PROFILES

June 1985 The Magazine for Kaypro Users

Micros in the Third World

BULK RATE U.S. POSTAGE PAID Glasgow, KY Permit No. 461

ADDRESS CORR. REQ. P.O. BOX 2889 DEL MAR, CA 92014

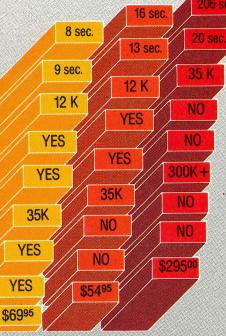
They said it couldn't be done. Borland Did It. Turbo Pascal 3.0

The industry standard

With more than 250,000 users worldwide Turbo Pascal is the industry's de facto standard. Turbo Pascal is praised by more engineers, hobbyists, students and professional programmers than any other development environment in the history of microcomputing. And yet, Turbo Pascal is simple and fun to use!

COMPILATION SPEED	
EXECUTION SPEED	
CODE SIZE	
BUILT-IN INTERACTIVE EDITOR	
ONE STEP COMPILE (NO LINKING NECESSARY)	
COMPILER SIZE	
TURTLE GRAPHICS	
BCD OPTION	
PRICE	

TURBO MS TURBO 2.0 PASCAL 3.0 16 sec



The best just got better: Introducing Turbo Pascal 3.0

We just added a whole range of exciting new features to Turbo Pascal:

- · First, the world's fastest Pascal compiler just got faster. Turbo Pascal 3.0 compiles twice as fast as Turbo Pascal 2.0! No kidding.
- Then, we totally rewrote the file I/O system, and we also now support I/O redirection.
- · For the IBM PC versions, we've even added "turtle graphics" and full tree directory support.
- . For all 16 Bit versions, we now offer two additional options: 8087 math coprocessor support for intensive calculations and Binary Coded Decimals (BCD) for business applications.
- · And much much more.

The Critics' Choice.

Jeff Duntemann, PC Magazine: "Language deal of the century . . . Turbo Pascal: It introduces a new programming environment and runs like magic."

Dave Garland, Popular Computing: "Most Pascal compilers barely fit on a disk, but Turbo Pascal packs an editor, compiler, linker, and runtime library into just 29K bytes of randomaccess memory."

Jerry Pournelle, BYTE: "What I think the computer industry is headed for: well documented, standard, plenty of good features, and a reasonable price."

Portability

Turbo Pascal is available today for most computers running PC DOS, MS DOS, CP/M 80 or CP/M 86. A XENIX version of Turbo Pascal will soon be announced, and before the end of the year, Turbo Pascal will be running on most 68000 based microcomputers.

An Offer You Can't Refuse

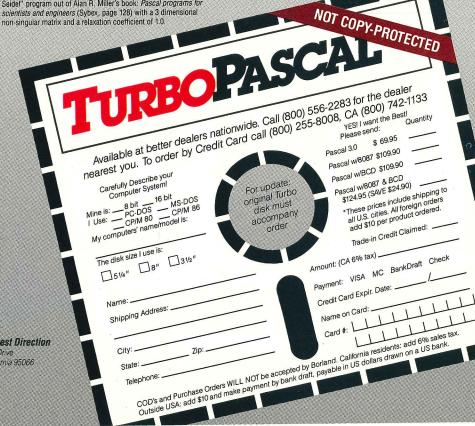
Until June 1st, 1985, you can get Turbo Pascal 3.0 for only \$69.95. Turbo Pascal 3.0, equipped with either the BCD or 8087 options, is available for an additional \$39.95 or Turbo Pascal 3.0 with both options for only \$124.95. As a matter of fact, if you own a 16 Bit computer and are serious about programming, you might as well get both options right away and save almost \$25.

Update policy

As always, our first commitment is to our customers. You built Borland and we will always honor your

So, to make your upgrade to the exciting new version of Turbo Pascal 3.0 easy, we will accept your original Turbo Pascal disk (in a bend-proof container) for a trade-in credit of \$39.95 and your Turbo87 original disk for \$59.95. This trade-in credit may only be applied toward the purchase of Turbo Pascal 3.0 and its additional BCD and 8087 options (trade-in offer is only valid directly through Borland and until June 1st, 1985).

(*) Benchmark run on an IBM PC using MS Pascal version 3.2 and the DOS linker version 2.6. The 179 line program used is the "Gauss-Seidel" program out of Alan R. Miller's book: Pascal programs for scientists and engineers (Sybex, page 128) with a 3 dimensional





Software's Newest Direction

4113 Scotts Valley Drive Scotts Valley, California 95066

What are you waiting for?

FOR YOUR KAYPRO FROM MICROSPHERE

Electronic RAM disk and Printer Buffer Combination—the ultimate add-on for Kaypro II, 4, 2-84, 4-84 and 2X Computers.

Incredible speed and efficiency are offered using MicroSphere's dual operation Electronic RAM disk and printer buffer. No longer will you need to wait for your Kaypro to slowly finish mundane tasks such as running a printer or waiting for floppy drives to turn when you have better things to do.

Features:

- Up to 10x increase in effective program execution speed when disk drive access is required.
- 32K Printer buffer can be used simultaneously with RAM disk; Printer pause and printer halt commands for printer buffer.
- External cabinet provided.
- RAM disk is seen by the Kaypro as additional disk drive; RAM disk is usable as drive A or E. All existing floppy drives are still available.
- Software also included for Micro-Cornucopia PRO-8 system (five drives possible).
- Compatible with most speed up kits to improve disk access times.
- RAM disk memory is not lost when the Kaypro is reset.
- Comes complete with cables, software, and connectors. (Kaypro 2-84 and 2X owners must add additional Z80PIO).

RAM disk size	Configuration	price
256K	215K RAM disk 32K printer buf	fer \$\frac{\$425.00}{205.00}
512K	470K RAM disk 32K printer buf	fer _650.00
512K	430K RAM disk 64K printer buf	
1mb	942K RAM disk 64K	545.00
	printer buffer	1,200.00
	IIS add \$5.00 shipping	795.00

U.S. add \$5.00 shipping
International add \$15.00 shipping

When ordering, please include the model of Kaypro to be used. Boards can be upgraded should yours need change.

Typical speed increases you can expect to see using MicroSphere's RAM disk:

	4MHz Kaypro					
Recalc 14K	Floppy Disk	RAM disk				
Perfect Calc	9:31.25	1:17.78				
Load LADDER.COM	9.38 *	2.12 *				
Load Printer Buffer 20k file, 11 pages, 2586 words using PIP to the LST device		24.61 *				

* Time in seconds

R.F.	Modulato	r	 \$25.00

Zenith Monitors

Description	Model	Price	
Composite Amber	122	\$119	
Composite Green	123	\$114	
IBM Type Amber	124	\$179	
IBM & Analog RGB	135	\$549	

Infocom ADVENTURE Games / Kaypro Format

2 Zork 1		2 Enchanter	44.95
3 Zork 2	39.95	3 Infidel	39.95
3 Zork 3	39.95	3 Sorcerer	39.95
4 Deadline	44.95	1 Seastalker	34.95
4 Starcross		2 Cutthroats	34.95
4 Suspended		2 Hitchhikers	
2 Witness	44.95	3 Suspect	39.95
2 Planetfall	44 95		

LEVELS: 1=Jr., 2=Standard, 3=Advanced, 4=Expert INVISICLUES available at \$7.95 each for all above games.

TLC LOGO for Kaypro Computers. Easy and exciting language for all ages. TLC LOGO is an exceptionally complete logo with vectors, multiple turtles, full floating point decimals and extremely fast program execution.

TWO versions offered:

STANDARD version using only internal graphics of Kaypro 2-84, 4-84, 2X and 10; no hardware additions or modifications required; 16,000 pixel resolution.

DELUXE version for all Kaypro Computers that have the MicroSphere color Graphics board. Features 16 colors, 32 sprites, 49,000 pixel resolution and utilities such as screen dump to printer or disk.

VIDEO GENERATOR FOR KAYPRO

Note: Dual Screen means internal Kaypro screen and external monitor work at the same time.

- 1. Kaypro 2-84, 2X, 4-84, 10 standard composite video\$89.95

Standard Version of TLC Logo	99.95
Deluxe Version of TLC Logo	129.95
Special: Color Board and Deluxe TLC Logo	
	1999

A NEW DIMENSION FOR KAYPRO COM-PUTERS Color Graphics Board. Features 16 colors, 32 sprites, 256x192 bit mapped graphics.

16K of RAM on the color board itself allows creation of graphics without losing internal memory of the Kaypro.

Software includes 3 editors, drivers and routines to access graphics system. Utilities include screen dump to disk and printer. Dual screen operation features internal Kaypro screen for text and commands, external graphics screen for results. A TV set can be used with addition of RF Modulator.

Color board for Kaypro II, 4, 2-84, 2X, 4-84, 10 and Robie ... 245.00

INSTANT GRAPHER 2.0 (For use with Color Graphics Board) Creates bar charts, stacked bar charts, hi/low, line graphs from keyboard, Perfect Calc, CalcStar or text files. Single and Double size dumpscreen to printer, each color prints a different pattern on a standard dot matrix printer \$50.00

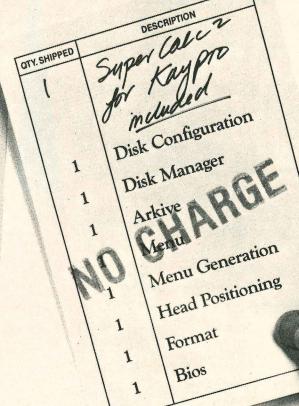


\$40.00 MicroSphere, Inc. P.O. Box 1221 Bend, Oregon 97709 503-388-1194 9-5 Pacific Time Dealer inquiries invited.



MicroSphere

Introducing the Trantor Hard Disk from WestWind. You pay for the hard disk. We pay for the software.



WestWind includes all of the software you'll ever need <u>FREE</u> with every Trantor hard disk. This powerful and easy to use software will give your system the ability to get going and keep going, <u>fast</u>.

It's how real capability and convenience get built in.

Here's what's included -

<u>Configuration</u> to create many logical drives with different block sizes – up to 40% more storage.

<u>Arkive</u> for quick & easy backup.
<u>DiskMgr</u> to make sure your good data stays good.

Menu for single-keystroke program selection.

MenuGen to make your own menus. Head Position for safe travel.

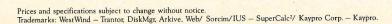
<u>SuperCalc²</u> from Sorcim/IUS, the world's best spreadsheet, is also included FREE of charge.

SuperCalc² loads fast, runs fast and it's easy to learn. It's hi-speed data sort, consolidation and flexible cell manipulation matched with the speed and power of our Trantor is an unbeatable combination.

Add our 5 Meg Removable Cartridge System for quick backup and more on-line capacity. Or use our Web to let up to 4 Kaypros share our hard disk and 3 printers at once!

To order call toll-free: (800) 526-6500 (in CA (800) 831-3144). For information write WestWind Computer, 1690 65th Street, Emeryville, California 94608. Or call (415) 652-3222.

WestWind C O M P U T E R



PROFILES

Volume 2, Number 10 June 1985 The Magazine for Kaypro Users



							771.1	
Third Worl	d.							.30



Disappeared Ones36



Perfect Writer42



Perfect Package50 Cover illustration by Ruben De Anda

6	-	0		UTS
			14)	419
			(S)	

About PROFILES	6
Letters	8
Q&A	10
Technical Forum	68
New Products	74
Advertisers' Index	78

FEATURES

Microcomputers and the Third World	30
by Dan Burstein and Tom Peifer	
Appropriate technology for developing nations	

Tracking Argentina's '	'Disappeared Ones''	36
by Miguel Llanos		
A Kaypro is the key to hope		

Perfect Writer the Second Time Around	42
by Joseph Comanda and Michael Harney	
How the new, the old, and WordStar compare	

Three More Pieces Of The New Perfect by Joseph Comanda and Michael Harney Perfect Filer, Perfect Calc, and Perfect Link	50
It's Greek To Me! by Jim Spickard Foreign symbols and other printer enhancements	54

Lap-top Launched	 										66	5
Kaypro 2000 debuted												

COLUMNS

by Dick Lutz

Editor's Notes	12
Up and Runningby David Gerrold	16
Flea Market	20
Life at 300 Baud	24
Rook Peview	74

MAXIMIZE YOUR

NEW PRODUCTS

HARDWARE

Kaypro-Formance Package: This is a modular product concept which provides the ability to buy one item in the family and add others as the need arises. The Kaypro-Formance package allows for a cost savings over individual product pricing

Sta	rt with	add										
		Hard Disk	RAM Disk	Clock								
Clock	(\$89.95)	\$1128.00	\$355.00	_								
	(\$1169.95)	- E	\$355.00	\$49.00								
RAM Disk		\$1128.00	· –	\$49.00								

Clock/Calendar: Real time clock/calendar for use with Plu*Perfect DateStamper or your own application. Source code drivers provided on disk. (All computers except 4'84.)

Clock/Calendar \$89.95 Clock Repair Kit: Solves the problem of the clock randomly changing time and date when the Kaypro is turned on or off. (For Kaypro 4'84 computer only.)

10Mb Disk Add-On: Add a second internal 10Mb hard disk to your Kaypro 10. Includes 10Mb drive, all cables and mounting hardware. Kaypro 10 TurboROM is included.

10Mb Kit \$875.00

10Mb Disk System Add-On for Kaypro 2 and 4: Add an internal hard disk to any Kaypro 2 or 4 computer. Includes 10Mb drive, disk controller, all cables and mounting hardware. Kaypro 2 or 4 hard disk TurboROM included. 10Mb Kit (Kaypro 2 or 4) \$1,170.00

CALL FOR PRICES ON LARGER HARD DISKS.

SOFTWARE

Kaydraw: Graphics drawing program that is simple to use. Produce pictures, charts and graphs directly on screen then save and print the file. Kaydraw 549.95

- Turbo Pascal: Borland version 2.0. The best Pascal compiler on the market. Turbo Pascal \$54.95
- *Turbo Toolbox: Set of 3 utilities for use with Turbo Pascal. Turbo Toolbox \$54.95
- *Turbo Tutor: Teaches you step-by-step how to use Turbo Pascal.
- *Sidekick: One of the most popular programs ever written for the IBM PC. Sidekick is always loaded and ready for use as a calculator, notepad, appointment calendar, auto dialer, ASCII conversion table and much more. On-line

FILE TRANSFER SERVICE

Advent provides a service beyond the ability of any format conversion software. We can transfer files between MS-DOS/PC-DOS, CP/M and other operating systems in 275 different $3\frac{1}{2}$ ", $5\frac{1}{4}$ " and 8" formats including 48 and 96 TPI. Includes Apple, Apricot, Eagle, Epson, PX-8, HP-150, and North Star computers. Call for further information.

IBM AND K16 ACCESSORIES

Advent now stocks much of the software listed in this ad in IBM-PC format.

Taxan Color Monitors:

RGB415 High Res. \$539.95 RGB420 Super High Res. \$579.95 \$469.95 \$489.95

Cables:IBM RS-232 Serial: 6ft - \$19.95
IBM / Centronics Parallel: 6ft - \$27.95 12ft - \$24.95

HARDWARE & ACCESSORIES

External Monitor Adaptor: The External Monitor Adaptor (EMA) provides the ability for the Kaypro to drive an external video monitor. Original characters and video display remain unchanged. In addition, the Kaypro monitor remains operative. Simple plug-in installation. Complete illustrated instructions

EMA Kaypro II & 4																											\$59	.95	5
Green Monitor		-		3																							5149	.9)
Amber Monitor																						• •					5159	1.93)
EMA Kaypro 2'84,	2	X	9	4	3.	34	١,	1	0	.4	34	1	8	. 1	R	ol	bi	e		 							\$74	.95	3
EMA Kaypro 10'83																				 							\$82	.9	5
Green Monitor*	300	-																					B				5159		2
Amber Monitor*																										-	5169	.9:)

*Please Note: Specially modified monitors listed above must be used with all models except the Kaypro II and 4.

5 MHz TurboBoard: Our tried and true 5 MHz speed enhancement for the earlier models. Kaypro II & 4 \$74.95

Electronic RAM Disk: High speed **2Mb** internal RAM disk for all Kaypro models. Expandable to 1Mb in 256K increments. Add the 1Mb expansion board for a full **2Mb** RAM disk. The RAM disk is designed with 9 bit parity

memory for the highest possible reliability.

1Mb RAM Disk (256K installed)...\$399.95

1Mb Expansion Board (256K installed)...\$329.95

256K Expansion Memory...\$154.95

ProGRAPHICS: Gives your Kaypro II or 4 the ultimate in video display and graphics capability, including reverse and half intensity video. Fully compatible with software and other enhancements for the Kaypro. Prographics

12ft Keyboard Cable: Designed to replace the original 6ft cable. Not just a telephone cord, it is designed to meet the exact requirements of the Kaypro. Guaranteed to work. 12ft Keyboard Cable\$9,95

Printer & Modem Cables: These high quality cables are designed to work with your particular printer or modem and Kaypro. No additional jumpers or modifications are required. Specify make and model of printer and Kaypro model when ordering.

6ft - \$17.95 6ft - \$24.95 12ft - \$22.95 10ft - \$28.95 4ft - \$22.95 RS-232 Serial: Centronics Parallel: Modem Cable: 2ft - \$19.95

Anti-Glare Screen: Increases contrast and reduces glare. Made from scratch resistant polycarbonate and contoured to fit exactly, it offers an undistorted view of the entire CRT. Attaches directly to the CRT and requires no disassembly.

Kaypro Cover & Carrying Case: Your choice, an unpadded cover for infrequent travel, or a fully padded case for more complete protection. The cover, made from Sunbrella, is open at the bottom and uses the original Kaypro handle to carry the computer. The case, made from Cordura, is completely enclosed and has a padded shoulder strap to make carrying the computer and the case complete with packets to carry your manual, disketter an easy task. Both come complete with pockets to carry your manual, diskettes, etc. Please specify **Blue** or **Black** when ordering.

and laid out in a logical (not alphabetical) order, it places the commands at

disk and versions of the TurboROM that support up to two 32Mb hard disks

 disk and versions of the final Kaypros.
 \$59.95

 in all Kaypros.
 \$59.95

 KII/4 TurboROM (hard disk version)
 \$69.95

 K84 TurboROM (hard disk version)
 \$59.95

 K84 TurboROM (hard disk version)
 \$69.95

 K84 TurboROM (hard disk version)
 \$69.95

 K10 TurboROM \$69.95

Personality/Decoder Module: For use with the TurboROM when additional 48 or 96 TPI drives are to be added to the Kaypro. This board provides the extra drive selection electronics for adding drives C: and D: . Also tells the computer that 96 TPI drives are installed so the computer will handle them properly. No soldering is required, even on the oldest Kaypro IIs that don't have the side select logic.

Personality/Decoder Module\$39.95

KAYPRO-FORMANCE

*Software available in IBM format.

SOFTWARE

(Call for information on latest software that is not listed in this ad.)

GAMES
Call about new game software not shown in this ad.
*Eliza: Eliza is a psychiatrist that carries on a conversation in plain English about anything you wish. Great to play alone or in a group. Eliza
*Adventure: Explore the dangerous Colossal Cave for treasures. Endure mystical spells and overcome adversaries. Adventure
Airport: You are an air traffic controller and your radar screen is filled with aircraft under your guidance. See how long you can last without cracking. Airport
* Mychess: World class chess. Nine skill levels with over 850 opening moves. Print moves and save game in progress. Mychess \$34.95
*Word Wiggle: Scrambled letter game for building vocabulary of young and old. Eleven skill levels containing 40,000 word dictionary. Word Wiggle\$29.95
PROGRAMMING TOOLS
from The Software Toolworks
C/80 Ver. 3.1: C compiler and runtime library. One of the fastest on the market. Supports most C features.
C/80 Ver. 3.1 (Software Toolworks)
C/80 Mathpak: Add true 32 bit floating point and signed integers to C/80 for fast assembly arithmetic. C/80 Mathpak
LISP/80: Artificial intelligence programming language. Over 75 built-in functions including trace, file I/O, and string operations
LISP/80
UTILITIES
*Uniform: Your Kaypro can read and write many popular disk formats including MS-DOS and PC-DOS. 80 single and double sided formats for Kaypro 4 or 10 computers. 35 single sided formats for Kaypro 2. Uniform
*Media Master: Read or write 25 different single sided disk formats on
Kaypro 2 computers. Includes MS-DOS and PC-DOS formats. Media Master
*Media Master (IBM): Read or write over 70 different CP/M and MS-DOS disk formats. For use with IBM and Kaypro 16 computers.
Media Master (IBM Format)
and changes between any two files. Autodiff can mark the file, display, or print the differences. Many other features.
Autodiff\$29.95
Plu*Perfect: Inexpensive software packages to dramatically increase the power and capability of your Kaypro. CP/M 2.2E
Enhanced CP/M
Plu*Perfect Writer (comes with CP/M 2.2F)
Perfect Writer Enhancement
GENERAL PACKAGES Checks & Balances: A complete personal checking program or business
register. A check writer and data base module included. An excellent money manager. Checks & Balances
Stardrive: Enhance WordStar by including high resolution graphics on line
100,000 word spelling checker, thesaurus, and a calculator to do common math, all while inside the edit mode of WordStar.

*Punctuation & Style: Improves your writing by catching unbalanced quotes, parentheses and brackets, improper abbreviations, capitalization,

sentence structure, much more.

*Word Plus: The ultimate spelling checker. Not only finds misspelled words but shows you correct spelling options, shows the word in context and much more. Word Plus
Thesaurus: This 72,000 word Thesaurus allows you to select the best word for the job. Works inside Word Star for greater ease of use. Thesaurus \$100.00
Wordpatch: A must for WordStar users. Print files with tiny, compressed, wide, or wide compressed type faces. 5 sizes of italic, real superscripts and subscripts, and 6, 7, and 8 lines per inch spacing. No new print controls to learn. Supports most popular dot matrix printers.
Wordpatch \$49.95
*Computer Chef: The computerized cook book for serious food lovers. Contains a data base of almost 100 recipes to which you can add your own. Auto scale ingredient quantities, display or print recipes by keywords or type of ingredients you want to use, and much more! Computer Chef
*What's for Dinner: For use with Computer Chef. Contains over 200 delicious main dish and dessert recipes for every occasion. What's for Dinner
*The Best of Wok Talk: Over 100 recipes from all regions of China. Computer Chef included. The Best of Wok Talk \$29.95
Chocolate Bytes: Can't you just taste each of the over 100 recipes including main dishes, desserts and more. All from the pages of Chocolate News. Computer Chef included. Chocolate Bytes
*Dr. DOS: Learn to use your K16 or IBM computer and the MS-DOS operating system. This program is a must if you have a K16. Dr. DOS
BUSINESS AND GRAPHICS
*Accounting Express: Comprehensive small business accounting system. Rated one of the best at any price. Purchase any of the eight integrated packages as you need them. GL, AR, AP, Payroll, Order Entry, Point of Purchase, Purchase Order Journal, Inventory Management. Accounting Express
Office Express: Client billing system for lawyers, accountants, and professionals. Calculates client charges, accumulates supplier costs, totals, makes statements and tracks payments.
Office Express
Rembrandt: Easy to use graphics package. Includes graphics editor to produce bar, pie and x-y charts easily. Electronic slide show presentations can also be produced. Supports most dot matrix printers. Rembrandt \$79.95
*Plotpro: Scientific graph printing program. Prints on 80 or 132 column printer. Create linear, semi-logarithmic, and full logarithmic plots with one or two Y axes in auto or forced scale. Plotpro\$\$49.95
\$549.95

CALL TODAY

(800) 821-8778 California (800) 521-7182

All items are warranteed for 90 days: 30 day money back guarantee if not completely satisfied. Visa and MasterCard are welcome. Please add \$2.00 for COD. California residents please add 6% sales tax. Prices subject to change without notice.



3154-F E. La Palma Ave. Anaheim, CA 92806 (714) 666-0130



*Complete with hub reinforcing rings, Tyvek sleeves, color coded user labels, and write protect tabs.

Quality you expect at a price you don't.

Proven quality at a great price. BECK offers you a full satisfaction money-back guarantee - you can't lose! If you like the quality of 3M, Dysan, Verbatim, et al, you'll like BECK.

- Satisfaction, Money-Back Guarantee
 100% Certified, 100% Error-Free
- Full 7-Year Warranty
- Tested and Retested 21 Times to 42 Rigid Specifications
- Meets or Exceeds ANSI Standards

For IBM, Apple, TRS, and 97% of popular computers

Order Toll Free 1-800-232-5634. Available in 25-Pack only plus freight. Bulk product inquiries welcome.

COD's CASH ONLY Corp. Accts Welcome No personal checks accepted.



Order Now Toll Free Door to Door in 48 hrs.

(In New Hampshire call 924-3821)

PUBLISHER

Geoffrey W. Soule

FDITOR

Tom Foote

SENIOR EDITOR

Terian Tyre

MANAGING EDITOR

Diane Ingalls

TECHNICAL EDITOR

Tom Enright

TECHNICAL CONSULTANT

Jak Perham

CONTRIBUTING EDITORS

David Gerrold

Ted Silveira

Dick Lutz **Brock Meeks**

ART DIRECTOR

Doug Powell

ART ASSISTANT

Lorraine Leung

ASSISTANT PUBLISHER

Gwyn Price

CIRCULATION

Mary Boggy

EDITORIAL OFFICES

533 Stevens Avenue Solana Beach, CA 92075 619/481-4353

ADVERTISING

Nancy Donabedian 249 S. Highway 101, Suite 321 Solana Beach, CA 92075 619/436-6112

PROFILES (ISSN 8775-464X) is published ten times a year by Kaypro Corporation, Solana Beach, California. Registered owners of Kaypro computers, within the United States, are entitled to a six-issue introductory subscription. Subscriptions within the United States are available for \$25.00 per year to people who are not registered Kaypro computer owners and for introductory subscription renewals.

Copyright © 1985 by Kaypro Corporation. All rights reserved. The views expressed in PROFILES do not necessarily reflect the views and opinions of the management or shareholders of Kaypro Corporation. Reproduction without express written consent of the publisher is strictly prohibited. POSTMASTER: PLEASE SEND ALL CHANGES OF ADDRESS (FORM 3579) TO PROFILES, P.O. BOX 2889, DEL MAR, CALIFORNIA 92014.

Subscriptions

General subscription information can be found on page 7. If your subscription is due to expire, we'll notify you by mail. No subscription will be cancelled until you are given a chance to renew. Our basic oneyear rate is \$25 (for ten issues).

If your first issue does not arrive within eight weeks after you've sent in your warranty card, or you miss an issue, please write to: PRO-FILES. Circulation Dept., P.O. Box 2889, Del Mar, CA 92014. We'll extend your subscription or send the issue.

To direct PROFILES to a new address, attach a recent mailing label plus both your old and new addresses. Allow six to eight weeks for processing.

If you have any other problem with your subscription or billing, please let us know at the above (Circulation) address so we can solve it promptly.

Disclaimer

Reviews, editorial references, and advertisements should not be taken as endorsements of any products not specifically manufactured by Kaypro Corporation. Opinions expressed are those of individuals and do not represent any form of corporate certification. Nor do they necessarily reflect intensive technical analysis as would be provided by a professional testing firm.

Responsibility for advertised products lies with the advertisers. Though we will not knowingly publish fraudulent materials, we are not liable for any damages arising from the purchase or use of any products. Should there be any consumer complaints regarding goods or services purchased from our advertisers, we would appreciate written notification to that effect to aid our own screening.

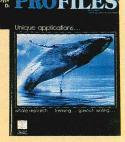
Introducing

OFILES

PROFILES

A Magazine For Kaypro Users

If you own a Kaypro, six issues of PROFILES won't cost you a penny.







Speaking Through Your Kaypro



If you've purchased a Kaypro computer, the cost of a six-issue PROFILES subscription was included in the purchase price. If you sent in your warranty card. you should be on the mailing list. If you haven't received an issue in the mail. please fill out the form below and send it in. We must have accurate serial numbers and zip codes for subscriptions to go through, so be thorough. Please allow 10-12 weeks for delivery. Note: the

introductory subscription begins with the first issue you receive in the mail and has no relationship to the complimentary issue packed in your machine.

If you don't have the luck to own a Kaypro, you can still subscribe (use the lower form). Or you can pick up a copy at any authorized Kaypro dealer. Call 800-447-4700 for the dealer nearest you.

Yes, Kaypro.

Address: *(U.S. Only) City: _ Zip: Kaypro model: Date purchased:___ Check here Serial number: (No introductory subscriptions without serial number) Owners outside of U.S.A. should consult their Kaypro dealers, or write to: Kaypro International, P.O. Box N, Del Mar, CA 92014. Additional postage rates will apply.

☐ Please Begin My Introductory Six-issue Subscription.

☐ I enclose \$21 for one-year subscription (10 issues) plus 11th issue bonus. SAVE \$4 OFF REGULAR RATE.

RENEWALS ONLY

☐ SUBSCRIPTION RENEWAL

Please attach current mailing

☐ Please bill me \$21 for 10 issues.

4BB77

(M.I.)

No, I don't Kaypro. I'd like to receive ten issues of PROFILES, and I've enclosed a \$25.00 check or money order made payable to Kaypro Corporation. (No cash, please)

(LAST)

Address:

City: _

_ Zip: _

*Subscribers outside of U.S.A. should write to: Kaypro International, P.O. Box N, Del Mar, CA 92014.

Send to: PROFILES Subscriptions, P.O. Box 2889, Del Mar, CA 92014. Please allow 10-12 weeks for delivery.

4BBZZ

Letters

New Republic?

It was with great joy that I opened the latest (April) issue of *PROFILES* to read yesterday, April Fool's Day, that William F. Buckley, Jr., was the founder of "the conservative New Republic!" Mr. Buckley was not even *alive* when that respected journal of (liberal) opinion was first published 70 years ago.

Elwood Williams Cambridge Springs, Pennsylvania

Tempted as we are to plead "April Fools," the truth is we failed to catch the above howler. We regret the error. The editorial attribution on page 41 of the same issue was correct in stating that "William F. Buckley, Jr., is the editor of the National Review . . ."

Badly misinformed

Canadians are sick and tired of being treated as second-class users by Kaypro and by *PROFILES*.

Kaypro owners in Canada were badly misinformed by you omitting Canadian users' groups (such as KUTE) from both the domestic and international listings published in *PROFILES*.

Michael A. Harrison, President KUTE

Box 66, Station "A" Toronto, Ontario Canada M5W 1A2

PROFILES regrets the omission. Whenever we run the KUG list, what we see in the KUG manager's database is exactly what we print, plain and simple. It follows that any KUG wishing to avoid errors or omissions in our occasional listing must keep the KUG manager current by sending new KUG information to:

Jim Durkin, Manager 533 Stevens Avenue Solana Beach, CA 92075.

Ever-increasing anguish

I read the "new" PROFILES with ever-increasing anguish and disappointment ... In my opinion you have debased what could have been the finest magazine since Dr. Dobbs Journal and missed the opportunity for a unique technical forum by appealing to the most pernicious herd insecurities of your audience. I don't care how many letters of praise from the yahoos you publish in your "Letters" column. It's an inexcusable abuse of editorial power. It hardly does credit to the Kaypro product that its house organ is far and away the trashiest magazine in the history of computer publications . . .

William B. Fankboner Palm Desert, California

We regret your disappointment and certainly wish we could better meet your needs. Please understand that we must also satisfy the needs of other readers with abundantly diverse interests and levels of expertise. The feedback we get-which, by any measure, is even more positive than what we print—suggests that the balance we provide for all is about right. Of course, we look forward to our upcoming readership survey to give us a better idea of reader needs and how well we meet them.

Controlling the real world

Jerry Houston's article, "Controlling the Real World" (March 1985) was both fair and informative, particularly with regard to the Starbuck 8232 ("Rapid-Fire Data Acquisition"). Your readers should note that there have been a few changes at Starbuck Data Company recently. First, we have a new

address and phone number. Second, we have a new product, the 1232 Data Acquisition and Control System, which is similar to the 8232 but has 13-bit resolution on the eight analog input channels. The list price of the 1232 is \$690. Third, the price on the 8232 has been reduced to \$490.

Peter O'Donnell Offenhartz Starbuck Data Co. 225 Crescent Street Waltham, Massachusetts 02154

I feel an important point was not stressed in Jerry Houston's article. There are two types of analog-to-digital controllers: 1) the "standalone" ADC, which uses a computer such as a Kaypro only to occasionally look into or change its internal program (it has its own CPU, ROM and RAM); 2) the RS-232 AD converter, which "dedicates" a small computer as a controller that is unable to do anything else unless you stop the controlling program.

I have a stand-alone ADC made by Hypertek (P.O. Box 137, Whitehouse, New Jersey 08888). While easy to program, it operates a complicated electrical system. The manufacturer has stood behind its product very well, replacing parts damaged by lightning and correcting other minor problems.

Neil Seitz Villa Grove, Colorado

I thought Jerry Houston's article was super. I did not know the Kaypro had so much potential. How do I get further information and prices on both home and business applications of ADC systems?

Joseph W. Swingle Westfield, New Jersey

Please note the above ADC vendor addresses of Starbuck Data Co. and Hypertek. Remote Measurement Systems, Inc. can be reached at 2633 Eastlake Ave. East, Suite 206, Seattle, Washington 98102.

Other assessments

I suppose you get a lot of letters with the deathless phrase, "Keep up the good work!" I suppose, too, that you won't mind hearing another voice raised in appreciation of your magazine.

I had noted in the past what I was beginning to think of as the "PRO-FILES Shuffle." I hope the shuffle is over; the present act is a good one. The April 1985 issue is a winner in every department. Your staff writers are tops, as are your contributors. (Buckley didn't outdo any of them.) ... Please don't get the impression that PROFILES blows my mind, but I do think one should be told when he is appreciated.

T.C. Miller Cameron, Texas

I would welcome an article of the "Did You Know?" type. Apparently there are many little tricks one can learn and use without being a hacker, and I would like to know more about them. Your note about using wildcards in the AQA and AQF commands of WordStar might save me countless minutes.

Thank you for doing an excellent job. Satisfying so many disparate interests is not easy. Yet hardly an issue goes by without my learning something useful.

Adolph Amster Ridgecrest, California

Your April issue is outstanding.

Well worth the price of admission. I was particularly pleased with Bill Kennedy's program for utilizing the Kaypro 4'84 internal clock. The thought of that damn clock just

sitting in there and not earning its keep was driving me up the wall...

Terrence Beasor Santa Monica, California

Are You Looking For Mini Level Storage Capacity At Micro Prices?

\$950 10MB CHOOSE THE KIT THAT FITS YOUR NEED Dealer price



Dealer price	rormat	tea)	internai	Externa
	10MB	Kaypro 2's, 4's Kaypro 10	\$1195 —	\$1695 \$1695
	21MB	Kaypro 2's, 4's Kaypro 10	\$2850 \$2425	\$3295 \$2995
	32MB	Kaypro 2's, 4's Kaypro 10	\$3492 \$3195	\$3995 \$3695
	42MB	Kaypro 2's, 4's Kaypro 10	\$4195 \$3995	\$4750 \$4495
	70MB	Kaypro 2's, 4's Kaypro 10	\$5495 \$5495	\$5995 \$5895
	120MB	Kaypro	Call	\$10,495
	KAYPRO 286		Call	Call
	KAYPRO 16		Call	Call
	Call	Call		
	HARD DISK 8	BACK-UP KIT	Γ Call	Call
COMPLETE SYSTE	MS WITH KIT	INSTALLED	Call	Call

CARTRIDGE TAPE 20-60MB \$1995 **BACK-UP SYSTEMS: CARTRIDGE DISK 10.8MB**

- Boots from CP/M, DOS
- Quick and easy to install
- Transparent to operating system and application software
 - Average seek time 30 milli seconds
- INTERNAL KITS are packaged and pretested and include hard disk. illustrated installation instructions, EPROM chip, cables, and utility software
 - EXTERNAL KITS include chassis, hard drive, connection instructions, power supply, cables, fan, and disk controller
 - ONE YEAR LIMITED WARRANTY / 48 HOUR REPLACEMENT

DEALER INQUIRIES WELCOME **VOLUME DISCOUNTS AVAILABLE**

TECHNOLOGY INFORMATION SYSTEMS INC.

SALES 1-800-821-1989 ext. 448 3621 N. Central; Phoenix, AZ 85012



by Tom Enright

We welcome and read all your letters. Some letters of general interest are printed in the Letters column; others are pleas for technical help. Questions that lend themselves to simple, concise answers are dealt with here. More advanced topics develop into articles or discussions in the Technical Forum.

Due to the volume, we simply can't respond personally to every request for assistance. If you need immediate help, you should contact your dealer. Kaypro Technical Support (619/481-3920) is now giving dealer calls priority, so it may be difficult to reach them by phone, but you can write to Kaypro Software Technical Support, P.O. Box N, Del Mar, CA, 92014. Please include a daytime phone number.

New BIOS

I own a Kaypro 4'84 and I am currently writing an enhanced BIOS for my system. The literature I am using as reference contains utility programs written in the C language (BDS C ver 1.50).

A few questions have arisen:

- 1) Would it be best to purchase the BDS C compiler mentioned in the book I'm using as a reference for the utilities?
- 2) Since my budget isn't that large, could I purchase a less expensive C compiler? I was thinking of Software Toolworks' C/80 ver 3.1.
- 3) Would it also be possible to write in another high-level language such as SBASIC?
- 4) Or should I rewrite them in assembler?

Doug Luedemann Huntsville, Texas

Let's be certain that you're talking about writing the utilities, not the new BIOS, in a high-level language. You'll have to do the BIOS in assembler.

It is possible to write system utilities in any high-level language. Many of the earlier utility programs for Kaypros were written in SBASIC. However, if you want to learn C, then by all means use it.

It will always be easier to use the same compiler used in the example programs. Every version of a language will have small differences that could drive you nearly nuts.

The BDS C compiler is a good one, but like most compilers it's somewhat expensive. Should you opt for the C/80 compiler, be prepared to encounter a series of puzzling differences from your examples. You'll run into those if you use any compiler different from the one in your book.

If you aren't absolutely wedded to C, you might consider Turbo Pascal from Borland International. It's exceptionally pleasant to use and generates very fast code.

My own preference is to write utilities in assembler. No highlevel language compiles smaller or runs faster.

Kaypro/Apple

We read a great deal these days about what can be done to our home computers to make them IBM PC-compatible. What about Apple II compatibility?

Thousands of Apple II programs are available, including a lot of game software, which is the only real deficiency in CP/M. How, if at all, do I go about making my Kaypro able to run software written for the Apple II?

Edward Stewart Berkeley, California No one that I know of markets a 6502 (the Apple II's CPU chip) coprocessor board for any CP/M machine.

The biggest problem is Apple's disk controller. It's unlike anything else in the industry. There are also the problems of Apple's 40-column screen, graphics statements in its BASIC, and a standard keyboard with uppercase only.

CP/M was designed to run on computers with separate terminals, not those with terminals designed into the computer like the Apple II's. Even Kaypro does not design the video into the mainboard. It is a separate video system mounted in the same cabinet.

