A-2286D Bridge Board.....\$1079  
A-501 Memory Expansion.....\$149

ALL OTHER AMIGA PERIPHERALS & HARD DRIVES IN STOCK



**IBM AT**

•512K RAM expandable to 8MB  
•1.2 MB Floppy Drive  
• Wordprocessing, Database & Spreadsheet Software • 12" Monitor

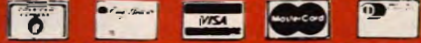
**\$899**

**HARD DRIVES**

ST225 (20 MB).....	\$219
ST225 (20 MB) With CONTROLLER.....	\$239
ST238 (30 MB).....	\$230
ST238 (30 MB) With CONTROLLER.....	\$269
ST251-1 (40 MB).....	\$319
ST277R (60 MB).....	\$369
ST4096 (80 MB).....	\$549

FOR CUSTOMER SERVICE CALL: **(718)692-1148**

CUSTOMER SERVICE HOURS: MON-THURS 9:00am-5:00pm FRI 9:00am-4:30pm



**NO SURCHARGE FOR CREDIT CARD ORDERS**  
WE INVITE CORPORATE AND EDUCATIONAL CUSTOMERS. DISCOUNTS FOR QUANTITY ORDERS / RUSH SERVICE AVAILABLE

**TOLL FREE TECHNICAL SUPPORT**

Certified check, Bank Check, Money Orders, Approved P.O.s, Visa, Mastercard, Amex, Optima, Diners Club, Carte-Blanche, COD's & Wire Transfers accepted. Please call before submitting P.O.s. Non-certified checks must wait 4-6 weeks for clearance. Prices and availability subject to change without notice. Not responsible for typographic errors. Return of defective merchandise must have prior return authorization number or return will not be accepted. IBM XT, AT are registered trademarks of International Business Machine Corp. Please add 5% shipping and handling. Orders over \$1200 are discounted to 3% shipping and handling (Orders over \$3000 2%.) Canadian orders please call for shipping rates. APO/FPO orders please add 10% shipping and handling. All APO/FPO orders are shipped first class priority air. All orders can be shipped air express, call for details DCA#00233

**IF YOU DON'T SEE WHAT YOU WANT-ASK FOR IT. WE CARRY ALL MAJOR BRAND COMPUTERS & PERIPHERALS WE WILL TRY TO BEAT ANY ADVERTISED PRICE IN THIS MAGAZINE**

## BOTTOM LINES

## THE FAXES

keep rolling in—it seems no home office is complete without one of these ubiquitous machines. And for good reason. Faster and cheaper than overnight delivery services, a fax machine can get your important correspondence to the right person at the right time.

In the race to fill this growing market, **Dataquest**, a market research firm based in San Jose, California, named **Sharp Electronics** as the number 1 seller of fax machines in the United States for the third year in a row. Sharp, headquartered in Mahwah, New Jersey, sold 350,000 units last year—good for 21½ percent of the market.

Sharp will try to meet the demands of the plain-paper fax market with its new FO-5200 model, which incorporates laser technology. **Hewlett-Packard** has revamped its own lasers with its introduction of the **LaserJet III**, an eight-pages-per-minute printer that retails for \$2,395. This successor to the venerable LaserJet II uses the company's Resolution Enhancement technology for improved print quality and claims to offer faster graphics printing—a welcome feature for home office users who have fallen asleep waiting for graphics to print from the LaserJet II.

Hewlett-Packard also said it will release **Macintosh** versions of the LaserJet III, IID, and IIP printers sometime in the second quarter of 1990. The firm will continue to take orders for the LaserJet II through September 1990.

No matter what kind of computer you own, if you want to make money with it at home, **The American Institute of Computer Technology** has

published a short, informative book by John R. Mortz called **Make Money Moonlighting**.

According to the U.S. Department of Labor, Mortz says, 20 percent of American workers earn money moonlighting, and those who use a computer earn the best wages. The author goes on to proclaim that the **best 11 areas** for earning money with your computer are word processing, desktop publishing, shareware development, computer consulting, computer training, computer repair, computer services broker, computer seminars, bulletin board systems, computer equipment rentals, and employment agencies. For more information about this book, write the Institute at 30 North Raymond Avenue, Suite 714, P.O. Box 2615, Pasadena, California 91102-2615, or call (818) 793-8429.

A few other "bests" were named recently at the Software Publishers Association **Excellence in Software Awards**, held March 27 in San Diego, California. Named as Best Personal



The LaserJet III offers improved print quality and speed at a lower price.

Productivity/Creativity program, Intuit's **Quicken 3.0** furthered its excellent reputation. The award for Best Business Application: Numeric or Data Orientation went to Borland International's **Quattro Pro**, while Hewlett-Packard's graphical operating environment, **NewWave**, took the Best Business Application: Graphic or Display Orientation honor.

If you've already set up your home office, you may be missing the

camaraderie that comes with working the old 9 to 5. Well, **stop fretting** because you can choose from two organizations designed for home-based entrepreneurs: the American Home Business Association (397 Post Road, Darien, Connecticut 06820) and the National Association for the Cottage Industry (P.O. Box 14850, Chicago, Illinois 60614). So pick up a pencil and **join the club**.

**On the subject of sharing**, how would you like to link a couple of PCs within a network for less than \$100? Networks don't immediately leap to mind when you think of a home office. But if you're one of those people out there who has bought an upgraded PC and is wondering what you'll do with your old one, here's an answer.

The Access Easy Network gives you everything you need to make information and peripherals (like a laser printer) available to a second PC. The two computers can be up to 20 feet apart (optional cables can increase the distance to 200 feet). Simply install the two networking cards (one in each computer) and the software, then run the cable, and—**bang!**—you're off and running. **No more sneakernet.**

For information, contact Exzel, 7721 East Gray Road, Suite 102, Scottsdale, Arizona 85260; (800) 991-9775.

You can share more than a printer if you **log on** to the Home Office/Small Business Roundtable on the GENie online information service. Topics ranging from tax advice to setting fees are discussed in free-ranging electronic conversations that make you feel like part of a larger group—and you should. The U.S. Chamber of Commerce counts **more than 10 million businesses** that list a home address with the IRS.

If you have your own **information to share** with **COMPUTE!'s** Home Office Direct readers, I'd like to hear from you. Drop a line to **COMPUTE!** Feedback—Home Office Direct, P.O. Box 5406, Greensboro, North Carolina 27403. □

# LOWEST PRICES! FAST DELIVERY!

**Guaranteed**

**\$1.75** or  
per disk 10 or more  
**\$2.25**  
per disk less than 10



Unconditional money-back guarantee! ■ Free catalog of over 200 programs with every order or by request ■ All orders shipped same day ■ Airborne Express overnight service only \$6.00

## THIS MONTH'S SPECIALS

- Am-Tax, 1989 Tax Year (3989)**—Prepare your 1989 tax returns easily and quickly. 1040 and all schedules A-SE.
- Personal Budget Tools (3967)**—Great way to plan your household budget. Powerful and easy to use.

## BUSINESS/HOME

- Express Check 3.07 (1117)**—A great program to manage your checking accounts! Even prints checks!
- Home Inventory 3.4 (3137)**—Helps you keep track of everything you own. Great for insurance.
- Painless Accounting 4.0 (3 disks) (1120)**—Easy to use and loaded with features. General Ledger, Accounts Receivable/Payable, invoicing, check printing and more. (HD)

## DATABASE/SPREADSHEET/ WORD PROCESSING

- PC-Calc+ (3 disks) (3410)**—A very powerful spreadsheet.
- PC-File:db (3 disks) (1330)**—An excellent dBase compatible data base program. Very powerful! (HD)
- PC-Stylist 1.2 (3917)**—Improve your writing style.
- PC-Write 3.02 (3 disks) (3820)**—One of the best word processors available anywhere. Easy to use and loaded with features including spell checker.

## EDUCATION

- Amy's First Primer (1717)**—Six different learning programs for children ages 4-8. (CGA)
- Computer/DOS Tutor 4.4 (1415)**—Learn how to use your computer and DOS easily with this educational program. A must for anybody trying to learn about computers!
- The DOS Learning System (1417)**—Learn how to use DOS with this great tutorial. All versions of DOS 2.0-3.3.
- Funnels and Buckets (1727)**—A fun way to teach children basic math skills! (CGA)
- Lotus Learning System (2 disks) (1420)**—Learn Lotus 2.0 easily and quickly.
- Play 'n' Learn 2.03 (1735)**—A collection of six programs for children 18 months to 4 years. (CGA)
- Typing Teacher (1425)**—This disk contains 3 program designed to improve the speed and accuracy of your typing!
- World 2.93 (1849)**—The ultimate globe! Learn about cities, countries with this computerized globe. (CGA)

## GAMES

- Arcade Games 1 (1811)**—Pac-man (3 versions!), Hopper, Space Invaders, Janitor Joe and others. (CGA)
- Arcade Games 2 (1812)**—Q-Bert, Donkey Kong, Breakout, Beast and others. (CGA)
- Arcade Games 3 (1813)**—Striker, Space War & more. (CGA)
- Ed's Chess (2425)**—The best chess game available anywhere. (It beat Chessmaster 2000)
- EGA Cuning Football 2.3 (1927)**—The best football simulation anywhere. EGA or VGA Graphics required.
- EGA Games 1 (1911)**—A collection of the best EGA games including EGARoids, Reflex, Aldo, Flees and others. EGA or VGA Graphics required.

- Graphic-Less Games (2111)**—A collection of games that don't require color or graphics. (Will work on ANY system!)
- Great Adventures 1 (2531)**—Five exciting games.
- Kids' Games (2317)**—Fun for the under-12 set.
- Master the Market (2435)**—3 great stock market simulators!
- Mind Puzzles (2439)**—3 programs that challenge the mind! (CGA)
- Miramar Flight Simulator (2319)**—Go to Top Gun flight school and pilot an F-18 into combat. (CGA)
- Monopoly (2445)**—A great rendition of the classic game. Great color and sound! (CGA)
- PC-Pro-Golf 4.2 (2327)**—Tee it up, and play 18 holes! (CGA)
- Pinball 1 (1821)**—Five great pinball games. (CGA)
- Strategy Games (2461)**—Risk, Othello, Chess, Nyet (Tetris clone), and others. (CGA)
- Star Trek Games (2341)**—Three games: an arcade game, standard Star Trek game, and a trivia game.

