

U.S. \$7.95

# THE HP Palmtop Paper



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Introducing

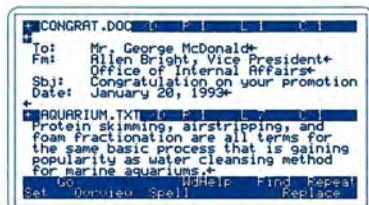
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LETTER FROM  
HAL GOLDSTEIN**  
PUBLISHER OF THE  
HP PALMTOP PAPER

Publisher of  
*The HP Palmtop Paper*

**Thaddeus  
Computing INC.**



Dear Subscriber,

We know many of you want to receive *The HP Palmtop Paper ON DISK*. So, at a special price, until June 30th, you can collect all the disk sets we've produced from 1991 through 1993.

*The HP Palmtop Paper ON DISK* is more than its name implies. Yes, it contains all the text from *The HP Palmtop Paper* in an easily topic-searchable format. And yes, it contains in-depth information from our advertisers to help you more informed buying decisions, but...

...it also contains *all the best freeware and shareware available for the HP 95LX* as we discover it.

Here is just a sample of the great software subscribers to *The HP Palmtop Paper ON DISK* have received with each issue.

95BUDDY — 1992 Product of the Year  
SPEL95 — Spell Checker for the 95LX  
OUTLINE PLUS — Outliner and text editor  
FINISH — Completes words you type  
UMA — Useful Macros  
MULTIDAY — Week-at-a-glance  
GAMES — Chess, Space Invaders, Tetris,  
Othello, Mastermind, Worm, Checkers,  
Go-Moku, Klondike, Adventure, Sokoban,  
Poker and many more.

VDE — Compact, powerful text editor  
VDE-LX — Makes VDE work like WordPerfect  
COMMO — Robust communications program  
DIET — File compression utility  
UNO — Useful Notes, database  
ATO — Automates CompuServe activities  
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PHONE — Databases; TV guide, New and  
Old Testament quotes, special character set,  
area codes, 1-2-3 file and many more.

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*...and much, much more!*

*The HP Palmtop Paper ON DISK* is a *goldmine* of useful software for the HP 95LX, and can help you turn your palmtop into a more powerful and productive machine.

*The HP Palmtop Paper* gives you the information you need to get the most out of your HP 95LX. *The HP Palmtop Paper ON DISK* gives you the *tools*.

Sincerely,

Hal Goldstein  
Publisher

P.S. Subscribe today. You have nothing to lose with our full, money-back guarantee. At \$159 for 2 years (13 sets) *The HP Palmtop Paper ON DISK* comes to a mere \$12.25 per set! Offer expires June 30, 1993.

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# Publisher's Message



Hal Goldstein

At this time the number of HP Palmtop computers occupy a minuscule part of the personal computer market place. We HP 95LX users view our HP Palmtop as one of the world's best kept secrets. We see the future of computing in our palm. Having all that computing power always available is too useful for it not to catch on in a big way.

In the meantime the HP 95LX has attracted a network of users and vendors of extraordinary quality. Fortunately for us, many of these users have taken the time to contribute to this

publication. Our contributors this issue include a lawyer with a Ph.D. in Chemical Engineering, an award-winning programmer for Symantec, leaders of America On Line's new Palmtop SIG forum, an engineering manager, an experienced computer science professor, and two consultants specializing in the HP 95LX. In this issue these fellow users describe a new MEMO alternative, wireless computing, and alternatives for transferring your 95LX files. Other users will tell you how to update your Quicken (personal finance) information on your 95LX, how to protect your files on the different memory card alternatives, and how to run your desktop computer via modem from the HP 95LX.

Also, in this issue a student explains how he uses his HP Palmtop, I describe over twenty data bases and other tools to enhance the built-in PHONE application, and Ed Keefe gives you an advanced lesson on User Defined function keys (macros). In addition, you'll find a rich collection of tips, letters, and even an article on how to keep your HP 95LX clean. Enjoy.

Finally, as you will see, HP no longer charges for its U.S. support. It is free for the cost of the call. Given this change in HP policy, we have eliminated our Ask Thaddeus support helpline. Robert Roney, director of Ask Thaddeus, has agreed to join Richard Hall and myself in our editorial staff. Given Robert's technical and interpersonal skills, Robert will help *The HP Palmtop Paper* live up its mission of making HP Palmtops more useful and enjoyable.

*Hal Goldstein*

## The HP Palmtop Paper

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### America OnLine's Palmtop SIG Opens!

America Online's (AOL) Palmtop Special Interest Group finally opened on Tuesday, January 28, 1993. As of mid-March the Palmtop SIG had over 700 messages and 80 files in its own software library.

AOL started as a Macintosh and Apple II online service, but has expanded into a truly well rounded service with Mac, DOS, and now Windows interfaces. We would appreciate your help and support in continuing to build the Palmtop SIG's file and message base. This new AOL forum will help answer questions and promote your shareware programs and products. This, of course, is in addition to the fine support offered by CompuServe from Ted Dickens and Team-HP on the HP HAND forum.

The Palmtop SIG on AOL provides HP users who do not subscribe to CompuServe (CIS) with another source of support and shareware. A number of CIS "regulars" have also dropped in on the Palmtop SIG and have uploaded their programs. The user interface is different than CIS, more graphical like CIM. One of the great areas on AOL is a classified section for advertising that is free to the AOL member. There are other interesting areas that are free of any charges besides online time.

The rates for AOL are very reasonable, and new members are given five hours online time plus the first month's base charge of \$7.95 FREE. After the first month the rates are \$7.95 for the first two hours of usage and then \$0.10 per minute. There are no additional surcharges for the use of the service between the hours of 6:00 PM and 6:00 AM EST. Presently the maximum baud rate is 2400, but 9600

baud should be available shortly. A book published by Ventana Press called "The Official America Online Tour Guide" is available in most bookstores, and comes with TEN free hours of online time. It lists for \$34.95, and is available in Mac and DOS versions now, with a Windows version to be released very soon.

We are asking that you please help by uploading your files and programs to AOL, which will in turn give better exposure to your shareware, freeware, equipment, and products. We of course encourage you to try AOL, even if only for the FREE introductory period. To get your FREE startup kit, please CIS E-Mail Jeff Zorn at 71165,1650 or Craig de Fasselle at 76500,1440, include your name, address, and whether you need a DOS, Windows, or MAC set

of disks and disk size. Upon your notification we will send your disks promptly!

Should you choose not to try AOL, we would appreciate your E-Mailing programs and files to either of us and so we may upload them to the Palmtop Library. Please include a brief description (noting any special requirements) of the program so we can post an exciting preview of the file. If the program is too large to E-Mail feel free to "snail-mail" a copy to us (contact us for the mailing address).

The Keyword once you sign on is PALMTOP, which takes you directly to the SIG message boards and file libraries. Even if you do not have any files to upload, we would love to have you visit, and look forward to your valuable input and participation. America Online, 8619 Westwood Center Dr., Vien-

na, VA 22182-9806, or phone 800-827-6364.

Jeff Zorn  
CompuServe ID: [71165,1650]  
or AOL: PDA Jeff)  
Craig de Fasselle  
CompuServe ID: [76500,1440]  
or AOL: PDA Craig)

### Looking for a DOS Database

I recently upgraded my HP 95LX to 1MB to be able to run some DOS database programs. I am looking for a programmable database with import and export capabilities, and it would be a bonus if it were relational.

4-You Software has just introduced a program called Info Manager, which looks as though it might do the job. What other options do I have?