In conclusion, I don't think anyone is going to see enough of a market to work around all of the design problems.

Noisy fan

I love everything about my Kaypro 4'84 except the buzzing, noisy fan. It is such a nuisance that I have considered removing it. Do you have any suggestions to quiet the thing?

D.W.M. Cambridge, Massachusetts

Sounds like your fan may be noisier than it should be. None of the fans in any of the Kaypro machines I use is obtrusive.

Try comparing the noise from your fan to the noise from computers in your dealer's showroom. If your fan is noisier than those, get your dealer to check it out. Something may be loose near the fan and vibrating. Check that before having the fan replaced.

I don't recommend removing the fan. You run the risk of overheated disk drives if you do. Overheating drives can damage the disks in them or the drive itself.

Video headache

I have a Kaypro 16, and on the whole, I'm very happy with it, except for one thing—the video. The appearance of characters onscreen is awfully spotty and strains my eyes. I don't have an external color monitor, nor do I intend to buy one soon. Do you have any suggestions for improving the readability of text onscreen?

Doris Greenberg Chicago, Illinois

The "spotty" appearance of text is caused by the IBM character set that is implemented on the 16's color-graphics board. Only every other scan line in the character cell is used (more about scan lines and character cells in this issue's "Technical Forum"). Therefore, you can see all the dots and the spaces between them in each character.

A patch to WordStar will fix this. The WINSTALL program allows you to choose what colors are used to display text and menus. By reassigning these colors you can relieve 90 percent of the objections to IBM's character set.

For menu colors, select red characters on a blue background. For normal text, select black characters on a blue background.

The key is having normal text as black characters (not lit up at all) on a dim reverse-video background. Since the characters are not illuminated, they appear to be fully formed. The effect is rather pleasing—normal text is easy to read, the background is unobtrusive, and menus are visually distinct but graphically sepa-

rated from your text.

The suggestions here are for the monochrome monitor, not an RGB color monitor. On the built-in monitor, different colors show up as different intensities of green.

Turbo frustration

I have been having a problem using Turbo Pascal on my Kaypro with a SWP board installed. When I try to invoke Turbo Pascal I get an "Interrupt Handling Trap" message on the screen under CP/M 86.

Under MS-DOS I get garbage on the screen when trying to use the full-screen editor.

As a computer science graduate student I find the situation highly frustrating.

Allen B. Johnston Arlington, Virginia

While I can't be certain about which interrupt is causing your problem under CP/M 86, your problem under MS-DOS sounds familiar.

Try reinstalling for a ADM 3A terminal. I remember this choice working on a SWP/Kaypro before. You can alter the video protocols one at a time from that point to see what happens.

Juki update

In the March 1985 "Q & A" column I advised John Marshall of Boone, North Carolina, that a ribbon feeding problem he was having indicated a need for adjustment on his Kaypro/Juki printer.

Bill Pfeifer of Springfield, Missouri, advises us that he solved a similar problem by using Viking and Royal brand ribbons. It seems that not all ribbons are equal. The manner in which ribbons thread into some cartridges is not compatible with the Juki printer.



AN APPLICATION RESOURCE

It's like having a friend to help:

Customize WordStar® for

- Faster screen response
- Optimal printer output
- Custom patches

Get started with Communications

- Transfer files across the country or across the room
- Communication Software on disk with Examples

Connect Equipment

- RS-232 & Handshaking explained
- Cable Connection Examples for over 70 printers

FastFacts Command Reference

Quick access to commands for common programs

Learn CP/M® Shortcuts

- Commands with examples
- Turn your Kaypro into an electronic typewriter with PIP
- Modify programs with DDT

Understand the great Public Domain Software included on disk

- Catalog and Organize disks
- Time and Date stamp files without a clock
- Writers & Disk Utilities

Programmers Reference

Software & Hardware Interface points

SLIPCASED KAYPRO COMPANION BOOK AND DISK PACKAGE \$35.00

PLUS WORDSTAR® RECOVERY PROGRAM TO SAVE FILES WHEN DISK IS FULL OR WHEN OTHER SAVE PROBLEMS OCCUR WSFIX.COM a \$30 value



2990 ATLANTIC AVE. Penfield, NY 14526

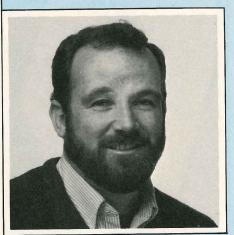
716 377-0369

Master Card and Visa Accepted \$3.00 Postage, NY residents add local tax

OTO BY DON! BOM/EDS

Editor's Notes

Megaproblems and microcomputers



by Tom Foote

et me explain what has long been a nagging enigma: I see a world with many competent and caring users on the one hand; starvation and international misunderstanding on the other; and nothing very systematic in the middle to join the two—despite abundant high-tech capacity to do so. Surely this follows from ours being a political world, not a logical one. But must it persist?

Micros, starvation and "Dirty War" excesses

With all that many are doing to help the Third World, we were stunned to see how much micros now help in fighting starvation, violations of human rights, and more. For example, in the Burstein and Peifer article. Dan Connell of Grassroots says "We get information daily from the refugee camps in Sudan and put it into the hands of the decision makers in the U.S. The bottom line is we're saving lives because of them [the Kaypros]." And in the Llanos article, we see how a Kaypro 2 helps track thousands who vanished during Argentina's so called "Dirty War."

What more can be done?

The world's proliferating base of users' groups offers much technical strength and a widely recognized penchant for caring and sharing (the lifeblood of any users' group). This combination offers an untapped wellspring for helping Third World nations dig out of very deep holes—to say nothing of helping all nations get along better.

How, you ask? Capitol KUG of Maryland planted this now-prolific seed: Aware that Kaypro Corporation has granted over 450 computers to nearly 50 Third World countries, and that most of the recipients lack the luxury of a nearby users' group, Capitol KUG has offered correspondence support and public domain programs to any of the Third World recipients who need them (See Burstein and Peifer article for details).

This prompted the thought: Why not appeal, here and now, to all Kaypro users' groups? Indeed, why not launch a second A.I.D.—an "adopt an international donee" effort—whereby a KUG in a developed country adopts a Kayprorecipient in a less-developed country, and guarantees all the serious consulting and software support the recipient might need?

A few calls to those I thought could pull this off met with excitement at every turn. Al Gerson of KUGRAM has volunteered use of the KUGRAM BBS and the Kaypro SIG of CompuServe to centralize the information flows. And International Grants Director, Tom Peifer, *PROFILES* columnist Brock Meeks, and KUG Manager, Jim Durkin, have agreed to coordinate it all.

Still more?

The above sprouting of ideas begot

still bigger ideas: Why limit this to just Kaypro users' groups? Why not launch an international coordinating center for microcomputing aid to the Third World-open to any user who wants to help? Perhaps commercial vendors of hardware and software could contribute. Indeed, wouldn't it be spectacular if the heavy hitters-IT&T, perhaps other multinationals, the U.N., the World Bank, et al.-jointly sponsored a satellite-supported, no-cost dial-in, kilo-port global BBS-all aimed at international problem solving? Through this hub could flow technical help, user-to-user software, application-specific international conferencing and, above all, heightened understanding of radically different cultures circumstances among and participating users.

Strides have already been made toward the above. And surely economic, technical, and political concerns will limit further strides. However, if users knew that helping the Third World was just an 800 number away, I think that many of them would fire up their modems in a minute—perhaps making the whole thing cost-effective in the long run.

While avoiding any political association left or right, we at *PRO-FILES* are serious about putting people of all persuasions together to get efforts like these rolling. Send us your thoughts and stay tuned to the KUGRAM BBS and the CompuServe Kaypro SIG for more.



Any 2 Or More Items On These next 3 Pages Get a

Giant 12 Foot **Coiled Extension Cord for Your** Kaypro keyboard

Send for your free cord today. Enjoy that detachable keyboard. One Free Cord Per Customer

Regarding this coiled retractible cord: Don't be fooled by cheap imitations. This cord has been specially manufactured to match the unique electrical requirements of the Kaypro computer and meets demanding Kaypro-like specs. It is guaranteed to work with every model Kaypro II, IV, and 10. Don't settle for less from copycat advertisers. Other cords will fail and may hurt your system. Order your free cord today.

This free offer applies to any 2 or more separate items. For example, a Kaypro Quality Cover and one template equals 2 items; 2 templates equal 2 items, but a single box of diskettes is one item. We must reserve the right to end this offer. Don't be disappointed, order today. 12 foot cords sold separately at \$12.95 per cord.

 Toll Free Order Desk Only 800-533-8049 USA 800-624-5628 CA Information Calls (805) 524-4189

CENTRAL COMPUTER PRODUCTS 330 Central Avenue • Fillmore, CA 93015

© 1985 Central Computer Products

Kaypro is a trademark of the Kaypro Corporation

Enemies of Kaypro[®]... Spikes, Surges, and Noise

The Kaypro has enemies. But now you can protect it from the mish mash of electrical currents that race through your home or business. Powerful up-surges of current can actually blow out your machine. Less powerful, barely noticeable spikes, surges, and noise can silently degrade your system in time, ruining chips, destroying data, and causing expensive service calls

The Kaypro manual states, 'Line filtering will protect your Kaypro...from power surges or other undesirable occurrences from the power source." Surge protection will help your Kaypro provide years of trouble-free service. Also, if you plan to use your Kaypro to access information by modem, you must have a reliable high frequency noise (EMI/RFI) suppressor to insure against data loss and scrambling.

There are many "toy" surge suppressors on the market. They are smartly colored, but beware. The performance difference is amazing. The best surge and noise suppressors on the market are made by Panamax. Our "Panamax Challenge Certificate" tells all. It is a startling comparison of Panamax quality with 11 other wellknown brands. One aspect of this revealing report tells how Panamax responds to and cuts surges in 5 or less pico seconds, while most other suppressors respond at a comparatively slow 5 to 50 nanoseconds!

sandwich aimed for

the disk drive slot.

Photo:

Panamax

6 outlets LC S RB NF.

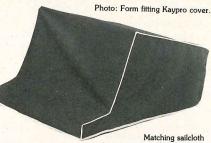
Check our regular low prices. Try the Panamax of your choice for 15 days. Receive the "Panamax Challenge Certificate" with your purchase. If not completely satisfied with your purchase, return for immediate full refund. Your Kaypro deserves Panamax protection, the best there is. Order today.

Introducing A Classic Form Fitting Kaypro Cover

At last, the classic Kaypro dust cover you'll be proud to own and use. This first rate computer cover is made from a premium, lint free, static free, washable, free breathing, and fade resistant sailcloth. It comes in a rich looking Navy blue or Royal blue, and has a smart contrasting silver gray piping and trim that adds a superior finished look. Made to form fit and protect a Kaypro that is set up and ready to use.

For a limited time only, your price for this factory direct, custom made, sailcloth Quality Cover is \$16.95. When ordering, remember to indicate color preference. This special low price is subject to change. You must be completely satisfied with this cover or we'll refund your money immediately. Order today.

Richly tailored inside and out. Look inside any of our Quality Covers; see the ultimate finishing; we use machines that sew with 3 needles so that no edge will ever unravel or shed lint. We stress perfection because you deserve the best. Compare for long-lasting satisfaction.



Matching sailcloth printer covers are \$14.95 each. Complete list sent with order. New. Special two-piece Kaypro sailcloth cover. Set covers CPU and keyboard. \$19.95 per set.

- Quality tailoring
 - Easy care fabrics
- Attractive colors
- Professional appeal

FACTORY DIRECT

Kleertex®

- \$17.95 for one
- . \$34 for two
- \$49 for three
- \$62 for four



Learn Software Commands Super, Now Available:

Super Fast

Wordstar/MailMerge dBase II, CalcStar

Time-saving Kleertex templates are made from a durable, non-glare plastic, and can be put on and lifted off the keyboard instantly. The software commands on Kleertex templates are easy to read and are conveniently arranged in alphabetical order. With a Kleertex template on

your keyboard, software commands are only a glance away, at your fingertips. This makes it easy to learn programs that come with your Kaypro. Stop going back to the book to get a software command. Now you can learn software commands super fast, so you can make better use of your powerful programs. The expertly organized Wordstar/Mailmerge template, for example, gets you into word processing in half the time. A special dBase II template cuts through the learning curve like a knife and gets you programming sooner. Kleertex templates for CalcStar, Perfect Writer/Filer and Perfect Calc get you moving fast on these programs too. Once you try Kleertex templates, you'll wonder how you ever got along without these useful tools. Central's special price for one template is \$17.95. Choose any two templates for \$34 and save. If you like, you may combine purchase of any of these four templates for super savings. Complete satisfaction is guaranteed or money-back. Makes learning software a breeze. Great value. Order today.

MORE ON NEXT PAGE PANAMAX SURGE SUPPRESSORS

Price

"Spikes and surges can be the greatest Description threat to your computer 2 outlets, D NF outside a 4 year old child with a jelly

\$ 79.00 \$ 59.00 4 outlets, LC S RB NF 6 outlets, LC S RB NF UltraMax, LC S UA NF \$ 89.00 \$ 99.00 89.00 \$ 69.00 \$ 79.00 \$ 99.00 \$149.00 TeleMax, D 1OL 2PJ NF \$ 89.00 \$ 69.00

- D: Connects direct to grounded wall jack.
- LC: Includes 6 foot long heavy duty line cord.
 S: Includes illuminated on/off switch.
- NF: Includes EMI/RFI noise filter.
- RB: Includes reset button.
 OL: Includes outlet.

D1: Includes 2 phone jack receptacles.

UA: Includes under voltage alarm/brown out protection.

All units include the added security of a 4 amp fuse.

Unique Panamax EMI/RFI noise filters provide protection in common and transverse mode. Essential for modem communications, multi-user stations, etc. All Panamax units are factory guaranteed for 60 months.

> "Power line-associated problems are estimated to cause nearly 70 to 90 percent of the malfunctions in the IBM PC."

> "Overvoltage can be fatal to both data and hardware alike." P.C. Magazine, March 1983

Lockable Diskette Defender

Handsome, sturdy, smoke-tinted acrylic tray holds 70

Kaypro-size diskettes. Flip-up lid keeps out dust, debris, and moisture, and locks securely to guard your important work. Comes with 7 dividers that make for easy filing and keep floppies upright to prevent bending, warping, and scratching. Tough metal lock never comes in contact with diskettes because it is enclosed in a plastic housing. Super value at \$23 for one, or \$21 each if you buy 2 or more. Keep prying eyes and sticky fingers away from your important data. Order today.

Cables

Top quality, individually tested 36 pin Centronics-type standard parallel cables for all model Kaypros. These are made to work hard and long. Guaranteed.

5 ft cables ... \$19.95 each 10 ft cables ... \$25.95 each

Top quality, individually tested ribbon modem RS 232C cables designed with reinforced clamps for a sure continuous connection and made especially for your Kaypro. These work every time.

2 ft cables ... \$14.95 each 5 ft cables ... \$16.95 each







SmartKey \$\$ Slashed

Now everyone can afford to supercharge their computing with SmartKey II Plus, the software program that Peter McWilliams and a cast of thousands rave about. SmartKey II Plus speeds up and improves accuracy in computing by letting you reduce multiple keystrokes to the touch of a single key. In a new national ad campaign Software Research Technologies, originators of SmartKey II, have slashed the retail price of this immensely popular program. In response, Central's new low, low price is:

SmartKey II Plus Super Combo Pak \$49

-includes SmartPrint II Plus and Screen Smarts

You can use this powerful program to assign thousands of keystrokes to one or more keys on your keyboard. Once you have redefined keys, you can put them to work or change them at will. All without interfering with the regular function of your typewriter-like keyboard. You can also store your "smartkey" definitions in a special file and use them later, or make numerous definition files to use with a variety of your favorite programs or projects. Imagine saving complex command codes, boilerplate paragraphs, inventory numbers, or whatever, and then injecting any of them into your work with the stroke of a single key. It's true, SmartKey makes computing exciting again.

Central's specially priced \$49 combo pak includes SmartPrint II, a program that greatly enhances the operation of dot matrix printers. In addition, Central's combo pak includes, as an exclusive bonus, a free copy of Paul Golding's \$15.95 book, Screen Smarts, The Computer Tamer's Guide. This book shows how Mr. Golding, a professional writer, uses SmartKey II to turn his humble computer into a supercharged dedicated word processor. Please don't delay, this offer may not be repeated. Order today to get this hard hitting \$115 combo pak for \$49

Warning: SmartKey II has many imitators. Comes with a complete step-by-step manual. Easy-to-use

Stop Tearing Up Your Disk Drives

If you're using your Kaypro as a printer buffer instead of a computer, you may be tearing up your disk drives. Disk drives are mechanical devices, they are often the first parts of a computer to go sour. No wonder. Everytime you feed your printer a file, the drives whirl madly until the printer has accepted the entire file. Sometimes this takes a long, long time.

If you're tired of hearing your disk drives grind down, you need a printer buffer. The best performance and price buffer on the market is the Consolink MicroSpooler. This computer-like tool absorbs files as fast as your computer can send them, and then patiently feeds or spools them to your printer a few bytes at a time

The MicroSpooler is an intelligent, feature-packed buffer. It is easy to install and operate. Merely place it between your computer and printer, then connect it with two cables, and feed files as large as 64K within seconds to your letter quality or dot matrix printer. The instant the transfer is complete, you can operate your computer again. The MicroSpooler does the rest.

The MicroSpooler comes in a variety of configurations. You can link your Kaypro to any popular printer with two inexpensive cables. Please check our low MicroSpooler prices. You won't find a more feature-packed or reasonably priced spooler around. Try the MicroSpooler of your choice for 15 days. If you are not completely satisfied with your purchase, return it for an immediate full refund. Your Kaypro deserves this attractive and useful accessory. Order a compact and powerful MicroSpooler for your computer today. Works with all model computers.

Central Computer Products

330 Central Avenue Fillmore, California 93015 (805) 524-4189

Mail Order service you can depend on.

- Personal Service
- Low Prices
- Fast deliveries
- Tele-Support

Price Protection Policy

Central Computer will meet or beat any price listed in this magazine on products also advertised in our ads. If you see a lower price, please tell us. We'll beat that price and pay shipping too. Try our lightning fast service today. Thank you.

Save Money. Save Worry.

3M diskettes. Certified 100% error-free. Guaranteed for life. Tested 327 ways.



They work like a charm on Kaypros.

Factory sealed. Best data diskette made. **3M** — One less thing to worry about.

No minimums - No limits

Box of 10 SS-DD Kaypro 2 diskettes: \$18. Box of 10 DS-DD Kaypro 4 diskettes: \$23. Box of 10 DS-DD Kaypro 10 diskettes: \$23. 3M Head Cleaning Kits for Kaypros: \$21.95 3M DeskTop 24"x 26" Anti-Static Mats: \$44.

The Kaypro can dump a file faster than a printer can accept it. This device will catch the file, quiet the disk drives, and let you compute again

CONSOLINK MICROSPOOLERS

Description	List	Price	
64 K P-P	\$315.00	\$279.95	
64 K P-S	\$343.00	\$299.95	
64 K S-S	\$349.00	\$299.95	
64 K S-P	\$339.00	\$294.95	
Two Cables	\$ 56.00	\$ 29.00	

64 K P-P P-S S-S S-P

Stores and spools files as large as 64 K. Parallel Kaypro port to parallel printer port Parallel Kaypro port to serial printer port. Serial Kaypro port to serial printer port. Serial Kaypro port to parallel printer port. Set includes one special male to female connector and one male-male connector. *Please tell us model and type of printer you're connecting to your computer.

Photo: MicroSpooler 64 K P-P

Includes these unique features:

- Status digital readout
- Multiple copy function
- Temporary pause function
- Sleek internal power supply
- Comprehensive self test routine
- Slimline attractive casing
- Front panel reset
- 12 month factory guarantee

Toll Free Order Desk 800-533-8049 USA 800-624-5628 CA

Product Description	List	Central
Kaypro Softwa	re	
ATI TRAINING SOFTWARE		
CP/M MBasic Interactive training	\$ 39.95 \$ 39.95	\$ 33.00 \$ 33.00
Microplan teaches how to use	\$ 75.00	\$ 57.00
Multiplan software. Fast results. Wordstar	\$ 75.00 \$ 75.00	\$ 57.00 \$ 57.00
BORLAND INTERNATIONAL	Ψ 73.00	Ψ 07.00
Turbo Pascal 2.0 ★	\$ 49.95	
Turbo Toolbox ★ Turbo Gift Pak with ★ & Tutor	\$ 49.95 \$ 99.00	\$ 44.00 \$ 94.00
CDE SOFTWARE	Ψ 33.00	4 7 1.00
Checks & Balances	\$ 74.95	\$ 69.95
CHUCK ATKINSON PROGRA	\$ 99.00	\$ 74.00
Quick Check Money Manager Quick Check + AR	\$195.00	\$149.00
Retail Inventory + Q Register	\$395.00	\$289.00
COMPUTER EDITYPE SYSTE	\$195.00	\$155.00
Magic Print ★ Magic Bind ★	\$250.00	\$199.00
Magic Index — includes ★ All superior Wordstar enhancer	\$295.00	\$245.00
COMPUTRONICS	S	
VersaBusiness Series		
VersaLedger II	\$149.95 \$ 99.95	\$115.00 \$ 79.50
Any other modules CONSULTANT SYSTEMS	φ 27.70	Ψ 79.50
The Real Estate Consultant	\$399.00	\$349.00
with The Creative Loan Consulta	nt out this	
Don't buy or sell property with CONTINENTAL SOFTWARE	out illis	
Home Accountant Plus	\$ 99.95	\$ 79.95
DATA DECISIONS, INC.		A 60.00
KBAR, K-10 backup utility	\$ 89.95	\$ 69.00
DG/SYSTEMS Rembrandt Graphics Pak	\$ 79.95	\$ 59.00
DIGITAL MARKETING/PRO		
Bibliography	\$ 99.00	\$ 84.00
Datebook II Footnote and Pair ★	\$150.00 \$ 99.00	\$115.00 \$ 79.00
Grammatik ★	\$ 75.00	\$ 69.00
Hyper Typer, Typing Tutor Index ★	\$ 29.95 \$ 99.00	\$ 26.00 \$ 87.00
Milestone, Project Planner	\$250.00	\$199.00
Bibliography and Footnote Notebook	\$150.00 \$150.00	\$130.00 \$119.00
Writer's Pak — includes	\$250.00	\$219.00
all ★ products and Spelling C	hecker	
EAGLE ENTERPRISES Citation	\$185.00	\$155.00
General Ledger	\$185.00	
FOX AND GELLER	#00F 00	#02E 00
QuickCode ★ QuickScreen ★	\$295.00 \$149.00	0100 00
QuickScreen MBasic	\$149.00	
All ★ products are dBase II e	nhancers	
FYI, INC. FYI 3000	\$395.00	
SuperFile with Sort & Merge	\$195.00	\$149.00
Free form textual matter database	base manage	siz
INFOCOM Enchanter	\$ 39.95	\$ 37.00
Deadline	\$ 49.95	\$ 46.00
SeaStaker PlanetFall	\$ 39.95 \$ 39.95	
Infidel	\$ 44.95	\$ 42.00
Witness Zork I	\$ 39.95 \$ 39.95	\$ 37.00
Zork II & III each	\$ 44.95	
LEXISOFT	. 640E 0	\$359.00
SpellBinder	\$495.00	J 4339,00
MENDOCINO SOFTWARE Eureka, Disk Cataloger	\$ 50.00	\$ 48.00
helps you find the right file in	stantly	
MICROSOFT MRasia Compiler	\$395.0	\$299.00
MBasic Compiler MultiPlan	\$195.0	
MICROSOLUTIONS		
Uniform Kaypro II	\$ 69.9	5 \$ 49.95
Reads 32 + machine formats Uniform Kaypro IV or 10	\$ 69.9	5 \$ 49.95
Reads 90 + machine formats		
continued on next pag	ge –	
0-624-5628 CA		
U-074-0079 CA		The last of the la





Toll Free Order Desk 800-533-8049 USA 800-624-5628 CA

	Product Description	List	Central
	Kaypro Software		Central
	MYCROFT LABS	- continued	
	Compat	\$ 99.00	\$ 89.00
	Mite Plus Terminal Emulations	\$150.00 \$175.00	\$ 99.00 \$129.00
	NORTHWESTERN ANALYT		
	StatPak	\$495.00	\$399.00
	PEARLSOFT Personal Pearl	\$295.00	\$225.00
	PLU PERFECT SYSTEMS	4270.00	. 4220.00
	Plu Perfect Writer CP/M 2.2E Backgrounder	\$ 39.95 \$ 45.00	\$ 31.00 \$ 38.00
	CP/M 2.2E only	\$ 32.00	\$ 27.00
	Date Stamper QUIC-N-EASY PROD.	\$ 39.00	\$ 29.00
	Q-Pro-4	\$595.00	\$395.00
	with multikey file indexing		
	ROBONICS Grafiks 2.4	\$125.00	\$ 99.00
	Graphic Express Stardrive	\$125.00	\$ 99.00
	—with thesaurus, checker, gr	\$200.00 aphics, etc.	\$159.00
	SAN FRANCISCO COMP		
	Power! DocuPower!	\$149.00 \$149.00	\$ 99.00 \$ 99.00
	SCIENTIFIC MARKETING		
	MarketFax Dynamic computerized sales	\$495.00	\$359.00
	SOFTCRAFT	generating too	
	Fancy Font 2.0	\$180.00	\$149.00
	SOFTWARE RESEARCH TE dFastest —	CH \$ 89.00	\$ 69.00
	sorts dBase II files 33 times fa		Ψ 09.00
	SOFTWARE TOOLWORKS Eliza	£ 04.04	A 00 00
	MyChess	\$ 24.94 \$ 34.95	\$ 22.00 \$ 29.95
	Word Wiggle C/80	\$ 29.95 \$ 49.95	\$ 27.00 \$ 45.00
	call for prices on other Toolw	orks products	φ 45.00
	SORCIM SuperCole 2	#00F 00	#00F 00
	SuperCalc 2 STAR SYSTEMS	\$295.00	\$235.00
	The Accounting Partner	\$395.00	\$285.00
	Star Systems 1, Integrated Upgrade AP to SS1 Integrated	\$795.00 \$400.00	\$635.00 \$350.00
	SUPERSOFT	4.00.00	4000.00
	Disk Doctor	\$100.00	\$ 75.00
	T/MAKER COMPANY T/Maker Integrated	\$495.00	\$379.00
	with database manager & spel		4075.00
	WRITING CONSULTANTS Proportional Star	\$ 75.00	\$ 69.00
	Hardware	Ψ 73.00	φ 09.00
	DATASOLVERS		
	Internal 300 Baud Modem	\$199.75	\$187.00
	Internal 1200 Baud Modem models for all Kaypros	\$427.50	\$389.00
	PANAMAX		
	PowerMax — 250 Watt Battery Back-up	\$559.00	\$399.95
	SWP MICROCOMPUTER PR	OD	
	128k Co-Power-88 MSDOS 256k Co-Power-88 MSDOS	\$400.00	\$375.00
		\$500.00 \$600.00	\$435.00 \$535.00
	256k Co-Power-88 Plus plus board is expandable up 1	megabyte N	EW
	Supplies		
	Dysan SSDD Kaypro II disks	orint wheels 10/box	\$ 25.95 \$ 23.00
	Dysan DSDD IV & 10 disks	10/box	\$ 29.00
	Bookware Compleat Kaypro II, IV & 10	\$ 16.95	£ 15.00
	CP/M for the Kaypro	\$ 16.95 \$ 16.95	\$ 15.00 \$ 15.00
	with an Intro to dBase II Kaypro WP Plain & Simple	\$ 13.95	\$ 12.50
	Free Software Handbook	\$ 17.95	\$ 15.00
	FS Handbook & 70 programs Using CP/M on Kaypro 10	\$ 57.95 \$ 19.50	\$ 44.00 \$ 18.00
	Screen Smarts	\$ 15.95	\$ 12.95
THE REAL PROPERTY.	Free yellow Hi-Liter pen sent wi Prices, specifications, and offers subjec	th every book or	der.
		3	

Do You Wish Writing Was Easier?

If you need to write, or want to write clearly, your Kaypro and the software program Punctuation and Style can help you get there faster. It improves, clarifies, and enriches your writing by identifying sentences with misused, redundant, faulty, cliched, or erroneous phrases, and shows you how to improve them. It helps you rewrite and check your work by quickly marking and annotating your files for easy correction. In addition to computer-fast identification of awkward, muddy, pompous, and wordy sentence structure, it also finds missing or improper punctuation, unbalanced quotes, wrong abbreviations, faulty capitalizations, and much more. Punctuation and Style actually improves your writing by mercilessly pointing out grammatical errors. After a few weeks with Oasis System's Punctuation and Style your writing is bound to become more dynamic, expressive, and honest. In time, you'll stop worrying about grammar and work on projecting ideas instead. After all, that's what writing is about.

Punctuation and Style makes writing and rewriting much easier. The list price of Punctuation and Style is \$125. Central's price is \$95. Experience the power of this valuable "Punctuation Checking and Writing Improvement Software" yourself. Order today to get this program fast.

Punctuation and Style works on files created with Wordstar or Perfect Writer. It comes with an easy to use, clearly written manual and is packaged in an attractive binder. Join thousands who now write with more confidence, faster, and better.

90,000 Word Perfect Kaypro® Stand Thesaurus at Your Fingertips

Synonym Finder by Writing Consultants is a 90,000 word thesaurus that is guaranteed to make you and your Wordstar a precise and powerful online writing machine. Synonym Finder is so easy to use that after one or two searches there's no turning back. Your speaking and writing vocabulary will improve dramatically as you use this program to display and study a rich variety of words at the push of a key.

Synonym Finder was compiled by a team of lexicographers. It is extremely fast and works within Wordstar, so you never have to leave your file to use it. Just put your cursor on a word in your text, press the escape key twice, and a list of synonyms appears. Then press a key if you want to select and automatically place an alternate word in your onscreen text. Synonym Finder will help you find the exact word you need to properly express your thought. Synonym Finder retails at \$124. Central's current low introductory price is \$74. This offer may not be repeated. Please order today.

Attention: Synonym Finder works with all Kaypros. Gives Wordstar text files new vim, vigor, and punch.

Cordura **Travel Case**

This full featured, padded carrying case is made from a super-material called "cordura." This material is rip, shred, and water resistant.



The Coverman Kaypro case comes fully padded and lined, so your Kaypro is protected from unexpected bumps and jolts. Since your Kaypro is completely enclosed in this case, it keeps rain, sand, and other debris out of your machine. The Coverman case comes with external carrying handles and a detachable strap with a non-slip shoulder pad that comes in handy when you have to carry your Kaypro over a long distance. There is also a large interior pocket perfect for transporting manuals and diskettes. The Coverman Kaypro carrying case is regularly \$79.95. Central is proud to offer this expertly constructed case at \$59.95. Please indicate your choice of color: silver-gray, dark blue, or brown. All straps and carrying handles are black. You must be completely satisfied with your purchase of this handsome travel case or receive a refund immediately. Order today.

Simple, strong, sturdy, safe. These words describe an attractive. angled stand that provides a perfect spot to place your Kaypro.



This stand is made from rounded, steel rods covered with a thick, shiny, soft, black polymer material that protects your Kaypro and table top from scratches. Unlike flat wood or acrylic panels used in other stands, the tough supporting rods of the Smart Stand (TM) do not obstruct air flow. In fact, since your Kaypro is lifted off the table top and gently angled by this stand, air rises up from under your computer, and flows freely through it to help keep it cool. When you're finished computing, you can slide the keyboard completely under the stand to create a working area on your desk. The Smart Stand is a super value at \$34.95. Try it for 15 days. If not completely satisfied, send it back for a full refund. Matching 80 or 132 column printer stands are only \$19.95 or \$23.95. Order today to get the Smart Stand fast.

CENTRAL COMPUTER PRODUCTS

330 Central Avenue, Dept. 7A Fillmore, California 93015 (805) 524-4189

Dear Central,

Please send me the items listed below. I want fast, friendly service. Remember to include my free 12 foot extension cord. I understand there is no charge for this cord if I purchase 2 or more items from these 3 pages. My

check, money order Descr	, or card n	o. is enc	losed.	Thanks. Price
- 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1				
Kaypro Model		Sub Tota		
FIRM	CA Resider	nt 6% Tax		
MONEY BACK GUARANTEE	Postage &	Handling	\$	3.00
ORDER WITH CONF	IDENCE	Total	\$	
☐ Navy. blue☐ Send free catalog☐ Check enclosed		Royal blue Send free Money Or	12 foot	
☐ Visa/Mastercard #				
Exp. Date	Sig		4714	
Name				MAT IN
Address			73	
City	Sta	te	Zip	
/isa and Mastercard pho To order by mail use co	ne orders acc	epted.	Cal	l toll free

Central Computer Products





by David Gerrold

ast month, I wrote about ZCPR3-which I liked, but found to be not really appropriate for my needs. What I really wanted was something that gave me some of the strengths of ZCPR3, but without its complications.

Fortunately, there is just such a product—or set of products—available. It is CP/M2.2E. The E is for Enhancement.

According to Derek McKay, one of the two owners of Plu*Perfect Systems (the other is Bridger Mitchell), CP/M 2.2E, The Enhancement, is derived from the original ZCPR3 enhancement for CP/M. That was their starting point. However, what they've done with it is something else entirely. They've dropped out most of the hackeroriented functions and used the space to enhance the user-oriented functions.

The Enhancement works by replacing the CCP—the Command Control Processor of CP/M-with a different block of code that gives you several new features on your system and two new commands.

First, The Enhancement gives you a larger type-ahead buffer (12 characters instead of three). If you're a fast typist, you'll really appreciate this. It means fewer dropped characters.

Like ZCPR3, CP/M 2.2E gives you 16 new user areas. As with ZCPR3, you can't actually log on to

Up and Running

Getting the most out of CP/M—Part II

these areas, but you can store files in them-and as you'll see in a minute, there's a way to use programs stored in these areas, too.

Moving files from one user area to another has been facilitated by a program called MAKE. The command MAKE <filename> 0\$31 <CR> will tell The Enhancement to rewrite that file's directory entry so as to put the file on to a different user area. (The 0 is the new user area, and the 31 is the old. The dollar sign is the delimiter.) The file will disappear from user area 31 and reappear in user area 0. The effect is the same as copying the file on to a new user area and erasing the original copy—but it's a lot faster this way, because all that's really changed is one byte in the program's directory listing.

CP/M's old familiar TYPE command has been replaced with a powerful new TYPE command. The enhanced TYPE clears the screen and lets you page through any file one screen at a time. Your down-arrow key displays the next page. Your up-arrow key takes you back one page. Your right-arrow scrolls the display up one line, your left-arrow scrolls it down one line. TYPE <filename > L will list the file out on your printer; TYPE <filename> E displays the last page, and TYPE <filename > C scrolls the file continuously. You can also enter a number from 1 to 9 and jump that many pages ahead.

(I should also note here that the enhanced TYPE command does not allow wildcard filenames, so you can't type a whole list of files to your screen or printer automatically. For my part, this is a small enough thing to give up for the new conveniences gained; but this question was raised by one user, so it may be an important consideration to others as well.)

Another nice feature is the automatic search of drive A. If you're logged on to drive B and you need a program or a file, CP/M 2.2E will look first on drive B for the program or file in the current user area. If it doesn't find it, it will then look in user area 0. If it still doesn't find it, it will then look on drive A for the program or file. And finally it will look in user area 0 of drive A.

The Enhancement will also let you add a startup command to your system. For instance, you can have your system come up running with a menu program or your word processor or your spreadsheet. Or you can automatically chain to a submit file that will load in a background module (like Smartkey or Xtra-key) and then your desired

The CP/M 2.2E Enhancement also gives you two new commands. The first of these is GO, and it allows you to immediately re-execute the last loaded program. This can be very convenient if you need to get back on to a program that takes a long time to load and initialize.

The second new command is PUBLIC. This allows you to declare any file on your disk to be a "public" file—which means you can access it from any user area you may be logged into. This means you need store only one copy of a program and its overlay files on a disk, but you can use it freely from any user

area. It doesn't matter what user area a PUBLIC file is stored in, either—public is public.

What I've done is taken all my PUBLIC programs-NewWord, The Word Plus, dBASE II, MBASIC, and others-and stashed them all in high-numbered user areas. NW is in 31, MBASIC is in 30, and so on. Now I have my bottom 16 user areas uncluttered and clear for files I'll be working on. Any program is available to work on any file at any time. The simple command "PUBLIC" will tell you what files you have declared as public.

CP/M 2.2E also comes with several public domain utilities that will make your life a lot easier. One of these, SD.COM, is a superdirectory program-and it even has the capability to give you a directory of your PUBLIC programs. SD can also write a copy of a directory to disk, adding each new directory to the end of the file. This makes it very easy to catalog all your disk files onto one master directory.

Other public domain utilities include RPIP (a resettable PIP- no more AC warm boots); SWEEP, a very powerful file management utility; EX, which works like SUB-MIT but is a lot more versatile; UNERASE, which brings back lost files; FINDBAD, which locates damaged sectors on a disk; and the above-mentioned MAKE.

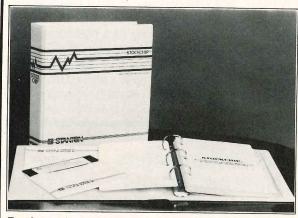
And all this costs only \$32.

The Backgrounder

For another \$45, Plu*Perfect Systems will also send you The Backgrounder-which is such a perfect complement to The CP/M 2.2E Enhancement that it's hard to think of them as two separate programs. In fact, you need The CP/M 2.2E Enhancement in order to run The Backgrounder.

What The Backgrounder does is not immediately obvious-in fact, it's not supposed to be. It's supposed to hide in the background, waiting until you need it. When you do, you simply hit a previously defined Backgrounder function key, or a Control-1. (The 1 is just above the 6 on the keyboard, but you don't have to hit the control key, the shift and

STOCKCHIP



- ✓ Record all transactions
- ✓ Analyze performance
- → Prepare complicated tax form entries even with difficult utility shares
- → Project long/short term gain and loss
- Compute hypothetical buys and sells
- Maintain complete records
- Check bottom line profit and loss in a matter of seconds
- Generates 8 different reports
- Accepts up to 300 stocks Plus many other features
- Available on PC/MS-DOS and CP/M-80

For those who now own and for those who plan to own STOCK INVESTMENTS.. Stanton Software offers a complete, comprehensive, and most of all...EASY TO USE, Stock Portfolio Management Program.

Quality Assured, thorough documentation, menu-driven Reasonably priced at \$149 with potential tax benefits TO ORDER Call 314-576-7482 or write to:

STANTON SOFTWARE • Box 28762 • St. Louis, Mo. 63146

MASTER CARD*VISA*MONEY ORDER*SATISFACTION GUARANTEED

KAYPRO 4-84

At last, the real time clock in the 4-84 IS good for something — the complete TIMEPRO system is available as single programs, or as a complete

SEETIME.COM continuously displays the time and date (in either standard or military time) on the 25th line of the screen — all the time you use your Kaypro. Does screen dump.