## MISCELLANEOUS

- Banner & Sign Makers (3215)**—Make banners or signs for any occasion. Works with any printer.
- Brother's Keeper 4.3 (2 disks) (3120)**—Excellent, full-featured genealogy program that's easy to use.
- Calendar Maker (3129)**—Create calendars for any month or year.
- Formgen 3.31 (3227)**—A very versatile form generator. Make any kind of form for business or home on any printer!
- Kwikstat 2.0 (2 disks) (3130)**—A complete, easy-to-use statistics package.
- PC-Key-Draw 3.65 (4 disks) (2780)**—An exceptionally powerful graphics program. Comes with a large collection of ready-made graphics. (CGA) (HD)
- Pianoman 4.0 (3147)**—Create and play music on your PC! Lots of fun!
- SpeedRead (1845)**—Learn to speed read!
- Willkit (3157)**—Prepare a will that is valid in all 50 states.

## UTILITIES

- Automenu 4.5 (3515)**—Latest version of the most popular menuing program of all time!
- Backup Whiz 2.1 (3517)**—Back up your hard disk quickly and safely with this easy-to-use program.
- Best DOS Utilities (3525)**—Essential utilities for DOS. File finders, listers and numerous other handy utilities that will save you time. Very easy to use!
- Epson Utilities (2 disks) (3210)**—A collection of utilities for Epson and Epson-compatible printers.
- Mr. Label 4.1 (3235)**—Powerful & versatile label maker.
- PC-Deskteam 2.01 (3549)**—A Sidekick-like program with even more features!
- Professional Master Key (3555)**—A collection of utilities like Norton's. Recover erased files easily!
- Vaccines and Virus Killers (3627)**—A collection of utilities designed to protect your system from viruses! This disk includes Flu-Shot+ 1.52.

## WORDPERFECT 5.0

- PC-Draft II (2 disks) (3760)**—Create clip art graphic files (in .WPG format) for WP 5.0. Includes dozens of images to help get you started. (CGA) (HD)
- WordPerfect 5.0 Art/Graphics (2 disks) (3710)**—Dozens of clipart images and clip art viewer.
- WordPerfect 5.0 Learning System (2 disks) (3730)**—Learn WP 5.0 easily and quickly with this great tutorial (WP 5.0 is NOT required).
- WordPerfect 5.0 Macros (2 disks) (3720)**—Hundreds of helpful macros for WP 5.0.
- WordPerfect 5.0 Menu/Mice (2 disks) (3740)**—Menu systems, mouse drivers.
- WordPerfect 5.0 Tools (2 disks) (3750)**—A collection of 17+ utilities for WP 5.0.

(CGA) Requires Color Graphic Adapter (HD) Requires Hard Disk  
Some of the programs we sell are "shareware." Shareware programs are copyrighted and require additional payment to the authors if found useful.

**Order Toll Free  
1-800-876-3475**

**Information: 503-776-5777  
Fax: 503-773-7803**

Name \_\_\_\_\_  
Business/Company (if applicable) \_\_\_\_\_  
Address \_\_\_\_\_  
City/State/Zip \_\_\_\_\_

Phone \_\_\_\_\_  
Method of Payment:  Check/Money Order  Visa/MasterCard  COD  
All checks must be payable in US funds. We cannot accept Eurochecks.

Card No. \_\_\_\_\_ Exp. Date \_\_\_\_\_ Signature \_\_\_\_\_

Disk size:  5 1/4"  3 1/2" (add \$1 per disk if you require 3 1/2")  
No. Disks \_\_\_\_\_ x \$ \_\_\_\_\_ = \$ \_\_\_\_\_  
 Shipping \$ **\$3.00**  
 Airborne Express, Overnight (add \$6) \$ \_\_\_\_\_  
 UPS 2nd Day Air (add \$4) \$ \_\_\_\_\_  
 COD (add \$4) \$ \_\_\_\_\_  
 Foreign (add \$4) \$ \_\_\_\_\_  
TOTAL ORDER: \$ \_\_\_\_\_



**Reasonable  
Solutions**

2101 West Main, Medford, Oregon 97501



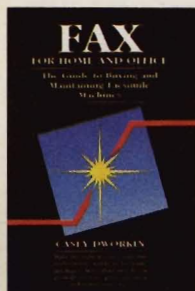
Circle Reader Service Number 189  
[www.commodore.ca](http://www.commodore.ca)

CM6P/90

# BUILD YOUR OFFICE WITH COMPUTERS

# BUILD YOUR BUSINESS WITH COMPUTE!

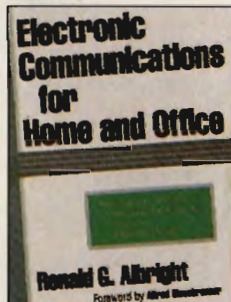
Start building with this collection of books that deliver the same quality and dependability you find in **COMPUTE!**



### Fax for Home and Office: The Guide to Buying and Maintaining Facsimile Machines

by Casey Dworkin  
\$12.95

This easy-to-use guide is geared toward first-time buyers of a fax machine who typically purchase the fax for a home office or small- to medium-sized business. 128pp.



### Electronic Communications for Home and Office

by Ronald G. Albright  
Foreword by Alfred Glossbrenner  
\$16.95

The first source book which shows how home businesses and small companies can use voice mail, fax, databases, electronic mailboxes, and other electronic innovations to enhance productivity. 270pp.



### Turn Your Ideas into Money

by Jeff Spira  
\$12.95

This step-by-step guide tells you how to sell your ideas as developed products without lengthy patent searches and expensive lawyers. A successful developer of new products, Spira explodes some commonly held myths about patent protection and explains the steps through which all successful new-product development must proceed. 160pp.

### Maintaining, Upgrading and Troubleshooting IBM PCs, Compatibles, and PS/2 Personal Computers

by Mark Minasi  
\$18.95

For users of IBM PCs, compatibles, and PS/2 computers, this resource explains how to avoid costly repairs, perform minor repairs, install peripherals, and really get to know your personal computer. Tested by hundreds of hours of rigorous classroom use, this book is the maintenance and repair manual every computer user needs. 320pp.

### Your Home Business Can Make Dollars and Sense

by Jo Frohbieter-Mueller  
Foreword by Dr. Dale Jon Hockstra  
\$16.95

Written for the beginner, this book leads you through the steps of setting up a business at home, investigating zoning and financing, basic business procedures, and even how to take advantage of tax breaks for home business owners. It includes extensive references and a list of over 200 occupations suitable for at-home work. 256pp.

Order these top titles from **COMPUTE!'s Bookshelf** and start building your business. Mail the order form to the right to **COMPUTE!'s Bookshelf, P.O. Box 5188, Greensboro, North Carolina 27403.**

Please send me the titles checked below. I've enclosed \$2.00 shipping and handling per book and sales tax\* where applicable.

- |                                                                                                                                             |                                                                                                                 |
|---------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|
| <input type="checkbox"/> <b>Electronic Communications for Home and Office (7993) \$16.95</b>                                                | <input type="checkbox"/> <b>Turn Your Ideas into Money (8008) \$12.95</b>                                       |
| <input type="checkbox"/> <b>Fax for Home and Office: The Guide to Buying and Maintaining Facsimile Machines (7990) \$12.95</b>              | <input type="checkbox"/> <b>Your Home Business Can Make Dollars and Sense (7995) \$16.95</b>                    |
| <input type="checkbox"/> <b>Maintaining, Upgrading and Troubleshooting IBM PCs, Compatibles, and PS/2 Personal Computers (2303) \$18.95</b> | <input type="checkbox"/> Check or money order <input type="checkbox"/> MasterCard <input type="checkbox"/> VISA |

Subtotal \_\_\_\_\_  
\*Sales tax (NC, NY, and PA residents please add appropriate sales tax)  
Shipping and handling (\$2.00 per book)  
Total enclosed \_\_\_\_\_

Signature \_\_\_\_\_  
(Required for Credit Card Orders)

Acct. No. \_\_\_\_\_ Exp. Date \_\_\_\_\_

Name \_\_\_\_\_

Street Address \_\_\_\_\_  
(No P.O. Boxes, Please)

City \_\_\_\_\_

State \_\_\_\_\_ ZIP \_\_\_\_\_

Daytime Phone No. \_\_\_\_\_

Mail to  
**COMPUTE!'s Bookshelf**  
P.O. Box 5188  
Greensboro, NC 27403

NC, NY, and PA residents please add appropriate sales tax. All orders must be paid in U.S. funds drawn on a U.S. bank. Orders will be shipped via UPS Ground Service. Please allow 4-6 weeks for delivery.

[www.commodore.ca](http://www.commodore.ca)



# CONVERSATIONS

K E I T H F E R R E L L

**T**he year's most compelling computer buzzword—*multimedia*—has hardware and software companies scrambling to find applications, develop products, generate excitement, and even define the term. No company is more engaged in these activities than IBM. And few people are more involved than IBM's Peter Blakeney, manager of Market Support—MultiMedia Solutions.

"Our definition of multimedia is the incorporation of still image, sound, motion video, graphics and animation, and touch into a personal or desktop system," Blakeney says.

"There is a broader definition [of touch]," Blakeney says, "which encompasses new input mechanisms other than a keyboard. It might be a stylus on a pad or gestures that modify action on the screen, as well as spoken voice. In general, *touch* means new methods of interacting with the computer."

Blakeney sees several areas ripe for multimedia impact. "One [area] is training," he says. "There is an enormous requirement across the world to retrain the work force. The training ranges all the way from basic skills and remediation, for workers who are not getting an appropriate education coming out of the K-12 environment, to [training for] those who are being retrained for new skills and also [for] management employees."

"The second area," Blakeney says, "is the educational institutions themselves, K-12 and higher. Here, multimedia uses the techniques of motion video and sound to enhance the traditional text, and even graphics presentation causes the [educational] efficacy to explode exponentially."

Such a multimedia explosion may be necessary in our classrooms, Blakeney says. "The children who are coming up through our schools today deal in an entirely different grammatical context than you and I did—and

it's caused by television, radio, and music. There's a new grammar, and the grammar that they're used to now is video images: MTV."