David W. Harper  
Valley View, OH, USA

[You have many choices for databases on the 95LX. To begin with take a look at

**STOP! Before you buy another set of batteries...**

## BATTman<sup>TM</sup> (NEW!) NiMH batteries



*"If you are tired of throwing away batteries, BATTman will allow safe hassle-free use of rechargeables on your 95LX.."*

*"Every combination of BATTman works flawlessly and I never once lost data.."*

- Palmtop paper, August 1992

### With NEW Features!

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BATTman NEW! version 1.2 on 3.5" floppy ..... \$49  
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BATTman with two Ni-metal-Hydrates & charger ..... \$69

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PHONE databases, page 31 this issue. Also take a look at Lotus 123, a built-in data base that is many times overlooked (see page 53, Jan/Feb 93, Basic Tips). Also look at @Base, a Lotus add-in database (see Quick Tips, page 50 of the Sept/Oct issue). We've heard good things about Info Manager, but have not yet tested it.

Other database products for the 95LX include the following:

- We have had reports of people using dBase III on a RAM card
- Pocket Sales Force offers client tracking with customizable data base features (see page 8 of the May/June 92 issue)
- Useful Notes is a free-form notes-based program (see page 10 of the July/Aug 92 issue)
- fastNotes is a system-compliant version of Useful Notes from ACE Technologies (see ad, page 39)
- QA Palm is a screen generator for the 95LX, letting you collect data on the 95LX and later download it to a PC for analysis and manipulation with a dBASE-compatible program (see ad, page 30);
- Info-Select, a free-form database, (see page 35 of the Jan/Feb 93 issue);
- EFMS, Everyone's File Management System, a flat-file database (see page 46 of the Sep/Oct 92 issue); and
- KIV, Keep In View, a free-form database & outliner (see page 48 of the Sep/Oct 92 issue of The HP Palmtop Paper). We intend a more thorough comparison in upcoming issues.

### L(x,alg) or L(x:alg)

Ed Keefe's article on SIGMA in the Jan/Feb issue of the PTP is quite helpful in further understanding of L() function. I note that sometimes you use (:) as a delimiter and then sometimes a (.). I tried out your examples with the : and they seemed to work okay. But is there something significant about using one (:) or the other (.)?

Mick Luce  
Portland, OR, USA

[The use of ":" in the L( : ) function is a holdover from the HP 1911b. I suppose HP left that in Solver to make it backward compatible with the calculator. I was surprised when ":" worked. I like it better than "," since commas are hard to keep track of, but either one will work — Ed.]

### HP bugs

HP should give a serious warning to all German speaking users of a 95LX:

1. Disconnecting the PC from the 95LX in DOS Connect needs a "DC95 -E" command rather than a "CD95 -U". Reference: Connectivity Pack Manual #F1001-90003, alright on page 5-11, but wrong on that single sheet called "Kurzuebersicht".
2. To exchange a RAM-Card battery: SWITCH YOUR HP-95LX ON!! not OFF!! Reference: Main User Manual

#F1000-90007 page A-5

Hermann Schmitt  
Winnweiler, GERMANY

### 95LX Survives Fall

Well, it finally happened. After having my 95LX close to two years, I finally dropped it on the floor. I was carrying it on top of some books, and it slipped off and fell 3 1/2 feet onto my tile over concrete floor. I was very upset and nervous as I picked it up, and when I opened the case I couldn't believe what happened to it — nothing! It worked perfectly.

This was a real drop to the floor, it made a loud noise and even bounced once.

So this gives me another reason to feel I made the right choice by choosing an HP. Not only is it an innovative product, but it will actually last for a while (I still

use my HP 110 Portable computer from time to time).

I wanted to thank the HP hardware design engineers for the extra effort they put in to protect my investment.

Larry Lefkowitz  
Royal Palm Beach, FL, USA

### Must Have MultiMacro Manager

I noticed that Ed Keefe has an ad in the latest Palmtop Paper for his Multi-Macro manager. I had the distinct pleasure of being one of the beta testers for this program.

Run to the post office and send Ed a check for this program!

It works beautifully and allows you to keep and swap different Char macro files on your 95LX. You can forget about not keeping a macro

[Continued on page 52.]

## Control your TV VCR Stereo with the 95LX

### Introducing myREMOTE™ version 2.0



User programmable Macro commands

Multiple files for different remotes

Up to 100 commands

Single Key access to your Remote's functions

myREMOTE v2.0
TV.IR

W Watch VCR movie	@. Commercials Off
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LI Channel Down	@ALT-C CD
UP Volume Up	@ALT-S STEREO
DN Volume Down	@ALT-W Wake up 6am
= Recall	@ALT-P KQED-PBS
* Quick View	@ALT-O This old hou
- Mute Sound	@ALT-2 11pm News
/ Sleep Timer	@ALT-S Set Clock
+ On/Off	@ALT-D Daylight sav

V  
Use ARROW keys to select item.  
ENTER>Send E>dit D>elete I>nsert T>rain

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#### New Features!

- Now you can control your 95LX with IR remotes - great for presentations, demos and fun.
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myREMOTE version 2.0 (C1065) ..... \$39



# HP Offers Free Palmtop Support to U.S. Users



*Beginning April 5, 1993, Hewlett-Packard will offer free technical support to U.S. users of the HP 95LX. Call 503-757-2004, 5 am to 5 pm Pacific Time. Ask Thaddeus Discontinued*

*By HP Technical Support*

Hewlett-Packard Company is proud to announce that beginning April 5, 1993, technical support in the U.S. for its palmtop line of personal computers will be free. All you have to pay is the phone charge from your location to our support facility. So when you can't find the information you need in the user's manuals or reference materials, you can get technical help for free, 5:00 am to 5:00 pm Pacific Time, week days by calling **503-757-2004**. Hewlett-Packard will continue to offer limited automated support services 24 hours a day, 7 days a week on its toll-free line at **800-443-1254**.

If you have previously purchased a support contract and it is still in effect, Hewlett-Packard offers the following choices about how to continue your support contract.

1. If you prefer, Hewlett-Packard will continue to provide toll-free access for you through the end of your contract term (however, contracts will not be renewed).
2. If you choose to discontinue your support contract, upon acceptance Hewlett-Packard will return a pro-rated amount of your payment to you at your request. The pro-rated amount will be based on the days of support remaining on your contract from the date HP receives your request for refund. You will continue to have toll-free access on your support contract until Hewlett-Packard processes your request. Processing of requests can take up to 10 weeks.

A letter along with a Refund Request form will be sent to all support contract customers in the April time-frame. To receive a pro-rated refund the form must be completed and returned to Hewlett-Packard. If no refund is requested, no action is necessary. Toll-free access ends on the support contract expiration date.

Customers should retain their PINs (Personal Identification Number). These will continue to be used to access the Technical Support Department. New customers calling the Support Department will continue to be assigned a PIN.

## Ask Thaddeus! Helpline Service Discontinued April 5

*By Robert Roney  
Director of Ask Thaddeus.*

Due to the generous offer of Hewlett-Packard to give free technical support to users of its palmtop computers, Thaddeus Computing is discontinuing the Ask Thaddeus Helpline Service on April 5, 1993.

I want to express my gratitude and thanks to those subscribers who have used this service. It has been a great pleasure to work with you directly and learn about your problems and successes with the 95LX. I have especially enjoyed the successes when we've been able to avert some catastrophe or enhanced the usability of the 95LX. I must also thank you for the suggestions and the feed-back that you have given. I know that this experience will help enrich *The HP*

*Palmtop Paper* and make it even more useful to you in the future.