TD.COM time and date stamps your disk files. Automatically detects which files have been added or modified since TD was last run and updates the time and date only for those files. Does automatic backup of updated files.

APPT.COM maintains calendar of appointments and other reminders for up to 20 people. Includes archiving capabilities and several utilities.

*NEW

LOG.COM designed mainly to aid Kaypro users in complying with the new IRS requirements

regulating computer use. Can be used for tracking time spent doing any type activity. An easy and convenient method of time keeping!

KAYPRO 2-84, 2X-84

As you probably know, the main computer board of these two systems is identical to the 4-84, except that Kaypro left out the components for the real time clock and modem. We have the forgotten real time clock components, complete with instructions, ready to install.

KAYPRO II. 4 (Pre '84)

Time and speed are yours with our easily installed SPEEDPRO-5RTC 5 megahertz speedup board with real time clock. Shipped complete with the full TIMEPRO series of 12 programs - a whole disk full (192K) of software.

All packages are accompanied by programs for setting the real time clock and by source code in several computer languages to demonstrate the use of the real time clock in your own programs.

KAYPRO 10

Now TIMEPRO can be yours tool Available now with clock kit. TIMEPRO software is fully compatible with ZTIME-1 calendar/clock kit from Kenmore.

THE BOTTOM LINES

SEETIME.COM\$ 24.9	95
TD.COM \$ 24.9	95
APPT.COM \$ 24.9	
ALL ABOVE, PLUS SEVERAL	
ADDITIONAL PROGRAMS \$ 64.9	95
LOG.COM\$ 24.9	95
TIMEPRO DOCUMENTS ON DISK	
(credited toward complete	
TIMEPRO system) \$ 9.5	95
2/2X/10 REAL TIME CLOCK KIT\$ 49.9	
CLOCK KIT & TIMEPRO\$104.9	95
SPEEDPRO-5RTC & TIMEPRO \$129.0	
SPEEDPRO-5+ SPEEDUP	
BOARD\$ 89.9	95
SHIPPING \$ 4.0	

M/C, Visa, COD, Check

P.O. Box 5653 (206) 627-0797 Tacoma, WA 98405 the 6 all at the the same time. A simple Control-6 will accomplish the same result, because there is no Control-6; the keyboard sends a Control-^ instead.)

The Backgrounder function key suspends any program you are running and gives you instead a one-line command menu: Help/Mode/CR/Define/Cpm/Load/Save/DEFINED "<current definitions label>".

are in BCP/M you can use any of CP/M's built-in functions. You can log on to any user area. You can TYPE any file—using the enhanced TYPE command, of course. You can ERAse, DIRectory, REName, or SAVE memory to a file. This gives you some very powerful directory capabilities in the middle of programs that have none at all.

Another Control-6 returns you to the command line. A carriage

be aware it's there, until you need to check the time and date file—and you don't have to have a clock board to use it, either. The main use, of course, is to double-check which is the most recent version of a file, but it can also be used to validate just how many hours you use your machine—very important for tax purposes.

I will have more to say about The Datestamper when I get a new onboard clock installed in my machine, but for the moment, let me just note that it is as well thought out and as useful as The CP/M 2.2E Enhancement and The Backgrounder-plus it comes with appropriate utilities, including a special version of SD, the superdirectory program, and DAT-SWEEP, an enhanced version of SWEEP. Both of these utilities are able to make use of the Date-Stamper's time and date codes. The DateStamper is only \$39.

The Backgrounder lets you define any of your arrow and keypad keys as function keys.

Typing H for Help puts you automatically in CP/M 2.2E's TYPE function, with the first page of the appropriate help file displayed—if one exists. If not, you can create your own help files. Hit the ESC key and the suspended program resumes. (Some programs can redraw their screens—most word processors and spreadsheets do; some programs can't. A bit of care may be needed here.) You can also define any key on your keypad as a specific Help key.

The Backgrounder lets you define any or all of your arrow and keypad keys as function keys—or as strings of text up to 255 characters. Typing **M** for mode lets you suspend these definitions, so you can use your arrows and keypad normally. Typing **D** for Define—or the keypad definition key—will let you define any other key as a string up to 255 characters.

You use the reverse backslash (\) as the command instruction, and the following keystroke calls up the defined string. For example, for the writing of this article I set \c to write "CP/M 2.2E" and \p to write "Plu*Perfect Systems" on the screen. Definitions are very easy to create.

Hitting C puts you on to Background CP/M. (You can also have a defined Background CP/M key, if you want.) The prompt on this is not the familiar A>. BCP/M gives you its own prompt: A#. When you

return puts you back on to BCP/M; an ESCape puts you back on to your suspended program.

The L and S commands of The Backgrounder let you load and save previously defined sets of keypad and keyboard definitions. The best thing about these sets of definitions is that they can be attached to specific programs. That is, you can define your keypad one way for MultiPlan and another way for Word-Star and still a third way for MBASIC. Once you've defined a set of function keys for a programand saved them-you can permanently attach them to that program. From that moment on, as long as The Backgrounder is running on your system and the definition file is in an accessible drive or user area, that program will always come up running with those attached definitions in place.

When you exit the program, you also exit the definitions at the same time. You won't have to worry about de-configuring your keypad.

And so far, this isn't even half of what The Backgrounder does. It also has three other very powerful modules: NOTEPAD, SNAPSHOT, and LINEEDIT.

The Datestamper

Plu*Perfect Systems also offers The DateStamper, a program that keeps an automatic record of when a file or program was created, modified or accessed. You'll never even

The final rating

I've been using all three of the Plu*Perfect programs for several months now. They all worked exactly as advertised, and I've had no problems with any of them.

The only real quirk I've found is a little one; but it's peculiar enough to be interesting, because it's actually a fix of a Kaypro bug. The original Kaypro CP/M was supposed to have had a problem switching back and forth between single- and doublesided disks. CP/M 2.2E fixes this bug and is supposed to be able to switch between single- and doublesided disks without any problem. Well, okay, it does work, but now my machine seems just a tad more finicky switching back and forth between double- and single-sided disks than it did with just plain vanilla CP/M. I rarely use singlesided disks, though, so this is something I can live with.

Indeed, Plu*Perfect Software gets the highest possible rating. This is must-have software for any serious CP/M user. These are "How did I get along without them?" products. I most definitely recommend that you install these three packages on your CP/M system. □

CHECKS & BALANCES also has a Rolodex for names, addresses, phone numbers and notes, can print nearly any type of check, has reports comparing income and expenses, lets you disperse any entry to multiple categories, keeps a full year at a time, and gives you as many checkbooks as you want, on any disk drive

Checks Balances

is creating Panda-monium for Home Accountant and Quick Check!

When people compare Checks & Balances to Home Accountant and Quick Check, it's no contest! Just look at these examples:

•We give you powerful, easy to use and easy to remember English commands to take you from one function to another instantly. They give you a menu to go to another menu which goes to another menu to go to another

•We put up to seven entries on a screen at a time in a form just like your check register and let you scroll forward and back like flipping pages. They disply one entry per screen that doesn't look at all like your familiar check register.

•We let you make corrections on any entry displayed by inserting or deleting characters or typing over the error just like your word processor. With them making corrections means going to special menus where you have to call up the entry again, then going back through the menus to resume your work.

•We give you over forty characters of space for the payee and memo instead of as few as fifteen.

And best of all . . . we cost only \$74.95. They cost a whole lot more!

Start the New Year out right (and get last year in order for tax time). Pick up CHECKS & BALANCES at your local dealer, or order direct from CDE. CHECKS & BALANCES is available for PC-DOS, MS-DOS and CP/M. Indicate computer type, operating system, and disk type (8" SSSD, 51/4" SSDD, or 51/4" DSDD). California residents include 6% sales tax, and everyone include \$2 shipping and handling. Dealer distribution bundling rates available. Write for complete catalogue of software for home and business.

Visa/MC accepted

CDE SOFTWARE

(213)-661-2031

2463 McCready Ave. • Los Angeles, CA 90039



XTrakey out "keys" the competition!

Thinking about buying a "key" program? (You know, the names all start with words like "smart", "magic", "pro", etc.) Looking for a faster, easier

way to calc, or process words or databases? If so, then you owe it to yourself (and your Kaypro) to check out XtraKey. Quite frankly, we think it's the best of all the "key" programs. At any price! (And wait 'till you see our price.) Just like other "key" programs, XtraKey lets you redefine your regular keyboard

keys to be anything you want. A word, a paragraph, a series of commands . . . whatever you hate to type over and over again! Close a letter in split-seconds. Log onto bulletin boards at the touch of a key.

Create instant "macros" for database programs. You can change, use or make up new definitions anytime. Even while running a favorite program like WordStar or dBASE III Unlike other "key" programs, XtraKey can redefine your Kaypro's numeric keypad

or cursor keys directly without complicated configurations. And there's no limit on definition lengths.* Plus our advanced XShift feature lets individual keys have up to 16 meanings without losing their normal functions! Using XtraKey, you can even "talk" directly to your printer or video display. Change from regular to compressed type while working on a spreadsheet. Address an envelope while editing a document. Or call up your own custom help or menu screens (almost like having windows!)

There's more! Built-in print screen (screen dump) function . . . no need to install a special chip and void your Kaypro's warranty. Built-in batch processing. Automatic definition file loading. Backspace error correction. Input pause. All in one, neat little package that uses less memory AND disk space than other "key" programs. XtraKey is easy-to-use and includes a 70 page manual. No installation required. Now, for \$49.95, aren't you ready for real "key" power?

To available CP/M TPA

New version 2.3! Even more features!

Print screen! File screen! XScreen!

An Xpert Software exclusive! Our new XScreen program makes instant copies of your Kaypro's current screen display* on your printer OR allows you to save screen copies in standard word processing text files! And it works any time, even while running your favorite

XScreen is a real plus for documentation writers or people who want the bottom line and want it NOW. Copy menus, sign-on messages, bulletin board conversations, spreadsheet totals, etc. Then use your word processor to insert screen copies directly into a document where they can be edited! WordStar users can even configure XScreen to eliminate the top rows and far right columns for instant letters and envelopes.

XScreen is easy-to-use and requires no installation. (No need to install a special chip and void your Kaypro's

Now, for \$24.95, aren't you ready for real screen

Printing characters only, no graphics

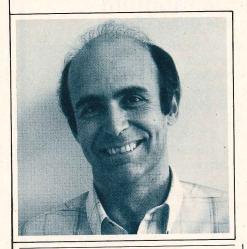
ORDERING INFORMATION

XtraKey and XScreen will run on all Kaypros except the K16. To order XtraKey, send check or money order for \$49.95 plus \$3.00 shipping (U.S. & Canada). To order XScreen, send \$24.95 plus \$2.00 shipping. California residents MUST add 6% sales tax. Inquire on foreign orders. Specify Kaypro 2 (SS/DD) or Kaypro 4 (DS/DD) disk format. VISA and MasterCard accepted (provide card number, bank number and expiration date). All orders please include telephone number

Xpert Software

8865 Polland Ave. • San Diego, CA 92123 (619) 268-0112

Tademarks: XtraKey, XScreen and XShift — Xpert Software, dBASE II — Ashton-Tate; WordStar — MicroPro International; Kaypro — Kaypro Corp.; CP/M — Digital Research



by Ted Silveira

ast month I showed how I use key-redefinition programs like XtraKey or SmartKey II to teach WordStar new tricks. These key-redefinition programs allow me to assign a complicated series of commands to any key I want and then recall that series with just one or two keystrokes.

Those of you who have one of these programs have probably cooked up your own WordStar commands by now, but I'll add a few more—this time dealing with paragraphs instead of sentences. As in last month's column, <SP > means "hit the space bar," <CR > means "hit the RETURN key," and <ESC > means "hit the ESC key."

Move to beginning of paragraph

Often, when I'm in the middle of a paragraph, I find I want to jump back and alter the paragraph opening. Since I start each of my paragraphs with a five-space indent (that's how WordStar interprets a TAB), it's easy enough to find the paragraph beginning. I set one key to send the command ^QF <SP><SP><SP><SP><SP><SP <SP><SP > CR> B <CR> ^F. After the search backward, WordStar will leave me at the beginning of the five-space indent, so I added a ^F to move to the first word.

Flea Market

More tricks for WordStar

Reforming paragraphs

This command cleans up the mess by zipping the cursor to the beginning of the paragraph and then reforming it with a ^B. Of course, if you have any columns or other special formatting set up with soft (rather than hard) carriage returns, this command will mess them up. But it's best to avoid such "soft" formatting anyway.

Move to end of paragraph

Since you can move to the beginning of a paragraph, you'll want to be able to move to the end of one also. To place the cursor after the last character of your current paragraph, use the command ^B^A. This method is easy and fast, but the ^B reforms your paragraph.

If you don't want your paragraph reformed, you'll have to use a different command. This will vary slightly, depending on whether you have one carriage return at the end of a paragraph (single-spaced text, no blank line between paragraphs) or two (either double-spaced text, or single-spaced text with blank lines between paragraphs). The command also varies depending on whether you have WordStar 3.3 or 3.0. For WordStar 3.3, one carriage return at the end of a paragraph, use the command $\Lambda QF \Lambda N < SP > < SP > < SP >$

<SP><ESC>. For WordStar 3.3, two carriage returns at the end, use the command $^{\circ}$ GF $^{\wedge}$ N $^{\wedge}$ N<SP>< SP><SP><SP><SP><SP><SP><SP><

For WordStar 3.0, the commands are slightly different, because WordStar 3.0 places the cursor at the *end* of the search string after a search forward. So for WordStar 3.0, one carriage return at the end of a paragraph, use the command ^QF ^N <SP > <SP > <SP > <SP > <SP > <SC > ^A.

And for WordStar 3.0, two carriage returns at the end, use the command $^{\circ}QF^{\circ}N < SP > ^{A}$

To keep matters straight, I have two separate key-redefinition files, one for each kind of paragraph.

Mark paragraph as a block

This command is handy because you can use it as a prelude to moving, copying, or deleting your current paragraph. For paragraphs with only one carriage return at the end, use the command ^QF<SP>
<SP> <SP> <SP> <SP> <SP> <

And for paragraphs with two carriage returns at the end, use the command $^{\Lambda}QF$ < SP> < SP> < SP> < CR> B

This command sets the beginblock mark at the start of the fivespace indent that begins my paragraphs and sets the end-block mark so that it includes any space that comes after the paragraph. This way, I avoid having extra space once the marked paragraph

Copyright © 1985 Ted Silveira. All rights reserved.

is gone and avoid having to add space if I move it to a new location. Notice also that I used the ^B command to get to the end of the paragraph. If you don't want to use the ^B, substitute the alternate method explained for the "Move to End of Paragraph" command.

You can turn this command into a "Delete Paragraph" command just by adding a ^KY at the end. I don't recommend it, though; make a few simple formatting errors and the command will wipe out two or three paragraphs instead of just one. I'll risk accidentally trashing a few sentences, but three paragraphs? Too cavalier for me.

Delete from cursor to end of paragraph

This command lets me delete everything in a paragraph from the present cursor position to the end. I use it mostly on first and second drafts, when I'm making wholesale revisions to the second half of a paragraph. Rather than editing and moving individual sentences. I move my cursor to the spot where my changes will start, rewrite the last part of the paragraph using the old sentences for reference, and then erase the rest of the old paragraph (now dangling at the end of my new one) in one stroke. I set one key to send the command ^KB^B^A^KK^KY

To play it safe, eliminate the ^KY. Then the command will mark everything from your cursor to the end of the paragraph as a block, and you can give the delete command yourself, after making sure you haven't marked anything you want to keep.

Print a marked block

Sometimes it's handy to be able to print out a short section of the file you're working on, without having to exit the file or stop what you're doing. The following command will print any marked block of text without interrupting you for more than a few seconds, provided your printer is installed to allow concurrent editing and printing. Set one key to send the command AKWA:PRINT.FIL < CR > YAKPA: PRINT.FIL < ESC >.



THE DISKIT SERIES OF HARD DISK DRIVES

now with

ZCPR3 by Echelon, Inc.

Now you can add from 5 to 40 Megabytes of fast-access Winchester storage to your KAYPRO 2, 4, or 10. The DISKIT is only 4 inches high; 5.7 if you get the two drive model with the *removable* 5 or 10 Mb. cartridge, and weighs less than 10 pounds. Easily disconnect DISKIT from the computer whenever you want, and if more capacity is required, just swap your drive for a larger model.

Our DISKIT Model 10 has 10.8 Megabytes of *formatted* capacity... **20**% more than a Kaypro 10, and runs about twice as fast. Installs in minutes. Call SPC now and ask for more information. Quantity and prepayment discounts are available.

SYSTEMS PERIPHERALS CONSULTANTS

9747 Business Park Avenue San Diego, CA 92131 (619) 693-8611

SOFTWARE FOR KAYPRO

SBACOUNT: Accounting for small business. Tracks all income & outgo, prints checks, posts chart of accounts. Prints chart of accounts, trial balance, profit and loss statement, & check ledger. Reconciles and prints reconciliation. Generates an Income & Expense journal for audit purposes.

MBACOUNT: Accounting for small business. Full general ledger (20 asset, 20 liability, 20 income, 30 expense & 10 capital accounts all user assigned) PLUS all the features of SBACOUNT as above.

PROFBILL: Automatic bookkeeping & invoicing for Doctors, Lawyers and other professional people who invoice at various hourly rates. Will handle up to nine partners/employees. Prints invoice or saves for future billing.

ONLY \$89.00

MAILLIST: Mailing list, customer handling, filing program, ten data fields per customer. 8 character cust # - user (or dated program) assigned, sorts by most fields. Add, delete or modify any record. Prints all or part on 1, 2 or 3-up labels on 80 column printer.

SFINANCE: Personal financial program. Prints checks, posts amount to selected budget catagory, posts debits and deposits, prints check ledger, reconciles and prints reconciliation statement. Similar program for charge cards. Extracts and prints list of expenditures in selected budget catagories.

ONLY \$79.00

TOUCHTYP: Touch typing course, Beginning, Intermediate & Advanced. Tests and displays typos and displays final score

ONLY \$79.00

STANFORM: Need to fill out standard or non-standard forms? This program generates programs for printing data in the proper location on invoices, gov't forms, insurance claims, any form that will fit into your printer.

MBSCHART: Prints MICROSOFT BASIC programs, prints cross reference list of all referenced lines, prints list of variables cross referenced to each line where used. A godsend if you modify or debug Mbasic programs.

ONLY \$79.00

Price includes disc, manual, and shipment next working day by first class mail. Mail in your order today or request detailed program listing. Better yet, if using accepted credit card, phone your order or data request to our 7 day, 24 hour phone service. Californians must add 6% to all prices.

MAP

(Visa, Mastercard & American Express accepted)

Micro-Art Programmers

173 Birch Avenue, Cayucos, California 93430 Phone: (805) 995-2329 MBASIC® is a registered trademark of MICROSOFT

This command writes the marked block to a file on drive A named PRINT.FIL, tells WordStar it's okay to overwrite the old PRINT.FIL, and then prints PRINT.FIL. I put PRINT.FIL on drive A because I always have room there, but if your A disk is absolutely full, you'll have to write it on drive B. The Y after the block-write command tells WordStar it's okay to overwrite the old A:PRINT.FIL. Unless you create a dummy PRINT.FIL, this command will insert a Y in your text the first time you use it (because there'll be no PRINT.FIL to overwrite, so Word-Star won't ask the question). Just delete it, and after that everything will be fine.

Once you've given the command, use ^KH to remove the markers.

built-in function that will send a snapshot of your screen to the printer. With others, you have to create the function, but it works fine either way. Use the command ^KO ^QE ^QS ^KB ^Z ^QX ^QD ^KK ^W ^QO ^KO ^KWA:PRINT.FIL <CR> Y ^KPA:PRINT.FIL <ESC>^KH.

This command combines the "Print a Marked Block" and "Remove Ghost Characters" commands. It marks your present place, marks the whole screen as a block, writes the block to a file on drive A named PRINTFIL, prints A:PRINTFIL, returns you to your original place, and removes all the markers. I added a ^Z and a ^W to make sure that the very bottom line of the screen gets included in the block.

also available on CompuServe in the Kaypro SIG, PCS-25, as SHADES.WS.)

KAY*FOG, by the way, is one of my favorite bulletin boards. It has a fairly good up- and downloading section, including a special area for Kaypro programs. More important, it has a very active message board with online articles, conferences (on various subjects, including law), and an interesting batch of users who talk about things other than what kinds of computers they have. KAY*FOG is also a very forgiving board—the software doesn't crash or give out cryptic messages, and novices are welcome. (It's easy to forget how overwhelming it can be to call a bulletin board for the first time.) KAY*FOG requires registration (no fee), but it's worth the trouble to sign up.

I'll risk accidentally trashing a few sentences, but three paragraphs? Too cavalier for me.

Removing ghost characters

Most people who use WordStar have had ghosts—those stray characters that show up on your screen (but not in your file) and can be so hard to get rid of. These stray characters do no harm, but they're confusing and annoying.

To get rid of these ghosts, I use the following trick, which I picked up from the KAY*FOG bulletin board (near San Francisco) where it's called the "ghostbuster." In its present form, it's credited to Martin Nicolaus. The command is ^KO ^QE^QS^KB^QX^QD^KK^QO^KO.

This command marks the screen as a block (which causes WordStar to rewrite the screen, eliminating the ghosts) and returns the cursor to its previous position. You can unmark the block by using ^KH or by hitting the "ghostbuster" key again.

Print screen

With some key-redefinition programs, like XtraKey, you can get a

Still more tricks

Once people get the hang of a keyredefinition software program, especially with WordStar, they tend to get fanatical about working out new definitions. If you want to get a feel for just how far you can go, call the KAY*FOG bulletin board (415/285-2687, 300/1200 baud, 24 hours) and read or download an online article by Dick Ezzard called "Shades of WordStar" (filename in the ARTI-SHADES.ART CLE.PUB section). He describes a nifty method for yanking notes, outlines, or other outside material into the file you're working on-just as if you were pulling down a window shade with something written on it—and then snapping it up out of the way when you're done with it. It's quick and neat, and while it's not exactly like having windows, it breaks down some old WordStar barriers. You should also look at two other articles of his-DESTRUCT.ART and MOVIES .-ART-for more good ideas about using WordStar. (SHADES.ART is

Next month

I love to tinker with things, but when it comes to computers, I'm mainly just a user—I haven't got the talent (or the attention span) to be a programmer or serious hacker. Instead, I'm a scavenger. When I need some little program I don't have, I don't sit down to write it myself—I prowl the bulletin boards to see if someone else has already written it. Next month I'll pass on some of the good things I've found in the public domain.



ACCOUNTING FOR MICROS

\$325 Set of Four \$325 Set of Three \$465 Set of Five

ACCOUNTING FOR MICROS is a set of integrated accounting programs which meet professional standards. They're fast and easy to use, with complete instructions. Our manual (shown above) also includes helpful information on bookkeeping and computers.

GENERAL LEDGER \$125

Allows up to 1,000 accounts & 1,000 transactions/month. Retains mo/end balances for Last year, This Year and Forecast. Includes Cash Disbursements, Cash Receipts and General Journals. Reports include Balance Sheet, Income Statement, Annual Summaries and Journal Reports.

ACCOUNTS RECEIVABLE \$125

Allows up to 2,500 customers and 1,000 invoices per month. Invoicing can access Inventory Module. Keeps customer names and addresses. Invoice prints on plain paper or any pre-printed form. Statements can be printed at any time.

INVENTORY \$125

Allows up to 4,000 parts. Keeps 3 month history of unit sales as well as year to date. With AR, can be used as point of sale system (prints invoices, handles cash). Reports include Inventory Value and Stock Report, Internal and Customer Price List.

ACCOUNTS PAYABLE \$125

Allows up to 500 vendors and 600 invoices/mo. Records invoices and handwritten checks. Prints computer checks on any pre-printed form. Keeps vendor names and addresses.

PAYROLL \$125

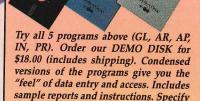
Will handle up to 100 employees with eight deductions per employee. Deductions may be determined as fixed dollar amounts or percentages, or referred to a table for automatic look-up. Tax tables are easily entered, or purchased separately. Prints checks and W2's.

SET OF FIVE	\$465
SET OF FOUR	\$395
SET OF THREE	\$325

RUN ON MOST CPM AND MSDOS

Apple CPM	IBM PC,XT,PC jr,AT	Sanyo (all)
Columbia	Kaypro (all)	Tandy (all)
Compaq	Morrow (all)	TeleVideo
Corona	Osborne (all)	Zenith 100 & 150
Eagle (all)	Panasonic	8 " CPM
Foson OX-10	Radio Shack CDM	Other competible

DEMO DISK \$18.00



TMAN \$125

The "Catch-All" program. Files any type of information for quick access. Name or subject oriented with 15 lines of notes per name. Use TMAN as a mailing list, filing system, notebook, etc. Can be used alone or with data from our other programs.

Try TMAN DEMÒ\$16

HOW TO ORDER: Please specify machine and disk format. You can pay by check, by VISA or MasterCard (we need your expiration date and card number), or by UPS COD (add \$2.50 COD charge). Our price includes shipping. Minnesota residents, add 6% sales tax). We ship most orders the same day.

or ORDER BY PHONE: 612-339-2521

James River Group

1

125 North First Street Minneapolis, MN 55401

by Brock Meeks

[Ed. note: Because of space limitations, we were unable to print all the numbers for the BBSs mentioned in Brock Meeks' column. However, a complete list can be found on the Kaypro National Users Group BBS (516/747-8306) and Steve Sanders' Pro-Comm I (813/937-3608). The file is called INTERBBS.TXT (International BBS text).

You can also obtain a copy directly from Meeks by contacting him through one of the addresses listed at the end of this column.]

ost of my online sessions follow the same routine. The Kaypro 2 fires up MEX (cloned to level 13) while drive number 2 logs on the "scratch" download disk. The local FM jazz station is cued up in the ultralight headphones; something cold (and preferably imported) waits sweating a safe distance from the keyboard, and I then begin the almost ritual-like process of dialing the phone.

The sequence of numbers rarely changes. My "homebase" BBS first, then the local "intellectual" BBS, followed by CompuServe, The Source, and MCI Mail. My electronic mail holds few surprises, but last week's MCI log-on was a different story.

Life at 300 Baud

Electronic globetrotting from Canada to Jakarta

Assignment: International

MCI welcomed me, and after scanning some electronic junk mail, a one-line message scrolled onto my screen:

1 message inbox *PRIORITY*

Now, my MCI mailbox usually contains nothing more than cordial greetings or requests for information from readers of "300 Baud." Seeing a *PRIORITY* message quickened my pulse. I took another swallow from the sweating bottle of brew and turned down the jazz. I had never received a *PRIORITY* message before. It read:

"Brock-there is a BBS operating in Saudi Arabia. I've never called it, but the number is supposed to be 966-2-651-5259. Just thought you would like the info.-Bob"

With the message safely downloaded, I scrambled for the phone and dialed PROFILES.

A short conversation with the editor netted me the online addicts dream: Carte blanche to travel the international online community.

At first, splashing my cursor across the continents didn't seem like it would be much of a problem.

I was in for an education.

Intercontinental primer

International data transfer is a challenge, even for you modem pros. When the world set out to create a "standard" for data transfer, someone forgot to invite North America.

In the United States, Canada and Mexico, the Bell standard gov-

erns modem communications. However, the rest of the world uses standards set by the International Telegraph and Telephone Consultative Committee (abbreviated CCITT in French), a United Nations-sponsored body based in

The problems with international communications begin to appear because the Bell and CCITT modems do not handshake on the same frequencies, even though they may be running at the same baud rate.

The only way around this is to get a modem that operates on both the Bell and CCITT standards (which many of the major manufacturers are beginning to offer).

If you don't have a dual-standard modem, don't call a CCITT BBS. It will just be an expensive lesson in frustration.

Thanks, Ma

Armed with nothing more than a hunch and a book of international country codes, I began my tour with Saudi Arabia.

The first couple of attempts at calling Saudi Arabia filled me with frustration and a new appreciation of the complexity of that antique telecommunications device, the telephone.

A quick call to the operator informed me that I needed an international "dial out" number, (which happens to be 011). In addition I discovered that leading zeros must be dropped from the city numbers when calling. With these "common knowledge" technicalities out of the way, I was ready to log onto my

first intercontinental BBS.

Sheik BBS

My first contact was the Jeddah RBBS, where Mohamed Elyas is sysop. The board is sponsored by a "downtown" computer store.

Logging on to a foreign BBS is almost surrealistic. Here I was, communicating with a computer set up in Jeddah, Saudi Arabia—but I had no concept of its actual location. (I'm sure reality will come crashing in when the phone bill arrives next month).

All text was in English, and only a few Arab names were posted with the messages. (A discussion of the new Arabic version of WordStar quickly reminded me that I wasn't online somewhere in Cleveland.)

The board operated like any RBBS system in the United States. The commands were all the same, and I found that comforting. (Anything approaching a "standard" these days makes me comfortable.)

From what I could tell, the Saudi government doesn't mind the existence of bulletin board systems. In fact, I was informed that "some of the young princes are considered regular callers on a few systems."

Here are two of the seven systems operating in Saudi Arabia: Jeddah RBBS. 966-2-651-5259. 300/1200 baud. (Bell).

Riyadh TBBS. 966-1-463-2743. 300/1200 baud. (Bell).

British BBS

Bulletin boards were introduced to the United Kingdom by Fred Brown, with his pioneering Forum-80 board located in Hull. Since Forum-80 went online, England has spawned 22 other systems.

Except for London, however, there is only one city that has more than one BBS—the city of Hull, which contains a grand total of two.

Message threads have a high mortality rate on British systems. A topic is created, discussed and dismissed within a few messages. I don't know if that is because discussion is efficient or there are a lot of boring topics.

Here are a couple of the boards of

NEWWORD®

\$100!

HERE ARE SOME OF THE FEATURES YOU GET:

30 day money back guarantee

- WordStar/MailMerge compatible file, keystroke, command
- Mergeprint is standard including conditionals (if, then, else)
- Displays underline, bold, & inverse on the screen*
- Unerase delete a line by accident? Unerase it!

Works from any user area

Microjustified printing on dot-matrix printers

VISIT OR CALL YOUR KAYPRO DEALER TODAY

ORDER NOW!

(800) 932-2526 · (415) 932-2526 (CA only)

OR SEND CHECK OR MONEY ORDER TO:

Newstar Software, Inc. 1601 Oak Park Blvd. Pleasant Hill, CA 94523

- send \$100 for Newword\$3.00 shipping & handling
- CA residents add sales tax
 VISA/MC accepted

*not supported on '83 or earlier Models 2 & 4 offer applies to Kaypro CP/M™ versions only Newword, CP/M, WordStar, MailMerge are trademarks of Newstar Software, Digital Research, and MicroPro



Cubbyhole

Single - Entry Bookkeeping System

\$79.95

Payables & Receivables Modules

\$19.95 each!

Cubbyhole is a perfect choice for home, small business or non - profit organizations.

"CHECK" THIS OUT:

- Unlimited number of named Income & Expense Accounts
- Create Accounts while performing any function
- Up to 26 Checkbooks and 26 separate Funds
- Budgets by Month or Year with or without Balance Forward
- Complete Reports Check Register, Profit & Loss, Income, Expense, Budget, on Printer or Screen
- Payables & Receivables interact directly with Cubbyhole files

Powerful, versatile, easy to use, ... and AFFORDABLE!!

★ Requires CP/M 2.2 or MS-DOS 2.0 or higher with 192K and one drive with at least 190K.

Be sure to include \$2.00 shipping and handling per order. ND residents add 4 % sales tax

Visa and Mastercard accepted

SEND CHECK OR MONEY ORDER TO: P.O. Box 2166 Minot N.D. 58702

P.O. Box 2166 Minot N.D. 58702 Phone (701) 838-3546 BRING YOUR BOOKKEEPING UP TO DATE WITH THE LATEST IN COMPUTER SOFTWARE... ORDER TODAY!!



Britain:

Forum-80 Hull (Forum-80 HQ). Tel: (0482) 859169. International electronic mail, library for up/downloading. Hours: 3-11:30 p.m. Mon.-Fri.; noon to ll:30 p.m. Sat. and Sun. (CCITT). Midnight to 8 a.m. daily (Bell 103).

REWTEL. Tel: (0272) 236628. 300 baud. Run by Radio and Electronics World, the publishing side of Ambit (electronics components suppliers). Information on stocklines, some message facilities. Cost: limited areas free 24 hours.

Maple leaf network

If you experience too many frustrations trying to call overseas, turn your cursor to Canada.

Since Canada operates on the same standard (Bell) as the United States, about the only frustration you will encounter will be a busy signal, instead of a dropped carrier.

Bulletin boards in Canada have the same "flavor" as American

at connecting before I got through. Both systems run under RCP/M software. You might want to download Help menus from a local RCP/M before logging on in Australia. This will not only save you frustration—it will go a long way toward preserving your checkbook balance as well.

Here are the two systems I found: RCP/M CBBS MICOM, Melbourne, VIC, Australia. 61 3 762-5088. 24 hours. 300 baud.

RCP/M Software Tools, Sydney, Australia. 61 2 997 1018. 24 hours. 300 baud.

The dog barks in Jakarta

Jakarta, Indonesia, can boast of three of bulletin board systems, all running under FidoNet software. The main board in Jakarta is called the PACOM Security Assistance BBS. That's right, good ol' Uncle Sam is footing the bill for this BBS.

According to the sysop, Major Jim Filgo, the PACOM BBS is used areas of the world is extremely limited. I have heard rumors of bulletin boards in South Africa, France, and Germany, but I was not able to verify these.

In most countries, communications are restricted by the local government's postal-telephonetelegraph monopoly (PTT), and many PTTs forbid the use of any modem other than a governmentapproved device.

In Germany, Spain and Italy you are required to lease the modem from the government. In Italy your only option is to lease a 300 baud acoustic coupler modem. (If this seems a bit harsh, remember that ten years ago Americans had no other option but to lease their phones from Ma Bell.)

The cost of leasing these modems is often hundreds of dollars a month, making the idea of running a bulletin board something less than romantic.

In some countries modem communications are impossible. In India, for example, the phone lines are so noisy the modems can't key into each other's carriers, so data communication is a waste of time.

Then there are the countries that don't allow public access to computers—such as the Soviet Union (though I should mention there has been some discussion on The Source about a renegade Soviet BBS being run on, of all things, a TRS model 100!)

I called the Soviet Embassy to ask about their policy on electronic communications. To make sure I would be talking with people who understood me, I called the embassy in San Francisco—where the actual building is just a microwave from Silicon Valley.

I talked with the "diplomat of the day," who finally agreed to answer my questions, but only if I sent them in writing.

I wrote the letter.

I'm still waiting.

I'll let you know how it turns out in another column.

Japanese connection

Micro communications in Japan are opening up. Just two years ago the Kokusai Denshin Denwa (Inter-

International data transfer is a challenge, even for you modem pros.

BBSs. Most boards were active, with a good number of discussions taking place. These lively boards are most often frequented by Americans exporting their thoughts. Here are a couple of the more than 40 Canadian boards:

ABBS Analog, Port Coquitlam, BC, CN (604) 941-0041. 24 hours. 300 baud.

FIDO #321 CANADA-1, Willow-dale, Ont., CN. (416) 226-9260. 24 hours. 300 baud.

BBSing the outback

Australia is a newcomer to bulletin board systems, and I could only find two systems in the whole country. What I did see was encouraging, as the message traffic was heavy and there is talk about expanding.

I found the connection to Australia extremely unreliable, and I made many unsuccessful attempts

"to assist an ongoing Department of Defense microcomputer test project. Our goal is to more closely link the myriad of offices of certain DOD organizations that support the U.S. security assistance training program."

Didn't I tell you BBSs were growing up?

Filgo has also set up FidoNets in Malasyia and Hawaii. While the latter boards are for official use only, the PACOM board is open to the public.

Filgo is trying to help the Indonesian people run a BBS and has been successful in developing two more.

The number of the PACOM board is: PACOM Security BBS. 011-62-21-372518. 24 hours. 300/1200 baud.

State of the art

Electronic communication in other

national T&T or KDD) would not let an individual have access to the TELENET or TYMNET services (these are "gateways" used for accessing The Source and CompuServe, among others). However, this policy has changed and those gateway systems are now open to the public. The KDD also has a list of "approved" modems that one can purchase. Until recently the Hayes modem was not on the list.

Japan does not have a standard ASCII equivalent for Japanese phonetic syllables, so these BBSs require that you have the same hardware configuration as the originating BBS. (And you thought nonstandardization was bad in the U.S.?) For you more adventurous online wanderers, here are two of the nine boards in Japan:

JADA Teleport System. 011-81-3-461-2516.

JAPAN Mai-Kon (microcomputer) Club. 011-81-3-434-8080.

Swedish nodes

There are a couple of boards in Sweden. They both operate on the CCITT standard, so I wasn't able to log on. However, I understand both boards are quite active.

Here are the numbers of Swedish

Day Rainbow, Karlstad. 011-46-54-166988.

Sun City FIDO, Karlstad. 011-46-54-166988.

Carrier connected

As modems become cheaper and packet switching networks (like TYMNET, TELENET, and GTE) lower their rates, it is conceivable that one day you may be calling the "Sgt. Pepper's BBS" in Liverpool, England, as often as you dial into your local RCP/M.

If any of you know of an international BBS not mentioned here, I would like to hear about it. You can reach me-online, of course-via any of the following:

CompuServe-70366,1355 MCI Mail—BMEEKS P.dBMS #1-(619) 444-7099 And if you prefer the U.S. Mail, in c/o PROFILES Magazine.

INVENTORY CONTROL

MODUTROL™ SYSTEMS & ACCESSORIES

WHOLESALE/RETAIL - Includes 14 data fields per record. Order entry option allows for quantity on hand. Sales Amount and Net Balance. Records last Activity Date and Sales History (YTD). Prints all Re-order and Transaction Reports.

MODUTROL- I OUR PRICE \$29.00

MANUFACTURERS - Includes Easy Creation for Bill of Material "Lists." Single entries update quantities and order entry amounts for all items on a List. Search out parts "hiding" in your lists. Perform immediate and future Parts Projections. Print your Parts lists with or without cost information. Use this system for Raw Materials as well, a great scheduling aid for the Machine Shop. All features of Modutrol - I and much more. Look at the price!

MODUTROL - II OUR PRICE \$79.00

UTILITIES - There are several Special Purpose programs to do extra functions with your Inventory Data. Fact sheet included with sales literature. **PRICE/ea** \$10.00

FILERS & MAILERS - These 3 programs are great to have around the home or business.

JOHN DOE - For names, addresses, phone and extra. TICKLER - A Calendar for reminding you when and where. \$10.00 **EVENTS** - For Birthdays, Anniversaries, whatever.

ALL PROGRAMS ARE COMPLETELY MENU-DRIVEN AND SIMPLE TO USE CPM VERSIONS AVAILABLE NOW — MSDOS COMING SOON.