Multimedia can also save schools money. "Chemistry is an example," Blakeney says. "To be able to do experiments interactively without caustic chemicals, very expensive chemicals, or environmentally damaging chemicals can yield great savings."

Multimedia devices will also appear outside the classroom, in the public information arena. "This involves the placement of interactive multimedia displays in kiosks or in accessible locations in malls, lobbies of office buildings, and cafeterias where either the general public or a specific audience can touch the screen or access information easily, without being computer literate or application literate," Blakeney explains.

In Tampa, Florida, a pilot pro-

gram involving public kiosks allows citizens to find out where to get a marriage license, how to lodge a complaint against city hall, and how to gain access to other services.

Retail business will also feel the impact of multimedia. "The fourth arena is what we call *merchandising*," Blakeney says. "The placement of kiosks on the retail floor will be used to supplement as well as replace employees in merchandising products."

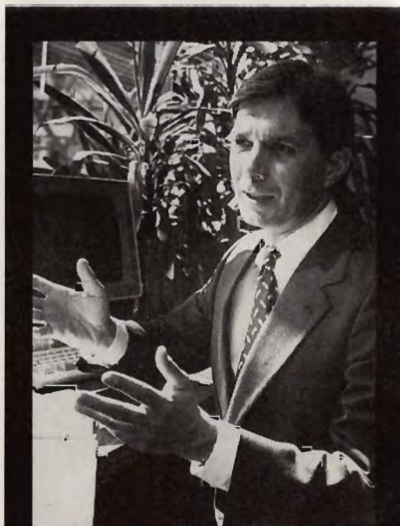
Multimedia's greatest impact may come in the way we use our computers. "The fifth arena," Blakeney says, "consists of masking complexity, increasing ease of [computer] use. You use icons, still images, and touch to mask the complexity of using the computer. The user does not have to understand the nomenclature of the computer in order to navigate through the computer."

Blakeney also believes that multimedia will become a home technology, but that it may take awhile.

It's in our schools, however, where multimedia's impact may exert the largest long-term influence. Blakeney sees computers and multimedia at the heart of the transformation that will soon sweep through our educational institutions.

"Everybody who's 35 years old or older grew up in what was essentially an Industrial Age educational system—a system that provided education by presentation, recitation, and regurgitation of information," he says. "That doesn't teach people to correlate or analyze information; it teaches students to store facts and repeat them."

Those days, Blakeney argues, are gone. "The new paradigm is that we need to be able to teach children to correlate, analyze, and draw conclusions. It's an *informational* education system as opposed to an industrial education system. That's what multimedia does. It allows us to present information in a variety of ways. The user can explore the information, as opposed to simply receiving it, repeating and regurgitating it." □



PETER BLAKENEY

THERE'S A NEW  
GRAMMAR, AND  
THE GRAMMAR IS  
VIDEO IMAGES.

# Join Our Reader

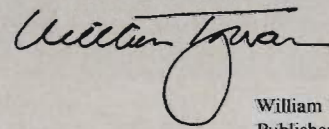
# Research Panel!

**Open House . . .** and you're invited to participate in a new and extremely important program for *COMPUTE!* magazine readers. In order to fully understand your opinions, attitudes and reading preferences, we are establishing a Reader Research Panel.

Scientifically selected samples of our panel members will receive up to four survey mailings over the next 12 months. Survey results will help us to better design *COMPUTE!* magazine with your interests in mind.

Please apply to participate in our Reader Research Panel today by completing the attached application form and mailing it back to Data Processing Firm, Media Research Associates, no later than June 30, 1990. All statistical information must be provided in order to select a panel representative of our entire readership. All information will remain confidential.

If selected, you will be contacted accordingly. Thank you for your cooperation.



William Tynan  
Publisher

**RSVP to: Media Research Associates**  
230 Park Avenue, Suite 1567, New York, NY 10169

Application Form *COMPUTE!* Magazine Reader Research Panel  
**ALL INFORMATION WILL REMAIN CONFIDENTIAL.**

- |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>1. Are you Male <input type="checkbox"/></p> <p>Female <input type="checkbox"/></p> <p>2. What is your marital status?</p> <p>Married <input type="checkbox"/></p> <p>Single <input type="checkbox"/></p> <p>Widowed <input type="checkbox"/></p> <p>Separated or Divorced <input type="checkbox"/></p> <p>3. What is your age?</p> <p>Under 25 <input type="checkbox"/></p> <p>25-29 <input type="checkbox"/></p> <p>30-34 <input type="checkbox"/></p> <p>35-39 <input type="checkbox"/></p> <p>40-44 <input type="checkbox"/></p> <p>45-49 <input type="checkbox"/></p> <p>50-54 <input type="checkbox"/></p> <p>55-59 <input type="checkbox"/></p> <p>60-64 <input type="checkbox"/></p> <p>65+ <input type="checkbox"/></p> <p>4. What was your total household income (from all sources) in 1989?</p> <p>Under \$25,000 <input type="checkbox"/></p> <p>\$25,000-\$34,999 <input type="checkbox"/></p> | <p>\$35,000-\$39,999 <input type="checkbox"/></p> <p>\$40,000-\$49,999 <input type="checkbox"/></p> <p>\$50,000-\$64,999 <input type="checkbox"/></p> <p>\$65,000-\$74,999 <input type="checkbox"/></p> <p>\$75,000-\$99,999 <input type="checkbox"/></p> <p>\$100,000+ <input type="checkbox"/></p> <p>5. What is the highest level of education that you have attained to date?</p> <p>Attended High School <input type="checkbox"/></p> <p>Graduated High School <input type="checkbox"/></p> <p>Attended College <input type="checkbox"/></p> <p>Graduated College <input type="checkbox"/></p> <p>Post-Graduate Study <input type="checkbox"/></p> <p>6. What group below best describes your occupation?</p> <p>Professional/Technical <input type="checkbox"/></p> <p>Manager/Administrator <input type="checkbox"/></p> <p>Clerical/Sales <input type="checkbox"/></p> <p>Craftsman/Foreman <input type="checkbox"/></p> <p>Other Employment <input type="checkbox"/></p> <p>Student <input type="checkbox"/></p> <p>Not Employed <input type="checkbox"/></p> | <p>7. How did you acquire this copy of <i>COMPUTE!</i>?</p> <p>(Please check only one answer.)</p> <p>I subscribe and received it through the mail <input type="checkbox"/></p> <p>Another member of this household subscribes and received it through the mail <input type="checkbox"/></p> <p>I bought it at a grocery, newsstand, drugstore, etc. <input type="checkbox"/></p> <p>Another member of this household bought it at a grocery, newsstand, drugstore, etc. <input type="checkbox"/></p> <p>Other (specify) <input type="checkbox"/></p> <p>Name _____</p> <p>Address _____</p> <p>Apt. # _____ Phone _____</p> <p>City _____</p> <p>State _____ ZIP _____</p> |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

**COMPUTE!**

THE CHOICE OF HOME PC ENTHUSIASTS SINCE 1979  
[www.commodore.ca](http://www.commodore.ca)

# Enhance your Tandy !!!

We also carry a full line of upgrades for your Panasonic FX series, IBM and compatibles.

## DOS 4.01

The Latest for less, supports larger than 32 meg partitions, and comes with DOS SHELL.  
5.25" version . . . 89.00  
3.5" version . . . 99.00

## EX / HX Hard Drive Systems

Complete, plug-n-play! 15 month warranty!

21 Megabyte . . . . 389.00  
32 Megabyte . . . . 439.00  
42 Megabyte . . . . 489.00  
68 Megabyte . . . . 589.00

## EX/HX Memory Upgrades

Raise your systems memory the cost effective way with DCS memory upgrades. 1 yr warranty

Board 128K, adds 2 slots . . 149.00  
Board w/384k and 2 slots. . 189.00

## Memory Upgrade Chip Sets

Use these chip sets to upgrade your system memory to 640K! At these prices you can't afford not to . . .

CS8150 for 1000SX, EX, HX . . . . 59.00  
CS8260 for 1000SL . . . . . 59.00  
CS8370 for 1000TX, TL . . . . . 49.00  
CS8480 for 3000NL . . . . . 59.00

## Floppy Drives

Add a floppy drive to your existing system. All drives are internal and come complete with mounting hardware and cables. SAVE! SAVE!

360K 5.25" . . . . . 79.00  
1.2 M 5.25" . . . . . 149.00  
720K 3.5" . . . . . 99.00  
1.44 M 3.5" . . . . . 149.00

## VGA Combinations

Go for the gold in graphics with this VGA monitor and card combo! 640 x 480 resolution and 256 colors.

VGA COMBO . . . . 489.00

## Smart Mouse

This serial mouse comes complete with Dr. Halo III drawing software and a mouse pad. Incredible deal at

ALL Models . . . . . 49.00

## EMS Boards

Upgrade to Expanded Memory on your Tandy or Panasonic FX series computer. Micro Mainframe 5150 board. Holds up to 2 megabytes of memory.

Board ρK . . . . . 159.00  
Board w/256K . . . . 199.00  
Board w/512K . . . . 249.00  
Board w/1 MEG . . . . 309.00  
Board w/2 MEG . . . . 389.00

Prices include 150ns chips, add \$20 for 120ns chips needed on some machines.

## HARD CARDS

Plug-n-Play, Tandy/IBM switchable and works on 1000, A, SX, TX, SL, TL, TL/2, SL/2, 3000, 1200. 15 month warranty!

21 Megabyte . . . . . 279.00  
32 Megabyte . . . . . 299.00  
42 Megabyte . . . . . 389.00  
68 Megabyte . . . . . 589.00

## Modems

All modems are Hayes command set compatible, auto answer, auto dial, and auto baud detect.

2400 B Internal . . . 79.00  
1200 B Internal . . . 59.00  
2400 B External . . 129.00  
1200 B External . . 89.00

## IDE Drives for TL/2

New technology at a reasonable price! Does not use a slot, plugs into the existing TL/2 IDE interface connection.

20 MEG . . . . . 289.00  
40 MEG . . . . . 339.00

## EX / HX External Floppies

Add an external floppy drive to your EX or HX and move into the world of multi-disk systems.