We will discontinue the Ask Thaddeus phone numbers on April 5, 1993, when Hewlett-Packard begins their free service. After that, I will be moving over to the editorial staff with Hal Goldstein and Richard Hall to work on the technical side of *The HP Palmtop Paper*.

Although it's no longer practical to keep a technical support person on staff, you will still be able to reach me at 515-472-6330 or (fax) 515-472-1879. We will continue with the same policy of charging \$2.00/minute for phone consultation time.

## HP Announces Publishing Agreements

Hewlett-Packard Company announced that it has reached agreements with Random House Electronic Publishing and PTR Prentice Hall to publish books on HP technologies and products. Random House is expected to announce titles on HP's palmtops, printers and home/office computer usage.

## Back Issues of The HP Palmtop Paper

While supplies last, you may purchase sets of back issues of *The HP Palmtop Paper* or *The HP Palmtop Paper ON DISK*. Use the enclosed order card or contact Thaddeus Computing Inc,

Phone: **800-373-6114** or **515-472-6330**

Fax: **515-472-1879**.



# New Products Designed to Work with the HP 95LX

In the first eight issues we listed over 300 hardware and software products, and other 95LX-related services already available from third-party manufacturers and developers. We will continue to list 95LX hardware, software, books, videos, training, and services as we discover them. Vendors of 95LX-related products should send us information.

By Richard Hall and Hal Goldstein

## Hardware

### Binders / Cases

#### HP Palmtop Paper Binders

Binders to protect your issues of *The HP Palmtop Paper*. Finished in deep blue Leathertex and designed to hold a complete year of issues.

[See Advertising, page 52.]

Availability ..... Now  
Pricing ..... £14 / \$19  
CONTACT: SupplyLine, Unit A, 75 South Western Road, Twickenham, TW1 1LG, UK; Phone +44-81-744-0022; Fax: +44-81-744-0045; CompuServe: [100064,1525].

#### Protective Case and Organizer

The TimeBoss Executive Leather Case combines a basic executive organizer with a slim and attractive protective leather case for the 95LX. It's easy to use the Palmtop in the case and easy to take it out. Made of top-grain leather it includes a monthly/yearly calendar, note pad, pencil, pockets for computer cards, credit cards, etc.

[See Advertising, page 9.]

Availability ..... Now  
Pricing ..... \$89.95  
CONTACT: Connection Point Inc., 101 S. Main St., Janesville, WI 53545; Phone: 608 757 0673; Fax: 608 755 1744.

### Memory Cards and Card Drives

#### SCSI PCMCIA Card Drive for Macintosh

MCDISK-1 is an external desktop PCMCIA drive with a built-in power supply and a 1MB/5 SCSI-compatible interface that supports the complete SCSI command set and SCSI address select. MCDISK-1 accepts all types of Static RAM, Flash EPROM and One Time PROM's (OTP) memory cards with capacity up to 64MB. It comes with two SCSI connectors and can be easily installed in any UNIX, VME, Macintosh or PC system equipped with an SCSI adapter. Software drivers are available for most of these systems.

Availability ..... Now  
Requires ..... SCSI Interface  
Pricing ..... \$675.00  
CONTACT: Gespac, Inc., 50 W. Hoover Ave., Mesa, AZ 85210; Phone: 602 962-5559; Fax: 602 962-5750.

### Modems

#### Vidar Battery Powered Pocket Modem

Vidar-SMS MP2400 is a portable pocket modem that runs at 2400 bps. It uses on a standard 9-volt battery and comes with Auto-Sleep and Auto-Wake Up features. It can

connect directly to the HP 95LX without a cable by using the HP Cradle.

Availability ..... April, 1993  
Pricing ..... \$249.00  
CONTACT: Vidar-SMS Co., Ltd., Attn: Peter Lu / API Division, No. 159, Sec. 3, Tam-king Rd., Tamsui, Taipei Taiwan, 251 R.O.C.; Phone: 886-2-622-4300, 886-2-623-2750; Fax: 886-2-622-0138, 886-2-623-4156.

#### FAXman

Automated HP 95LX fax software for the Worldport Palmtop and 2400plus fax modems. Features include creation of custom fax cover sheets and integral fax number directory.

Availability ..... Now  
Medium ..... Floppy disk  
Runs under SysMgr ..... Yes  
Pricing ..... £49 / \$49  
CONTACT: SupplyLine, Unit A, 75 South Western Road, Twickenham, TW1 1LG, UK; Phone +44-81-744-0022; Fax: +44-81-744-0045; CompuServe: [100064,1525].

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#### Palm Lock: Software Protection for Developers

Palm Lock is a device that software developers can market with their programs to protect the program from unauthorized copying. The Palm Lock devices are designed to interface with the 95LX's serial ports. They are

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Availability ..... May, 1993  
Pricing ..... \$CALL  
CONTACT: RhonSoft Development, 180 Glennview Dr., Canfield, OH 44406, USA; Phone: 216-533-0185; Fax: call.

#### Easy Data Acquisition and Process Control

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Availability ..... Now  
Pricing ..... varies with unit  
CONTACT: Systronix, Inc., 754 East Roosevelt Avenue, Salt Lake City, UT 84105, USA; Phone 801-487-7412; Fax: 801-487-3130; BBS: 801-487-2778.

## Software

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Availability ..... Now  
Medium ..... Floppy disk  
Runs under SysMgr ..... Yes  
Pricing ..... \$95  
CONTACT: Septima International Corporation, 382 Chicopee Row, Groton, MA 01450, USA; Phone: 508-448-2761; Fax: 508-448-5246.

## Connectivity

### PC DataExchange

DataExchange transfers files between the HP 95LX and a PC. Run PC DataExchange in Windows or DOS operating systems. Standard file maintenance features (create and remove directory, change drive, etc.) are built in. DataExchange requires the following minimum systems: PC AT with VGA adapter and DOS 3.0 or higher, a 3.5" floppy drive, hard disk, and mouse; an HP 95LX with at least 15K free on either the internal RAM disk (C drive) or an external RAM card (A drive). Package includes software, manual, and cable.

Macintosh connectivity software is also available.

Availability ..... Now  
Medium ..... 3.5" floppy disk  
Runs under SysMgr ..... Yes

Pricing ..... \$69.95  
CONTACT: Sparcom Corporation, 897 NW Grant Ave., Corvallis, OR 97330, USA; Phone 800-827-8416 or 503-757-8416; Fax: 503-753-7821; CompuServe ID: [75320,2440].

## Financial

### Amortization

This DOS application may be run on the HP 95LX or other PC-compatible computer. It is a 'what-if' application which allows you to calculate an amortization from any three of the four necessary components. It displays and prints out a formal amortization schedule and a Time Value of Money (TVM) table from the interest rate and compounding frequency.

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Runs under SysMgr ..... No  
Pricing ..... \$29  
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CONTACT: Genus Software Corp., 1625 Richards Street, Salt Lake City, Utah 84115, USA

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Medium ..... Floppy Disk  
Runs under SysMgr ..... Yes  
Pricing ..... \$55  
CONTACT: IXTA Software, GmbH, Bretonischer Ring 18, 8011 Grasbrunn, GERMANY; Phone: +49 (89) 456-0340; Fax: +49 (89) 460-5764.