VISA, MASTERCHARGE or Advance Payment. No. COD's. Add \$2.00 for shipping and handling. International orders add \$5.00.

CRYSTAL CONTROL

MOBILE COMPUTER WORK STATION

Increase speed and efficiency, reduce fatigue. Put work where it belongs, in front of you. Adjust keyboard height to fit you perfectly. Tuck the keyboard away when not in use. Lots of storage in the handsome light oak on dook welluit calvers. Available with or dark walnut cabinet. Available with sturdy, obstruction free U-frame that adjusts keyboard height from 20" to 33"



A accommodates monitors 22' 12". B accepts monitors 22" x 16 Both accept keyboards 22" x 11' 3 1/2".

A w/mobile stand A w/out mobile stand B w/mobile stand B w/out mobile stand

*\$295 *\$199 *\$315

Mobile stand only *Shipping and handling included

2544 N.E. 2nd. • BEND, OR 97701 • [503] 382-2308

FINANCIAL FILER CHECK/LEDGER \$59.95 Up to 99 categories, 9 bank accounts per file, 25 codes for cash entries. Month and year category totals. Check register. Running records and Bank Balance on all accounts. Clear checks. Sort on any field with flexible search program. Full range of editing functions. Help screens, many printing choices, and many more features. Check Print option (at extra cost). Menu driven, fast, and a pleasure to use. Pays for itself in time saved. Makes taxes easy.

PROMAILER from \$59.95 Up to 3000 names per file. Sorting on any field provides unlimited sorting choices with no set up required. 60 character comment line (2 variable search), two fast ten character sorting fields, 10 digit zip, multiple phone numbers, and more. Creates mail merge files, lists sorted alphabetically or by zip. Prints 1 or 3 across labels, lists, and envelopes (will even print return address). PROMAIL II (\$89.95) includes: built-in Type-Write program - inserts address directly into your letter, forms, etc; PROMAIL III (\$99.95) includes Type-Write and Form Letter to print custom labels, envelopes, letter headings, forms, etc. Promailer is easy enough for a Christmas Card list, and powerful enough for a small business.

TYPE-WRITE \$34.50 Allows computer and printer to be used as a one line editing typewriter. Many editing features similar to word processor including: line justify, word wrap, line center, flush right, adjustable margins, printer codes. Perfect for letters, forms, notes, envelopes, etc. TYPE-WRITE II (\$49.95) Same features as TYPE-WRITE, with the addition of a Form Letter Function (allows keyboard input during printing) to print letter headings, form letters, structured form templates, any form you want automatically.

PRINTER CHARACTER SET \$34.50 Use your printer's memory to hold a custom character set, available with a single command. Ten fonts including: Italics, Script, Small, Roman, Gothic, and correspondence. Use with all regular printer features. Menu selections include style, pitch, line spacing. Prints at high speed. Easy to use. Optional fonts include Russian, Greek, Hebrew and Scientific (\$20.00 each).**

CHARACTER DESIGN KIT \$49.95 Design your own printer characters on your computer screen. Does not require graphics. Perfect for special fonts, foreign languages, scientific or graphics characters. Includes Roman, Gothic and graphics sets. Also works with Character Set.**

**Okidata 92, 93, 84, 2350, 2410, Star Micronics® (Gemini, Delta, Radix), Epson FX 80, 100

Kaypro® and IBM® compatibles. Add \$2.00 shipping. Indiana orders add 5% tax. MC/VISA Program updates at minimal cost.

CALL OR WRITE FOR MORE INFORMATION (No Collect Calls)

Rt. 3 Box 550A • Nashville, IN 47448 • (812) 988-2137

Trademarks -Okidata (Okidata Corp.). Mailmerge (Micropro). Gemini (Star Micronics, Inc.). Kaypro (Kaypro Corp.). IBM (Int'l Bus. Mach. Corp.)

FREE CATALOG KayPro Disk K14 Smartmodem Programs KAYPRO USERS DISKS MICRO CORNUCOPIA'S KavPro Disk K15 Hard Disk Utilities for Kaypro II, 4 and 10 \$1200 each KavPro Disk K16 Pascal Compiler KayPro Disk K17 Z80 Tools Kaypro Disk K22 KayPro Disk K18 System Diagnostics This disk is filled with ZPCR files. You get ZPCR for the Kaypro II, Just as we finished editing the routines on this Kaypro 4, and the Kaypro 10. This version is fixed so that you disk, we received a copy of KayPro's diagnostic can pass control characters (such as cntl-P) to the system and disk. The memory test and drive exercise, you can choose to have it recognize the semi-colon for drive routines on this disk are more powerful than select (as well as the colon). So you can enter "B;" or "B:" to KayPro's versions. (Plus, it's only \$121) Setup for KayPro II and 4. select drive B. Super neat! ZPCR, for those of you who don't know, makes CP/M a lot KavPro Disk K19 friendlier. It searches drive A for any . COM file it doesn't find on Prowriter Graphics the current drive, the TYPE command scrolls text 24 lines at a Kaypro Disk K20 time, and a new LIST command outputs a file to the printer. Color Graphics Routines Kaypro Disk K23 KAYPRO USERS CATALOG Kaypro Disk K21 Fast Terminal Software & New BYE BASIC Routines & Screen Dump Kaypro Disk K24 SBASIC: Finally a disk of SBASIC MBASIC Games & Keyboard Translator software. There are some good We sifted through many, many games before coming up with examples of structured programthese gems. All will work on any Kaypro and all come in MBASIC source. ming on this disk (including one program written both USOPEN shows you the fairway on the screen. You select the ways so you can see the club and direction for each stroke. After you reach the green differencel the display shifts to show details of the green and flag. For one SCREEN DUMP: This is a screen dump for all Kay-DUCK is an offshoot of aliens (pardon the pun). Hunter tries to pros new and old. You shoot down ducks while ducks try to bomb the hunter. (Much can buy a similar packfairer than real life.) age elsewhere for \$60. CASTLE is an adventure in which you select your attributes (strength, dexterity, and intelligence) and you get to purchase arms and protection. Great documentation and very interesting KayPro Disk KI Modem software KSTROKES is a keyboard translator similar to Smartkey. Bill KayPro Disk K2 Forbes did an excellent job creating this program. You can create and save translation files on disk. The program even Utilities Really oodles of spiffy includes a table which generates WordStar commands from the Kaypro's keypad! You can define 8 keystrokes at up to 63 little (and big) programs to help you get full use of characters each vour KavPro Kaypro Disk K25 ZESOURCE.COM: A true Z80 Macro Assembler Zilog format disassembler for 8080 and Z80 object (.COM) Kaypro Disk K26 files. Now you can turn .COM files into . MAC files. EPROM Programmer & Character Editor Kaypro Disk K27 UNERA.COM: Simply enter "UN-ERA" followed by the name of the Typing Tutor A complete typing tutor for beginners and experts. Written in file you just erased and presto, the erased file is back! A lifesaver. Australia, it comes complete with source. This was customized for Kaypro II, 4 and 10 by Barry Cole of WLAKUG FINDBD54.COM: Checks an entire The documentation says you can learn to touch type in 8 hours disk, reports bad sectors, and then creates (probably a little longer for mortals). a special file containing those sectors. You DECODER BOARD DECODER BOARD PACKAGES MICRO CORNUCOPIA BACK 15SUES MICRO CORNUCOPIA BACK 15SUES MICRO CORNUCOPIA BACK 15SUES KAYPRO USERS DISKS save a bundle on disks. Kaypro Users Disk K28 CAT2: This a group of programs which Modem 730 create and maintain a single directory of all the Kaypro Disk K29 programs you have on all your disks. Even KAYPRO ROMS DECODER BOARD urbo Pascal Games I keeps track of which programs are backed up With Source and which aren't.

UNSPOOL.COM: Use your KayPro II and print Kaypro Disk K30 Turbo Pascal Games II files at the same time. Doesn't slow down system With Source DUMPX, DU-77, COMPARE, SUPERSUB, FORM-Kaypro Disk K31 urbo Bulletin Board FEED, DIR-DUMP, ... and all have documentation on Complete Bulletin Board Package For Only KayPro Disk K3 Kaypro Disk K32 Games KayPro Disk K4 Much Fancier Forth! This disk contains one 191K game, Adventure. ADV.COM: This DISK \$12.00 ea. is the latest, greatest, most cussed adventure ever devised by half-mortals. This is the 550-point version so the cave is greatly postage paid expanded and the creatures are much smarter KayPro Disk K5 MX-80 Graphics KayPro Disk K6 Word Processing Utilities KayPro Disk K7 Small C Version 2 Compiler KavPro Disk KB Small C Version 2 Source Write or call KayPro Disk K9 KayPro Disk K10 ZCPR Assemblers for a free catalog Library & Checkbook Programs

CHECKS: This has been a very popular group of programs. Categorizes checks (also included with each order from) so you can keep track which are tax deductible and which get charged to which projects. Includes source and excellent example check files. Very powerful. MICRO CORNUCOPIA LIBR: This is a complete set of library routines which let you group files into a single file called a library. Then CP/M sees them as a single program, but with the library P.O. Box 223 routines, you can list them out separately, run them separately, or divide them up Bend, OR 97709 again. Almost like a unix environment. DISPLAY, VLIST, PGLST: Additional screen and print utilities (503) 382-5060 KayPro Disk K13 KayPro Disk K12 FORTH Source of fig-FORTH 9-5 PST Monday-Friday

PRICE MAGAZINE Micro Cornucopia Magazine

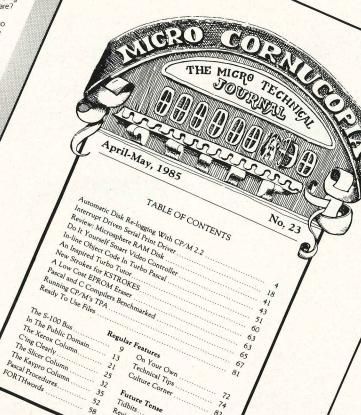
Want to speed up your Kaypro? Want to find out what's going on under the Kaypro's hood? Want to know who's selling good products and providing good support (and who isn't)? Want to find really inexpensive software? Then you're in the right place.

Micro Cornucopia (Micro C) is the friendly journal for those of you who want to stay abreast of the latest information on Kaypros and other single board systems, or want to upgrade your Kaypro yourself without paying an arm and a leg. We have regular columns on Pascal, C, FORTH as well as the popular "On Your Own" feature for those of you who plan to make the Kaypro your ticket to independence

If you need more information before subscribing, order the most

recent back issue for \$3.00 (Postpaid).

Subscripti	n Kates	
1 yr. (6 issues]	.00
Tyr. (Canada	& Mexico)	00
l yr. (other fo	reign)	0
Back Issue	\$3.00	



8>

83

Schematic Packages

Finally, a complete schematic of your processor board, logically laid out on a single 24" cessor locard, logically laid out on a sirrigle 24 by 36" sheet, plus a very complete, illustrated, Theory of Operation that's keyed to the schematic. You'll get information that's available nowhere else.

For instance, those of you with the 10 and new 84 systems get a theory that randown on your video service of complete with sample with sample of the systems. For instance, those or you with the 10 and new 84 systems get a thorough rundown on your video section complete with sample video control programs in assembly language. Of course, all packages contain serial and parallel port details and programming examples as well as complete coverage of the processor, clock, I/O, and disk controller (information that is not even available in Kaypro's own Dealer Service Manual).

Kaypro Schematic Packages Kaypro 10 (pre-84)s20 All prices include postage.

New ROMs

for 84 Kaypros
The wait is over! We now have two
new ROMs and both are for the 84 series Kaypro 2 and 4.

Pro-884

\$3.00

This ROM provides the benefits of the original Pro-8 to the 84 owner. With the Pro-884, you can run any mix of quad-density (784K) drives and double-sided double-density drives as A: and B.. Plus, if you plug-in the decoder board, you can run up to 4 drives.

Pro-884 MAX

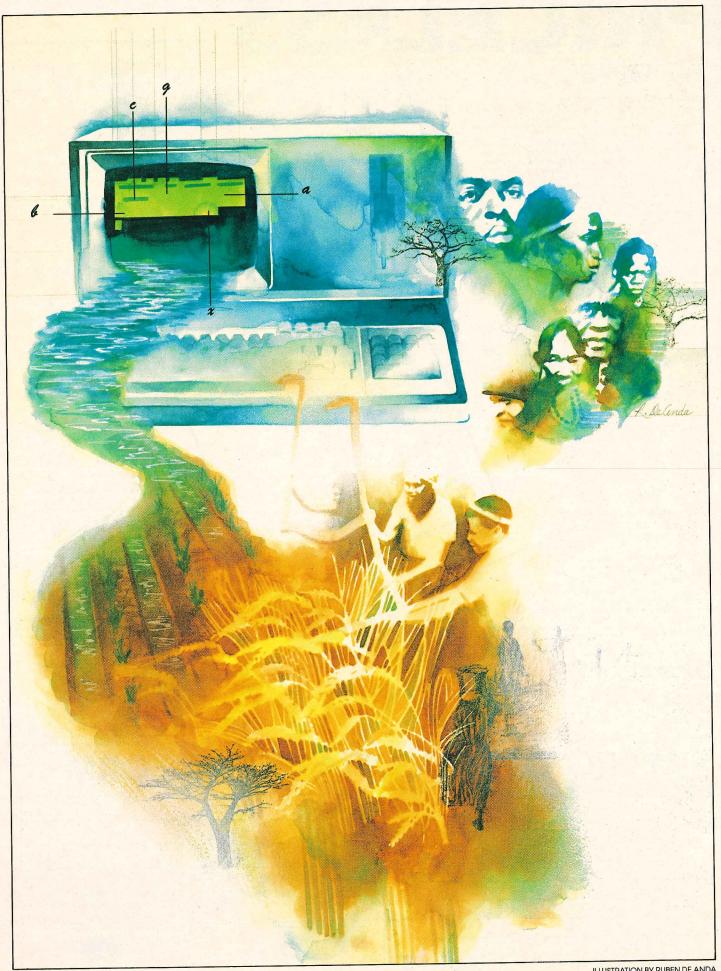
The MAX gives you all the advantages of the Pro-884 plus: faster screen scrolling, ZCPR in ROM (you "warm boot" on any disk, whether it has system tracks or not), screen dump, ctrl-p type printer output, and VT52/HI9 terminal emulation in addition to the original ADM3), to name a few. (We worked on this hummer for nearly a year.)

If you need more information on the Pro-884s or our '83 campatible ROMs, call, write, or yell for our Kaypro Users Catalog.)

Pro-884															\$59.95
Pro-884 MAX .															\$79.95
Decoder Board								٠							\$39.95

MICRO CORNUCOPIA ORDER FORM

Quantity	Description	Price	Total	NAME
	Subscription (1 year-6 issues) (See subscription rates above)		ADDRESS
	Kaypro Disks for 2, 4 & 10 — 5" SSDD #s	\$12		CITY
	Kaypro Catalog	FREE		STATE ZIP ZIP Make check or money order payable to:
	Other Items:			Micro Cornucopia P.O. Box 223 • Bend, OR 97709
				Card No
				□ VISA □ MasterCard
Prices inclu	ude media, package, ostage	TOTAL		Signature



Microcomputers and the Third World

Appropriate technology for developing nations

by Dan Burstein and Tom Peifer

ay "microcomputer" to the average American in a free association test and you're likely to hear words like "office," "school," "word processing" and "spreadsheet." You are extremely unlikely to hear anyone say, "Zapotec herbal medicine," "Jamaican oral history," "refugee disease control" or "African relief."

But spend some time with Kaypro's international department and such exotic associations suddenly seem more logical. Over the last two years, Kaypro computers have been put to work in nearly 100 countries performing such functions as creating databases on the properties of traditional herbs in Mexico, organizing the field work of archeologists at ancient ruins on the plains of Thailand and in the jungles of Belize, tracking food distribution in drought-stricken Ethiopia and the Sudan and helping doctors save lives in Chad and Mauritania.

The International Grants Program

People have become familiar with Kaypros in some of the farthest corners of the world as a result of the Kaypro International Grants Program, under which 400 machines have been donated to educational institutions, development projects and humanitarian organizations in nearly 50 Third World countries.

The idea for the grants program came about when Kaypro's vice president of marketing, David Kay, read an article in the Wall Street Journal about a young man in India who had been exposed to computers as a boy and who had gone on to study at MIT, returning eventually to teach in India.

The article got Kay thinking about ways the micro-computer revolution—which was just reaching its full force in the U.S.—could have a positive impact on the developing countries of the world in their efforts to cope with problems like hunger, disease and illiteracy. In September 1983, the International Grants Program began offering no-strings-attached grants of Kaypro computers to a broad range of groups and institutions working in the Third World.

Early critics of the program claimed it was just

another attempt to peddle a costly, delicate technology ill suited to the needs and conditions in developing countries.

This criticism came early in the search for qualified recipients. In response, groups and projects from throughout the Third World were screened in order to place Kaypros in the right hands, in the hope it would show that inexpensive, rugged microcomputers were equal to the task and that Kaypros were "appropriate technology" for the developing world. It was soon apparent that those hands were reaching out for all the help they could get. The tasks were many indeed.

Telecommunications for famine relief

Late in 1983, groups struggling with the growing disaster in Africa asked Kaypro for help. Although millions of people were starving, the situation had not yet received widespread publicity. The flood of donated food and money was still months away. Grassroots International, a Cambridge, Massachusetts-based organization that has received high marks for its policy of supporting community-based "self-help" projects in Africa, asked for and received three Kaypro 4s. The plan was to link its U.S. office with a new office in Khartoum in the Sudan. In addition to helping Grassroots coordinate its own relief work in Africa, the donated Kaypros enabled Grassroots to play a pivotal role in bringing the scope of the crisis to the attention of the American news media.

According to its executive director, Dan Connell, Grassroots "has become a minor news agency." Using electronic mail and other telecommunications services, the Kaypros "have given a tiny little office an international capacity for news distribution."

"We get information daily from the refugee camps in the Sudan and put it into the hands of the decision makers in the U.S.," said Connell. "The bottom line is we're saving lives because of them [the computers]."

Disease control

Elsewhere in Africa nature has taken a similar toll.

People fleeing the drought-ravaged areas of Chad and Mauritania have crowded into resettlement camps where food is available, but health conditions are far from satisfactory. French doctors from the relief organization Medecins Sans Frontieres (Doctors Without Borders) are using Kaypros in both countries to help control the spread of disease in the camps.

A key element in this use of the microcomputer is the applications software developed by the World Health Organization. This package consists of a list of 80 "essential" drugs, their therapeutic properties, and comparative pricing information. Working with this software, doctors in the field are able to plan the best and most cost-effective program of treatment for very large numbers of people, taking into account symptoms, limited availability of drugs, and the perennial shortage of funds.

A grain of truth

The World Health Organization is not the only international agency that has come to respect the impact microcomputers can have on the present crisis in Africa. A number of studies in the last few years have shown that a decline in food production is often not the sole cause of famine. This research suggests that timely decisions about the distribution of food can often avert major crises.

Kaypros are part of the Peace Corps' efforts to initiate rural technological development.

Suppose, for instance, that a minister of agriculture learns that a remote province in his country has received no rain for three months and food production in that area is expected to be almost nil this season. Using a spreadsheet, he is able to predict how long existing stocks will last and can begin to truck food into the area *before* the situation becomes critical.

Food for thought

The International Grants Program recently collaborated with the Food and Agricultural Organization (FAO) of the United Nations in a major effort to improve the ability of several African nations to accurately manage their food commodity statistics. Kaypros equipped with Spanish, French or English keyboards and software were donated to 11 countries at the close of a workshop on agricultural statistics held at FAO headquarters in Rome.

Participants at the workshop were given a basic introduction to the use and operation of the computers, and then the FAO staff plunged into intensive training centering on the spreadsheet software used to keep

track of food commodities. Called "Supply/Utilization Accounts," the spreadsheet is designed to permit a computerized inventory of a wide range of agricultural products, a monthly update on use or export, and an important group of columns that provide a breakdown for each commodity in terms of grams of protein, carbohydrates and fat available per person per day in the particular country.

Another recent workshop addressed the problem of increasing agricultural productivity to provide for rapidly growing populations. Agricultural economists, soil scientists and experts in water management from Egypt and the Sudan joined with social scientists from throughout the Middle East at a forum hosted by the Ford Foundation and the Population Council. Again the focus was the application of microcomputers to the problems faced by countries in the region. Participants learned dBASE II to manage scientific and survey data inputs, SL Micro and Microstat to churn out all manner of statistical analyses, WordStar for everything from lists of instructions to manuscripts, and, of course, spreadsheets.

The Peace Corps plugs in

One of the world's best-known volunteer agencies—the U.S. Peace Corps—is facing the crisis in Africa head on. Its approach is based on 23 years of community-level development efforts. Called the Africa Food Systems Initiative, this Peace Corps effort aims to have a long-term impact and focuses on the small farmers who are the backbone of African food production and distribution. At the heart of the organization of the Food Systems Initiative is a Kaypro 2, one of ten donated to the Peace Corps.

In Thailand, also, the Peace Corps is functioning as a microcomputer advocate group. Their six machines have been upgraded by the Kaypro dealer in Bangkok to run word processing programs in both Thai and English.

"The Kaypros are an integral part of the Peace Corps effort to initiate technological transfer in up-country rural development programs," said Roger Nicholson, director of training and program support. Volunteers have put the machines to work in road construction, rural health and agricultural development programs and have taught local Thai people to use the machines. Like other groups with decades of experience at the grassroots level, the Peace Corps has come to see microcomputers as "appropriate" technology for needs and conditions in the Third World.

Cultural preservation

While Peace Corps volunteers are working with Kaypros to shape the future of Thailand, archeologists at a number of sites are quietly unearthing the past—again using Kaypros. Excavations in the Caribbean and Central America were mentioned in the March 1985 issue of *PROFILES*. In Thailand, researchers at

Ban Don Ta Phet are using a Kaypro 4 to manage the data emerging from their attempts to unlock the secrets of an ancient Bronze Age cemetery in the middle of the monsoon-swept plains.

The use of the Kaypros in archeology is part of a larger trend in developing countries where people are concerned about the disappearance of their cultural heritage. Perhaps ironically, microcomputers can play a part in the fight to preserve the old ways. In the remote reaches of the Sierra Juarez Mountains of southern Mexico, Kaypro 4s are being used to construct a database on the medicinal herbs traditionally used by the Mixtec and Zapotec peoples of the area.

In Jamaica, thousands of folk songs, work chants and oral history recordings are being electronically catalogued for the first time in that country's Memory Bank Project. Organizers of the effort hope that using a Kaypro 10 will enable them to put more order into the island nation's wealth of inherited oral culture, providing researchers with more systematic access to this information and developing local pride in what is truly indigenous. Current plans are to replicate the Jamaican Memory Bank project in Dominica and to eventually include the entire Caribbean area.

Appropriate technology for education

Schools and universities throughout the world are hungry for microcomputers. A number of institutions have received Kaypros for basic computer education, teaching office skills and research applications. Some unique uses have emerged.

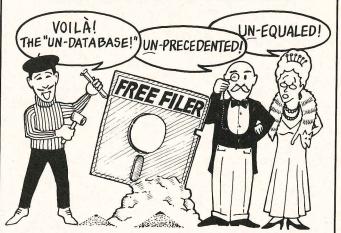
Graduate students at a university in Africa were relieved to finally get their hands on a computer because the mainframe at their institution had been "down" for so long. In the first day of use, the Kaypro 2 enabled three students to process the data sets required for their advanced degrees. Mahidol University in Thailand is developing software to handle administrative and medical recordkeeping at the many small village hospitals throughout that country. At the American University of Beirut, students in that war-torn city have at least one place of refuge, a new computer laboratory full of Kaypros.

Elementary students at Mt. Kenya Academy have hit it off with their new Kaypros. Reports Brian Carstens, a teacher at the academy, "The Kaypros are a hit! Of course the kids mostly want to play 'Aliens,' but there are those who come during lunch and after class to draw with LOGO. Traditional Kenyan education relies heavily on rote memorization. In the LOGO classes, I try to get the fourth and fifth graders to think more creatively about solutions to problems. The Kaypros are certainly tough machines and have stood up well to keyboard pounding, power fluctuations, rough disk insertions, chalk dust, biscuit crumbs, finger jabs, elbows leaning on them and long periods of use."

In Sri Lanka, Kaypros are networking in an ambitious project to link seven universities and three

Free Filer

The "Un-Database" from Telion Software



atabase programs make you organize information into a form. That's fine for an address list where every entry contains the same old boring things. But how do you "database" your free-form text files, like novels, business letters, screenplays, annotated bibliographies, personal correspondence or client case histories? With a database program you're just plain out of luck!

Now Free Filer lets you keep track of your words like you do your lists. That's why we call Free Filer the "un-database."

How does FREE FILER do it? Free Filer divides your diskette into parcels of information, much like index cards. It will segment your text files into paragraph parcels automatically. Or you can specify other data parcels yourself.

You can search, alphabetically sort, and print each parcel effortlessly. You can even combine parcels to create a new card. Free Filer can search all or some of your files on disk, going through them one by one. And if you have lots of files, that can save you a bundle of time.

And it's fast. Free Filer can blitz through a 55K file in less than 25 seconds.

"I am taken at the program's speed and simplicity. I would recommend it for everyone – it's another tool to make your computer more powerful and you more efficient." – Peter A McWilliams, author of *The Personal Computer Book*.

"Free Filer is one of those wonderful little general-purpose text utilities that simplify life with computers. Recommended." – Jerry Pournelle, *Byte Magazine*.

Free Filer is directly available from Telion Software for \$7995 in most popular CP/M and MS-DOS formats, including Kaypro, Morrow, Apple CP/M and IBM PC.

Profiles readers: order your FREE FILER by July 29th and pay only \$4995.

TELION software

P.O. Box 1464 - La Mirada, CA 90637-1464 Phone 213-547-9673

THE ULTIMATE PRINT SPOOLER



Now you can PRINT while you EDIT

- Run virtually any other program while printing
 - Queue up to 65,000 files
 - 62 commands
 - User-customizable configuration with 82 items
- Requires no hardware modification
 - Cancel printing of individual files
 - Specify forms to print on and number of copies
 - Runs on CP/M 2.2 systems
- Requires 10K plus 2K (CCP) and two ¼K (min) buffers
 - Resident interface specs and all file formats included
 - Requires no special installation
 - 30-day money-back guarantee



5/25



ANAHEIM SOFTWARE

13814 Hawes Street • Whittier, CA 90605

Telephone: (714) 863-9044

KAYPRO SPEEDUP UNDER \$50

For Kaypro II & 4 made before September 1983 (if in doubt, write for information)

- Run your older Kaypro at 4 or 5 MHz
 up to 25% faster than new models
- Easy Plug-in Installation
- Complete Illustrated Instructions
- Compatible with other Upgrades/Add-ons

Kaypro II Kit 2A \$49.95 Kaypro 4 Kit 4A \$39.95

Add Double Sided or Quad-Density Drives

Ask about our easy, plug-in Circuit Board Modification

Kit # 2x

Money Back Guarantee of Satisfaction USER GROUP DISCOUNTS AVAILABLE

> HIGHLAND MICROKIT P.O. Box 21B, Highland, MD 20777

THIRD WORLD

research centers, including the Arthur C. Clarke Foundation, started by the world-famous science fiction writer and futurist who himself used a Kaypro for correspondence between his Sri Lanka home and his Hollywood colleagues working on the movie 2010. The network is intended to provide ways of communicating and accessing data for researchers working in a variety of high-tech areas from robotics to low-cost broadcasting equipment. The Sri Lankans ultimately plan to link up with academic institutions in the U.S. via an international data network.

Equally ambitious are students and faculty at the Ponape Agricultural and Trade School in the Eastern Caroline Islands. Formerly a U.S. Trust Territory, Ponape is part of the emerging nation of The Federated States of Micronesia. To give an idea how fast the use of micros is catching on in developing nations, consider this: The Economic Development Authority on Ponape bought a Kaypro 10 because its large minicomputer never seemed to be free of bugs, even during the dry season. They endorsed a grant request from the Agriculture and Trade School, which was eager to supplement its curriculum by introducing computers to its students. Just months after the arrival of the first Kaypro on the island there were ten, and current plans are to link up via the ECONET satellite with the Farallones Institute, a Northern California organization dedicated to appropriate agricultural technology.

That Kaypros would find homes on the desktops of European businessmen in environments very similar to those in the U.S. comes as little surprise. But the innovative uses to which Kaypros are being put in more remote and less technologically developed environments is a fascinating indicator of the power of microcomputer technology to influence the lives of people everywhere.

Tom Peifer is director of Kaypro's International Grants program. Dan Burstein is a media consultant whose firm, Impact Features, has offices in New York and San Francisco. He is considered an expert on the Asian computer industry.

The Start of Something Big?

Upon learning of the International Grants Program, the Capital Users' Group (Kensington, Maryland) contacted Kaypro Corp. offering to start correspondence support and share their public domain software library with grant recipients.

"Such activities are in the spirit of the user group concept," CAPKUG members said. "Knowing how important educational support services are, contact with American users could be of great benefit to Kaypro grant recipients in the Third World."

Other KUGs interested in similar activities or in "adopting" an overseas KUG may contact Tom Peifer in c/o Kaypro's International Department, 533 Stevens Avenue, Solana Beach, CA 92075.

1 4 16: 12 PO 3000

This time-tested,

interactive software

developed in 1975 for small-to-medium sized businesses. Since then it has

successfully proven itself in well over

10,000 companies

in all 50 states and in 13 foreign countries. It is used

by <u>hundreds</u> of

accountants and

Order yours today.

bookkeepers.

was originally

ACCOUNTING SOFTWARE

NOW

NEARLY

10,000

USERS

Complete

for Portable, Personal and Desktop Computers

Available for popular 8-bit and 16-bit microcomputer formats:



Package of Software, Training Aids, Manuals, and Users' Newsletter ONLY

"...for several years the defacto standard for microcomputer software, and still a good example of some of the better thought-out software on the market." —Interface Age

\$395

Telephone Support \$100

Desktop Accountant

FULL-FEATURE, FULLY-INTEGRATED ACCOUNTING SYSTEM Everything you need to keep the books...at a price you can afford! Your Bookkeeper, Accountant, and Banker will love you for installing this fine system!

Check these features:

This remarkably-valued Accounting System will manage your company's business records and automate your entire bookkeeping process-from the posting of individual transactions to producing up-to-theminute Income Statements, Balance Sheets, and other important management reports. Desktop Accountant™ gives you a "Big Company," professional image with preprinted invoices, statements, and checks. It is user-friendly, completely menu-driven, offers system-prompted data entry, and is compatible with both floppy and hard disks. Feature-for-feature, and dollar-for-dollar it is the best software value on the market! But don't let the low price fool you. Desktop Accountant™ is not a "cheap" accounting system, only inexpensive. That's because original development costs were recovered years ago allowing us to sell an excellent product in high volume at low prices and still earn a fair profit. Included with your system are complete source code in MBASIC and

a FREE calendar year subscription to our user's newsletter "Debits and Credits" plus access to our optional telephone "Hot Line" support service and our growing network of Experienced User Consultants™. No other Accounting System at this price offers you so many features, benefits, and valuable extra services. You can pay more but you can't buy more! Call for free literature or order now with complete confidence.

Read what Users say...

6 Two hours after receiving the Desktop Accountant I was up and running live data, and generated an entire month's work and financial statements the following day, ? ?

—J.C. Bartels, President (accounting firm) Gonzales, Texas

66 To get anything better we would have had to spend multiple thousands of dollars. I think it's a dynamite package for the money.

—Bob Cox, V.P. General Mgr. (manufacturing company) San Antonio, Texas

LETTERS ON FILE

Other members of the Desktop Family:

For Lawyers, CPAs, other professionals..

Desktop Time & BillingTM Professional Time Billing & Management System

Desktop Time & Billing simplifies the billing process, prompts professionals to bill on time, reduces unbilled work-in-process, measures and analyzes non-chargeable time; minimizes unreported time, provides objective criteria to analyze staff performance, and reduces manual and clerical effort. Integrates with Desktop G/L. User defined billing format. Only \$495. Not available in every format.

Desktop Inventory ManagerTM

Comprehensive stand-alone Inventory Management System for retail and wholesale businesses • Multi-location/multi-department applications • Quantity capacity to 999,999,999.999 • Fractional units • Inquiry function uses partial item keys • Many reports printed by department, location, or vendor and can include entire data file or any subset • Produces 11 management reports • Tracks sales, receipts, returns and reserves • Optional history records • Part Numbers can be any printable character • Complete audit trail • PRICE: \$295 • Not available in every format.

Call for FREE LITERATURE, including sample reports • Available from your local dealer or directly from us • Order today by Mail or Phone • Phone Orders Filled Promptly

Orders, Questions, and Literature Requests CALL NOW, TOLL-FREE





1-800-832-2244 In California call 1-800-732-2311

Please mention Ad #1304

Send Orders To: 1280-C Newell Avenue, Suite 1304, Walnut Creek, California 94596

*When ordering please mention or include the Ad number appearing near our telephone number • Orders shipped within 48 hours via UPS • Add \$5.00 for faster 2-day Plush Alf Service • California residents add 61945 \$868 Tax • Payment by 198/MasterQrd/COD/MO/Cabeller's Check • All Brand Names are manufacturers' registered Trade Marks • Dealer Inquiries invited • Specifications subject to change without notice • Foreign orders please call or write before ordering ®1983 Rocky Mountain Software Systems.

A Complete System!

includes all four standard general accounting programs:

GENERAL LEDGER is completely integrated to automatically post end-of-month transactions from A/R, A/P and Payroll. It prints 13 detailed reports for the entire company, and optional Income Statements for up to 99 departments. It produces up-to-the-minute comparative financial statements with current, year-to-date, budget, and last year (month and YTD), showing both dollar amounts and percentages, and presents everything you, your bookkeeper, and your accountant need to know about the company ● G/L automatically reconciles all accounts, and maintains extensive, detailed audit trails showing the source of each G/L entry for quick, easy, tracing ● Trial Balance includes all transactions ● Flexible Chart of Accounts ● Monthly Transactions capacity: 1,000 with 200K diskette; 3,500 with 500K diskette; 7,000 per Megabyte with a Hard Disk.

ACCOUNTS RECEIVABLE provides instant, on-line customer account information (both current and aged), with complete, timely invoicing, including open-item (or balance forward) and statement capabilities. It makes the entire billing process fast, easy, and efficient. It quickly identifies your overdue accounts, helps speed collections, helps control your cash flow, and assists you in making better financial decisions. Both detailed and summary customer activity and aging reports are instantly available ● Preprinted forms available for invoices and statements ● Optional service type invoice ● Automatic finance charge calculation ● Detailed audit trail ● Maintains comprehensive customer data files ● Produces 8 reports and documents ● Includes automatic periodic customer/client billing option which is ideal for service businesses ● Itemized monthly statements ● Master File capacity: 400 Customers ● Monthly Transactions capacity: 800 with 200K diskette; 3,500 with 500K diskette; 7,000 per Megabyte with a Hard Disk.

ACCOUNTS PAYABLE maintains complete vendor/voucher history and includes check-writing capabilities. Current and aged payable reports are available upon command. It prepares an extremely useful cash flow/cash requirements report that greatly improves management control of your most valuable resource—cash! It prints checks (on commercially available forms on which your company name, address and logo can be imprinted) with comprehensive check stubs that your vendors will appreciate • Produces 11 reports and documents • Automatic pay selection program allows payment by due date or by discount date • Manual and automatic checkwriting • Check register • Detailed audit trail • Itemized monthly transactions • Master File capacity: 400 Vendors • Monthly Transactions capacity: 800 with 200K diskette; 3,500 with 500K diskette; 7,000 per Megabyte with a Hard Disk. PAYROLL is a complete, easy-to-use professional-quality payroll

PAYROLL is a complete, easy-to-use professional-quality payroll system. Be the office hero each week when the checks come out on time! This program calculates payroll for every type of employee (hourly, salaried, and commissioned) and prints payroll checks (with popular, comprehensive check stubs) with an absolute minimum of input. Your company name and logo can appear on these, too. ● Stores and reports comprehensive employee and payroll information. ● Maintains monthly, quarterly, and yearly totals for reporting purposes in multiple states(!) ● Offers user-maintainable Federal, State, and local tax tables(!). ● W-2 printing ● 941 Reporting ● Produces 10 reports and documents ● Master File capacity: 400 employees. An outstanding Payroll package!

Produces These Reports & Documents:

General Ledger 1. Chart of Accounts 2. Chart of Accounts with summary dollar amounts 3. Chart of Accounts with prior year comparisons 4. Daily Transactions Report 5. Itemized Monthly Transactions 6. Balance Sheet 7. Balance Sheet with prior year comparison 8. Income Statement 9. Income Statement with prior year comparison 10. Departmental Income Statement(s) with prior year comparison 12. Detail report for individual accounts 13. Trial Balance Statement

Accounts Receivable 1. Daily Transactions Report 2. Invoices (with or without preprinted forms) 3. Statements (with or without pre-printed forms) 4. Summary Aging Report 6. Tenized Monthly Transactions 7. Detailed Customer Activity Report 8. Summary Customer Account Report 9. Customer Mailing Labels

Accounts Payable 1. Daily Voucher Report 2. Daily Credit Report 3. Checks with Detailed stubs 4. Check Register 5. General Ledger Transfer Report 6. Cash Requirements Report 7. Transaction Register 8. Open Voucher Report 9. Aged Payables Report 10. Detailed Vendor Activity Report 11. Summary Vendor Account Report 12. Vendor Mailing Labels

Payroll 1. Federal Tax Tables 2. State Tax Tables 3. Payroll checks with stubs 4. Payroll Check Register 5. Monthly Payroll Summary 6. Quarterly Payroll Summary 7. General Ledger Transfer Report 8. Detailed Employee File Listing 9. Produces 941 Worksheet 10. Prints annual W-2 Forms 11. Employee Mailing Labels

System Requirements: CP/M[®] with 64K RAM or PC-DOS (MS-DOS) with 128K ● Microsoft BASIC ● Two disk drives or hard disk ● 132 column wide carriage printer, or an 8½″x11″ printer with compressed print mode (an Epson MX-80 or similar printer).

Rush me more inform	nation on Desktop!!
Name	
Company	
Address	
City	State Zip
Phone	
Computer System	
A A	ROCKY MOUNTAIN
	SOFTWARE SYSTEMS
	Specialists in Accounting Software
	Specialisis in Accounting Sollware

Tracking Argentina's 'Disappeared Ones'

A Kaypro is the key to hope for loved ones and lawyers

by Miguel Llanos

[Editor's note: Miguel Llanos of the Buenos Aires Herald reports from Argentina on the work of the Center for Legal and Social Studies (CELS) and its use of a Kaypro computer to learn the fates of los desaparecidos—the thousands who were arrested and then vanished in the 1970s while Argentina was still under military rule. (CELS received its Kaypro 2 under Kaypro Corporation's International Grants Program, headed by Tom Peifer. An article about other uses of Kaypros under this program appears elsewhere in this issue.)