360K, 5.25" drive complete . . 129.00  
720K, 3.5" drive complete . . 129.00

## Speed Up Solutions

These products were designed to speed up your computer creating more raw computing power. Some involve clock speed changes.

V20 for 1000, A, SX, IBM . . 29.00  
V30 for 1000SL, FX, ATT. . 39.00  
PC Sprint . . . . . 75.00  
PC Sprint IBM XT clones. . 85.00  
PC Sprint Compaq . . . . 85.00

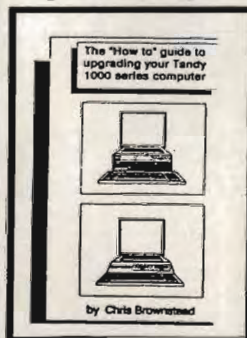
The PC Sprint boards will give a normal XT user currently running at 4.77mHz a 100% increase in processing power.

## Zucker Memory Boards

This board will increase the memory on a original Tandy 1000 or 1000A from 128K to 640K on one board using only one slot. Last Chance! Buy Now!

Tandy 1000, A . . . . . 279.00  
Tandy 1200, IBM XT . . . . 199.00

## The "How to" guide to upgrading your Tandy 1000 series computer.



This comprehensive guide is a must for any Tandy user who wants more from their 1000 series computer. Covers all models of the 1000 from the original to the EX/HX through the TL. Read about upgrades that you can make before you buy. What makes Tandy so different from the normal XT? There are sections for speed, video, memory, sound, and software as well as many more! Buy now and save . . . 19.95 add \$3 shipping . . .

## Performance Software

FAST disk cache improve access time . . 75.00  
SPINRITE disk low level formatter . . . . . 75.00  
TURBOEMS EMS simulation software . . . 75.00

**DCS Industries, Inc.**  
141 Columbus Rd.  
Athens, Ohio 45701

**1-800-537-3539**

LOCAL: 1-614-594-4180 FAX: 1-614-592-1527

TOLL FREE TECHNICAL SUPPORT!  
DEALER ORDERS WELCOME!  
NO SURCHARGE FOR VISA or MASTERCARD!

Tandy is a registered trademark of Tandy Corp.  
IBM is a registered trademark of International Business Machines  
Prices and availability are subject to change without notice!

# CLASSIFIED

## NEWSLETTERS

### ComputIPS

#### Tips - Tricks - Techniques

Wordprocessing, DOS, Databases  
D.T.P., Spreadsheets, Q&A'S

#### First Newsletter FREE

Send \$2 9/h to Dyna-Comp Computer Services  
1960 Kapiolani, Ste. 113-586, Honolulu, HI. 96826



## SOFTWARE

**TRY BEFORE YOU BUY:** C64, 128, AMIGA. Games utilities, educ'n'l, classics, new releases, 100's of titles. Free brochure. Specify computer. RENT-A-DISC, Frederick Bldg. #221, Hunt'n, WV 25701 (304) 529-3232

**Professional HANDICAPPING SOFTWARE** for Thoroughbred, Greyhound, Harness, Quarterhorse, Pace. Accurate to 82%. \$49.95 each. Demo/Manual \$7.00. IBM, Apple, C64/128. FREE Catalog. ADPA, Box 7990-CP040, Fremont CA 94537 CALL: (415) 795-0504

**BASEBALL FANS!!!** Pursue the Pennant PC BB game for IBMs with 256K. Send \$10 deposit for Demo Version to: PTP, Box 38364-C, Greensboro, NC 27438. Or call 1-(800)765-4PTP for info.

IBM - COMMODORE 64 & 128 - AMIGA. 1000's of PD/Shareware programs on 100's of disks. Free listing or \$1 for large descriptive catalog (specify computer). DISKS O'PLENTY INC., 7958 Pines Blvd., Suite 270B, Pembroke Pines, FL 33024

**YOUR IBM & COMP SHAREWARE DISTRIBUTOR.** Over 800 in library-5 1/4" & 3 1/2". Send 50¢ US stamp for winter catlg. T&Z Software, PO Box 780217-C, Sebastian, FL 32978-0217.

**FREE CATALOG FOR COMMERCIAL SOFTWARE** 30-60% off. Amiga, Apple, Commodore IBM, MacIntosh, Atari. DISK-COUNT SOFTWARE, Box 3, Carteret, NJ 07008. (800) 448-6658

**UNIQUE FORECASTING SOFTWARE FOR STOCKS AND FUTURES USES POWERFUL LEADING INDICATORS.** TRIAL \$9(+6 S&H). SASE TO: RMC POB 60842, SUNNYVALE, CA 94088. Ph: (408)746-0477

## COMPUTE! Classified is a low-cost way to tell over 225,000 microcomputer owners about your product or service.

**Rates:** \$25 per line, minimum of four lines. Any or all of the first line set in capital letters at no charge. Add \$15 per line for boldface words, or \$50 for the entire ad set in boldface (any number of lines.) Inquire about display rates.

**Terms:** Prepayment is required. Check, money order, American Express, Visa, or MasterCard is accepted. Make checks payable to COMPUTE! Publications.

**Form:** Ads are subject to publisher's approval and must be either typed or legibly printed. One line equals 40 letters and spaces between words. Please underline words to be set in boldface.

**General Information:** Advertisers using post office box numbers in their ads must supply permanent address and telephone numbers. Ad will appear in next available issue after receipt.

**Closing:** 10th of the third month preceding cover date (e.g., June issue closes March 10th). Send order and remittance to: Kathleen Ingram, Classified Manager, COMPUTE!, P.O. Box 5406, Greensboro, NC 27403. To place an ad by phone, call Kathleen Ingram at (919) 275-9809.

**Notice:** COMPUTE! Publications cannot be responsible for offers or claims of advertisers, but will attempt to screen out misleading or questionable copy.

**Classified Display Rates:** Classified display ads measure 2 1/4" wide and are priced according to height. 1" = \$250; 1 1/2" = \$375; 2" = \$500; 3" = \$600; (\$100 for each additional inch, e.g. 4" = \$700, etc.) Preferred supplied material is Velox or PMT.

**FREE PUBLIC DOMAIN & SHAREWARE.** IBM or C64 (SPECIFY). Send \$2 for complete catalog and Sample disk (refundable). RVH PUBLICATIONS 4291 Holland Rd. Suite 562-A VA Beach, VA 23452. ASP Vendor

**WIN - HANDICAP SPORTS WITH YOUR PC** Send for free info. or \$3 for 5 1/4" IBM compatible demo disk to RUTECH SOFTWARE, 6010 W. Cheyenne #15-945, LV, NV 89108

**COMPUTER-AIDED-LIVING,** a new detailed guide shows how to use your computer to control lights and appliances, pay bills, obtain free software, much more! Send \$9.95 (ppd) to: DANIEL SYSTEMS, 36437 Spruce, Newark, CA 94560

IBM PD & SHAREWARE disk catalog 5 1/4" \$1, 3 1/2" \$2, refundable with first order. ASP APPROVED VENDOR, Finto Software, Dept M, Rt 2 Box 44, Rosebud, TX 76570

**GREATER MIDWEST MICRO SOURCE - Your BEST SOURCE** of IBM Comp Shareware & Supplies for FREE Catalog write to GMMMS Dept 101, 2200 180th Ave NW, Andover, MN 55304

**FREE CATALOG—OVER 1000 PUBLIC DOMAIN Programs** of IBM PC and Compatibles. Buy or Rent. Low as \$1.00/disk. Write to Softshoppe, POB 709, Ann Arbor, MI 48106

**SHAREWARE & PUBLIC DOMAIN SOFTWARE** IBM (\$1) Apple (\$3) catalogs available. Catalog fees credited on 1st disk order. B&M Sales, POB 458, Wabash IN 46992

**GET THE MOST, PAY THE LEAST** in IBM & Comp PD/Shareware. Send \$1 for catalog plus free disk of games & utilities-featuring Nyet, a Tetris clone. Specify 5 1/4" or 3 1/2". CJWare, POB 2299, Champaign, IL 61825

## BUSINESS OPPORTUNITIES

**HOW TO MAKE THOUSANDS OF \$\$\$\$** with your own part-time HOME COMPUTER BUSINESS. Will teach & help you setup. Send \$1 for INFO, Box 1442-A1, Orange Park, FL 32067

## EARN \$400/MONTH FROM YOUR HOME WITH A COMPUTER

Start part-time with potential earnings of \$10,000 or more per month. You do not need to own or know how to run a company—we will provide free training. If you purchase our software we will give you a computer and printer. Complete financing available. To receive a FREE 2-hour Cassette and Color Literature. Call Computer Business Services 1-800-343-8014. X303

## BOOKS

**DISCOUNT COMPUTER BOOKS.** Thousands of titles available. Please call or write for your free catalog today. **BOOKWARE** 147 Campville Rd, Northfield CT 06778 (203) 283-6973 (800) 288-5662

## FREELANCERS

**PC PROGRAMMERS \* TECH WRITERS** Do you have a package worth marketing? Are you ready to start your own freelance career? For more info send \$1. Acer Enterprises, PO Box 751712, Memphis, TN 38175

## HARDWARE

**MARYMAC INDUSTRIES, INC.**

**Our 13th year of DISCOUNTS**

**COMPUTERS FAX CELLULAR PHONES**

Tandy Radio Shack SCO

Fgt. Prepaid. Save Tax  
Toll Free 800-231-3680

22511 Katy Fwy., Katy (Houston) TX 77450  
1-713-392-0747 FAX: (713)574-4567

## SPANISH SOFTWARE

**SPANISH SOFTWARE FOR WRITING AND EDUCATION**

AT LAST! FOR STUDENTS, WRITERS & TEACHERS.

**ARANDU ESCRITOR CREATIVO (2 Vol.)**  
Elaborate your ideas into a meaningful composition. An efficient tool for critical thinking, paired with an easy-to-use word processor in Spanish. **\$179.95**

The following collections were developed by teachers and programmers with years of experience in educational software:

**SPANISH LANGUAGE (2 Vol.)** **\$44.95**  
**MATH (3 Vol.)** **\$64.95**  
**MATH & PHYSICS SIMULATION (5 Vol.)** **\$219.95**

30-Day Money-Back Guarantee

**ARANDU SOFT**  
Tel: 800-627-3764 Fax: (305) 591-1940  
7224 NW 31 St., Miami, FL 33122

## EDUCATION

**B.Sc. & M.S. in COMPUTER SCIENCE**

The American Institute for Computer Sciences offers an in-depth correspondence program to earn your Bachelor of Science and Master of Science degrees in Computer Science at home. BSc. subjects covered are: MS/DOS, BASIC, PASCAL, C, Data File Processing, Data Structures & Operating systems. MS program includes subjects in Software Engineering and Artificial Intelligence.