### QuickView 2.0

This checkbook register and investment management program lets you view and search all of your Quicken records on your 95LX and create Lotus .WK1 files from your Quicken data. Version 2 lets you add, change, and

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Availability ..... Now  
Medium ..... Floppy disk  
Runs under SysMgr ..... No  
Pricing ..... \$30  
CONTACT: John C. Haskel, Jr., 7102  
Three Chopt Road, Richmond, VA  
23226-3615, USA; CompuServe ID:  
[70750,1243].

## Games

### Worm!

This expanded version of a classic arcade game has ten different skill levels, forty playing screens, and allows the saving and restoring of games. This non-system compliant game occupies about 40K of disk space.

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Medium ..... Floppy disk  
(specify 5.25" or 3.5" disks)  
Runs under SysMgr ..... No  
Pricing ..... \$20  
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CONTACT: Snappy Software, P.O.  
Box 731, Lexington, KY 40586, USA;  
Phone: 606-269-0496.

### WW3

Arcade game written specifically for the HP 95LX. Has three different skill levels. Occupies 30K disk space.

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(specify 5.25" or 3.5" disks)  
Runs under SysMgr ..... No  
Pricing ..... \$20  
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Phone: 606-269-0496.

## Programming

### SS95

Library that allows experienced programmers using QuickBASIC to draw points, lines, rectangles, and text in graphics mode. Comes with information on linking and compiling.

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Medium ..... Floppy disk  
(specify 5.25" or 3.5" disks)  
Runs under SysMgr ..... No  
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The template was developed from HP's Long-Term Almanac of the Sun, with other information added to make it a planning tool for travelers of various professions. Two versions are included: One for the 95LX and one for laptop/ desktop PCs.

Availability ..... Now  
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Ericsson GE has recently discounted Mobidem (see page 45, Mar/Apr 92 for more on the Mobidem). Ericsson also offers the Viking Express package, which includes RadioMail software, the Mobidem, an HP 95LX, and a leather carrying case.

Availability ..... Now  
Pricing

RadioMail monthly rate . . . \$89  
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94026-1206, USA; Phone: 415-328-  
5615; Fax: 415-322-1753.

## Publications and Services

### Field Guide to Computing

In the new book, *A Guide to Field Computing* by Dana Blankenhorn, gives the HP 95LX extensive coverage.

It focuses on the many applications of portable computers. A disk comes with the book, which includes among other programs (COMMO), acCIS, and MESSAGE (also available on CompuServe and the PTP OnDisk).

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2500 Sales: 800 428-5331.

## Upgrades, Updates, Corrections

### ACT! on PalmModem

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Barranca, B-101 Irvine, CA 92718,  
USA; Phone: 714 453-0100; Fax: 714-  
453-0114.

### MacLinkPlus/HP 95LX Competitive Upgrade

Users of Sparcom Corporation's DataExchange program can now purchase the MacLinkPlus/HP 95LX software from DataViz for \$49.00 (suggested retail price is \$129.00). Offer ends May 31, 1993 (see page 14, this

issue for more on MacLink-Plus). [See Advertising, page inside back cover.]

CONTACT: DataViz, 55 Corporate  
Drive, Trumbull, CT 06611; Phone:  
203 268-0030; Fax: 203 268-4345.

### PhoneBook File Repair a Service

Announced as a software program on page 7 of the Jan/Feb 93 issue, this service requires that you send in your 95LX to recover corrupted Phone Book or Appointment Book files. May be of use when you see the "File I/O error" or the "RAM Disk Corrupt" messages and you did not have an adequate back up. Do not reinitialize or write any data to the disk until the files have been recovered. Send your 95LX (or memory card) to the contact below. They'll send it back within two working days of receipt.

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665 N.E. Conifer Blvd., Corvallis, OR  
97330, USA; Phone: 503-757-0044.



### Shareware Mentioned in Third Party Products

#### On the HP Palmtop Paper ON DISK

\*CIS \*\*SHR QUIKVU.EXE - M/A 93

\*CIS - Also available in the HP Handhelds forum of CompuServe.

\*\*SHR - SHAREWARE is software distributed free of charge for evaluation purposes only. If you decide to use it, you must pay the author the shareware fee. This goes for any shareware found on The HP Palmtop Paper ON DISK or CompuServe.

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# Transferring Files Between the 95LX and a PC or Mac

*Almost everyone using a 95LX needs to backup important files or download files from another computer. File transfer is a crucial function, and this article compares different approaches.*



By Tony McNamara

The HP 95LX lets you take your work wherever you go. It's great to be able to take notes, look up phone numbers, make calculations, and create or access important spreadsheets at a moments notice. It's also vital for most users to be able to easily transfer files back and forth between the 95LX and a desktop computer.

One solution is to install a PCMCIA card drive in your desktop and transfer data via memory card. Once the drive is installed, this is the simplest way to go. You use your RAM

card like it's a floppy disk and transfer files back and forth between machines. There are a number of card drives available for PCs, and one that we know of for a Macintosh (see page 12, this issue).

One problem with this approach is that if you're on the road and want to transfer files to or from another PC that doesn't happen to have a card drive, you're out of luck! Also, the card drive approach is the most expensive (\$300-\$500 plus the cost of a card).

## File Transfer Software

A less expensive solution is to use a file transfer program and serial cable. A variety of programs and connectivity packages are available, allowing you to connect to PCs or Macs. If you're on the road, you can take the software and serial cable with you and connect to almost anyone's computer. Best of all, the price is right (\$55-\$200, serial cable and software).

This approach has two problems associated with it. The first is the

95LX's non-standard serial port. This very basic three-wire port does not support a standard serial port's DTS and DTR signals. This handicaps performance with transfer programs like LapLink and FastLynx, which can support seven-wire serial cables.

The other difficulty associated with the serial transfer approach is getting the transfer software on to the 95LX in the first place. It's a bit of a Catch-22 — you need file transfer software to transfer files to the 95LX, but the first file you have to transfer over is the file transfer software!

The HP Connectivity Pack uses the FILER program already installed on the 95LX. The other software can be transferred to the 95LX using the built-in COMM application and any common communications program (i.e. Crosstalk or ProComm) on the PC. Simply connect the two systems using the appropriate cable, select the same communications parameters on both sides, and initiate an X-Modem or Kermit transfer of the desired files.

There's one other minor problem associated with the 95LX's power

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## ABOUT THE AUTHOR

Tony is a programmer for Symantec, Peter Norton Computing. He received degree in physics from UCLA and is the author of the award-winning Keypress shareware program. His CompuServe ID is [72477,2504].



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*Other topics as requested:*

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management system. The 95LX's serial port may be shut down to save power. If you find your file transfer software is not working, you might try running the `serctl /w` command from the DOS prompt to turn the serial port back on. You can also use 95Buddy to turn on the serial port.

## Generic and 95LX-Specific File Transfer Solutions

The packages in this review fall into two general categories: generic file-transfer software and software aimed at the HP 95LX in particular. LapLink is the best known example of the former, while the HP Connectivity Pack is the primary example of the latter.

These two categories take different approaches. The generic file-transfer packages usually support more than the three-wire mode the 95LX is limited to. Greater transfer speed is available with seven-wire serial and nine-wire parallel transfer

(not applicable to the 95LX). The generic packages still tend to be faster than the 95LX-specific packs, even in the three-wire mode.

The advantage of the 95LX-specific programs is that they are designed to take into account the screen size of the 95LX and the data-compatibility of the built-in applications. Most 95LX-specific programs also provide a 95LX-compatible cable, which you must purchase separately for the other programs.