CEL's work has received international attention. In 1983 attorney Emilio Mignone, whose own daughter Monica is among the missing, accepted the prestigious Letelier-Moffitt Human Rights Memorial Award in Washington, D.C., on behalf of the group.]

armen Aguilera suspected her son Jorge was one of Argentina's 9,000 desaparecidos, or "disappeared ones," victims of the military's so-called Dirty War against terrorism in the 1970s. But Mrs. Aguilera had no evidence her son had been kidnapped by security forces; all she knew was that Jorge had vanished along with a friend in January 1978.

For five years Mrs. Aguilera searched fruitlessly for her son, running into deadends at every turn. The former military regime consistently denied holding anyone named Jorge Aguilera. And with the return to democracy in December 1983, the secret detention centers run by the military during the Dirty War were dismantled—but there was still no word on Jorge.

Computer offers hope

Running low on hope, Mrs. Aguilera last October sought the help of the Center for Legal and Social Studies (CELS), which just six months earlier had acquired a Kaypro 2 to keep track of information on 1,350 missing persons.

CELS' programmer Daniel Frontalini recalls the day Mrs. Aguilera showed up at the Center. "All she could tell me was that Jorge disappeared along with a friend nicknamed 'Vizcacha' on January 2, 1978."

A quick computer search for "Aguilera, Jorge" drew a blank. Frontalini next tried the only other clue available, Vizcacha. Hunting for all Vizcachas reported missing in January 1978, the computer came up with a full name: Nestor Furrer.

A look at Furrer's file showed that two former political prisoners reported having seen Furrer at the Mar del Plata Navy base. With this new lead, Mrs. Aguilera investigated further and found that Nestor Furrer was indeed the real name of Jorge's friend.

Furrer's file also revealed that another former prisoner, Luis Cordoba, testified that he had later seen Furrer at an Army base in Buenos Aires.

At present, Mrs. Aguilera is in Brazil trying to contact Luis Cordoba to see if maybe he knew or had heard of Jorge while imprisoned at the Army base. She still does not know what happened to her son—chances are she never will—but Mrs. Aguilera found new hope through CELS' computer.

Investigating the fate of the missing

Besides assisting Mrs. Aguilera, the Kaypro 2 is helping CELS—Argentina's most prominent human rights group—further its investigation into the fate of many of the country's desaparecidos.

Founded as a non-profit organization by lawyers in 1980, CELS pursues two main objectives: one humanitarian, helping families like the Aguileras in their agonizing search for facts about their loved ones; the other legal, taking court action against suspected kidnappers, torturers, murderers and military officers responsible for the Dirty War excesses.

CELS' database is the key to achieving these objectives. Before going to computer, however, piecing together the events of the Dirty War meant storing information on the missing and their captors on 3×5 -inch index cards. Finding Nestor "Vizcacha" Furrer





under the old system would have demanded hours of hand searching through all the cards, pulling out all possibilities and comparing detention dates to the date Jorge disappeared.

Computer files replace index cards

After four months of passing index card data into the computer, CELS today has diskette files on 1,350 desaparecidos last seen at any one of the 340 secret detention centers used by the military and security forces. The 1,350 do not represent all of Argentina's missing, but rather those actually seen at detention centers. CELS focuses on these "leading cases" because they offer the best documented evidence of the Dirty War crimes.

Each missing-person file has 43 fields, many unique to the specific needs of relatives and CELS lawyers. Fields include nationality and political party, place kidnapped, security force responsible, detention center, names of eyewitnesses, and whether the victim was pregnant.

In minutes the computer can find the names of all women pregnant when illegally detained, or of all persons held at the La Cacha detention center between April 1976 and March 1977, or of all missing persons belonging to the Communist Party. The same tasks would have required days using index cards.

The files of women detained while pregnant are especially important to CELS—in these cases two lives, not just one, are documented. A glance at the first four names under the pregnant women's listing shows that the Dirty War did not discriminate against females or infants:

Ales de Espindola, Rita. Observations: gives birth to girl at Cordoba military hospital. Infant handed over to grandparents.

Human rights activists paint symbolic silhouettes of missing persons on Buenos Aries sidewalks.



CELS' programmer, Daniel Frontalini, enters data on military officers into the Kaypro. Behind the computer is a graphic poster of CELS' message: "The desaparecidos cry out for justice."

JUSTICIA claman

Alfonsin de Cabandie, Alicia. Observations: gives birth to boy in March 1978.

Alonso de Hueravillo, Mirta. Observations: gives birth to boy, marking him with needle.

Arce de Hostle Rhoi, Adriana. Observations: loses fetus during torture.

These four women are still missing. Of the four infants, only one was returned to relatives. The rest may never be found.

Nicknames provide a valuable field

According to programmer Frontalini, nickname is the field most often used, not only to tackle cases like Mrs. Aguilera's, but, more importantly, to help "name" the missing. Because many former political prisoners knew only the first names or nicknames of their fellow inmates, 20 percent of the 1,350 missing are not filed with full names. Using the nickname field lets CELS keep temporary files on these missing while their true identities are sought.

CELS lawyers are finding other uses for the computer as well. Alicia Oliveira is using it to identify dozens of "no-name" corpses dumped at the Buenos Aires morgue by security forces between April and June 1976. Armed with a computer listing of all missing persons detained during those months, Oliveira is presently contacting relatives of these disappeared, hoping they might recognize some of the corpses through morgue photos. So far several bodies have been positively identified. For the families of these dead the long search is at an end; now their attention will turn to prosecuting those responsible for the killings.

Oliveira sees life with the computer as a give-and-take relationship. She cites as examples the case of two corpses buried as no-names but later exhumed and identified by relatives. The names of the two men did not show up on CELS' files, and there was some question as to whether they really were Dirty War victims. Faced with this doubt, Oliveira compared personal data (age, date of disappearance, etc.) to information already on the diskettes. After a series of checks the mystery was solved: The two had in fact been seen at a detention center, but the witnesses had reported their names incorrectly. Oliveira immediately had the files changed and the men's proper names recorded.

Organizing CELS lawyers' court cases

Computerizing CELS has also meant a more efficient organization of lawyers' court cases. CELS' most active attorney, Marcelo Parrili, is handling 80 cases simultaneously. Unable to keep accurate mental tabs on all of them, he gets a monthly computer listing of his cases with reminders of things to do (phone relatives of a desaparecido, meet a legal deadline, etc.). CELS' seven other full-time lawyers likewise receive these personal case listings.

Currently CELS lawyers are representing relatives of missing persons and former political prisoners in 253 individual and joint-action court cases.

Argentina's most widely publicized disappearance case—that of a young Swedish girl, Dagmar Hagelin—is being handled by CELS lawyer Luis Zamora. Hagelin, a Swedish citizen living in Buenos Aires, "disappeared" in January 1977, reportedly kidnapped



At every public march, Mothers of the Plaza de Mayo rally around the banner demanding "That the detained/disappeared reappear alive."

Reach Your Customers!

E-Z MAIL ... MAILING LIST MAGIC ...

You have worked hard to make your valuable products/services available to your customers. But they are probably going somewhere else and getting something they really don't want. Because when they need something, they remember someone else's advertising. Unfair? You bet!

Other businesses are paying a great deal of money to influence YOUR customers. It costs them a lot because their mailing lists are unorganized and out of date. You can surpass their efforts with your computer and **E-Z Mail**, the mailing list system that does everything for you.

E-Z Mail makes your mailing lists a snap!

Unlike the generic "data base" systems, **E-Z Mail** requires no programming. And you don't need to memorize commands either. They are listed on the screen and you just pick the one you want.

E-Z Mail opens new doors to your advertising. Imagine your computer printing mailing labels for a select sub-group of your clients. This can save you

time and money. And the convenience of having your list alphabetized by company name or zip code. Or anything else. **E-Z Mail** does it all.

So why not get the job done right? Let **E-Z Mail** do it!

Ask for **E-Z Mail** at your local computer store. Suggested retail price is \$199.

To order direct: send \$199 plus \$5 for shipping. CA residents add 6% sales tax. Be sure to mention which computer you have. Phone orders (MC/Visa) accepted.



Practical Business Software
3377 Solano Ave., Suite 307, Napa, CA 94558 (707) 253-8432

Shirts, buttons, pens, jackets, and many more items are available to you through your local Kaypro Dealer. Stop by and ask to see the collection of collectibles!





The World's Best Micro Computer Based Statistical Analysis Package

Forecast Plus^M

Time Series Analysis Package
The Business Forecasting Tool
for the Non Statistician

Call For Free Comprehensive Brochures

1-800-328-4907

WALONICK ASSOCIATES 6500 Nicollet Ave S Minneapolis, MN 55423 (612) 866-9022

MATHSTAR

Four function math, right in WordStar!

Do math right in WordStar. Don't ever reach for the calculator again!

+ - X ÷

Even vertical column addition!

CP/M or MS-DOS (specify format)

Supports complex formulas, up to 19 digit numbers, floating dollar sign, decimal rounding, negatives in brackets (500), commas in 1,000's, and more. Easy to install and use.

\$4995 plus \$2.50 shipping

Okay! My check is enclosed for \$..... (or charge my VISA/MC acct # exp).

Writing Consultants

Suite 347, 11 Creek Bend Drive - Fairport, NY 14450 Orders only: 800-828-6293 Info: 716-377-0130 dealers and distributors please call or write We also market ProportionalStar and Synonym Finder

DISAPPEARED ONES

by Navy Captain Alfredo Astiz and other military personnel who mistook her for a suspected terrorist. During the incident, eyewitnesses saw Astiz shoot and wound the 17-year-old as she tried to flee in panic. Astiz next commandeered a passing taxi, whose driver later testified that it was used to take Hagelin to the Navy Mechanics School (ESMA), the most feared detention center run by the military. Except for a few reports from ESMA survivors, Hagelin's fate is still a mystery. (Astiz, meanwhile, remains in active service and was recently cleared of all charges in the Hagelin case by the Armed Forces Supreme Council.)

But the Council's decision has not stopped the Hagelin family or CELS from pressing for word on Dagmar and demanding that Astiz be punished. While the Hagelin family appeals the military Council's decision before a civilian court, CELS is busy updating its file on Dagmar's case. Using 47 fields, as it does with every legal case file, CELS has documented Dagmar's place of detention, the date court charges were first pressed, the case's present legal status, the court now hearing the case, the eyewitnesses, and the accused officers, who include, in addition to Astiz, former ESMA director Ruben Chamorro and ex-Navy Commander-in-Chief Emilio Massera.

Storing data on military officers

Unfortunately, not all of CELS' legal cases include eyewitnesses or documentation on the officers implicated in illegal detentions. Many of the plaintiffs know few or none of the names of the men responsible for these human rights violations. As a result, CELS recently began a file program to store data on all 2,000 military officers who were in active service during the Dirty War.

Each officer file includes, among other information, fields on rank, place of service, position, and charges faced. Once completed, the files will identify who was stationed where, when and in what capacity. With this information CELS plans to take legal action against every officer documented as having served at a detention center. Every sergeant, captain, lieutenant and general who served at the III Army Corps in Cordoba—where the La Perla detention center was located—will be named as a defendant and called to testify about what occurred behind Army walls.

CELS has already prepared files on the nine former military junta members being tried by the State for having ordered the illegal Dirty War detentions. The Center presented these files to State prosecutor Julio Strassera, who intends to use the information to back 711 charges of illegal imprisonment, torture and homicide against the nine officers.

As a private organization, CELS is proud of its independence from the government and often sees itself as David doing battle with Goliath. When Argentine President Raul Alfonsin created the National

(continued on page 73)

POWERFUL

CP/M'

SOFTWARE

Diskette \$2995

FORTRAN

DISKETTE & MANUAL

Nevada FORTRAN is based upon the ANSI-66 standards (FORTRAN IV) with some \$29.95

1977 level features. Advanced features include: IF...THEN...ELSE statement; COPY (Include); CHAINing with COMMON; and TRACE debugging. Package includes a diskette, 214-page manual and 5 sample programs. Included also is an 8080 assembler. Requires 48K RAM.

BASIC TM DISKETTE & MANUAL

With the built-in, full-screen text editor, you can easily develop programs for 1/10 the cost \$29.95

of a comparable BASIC interpreter. What's more, Nevada BASIC has full Matrix operations, Single- and Multi-Line functions, and BCD math (no round-off errors). You get a diskette and a 220-page manual. Requires 48K RAM.

PILOT

DISKETTE & MANUAL

Nevada PILOT, written by Prof. John Starkweather, the language's creator, meets and exceeds all \$29.95

PILOT-73 standards. See the review in January 1983 MICROCOMPU-TING. This package includes a diskette, 131-page manual, and 10 useful sample programs.

WHY WAIT? ORDER YOURS TODAY!

Satisfaction guaranteed—or your money back. If for any reason you're not completely satisfied, just return the package—in good condition—with the sealed diskette unopened, within 15 days and we'll refund your money.

Checks must be in U.S. Dollars and drawn on a U.S. Bank.

California deliveries add 6% or 6.5% sales tax

SHIPPING AND HANDLING FEES: Add \$4.00 for the first package or manual and \$2.00 each additional. OVERSEAS: Add \$15.00 for the first package or manual and \$5.00 each additional. COD's: Add \$4.00.

Since 1977

ELLIS COMPUTING TO

WE WELCOME C.O.D.'s





(415) 753-0186

ELLIS COMPUTING, INC. 3917 Noriega Street San Francisco, CA 94122 COBOL THE DISKETTE & MANUAL

Nevada COBOL, based upon the ANSI-74 standards, has all the popular features. Powerful level 2 \$29.95

features include: compound conditionals and full CALL CANCEL. This software package includes a diskette, 165-page manual, plenty of examples and 16 complete COBOL source code programs.

PASCAL DISKETTE & MANUAL

Advanced features include: 14-Digit precision; BCD math (no round-off errors); Floating point \$29.95

+ 63 -64; TRACE debugging; Arrays up to 8 dimensions; 64K strings; External procedures; and Dynamic Module loading. You get a diskette and a 184-page manual. Requires 60K RAM and one disk drive with at least 90K storage.

EDIT

DISKETTE & MANUAL

Nevada EDIT, a full-screen, video-display text editor, is designed specifically for computer \$29,95

program text preparation. Nevada EDIT is completely user-changeable, can be configured to almost any terminal and takes up only 12K of disk space. This package includes a diskette and 59-page manual.

ALSO AVAILABLE:

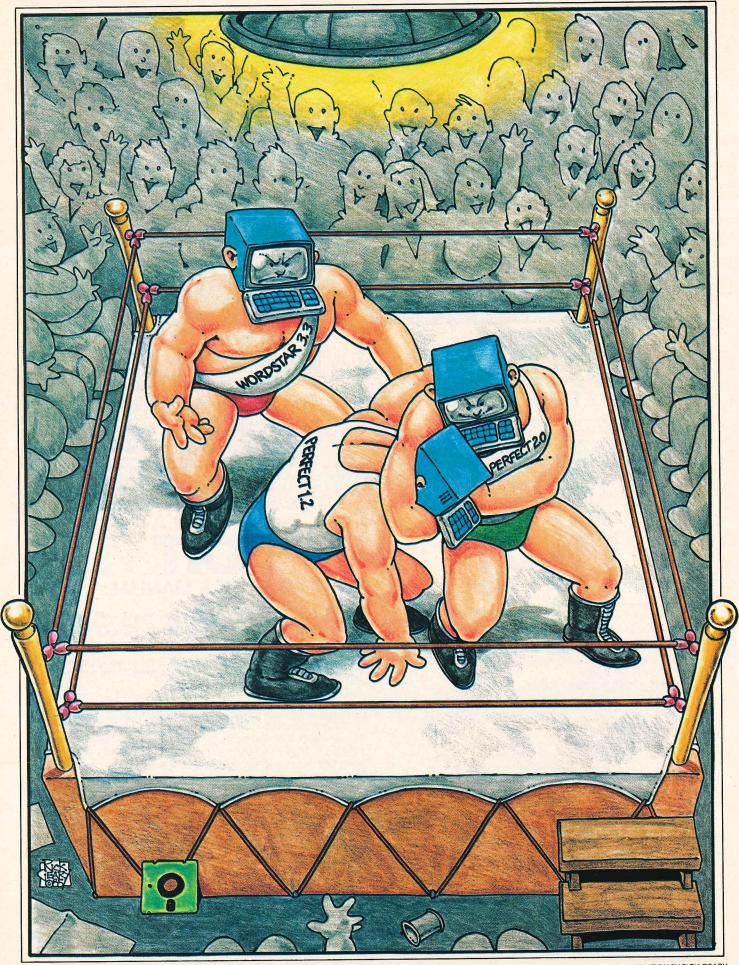
*	EXTRA MANUALS	\$1	4.95
*	COBOL Application Packages, Book 1	\$	9.95
	BIG PRINT-Diskette		

The CP/M Operating System, an 8080, 8085, or Z-80 (8-Bit) microprocessor, and 32K RAM are required, unless otherwise stated above.

WHEN YOU ORDER, PLEASE SPECIFY ONE OF THE FOLLOWING DISKETTE FORMATS:

- ☐ 8" SSSD (Standard CP/M IBM 3740) 51/4" Diskettes for:
- Access/Actrix
- ☐ Apple CP/M☐ DEC VT 180☐ DEC Rainbow
- ☐ DEC Rainbow ☐ Epson QX-10
- ☐ Heath Hard Sector (Z-89)
 ☐ Heath Soft Sector
 (Z-90, Z-100)
 - IBM-PC (Requires Z-80, Baby Blue II Card)
- ☐ Kaypro Double Density (NCR)☐ Micropolis Mod II
- □ NEC PC 8001
 □ North Star Double Density
 □ North Star Single Density
 □ Osborne Single Density
- ☐ Sanyo 1000, 1050 ☐ Superbrain DD DOS 3.X
- (512 byte sec)
- ☐ TRS-80 Model 1 (Base O Mapper)☐ Xerox 820 Single Density

CP/M is a registered trademark of Digital Research, Inc. Microsoft is a registered trademark of Microsoft Corp. TRS-80 is a registered trademark of Andy Corp. Apple II is a trademark of Apple Computer, Inc. Osborne is a registered trademark of Osborne Computer Corp. Xerox 820 is a trademark of Xerox Corp. Kaypro is a trademark of Non-linear Sys. Heath/Zenith is a trademark of Heath Corp. IBM is a registered trademark of International Business Machines, Corp. Nevada BASIC, Nevada COBOL, Nevada FOR-TRAN, Nevada PILOT, Nevada EDIT, Nevada PASCAL, and Ellis Computing are trademarks of Ellis Computing, Inc. © 1984 Ellis Computing, Inc.



Perfect Writer the Second Time Around

How the new, the old, and WordStar compare

by Joseph Comanda and Michael Harney

It's here, folks: Perfect Writer 2.0! Some of you may wonder what all the fuss is about, but not so long ago all Kaypros came with Perfect Writer. So it makes sense that an update should generate interest among Kaypro owners. You oldtimers who swear by the old Perfect Writer will want to know what this new version can do, and those of you who cut your teeth on WordStar might be a little curious about this other word processor. (To quickly compare key features of all three word processors, see table on pages 44-45.)

Even those who love the old Perfect Writer admit it was not an easy program to master. In fact—and that is part of the confusion—it was not a single program. Rather, it was three separate programs linked through a common menu. To get words from head to paper, you had to edit them with Perfect Writer, then format them with Perfect Formatter, and finally print them with Perfect Printer.

Perfect Writer inherited that structure from the mainframe Unix environment that spawned it. Unixedited text is nothing but a series of ASCII character strings—including the embedded formatting codes. Since everything relating to the real look of the printed page is handled by separate formatting programs, what you see on the screen has very little to do—visually—with what you get on paper. The new Perfect Writer still uses formatting codes and separate programs for printing, but now the boundaries between programs are less visible.

But we are getting ahead of ourselves. Let's go back to the beginning, to the new Perfect Writer fresh out of the box. First we'll examine the new opening menu, then the editor, then the formatting commands, and finally how it prints.

One more thing before we begin. When this article was written, Version 2.0 was only available for the pre-84 Kaypro 2 and 4. (Ed. note: As we go to press, Michael Dixon, Customer Support Representative for Thorn EMI, confirms that Thorn has chosen not to make versions for either the post-84 Kaypros or any of the Kaypro 10s.)

Surprise: copy protection

A surprise awaits you when you open the package. The distribution disks are copy protected. You'll have to use your masters or the programs won't run. This will come as a shock to those of you accustomed to treating masters as objects of veneration. Even the Perfect Writer manual, written before copy protection was added, warns you *never* to use your masters.

The folks at Thorn EMI have done their best to soften the blow. They've announced that they will start shipping two masters as a safety measure and will promptly replace any problem-plagued masters for \$10. The disks now come with revised instructions on preparing Perfect Writer for use. You have to make backup copies of the programs (in case anything happens to the originals) and then install CP/M on the masters so you can boot with them.

Copy-protection schemes are notoriously unreliable. Our own experience as reviewers was mixed. One of us had no problems, and the word from other users we've heard from is equally reassuring. However, one of us ran into difficulties after the first week. The main menu program wouldn't start up properly and finally quit working. Recopying the program from the backup didn't fix it, either, so the master had to be replaced.

PSI

PSI (Perfect Software Inc.) is Perfect Writer's impressive new opening menu. Its screen design reminds you of an uncluttered bulletin board, and you can select an option by moving to it with the arrow keys and then pressing the RETURN key or by typing the first letter of the option. For example, to edit a file, you type W for "Write or revise a document."

PSI's utilities are nice, especially its new directory option. Upon request, it displays files alphabetically in a single column at the right side of the screen, listing sizes. It can list files from any drive or user area and accepts ambiguous characters for selection. For example, to list all files with the extension .mss on drive B in user area 2, you type 2/B:*.mss. Then, with

	PERFECT WRITER 2.0	PERFECT WRITER 1.20	WORDSTAR 3.30
ONSCREEN HELP			
optional help menus	*pop-up, levelled menus	half-screen command lists	top-screen menus
optional onscreen	*extensive text helps avail-	none	limited explanations for
explanations	able at every menu level		some commands
CURSOR MOVEMENTS			
by sentence	yes	yes	no
by paragraph	yes	yes	no
to top or bottom of screen	no	.no	yes
SCROLLING			
by screen	scroll backward and forwar	Both Version 2.0 and 1.20 of Perfect Writer can scroll backward and forward a screen at a time, but automatic continuous scrolling is not possible.	
by line	Perfect Writer has no line-scr do have a redraw commar taining the cursor at the cer		both single-line and con- tinuous scrolling at adjust able speeds backward and forward
horizontal scrolling to handle lines larger than eighty columns	no	no	yes
DELETIONS AND BLOCK OPERA	ATIONS	nd of some of warshifted	
delete to beginning of line	no	no	yes
delete sentence, paragraph	yes	yes	no
restore deleted text	yes	yes	no
ONSCREEN SETUP (MARGINS,	TABS, ETC.)		
adjustable tabs	fixed-length tabbing	fixed-length tabbing	variable-length tabbing, decimal tabbing
optional ruler line displaying margin and tab settings	*available during split- screen editing	no	yes
option to save margin and tab setups with program	*yes	no	no
adjustable line- spacing onscreen	no	no	yes
optional hyphenation help	no	no	yes
optional onscreen right- margin justification of paragraph	*yes	no	yes
right-flushing a line	*yes	no	no
PAGINATION AND CURSOR PO	OSITION INDICATORS		
optional visible onscreen page breaks	*yes	no	yes
conditional page breaks	*yes, but not visible onscreen	no	yes
cursor position indicators	none, but has a command that searches for a line by number	Location command displays cursor position by line and column.	Status line indicates curs position either by page, lir and column or, optionall by line and column.

Editing features that all three word processors have in common are not listed in the table. These include most of the conventional cursor-movement and deletion commands, margin-setting and paragraph-reform commands, standard block operations, and standard disk operations available from the opening menu.

Formatting features are not included either. Both versions of Perfect Writer offer a wealth of special formatting features not found in WordStar, the most prominent of which are automatic generation of table of contents, indexing, footnoting or endnoting, multiple-line headings and footings, and automatic outline generation.

* An asterisk indicates a new feature in Perfect Writer 2.0.

	PERFECT WRITER 2.0	PERFECT WRITER 1.20	WORDSTAR 3.30
SEARCH AND REPLACE OPER	RATIONS		
search for text	forward and backward	forward and backward	forward and backward
search and replace operations	forward only	forward only	forward and backward
MULTIPLE-FILE EDITING			
multiple-file editing	L Doth varian 0.0 av 14.00	will are the second transfer	
mumple-life ediling	Both version 2.0 and 1.20 co at a time in memory and a edit two files simultaneously	llow splitting the screen to	no
moving blocks of text between files in memory	yes	yes	no
DISK OPERATIONS FROM EDI	TING MODE		
saving a file to disk	yes	yes	voe (exected
			yes (creates automatic backup)
writing a block of text to a file on disk	writes whole file	writes whole file or any part of a file	writes a block that can bas big as a file
optional display of disk directory	* displays files on any drive or user area and allows use of ambiguous characters	no	displays non-program file on logged drive in alpha betical order
renaming a file on disk	no	no	yes
copying a file on disk	no	no	yes
deleting a file on disk	no	no	yes
printing a file on disk	no	no	yes
changing logged drive	no	no	yes, but doesn't allow reliable disk switching
searching files on disk for text	*yes	no	no
NON-FOITING DISK OPERATIO	NS AVAILABLE FROM THE OPENING	O NATNUL	
displaying disk directory			emilianes veililit
	*displays files on any drive or user area in alphabetical order, allows use of ambig- uous characters, and lists file sizes	displays files on any drive	displays non-program file on logged drive in alpha betical order
erasing files on disk	*allows selection of several files for deletion either by using ambiguous charac- ters or by selecting them from the directory	individually '	individually
changing logged drive	*to any drive or user area	no	yes
riewing a file in non-edit mode	*yes	no, but offers it as an option mode during editing	no
unning other programs	*allows running of other programs in Perfect Series	no	allows running of any other program
AISCELLANEOUS EDITING FEA	TURES		
ouilt-in spelling checker	yes	yes	no
puilt-in thesaurus	*yes	no	no
ransposition of etters, words	yes	yes	no
changing a word to all apper or lower case or capitalizing a letter	yes	yes	no
nscreen underlining	*on Kaypro-84 series only, appears as bold	no	no

the directory displayed, you can select your file.

The erase utility makes special use of the directory, letting you select several files at once for erasure. You may also bypass the directory and erase a set of files by using ambiguous characters.

Another new feature is the ability to log onto any drive or user area. User areas may be a bit esoteric, but you'll appreciate the usefulness of logging onto the B drive. It means you won't have to specify the drive name for a file or directory listing. Perfect Writer will automatically select the B drive for you.

Unlike the old Perfect Writer's menu program, PSI can't be totally bypassed. You can enter Perfect Writer directly from the CP/M prompt as before, but you can't print without passing through the PSI menu.

Pop-up menus and other delights

With a few exceptions, you'll find all the old editing features, including, of course, the ability to recover deleted text (now called "pasting") and to split the screen and edit two files simultaneously. However, the command structure is completely new. You oldtime users will find that disconcerting at first, but the popup menus and the intuitive logic of the command structure will put you at ease in no time.

This version is sluggish. There's no getting around it.

The old confusions between ESCAPE key and CONTROL key are gone. Now the ESCAPE key gives you the Top Menu. These menus, which fill about two square inches on the screen, appear and disappear quickly without a sound. They are both more accessible than the old Perfect Writer's Help Screens and less obtrusive than WordStar's menus.

The Top Menu options lead, through submenus, to all the other commands. As with PSI, you either move the cursor to an option or type its first letter. For example, typing F (for Forward) displays a submenu listing all the forward cursor movements. This submenu is almost identical to the one you'd get if you typed B (for Backward). ESCAPE FW moves you forward a word, and ESCAPE BW takes you back a word. In the same way ESCAPE FS moves you forward a sentence and ESCAPE FP forward a paragraph. It's all very nice and mnemonic.

There are also two ways to bypass the menus. You can use the CONTROL key as an alternative to the ESCAPE key. ESCAPE FL and CONTROL FL do the same job, but the latter bypasses the Top Menu. You can also increase the delay time before the menus appear. Setting the delay to nine effectively turns them off. If you set them at two, they stay off most of the time, but come on quickly enough when you're stuck. You can even use a new Save Setup command to make that

setting, along with the current margin and tab settings, the startup defaults.

There's one drawback to this command structure. Most commands now use more keystrokes than before. For example, the paragraph reform command now takes four keystrokes, counting the ESCAPE key. In fact, only eight commands use less than three keystrokes. That includes arrow keys. It is clear from the manual that the programmers counted on the IBM PC's special function keys to bail them out. Since the new Perfect Writer has trouble with key reconfiguration programs, Kaypro owners are just out of luck.

Other major editing changes

The Thesaurus: Perfect Speller hasn't changed, but the new 50,000-word (entries plus synonyms) thesaurus is nice. Here's how it works. With the cursor on a word, you give the Search Thesaurus command. Perfect Writer splits the screen and places the thesaurus entries for that word in the upper window. You can then move to the replacement word and give a command for Perfect Writer to insert it into the text. You can also edit your choice before inserting it, type in your own alternative, or cancel the operation. The thesaurus can find root words (e.g. it will find plain if you ask it to look up plainly) but not misspelled words.

Using the thesaurus requires disk switching, so save your file before doing a search.

Onscreen Page Breaks: The old Perfect Writer's biggest weakness was its inability to display page breaks onscreen. Version 2.0 lets you insert dotted-line page breaks individually or at regular intervals (every 50 lines is the default). Once they're inserted, you can adjust text around them. But be careful. Unlike Word-Star's, these breaks are part of the text. You can't push text down without pushing the page break down, too. You have to move it as a block.

Also, the regular-interval approach only works properly when the intervals are within the limit of printable lines per page established by the Document Style Settings. Initially, that's 54. The breaks are also thrown off by formatting commands that take up non-printing space and otherwise rearrange text. You pretty much have to choose between formatting commands or onscreen page breaks. Finally, if it matters to you, you should know that these breaks insert non-ASCII characters into your file.

Onscreen Margins and Tabs: As with the old Perfect Writer, you can change onscreen margins and tabs. Now you can also save those settings as your new startup defaults with a Save Setup command.

Resetting tabs is still a problem. If you change tab settings onscreen you get some surprising results when you print. Here's why. Perfect Writer treats a five-space tab as a single *tab* character, not five *space* characters. Here's the catch. When printing, it uses the tab definition in the Document Style Settings table (initially a five-space tab). Onscreen tab settings don't

affect this definition. So ten-space onscreen tabs are still printed as five-space tabs unless you change the tab definition with PFCONFIG.

Speed: This version of Perfect Writer is sluggish. There's no getting around it. Everything from loading to searching to saving is noticeably slower. Scrolling and screen-rewrite operations lack the speed and grace of the old version.

Minor editing changes

Some Streamlining Changes: There have been a number of minor housekeeping changes. For example, buffer names have been eliminated. Similarly, they've reduced some command overlap (like the find/read and save/write command pairs) and reorganized the edit modes (Save and View are gone, and there's a new Justify mode).

Location Clues: The old command that told you the cursor position is gone. That leaves you with two less-than-satisfactory ways to figure out where you are. A new command lets you find a particular line by number. It's for finding formatting syntax errors, but could serve as a tool for getting your bearings.

The other new feature is a ruler line displaying current margin and tab settings. It's the dividing line between files when you split the screen and is only visible then, but you could split the screen at the top (screen splitting now occurs at the position of the cursor) just to get the ruler line.

Marked Text and Onscreen Underlining: On the pre-84 screen, text marked off for block operations blinks rapidly on and off like a silent scream. Apparently, this is an alternative to reverse video.

Another new feature in Version 2.0 is onscreen underlining, although it's not available on pre-84 Kaypros. This is not to be confused with the underlining formatting commands, which are still available.

Disk Directory in Edit Mode and Searching Files on Disk: A new editing command displays the disk directory. It's not as nice as the PSI menu directory—it doesn't arrange files alphabetically or list their sizes—but it lets you select with ambiguous characters.

A new Search command lets you search one or more files on disk for a character string. When it finds an occurrence, it asks if you want to load the file into memory. If you specified more than one file, it continues the search. It seems to work pretty well unless you specify a program file, in which case it gets stuck.

The formatting commands

Perfect Writer's special formatting capabilities have always been its strong suit, and Version 2.0 offers very nearly the same selection of formatting features as the old one. These include the following:

—Typeface commands allow boldface, italics, bold italics, three kinds of underlining, superscripts, and subscripts.

-Heading and footing commands allow variable

When you're ready for hard disk storage, HDS is ready for you.

You bought your KAYPRO to help in your business — and it's given you a real head start. But lately, maybe you've started noticing a few little problems. Like lost time searching for the floppy with the right data. Or slow information retrieval or calculation. Or even lost data because a vulnerable floppy was damaged.

The answer isn't more floppies — you need the next logical step. An HDS 10MB hard disk subsystem to help keep your business on the grow, at a price even your accountant will love.

The HDS 10MB has all the features you expect from a truly state-of-the-art unit. Like half-height size; complete plug compatibility; five-minute installation; a dedicated power supply and a full, one-year warranty. Best of all, it comes at a price that's easy to take, starting at just \$1,249 for the 10 megabyte version. And when you're ready for more storage capacity, HDS is still ready for you with 15, 20 and 30 megabyte disk units; all with the same no-nonsense features.

Contact us today for full details or the name of the dealer nearest you. (Dealer and OEM inquiries welcome.)





Huntington Data Systems

307 6th Street, Huntington Beach, Calif. 92648 (714) 960-7498

Solutions that work. For you.

(LISP) for KAYPRO

UO-LISP Programming Environment The Powerful Implementation of LISP for MICRO COMPUTERS



LEARN LISP System (LLS.1) (see description below

\$39.95 **UO-LISP Programming Environment** Base Line System (BLS.1) \$49.95

> Includes: Interpreter, Compiler, Structure Editor, Extended Numbers, Trace, Pretty Print, various Utilities, and Manual with Usage Examples. (BLS.1) expands to support full system and products described below.

UO-LISP Programming Environment: The Usual LISP Interpreter Functions, Data Types and Extensions, Structure & Screen Editors, Compiler, Optimizer, LISP & Assembly Code Intermixing, Compiled Code Library Loader, I/O Support, Macros, Debug Tools, Sort & Merge, On-Line Help, Other Utility Packages, Hardware and Operating System Access, Session Freeze and Restart, Manual with Examples expands to over 350 pages. Other UO-LISP products include: LISPTEX text formatter, LITTLE META translator writing system, RLISP high level language, NLARGE algebra system. Prices vary with configurations beyond (BLS.1) please send for FREE catalog.

LEARN LISP System (LLS.1): Complete with LISP Tutorial Guide, Editor Tutorial Guide, System Manual with Examples, Full LISP Interpreter, On-Line Help and other Utilities, LEARN LISP fundamentals and programming techniques rapidly and effectively. This system does not permit expansion to include the compiler and other products listed

LISP Tutorial Support (LTS.1): Includes LISP and Structure Editor Tutorial Guides, On-line Help, and History Loop. This option adds a valuable learning tool to the UO-LISP Programming Environment (BSL.1). Order (LTS.1) for \$19.95.

REQUIRES: UO-LISP Products run on most Z80 computers with CP/M, TRSDOS or

NEQUINES: OU-LISP PRODUCTS RUN ON MOST LOW COMPUTERS WITH CP/M, IRSDOS OF TRSDOS compatible operating systems. The 8086 version available soon.

TO ORDER: Send Name, Address, Phone No., Computer Type, Disk Format Type, Package Price, 6.5% Tax (CA residents only), Ship & Handle fee of \$3.00 inside U.S. & CN, \$10 outside U.S., Check, Money Order, VISA and MasterCard accepted. With Credit Card include exp. date. Other configurations and products are ordered thru our FREE catalog.

Northwest Computer Algorithms

P.O. Box 90995, Long Beach, CA 90809 (213) 426-1893

Find the right word

Thesaurus WordStar Multimate, Word Perfect

(Synonym Finder)

Improve your writing by finding the perfect word. Put your cursor on a word and call up a list of words with similar meaning. Pick one, and voila, your new word replaces your old word. No more fumbling for a book. It's so fast and easy you'll use it all the time. Special introductory offer, only \$79.95! (Regularly \$124.95.) Synonym Finder installs on most machines that run Word-Star (3.3 or 3.0), Multimate, or Word Perfect. Specify word

proc., computer, operating system (MS/PC DOS or CP/M 80) and disk format. New database has 1/3 more words than Random House and uses 1/3 less disk space. Easy to install and operate. Highly rated by dozens of reviewers and users groups. \$2.50 shipping-NYS residents add sales tax. Okay! My check is enclosed for _ (or charge my VISA/ MC acct. #_

expires_

Writing Consultants

Suite 342, 11 Creek Bend Drive - Fairport, NY 14450 Orders only: 800-828-6293 Info: 716-377-0130 dealers and distributors please call or write

PERFECT WRITER 2.0

and multiple-line headers and footers.

 Environment commands provide special formats for verse, letterheads, salutations and signatures, quotations, indented and "undented" text, etc. One powerful subset, the Level environments, aid in the automatic generation of outlines and turn Perfect Writer into a rudimentary idea processor,

-The Document Sectioning and Organization commands permit sectioning of a manuscript, automatic generation of a table of contents, indexing, footnotes, and endnotes.

—Formletter design tools allow you to do things like insert boilerplate paragraphs during printing or chain several files together into one continuously paginated document.

Version 2.0, like its predecessor, uses two categories of formatting commands. Global @STYLE commands at the top of a file govern the entire document, establishing settings for layout characteristics like margins, paragraph separation and indentation, and page length and width. Local formatting commands, placed at specific points in the text, provide the various "special effects."

The latter commands consist either of English words or compounds (e.g., OFFSET, ENUMERATE, FLUSHLEFT) or mnemonic initials (e.g., B for boldface, I for italics) preceded by an at-sign (@) and followed by a matching pair of fences that surround affected text. The fences can be parentheses, square or curly brackets, apostrophes, quotation marks, or greaterthan/less-than signs. For example, "@B[How bold of you!!!]" tells Perfect Writer to print out "How bold of You!!!" in boldface.

Version 2.0 makes working with formatting commands much easier than before. You must still enter the @STYLE commands by hand, but you can now select all the local formatting commands from a Layout submenu. Perfect Writer then inserts the command into the text (complete with fences) and places the cursor inside the closing fence. Just remember to move the cursor outside the fences after typing in the text.