**AMERICAN INST. for COMPUTER SCIENCES**  
1704-CP 11th Avenue South  
Birmingham, AL 35205  
CALL (205) 933-0339





# SAVE UP TO 70%

CALL FOR YOUR FREE CATALOG TODAY!

1-800-BUY-WISE EXT. 51

Since 1979

WE CARRY 1000s OF  
HARDWARE, SOFTWARE  
& ACCESSORY ITEMS  
IN STOCK!

## LOWEST PRICED DISKETTES ANYWHERE!

PREMIUM QUALITY

5 1/4" DS/DD from 5 1/4" DS/HD from  
**19¢** ea. **39¢** ea.

3 1/2" DS/DD from 3 1/2" DS/HD from  
**44¢** ea. **84¢** ea.

100% Certified • Lifetime Guarantee

## TEAC® DISK DRIVES 360K 5.25" INTERNAL FLOPPY DRIVE ..... Too Low to Print!

720K 3.5" INTERNAL DISK  
DRIVE ..... Call for Price

1.2 MEG 5.25" INTERNAL DISK  
DRIVE Was \$89.95 ..... **\$79.95**

1.44 MEG 3.5" INTERNAL DRIVE  
Call for Our Low Price

## 100% HAYES COMPATIBLE MODEMS

1200 BAUD INTERNAL ..... **\$34.95**  
Modem software included - a \$29.95 value! List \$129.95

1200 BAUD EXTERNAL ..... **\$49.95**  
Fits in the palm of your hand! Modem software  
included - a \$29.95 value! List \$199.95

2400 BAUD INTERNAL ..... **\$74.95**  
Made in the USA! Modem software included  
- a \$29.95 value! List \$129.95

2400 BAUD EXTERNAL ..... **\$96.95**  
Made in the USA! List \$349.95

## PRINTERS

### 10" 180 CPS PRINTER WITH NEAR LETTER QUALITY

- Lifetime warranty on printhead
- Dot addressable graphics & 8K buffer

NO ONE CAN SELL THIS ONE FOR LESS!

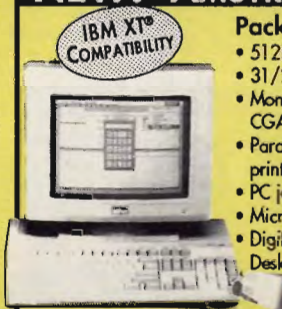
**\$149.95** List \$299.95

### 15" 720 CPS PRINTER MULTI-HEAD 15" WITH 150 CPS NLQ

- Print Speed of 214 lpm; draft & 30.0 lpm; NLQ
- 6 print heads achieve high dot resolution in higher speed - excellent print quality at 6 times the speed

**\$499.95** List \$1995.95

## AT \$299 WHAT ARE YOU WAITING FOR? NEW! AMSTRAD® PC20



AT AN UNBELIEVABLE

**\$299.95**

List \$699.95

Package Includes:

- 512K RAM memory
- 31/2" 720K disk drive
- Monochrome graphics & CGA color graphics built-in
- Parallel and serial ports for printer or modem
- PC joystick port
- Microsoft DOS™ V.3.3
- Digital Research's GEM™ Desktop ("point & click")
- Digital Research's GEM™ Paint
- Micro-compatible mouse

CALL NOW FOR  
SYSTEM PRICING  
Monitor Optional

## SAVE UP TO \$300 ON Seagate HARD DRIVES

20 MB ST-225 HALF HEIGHT  
DRIVE KIT ..... **\$224.95**

20 MB storage, supports MS-DOS, cables & controller  
included. Fits IBM® PC, XT & compatibles. List \$499

40 MB ST-251-1 SUPER FAST  
DRIVE ..... Too Low to Print!

40 MB storage, supports MS-DOS, 28ms access time. List \$499

SCSI ST157N DRIVE ..... Too Low!

20, 30 & 45 formatted MB in 3.5" form. & SCSI interface incl.

SCSI ST296N DRIVE ..... Too Low!

20, 30, 60 & 80 formatted MB in 5.25" form. & SCSI interface  
included. Fits IBM® PC, XT, AT or 386 class storage needs.

## VIP 12 MHz 286 LOWEST PRICED IBM® AT COMPATIBLE

COMPLETE AT® WITH NO HIDDEN COSTS!

- 512K RAM, Expandable to 4 MEG
- Monochrome Graphic Parallel (MGP) Card
- Parallel, Serial & Game Ports Standard
- 1.2 MEG Floppy Drive
- Clock/Calendar & 200 Watt Power Supply
- Built-in Math Co-processor Slot
- FREE DOS (List \$69.95), DOS Tutor (List \$25.95) & Word Processor (List \$24.95) - A \$124.85 Value!
- 9 VOLT INTERNAL BATTERY BACK-UP FREE



WITH  
**\$124.85**  
IN FREE SOFTWARE

FANTASTIC BUY! **\$599.95**  
List Price \$1424.80

CALL FOR SYSTEM PRICING

## COLOR MONITORS

PENOR 14" RGB 0.43 Dot Pitch

List \$399.95 ..... **\$199.95**

MAGNAVOX VGA Analog Input

List \$499.95 ..... **\$329.95**

LEADING TECHNOLOGY 14"

MULTISCAN 1 Year Limited Warranty

List \$599.95 ..... **\$399.95**

## 16 MHz 386SX

386 PERFORMANCE AT A LOW 286 PRICE!

- IBM AT® COMPATIBLE
- Phoenix BIOS 386SX-16 MHz CPU
- 1 MB Memory, Expandable to 8 MEG
- Full Case/3 Open Drive Bays
- Serial, Parallel & Game Card, MGP Card
- Hard Disk Floppy Controller
- 1.2 MEG Floppy Drive
- 101 Enhanced Keyboard
- FREE MS-DOS 4.01 (List \$79.95), GW BASIC (List \$19.95) & DOS Tutor (List \$29.95) - A \$129.85 Value!



WITH  
**\$129.85**  
IN FREE SOFTWARE

GREAT BUY! **\$979.95**  
List Price \$1214.85

CALL FOR SYSTEM PRICING

Prices do not include shipping charges. Call to get your lowest delivered cost. We insure all shipments at no extra cost to you! All packages are normally shipped UPS Ground. 2nd day and overnight delivery are available at extra cost. We ship to all points in the US, Canada, Puerto Rico, Alaska, Hawaii, Virgin Islands and APO-FPO. Monitors only shipped in Continental US. Illinois residents add 6.5% sales tax. Prices and availability subject to change without notice. Not responsible for typographical errors or omissions. \*Computer Direct will match any current (within 30 days) nationally advertised price on exact same items. Shipping and sales tax not included. Verification required. FAX Ordering 708-382-7545 Outside Service Area, Please Call 708-382-5058

Monitors Optional. IBM is a registered trademark of International Business Machines

## COMPUTER DIRECT, INC.

22292 N. Pepper Road  
Barrington, IL 60010 EXP 6/30/90

"We Love Our Customers"

# \$299.95!

## WE MUST BE CRAZY...

### TO SELL A COMPUTER WITH FULL IBM® XT COMPATIBILITY AT THIS PRICE

The Amstrad PC20 is fast and powerful. It has a 16-bit processor operating at *turbo speed*. This means the PC20 will handle your programs at up to twice the speed of its competition. It's great for the student at home or away, the businessperson at home or at the office, the game player at home and the organizer at home.

#### ▼ LOOK AT ALL YOU GET!

- 8MHz 8086 16-bit processor
- 512K RAM memory
- PC compatibility (two full PC expansion slots)
- Built-in CGA/MDA graphics color adaptor
- Parallel centronics standard printer port
- Serial (RS-232) communications printer/modem port
- Enhanced AT 102 keyboard
- 720K 3 1/2" disk drive
- Expansion port for 5 1/4" disk drive
- Microsoft-compatible mouse
- Speaker with volume control
- Standard analog joystick port



#### ▼ PLUS ALL THIS SOFTWARE!

- Microsoft DOS™ V.3.3 software
- Digital Research's GEM™ Desktop 3 with "point and click" software for use with mouse
- Digital Research's GEM™ Paint software
- Easy Working™ Tri-Pack with The Writer, Filer & Planner personal productivity programs

THE PRICE YOU'VE BEEN WAITING FOR!