Finally, most but not all file transfer programs let either of the two connected computers control the transfer process (one or the other, not both at the same time). Because a larger keyboard and screen are easier to use, most people would use the desktop computer as the controller (also call the "host" or "local" computer). I tested these programs using the desktop computer as the controlling computer in all cases.

## The Macintosh Programs

Both programs reviewed, **MacLink Plus** and **Data Exchange**, are written specifically for file transfer between the Macintosh and the 95LX. Both come with a special 95LX-to-Mac interface cable and both allow you to use either of the Macintosh's serial port (the printer or the modem port). Neither of these programs displays any information on the 95LX screen while running, and neither allows you to control the connection from the 95LX side.

Interestingly, both were also somewhat incompatible with ACE's DoubleCard (Stacker) software: MacLink would usually connect, but would also usually abort on very long files, while Data Exchange would always connect, but would take a very long time to do the transfer. Without the DoubleCard compression software, both packages

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were reasonably stable.

Both programs were tested on an Apple Macintosh IICx.

### MacLinkPlus, by DataViz

The MacLink Plus documentation is very well-paced and very clear. It walks the user through the process of copying the necessary files to the 95LX using the COMM program.

Once installed, the top speed of MacLink Plus when connecting to a 95LX is rated at 19,200 baud. This is the slowest rated connect speed of the packages reviewed, although it did not turn out the slowest real performance.

MacLink Plus includes a wide variety of file translation options. The default is to transfer and translate a file in one operation, but you can also select a straight binary transfer (file is transferred with no translation taking place). The file translations convert data to and from common Macintosh spreadsheet formats. For example, MacLink Plus lets you translate between Lotus, MS-Works Spreadsheet, or Excel worksheets. The 95LX's PHONE and APPT files can be translated to Dynodex, Address Book Plus, the spreadsheet files listed above, and SYLK files (generic database format that can be imported into programs such as FoxBase).

The file translation options convert MEMO files into files useable by most common Mac word processors. They also translate between Dynodex and the Phone Book files. The 95LX's Phone Book and Appointment files can also be translated to spreadsheet or database formats.

There were a few minor problems. First of all, when transferring files from the HP 95LX to the Macintosh, I noticed that the status bar on the Mac is inoperative and the block count doesn't tell you how many total blocks are to be sent. This means that there's no way to determine how far along the transfer is. All the 95LX screen tells you that it is connected.

Secondly, MacLink (and Data Exchange) are both incompatible with ACE's DoubleCard. There seems to be no way to access the B: drive on the 95LX with MacLink Plus. This is

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a big issue for users of Stacker, the compression program used on the DoubleCard. The un-Stac'd (or pre-Stac) files on the card reside on the B drive. At the time of the review, DataViz had not released a fix, but was working with ACE and promised a fix in a future release.

MacLink Plus can also be used to transfer files between a PC and MAC. However, the cable included with this version only connects a MAC to a 95LX. DataViz markets another package for PC-to-MAC transfer.

Overall, MacLink provides functionality and adequate speed, on par with the HP Connectivity Pack for the PC. File transfer tested significantly faster than Data Exchange. It works fine with standard configurations and no Stacker. MacLink is a good bet, especially for those who need to do a lot of data conversions from the 95LX's built-in applications.

### Data Exchange, by Sparcom

Like MacLink Plus, Data Exchange is designed to port data between the Macintosh and the HP 95LX. It also has some file conversion capabilities. Unfortunately, it also suffered the Stacker (ACE DoubleCard) compatibility problem.

Data Exchange's documentation is the best of the group. While neither comprehensive nor visually stunning, it is so well organized that the index is superfluous. At any given point, it tells you where in the process you are, what's next, and why.

Data Exchange installs to the 95LX's C drive, regardless of where you wish to put it. If you have insufficient space on the C drive, it will put what fits there and not warn you that the installation is incomplete.

Another Data Exchange problem is that it doesn't warn you when the connection has been dropped (no error message or indication that the transfer was interrupted). If only a



portion of a file has been transferred, it is saved as if everything had succeeded.

As mentioned, Data Exchange is callable from a hotkey (the main program is an EXM file). This means you can run Data Exchange while system-compliant programs such as MEMO and 1-2-3 remain open.

Data Exchange lets you easily connect to the 95LX's A and C drives directly. You can change to the B drive (or other drives), but the process is awkward.

Data Exchange does some basic file conversions, but doesn't support the variety that MacLink Plus does. It is slow to begin with, and even slower when it interacts with Stacker (see timings table). However, the Stacker-related transfers were more reliable than with Mac Link Plus. Lastly, Data Exchange is easy to use and install.

## The PC Programs

These programs are much more diverse than the Macintosh programs. However, none of them had the ACE DoubleCard/Stacker compatibility problems that both Macintosh programs did, and only the HP Connectivity Pack, IntelliLink, and Data Exchange for Windows was written with the HP 95LX in mind. The HP Connectivity Pack and Data Exchange come with a 95LX compatible cable. The other packages required that you purchase one separately (see the order information at the end of the article).

### The HP Connectivity Pack

One of the nicest things about this package is that you don't have to copy software over to the 95LX since it's already built-in on the 95LX's ROM, taking up no additional disk space. The software you install on your PC mimics the 95LX software. To transfer files, you connect the serial cable between the 95LX and PC, start APP95 on the PC, start FILER on both the 95LX and the PC, and transfer files. The commands are almost identical. (You have to press **[ALT]-[F10]** on the PC to access the

MENU key).

The HP Connectivity Pack was tested at the "Direct" option, its fastest selectable speed. At 57,600 baud, its rated transfer speed was about one-half that of the other PC programs.

One nice thing about the Connectivity Pack is that either computer can control the other. However, I suspect most users will use the desktop as the controller because of its bigger display and keyboard.

Another nice thing is that the HP Connectivity Pack provides PC versions of all the 95LX built-in software (except Lotus and COMM). The applications appear on the PC as they do on the 95LX. This unfortunately includes the limiting 40-col x 16-line display. Both FILER and MEMO would be nicer with a full-screen display.

One annoying characteristic of the Connectivity Pack software is that the program pauses a few seconds every time you switch back and forth be-


tween the remote and local views. No other tested program insisted on such a delay.

### DOS CONNECT DRIVE SERVER

The HP Connectivity Pack also comes with DOS Connect, a utility that allows you to access the 95LXs drives directly from the PC. The main program file, DCS95.EXE, is not compressible and takes up another 38.9K on the 95LX. However, file transfer using this utility is much quicker than APP95.

DOS Connect requires that the CONFIG.SYS file on the desktop be modified with an appropriate LASTDRIVE command (documented in the manual on page 6-1). FastLynx comes with a similar drive server.


Overall, The HP Connectivity Pack provides a functional, easy to use method of transferring files to and from a PC. It is a bit slow, and I find the functionality of the PC versions of the built-in software to be limited.



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## Data Exchange for DOS and Windows

Sparcom now offers a PC version of its Data Exchange file transfer software. Unfortunately, we didn't receive a copy in time to test it. According to Sparcom the PC version can be run from DOS or Windows. (For more see page 8, this issue.)


## FastLynx, by Rupp

FastLynx is a dedicated file-transfer program. It and LapLink generally trade the position of fastest comm program with each new release. On the 95LX, the two came in at identical speeds. I believe this is because new transfer speed improvements are now mostly related to file compression. The new releases of LapLink and FastLynx feature faster speeds on 386/486 systems because they compress data before sending it, like a V.32bis modem. These faster transfer speeds don't happen on the 95LX, because it has a slower CPU speed and can't keep up.