A special word about footnoting

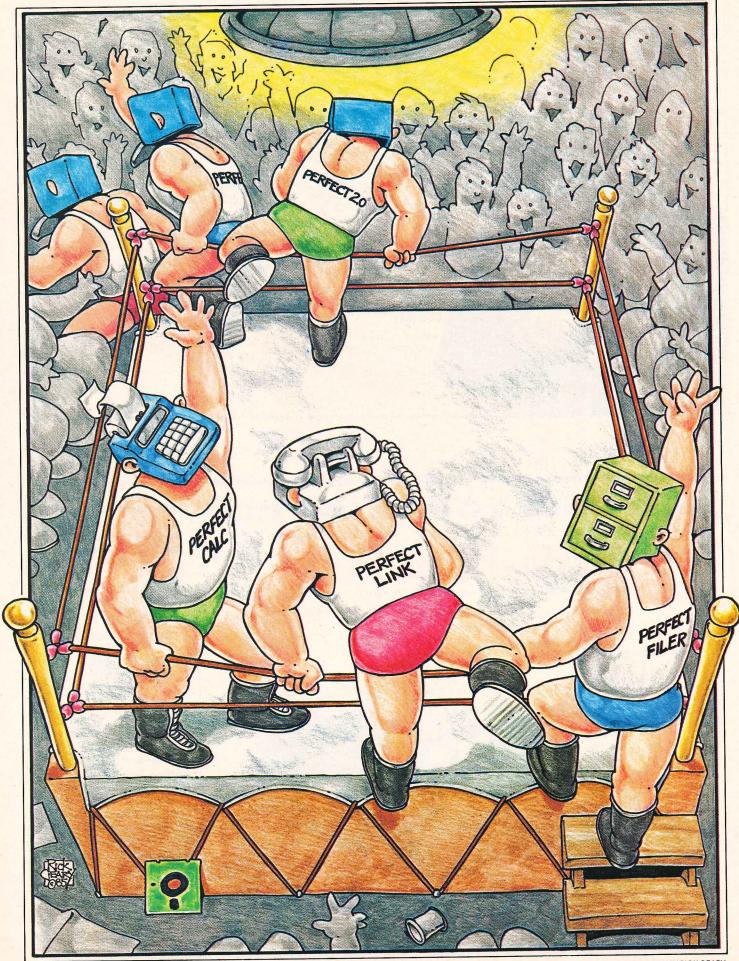
Footnoting still has its perils. The old 300-character limit on the amount of text you may enter between @FOOTNOTE fences is still there. Exceeding it gives rise to the infamous "input buffer overflow" error message. You must also worry about footnote references placed too close to the bottom of the page. Since Perfect Writer is not capable of reliable onscreen pagebreak display, there's no easy solution. Despite its limitations, however, the footnote capability remains extremely useful, sparing you the trouble of renumbering notes throughout your text.

And a word about new, old and undocumented features. The only new command is a much-needed @NEED command that permits conditional page

(continued on page 67)







Three More Pieces of the New Perfect Package

Perfect Calc, Perfect Filer and Perfect Link

by Joseph Comanda and Michael Harney

horn EMI bills the Perfect series as an integrated package. That claim is borne out in a number of ways. First, the programs are linked through a common entry menu. PSI, Perfect Writer's new opening menu, also lets you run Perfect Filer, Perfect Calc, and Perfect Link (requires disk switching).

They also share a pop-up menu structure. This common structure works better than the old approach (which broke down at critical points) of trying to use identical commands throughout the series.

Finally, the programs are somewhat interdependent. For example, Perfect Filer uses Perfect Calc for calculations and Perfect Writer for report design; Perfect Calc tables can be used in Perfect Writer documents; and, of course, Perfect Link provides a communications pathway between all of these and the outside world. As we look closely at the new Perfect Calc and Perfect Filer and briefly report on Perfect Link, we'll detail how some of these program linkages work better than others.

The old Perfect Calc

If you got Perfect Calc free with your Kaypro you may not realize what a fantastic deal it was. We consider it one of the finest products available for the CP/M market. Apparently others out there agree. According to the people at 800 Software, a large mail-order software house in Berkeley, Perfect Calc was the only program in the Perfect series that did well on its own (the old Perfect series was principally a bundled product).

What's so great about it?

(1) It has all the standard spreadsheet features, and its calculation speeds compare well with those of other spreadsheets. You can easily enter, edit, and copy labels and numbers, adjust column widths, and justify entries. It is equally easy to edit, store, and replicate formulas.

(2) Like Perfect Writer, Perfect Calc uses a virtual-memory approach that lets you work on files too large to fit in available memory.

(3) Perfect Calc can also work with up to seven interdependent spreadsheets simultaneously. This

feature lets you link spreadsheets containing only numbers to files serving as function libraries. A network of associated spreadsheets turns out to be faster than one large spreadsheet, since recalculation is only performed in one spreadsheet at a time.

(4) Perfect Calc, like Perfect Writer, uses windows, letting you view two different files or different sections of the same file. It turns out to be even more valuable in spreadsheet work than in word processing.

(5) Perfect Calc boasts an extensive repertoire of arithmetical, logical, and trigonometric functions. These include functions for averaging and net present value; for doing logarithmic calculations and deriving square roots; for "and," "or," "if," and "not" operations; and for arc tangent, cosine, and sine. Some trigonometric functions not built in (such as arc cosine and sine) can be constructed using available functions.

To be sure, it has a few problems. For one thing, it's a little slow in reading and saving files. For another, writing files for inclusion in Perfect Writer documents is not completely straightforward. This, however, is really a limitation of Perfect Writer, which can't handle columned text or scroll horizontally beyond the 80th column. You're forced to transfer files from Calc to Perfect Writer in screen-sized regions rather than whole sheets at a time. Once inside Perfect Writer, you have to frame the Perfect Calc information with @VERBATIM formatting commands to preserve the spreadsheet format.

Even so, it remains an excellent product. Having used Perfect Calc extensively for the past two years on a great variety of tasks, we have both found it reliable, powerful, and easy to use.

Enhancements and alterations in version 2.0

Version 2.0 has a number of changes. Most of them are enhancements of the old Perfect Calc, but the new version also has a couple of distinct drawbacks.

Pop-up Menus: The new Perfect Calc is, at its core, the same program as the old with an entirely new menu system. The menus seem, if anything, even more appropriate here than in Perfect Writer.

The trunk of the new menu tree is a Top Menu of principal options that branch off into sub-options. For example, the View option leads to a submenu with options for moving up, down, left, or right. The Up option, in turn, permits you to go up a screen (or page) or back to the top of the spreadsheet.

As in Perfect Writer, you can use the ESCAPE key to reach the Top Menu or circumvent it with the CONTROL key. To scroll up a page, you type ESCAPE (or CONTROL) VUP. Similarly, to move down a page, you

type ESCAPE VDP.

Onscreen Helps: The old Perfect Calc's onscreen help was decent. It is even better now. Typing a question mark at any point in the menu structure invokes informative help screens covering the menu branch where you happen to be at the moment.

New Built-in Functions: The repertoire of functions has been expanded. There are now built-in functions for factorials and standard deviation, as well as for generating random numbers and converting to nearest whole number. The originally limited trigonometric set now has pi, conversion from radians to degrees and vice versa, arc sine and cosine, and tangent.

Recalculation Order: With Version 2.0 you no longer need to specify that calculations be done by column rather than by line. If a formula references cells that come after it in the calculation order, Perfect Calc keeps recalculating, making successive passes until the whole sheet (or region) has correct values.

The old Filer's list-design process with its monkey-bar menus is gone . . .

Also, Version 2.0 no longer recalculates a spreadsheet automatically when it first loads it. Unfortunately, this hasn't improved its loading speed Some Miscellaneous New Features:

—A new directory command like the one in Perfect Writer lists files from any disk drive or user area.

—When working with a split screen, you can now link and unlink spreadsheets at any time for simultaneous scrolling.

—A new Value Only command converts the contents of a range of cells from formulas to the numbers they are currently holding.

Speed: The old Perfect Calc was no speed demon at loading and saving files. The new one is downright torpid. The old Perfect Calc, running on a pre-1984 Kaypro II, took between 30 and 40 seconds to call up a 5k file from disk. Version 2.0 takes about 1 minute and 10 seconds to read a comparable file. The old version took 16 seconds to save the same file to disk. The new one takes 40 seconds. Screen rewrites during scroll-

ing—also a cause for impatience in the old Perfect Calc—are even slower in the new version.

Incompatibility with the old Perfect Calc: The new Perfect Calc appears to read files created with the earlier version, but column and labeling structures are not intact and the formula cells sprout "Error!" messages. It's possible to untangle the mess, but it's not easy. Thorn EMI says a conversion utility is in the works, but it is not currently part of the package.

Perfect Filer

Perfect Filer is a list manager capable of keeping records for a variety of business and personal needs. It is particularly good at sorting and selecting records for form letters, labels, and statistical reporting. Among Kaypro users there are many who swear by the old Perfect Filer, claiming that its speed and versatility are unrivaled in single-datafile programs.

Still, the old Perfect Filer had its limitations. It could only handle one datafile per disk (or user area), the documentation was slim (a centimeter-thick manual), its report-design procedure was unwieldy, and it couldn't do calculations. Not surprisingly, of all the programs, it has changed the most. But not all the news is good. They've added a lot of features, but they've lost some of the old Filer's simplicity.

A look at the major changes

Overall Helpfulness: The new Perfect Filer is a lot friendlier to the first-time user. Now, pop-up menus accompany you when you design a new record form, and Help Screens are available at every level. The documentation is now excellent and includes a sample applications disk and numerous tutorials.

Better Screen Editor: The record form design editor is vastly improved. The old version was very intolerant of typos and afterthoughts. It lacked proper insertion and deletion features. Now you can move things from one line to the next, inserting and deleting as needed. In short, it's a first-class editor.

A cut-and-paste feature would further improve the screen editor (after all, Perfect Writer and Perfect Calc can do it), and a status line specifying cursor position and field lengths would be even more valuable.

As with Version 1.0, you can either use ready-made fields (called group entries now) or enter your own by typing underline characters onto the screen. You can define custom fields as alphanumeric or numeric. They've dropped the old alphabetic field type and changed the status field type (for yes/no or true/false) into a group entry option.

The ready-made group entry fields are better designed this time. The name group, for example, is stripped down to first, middle, and last name, and the money group now allows proper right-justified entry for up to six figures plus two decimal places.

Better Report Writer: The old list-design process (continued on page 64)

In The Beciana There was the "Shoe-Box" accounting system...

But Now There's Mini-Ledger

It doesn't make sense to try to tell you about Mini-Ledger in an ad this size. That is especially true since the arrival of Accounts Payable and Accounts Receivable.

So, if you want to learn about Mini-Ledger accounting, order our interactive brochure disk. The disk will not only show you what the programs do, but how easy they are to use.

The brochure disk is \$5.00.* At the very least you will get a disk, and who knows. you might even discover why you bought your computer in the first place.

*credited toward purchase



With Mini-Ledger, those prehistoric days of Shoe-Box accounting are over.

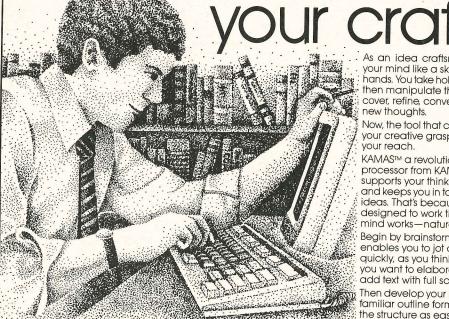
PARADIGM CONSULTANTS



39243 Liberty Street, Suite L Fremont, CA 94538 **(415) 796-0543** Outside California Call **(800) 821-8407**

CP/M is a registered trademark of Digital Research Corporation

Reach for the height



KAMAS, Z80, & CP/M are trademarks of KAMASOFT*, Zilog, & Digital Research respectively. formerly Compusophic Systems

Get your hands on KAMAS now. Send \$147 plus \$4 for \$/H. Or call (503) 649-3765 for VISA or Master-Card orders. KAMAS is available for many Z80, CP/M computers. Ask about your system.

KAMASOFT* 2525 SW 224th Ave., Dept. 101 Aloha, OR 97006

As an idea craftsman, you use your mind like a skilled pair of hands. You take hold of concepts, then manipulate them to discover, refine, convey dynamic new thoughts.

Now, the tool that can strengthen your creative grasp is well within vour reach.

KAMAS™ a revolutionary outline processor from KAMASÓFT*, supports your thinking process and keeps you in touch with your ideas. That's because KAMAS is designed to work the way your mind works—naturally.

Begin by brainstorming. KAMAS enables you to jot down ideas quickly, as you think of them. If you want to elaborate, you can add text with full screen editing.

Then develop your ideas using a familiar outline format. Change the structure as easily as you change your mind. Move an idea and all attached text moves

KAMAS puts full control at your fingertips. You can keep track of your main line of thought by collapsing the details from view. Then, expand the outline to develop the specifics when you need to. By collapsing and expanding portions of the outline, you can maintain an overview and literally see how your ideas fit together. And KAMAS is fast. Your ideas remain at your fingertips. KAMAS can locate and retrieve by keyword—even a misspelled one—in less than a second per topic file.

Use as much of the power as you feel comfortable with. KAMAS is menu-driven with over 100 on-line help screens. But you can also open the hood to find a high performance programming environment with the additional horsepower you may need to get the job done. An active user community and the KAMAS Report newsletter keep you in touch with the latest KAMAS applications.

Achieve a commanding vantage point...

...with KA

It's Greek to Me!

Foreign symbols and other printer enhancements

by Jim Spickard

et's say you're a linguist. You'd like to write with a computer, but you need lots of symbols an ordinary printer can't provide: the ¿'s and i's of Spanish, the B's, Д's and Ж's of Russian, the λ's and γ's of Greek.

Or you're a physicist and not only use Greek letters but symbols like \leq , \geq and Ξ .

How do you write

$$\tau = \int_{a}^{b} dx \chi_{nn}, \phi(x) \frac{\partial \Psi}{\partial x}$$

without giving your printer fits?

Maybe you just want to change typestyles—and have a dot-matrix printer with only one typeface.

Several programs now on the market help you get more out of your dot-matrix printer than you ever thought possible. (Daisywheelers have some options, too, but that will have to be another article.) What you need depends on your brand of printer and on the word processor you use. And on how much effort—and money—you're willing to put forth.

This article reviews three programs and one printing utility that lets you print anything from Greek to music.

Three techniques

Chartech by Techware, Woodsmith Software's Custom Character Kit, and Softcraft's Fancy Font make special symbols in three very different ways.

Chartech is a clever gnome that sits between Word-Star and your printer and tells the printer how to interpret what WordStar sends out. For example, Word-Star's "!" becomes "i" as Chartech tells the pins of the dot-matrix printhead to fire upside down. "S" becomes "\(\Sigma\)," "P" becomes "\(\Gamma\)," and so on. The number of new symbols is limited to 94 at a time—the number of printing keys on your keyboard. But you don't lose the standard symbols. The gnome only translates when you tell him to. He shuts up the rest of the time.

The Woodsmith symbols, on the other hand, live in your printer. They sit in a special RAM chip some

printers have for holding alternate alphabets. You switch between standard and alternate characters by putting special symbols in your text (I'll tell you how later in this article). You don't even need a word processor! Typing PIP LST:=CON:<CR> will turn PIP.COM into a non-correcting typewriter with two alphabets, once the Woodsmith symbols are in place.

Fancy Font makes the most radical changes of all. It replaces the printing half of your word processor with a quadruple-density typesetter. It *draws* letters rather than printing them. The result looks very professional. You can use several typestyles in a single document and are not limited to standard sized letters. You get true proportional spacing and justification. Unfortunately, printing is slow.

All three programs can produce any symbol you'd ever want. Each has its advantages and disadvantages—depending on your equipment and needs.

Chartech

Chartech is a godsend to those of us who write with WordStar. (It doesn't work with other word processors.) Not only does it give us Greek, Russian and scientific symbols, but it prints equations several lines high (like the one at the beginning of this article.) It will print either at draft speed or in "dress" mode—good enough for publishers. And it lets you control all your printer's features—I do mean all—from your text.

In addition, it installs WordStar better than Micro-Pro's WINSTALL program does. It lets you see underlining and boldface on the newer Kaypro's screen. It even got WordStar to make super- and subscripts on my Citizen MSP-10 after the manufacturer had given up in despair! And it turns WordStar's user patches into toggles—doubling the control they provide. I'd buy it even if I didn't need special symbols.

The program is very straightforward. You write with WordStar as usual. When you need a non-standard letter, you insert a ^E in your text (by typing ^P^E). This shifts to a special set of 94 symbols corresponding to ASCII codes 33 ("!") through 126 ("~"). You type the

ASCII letter matching the character you want, and at print-time Chartech grabs those $^{\Lambda}$ Es and inserts the non-ASCII form; "a" becomes " α ", "b" becomes " β " and so on.

The rest of your text stays in ASCII.

Out of the box, the 94 characters are a mix of Greek and mathematical symbols, some of which are reproduced here in dress mode. (Doublestrike would make them even better).

Special commands let you build multi-line characters and equations.

To add other symbols (like the Spanish & and Russian A you have to remove some of the standard set—not a loss, since you can make different copies of the program, one for each alphabet you use.

About 45 extra symbols (beyond the original 94) come with the program. Others are available from Techware's "Character Exchange." Or you can make your own: the program includes a screen-oriented "character processor."

With this processor, you build pictures of the symbols out of dots, which tell the pins of the printhead where to strike. The program analyzes those dots and prints out a line of numbers that you substitute into Chartech's basic set. It's really quite simple—I made up a Russian alphabet in two hours one sleepless night, and that was my first try.

Substituting new characters for the standard ones is a bit complicated, though. Techware provides a "character dictionary" that you edit in WordStar's non-document mode. You delete lines for the characters you don't need, and add the lines you've built or gotten from the character exchange. Using CP/M's SUBMIT, ASM and DDT utilities, you patch the new dictionary into the program.

If you're not familiar with these utilities, you may be intimidated at first. You just have to dive in—and remember to work on a copy, not the original. The manual has everything you need, though it is not well written. Chartech demands too much of its users here—a real flaw.

To be fair, Techware is developing a menu of non-English alphabets, so the patches will be done automatically. They are also working on a program that lets WordStar write Arabic and Hebrew as they were meant to be written—from right to left. But that's a bit further down the road.

Chartech works on 12 different kinds of dot-matrix printers, plus clones. All the major brands are covered. It also enhances Diablo and NEC daisywheels (and

clones) by overstriking, and permits full use of the extra letters on their printwheels.

Kaypro owners with graphics CRTs can even buy a ROM chip so they can see 128 Greek and scientific letters on the screen. Chips for Russian, Arabic and Hebrew are in the works.

As a final plus, Chartech lets you control all your printer's functions from the text. You type in a special character (a "\" for example) and follow it by a letter or number. This sends an "ESCAPE" sequence to the printer, telling the printer that the following string is instructions, not text. On an Epson FX, for example, I get elite type with "\M" and return to pica with "\P" "\8" turns off the paper sensor (for when I'm typing single sheets) while "\-" turns on the printer's underline—which works better than WordStar's. It's like SmartPrint, a printing utility I'll describe later.

If you use WordStar, Chartech is a great deal.

Woodsmith's Custom Characters

If you don't use WordStar, you might turn to the Custom Character Set and Character Design Kit from Woodsmith Software. These programs will work with any word processor. So far, however, they will only work with *some* Okidata and Star Micronics printers. (A version for the Epson FX is in the works.)

As I mentioned before, Woodsmith stores extra characters in the printer's memory. (That's why it only works with a few printers: most don't have RAM storage.) Before printing, you load your alphabet into the printer, using a program Woodsmith provides. Then you print your text as usual. You either print the entire text with the new characters (useful for special typefaces), or you can stick special codes in your text to switch between regular and alternate alphabets.

Woodsmith Typefaces

Roman

Ifalic
Opemtop

Gothic
αβχδεφγθλμ

Δοτιπισουν

σκαρφΓжκππ

±≈ΓΔ∇ΦΞΓΙΘΔΛ

Woodsmith provides several typefaces, some of which are reproduced here (printed on an Okidata 92). They are all draft quality, but can be made darker by doublestriking. Indeed, the "correspondence" alphabet rivals Okidata's correspondence mode and is faster.

Woodsmith's Design Kit is almost the same as Chartech's "character processor"—it lets you build letters out of dots you see onscreen. Because it uses the printer's extra character slots, rather than graphics, however, Woodsmith's print is not quite as sharp as Chartech's.

Woodsmith's big advantage is the ease with which you change alphabets: no DDT and SUBMIT, no editing character dictionaries. If you want Hebrew, you load the Hebrew characters, then print your file. If you want Russian, load Russian. As long as you don't turn off the printer, you have a second alphabet to use. Even the computer illiterate should have no trouble.

Correspondence Modes:

Okidata Woodsmith (plain) Woodsmith (double)

The problem, of course, is switching between alphabets when you want to use both the Woodsmith characters and your printer's normal type. And that's only a problem for some word processors, not all.

The Okidata 92/93 switches to the alternate alphabet when it gets an "<ESCAPE>2" from the computer. "<ESCAPE>1" switches it to correspondence mode, while "<ESCAPE>0" switches to draft quality type. With WordStar you just set the "user patches" (such as APAE and APAR) to 1B 32, 1B 31, and 1B 30. A APAE in your text will switch to the alternate alphabet, just like Chartech, while a APAR (or another user patch) will switch back.

Perfect Writer (prior to version 2.0) doesn't have these patches. If you want to send an <ESCAPE > to the printer, you have to fool PW into thinking you're doing something else.

Here are three ways to go.

If you never use boldface or italics, you can reset PFCONFIG so that $@B(\dots)$ or $@I(\dots)$ will use the second alphabet to print what's inside the parentheses. Just define your printer so values 21 and 22 (or 23 and 24) turn the alphabet on and off.

If you don't want to give up boldface and italics, you can reset PFCONFIG's character translation tables so that your "\" (or some other character) means "<ESCAPE>." "\2" will then switch on the alternate set while "\1" or "\0" will switch back to normal. (Kristin Farry's Perfectly Serious: an In-Depth Look at Perfect Writer describes this in detail).

Or you can spend a few dollars on SmartPrint (from Software Research Technologies) and not have to fiddle with PFCONFIG at all.

SmartPrint II+

SmartPrint is a companion to SmartKey, one of the keyboard customization programs. SmartKey tells your computer that, say, the "1" on your keypad means "antidisestablishmentarianism" (saving you a lot of typing). SmartPrint tells your printer that, say, the "\W" in your textfile means "turn on the Wide type option." With SmartPrint in memory when you print your file, the character right after a "\" (or another symbol of your choice) is interpreted by the printer as instructions, not text. You have complete control over

your printer's abilities.

The advantage of SmartPrint over user patches is the number of special functions it controls. WordStar gives you four patches while the new Perfect Writer (2.0) only gives you three. I like to use my printer's special superscript to mark footnotes, and I like those notes in condensed rather than regular type. Since I also use both elite and pica type in my manuscripts, and prefer my printer's underlining to the word processor's, I soon run out of patches to use.

By using SmartPrint, I can have all these, plus wide type, six- or eight-inch line spacing and anything else (including the few Greek letters my printer has already). I can even use "pica compressed expanded" type—8.5 characters per inch— for a bit larger font.

Its only disadvantage is that I lose right justification. Those extra "\"s in the text throw the lines out of whack. But I prefer extra typestyles to justification.

As I said, Chartech gives me all this control in WordStar, but for other word processors SmartPrint meets my needs. And it has some nice features. For example, I can use a mnemonic system to remember the commands. " \R " makes a lot more sense for reversed type (white on black) than an "<-ESCAPE> \sim 21," and is a lot easier to remember.

You need SmartKey to set up SmartPrint's definition files. Many retailers sell them together.

Woodsmith stores extra characters in the printer's memory.

Fancy Font

Fancy Font, from SoftCraft, is a typesetting program that produces near-perfect text. Or music. Or anything else you want. It handles 6- to 42-point type (72-point on 16-bit machines, more for single characters) and comes with several alphabets and typestyles, some of which I have reproduced here. The type is proportionally spaced, and you can word-wrap it, justify it, center it, shift it right or left. On some printers you can even print columns without going through the gyrations normal word processors demand.

The program works by means of special characters inserted into your text. "\c" centers a line, "\r" shifts it right. "\w" turns on word-wrap while "\x" turns it off. "\v+2i" puts a two-inch vertical space in the text, "\>3c" indents three centimeters from the left margin, "\v6i" starts printing six inches from the top of the page. And so on.

Most important, Fancy Font lets you use up to 10 typestyles in a single document, plus all the "native" fonts your printer provides: "\f0" signals the first font, "\f1" the second and so on. When you print, you just

ANNOUNCING

HANDYMAN

The hardware/software Desktop Manager for all KAYPROs

CALCULATOR

Full featured with Dec, Hex, Binary conversion. Import or export numbers from or to your wordprocessor, spreadsheet or other program.

APPOINTMENT CALENDAR

Monthly calendars 1752-2099AD.

SCREEN DUMP

Dumps screen to your printer or file.



NOTEPAD

Uses a subset of Wordstar or Perfect Writer commands (please specify). Import or export data from or to your wordprocessor or other program.

AUTO DIALER

HAYES compatible modem required.

DIRECTORY

List disk files from within any program.

ONE KEYSTROKE

HANDYMAN uses no main memory! How they do that?

HANDYMAN is a hardware add-on board complete with its own RAM and ROM. The software is ROM based and utilizes the HANDYMAN RAM in lieu of main memory. Installation is simple and can be accomplished in about 5 minutes. No soldering or wiring is required! HANDYMAN merely plugs into existing KAYPRO IC sockets.

MFLO	-SYSTEMS,	INC.
3010 FLOYD STREET	BURBANK, CALIFORNIA	91504 (213) 849-7711
YES! Send me HANDYMAN(s) at \$124.95 each.	My KAYPRO is:	Wordstar Perfect Writer NOTEPAD command set.
(quantity) at \$124.95 \$	II 🗌 🗌 2-84	
	2X 🗌 🔲 4	Charge my: VISA master charge DORGESS
California residents add 6.5 % Sales tax	4-84 10	Charge my:
Shipping and handling 5.00	Robie 10-84	^ III
TOTAL \$	4X 12X	Card # Exp. C.O.D. and checks drawn on US banks also accepted.
Trademarks: Kaypro (Kaypro Corporation), Word		pration), Perfect Writer (Perfect Software, Inc.).

DATESTAMPER ... has the answers

Has the mailing list been updated? When did we print that letter? Which is the latest version?

Use it to keep your KAYPRO® up-to-date!

- · avoid erasing the wrong file
- keep dated tax records of computer use
- back-up files by date and time
- simplify disk housekeeping chores

OPERATION: DateStamper extends CP/M 2.2 to automatically record date and time a file is created, read or modified. DateStamper reads the exact time from the real-time clock, if you have one; otherwise, it records the order in which you use files. Disks initialized for datestamping are fully compatible with standard CP/M.

REQUIREMENTS: Real-time clock is optional. Configurable for any real-time clock, with pre-assembled code supplied for popular models, including 4-84, Advent, Kenmore and Legacy.

UTILITIES: Enhanced SuperDirectory. • Powerful, all-function DATSWEEP file-management program with date and time tagging. • Disk-initializer. • Installation and configuration utilities.

General CP/M 2.2 version

Version using CP/M 2.2 Enhancements

\$39

Other Kaypro® Products

The Backgrounder™

All keys fully definable in any program. Suspend any program to print the screen or send it to a file, write background notes, and use built-in CP/M commands. Now comes with Print Spooler. (Requires CP/M 2.2 Enhancements)

Plu*Perfect Writer

\$39

Indispensable enhancements for the Perfect Writer Editor (versions 1.03 and 1.20). One touch commands, set swap file size, change disks while editing, etc. Includes CP/M 2.2 Enhancements.

CP/M 2.2 Enhancements

\$32

For any version of CP/M 2.2. Completely compatible with all applications software. Now includes configurable WordStar function keys.

 We now also carry Advent hardware products that complement our software. Package prices available.

Shipping and handling \$3. California residents add 6% sales tax. Deduct \$5 when ordering two or more disks. Visa and MasterCard accepted.

Trademarks: CP/M (Digital Research); Perfect Writer (Perfect Software); Kaypro (Kaypro Corporation); WordStar (MicroPro, Inc.)

Write or call for further information: BOX 1494 • IDYLLWILD, CA 92349 • 714-659-4432 Plu*Perfect Systems

"After using your "Help" books, I am hesitant to purchase any software without checking to see if you have published a book on it." Houston, TX.

The "Smart" Database Manager
It knows how

SALVO THE ULTIMATE DATABASE Introductory Price JUST \$94.95

- · Fully Relational Database
- · Uses up to 16 files at one time
- Natural Language Interpreter Talk to SALVO in English!
- Powerful 4th Generation Language Write whole programs in 2 or 3 lines MONEY-BACK GUARANTEE! (Price expires July 31, 1985)

From Plu*Perfect Systems, Inc. CP/M 2.2e plus Plu*Perfect Writer®\$31.95

"A wonderful program that enhances the features of Perfect Writer." Peter McWilliams

Plu'Perfect Backgrounder® \$37.95

"The only thing more amazing than the performance is the price!" Peter McWilliams NEW! Plu'Perfect Datestamper \$31.95 Automatically time and date stamps your files.

NEW! Perfect Software Version 2.0

Writer, Filer and Calc NO COPY PROTECTION! Normally \$89 Our Price: \$85

All 3 \$225

AT LAST! The PeopleTalk book you've been waiting for.

The All Star Guide to the Kaypro Computer In People Talk's learner-friendly style covering

- WordStar® DataStar®
 - DataStar[®]
 CalcStar[®]
 MailMerge[®]
 SuperSort[®]

• ReportStar • CalcStar • SuperSort Written in cooperation with Kaypro Complete easy to read tutorials on all of the Star software; starts with basics — builds to advanced uses; expert tips and advice; fully cross-referenced; fully indexed; spiral-bound for easy access Introductory Price \$19.95

THE PEOPLETALK QUARTERLY

60 pages and going strong! A newsletter written in plain English. Columns covering—

- · Star software
- Perfect software
- Dbase-II
- Book section
- Product reviews
- Modems &
- In-depth articles
- Communications
- · Public Domain Software
- Tricks for getting the most from your printer Normally \$20 (4 issues) Special Price **\$17.95** Back issues \$2.50 each

KAYPRO 10 USERS

KBACK — The ultra high speed back-up program. Dumps 10 megabytes in 15 minutes!

JUST \$69.95

FASTBACK—The highly praised back-up utility. See the review in February Profiles

Normally \$99.95 Our Price \$74.95

PASSWORD—The ultimate security system.

Gives you total control over who has access to your computer. From start-up to shut-down PASSWORD follows your instructions about who may have access and what areas they may use.

JUST \$69.95

REMBRANDT GRAPHICS FOR YOUR KAYPRO

Thousands of copies sold at \$79.95 Our price only **\$57.95** Demo Disk \$6 Price Expires July 31, 1985 "...the very best collection of utility software I've seen...The Kaypro is advertised as "The Compleat Computer"-but this is the bundle of software that makes that true!"

Dave Gerrold, Profiles Magazine

FREE SOFTWARE HANDBOOK ONLY \$17.95 (Handbook plus software disks \$62.95. Disks only \$54.95.)

Features the top programs in public domain

· What they are

When they're useful

· How to acquire them

· How they work

'If ordering disks please specify machine and disk format.

Also from PeopleTalk:

Wordstar and Friends for Kaypro 2 & 4 \$19.95
Perfect Manual for the Kaypro 2,
Perfect Manual for the Kaypro 4,
\$17.95

Supercharge your Kaypro with Smartkey! Only \$44.95 to customize your computer.

Program your own keyboard to turn the mostused commands into ONE KEYSTROKE.

PERFECT WRITER ON THE KAYPRO

Easy-to-read tutorial for Perfect Writer users. Unleash the power of Writer with this handy reference book as only PeopleTalk could produce it!

- Exceptional type-this-and-you-get that reference section lets you look up a command quickly and easily
- Focuses on all Kaypro models All this for only

\$17.95

DISKETTES! Special 25 disk prepacks Single-Sided: \$1.25 each \$31.25 Box Double-Sided: \$1.45 each \$36.25 Box Includes warranty, envelopes & labels

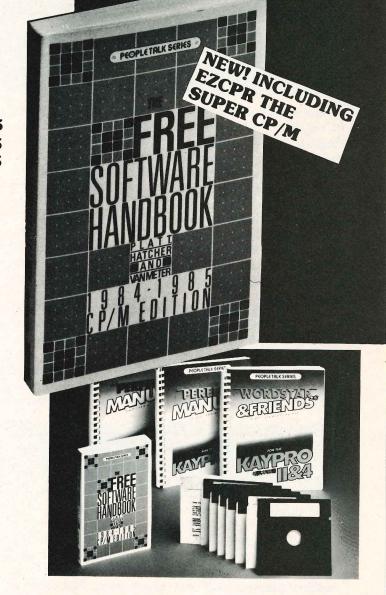
CHECKS AND BALANCES

"The sky opened with a crack of thunder ... My checkbook had balanced ... It hadn't balanced in 17 years. If anyone had told me that I would be balancing my checkbook and enjoying it, I'd have suggested he was a candidate for a rubber room!" Dave Gerrold Profiles

The incredibly easy-to-use accounting package for personal and business use.

Super-low price \$54.95

MONEY-BACK GUARANTEE



See your dealer or order direct:

PeopleTalk Associates Inc.

P.O. Box 863652-A Plano, TX 75086 1-800-PT BOOKS





Please include product price in U.S. Dollars + \$3 shipping and handling (\$10 air mail outside U.S.) Texas residents add 6% tax.

give Fancy Font the list of fonts you want to use, and it makes the substitutions automatically.

The fonts needn't even be the same size! I printed birth announcements for our new baby using five fonts, from 11- to 48-point, without a hitch. And when we didn't like the five I'd chosen, I just picked some others, without having to revise my text.

use for everyday writing.

Of course there are six rough-draft modes, so you can quickly print a copy to see if everything is in the right place. But in full dress, Fancy Font is for special occasions. I can only imagine printing a manuscript on it if my publisher wanted camera-ready copy—and some publishers do ask for that these days.

	FancyFont Ty	pefaces	
Celtic	italic		boldface
SanSerif	Romansuperscript	Руссиан	תרבה
Twist	Modified Ro	oman	Old English
Script	æβçðєму ^ћ лул	фсип'	Formal

Fancy Font comes with Roman type (8- to 24-point) in regular, italics and bold, plus script and "Olde English" in various sizes. It includes a 1,600-character database containing several styles of sans serif, Russian, Greek and Old German, plus graphics characters. A special program, CFONT, lets you create fonts from this data. Another program, EFONT, lets you edit the alphabets in order to clean up any imperfections. It works something like Chartech and Woodsmith's design programs, but it's much more complicated. (It has to be, since a 48-point character needs more than 70 vertical lines, rather than a standard character's eight or nine.)

You can order any of 42 special fonts from SoftCraft's font library. The disks (there are 50 of them to accommodate several sizes per font) run \$15 each and cover everything from international phonetics to music. Also for \$15 you can buy MODFONT, which will double, halve, embolden or slant a font. Using EFONT and two passes of MODFONT I made some truly huge characters.

Fancy Font prints musicl

WordStar users will want to get WSFONT (\$15), which embeds Fancy Font commands in WordStar texts automatically. ^OJ becomes \j, ^PS becomes \u and so on. Writing your document in WordStar gives you the automatic hyphenation that Fancy Font lacks, making justified text look much nicer. Not all commands are covered, but the program is a big timesaver.

And that's what you need to run Fancy Font: lots of time. At 240 by 216 dots per inch, the program uses 90k bytes for a page of text. When I printed samples from the music font, each page took me more than ten minutes. The result was gorgeous and unobtainable any other way, but this is not the program you want to

Fancy Font works best on an Epson FX printer—which has, as the ad says, phenomenal resolution. It will also work with Star Micronics (Gemini, Delta, Radix) and some Texas Instruments printers, as well as the Epson MX, though these are less clean than the FX version.

Fancy Font prints near-perfect text. Or music. Or anything else you want.

Of the programs I've reviewed, Fancy Font is the most fun, but the one I'm apt to use the least for day-to-day writing. Anyone printing posters, formal announcements or music, or starting a home typesetting business, however, will find it well worth its modest cost.

Recommendations

Which program should you get? It's quite simple, really. If you write with WordStar, and particularly if you want to print equations as well as foreign alphabets, Chartech is the program of choice. Its combination of features and low price simply can't be beaten.

If you use a word processor other than WordStar and you have an Okidata or Star Micronics printer, buy Woodsmith and SmartPrint. Together they do almost everything Chartech does. The ease of changing alphabets with Woodsmith will even attract WordStar users.

And if you are writing music or want copy that can't be topped for looks, and non-standard characters besides, then buy Fancy Font.

The choice is yours.

Jim Spickard is a writer and teacher in the sociology of religion. He reviews software used by academic writers. (continued on page 77)

Thousands Sold in the First Week!

When our first ad appeared in the April issue of *Profiles* magazine, thousands of law firms, church groups, small businesses, typing services, writers, professors, and students rushed to place their orders in the first week! We were simply overwhelmed by their enthusiasm. To all of them we say a big THANK YOU. In the second week, customers raved and raved about our products and recommended them to their friends and business associates. In case you haven't heard of these hottest items among Kaypro users, here they are:

Proportional Spacing. A program that automatically installs your WordStar to print in proportional spacing. This means such letters as "i" and "l" will occupy much less space than letters like "m" and "w," and the space in between words will be evenly spread out, resulting in a dramatically improved printout that looks almost typeset. You still get all the WordStar printing features, including right justification, boldface, underscore, superscript, etc. You get best results when you use a PS printwheel, but fine even if you use the ordinary non-PS 10 or 12-pitch printwheels. No crowded characters, even on one-word short lines. Comes with a disk and a manual plus a variety of printing tricks. Requires Kaypro/Juki, Brother, Silver-Reed, or any other letter-quality printers. Developed by the author to print his Ph.D. dissertation.

Extra Bonus for Juki 6100 printer: Our Proportional Spacing program will also automatically install your WordStar to print French cedilla $(\hat{\mathbf{y}})$ and German umlaut $(\ddot{\mathbf{u}})$, two foreign characters not on your Kaypro keyboard. Now your Juki can print all the diacritical marks needed for French and German. Information on how to print the other four special characters $(\mathbf{t} - \mathbf{\hat{y}} \ \mathbf{\hat{x}})$ is also included in our Manual. Fully tested on Juki 6100 and Kaypro printers.

Bibliography. An electronic marvel for modern scholars! Definition files and command files all properly set up for your DataStar and MailMerge to produce MLA style bibliography. Can be converted to any other styles. Saves you hours of frustration in creating your own. Ready for data entry. Can sort by any field. Number of bibliographic items limited only by your disk capacity. Many tricks included; serves as a tutorial in itself. Used by the author in his Ph.D. dissertation.

Only \$15.95

Mailing List. Definition files and command files all properly set up for your DataStar and MailMerge to produce a variety of mailing lists to suit different needs. Number of records limited only by your disk capacity. Can sort by any field. Includes many tricks and tips and a command file to print envelopes. Can print 1 or 3-across labels. Originally developed for a magazine subscription agency to keep track of more than 100,000 subscribers. Why waste time creating your own when you can use our fully tested and debugged program?