# \$299.95

Manufacturer's Suggested Price \$749.95 Monitor Optional

## LOOK! LOWEST PRICES EVER FOR SOFTWARE

### ENTERTAINMENT & EDUCATION

<b>American Educational Computer</b>	
• Reading Comprehension	\$28.95
• Spelling	\$28.95
<b>Barrons</b>	
• SAT	\$33.95
<b>Broderbund</b>	
• Where/Time/Carment	\$36.95
<b>Electronic Arts</b>	
• Indianapolis 500	\$39.95
<b>Microprose</b>	
• Stealth Fighter F/19	\$37.95
• Red Storm Rising	\$31.95
• Gunship	\$31.95
<b>Microsoft</b>	
• Flight Simulator	\$38.95

### FOR YOUR HOME OR OFFICE

<b>5th Generation</b>	
• Maca Utilities	\$54.95
• Maca Gold	\$87.95
<b>Ashton-Tate</b>	
• dBase IV	\$467.95
<b>Borland</b>	
• Turbo C	\$103.95
• Turbo Pascal	\$103.95
• Turbo Assembler with Debugger	\$103.95
• Sidekick Plus	\$133.95
• Paradox	\$467.95
• Quattro	\$163.95
<b>Broderbund</b>	
• The New Print Shop	\$36.95
• Graphics Library Sampler	\$24.95
• Graphics Library Party Edition	\$24.95
• Graphics Library School & Bus.	\$24.95
<b>Central Point</b>	
• PC Tools Deluxe	\$76.95
<b>Chronos Software</b>	
• Who's What's When	\$117.95

### Cross Talk Communications

• Remote	\$108.95
• Crosstalk XVI	\$108.95
<b>Dac Software</b>	
• Dac Easy Light	\$43.95
• Dac Easy Payroll	\$57.95
• Dac Easy Accounting	\$89.95
<b>Expert Software</b>	
• Will Power	\$10.95
• Personal Publisher	\$10.95
<b>Funk</b>	
• Sideways	\$41.95
• Worksheet Utilities	\$58.95
• Allways	\$84.95
<b>Great American Software</b>	
• One Write Plus Accounting System	\$177.95
• One Write Plus Payroll	\$87.95
<b>Hayes</b>	
• Smartcom II	\$87.95
• Smartcom III	\$147.95
<b>Imisi</b>	
• Corel Draw!	\$329.95
<b>Intuit</b>	
• Quicken 3.0	\$38.95
<b>Lotus</b>	
• Lotus 1-2-3	\$303.95
• Magellan	\$129.95
• HAL	\$99.95
• Agenda	\$249.95
<b>Maverick</b>	
• Entrepreneur	\$21.95
<b>Microsoft</b>	
• Learning DOS	\$34.95
• Windows 286	\$68.95
• Works	\$98.95
• Windows 386	\$127.95
• Word	\$207.95
• Multiplan	\$133.95

### Languages

• Quick C	\$68.95
• Macro Assembler	\$97.95

• Basic Compiler	\$197.95
• C Compiler	\$297.95
<b>Monogram</b>	
• Dollars & Sense	\$68.95
<b>North Edge Software</b>	
• Timeslips III	\$167.95
<b>Peachtree</b>	
• Peachtree Complete III	\$145.95
<b>Peter Norton</b>	
• Norton Utilities Advanced	\$99.95
• Norton Utilities Standard	\$60.95
• Norton Commander	\$99.95
<b>Quarterdeck</b>	
• Expanded Memory Manager 386	\$64.95
<b>Software Publishing</b>	
• PFS: First Publisher	\$77.95
• PFS: First Graphics	\$87.95
• PFS: First Choice with Quicken	\$103.95
• Professional Write	\$137.95
• Professional File	\$187.95
• Harvard Graphics	\$297.95
<b>Symantic</b>	
• Q & A	\$217.95
<b>The XTree Company</b>	
• XTree Pro	\$77.95
<b>Traveling Software</b>	
• Laplink III	\$83.95
<b>WordPerfect</b>	
• WordPerfect Library	\$73.95
• WordPerfect Executive	\$133.95
• WordPerfect	\$259.95
<b>Wordstar</b>	
• Wordstar	\$227.95
<b>Wordtech System</b>	
• DBXL	\$143.95
• Quicksilver Diamond	\$347.95
<b>Xerox</b>	
• Ventura Publisher	\$497.95



WE CARRY THE LATEST VERSIONS!

# COMPUTE!'s MARKETPLACE

## Soar into the Wild Blue Yonder

### The Official F-19 Stealth Fighter Handbook

by Richard G. Sheffield  
Foreword by Major "Wild Bill" Stealey, President  
and Co-founder of MicroProse  
\$14.95, 192pp

Learn the ins and outs of flying MicroProse's new F-19 Stealth Fighter flight simulator. Study the practical hints and tips for flying the simulator and performing ground-attack and air-to-air tactics. Then read all the background information in the book to learn to fly the real F-19. In the final section of the book, you'll find yourself looking over the shoulder of an expert F-19 Stealth Fighter game player as he carries out several "dangerous" missions.

Order your copy today.

Send \$14.95 plus \$2.00 shipping and handling (\$5.00 for orders outside the U.S. and Canada) and applicable sales tax\* to:

COMPUTE!'s Bookshelf  
P.O. Box 5188  
Greensboro, NC 27403

## I WAS A COMPUTER NERD

### UNTIL MY COMPUTER TAUGHT ME TO PLAY THE GUITAR

Most computer programs don't improve your social skills. GUITAR TUTOR will. Playing an instrument is a skill people admire. GUITAR TUTOR will teach you using the same methods professional instructors do, but it's cheaper, faster, easier, and more fun. With GUITAR TUTOR and a little practice, you will play the guitar!

Available for Tandy/IBM and compatibles for only \$29.95 (plus \$2 S&H). Specify 5.25 or 3.5 disk and send to:

Northern Star Software  
P. O. Box 63, Oak Creek, WI 53154

CALL TOLL-FREE:  
1-800-648-5286



Circle Reader Service Number 125

## 15 FULL DISKS - FREE SOFTWARE FOR IBM® COMPUTERS

TRY US! Get 15 disks full of our best selling software - FREE! Games, Business, Education, Graphics, Programmers' Utilities, Finance, Desktop publishing, more. PAY ONLY \$5.00 FOR SHIPPING

SATISFACTION GUARANTEED!

### INTERNATIONAL SOFTWARE LIBRARY

511-104 Encinitas Blvd • Encinitas CA. 92024

619 942-9998

since 1985



Circle Reader Service Number 136

## COMPUTERINSURANCE PLUS

- ✦ Replacement with no depreciation
- ✦ Covers computer hardware in home or office
- ✦ Easy to read policy
- ✦ Bonus 20% for software coverage
- ✦ Low \$50 deductible
- ✦ Covers theft, fire, power surges, accidents, natural disasters, even earthquakes and flood
- ✦ Policy backed by an A+ company

### THE COMPUTERINSURANCE AGENCY, INC.

136 Moore Lane  
P. O. Box 385  
Piedmont, SC 29673

Local 803-845-6699 • Hours: 10 a.m. to 6 p.m.

1-800-722-0385

Circle Reader Service Number 126

## jwh: SoftWare

For The PC, XT, AT Compatible  
jwh: MoneyBook V2.0. At last check balancing made fun, fast, easy and accurate. Full featured checkbook and accounts management. Very user friendly with all menu driven commands for speed and ease of use. Complete search capabilities on all categories for generating reports and summaries. Can be run from a single floppy B&W or color system. Due to popular demand and use, this software package has been updated with more features. Plus Color Options.

Order Disk #1032 ..... \$29.75 + s/h

jwh:FastMenu V2.3.

Fast easy Hard Disk Menu System.

Order Disk #1052 ..... \$24.95 + s/h

jwh:Home Inventory V.2.3

Home Inventory & Floor Plan Drawing

Order Disk #1009 ..... \$49.75 + s/h

jwh:SoftWare  
P.O. Box 410  
Berlin Hts., OH 44814

Add \$3.50

Shipping/Handling

Circle Reader Service Number 112

## CRYPTO CRUNCHER

FOR IBM & COMPATIBLE PCs

The Ultimate Cryptogram Program That Lets You...

- SOLVE • CREATE • STORE
  - PRINT • RESCRAMBLE
- ### CRYPTOGRAM PUZZLES

CRYPTO CRUNCHER is a unique program that makes "cracking" cryptogram word puzzles challenging and fun! Puzzles may be entered from newspapers, magazines or the built-in puzzle library. Easy to use for novices or experts. Includes bonus solution print-out utility and 45 puzzles with solutions. Please specify 5.25" or 3.5" media with order.

Send Check or Money Order for \$19.95 to:

RILCO SYSTEMS  
P.O. BOX 730 - WATERFORD, NJ 08089

Please Allow 3-4 Weeks For Delivery

Circle Reader Service Number 127

## GET INVOLVED WITH YOUR HOME COMPUTER!!

SEE PAGE 37 IN THIS ISSUE FOR COMPUTE!'S JUNE SHAREPAK DISK.

TOP-QUALITY SHAREWARE HANDPICKED BY THE EXPERTS!!















# NEW PRODUCTS

L I Z C A S E Y A N D M I C K E Y M C L E A N

## 100 Percent

Two educational packages from Gamco Industries, *Percent* and *Percent Word Problems*, teach students about percentages. *Percent*'s first lesson contains six drills on converting fractions and decimals, percents greater than 100, and percents with one or two decimal places. The second lesson offers practice in finding a percent of a number, finding the number when the percent is known, and mixed drills. Students have access to help screens at each level except review.

With *Percent Word Problems*, students can choose from five different lessons, including two-step problems and find the percent. Teachers and parents can control the difficulty level so the student focuses on the word problem and not the calculations.

Both packages are available on 5¼- and 3½-inch disks for the IBM PC and compatibles, Apple II series, and Commodore 64/128. All versions retail for \$44.95 each.

*Gamco Industries, P.O. Box 1911, Big Spring, TX 79721*

Reader Service Number 200.

## Travels with Jack

Accolade has released the third in a series of golf simulations created in association with Jack Nicklaus Productions. *Jack Nicklaus Presents the International Course Disk* is a supplementary disk to Accolade's *Jack Nicklaus' Greatest 18 Holes of Major Championship Golf*. The company's first add-on course disk was *Jack Nicklaus Presents the Major Championship Courses of 1989*, released last year.

The new collection offers computer golfers the opportunity to play on three simulated courses based on championship layouts designed by Nicklaus in Australia, Japan, and England.

The Australian Golf Club in Kensington, the frequent site of the Australian Open, is the oldest and one of

the toughest courses in Australia. Saint Creek Golf Club in Nagoya, Japan, one of Nicklaus's more recent design projects, just opened in October 1989. St. Mellion Golf and Country Club in Cornwall, England—an American-style championship layout with streams, lakes, undulating fairways, and large, fast greens—opened in 1986.

The IBM PC and compatibles version of *Jack Nicklaus Presents the International Course Disk* has a suggested retail price of \$21.95. Versions for the Apple IIGS, Commodore 64, Amiga, and Macintosh are scheduled for release later this year.

*Accolade, 550 S. Winchester Blvd., Suite 200, San Jose, CA 95128*

Reader Service Number 201.

## Winning the War—Again

*Revolution '76* from Britannica Software takes you back to 1776 and the beginnings of the American Revolution. You must compel the British leaders to concede defeat even though the redcoat forces far surpass your own colonial forces.

This historical simulation presents you with the same problems the American revolutionaries faced, including selecting generals, raising and maintaining an army, keeping troops united, and planning strategies to defeat the British. It also tests your diplomatic skills as you try to develop European allies without entwining the colonies in European politics.