All speeds I reported in the chart (page 19) were honest 95LX speeds. Both FastLynx and LapLink Pro would show faster speeds between faster computers, and between computers that could support cables with more wires.

FastLynx uses function keys for most of its operations. The alphanumeric keys are used to jump to files in the display panel. FastLynx is intuitive in Split-Screen mode and has two other extremely powerful modes of operation called Command and Form.

FastLynx also sports a pair of utility programs analogous to the HP Connectivity Pack's DC95/DCS95, but slightly faster, especially when a disk cache is installed.

FastLynx can be Dieted (compressed using DIET ) after it has been fully configured. It does not allow the configuration to be saved after Dieting, but does retain the last saved configuration.

FastLynx is extremely fast, very easy to use, and packed with power. The only disadvantage is that unless you are using PCMCIA cards, it may

take too much storage space.

## The Norton Commander 3.0

The Norton Commander is a PC file manager that has a file transfer feature, which displays a split screen for local and remote drives. The file transfer feature, though a bit slow, is flawlessly integrated into the popular file manager. All of the file management and transfer capabilities, plus simple text editing and attribute setting, is provided by the NCMAIN.EXE program.

For flat-out speed, Commander is behind FastLynx and LapLink. However, it beats them in breadth of features.

## IntelliLink/XLT

IntelliLink/XLT is an "Add-in Product for the HP Connectivity Pack," adding translation support for additional file types beyond those supported by the Connectivity Pack. For example, it can convert APPT, PHONE, and TODO lists to Calendar Creator Plus, dBase, Paradox, Sidekick, and WordPerfect Office. It also provides data reconciliation (automatically eliminating duplicates and keeping the most current record). However, it does NOT replace the connectivity portion of the Connectivity Pack, and won't increase the file transfer speeds.

IntelliLink/XLT requires that the HP Connectivity Pack be installed in the same directory as itself.

## IntelliLink/Windows

IntelliLink/Windows runs under Windows, doesn't require the Connectivity Pack (but does need the cable), and provides the translation utilities of IntelliLink/XLT. (As we went to the printer, we received a new version that is supposed to be considerably faster.)

IntelliLink/Window is set up to install to the C drive only, and overwrites the current APNAME.LST (the file that contains System-Manager EXM file information). A savvy user may be able to install it to another drive. In any event, be sure and back up your current APNAME.LST file

If you see . . .

**File I/O error  
or  
RAM Disk Corrupt**

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before installation.

Also, IntelliLink/Windows requires the SHARE program that comes with MS-DOS be loaded, even on systems with DOS 5.0 that otherwise would not require SHARE.

Unfortunately, most transmission or program errors terminate IntelliLink operation with a very brief warning, or no warning at all! The constant restarting of the program gets frustrating fast. I also had difficulty canceling file transfers. The Windows cancel button doesn't seem to work. The only way I found to cancel a file transfer that is already in progress is to shut down IntelliLink on the 95LX side.

Transferring and translating 95LX data files (.TXT, .PBK, etc.) to the PC is automatic — once you've configured IntelliLink. From IntelliLink's Window's screen, point at your default data files and tell IntelliLink how you want them to be translated. From then on, every time you want



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to import or export a file, you can just check off the applications you want transferred and click "Import" or "Export."

This process works like a charm, except in several instances that require repetitive operations.

IntelliLink, once properly configured, clearly provides the easiest and most comprehensive method for moving HP 95LX data in and out of normal PC applications. The slow speed becomes a non-issue when dealing with the relatively tiny files that will be created by the built-in applications, and the ease-of-use (once configured) is paramount for busy executives.


### LapLink by Traveling Software

As we went to press we received word that Travelling Software had just released LapLink V and will no longer be selling III and Pro. We haven't tested V, but have included reviews of the other two versions because they are still in wide circulation. Travelling Software wrote both versions of LapLink, as well as the DC95 portion of the HP Connectivity Pack. However, LapLink is much faster than the Connectivity Pack. Both LapLinks have a features and speed similar to FastLynx. LapLink Pro supports a mouse, which neither LapLink III nor FastLynx do.

### LapLink III

LapLink III uses a Lotus-like menu at the bottom of the screen for all commands. You can either highlight the command and press **[ENTER]**, or type the first letter of the command and press **[ENTER]**.

LapLink III and LapLink Pro have a "batch" option which lets you create, save, and repeat transfer processes. It is similar to the Forms feature of FastLynx.

Like FastLynx, you have to configure LapLink before Dieting it (compressed using DIET ). Unlike FastLynx, if you save the configuration after Dieting, the program file will be corrupted and will crash the system on future loads.

LapLink III is as quick as FastLynx and LapLink Pro, but not as easy to use as these or as the Norton Commander. It does have the advantage of being the smallest of these faster programs.


### LapLink Pro

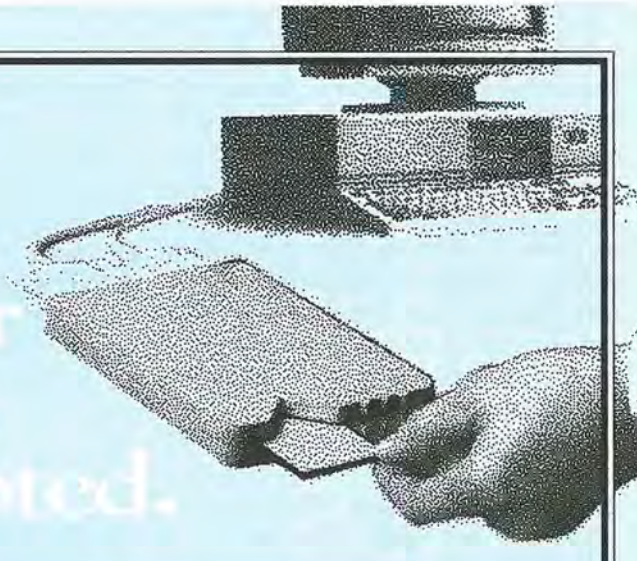
LapLink Pro is the latest version of LapLink, replacing LapLink III. As is common with newer version of a software product, it's much larger than the older version.

Packed into that additional size (225K) is a very nice user interface, great mouse and modem support, on-the-fly compression capabilities, and better integrated drive trees. However, these additional features don't mean that much on a limited system like the 95LX.


LapLink Pro is the fastest program of the group, by a tiny margin. This feature-rich program may be great for systems with copious data storage, but already compressed at 225K, it's a bit large for the 95LX.

### ZIP, by Eric Myer

ZIP.COM  was also reviewed on page 16 of the Mar/Apr 92 issue and on *The HP Palmtop Paper ON DISK*. ZIP is designed to be tiny and



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UTIL includes a Forth compiler, 8086 assembler, decompiler and disassembler, to turn your 95LX into a portable software development system. Create compact, System Manager compliant executable applications and standalone .COM programs. Or use the tools to access the built-in graphics capability of your 95LX, explore memory and much more.

Here's what a few of the current users (who can upgrade to Version 2.4 for only \$10) say about UTIL:

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fast. It succeeds at both of these, but is not as easy to use as some of the other programs. ZIP is primarily a command-line driven program, although it does provide a menu-mode of sorts. It does not provide split-screens, or even a full-screen interface. The Command-line mode allows you to run a series of commands from a batch file.

ZIP's Server mode, combined with its Send and Fetch commands, allows the user to control the program from one side or the other. However, it does not provide point-and-shoot capability - the user must input the file names (and the directory name, if necessary) for file operations.