Only \$12.95

Public Domain Disk. A full disk (191K) of the finest CP/M public domain programs: KSTROKES (a SmartKey-like program), SCREEN DUMP, UNERASE, NEW SWEEP, KMODEM, and much more. Absolutely a must for all Kaypro users.

Only \$11.95

Genuine Juki 6100 100-character Printwheels. Only \$22.95 each

Chaucer Software

P.O. Box 2308 Princeton, NJ 08540 Telephone (609) 734-9016 Check, Visa, MasterCard accepted All U.S. orders shipped FREE, via First Class Pr

All U.S. orders shipped FREE, via First Class Priority Mail, in 24 hours. Foreign customers, please add U.S. \$10.00 per order (any item) for Air Mail. NJ residents only, please add 6% sales tax.

TIMETRIC

The Internal Revenue Service requires you to keep "ADEQUATE, CONTEMPORANEOUS RECORDS", if you plan to deduct the business use of your computer. Let TIMETRK(c) take the drudgery out of keeping those records. MENU DRIVEN, FAST, EASY TO USE. Use it year after year to make tax-time easier.



\$29.95



PLUS SHIPPING

ORDER NOW FROM:

FINANCIAL TRACK SYSTEMS 9208 GUTIERREZ RD. NE ALBUQUERQUE, NM 87111

NM RESIDENTS: ADD SALES TAX

BARGAIN CORNER:

Get all the help you can to prepare for next year's tax season!! Use TIMETRK and TAXTRK. A spread-sheet version of TAXTRK is now available to help you get ready for next year. Accumulate information and know your tax status at a glance. GET BOTH for the discount price of \$59.95

SEVEN DAY/24 HOUR PHONE SERVICE

2 [505]243-8975

IF ORDERING BY MAIL: ADD \$3.05 SHIPPING & HANDLING

FINANGIAL TRACK SYSTEMS

I NG

"NEXT TO MY SOFTWARE, NOTHING'S MORE USER FRIENDLY THAN THE WALL STREET JOURNAL".

WILLIAM H. GATES III, CHAIRMAN, MICROSOFT CORPORATION

If you really want to know how valuable good business information can be, ask somebody who makes his living in the information business. Bill Gates, for example:

A TON OF INFORMATION

"I need a ton of information to stay the leader in computer software, but I have super-limited time. Which is precisely why I read The Wall Street Journal.

"My company's part of an industry that's moving very fast. The Journal does a great job of keeping up with it. Their coverage of the whole computer area is extremely good."

IN PRACTICALLY NO TIME

"And the way The Journal's organized, I can access this information in practically no time. A quick scan of 'What's News' on the front page tells me what stories I should read. And the stories give you the most news in the fewest words.

"They also give you a fresh perspective. I like to read how non-industry people see and react to what's going on in my industry. It gives me a much better feel for the marketplace I'm competing in."

IF IT'S IMPORTANT, IT'S IN THE JOURNAL

"There are some things I don't have any way of finding out except by reading The Journal. Like which big companies are committing to what hardware. Information so



important it influences the way we deal with our customers today and plan marketing strategies for tomorrow.

"Why, even when there's no news about my industry in The Journal, that's important news.

It means I have a lot less to worry about."

Bill Gates knows that every Monday through Friday, The Journal has all the business news you need, fresh, concise and ready to use.

Plus lively looks at leisure and the arts, provocative editorials and political insights.

That's why he's a Journal subscriber.

Shouldn't you be one, too?

HOW TO SUBSCRIBE

To have The Wall Street Journal rushed to you every business day for 26 weeks for only \$56—and save \$7.50 off the cover price—mail the coupon below. Do it now.

ws.	
Attn. Manager of	REET JOURNAL Subscriber Service I, Chicopee, MA 01021
☐ I prefer one ye	onths of The Journal for \$56. ar for \$107. □ Bill me ed. □ Please charge my □ Diners Club oress □ MC □ VISA
Card#	Exp.
Signature	
Name (Please print)	
Address	The same of the same of the same of
City	State/Zip
Limited time offer—good	d in Continental U.S. only. 2MAF LI STRFFT INURNAL

All the business news you need. When you need it.

Create graphics masterpieces with...



Version 3.0 just released!

Complete Business Graphics Toolkit™

NEED GRAPHICS? You don't need a new computer. You need **REMBRANDT**. The software package that unleashes all the graphics power built into your Kaypro Computer.

Until now, accessing Kaypro graphics required advanced programming efforts. Now the **REMBRANDT** Business Graphics Toolkit gives you three easy-to-use tools that allow even the most inexperienced user to quickly master Kaypro graphics.

KGRAPH™ enables quick and easy creation of business graphics including horizontal and vertical bar charts, pie charts and xy plots (scatter-graphs) — KGRAPH uses hand entered data or reads numerical data from just about any source including dBase II, spreadsheet, Mbasic and Wordstar files.

KBOARD™ is the full-screen graphics editor for your Kaypro computer. Create graphic screens, save and recall them to and from disk. Layout forms, design logos, draw pictures. It's easy and fun to use!

KBRIEF ™ produces electronic on-screen "slide shows" with absolutely no programming required! KGRAPH and KBOARD files are easily sequenced using nine special effects!

REMBRANDT is complete with printer routines so graphics can be reproduced on virtually every dot-matrix or daisy-wheel printer.

REMBRANDT, the Complete Business Graphics Toolkit costs just \$79.95.

A demonstration disk is just \$5.00 applicable to the purchase price.

See your **Kaypro** dealer for a demonstration.

For Kaypro 2-84, 2X, 4-84, 4E, 4X, 10, 12X and Robie.

Make your KAYPRO computer IBM-PC compatible for \$29.95! READ, WRITE and FORMAT more than 25 different types of disks (including IBM PC-DOS/MS-DOS) with

Now available for the IBM-PC 75 formats just \$39.95

Media Master

Are you tired of trying to find your favorite software package in **Kaypro** format? Would you like to use your **Kaypro** generated Wordstar files, dBase II data and spreadsheet files on the IBM-PC at work (and vice-versa)?

Do you want to trade public domain software with a friend who owns an Osborne?

MEDIA MASTER gives your Kaypro instant access to program and data files in over 25 disk formats including:

Osborne SD & DD
IBM PC-DOS 1.0 & up
IBM PC-DOS 2.0 & up
IBM CP/M-86
Morrow MD2

LNW-80 TRS-80 with Omikron CP/M TRS-80 III w/Memory Merchant TRS-80 IV with CP/M+ Heath Z100

Heath w/Magnolia CP/M

Cromemco CDOS SSDD Cromemco CDOS SSSD TI Professional CP/M-86 Actrix Lobo Max-80

Cromemco w/Int'l Term

Xerox 820 I SD Xerox 820 II DD Zenith Z90 DEC VT180 NEC PC-8001A Kaypro II

Now available for Kaypro 2 (and II): All other models soon!

ORDERING INFORMATION:

Include \$3 per order for postage/handling. Overseas airmail add \$10. California residents add 6% tax (LA County, add 6.5%). To place COD or credit card orders,



Systel II



Call TOLL FREE 24 hours: **800-824-7888** (Ask for Operator 409)

Alaska, Hawaii: 800-824-7919 (Ask for Operator 409)

Technical questions: call (818) 716-1655

For more information, a free brochure (including sample printouts and reviews), or to order, contact:

formerly
DG/SYSTEMS



22458 Ventura Blvd., Suite E Woodland Hills, CA 91364

PERFECT PACKAGE

(continued from page 52)

with its monkey-bar menus (you were always swinging up and down and around on them) is gone. Now you use Perfect Writer to design the layout of multi-column, multi-heading reports as well as labels and form letters.

But even with Perfect Writer, report design is no easy business. You must use special formatting commands to align columnar data properly in a report. Old users will recognize the logic of defining spaces on a line and then positioning strings or fields within them, but new users may find them confusing. For example, to get the report layout below you need this set of commands:

		For	rmat t	for Report		
		WEEK	(LY SA	LARY REPORT		
1	Nam	ne	1	Social Security Number	ı	Salary
 R3#E.≠	 #L13 < name.lastr	 name>#L13<	name	efirstname>#C23 <ssnumb< td=""><td> > #R</td><td> 11<salary< td=""></salary<></td></ssnumb<>	 > #R	 11 <salary< td=""></salary<>
				GALLET AND A		
			Actuc	al Report		
			o success	ALARY REPORT		
ı	Nan	WEE	o success		, 1	Salary
		WEE	o success	ALARY REPORT	, 1 	Salary 450.00
 1,		WEEK	o success	Social Security Number) 	
		WEE	o success	Social Security Number	`` -1	 450.00

Once you get the hang of these commands, you'll discover some interesting features. For example, the #DATE Command inserts the current date into a report in English longform (e.g. 02/27/85 becomes February 27, 1985). The #MONEY Command is nice, too. It converts a money entry into words for writing checks.

Fortunately, designing form letters and labels is simpler. If you use the ready-made group entries for name and address in your record, you can design a label with Perfect Writer using just two lines:

<name>

<address>

Then you select the label-printing option in Perfect Filer and get prompted for lines per label, label width, and columns per page.

More Flexible Access to Records: The old Perfect Filer only allowed you to look up records individually by ID. Now you can use any field and even specify complex conditions, such as all records updated after 03/05/85 for people whose last names begin with "T" and who live in California, sorted by zip code.

One new command (Note Entry) makes it easier to update several records through a scan. It automatically positions the cursor in a specific field.

Still, the new Perfect Filer's speed is disappointing. Version 1.0 could retrieve the last record in a 20-record datafile in two seconds. Version 2.0 takes 26 seconds to do the same thing. In fact, Version 2.0 is significantly slower at other tasks, too, such as scrolling to the screen, writing to disk, and sorting.

Sorting: Version 2.0 can sort on up to nine separate fields in either ascending or descending order. Version

2.0 does not store sort instructions with specific reports (or lists). To define a sort order, you simply put order numbers into the appropriate fields of a blank record. Perfect Filer then creates a "sort sequence" and saves it for later use. However, you can only have one active sort sequence, so subsequent sort instructions overwrite previous ones.

Also, Version 2.0, unlike its predecessor, creates a new sorted version of the datafile, so it requires spare disk space to do its sorts.

Multiple Files and Record Transfer: The new Perfect Filer allows 16 datafiles per disk, so you no longer have to spread your files over several disks. It also has a higher limit on record size (128 fields) and lets you move information between datafiles.

This latter feature passes records between similarly structured files. It's nice for housekeeping work such as making a compressed version of a datafile with lots of deletions, splitting up a large datafile, or making changes in a record form and saving the data.

Speaking of transferring files, old users may be dismayed to learn that Version 2.0 can't handle Version 1.0's datafiles. Thorn EMI says it's working on a conversion utility that will be released to all owners of the new software.

Calculating With Perfect Calc: The new Filer's ability to link up with Perfect Calc seems like a potentially interesting feature. If you set up a Calc spreadsheet properly and define which fields/cells go back and forth, you can take numbers out of a set of Filer records, send them to the spreadsheet, do the calculations in Calc, and then send back the results to the proper records. The process is as long and cumbersome as the previous sentence, but it does work. By using Filer's selection capabilities and the right formulas in Calc, you can do some nice tricks, but the process should be easier to use.

Disk Switching and Menu Hopping: All the old Filer programs fit on one single-sided disk. The new Perfect Filer sprawls over three sides, and since it depends on Perfect Calc and Perfect Writer for some tasks, it requires a lot of disk switching. You can get all the programs on one double-sided disk by eliminating the help files, but you'll have to settle for two disks on a Kaypro II.

Still, you can't get around the clumsy menu structure linking the Filer programs. Perfect Filer's design treats each program like a separate floor in a building. Sorting takes place on one floor and printing sorted labels takes place on another. But you can't go directly from one activity to the other. You must move from room to suite to hallway, climb the stairs, and then repeat the process in reverse. Worse yet, if you want to do a Filer-Calc transfer, you must work your way down from the fourth or fifth floor to street level before you can move to the Calc building next door.

The menu design has another irritating feature. It is task-oriented rather than file-oriented. Instead of let-

ting you open a particular datafile at the beginning of a work session and then perform all your operations on it until further notice, you must continually respecify the file you are working with each time you perform a new operation.

Perfect Link

Unlike the other programs, Perfect Link never came bundled with the Kaypro, but it's probably the nicest one in the package. It is an easy-to-learn, easy-to-use, full-feature telecommunications program, equally suitable for novice and experienced user. It transmits both ASCII text files and binary program files with full error checking.

It, too, has pop-up menus and onscreen helps, and its manual is exemplary in its thoroughness. The appendices are sufficient for the experienced, but beginners will appreciate the detailed instructions for using the different kinds of modems on the market. It even has separate chapters on each of nine popular information services, including Dow Jones, CompuServe, The Source, EasyLink, and MCI Mail.

Its status line is the best in the series. It indicates whether you're hooked up, whether you're receiving, which system you're hooked up to, what terminal you're emulating, what the baud rate is, which file you're saving to, and whether the printer is on.

Perfect Link's installation program leads you through the steps of setting up system files with phone numbers, passwords, and log-on procedures for ten different services or systems. It will even find the cheapest phone number for you to use to hook up to the popular services. These files then enable you to log onto a system automatically at startup.

Perfect Link also gives you ten programmable User keys (on the Kaypro, ESCAPE A through J) for displaying operator prompts and user comments or sending command sequences to the receiving computer.

It appears to be capable of handling the full range of telecommunications needs, from hooking up to information services to downloading from a mainframe.

Summary

The new manuals are attractively designed paperbound books printed on good paper with glossy covers. They boast excellent graphics and illustrations, and the writing is clear, instructive, accurate, and complete. Tutorials are well designed and clearly presented.

If they could just speed up Perfect Filer and Perfect Calc, come out with those conversion utilities, and take off copy protection, they would have a winning highperformance integrated package right up there with the best of CP/M.

CHUCK ATKINSON makes money and inventory management easy with new QUICK CHECK PLUS® and QUICK REGISTER®



...the greatest programs on earth for small businesses and professional people!

"It is fabulous. . . the best software I've ever had."

Dr. George Yama, Pulaski, Virginia

QUICK CHECK PLUS (QC+)

This program makes money management easy, even for those without accounting or computer experience. It includes bookkeeping, checking, accounts payable and accounts receivable. It will show income, expenses, balance, and pay records at the touch of a button. The program loads and runs in a

QUICK CHECK PLUS, \$195.



including

RETAIL INVENTORY PROGRAM (RIP)

QUICK REGISTER (POINT OF SALE) turns your computer into a very special cash register. Enter the quantity and item number of each sale, and the computer records the sale, prints the invoice, and adjusts the inventory! RIP lists the inventory several ways instantly. It takes care of inventory control, purchasing, labels, and keeps track of vendors. QUICK REGISTER with RIP, \$395.

For the name of your nearest dealer, write or call:

CHUCK ATKINSON PROGRAMS

Route 5, Box 277-C • Benbrook, Texas 76126 • (817) 249-0166

Lap-top Launched

Portability and compatibility are key features of new Kaypro 2000

(Editor's note: This is a late breaking preview revealing preliminary specifications only. We will follow it with a more extensive report in a later issue.)

tits April shareholders' meeting, Kaypro Corporation introduced its second major product for 1985, the fourth in a series of IBM compatibles. Following the Kaypro 16, and hot on the heels of the Kaypro 16-2 and Kaypro's IBM AT-compatible 286i, comes the Kaypro 2000, a fully IBM PC-compatible lap-

The \$1,995 Kaypro 2000 offers these standard features: 256k RAM expandable to 768k, a detachable keyboard, a brushed anodized aluminum case, built-in handle, battery pack and charger, and padded nylon carrying case with detachable shoulder strap and briefcase handle flap.

For expansion, the 2000 line features a \$795 "base station." Setting the 2000 into this desk-top station concurrently plugs it—via a 100-pin connector—into the station's 5 1/4-inch IBM format floppy disk drive, two IBM PC card expansion slots, and an additional serial and parallel port. The base unit can support a second 5 1/4-inch or 3 1/2-inch disk drive and an internal hard disk.

The briefcase-sized, 11-pound Kaypro 2000 itself has an 80-column by 25-line liquid crystal display with a resolution of 640 by 200 pixels and a 3 1/2-inch, 720k floppy disk drive (same capacity as two IBM 5 1/4-inch drives). It comes bundled with MS-DOS 2.11, WordStar, MailMerge, InfoStar+, CalcStar, MicroPro's tutors and lessons, and GW Basic.

The 2000 is powered by household current or batteries, which last about four hours between rechargings. The 2000's low-power indicator warns users when less than an hour's battery power remains. An optional external battery pack and car cigarettelighter adapter are available for extended use.

Other options include a disk adapter/connector that lets users connect the 2000 to an external 5 1/4-inch drive, a second 3 1/2-inch drive, or to a 5 1/4-inch drive in an existing PC. Kaypro will also offer a portable second 3 1/2-inch drive and 300/1200 baud Hayescompatible internal modem. Currently, external modems can be connected to the 2000 through its serial port.

Preliminary specifications

CPU/System: 4.77 MHz 8088. IBM PC-type system architecture. 8087 socket. Built-in real-time clock.

RAM: 256k standard. Expandable to 768k internally. Disk Storage: 720k internal 3 1/2-inch disk drive



(permitting storage equivalent to two 360k IBM PC floppy drives).

Display: LCD screen with tilt adjustment, contrast control via keyboard, and low-glare lens. 25 lines by 80 columns, 640 by 200 bit map graphics.

Keyboard: Detachable compact keyboard with flipout feet for adjustable slope angle. Three-way keyboard use: nested in machine, on desk, in lap. Full-size keys with non-glare finish.

Serial Port: IBM-compatible RS-232 serial port.

Expansion Port: 100-pin connector provides for IBM PC bus, external drives, additional ports, etc., through base unit or drive adapter.

Power: AC adapter/charger and built-in rechargeable battery pack. Four hours typical operating time.

Compatibility: Fully compatible with IBM PC in all key areas:

-Software: Runs all popular programs for IBM PC. Comes bundled with MS-DOS 2.11, WordStar, Mail-Merge, InfoStar +, CalcStar, MicroPro's tutors and lessons, and GW Basic.

-Hardware: Accepts standard IBM expansion cards (with base).

-Media: Can read and write standard IBM 5 1/4inch diskettes, with external drive. Also accepts DG/1 media.

-Display: Behaves like IBM color card with monochrome monitor.

-Keyboard: Every key on the IBM PC keyboard is represented.

Construction: Lightweight brushed aluminum case with sculptured rubber protection grips and built-in

Size/Weight: 11.5" depth x 13.1" width x 2.6" height; 11.5 lbs.

Carrying Case: Padded nylon carrying case with detachable shoulder strap and briefcase handle flap. 🗆

PERFECT WRITER 2.0

(continued from page 48)

breaks. However, there are some name changes (e.g. @SIGNATURE instead of @CLOSING, @OFFSET instead of @QUOTATION), and you'll need to change those commands in old files before you print them with Version 2.0. In addition, some commands dear to old users are still there, but are no longer documented. We found three: @STRING, @REF, and @W. The first two seem to work properly, but the third appears to have a bug in it. Finally, the old @DEVICE, which permitted you to link a file permanently with a particular printer definition, is gone, but you can still select a different definition from the print menu.

Printing

Version 2.0 has changed the rules for printing. The formatting process is now largely invisible, and formatted (.FIN) files are automatically erased. All the print-related options are consolidated on one Printing Options menu, and nonformatted what-you-see-is-whatyou-get printing is the default.

Now, if you want to use formatting commands, you must specifically select that option. Even then, what-you-see-is-what-you-get remains the the rule for printing text outside formatting command fences unless you again specifically request that Perfect Writer override the onscreen text layout, reformatting it according to the default Document Style Settings or @STYLE commands.

Actual printing performance appears to be the same. If Perfect Writer "knows" your printer, it performs well, doing an especially fine job of proportional spacing.

Disk switching

Perfect Writer's printing-related parts come on a separate disk. With a Kaypro 4, you can move them to your editing disk, but single-sided folk have a problem. Switching disks just to print seems a step backward. One solution is to put PF.COM on the edit disk leaving 13k

(continued on page 70)



All the type in this ad was printed on an inexpensive dot matrix printer with Fancy Font, the program that works with almost any word processor to produce high resolution, proportionally spaced, letter quality printing.

No special hardware or installation is required, so you'll be using Fancy Font as soon as you get it.
Fonts, including Roman, Sans Serif, Bold, Italic, Script, Md English

and more, from 8 to 24 points come standard with Fancy Font.

FLEXIBLE. Fancy Font comes with a complete set of over 1500 mathematical, foreign language and other special symbols. Hundreds of additional fonts in sizes from 6 to 72 points are

available, at a nominal additional charge, from our growing font library. You can edit any character and also create your own characters or

logos, up to 1 inch by 1 inch. Powerful formatting features let you center, justify, wordwrap and type flush left or right, with or without running headers and footers—even with different fonts and sizes on the same line.

COST EFFECTIVE. You buy Fancy Font from your local dealer or direct from us, the software developers, for only \$180.

You get near typeset quality at a small fraction of the time and cost of using art or typesetting services.

Fancy Font runs on PCDOS, MSDOS and CP/M systems with Epson,

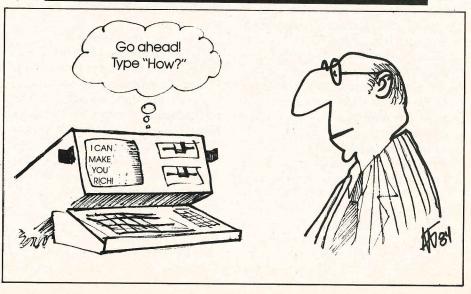
Toshiba and compatible dot matrix printers.

You'll be turning out great looking reports, newsletters, presentations, letters, mathematical texts, overheads or invitations after getting your copy of Fancy Font. The applications are limited only by your imagination.

Call or write now to order Fancy Font or ask for additional information including actual samples and independent reviews.

1-800-351-0500 MasterCharge and Visa Accepted CALL TODAY SoftCraft, Inc.

222 State Street, Madison, WI 53703 (608) 257-3300 Fancy Font is a registered trademark of SoftCraft, Inc.



Technical Forum

by Tom Enright

People have different preferences about what type of cursor they like. Some prefer a solid, unblinking block, while others like a blinking underline. On the Kaypro '84 series computer there is a choice. The factory doesn't give you one, but a little programming can give you whatever type of cursor you like.

The whole thing boils down to manipulating the MC6845 CRT controller chip. This chip has a whole series of attributes that can be set up in software. As a matter of fact, they have to be set every time the computer is turned on. That's one of the things your BIOS (basic input-output system) does on a power-up sequence: It sets the attributes for the cursor that the Kaypro engineers decided to give it. We're going to show you how to change those attributes to get different cursor styles; we're going to play around with three basic cursor attributes: size, whether it blinks or not, and how fast it blinks.

Background

Your video screen holds 25 lines of 80 characters each, so the screen is divided up into 2,000 character cells. Each character cell is 16 dots high and eight dots wide. Yet to prevent the characters from running into text above them, characters fill only 15 of those 16 vertical dots. The cursor is drawn inside a character cell just like any other character. We want our cursor to fill the entire width of the cell, but not necessarily the entire height.

Now, the 6845 CRT controller chip thinks in terms of scan lines. Since a character cell is 16 dots high, it has 16 scan lines in it. When your computer is reset, or when the power is turned on, the BIOS tells the 6845 on which scan line to start drawing the cursor, and whether it will blink or not. To alter the size of

the cursor, we change which scan line is used for the first (top) line of the cursor.

We don't play around with the ending (bottom) scan line because a cursor that stops halfway down the character cell can be disorienting to the user. In short, all cursors should extend to the bottom of the character cell.

With 15 scan lines, this gives us 15 possible cursor sizes. We're only going to use two of them. Our cursor will either fill the entire character cell or use only the bottom scan line. When the cursor fills the whole character cell, it's called a block cursor, and when only the last scan line is used, we refer to it as an underline cursor.

Along with the two cursor types, we'll delve into two attributes: whether it blinks, and how fast.

Ports is ports

Computers send signals from the main processor out predefined ports. This is what CP/M's BIOS does, since it's the only part of CP/M that's customized with the port addresses of a specific computer. So, to control a particular chip in a particular CP/M machine, you have to know specifically which ports the BIOS has defined to speak to that chip.

The chip that handles the cursor—the Motorola 6845 CRT controller—has two ports that we'll be sending signals to: the status/control port and the data port. In order to manipulate this chip, you first send a signal to the control port that tells the 6845 chip which one of its data registers to use. Then you send a second byte to the data port now connected to the 6845 register your first byte requested.

On Kaypro '84 series computers, the BIOS defines the status/control port for the 6845 as port 28 decimal and the data port as port 29 decimal.

The sequence of commands would be to first send the number 10 to port 28. This selects register 10 of the 6845, which controls the starting scan line of the cursor. Luckily, the same register also controls the blink and blink rate attributes. The second signal we send is a data byte to activate the attributes and cursor scan line we want. It will be sent to port 29.

The following maps out how this second signal, the data byte, is configured.

Starting Scan Line—Bits 0 through 3 control which scan line the cursor starts on. These bits can take any value from 0 through 15.

Cursor On/Off—If bit position 4 is set (1), the cursor is turned off.

(Note: According to Motorola documentation, bits 0 through 4 control starting scan line. However, if you start drawing the cursor on scan line 16 when you only have 15 scan lines, the cursor is not drawn at all. For that reason I've chosen to explain bit position 4 as cursor on/off.)

Cursor Blink Rate—When bit 6 is set (1) the cursor blinks slowly. If this bit is zero, the cursor blinks quickly. Blink rate is effective only if the blink attribute is turned on.

Cursor Blink—If bit 6 is set (1), the cursor will blink at the rate set in bit position 5. If bit 6 is zero, the cursor does not blink. This attribute must be on before blink rate has any effect.

The following is a table of data statements and the cursor style that they create. Numbers in the Decimal Data column are the ones that you would send out port 29.

Cursor Data Table:

		Blink	Dec.
Style	Blink	Rate	Data
Block .	No	N/A	Ø
	Yes	Fast	64
	"	Slow	96
Underline	No	N/A	15
	Yes	Fast	79
"		Slow	111

Here's an MBASIC program that uses the above information to make your cursor an unblinking block:

10 OUT 28,10 20 OUT 29,0

Though several excellent assembly language cursor programs exist in the public domain (e.g., CURSOR.COM, UNBLINK.COM) here's a simple one you can write and assemble yourself.

This makes the cursor a fastblinking underline.

Write this one with WordStar in non-document mode or with Perfect Writer and call it CUR-SOR. ASM. In the line that says MVI A,79 you can substitute the data value from the Cursor Data Table that gives the type of cursor you want. The code is 8080 assembly language, so you can assemble and load it with ASM.COM and LOAD.COM. Both of these programs came on your CP/M disk. Put the disk with CURSOR.ASM in drive B and your CP/M disk in A. Warm boot the computer and then enter the following command: ASM CURSOR < RETURN >.

When the assembler has finished, enter this command: LOAD B:CURSOR < RETURN>.

The assembly language version takes longer to get ready to run, but it's worth it.

Auto-run files

When you copy disks with the

COPY program, it asks you if you want a command line executed after each cold boot off of the newly copied diskette. If you respond that the command you want executed is CURSOR and the copied disk has CURSOR.COM on it, that program will run automatically whenever you reset (cold boot) the computer with that disk in drive A.

Setting up a disk to cold boot into a program can be done without having to copy the disk. For example, the program COMLINE.COM comes up specifically to ask you what command line you want written to the CP/M boot track of which diskette.

Alternatively, if you're familiar

with the public domain DU or DUU disk utilities, you can use them to write your preferred command line. More precisely, for most Kaypros, any valid CP/M command written on track 0, sector 2, starting in byte 8 will execute whenever the computer is reset or goes through the power-up sequence. For example, to auto-execute the above CURSOR.COM program, use DU to insert this string of hexadecimal characters: 06 43 55 52 53 4F 52. This string translates to a count of the length of the command (06 bytes) followed by the ASCII hex code of the name of the program to run (e.g., 43 hex equals C, 55 hex equals U, and so on). \Box

αβγδεζηθικλμυξοπροτυφχψωΓΔΘΛΞΠΣΥΦΨΩΘΠΕΔξ≥▼°+1||
CHARTECH turns WORDSTARIM into a great

CHARTECH turns WORDSTAR into a great TECHNICAL WORD PROCESSOR

$$\Lambda = \sum \left[\Gamma_{\alpha\beta} + \Omega_{\gamma\nu} \right] \qquad \tau = \int_{a}^{b} dx \; \Theta_{nn'} \phi (x) \frac{\partial \Psi}{\partial x}$$

CHARTECH software (\$95 for Kaypros) allows you to print 94 special characters on most dot-matrix printers and some daisys, design your own characters, and fully control your PRINTER. With our ROM (\$40), special characters are displayed on screen of Kaypros with graphics. This entire ad was created with CHARTECH. CHARTECH is used top government and private agencies and universities.

Order Now! We Accept Visa and Master Charge! Call: (503) 484-0520. Ask about our new FOREIGN LANGUAGE products. CHARTECH runs on most systems that run WordStar.

TECHWARE

P. O. Box 10545, Eugene, OR 97440

Your Kaypro Just Isn't the Same Without a Datasolvers Internal Modem.



t's now cheaper to give your KayPro its inner voice.
That's right! Now you can purchase a Datasolvers DS1200SMT internal modem at the newly reduced price of ONLY \$349.95!!

The DS1200SMT is a 1200-300 baud, Hayes compatible smartmodem designed specifically for internal installation in your KayPro computer (it works on all KayPro models except the new 16)! The modem comes complete with all installation instructions, free time on NewsNet (the new business information network), all needed cabling, user's manual, a 180 day warranty, and even software on diskette! Plus, all Datasolvers modems are installable options with MITE software.

NEW LOWER PRICE!!!

When installing the DS1200SMT you won't have to worry about soldering, drilling or modifying your computer. It's an easy process which takes about 15 minutes. And yes, you can do it!

Let's face it — 300 baud is alright, but 1200 baud is where it's really at! And now you can be in the forefront of communications for less. Give your KayPro the inner voice it deserves . . . a 1200 baud "voice," the DS1200SMT for only \$349.95.

If you have any questions give us a call, or contact your local KayPro dealer.

CALL US NOW: (316) 264-5068



datasolvers inc.

440 Maple, Wichita, Ks. 67213

Perfect Writer

(continued from page 67)

to spare and PP.COM and PF.DAT (50k for both) on your document file disk in drive B. Then make sure you are logged onto the B drive.

Printer configuration

A new MYPRINT program with an extensive list of popular printers greatly simplifies printer configuration (the process of defining how to communicate with a printer). If your printer is listed, you can make it the default by typing in its name as it appears on the list.

kind of assessment depending on whether you currently use Word-Star or the old Perfect Writer.

If you are in the former category, you will be comparing word processors that are very different in style and capabilities. Neither is really *better* in an absolute sense, but each is better for some uses and some work styles. Some people even like to use both.

If you like to lay things out on the screen just so, if you work with tables or lines wider than eighty

The pop-up menus appear and disappear quickly . . . and the commands are mnemonic.

If your printer is not listed, you'll have to use PFCONFIG ("Perfect Formatter Configurator"), to set up a new printer definition. It's not easy going, but it's as friendly and systematic as such programs get and permits detailed control over printer operations, even letting you edit character-width and character-translation tables.

PFCONFIG also has a second important function. It lets you select the default Document Style Settings for 18 different aspects of layout, including page lengths, margins, and tab settings.

Program configuration

Perfect Writer comes pre-configured for your computer, and you can no longer alter command-key assignments. But enlarging the disk swap file (PW.SWP)—a good idea for editing longer documents—is much easier now. You simply place your Perfect Writer edit disk in drive A and type PW-SWAP followed by a space and some number divisible by eight. The recommended maximum is 64.

Final assessment

Is Perfect Writer 2.0 worth getting? You will need to make a different

columns, or if you like to know where your page breaks are, you'll probably want to stick with Word-Star. On the other hand, if you like the notion of split screens and multiplefile editing, if you need the special formatting features that WordStar lacks, or if you're interested in an online thesaurus, you might consider Perfect Writer 2.0.

If you currently use the old Perfect Writer, you will be comparing very similar products and you will have to decide whether the new features will make a difference for you. You'll have to weigh characteristics like the greater ease in formatting, the more versatile opening menu, the simplified command structure, and the thesaurus against problems with key redefinition programs and reduced speed. Only you can decide which will work best for you.

Joseph Comanda is a freelance writer and consultant living in Philadelphia. Michael Harney teaches word processing and database techniques and is a freelance dBASE II programmer and an instructor at the University of California at Berkeley.

Book Review

by Dick Lutz

It's good to read somebody who's serious about BASIC. But that's a contradiction in terms for some. There are hit squads eager to consign the language to dim history—even some who insist human reasoning is irretrievably deformed by exposure to it.

We all know it's hanging by only one well-worn thread: users. Lots and lots of users.

There are hundreds of thousands of computer users who will never write "important" code who still need to hack out a program now and then—something to accept and file data, work a series of calculations, or keep track of some simple financial information.

Ideally, such programs should be in a kind of Esperanto so they can be rewritten when requirements change, or cobbled together with other lines of code for another purpose. BASIC is closer to the Esperanto ideal than Esperanto itself, simply because it's more universally available and understood.

I confess: I'm such a programmer. I write perhaps three new programs of any consequence in a year, ranging from a dozen lines to an opus of several hundred. For practical reasons, I'm unlikely to invest the time to learn a "preferred" language and unlearn whatever evils BASIC has implanted in my brain—not for so rare a need to program.

The MBASIC Handbook

by Walter A. Ettlin and Gregory Solberg

Getting serious about BASIC

There are times, however, when I want to do something serious:

—some sophisticated string manipulations to sharpen up the printout of my PHONBOOK.BAS program;

-or a grid-art-to-bit-map con-

version program so I can ram a company logo through my Think-Jet printer;

—or, because I've misplaced the public domain program that does it, write a quickie that will test a WordStar file for matching print toggles so underlining won't go on forever.

So I'm glad to see someone takes BASIC seriously. Walter A. Ettlin and Gregory Solberg do, in *The MBASIC Handbook* from Osborne/McGraw Hill. They pick the most Esperanto-like BASIC, Microsofts, and they take the user from the traditional "Hello" start line through practical use of Boolean operators and function definition.

frills.

In that respect, it's the opposite of the terrific Tom Dwyer-Margot Critchfield book, BASIC and the Personal Computer, which has real fun with its subject. Of all the books on BASIC that could bend your bookshelf, these two are probably the most neatly complementary. I give Dwyer-Critchfield to friends who are reluctantly approaching BASIC, and The MBASIC Handbook is the one I'll now keep shelved next to the Microsoft manual—a place to turn when I need the quick refresher on random files or print formatting or function definition.

Its plan is a real advantage for

I'm glad to see someone takes BASIC seriously . . . Ettlin and Solberg do.

They provide what I need when I want to perform something substantial by building on the basic BASIC I already know. They do it with a progressive treatment that welcomes any reader into the flow wherever he happens to start. So while it's just fine for serious newcomers, any veteran of earlier BASIC wars can formulate a programming problem and then open the book to an appropriate starting point.

But it's not casual reading. The style is businesslike and direct—textbookish to the point of having tutorials and (sit up straight, please) exercises with each chapter. To that extent *The MBASIC Handbook* is not seductive. It's written with the expectation that you come to it motivated and ready to learn, and that you want your information in a tight package without

this kind of book: A logical "build," chapter by chapter, that pulls the newcomer along a step at a time. Yet its structured to work as a reference book for quick access to an example of a particular technique or use of a particular statement.

And it's all here: All the statements and functions, output formatting, arrays, debugging procedures, sequential and random access files, Boolean operators, power programming tools, and (the authors be blessed) even a chapter on documentation.

I have two minor reservations: As good as the example programs are, the reproduction of the dot-matrix printout (for credibility and economy, no doubt) is occasionally flawed, and pagination is such that program segments are too often separated from explanations by two pages or more, necessitating

Re-ink any fabric ribbon AUTOMATICALLY for less than

Mac Inker

Extremely simple operation, with built in electric motor. We support over 750 types of printers - cartridge, spool, harmonica, or zip pack type. Most MAC INKER(s) cost less than \$60.00. (Add \$3.00 for UPS shippping anywhere in the US).

Use your MAC INKER to re-ink your dry cartridges (for less than 5 cents in ink) and watch the improvement in print-out quality. Our residue-less, lubricated, dot-matrix ink yields a darker print than most new ribbons. Or get any of our 6 basic ink colors: brown, blue, red, green, yellow, purple and use MAC INKER to CREATE YOUR OWN COLORED CARTRIDGES. We have uninked cartridges. Load the cartridge on MAC INKER, ink in the desired color, and re-ink when appropriate.

Most cartridges can be used almost indefinitely, if ribbon is regularly re-inked, kept moist and lubricated so that the fabric does not fray. Some customers have reported 80 re-inkings of the same cartridge.

As of February 85, we have over 30,000 MAC INKER(s) in the field, in 5 continents (220V motors available). MAC INKER has been reviewed, approved and flattered in most magazines and even in the NEW YORK TIMES and the CHICAGO SUN TIMES.



Order toll free 1-800-547-3303 or ask for free, detailed brochure. Dealers inquiries welcome.

C=mputer Friends

6415 SW Canyon Court Suite #10 Portland, Oregon 97221 (503) 297-2321 (24 hour line)

Book Review

lots of page-flipping.

At \$17.95 (paper cover), this is a worthwhile book.

Kaypro Word Processing Plain and Simple

by David Lenfest and William Houze

Dog books revisited

In the world of dogs, there is more than one series of books with titles something like *Your Corgi and You*. Replace "Corgi" with "St. Bernard," "Cocker Spaniel," "Dachshund" (or whatever) and you have a book whose cover, in some form, catches the eye of every dog owner. Inside, the chapters are all the same except for one that's breedspecific.

It's a familiar formula in the computer book world, too.

Alas, Kaypro Word Processing Plain and Simple comes very close to falling into that category. While you couldn't literally do a find-andreplace on the text to substitute "Brand X CP/M computer" for "Kaypro" wherever it appears, you would find the book to be rather general and something of a disappointment if you bought it hoping for all sorts of Kaypro-specific word processing tips.

The first seven (of 15) chapters deal not with word processing but with such documentation basics as "Bringing the New Kaypro [Puppy?] Home," "Meet the Kaypro [Sheepdog?] Family," and "CP/M: Your Kaypro's Operating System." Of the book's 176 pages, just 56 deal with WordStar and six with Perfect Writer. The Word Plus is covered in six pages and MailMerge in eight. None adds anything to what you get through intelligent use of materials supplied with your machine.

For the most part, the content is probably useful only to the buyer of a used Kaypro who didn't get the manuals and needs something to get started. At \$13.95, it's a definite pass.

WordStar Magic by Peter Silvia

Nothing new on WordStar

There's surely a market for a book on WordStar tips that will save time, accomplish the almostimpossible, and improve the productivity of even the veteran WordStar user.