*Revolution '76*, developed for age 11 and older, is available for the IBM PC and compatibles with 640K and for the Apple IIGS. Each version retails for \$49.95.

*Britannica Software, 345 Fourth St., San Francisco, CA 94107*

Reader Service Number 202.

## Notebook Power

Toshiba has introduced the 80C286-based 7.9-pound T1200XE notebook-size personal computer. The T1200XE features 12-MHz clock

speed, a 20MB hard drive, a 1.44MB-3½-inch floppy drive, and one megabyte of RAM expandable to five megabytes.

Its 25-millisecond hard drive and PS/2-compatible floppy disk drive reads and writes both 1.44MB and 720K formats. The blue-on-white side-lit supertwist liquid crystal display has 640 × 400 double-scan CGA compatibility and measures 7¼ × 4⅞ inches. The full-function 82-key keyboard has 12 function keys and 8 dedicated cursor-control keys.



The 80C286-based T1200XE is Toshiba's most powerful notebook-size PC.

The battery-operated T1200XE comes equipped with a 12-ounce removable nickel-cadmium battery that recharges in three hours. A nonremovable nickel-cadmium battery backs up system memory. Battery-conservation features include a sleep mode and a user-designated hard drive and display shutdown, which goes into effect after a period of keyboard inactivity.

Other features include serial, parallel, RGB, external 5¼-inch floppy drive, and keypad ports. Options include 2MB memory cards, an internal 2400-baud modem, a 17-key numeric keypad, a battery pack, a three-pack battery recharger, an auto adapter, and a carrying case.

The T1200XE comes with MS-DOS 4.01 and the PC Kwik Power Pak. It also has a hypertext online disk-resident T1200XE reference and an MS-DOS 4.01 manual. ▸



The suggested retail price of the T1200XE is \$3,999.

*Toshiba America Information Systems,  
Computer Systems Division, 9740 Irvine  
Blvd., Irvine, CA 92718*

Reader Service Number 203.

### Making a Clean Sweep

Curtis Manufacturing offers a series of computer cleaning products designed to keep your computer components free from dirt, dust, and potentially damaging static buildup.

The Curtis Clean Drive, available for 5¼- and 3½-inch disk drives, features a drive-cleaning disk and 15 single-application head-cleaning solution packets. It removes dust, oxide deposits, and other debris and helps prevent read/write errors and breakdowns. Curtis recommends that you use Clean Drive once a week for 30-45 seconds. It retails for \$9.95.

With the Curtis Clean Screen, you can prevent data-threatening static discharge. The kit comes with eight single-application wet towels, eight single-application dry towels, and one large, reusable towel. The cleaning system can be used on normal or coated monitors as well as on glass or mesh glare filters. Clean Screen can also dissipate static from facsimile machines, copiers, and keyboards. It retails for \$5.95.

*Curtis Manufacturing, 30 Fitzgerald Dr.,  
Jaffrey, NH 03452*

Reader Service Number 204.

### AD & D Roundtable

GENie, an online consumer information service, is now offering the TSR Online Roundtable. TSR is one of the world's leading publishers of role-playing games and products, including *Advanced Dungeons & Dragons*.

In addition to getting information and news about the AD & D game, GENie subscribers will be able to take part in live gaming, enroll in the Role-Playing Gamers Association, purchase TSR products through an online catalog, and participate in regular online classes on role-playing and dungeon-mastering.

Regular features on the Roundtable will include RPGA network events, *DRAGON* magazine articles available for downloading, previews of upcoming TSR novels, regular conferences and interviews with TSR game designers, up-to-the-minute information on gaming conventions and events around the world, and the opportunity to ask questions about any TSR product. TSR licensees such

as Strategic Simulations will also offer information on the service.

For more information about the GENie service, call (800) 638-9636. *GENie, GE Information Services, 401 N. Washington St., Rockville, MD 20850*

Reader Service Number 205.

### New Campaign

Dynamix has released *Simulation Module #1* for its flight simulator, *A-10: Tank Killer*. The module adds seven new missions that can be played individually or back to back in a campaign.

*Simulation Module #1* is available only from Dynamix for \$12.95. The package also includes an embroidered Flying Tigers patch as well as mission hints and tips. Orders can be placed by calling the Dynamix Ordering and Technical Support line at (503) 687-8690. The module is also available on the Dynamix Bulletin Board. Modem owners can call the BBS at (503) 687-8497.

*Dynamix, 99 W. 10th, Suite 337, Eugene,  
OR 97401*

Reader Service Number 206.

### Good Investment

The CompuServe Information Service has recently added two personal-investment services accessible by your personal computer and modem.

VESTOR, a weekly updated stock-analysis service, provides buy/sell recommendations on more than 6000 individual companies. Also, you can screen the information database for investment opportunities. By entering ticker symbols, you can obtain a computer-generated forecast of expected performance of stocks. It also identifies stocks to buy or sell based on financial criteria you enter.

RateGram lists the highest returns available on federally insured certificates of deposit, money-market rate-paying accounts, and money-market funds. Also updated weekly, RateGram reports on liquid money-market accounts, small- and minimum-balance CDs and jumbo CDs, mortgage rates, and taxable and tax-free money-market funds. Reports display the name, address, and phone number of the institution along with the required minimum deposit, frequency of interest compounding, stated interest rate, and other indicators.

VESTOR, provided by Investment Technologies, charges \$15.00 per hour over and above normal CompuServe connect charges of \$12.80 per hour. RateGram is a service of the Bradshaw Financial Net-

work and is available for a \$1.00 surcharge per report plus CompuServe's connect charges.

In addition to VESTOR and RateGram, CompuServe offers up-to-date stock-market quotes; information on mutual funds, options, commodities, and bonds; online discount brokering; and financial news. *CompuServe, 5000 Arlington Centre Blvd., P.O. Box 20212, Columbus, OH 43220*

Reader Service Number 207.

### Classic Storyteller

*The Milliken Storyteller* brings new life to classic children's stories such as *Henny Penny*, *The Ugly Duckling*, and *Little Red Riding Hood* by taking advantage of the sound capabilities of the Tandy 1000 and Covox-equipped IBM PCs and compatibles.

Each story is read aloud with a real human voice, and animation is used to bring each illustrated character to life. The program also contains activities such as comprehension questions and coloring screens.

*The Milliken Story Collection II* will soon be available and will contain *Jack & the Beanstalk*, *Aladdin & the Magic Lamp*, and *Peter Rabbit*.

The Tandy 1000 version has a suggested retail price of \$44.95. The IBM PC and compatibles version comes with Covox speech hardware and sells for \$69.95. Both versions require at least 384K of RAM and support EGA, CGA, VGA, and Hercules monochrome graphics. If you own an IBM PC or compatible already equipped with Covox speech hardware, you should purchase the Tandy 1000 version.

*Milliken Publishing, 1100 Research Blvd.,  
St. Louis, MO 63132*

Reader Service Number 208.

### Table Strategy

*MicroAce Blackjack* offers something for the blackjack beginner as well as the seasoned player. The program, both a game and tutorial, illustrates different blackjack strategies developed by Julian Braun. Play for fun or to improve your blackjack skills.

The program features six pop-up strategy tables, strategies for basic single- and multiple-deck play, advanced single- and multiple-deck play, player/dealer odds calculations, strategy practice drills, and card-counting practice.

*MicroAce Blackjack* requires 256K and retails for \$49.95.

*MicroAce, P.O. Box 5223, Englewood, CO  
80155*

Reader Service Number 209. □



# OFF LINE

D A N G O O K I N

**A**s with all things in this universe, your PC has cycles. (People have cycles, too: When we're young, they're tricycles, and later they're bicycles. As we get older, they become mood cycles—nasty habits and violent outbursts we privately relish but publicly blame on beverages such as beer and coffee.)

One of the most popular means of tracking these cycles is the zodiac. Created by the Romans, the zodiac gives fanciful names to the months of the year. The Romans ascribed a special sign to each month, which was a much more successful method than that employed by the ancient Zaldavians, who named each of their 12 months *Moon*.

It's said that a child born under a specific sign will show traits related to that sign. But researchers have always asserted that if children are born under any sign, it's the one called Tantrum. What hasn't been disproved by scientific circles is how the zodiac influences your computer. To further aid enlightenment, I offer an astrological calendar for the Information Age, along with a hint of what you can expect this month.

**Aries.** Aries is the sign of your PC's memory. It's also the sign of the TSR (memory-resident) software craze, which was born with the crowded house rising toward 640K. For June: Be patient. That flashing *MEM* light is only temporary. OS/2 looms.

**Taurus.** Taurus is associated with computer manuals and documentation. It's also the birth month for shrink-wrap, discovered by a 3M chemist who got bored one day while playing with Saran Wrap, his wife's hair dryer, and the family cat. For June: A relative from out of town will visit. Stop her before she puts the Melba toast into your disk drive.

**Gemini.** Gemini is the duplex sign of the modem and all data communications. Always the social sign, Gemini lends itself well to the land of

the electronic BBS. It's also the best month for a 14-year-old to think of a handle other than Dr. Death. For June: A second PC will come into your life and bring you much happiness. But along with the happiness will come financial burden and a need to buy a new disk format.

**Cancer.** Cancer, the crab, walks sideways even though its eyes and defensive claws point forward. The Cancer sign rules those people who walk around in huge discount warehouses and look at the stuff on the shelves instead of where they're going. For June: Nothing much going on.

**Leo.** Leo governs your power supply. It may purr like a kitten now, but when it dies, it's a lion, with popping and a lot of blue smoke. For



June: Take that vacation. Buy an extension cord and put the PC on the patio.

**Virgo.** Virgo is the virgin. (Originally, the Roman month of Tarto followed Virgo.) Most people desiring to build their own computers do so at this time of year. For June: A long-term financial obligation and debt will vanish this month—until you get your VISA bill for all that mail-order software you bought under Leo.

**Libra.** Libra is the sign for harmony, for the balance of opposing forces. You'll often find a copy of *COMMAND.COM* in every subdirectory on a Libra's hard drive. For June: In a haunting dream, Peter Norton, dressed as a rabbi, accuses you of piracy. Buy the software. Cancer figures in picture.