Because ZIP lacks file listing and point-and-shoot capability, it's not in the same league as the other programs. However, for those very short of disk space or money, it does provide the same basic function for a lot less.

### Recommendations

I think FastLynx has the best combination of speed, power, and size. If you need a Windows product, you'll have to consider IntelliLink and Data Exchange for Windows. If you need something smaller, you can't beat the size of the Connectivity Pack, but you do give up speed. With ZIP, you get back the speed but give up ease-of-use.



### Shareware/Freeware Mentioned in This Article

#### On the HP Palmtop Paper ON DISK

\*CIS DIET 1.44 - M/A 93 issue

#### On the 1992 Subscribers Disk

\*CIS ZIP.COM

\*CIS - Also available in the HP Handhelds forum of CompuServe.

### Order Information

#### MacLinkPlus - \$129

Macintosh to 95LX file transfer software.

CONTACT: DataViz Inc., 55 Corporate Dr., Trumbull, CT 06611, USA; Phone 800-733-0030 or 203-268-0300; Fax: 203-268-4345.

#### Data Exchange (Mac) - \$89.95

#### PC Data Exchange - \$69.95

File transfer software.

#### Station95 with

#### MAC Data Exchange - \$199.95

Docking with connectivity software.

#### Station95 with

#### PC Data Exchange - \$129.95

Docking with connectivity software. Data exchange software also comes with the SmartDoc ComStation and SmartDoc PrintStation.

CONTACT: Sparcom Corporation, 897 NW Grant Ave., Corvallis, OR 97330, USA; Phone 800-827-8416 or 503-757-8416; Fax: 503-753-7821; CompuServe ID: [75320, 2440].

#### HP Connectivity Pack - \$100

File transfer software/ serial cable from HP.

CONTACT: HP Dealers or third-party vendors such as EduCALC (see ad, page 24 this issue).

#### FastLynx - \$169.99

A fast DOS file transfer software.

CONTACT: Rupp Technologies, 3228 E. Indian School Road, Phoenix, AZ 85018, USA; Phone: 800-844-7775 or 602-224-9922; Fax: 602-224-0898.

#### Norton Commander 3.0 - \$149

File manager with file transfer feature.

CONTACT: Symantec Corp., 1452 Kifer Road, Sunnyvale, CA 94086, USA; Phone: 800-441-7234 or 408-253-9600; Fax: 408-255-3344.

#### IntelliLink/XLT - \$99.95

Utility providing additional translation support for 95LX applications.

#### IntelliLink/Windows - \$69.95

File transfer program that runs under Windows. Comes with IntelliLink/XLT's translation utility.

CONTACT: IntelliLink, Inc., 98 Spit Brook Road, Suite 12, Nashua, NH 03062, USA; Phone: 603-888-0666; Fax: 603-888-9817.

#### LapLink V - \$169.95

#### LapLink Pro - \$169.95

File transfer software.

CONTACT: Traveling Software, 18702 North Creek Parkway, Bothell, WA 98011, USA; Phone: 800-343-8080 or 206-483-8088; Fax: 206-485-6786.

NOTE: Price listed is suggested retail price, not including shipping and handling. You may be able to purchase the product for less from a software retailer.



File Transfer Comparison Chart											
	MacLink (MAC)	DataExch (MAC)	LapLink III	LapLink Pro	FastLynx	FastLynx Servers	Norton Commander	ZIP	ConnPack	ConPack DC/DCS95	IntelliLink
HP 95LX Side	MLP95LX.EXE	DATAEX.EXM	LL3.EXE	LLPRO.EXE	FX.EXE	FXSVR.EXE	NCMAIN.EXE	ZIP.COM	In ROM	DCS95.EXE	JI.EXM
Raw Size (bytes)	34.9K	14.1K	93.4K	225.4K	111.3K	44.6K	139.5K	11.2K	0	38.9K	115K
Stac'd Size (bytes)	23K	9K	62K	225K	93K	37K	93K	8.6K	0	N/A	77K
Dieted Size (bytes) * - file cannot be reconfigured after compression.	19.8K	N/A	50.5K*	N/A	75.7K*	30.8K	81.1K	N/A	N/A	N/A	N/A
<b>File Transfer Test Results</b> (from 95LX to PC or MAC, results reported in minutes: seconds) The spot checks I did indicated that the speeds were the same which ever direction the transfer took place. However, the direction and configuration of the desktop pc does makes a difference in the case of the server software (DCS95 and FXSVR.EXE).											
155K compressed file (DIET)	Unable to transfer	29:45	0:17	0:15	0:17	0:17	0:48	0:19	1:39	0:20	7:00
363K uncompressed file	4:30	Unable to transfer	0:42	0:42	0:42	0:48	1:59	0:54	4:00	0:48	16:09
<b>Special Test Results</b> (from 95LX RAM card to PC, Stacked RAM card not installed; results reported in minutes:seconds)											
155KB Comp:	1:45	6:35									
363KB EXE:	4:04	16:01									
<b>Features Chart</b>											
Has a 95LX Cable?	YES	YES	NO	NO	NO	NO	NO	NO	YES	YES	NO
Top Rated Transfer Speed: (Baud rate)	19.2K	38.4K	115K	115K	115K	115K	115K	115K	56K	115K	19.2K
95LX-Specific?	YES	YES	NO	NO	NO	NO	NO	NO	YES	YES	YES
95LX-Screen?	YES	YES	NO	NO	NO	N/A	NO	YES	YES	N/A	YES
Slave screen informative?	NO	NO	YES	YES	YES	NO	Semi	NO	NO	NO	YES
Full screen of software on desktop side?	N/A	N/A	YES	YES	YES	N/A	YES	NO	NO	N/A	N/A
Can run from 95LX side?	NO	NO	NO	YES	YES	YES	YES	YES	YES	YES	NO
Mouse support?	YES	YES	NO	YES	NO	NO	YES	NO	NO	NO	YES

**SIZES / TEST RESULTS** — ■ **Raw Size:** Size of the program's executable file on the 95LX, before compression; ■ **Stac'd Size:** Size of file compressed with Stacker; ■ **Dieted:** Size of the DIET compressed file (N/A means DIET could not compress the file); ■ **File Transfer Test Results:** These tests were done on a 155KB compressed file and a 363KB compressible file. (The large sizes were chosen to maximize the differences between programs.); ■■■ **SPECIAL TESTS:** These were done for the Macintosh products, which were incompatible with the popular ACE DoubleCard (Stacker) software, and were done on a 95LX without the DoubleCard software installed.

**FEATURES** — ■ **95LX Cable:** Whether the product comes with a 95LX-compatible cable. The two LapLinks and FastLynx come with serial and parallel cables, but would need an adapter to work with the 95LX; ■ **Top Rated Speed:** Fastest possible transfer speed (bits per second) under ideal conditions. May differ considerably from their actual transfer speeds on the 95LX; ■ **95LX Specific:** Was the program written for the 95LX? Do the instructions explain how to use the product on a 95LX in particular? ■ **95LX Screen:** Does the program have a 40x16 screen on the 95LX? ■ **Both screens informative:** Some of the programs freeze the 95LX screen when connected, while the LapLink and FastLynx programs show exactly what is happening on both systems. (The Norton Commander rates a "semi" because it gives you technical information on the slave side, such as blocks transmitted, rather than the file names most of the other programs display.) ■ **Full screen display on desktop:** (The Mac products were not included in this because the Mac interface would not be consistent with doing this.) ■ **Can run from the 95LX side:** Can the transfer be controlled from the 95LX? ■ **Mouse Support:** Does the program support the use of a mouse on the desktop side?