Such is the promise made for the WordStar Magic manual, advertised in the classified section of InfoWorld for \$5, with a moneyback guarantee. I asked for my money back. The booklet's best advice is to read the WordStar manual again: "You'll be pleasantly surprised at how much you will pick up by perusal through it once again....There are subtleties that you miss in first, second, and even third readings. Review it . . . every few months. The manual doesn't really change, you just get more knowledgeable about WordStar and material in it makes more sense." Much of the booklet is about as repetitious and weakly written as this quote, which describes just what the author must have done. Astounded by what he could learn by re-reading the manual, he shared it with us all.

This item might be useful if you're new to CP/M and WordStar, but there's nothing here that shouldn't occur to a reasonably intelligent being sometime in his/her first eight months using WordStar regularly. "Double your output" is the exaggerated claim made for WordStar Magic, but it's a waste of the postage you'll probably spend to return it.

DISAPPEARED ONES

(continued from page 40)

Commission on the Disappearance of Persons (CONADEP), local human rights activists expected a thorough investigation into the Dirty War excesses. But the underbudgeted and undersized CELS proved that CONADEP—despite its almost unlimited budget and news media clout-had overlooked 524 cases of desaparecidos documented in CELS' files.

Kaypro draws attention

The only human rights group in Argentina with computerized files, CELS has attracted journalists and scholars from around the world interested in investigating the fate of the country's missing. Television crews from Europe, newspaper reporters from the United States, and university students from Chile to Canada have used CELS' computer over the last year.

More importantly, the Kaypro has drawn the attention of human rights groups in Peru, El Salvador and Uruguay. Activists from these countries recently attended a human rights conference in Buenos Aires. During their stay they saw the Kaypro 2 perform, and they took back with them the conviction that computers are the only efficient way of keeping accurate tabs on the missing in their countries.

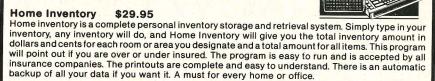
Over last year the computer has helped Mrs. Aguilera, turned CELS into an efficient processor of data on Argentina's missing, and proved its usefulness to other human rights organizations. But more significantly, the computer has offered hope that the desaparecidos will one day be accounted for and the guilty punished.

Miguel Llanos, born of Argentinean parents, is a graduate of the University of California at Berkeley, where he earned degrees in economics and Latin American studies. He says his own relatives in Argentina initially supported the Dirty War, but repudiated it when its excesses became known.

PROGRAMS FOR LESS

Checks & Balances Only \$59.95

Lowest Price Available



Check Index \$29.95

Check Index is a handy program to have for quick and easy access to all your checks. Simply enter your checks and you'll be able to get printouts of them in alphabetical order, in check number order or in date order. If ever you need to find a check you can use the search function in the program. It's easy to use, simply type in the name you want to find and Check Index goes and finds it for you. Automatic backup of data if you desire it. Change disks from within the program. Many other features to make it easy to use. A must for every person or small business.

Recipe Index

Recipe Index helps you keep track of all your recipes. Take all your recipes you have, enter them in the program and you'll always be able to find them when you need them. You can print them in any order you want, you can search for them by name or ingredient. There is a keyword field to enter other criteria to search by such as dessert, low-cal, etc. There is an automatic backup function and you can change disks from right in the program. Many other features besides these. You gals will love this one.

PRO-Mail

Is the most complete mailing label program I've ever seen. PRO-Mail will print out your lists or labels in alphabetical or zip code order or by any criteria you designate. It has a duplicate removal function that removes duplicates by any field you choose. You can change disks inside the program and it has an automatic backup feature. There is a comment field and the company name field will not print out on the labels if not desired. Many other features not mentioned. Better than the rest for half the price.

VISA

SPECIFY COMPUTER MODEL

Add \$3.00 shipping and handling. California residents add 6% sales tax.



6330 Lincoln Avenue • Cypress, CA 90630 • (714) 220-2729

Kaypro Users' Groups

Learning to operate a computer isn't easy-everyone needs help at one time or another. This precisely the reason users' groups were born.

Basically, a users' group is a collection of computer owners and users who learn from each other.

Got a problem with making your Okidata printer do proportional spacing with WordStar? Someone in your group probably has the solution. Need advice on how to set up dBASE II to run your inventory program? Ask around-no doubt your group has a resident dBASE expert just waiting to be consulted.

Kaypro Users' Groups (KUGs) exist in every state, in Canada, and in countries all over the world. There are two groups in France, one in Belgium, one in Germany, plus others in Finland, Switzerland, Saudi Arabia, and Australia.

All KUGs officially recognized by Kaypro Corporation are recorded in a database. These groups receive periodic informational mailings and have access to KUG

support programs offered by the corporation. This support may include speakers, training aids, special accessory offers, and gifts of promotional items from Kaypro

Official KUGs will also receive ONKUG The Official National Kaypro Users' Group newsletter, published by Kaypro Corporation.

Finding your KUG

To find the KUG closest to you, write to the KUG Manager at Kaypro Corporation and include your home address, state, and zip code. He will send you a list of the KUGs in your immediate area.

To register a KUG with Kaypro Corporation (and be entitled to corporate support offers), you again should notify the KUG Manager.

The KUG Manager can be reached by writing to:

Jim Durkin, KUG Manager Kaypro Corporation 533 Stevens Avenue Solana Beach, CA 92075.

New Products

by Susan Hyman

These new product listings are not reviews and should not be considered product endorsements. We have looked at some of the products, but do not necessarily have hands-on experience.

To be considered for publication in "New Products," press releases and product information should be sent to: New Products Editor, PROFILES Magazine, Kaypro Corporation, P.O. Box N, Del Mar, CA 92014. All releases must state specific Kaypro compatibility and must include the product's price, or they will not be used. Send black-and-white photos if available.

COMPUTER CULTURE BOOK.

Digital Deli touches on the human dimensions of the technological revolution. Written by "The Lunch Group" and guests and edited by Steve Ditlea, the 400-page work includes the contributions of more than 140 authors and artists.

"The Lunch Group" is a circle of computer writers in New York City that includes Rolling Stone columnist Steven Levy, Video editor Doug Garr, Business Week reporter Deborah Wise, Ms. magazine contributing editor Lindsy Van Gelder and Esquire contributing editor Frank Rose. The guest contributors include computer pioneers Nolan Bushnell, Steve Wozniak, and Mitch Kapor as well as celebrated writers William F. Buckley, Timothy Leary, Ray Bradbury and Henny Youngman.

Digital Deli is full of delightful trivia as well as thoughtful commentary. Says Ditlea, a journalist who has covered computer culture for five years, "An amazing array of computer lore, personalities and communities has developed in this decade. We cover them all: from pranksters to pirates, online romantics to interactive fiction

fans, computerized musicians, executives, teachers, kids, and cats."

\$12.95. Workman Publishing, 1 West 39th Street, New York, NY 10018 (212) 398-9160.

SAT PREPARATION.

Krell's College Board SAT Exam Preparation Series, a software package designed to increase your SAT scores, guarantees an 80-point score increase or your money back.

The program covers all math and verbal areas, diagnoses students' skills automatically, simulates SAT exam questions, provides instant answers and scoring, and provides solutions with detailed explanations.

The series uses SCL (Self-Customizing Logic) that assesses students' performance, analyzes their errors, and uses this information to customize learning and improvement programs.

Two versions are available. The Gold Label, \$299.95, is the expanded series that has an 80-point warranty. The Red Label, \$139.95, is the condensed version that carries no warranty.

For the Kaypro 2, 4, 10 and 16. Krell Software Corporation, 1320 Stony Brook Road, Stony Brook, NY 11790 (800) 245-7355.

GUIDE TO ONLINE DATABASES.

The Datapro Complete Guide to Dial-Up Databases profiles more than 1,400 publicly accessible databases in over 200 subjects, discusses 15 major online information services and what their customers think about them, and reports on the latest technology affecting the industry.

Arranged in alphabetical order, each profile lists the name, address, telephone number and contact person of the organization, the type of organization, application empha-

sis, scope of coverage, storage format, update frequency, user cost, training services, and vendors.



One section provides objective reports on 15 major information retrieval services, including DRI, DIALOG and CompuServe. Ratings of these services by 2,177 customers are also included.

\$145. Datapro Research Corporation, 1805 Underwood Blvd., Delran, NJ 08705 (800) 257-9406.

NEW OMNI GUIDE.

The 1985 edition of the annual *Omni Online Database Directory* contains 200 new database reviews, as well as a complete update and revision of the first edition published in 1984.

\$14.95. Edited by Owen Davies. Collier Books, MacMillan Publishing Company, 866 Third Ave., New York, NY 10022.

DO-IT-YOURSELF BAR CODES.

WRITEBAR prints bar code labels with dot-matrix printers. When labels are used with bar code readers, businesses can have access to fast, error-free data entry. Typical applications include library book loans, video tape rentals, parts labeling, and point-of-sale and specimen tracking.

WRITEBAR is written in Pascal and will print Code 39, Codabar and I 2 of 5.

\$99. Kaypro 16. Percon™, 2190 West 11th St., Eugene, OR 97402 (503) 344-1189.

MEMBERSHIP ROSTER SYSTEM.

A complete membership listing and mailing label system, dBrother allows the user to add new members, change existing member records, and display records in a member key order or serially.

It also produces membership rosters in zip code order and mailing labels in either a member key or zip code sequence. The fields include name, address, phone number, office held, committee assignments, and anniversary date.

\$29.95. Kaypro 2,4,10 and 16. Requires dBASE II ver. 2.41 or higher. T & C Consulting, 10231 N. 39th Ave., Phoenix, AZ 85021 (602) 938-3101.

COMPUTER LAW PUBLICATION.

The Computer Law Monitor provides quarterly digests of significant higher court decisions affecting manufacturers, vendors and users of business and personal computers.

Each quarterly report contains summaries of case decisions on a wide range of subjects: acquisition contracts; copyright, patent and trade secret protection; licensing; service bureau and time-sharing contracts; torts; claims of invasion of privacy, breach of confidentiality and lack of security; and computer crime.



Each issue features an index. The publication is written for those

who have no formal legal training; however, it is written and edited by practicing attorneys.

The reference subscription contains all back issues of *The Monitor*, the latest yearly index, and the next four quarterly updating reports in a ring binder for \$79.50. For those not interested in the reference aspect, a one-year subscription of four quarterly reports is \$49.50.

Research Publications, Inc., P.O. Box 9267, Asheville, NC 28815 (704) 298-8291.

FORTH ONLINE DATABASE.

FIG-Tree, an interactive online conference database, contains public messages addressing philosophical issues, public announcements and more. Major branches of this "conference tree" include dialog, a calendar of events, want ads, employment opportunities, FORTH ethics, FORTH standards, humor, users and vendors.

The FIG-Tree is sponsored by the FORTH Interest Group (FIG), a non-profit, member-supported organization with more than 4,800 members and 65 chapters worldwide devoted to the FORTH computer language. The FIG-Tree is free and can be accessed 24 hours a day by dialing (415) 538-3580 and typing two carriage returns. FIG membership costs \$15 per year and includes a subscription to FORTH Dimensions, the group's bimonthly publication.

FIG, P.O. Box 8231, San Jose, CA 95155 (415) 962-8653.

COMMUNICATIONS PACKAGE.

An upgraded version of Woolf Software's communications package, Move-It, has been announced. This version (4.0) has the same file transfer, downloading and utility accessing features as before, but

now includes file compression, multiple protocol support and the ability to send files from an unattended terminal. The program also has added keyboard macros, which allow users to send an entire command with one keystroke.



\$150. Kaypro 2,4,10 and 16. Woolf Software Systems, Inc., 6754 Eton Ave., Canoga Park, CA 91303 (818) 703-8112.

PRINTER GRAPHS.

GRAF 2.0, an upgrade to the public domain program GRAF 1.0, lets users plot floating point data on graphs as large as 320 x 320 pixels and use a dot-matrix printer to display the result.

Data may be entered by hand or loaded directly from most spreadsheets, database programs, editors or programming languages. In the latter case, GRAF 2.0 will scale both axes so the data fits into the graphing region.

GRAF can create line graphs or bar charts. It features four different plotting symbols and allows graphs to be overlaid. The program can also create circles, ellipses, elliptical arcs and rectangles. The user can write titles for the graph and the horizontal and vertical axes.

The program comes configured for Epson, Star Micronics (Gemini), or C. Itoh dot-matrix printers or printers emulating these models. The package comes with a 66-page illustrated users' manual that documents GRAF commands and demonstrates how to use GRAF with dBASE II, SuperCalc, MBASIC



OMNICOM-

Specializing in Data Communications

PRODUCT DESCRIPTION	LIST	OMNICOM	
DATASOLVERS MODEMS			
DS1200SMT: Internal for KayPro's, 300-1200 baud Hayes compatible smartmodem with software	\$349.95	\$299.95	
DS300SMT: Internal for KayPro's 300 baud Hayes compatible smartmodem with software	\$199.95	\$169.95	
SIGNALMAN MODEMS			
VOLKSMODEM 1200: 300-1200 baud, Hayes compatible smartmodem, auto-dial / auto-answer (needs cable)	\$299.95	\$219.95	
MARK X: 300 baud, Hayes compatible smartmodem, auto-dial / auto-answer	\$169.95	\$115.95	

CALL NOW TOLL FREE: 1-800-922-2329

Wichita, Kansas 1156 Amidon

and Turbo Pascal.

\$29.95. Kaypro 2, 4 and 10. Microcomputer Systems Consultants, 301 North Harrison St., CN 5279 Suite 228, Princeton, NJ 08540.

dBASE VIDEO TRAINING TAPES.

Two new videotapes, The dBASE II Video Training Course and The dBASE III Video Training Course, are designed to take the confusion out of learning these programs.

Developed by Alan Freedman of the Computer Language Company, these 90-minute tapes let users learn at their own pace. The Freedman's courses feature "dBASE Dozen," the 12 most important commands in dBASE. These commands provide a foundation for learning the rest of the functions. The video instruction is also supplemented by three instruction books.

Alan Freedman is the author of five books on dBASE and has taught more than 8,000 people to understand computers.

The prices are \$295 for dBASE II and \$395 for dBASE III.

Edutrends, Inc., 6949 Park Drive East, Kew Gardens, NY 11367 (718) 793-5262 or The Computer Language Company, Inc., 140 West 30th St., New York, NY 10001 (212) 736-8364.

UPGRADE SERVICE.

Kaypro 2 owners can now have their computers upgraded to Kaypro 4s with this service. Depending on how much of the upgrade the customer is able to do, the cost ranges from \$25 to \$300.

Cybernetic Surgery Clinic, P.O. Box 795, Collegedale, TN 37315. □

GDEEK

(continued from page 60)

Quick Reference Summary

Product Name: Chartech 2.0 **Uses:** Prints foreign language and scientific characters.

Audience: Scientists and foreignlanguage writers using WordStar. Noteworthy Features: Controls all printer features from within WordStar; prints multi-line equations; ROM chip available to show non-ASCII letters on screen.

Manufacturer: Techware 474 Willamette St., Suite 201 P.O. Box 10545 Eugene, Oregon 97440 (503) 484-0520

Hardware Needed: Any Kaypro model; and Epson, Okidata, C. Itoh, Citizen, NEC, Diablo, IDS or Toshiba printer.

List Price: \$95

Product Name: Printer Character Set and Character Design Kit

Uses: Prints alternate typefaces and foreign alphabets on dot-matrix printers having character memory chip.

Audience: Anyone wanting a different typeface than the one their printer provides.

Noteworthy Features: Downloads characters to printer memory; works with any word processor.

Manufacturer: Woodsmith

Software Rt. 3 Box 550A Nashville, TN 47448 (812) 988-2137

Hardware Needed: Any Kaypro model; and Okidata 92, 93, 84,

2350 or 2410, or Star Micronics. **List Price:** Character Set—\$34.50 Design Kit—\$49.95

Product Name: Fancy Font 2.0 Uses: Personal typesetter, including non-ASCII characters.

Audience: Anyone needing to typeset text or print with larger or smaller than usual characters.

Noteworthy Features: Extremely high-quality text, true proportional spacing, justification, word-wrap etc.; Font Library.

Manufacturer: SoftCraft, Inc. 222 State St., #400

Madison, WI 53703 (800) 351-0500

Hardware Needed: Any Kaypro model; and Epson FX, RX or MX, Gemini 10X, Radix, Delta, TI 850 or 855 printer.

List Price: \$180

Product Name: SmartPrint II+ **Uses:** Allows control of printer features from word processor.

Audience: Anyone wanting better

control over their printer.

Noteworthy Features: Decide your own printer commands.

Manufacturer: Software Research

Technologies, Inc.

3757 Wilshire Blvd, Suite 211 Los Angeles, CA 90010

(213) 384-4120

Hardware Needed: Any Kaypro Software Needed: Smartkey

List Price: \$49.95 alone; \$129.95

with Smartkey



Special Offer

PROFILES Binders

As a subscriber, you are entitled to purchase this top quality grey and blue vinyl covered binder that holds 12 issues of your magazine and gives complete protection at a special price of only \$12.95. The binder opens flat for quick, easy reference and metal rods hold publication in place without punching holes

Zip			
7:-			
ZIP _			
ard □ COD			
Exp. Date			
Cost	Total		
\$12.95 _			
Postage & Handling \$2.00			
Total \$			
	ord COD Date Cost \$12.95 _ & Handling \$		



13901 Harbour Place Prospect, KY 40059 502-228-1353

A simple DATABASE for KAYPRO users. ALIST - ALIST plus

ALIST features:

\$39.95

-Variable record length. -Up to 10 fields per record.

-Up to 254 characters per field.

-Alphabetical sort on first field.

 -Search on 1 to 64 AND/OR conditions, including GT, LT, EQ, NEQ, contains, not contains and more.

-Only requires ONE disk drive.
-Easy to learn and easy to use.

-Text editor, does not require word proc.

-User definable output to disk, printer or screen.

-Wordstar/Mailmerge compatible.

-Menu driven.

-User friendly instruction manual.

-Available in CP/M format.

ALIST plus:

\$49.95

40 fields per record.
 Arithmetic functioning.

-Available in MS-Dos or CP/M format.

IRATA - ALIST 2562 E. Glade (K)

Mesa, Az. 85204 (602) 892-0015



Prices include disk, manual & shipping. Satisfaction guaranteed. Specify format. Az. res. add 6%. For COD add \$2.50. Sorry no MC or Visa cards.



Hub Reinforcing Rings
Tyvek Sleeves
Labels
Write Protect Tabs
Meets or Exceeds ANSI Standards
Lifetime Replacement Guarantee
100% certified Error-Free

MEET PLAIN JANE

(quality media at wholesale prices)

Now you can buy Name Brand Quality Diskettes at Wholesale Prices ALL THAT PLAIN JANE LACKS IS FANCY PACKAGING

SSDD - \$1.49 DSDD - \$1.89

(Each in Quantities of Ten)
BUY 10 TEN PACKS - SAVE 10%
COD's:CASH or CASHIERS CHECK ONLY



ALL ORDERS FOB



ORDER TOLL FREE 1-800-851-2753 ILLINOIS(call collect) 309-833-1157 Integrated Computer Systems 129 North Randolph Street Macomb,Illinois 61455

overtisers' Inde

Advertiser	Page No.	Advertiser	Page No.
Accent Graphics Advent Products Anaheim Software Beck Mfg. Borland International CDE Software C. Atkinson Programs Central Computer Production Chang Labs Computer Friends Computer Professionals, Crystal Control Software Cuesta Systems Data Solvers Digital Dynamics Ellis Computing Financial Track Systems Flo Systems, Inc. H & E Computronics Highland Microkit Hornby, Inc. Huntington Data Systems Hurd Computers Integrated Computer Sylrata James River Group Kamasoft Kaypro General Store Micro Art Programmers		Micro Cornucopia Micro Solutions Microsphere Mycroft Labs Newstar Software Northwest Computer Alg Omnicom Optronics Technology Paradigm Consultants People Talk Associates Plu Perfect Systems Pomerleau Computing S Practical Business Software Rocky Mountain Software Rolland Management St SOS Computing Softcraft, Inc. Spectre Technologies Stanton Software Systems Peripherals Con TSK, Inc. Technology Information Techware Telion Software Wall Street Journal Walonick Associates WestWind Computer Woodsmith Software Writing Consultants Xpert Software	76

GENERAL UTILITIES PACKAGE

Rolland Management Systems Utilities Package offers maximum access to files for CP/M* users

Sort System - Organize and reorganize any file

Batch List Utility - List many files with one command

★ fixed or variable length records

★ optional page heading, page number or date

★ unrestricted sort keys

* output to printer, modern or another file \$19.95

* skip or include records or blocks Menu System - No need to "chain" back to menu

★ configure for any printer

Dump Utility - Decode and display entire file contents

★ unrestricted construction of menus

* show hexadecimal, integer or RAD50 value

\$29.95

* restrict user modification of menus

to dump to screen, printer or disk file \$19.95

* enhanced batch processor under the menu

* begin at any block and dump any number

FREE with purchase of any Utility - Base Conversion Utility - decimal to binary to hexadecimal to RAD50

Mastercard or Visa call (919)276-6070

Rolland Management Systems, Inc. Rt 5, Box 135

Laurinburg, N.C. 28352

* CP/M is a registered trademark of Digital Research, Inc.

You type it in and save !!!

Kaypro owners . . . you can learn to activate our typesetting system within very little time. Books, manuals, newsletters, etc. can be produced at lower cost. By mail or by modem. Call or write for FREE COMPLETE OPERATING INFORMATION.





226 So. 16th St. . Lincoln, NE 68508 (402) 475-5533 Quality Service

A COMPUTER IN YOUR BRIEFCASE?

Finally, a program that lets you take notes anywhere on a lap-size comput-er—and transfer those files directly to your Kaypro or PC-compatible home computer. HardWire® makes it simple, makes it fast.

HardWire® is menu-driven for simplicity. It moves data at speeds up to 19.2K baud! And it works with any combination of Kaypros, PC-compatibles and NEC, Radio Shack and Epson Geneva lap-size computers. All you need to add is a cable.

HardWire® program and easy-to-follow manual:

only

Specify CP/M or MS-DOS. Or get both versions for just \$59.95.

> VISA and MasterCard accepted. To order or for information, call or write:

POMERLEAU COMPUTING

SYSTEMS of Hyde Park 5634 S. Maryland Ave. Chicago, IL 60637 (312) 667-2075

> Call us for information on other lap-size computers.

CPI BUSINESS SYSTEMS

Our software saves you money before it's installed

Computer Professionals, Inc. has been developing computer applications for business and industry for NINETEEN years, often working behind the scenes for some of the biggest names in the industry. We have learned how to pack a lot of power into each computer program but we know that raw power and ability is worth little unless coupled with ease of use, good documentation and responsive support. CPI's Business Systems are all these things and more. They run faster, support larger capacities and cost less than any similar systems marketed today. They have been installed by thousands of users (since 1978) and are available from us directly or from your KAYPRO dealer. We specialize in KAYPRO systems.

We know that floppy disk users don't appreciate shuffling four or five disks in and out per application. We know that no users like to abort in the middle of an application to change printer pitch. We know that users don't like copy protection and complex licensing agreements. We don't believe that any systems with these 'features' can be considered easy to use so we left them all out of CPI Business Systems.

Fancy packaging and expensive type set manuals add greatly to the cost of most application packages but have little lasting value. Once your system/s are up and running for a week or so their real worth is their day-to-day productivity and responsiveness; the other materials gather dust. CPI Business Systems include comprehensive manuals, sample data files, tutorial sessions, etc. - everything you need is included. Our manuals are prepared and printed on computer systems. We will provide them to you on disk (with an easy to use print program) which lets you make as many copies as you need, and pass the \$10.00 savings on to you or include them with each system. You decide - we work for you!

No system is perfect; CPI Business Systems are not exceptions. That's why users are entitled to support when they need it and that's why CPI continues to enhance each system regularly based on users suggestions.

Most users need a little support when getting started so we include 45 days of FREE support with each application. Others charge hundreds of dollars extra. Users of CPI Business Systems can extend support for a full year for less than ten cents per day per application.

CP/M users may become MS-DOS users in the years ahead; CPI has planned ahead for this possibility and we provide data file conversion service to any user. CPI will, however, continue to support and enhance these fine systems for CP/M users for years to come. Your investments today will not be obsoleted by tomorrow's technology.

These powerful systems are described briefly below. If you don't feel confident yet ask for our 30+ page overview or try an application demo system at half price (demo prices apply to future system orders).

There are <u>no extra charges</u> for shipping, COD, etc. American Express, MasterCard, VISA card orders welcome. We ship in 48 hours. Please tell us what format you want (II/2X/4/10/16), etc. Demo systems in KAYPRO formats only.





Personal/Company Checks OK

COMPUTER PROFESSIONALS, INC. 15 REGENCY HILLS DRIVE GREENVILLE, S.C. 29607

Phones (803) 268-3911



\$80.00 CP/M GENERAL LEDGER

\$100.00 MS-DOS \$80,00 ACCOUNTS PAYABLE

\$100.00 MS-DOS

Comprehensive system with the most wanted features. Provides accurate and well organized financial information for your business. Check the partial feature list below. Accepts data automatically from all other CPI Business Systems for completely integrated accounting. The entire program library fits on one 191K disk with room to spare. Menu driven for ease of use but the menus won't get in your way.

PROGRAM FUNCTIONS: Systems Initialization customizes programs for your business and hardware. - Master File Maintenance to create, modify and report on charts of accounts; auto Make Departments function speeds setup; lists charts in 3 formats, on 8 1/2" wide forms at 10cpi - Transaction (Journal Entry) Maintenance to enter and change and delete and post and list (3 formats); auto increment for reference from numeric pad; auto duplication of any field from prior entry, last 7 entries on display; source/run totals; validation of account numbers at time of entry; true prior period adjustments; repeating entries for depreciation, etc. - Trial Balance summary reports (2), worksheets and detail general ledgers; Full/Consolidated/Selective departmental (FCS) processing. - Financial Statements in 4 formats: current year, current and prior year, current quarterly, cumulative quarterly; FCS selection (see above); run any report for any prior period; indicate # of months for the current period even when re-running prior periods; disclaimers (two 78-char lines) for Accountants. - Budget Reporting with remaining or variance computations; current, YTD, both; rerun prior periods; FCS processing, variable # months in current period - Full Year Detail G/L high speed build up system; over 3,800 records on 191K disk; detail is shown in original input sequence by account; FCS; partial year reports when disk space is limited; auto buildup for hard disk users - <u>End-Of</u>-Period creates backup file automatically; updates repeating entry date fields for new month; selects month/year end processing automatically; updates prior year's data. - <u>Accounting Transfer</u> inputs data from each CPI Business System; posts; prints control reports; multiple transfers from other applications allowed. - Query Account - high speed displays to CRT or individual or range-of-account displays to printer. See the Hardware Requirements section also. All CPI systems include easy data entry and correction via formatted screens, Back-Up, Void & End keys.

CAPACITIES: CP/M - 600 Accounts; MS-DOS - 2000 Accounts - 3-5 Digits
for Account Numbers - Up to 99 departments using 3-digit
account number and 2-digit department number. Each K of disk can hold
8 records (i.e. 300+ accounts and 1200+ transactions on a 191K disk).

Improve your cash management with this fine system. You'll get the up to date accurate picture of accounts to be paid, cash requirements for the data on file. Payments and notes vouchered automatically insuring timely payments. Complete check writing included. The system reports include Vendor File Lists, Open Vouchers, Ageing By Due Date, Discount Date Ageing, Cash Requirements, Check Registers, G/L Transaction List, Query Vendor Status, Credit Vouchers, Deleted Vouchers. CAPACITIES of 600 Vendors (CP/M), 2000 Vendors (MS-DOS) - no limit on transactions.

\$80.00 CP/M ACCOUNTS RECEIVABLE

\$100.00 MS-DOS

Super system with Invoices, Service Invoices, Statements, etc. A full range of reporting abilities include Customer Reports, Ageing Reports, Transactions Reports, G/L Transaction List, etc. Auto billing feature eliminates mistakes. Sales can be distributed to 100 accounts. Build up statement option combines the virtues of ledger card history detail and the speeds of todays computers. Use preprinted forms and/or plain paper for invoices and statements. CAPACITIES of 600 Customers (CP/M) 2000 (MS-00S) - no limit on transactions, multiple customer disks CK.

\$80.00

PAYROLL

\$100.00

A complete payroll system supplied with current tax routines for every state. Functions include Employee File Maintenance; Employee Lists in multiple levels of detail; Input Worksheets; Time Card Entry; Regular, Overtime, Other, Commissions, Tips, Misc. Pay, Exception Processing so you only enter variable data; Weekly, Bi-Weekly, Semi-Monthly, Monthly pay cycles (run individually/combined); Departmental Payrolls; Checks; Check Registers; Earnings Reports; 941's; W-2's; Unemployment Reports; Multi-state; Manual Checks; G/L Transactions. Federal, FICA, State and Local Taxes, Federal/State Add-Ons, FICA, FUTA, SUI, SDI, EIC, 4 other deductions. CAPACITIES - 600/2000 emp. (CPM/MSDOS), 98 Tax File Rcds.

HARDWARE REQUIREMENTS

CP/M.... 64K (53K TPA) & CP/M 2.0 or higher.

MS-DOS..: 128K (or more) & MS-DOS/PC-DOS 2.0 or higher - ANSI.SYS.

Printer.: 132 columns (compressed pitch supported), continuous forms. Disk/s..: Dual Floppies/Hard Disk/Both - 191K recommended, less works.

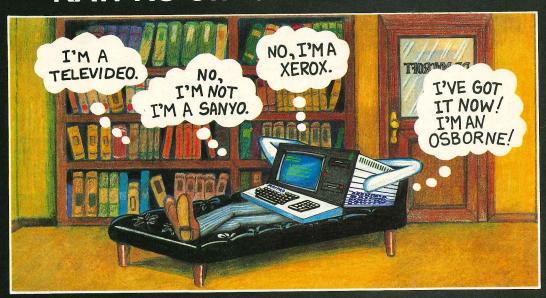
CRT.....: 80/24 with Clear, Home, Clear to EOL, Up, Down, Left, Right.

CURRENT UPDATE: THIS IS THE FIRST OF A NEW SERIES OF ADVERTISEMENTS DESCRIBING EACH APPLICATION IN TURN IN GREATER DETAIL. CHECK FUTURE ISSUES FOR INFORMATION ON OTHER CPI BUSINESS SYSTEMS AND YOUR DEALER FOR A DEMONSTRATION.

A Super Deal on an MFDISK Replacement

The \$95.00 *COMPAT* Direct Disk Interchange Software System for \$29.95.* Exclusively for KAYPRO owners.

For a limited time, Mycroft Labs will be offering MFDISK owners a copy of **COMPAT** at a substantially reduced price. Each MFDISK owner will be allowed to purchase one copy of **COMPAT** at the reduced price of \$29.95 + \$2.55 postage and handling. With you can Read, Write and Format over 60 different CP/M and MSDOS Disks (30 on single sided systems) on your Kaypro Computer. **COMPAT** allows you to change the personality of either or both drives and interchange foreign format CP/M disks with native ones. In addition, CC lows you to initialize blank disks to any supported CP/M or MSDOS format. And when you purchase **COMPAT** we'll supply a utility to perform directories of, and transfer files



Give Your Computer Multiple Personalities

to or from MSDOS disks, and a powerful replacement for PIP, called MYCOPY. **COMPAT** is also available for Sanyo 1000, 1150, 1250, Zenith-100, and other popular CP/M based computers.

*This offer is also valid for owners of MicroSolutions UniForm software package on Kaypro Computers

Mycroft Labs, Inc., P.O. Box 6045, Tallahassee, FL 32314 ☐ Yes, I would like to upgrade my copy of MFDISK to COMPAT.	MYCROFT Labs _{INC}
Enclosed is \$32.50 (which includes shipping, or \$34.00 for COD orders). Florida residents add applicable state Sales Tax.	Phone: (904) 385-1141
Name:	Payment Method
Company: Street Address: City: Phone: () Signature:	☐ Check ☐ COD ☐ VISA ☐ MasterCard Card # Exp. Date:
Available for Kaypro Models: 2/83, 2/84, 4/83, 4/84, 2x and 10.	Offer Expires July 31, 1985

Computerized Books Without Red Ink, weator Tears.

(Your picture here)

(established, industri-ous, entrepreneurial)

business person, looking for an escape from bookkeeping drudgery. But the computer "solutions" I'd seen all expensive, complex, intimidating

Then the local computer dealer called and said "Try Rags to Riches." It was made for you."

So I did. It was really easy to use! No codes or names to type—just pre-assigned customer and vendor keys. Five basic commands ran all the modules I needed:

They worked together, and all fit on one disk. The dealer

explained I'd save a bundle because I didn't

(an extra disk drive, a consultant to set it up, a training course, all of the above) The price was right—less than \$100 per module.

The price of the ______(IBM® PC, compatible, *) So was the price of the _____ computer it ran on.

The clincher was the way it's customized to suit my business. There are even Rags to Riches Solution Booklets™ to help make the most of my investment.

Rags to Riches is the only "RAM-based" accounting software. It calculates instantly - no waiting. Its "Open Architecture," means the data works with hundreds of other programs, so I won't outgrow it.

Now, it's business as usual, only better. I actually have extra time work on increasing profits, drum up more sales, relax

And, of course, to tell my friends that success doesn't have to be difficult anymore. (To be continued.)

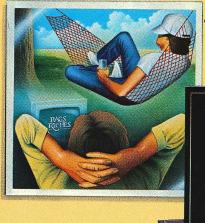
Now Available Through

For A Dealer Near You: (800) 4KAYPRO Toll Free Calif. (800) 9KAYPRO Toll Free

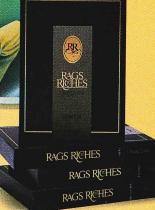
Another Fine Product From Jhang Labs™

The family of software solutions For the nearest dealer, call (800) 972-8800. In California, (800) 831-8080.

Headquarters, 5300 Stevens Creek Boulevard, San Jose, CA 95129 International Distribution: United Kingdom: Victor House, Phone 01-943-1257 Belgium: Victor International, Phone 32 (16) 202496 Japan: Software International. Phone 03-486-7151 ° 1984 Chang Labs, IBM® is a registered trademark of International Business Machines

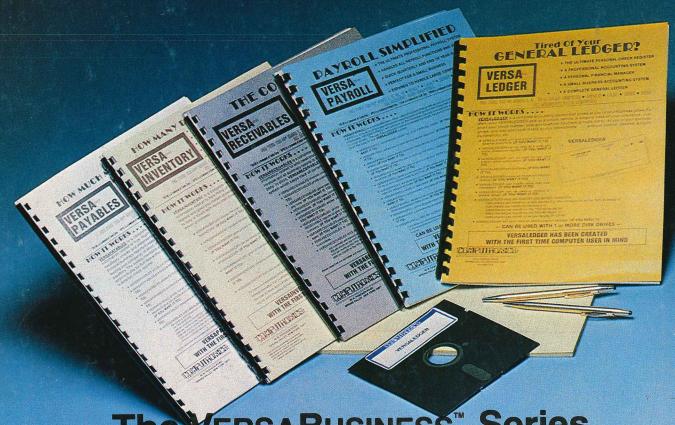


Ask your dealer about availability on others.



Introducing the Most Powerful Business Software Ever!

FOR YOUR TRS-80 • IBM • APPLE • KAYPRO • COMMODORE 64 • MSDOS OR CP/M COMPUTER*



Each VERSABUSINESS module can be purchased and used independently,

or can be linked in any combination to form a complete, coordinated business system.

VERSARECEIVABLEST*

VERSARCEIVABLES" is a complete menu-driven accounts receivable, invoicing, and monthly statement-generating system. It keeps track of all information related to who owes you or your company money, and can provide automatic billing for past due accounts. VERSARECTIVABLES" prints all necessary statements, invoices, and summary reports and can be linked with VERSALEDGER II" and VERSAINVENTORY.

VERSAPAYABLES™ \$99.95

VERSAPAYABLES™ is designed to keep track of current and aged payables, keeping you in touch with all information regarding how much money your company owes, and to whom. VERSAPAYABLES™ maintains a complete record on each vendor, prints checks, check registers, vouchers, transaction reports, aged payables reports, vendor reports, and more. With VERSAPAYABLES™, you can even let your computer automatically select which vendors are to be paid. which vouchers are to be paid.

VERSAPAYROLL**

VERSAPAYROLL**

VERSAPAYROLL**

VERSAPAYROLL**

is a powerful and sophisticated, but easy to use payroll system that keeps track of all government-required payroll information. Complete employee records are maintained, and all necessary payroll calculations are performed automatically, with totals displayed on screen for operator approval. A payroll can be run totally, automatically, or the operator can intervene to prevent a check from being printed, or to alter information on it. If desired, totals may be posted to the VERSALEDGER II** system.

VERSAINVENTORY™ \$99.95

VERSAINVENTORY™ is a complete inventory control system that gives you instant access to data on any item. VERSAINVENTORY™ keeps track of all information related to what items are in stock, out of stock, on backorder, etc., stores sales and pricing data, alerts you when an item falls below a preset reorder point, and allows you to enter and print invoices directly or to link with the VERSARECEIVABLES™ system. VERSAINVENTORY™ prints all needed inventory listings, reports of items below reorder point, inventory value reports, period and year-to-date sales reports, price lists, inventory checklists, etc.

50 N. PASCACK ROAD, SPRING VALLEY, N.Y. 10977

VERSALEDGER II™

VERSALEDGER II™ is a complete accounting system that grows as your business grows. VERSALEDGER II™ can be used as a simple personal checkbook register, expanded to a small business bookkeeping system or developed into a large corporate general ledger system without any additional software.

• VERSALEDGER II™ gives you almost unlimited storage capacity (300 to 10,000 entries per month, depending on the system),

• stores all check and general ledger information forever,

• prints tractor-feed checks,

• handles multiple checkbooks and general ledgers.

- handles multiple checkbooks and general ledgers, prints 17 customized accounting reports including check registers, balance sheets, income statements, transaction reports, account listings, etc.

Versaledger II'' comes with a professionally-written 160 page manual designed for first-time users. The Versaledger II'' manual will help you become quickly familiar with Versaledger II'', using complete sample data files supplied on diskette and more than 50 pages of sample printouts.

SATISFACTION GUARANTEED!

Every VERSABUSINESS** module is guaranteed to outperform all other competitive systems; and at a fraction of their cost. If you are not satisfied with any VERSABUSINESS** module, you may return it within 30 days for a refund. Manuals for any VERSABUSINESS** module may be purchased for \$25 each, credited toward a later purchase of that module.

All CP/M-based Computers must be equipped with Microsoft BASIC (MBASIC or BASIC-80)

To Order:

Write or call Toll-free (800) 431-2818 (N.Y.S. residents call 914-425-1535)

- add \$3 for shipping in UPS areas
- add \$4 for C.O.D. or non-UPS areas
- add \$5 to CANADA or MEXICO * add proper postage elsewhere







DEALER INQUIRIES WELCOME All prices and specifications subject to change / Delivery subject to availability