**Scorpio.** Scorpio is the sign for money and investing. This is the perfect time for expanding your system. It may also explain why this is when *Mondo Marvin's Compute-O-Rama* holds dollar days. For June: It's time to entertain. Invite your poker buddies into the den for a round of *Leisure Suit Larry IX: You Can't Do That in Georgia*.

**Sagittarius.** Sagittarius is patience, the listener, the hearer of wisdom. When told to insert a disk in the drive and close the door, the average Sagittarian will insert the disk, then close the office door. Sagittarius also governs expansion-slot covers, which true Sagittarians never throw away. For June: Nothing much going on, but that's no different from the usual.

**Capricorn.** Capricorn is the hungry wanderer. It's the sign for all the lost pieces of potato chips in your keyboard. Under this sign's influence, most users are apt to wedge a floppy disk in that tiny sliver of space between drives A and B. For June: Spirits will dampen when you realize you have saved every chapter of your book under the filename *CHAPTER*. Sell your firearms collection.

**Aquarius.** Aquarius is the combined sign of computer laptops and the table trays in modern airliners. Aquarius is also the month in which you'll most likely spill a liquid beverage into your keyboard. For June: Nothing much going on.

**Pisces.** Pisces is a troublesome sign for computers. It's during this month that the mythical wandering Esc key is rumored to find a permanent home. For June: Wedding bells may ring in the future. But remember: You're marrying the tall one, not the squat thing with four rubber feet. □



# HOTWARE

## SOFTWARE BESTSELLERS FROM AROUND THE COUNTRY

### HOME PRODUCTIVITY

- 1. Tax Cut**  
Prepare for April 15.  
MECA  
IBM
- 2. Turbo Tax 1990**  
Speed up your tax calculations.  
CHIPSOF  
IBM
- 3. Quicken**  
Manage your finances.  
Intuit  
IBM, Macintosh
- 4. The Print Shop**  
Make signs, cards, banners, and more.  
Brøderbund  
Apple II, Apple IIGS, Commodore 64/128, IBM, Macintosh
- 5. MacInTax**  
Mac-simize your tax refund.  
SoftView  
Macintosh
- 6. Calendar Creator Plus**  
Create many different calendars.  
Power Up  
IBM, Macintosh
- 7. Managing Your Money**  
Allocate your income.  
MECA  
Apple II, IBM, Macintosh
- 8. Print Shop Graphics Library**  
Add variety to your *Print Shop* creations.  
Brøderbund  
Apple II, Apple IIGS, Commodore 64/128, IBM
- 9. WillMaker**  
Get help in writing a will.  
Nolo Press  
Apple II, IBM, Macintosh
- 10. PC Globe 3.0**  
Explore world demographics.  
PC Globe  
IBM

### HOME ENTERTAINMENT

- 1. Tetris**  
Deceptively addicting falling-block game.  
Spectrum HoloByte  
Amiga, Apple IIGS, Commodore 64/128, Macintosh
- 2. SimCity**  
Run the world's first simulated city.  
Maxis  
Amiga, Commodore 64/128, IBM, Macintosh
- 3. Flight Simulator**  
Head for the wild blue yonder.  
Microsoft  
IBM, Macintosh
- 4. SimCity Terrain Editor**  
Design your own *SimCity* landscapes.  
Maxis  
Amiga, IBM, Macintosh
- 5. The Hunt for Red October**  
Computer adaptation of Tom Clancy's book.  
Electronic Arts  
Amiga, IBM
- 6. Life & Death**  
Your chance to play surgeon.  
Software Toolworks  
Apple IIGS, IBM, Macintosh
- 7. Populous**  
Deities battle it out.  
Electronic Arts  
Amiga, IBM
- 8. Leisure Suit Larry III**  
Larry and Passionate Patti get together.  
Sierra  
IBM
- 9. Falcon**  
Air combat at its best.  
Spectrum HoloByte  
Amiga, IBM, Macintosh
- 10. ChessMaster 2100**  
Board strategy that isn't boring.  
Electronic Arts  
Apple II, Apple IIGS, Commodore 64/128, IBM

### HOME LEARNING

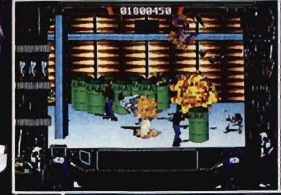
- 1. Where in Time Is Carmen Sandiego?**  
Can you find Carmen in time?  
Brøderbund  
IBM
- 2. Math Blaster Plus!**  
Teaches basic math concepts.  
Davidson & Associates  
Apple II, Apple IIGS, IBM
- 3. Where in the World Is Carmen Sandiego?**  
Chase Carmen around the world.  
Brøderbund  
Amiga, Apple II, Commodore 64/128, IBM, Macintosh
- 4. Reader Rabbit**  
Helps children learn to read.  
The Learning Company  
Apple II, Commodore 64/128, IBM, Macintosh
- 5. Mavis Beacon Teaches Typing**  
Learn to touch-type.  
Electronic Arts  
Apple II, Apple IIGS, Commodore 64/128, IBM, Macintosh
- 6. Where in the USA Is Carmen Sandiego?**  
The chase moves to the USA.  
Brøderbund  
Amiga, Apple II, Commodore 64/128, IBM, Macintosh
- 7. Learning DOS**  
Learn the ins and outs of DOS.  
Microsoft  
IBM
- 8. The Playroom**  
Kids explore and learn on their own.  
Brøderbund  
IBM
- 9. The Children's Writing & Publishing Center**  
A desktop publisher for kids.  
The Learning Company  
Apple II, Apple IIGS, IBM
- 10. Math Rabbit**  
Build early math skills.  
The Learning Company  
Apple II, Commodore 64/128, IBM, Macintosh



COMPUTE!'s Hotware lists were prepared by Egghead Discount Software and are based on retail sales of Apple II, Macintosh, and IBM software from February 4 through March 3, 1990, at 201 Egghead stores in the United States and Canada.

ACTUAL 256 COLOR  
VGA SCREENS

# CRIME *wave*



*Real Sound™*

A powerful crime syndicate has taken over large areas of our major cities turning them into vast criminal wastelands.

Arson, extortion, drug distribution, murder and now...terrorist abduction! You have just learned that they have taken the U.S. President's daughter and are holding her and our country hostage.

**YOU'VE HAD A GUT-FULL! . . . YOUR PURPOSE:** To wipe out this criminal organization and rescue the president's daughter. Even with the most sophisticated Assault Technology available, it won't be easy. You are the only one that can save the country from this sinister infestation . . .

Bring arcade action home like never before!

Crime Wave, with *Real Sound™* and 256 color digitized VGA graphics, puts you on the streets for real!

**ACCESS**  
SOFTWARE INCORPORATED

545 WEST 500 SOUTH, BOUNTIFUL, UTAH 84010  
(801) 298-9077 1-800-824-2549

Circle Reader Service Number 193

[www.commodore.ca](http://www.commodore.ca)

32203906  
 Electronics Boutique  
 Low Price  
 \$ - 2.95

# TELECOMMUNICATION SOFTWARE THAT'S EASY TO LEARN, SIMPLE TO USE AND AS CONVENIENT AS YOUR TELEPHONE!

## AS EASY AS PUSHING A BUTTON

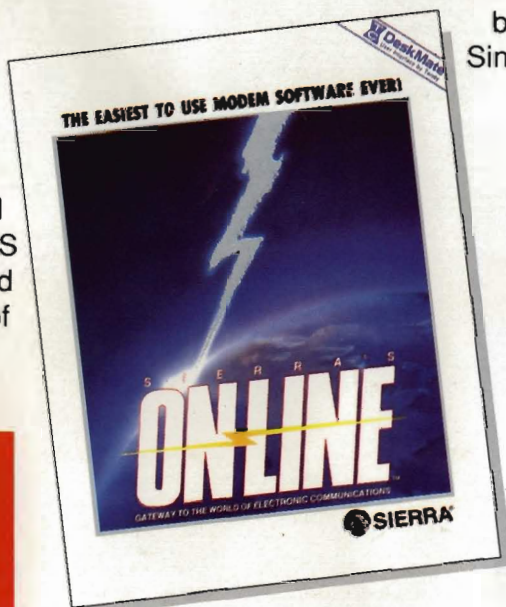
That's right — an uncomplicated point and click pushbutton interface, using your mouse or three basic keys on your keyboard, makes SIERRA'S ON-LINE your gateway to the world of electronic communications.

## NO COMPLEX COMMANDS TO MEMORIZE

Whether you're calling a big information service or a local bulletin board, with SIERRA'S ON-LINE you can upload and download files at the touch of a key, and perform even complex tasks, like

**T**he surprise for me was SIERRA'S On-Line. I had never seen it before and was impressed with the simplicity of its operation. It is more powerful than it first appears. Its ease of use may at first fool you into thinking it has less to offer, but that isn't the case."  
 PCM MAGAZINE

compressing and decompressing files, with simple pull-down menus and pushbutton commands. Two compression programs included will save you time and money.



✓	<b>SIMPLE TO USE</b>
✓	<b>EASY TO LEARN</b>
✓	<b>\$ 69.95</b>

## AN INSTANT SOLUTION TO TELECOMMUNICATIONS DILEMMAS

SIERRA'S ON-LINE comes with an easy to read manual that explains many useful details about telecommunications in general, and also includes step-by-step instructions for accessing bulletin boards and information services. Since ON-LINE works without modification on most systems, you'll be up and running within minutes of installing the program.

## TRY IT NOW FOR 30 DAYS SATISFACTION GUARANTEED!

Order On-Line today and try it out. If you aren't completely satisfied, return it within 30 days along with your sales receipt and a short note telling us why you're returning it. This free trial offer is made by Sierra On-Line, Inc., one of the oldest and largest home software publishers in the world.

## ORDER YOURS NOW!

**(800) 326-6654**

Or write: Sierra On-Line, Inc., P.O. Box 485, Coarsegold, CA 93614.

Please enclose this ad, or a copy, when ordering by mail. Visa, MasterCard, American Express accepted.

Circle Reader Service Number 145

California and Massachusetts residents please include sales tax.

 **SIERRA**<sup>®</sup>  
[www.commodore.ca](http://www.commodore.ca)