# EMBARC Messaging Services

*If you're on the road and need to receive E-mail, including text messages or binary computer files, take a close look at Motorola's EMBARC service.*



By Rick Shaddock

A wireless receiver makes the 95LX truly portable. You no longer have to connect up to a modem to receive important messages; time-sensitive information can be sent to you quickly, wherever you are! On page 20 of the Nov/Dec 92 issue we discussed the SkyTel SkyStream Service and the SkyStream Receiver. This article focuses on Motorola's EMBARC (Electronic Messaging Broadcast to A Roaming Computer). Both services provide an economical way to receive messages on the 95LX while traveling. Both services use similar pagers connected to the 95LX via the HP Mobile Accessory Cradle (Mobile Datalink Cradle).

SkyTel and EMBARC serve different niches — SkyTel focuses on shorter transmissions (up to 250 characters) for immediate delivery to groups of up to 40 individuals. EMBARC provides less immediate delivery (15 minutes minimum) of longer messages (up to 30,000 bytes) to unlimited sized groups. EMBARC handles either text or binary files, and sends daily broadcasts of news, sports, and weather. With SkyTel, the receiver pays on a per message plan; with EMBARC the sender pays for the transmission.

Both services provide wireless reception of messages. A SkyTel subscriber sends messages using a modem or touch tone phone. An EMBARC subscriber sends messages

via a modem or e-mail system.

## EMBARC Subscription Package Lets You Receive Messages on Your HP 95LX

The EMBARC subscription package includes a Motorola NewsStream receiver, HP's Mobile Accessory cradle, ROM card with EMBARC software, manual, and cable. The basic EMBARC subscription costs \$15 per month and provides an e-mail account, unlimited receipt of messages, and twice-a-day updates of USA TODAY news and weather. Other topics such as health, technology, and real estate news may be added to the basic service for about \$8 per month each.

The Motorola NewsStream receiver is powered by its own AA battery and has 32K of memory. Every morning, the green light flashes on the NewsStream receiver, indicating that the latest news is ready to be downloaded. I pop in the NewsStream receiver and 95LX into the Mobile Accessory cradle, slip the EMBARC ROM card into the 95LX's A drive,

and press the **CTRL-F1** hotkey to get the EMBARC Main Menu screen:

```
EMBARC Comm 01/01/93 3:13 PM
MAIN MENU
F1 New Mail Messages
F2 Mail Box
F3 Get Messages from NewsStream
CTRL+F4 EMBARC Switch Communication
F5 Local Administration
CTRL+F5 Recombine Info Svc

Mail ESC=Quit
New Get Admin
```

EMBARC Main Menu Screen

I press **F3** to download messages and then **F1** to see a listing of the messages I just received.

```
EMBARC Comm 01/01/93 3:31 PM
NEW MAIL
1 03:24 PM 01/01/93 USATODAY
USA TODAY Update #1 of 2
2 03:24 PM 01/01/93 USATODAY
USA TODAY Update #2 of 2
3 03:24 PM 01/01/93 USATODAY
USA TODAY Weather
4 07:04 PM 01/02/93 SHADDOCK.R
Hello! Testing my EMBARC pager now.
Delete RtlPg All ESC=Brw
Save RtlPg Mark Drop
```

Message Listing Screen

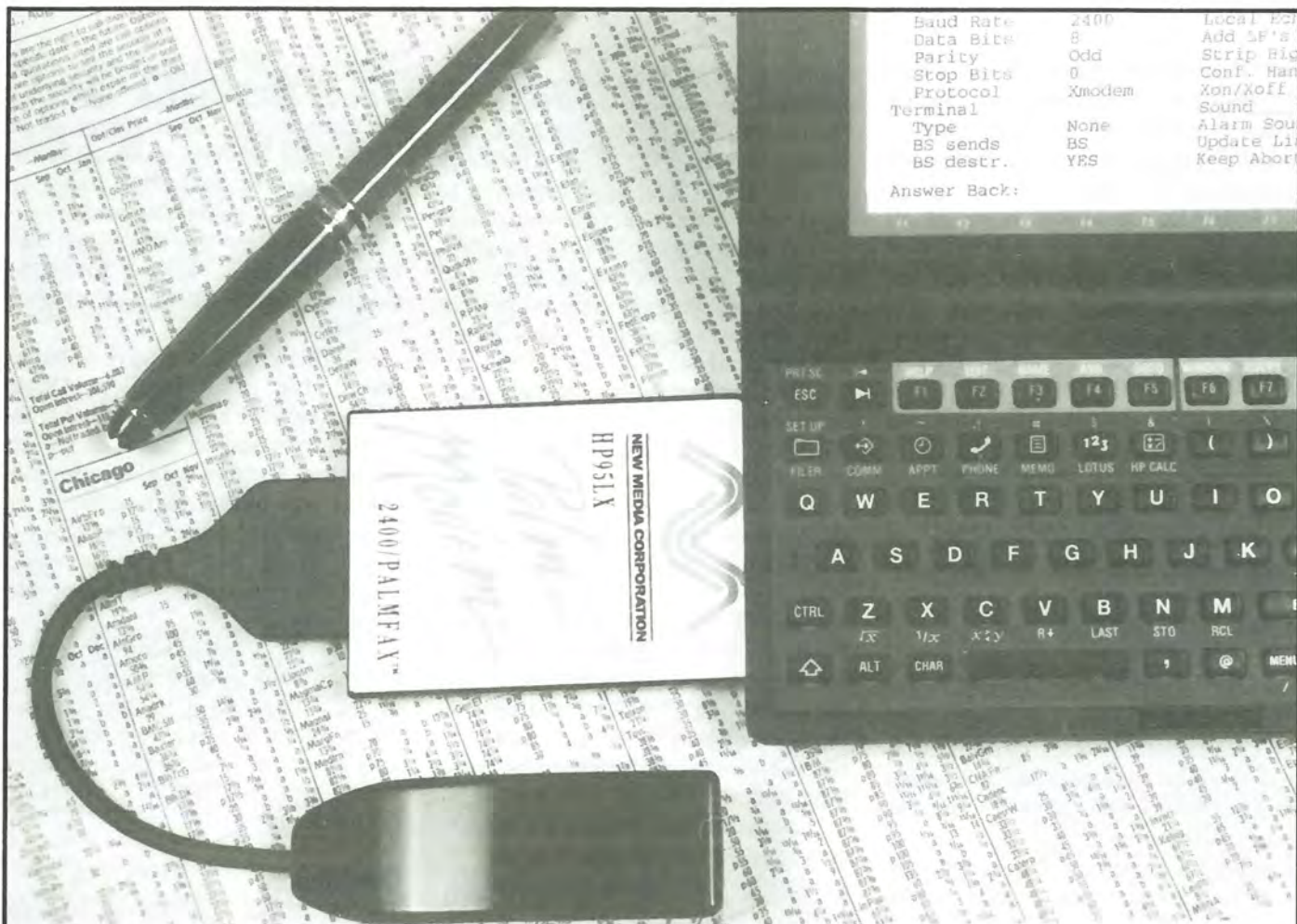
Messages longer than 1500 bytes are divided up, so I get the USA TODAY



## ABOUT THE AUTHOR

Rick uses his 95LX and EMBARC to keep in contact with his office while teaching HP 95LX classes and consulting nationwide with Computer Instructors Company. Rick is building a network of 95LX experts in major cities for 95LX consulting and tutoring. You can reach Rick at 800-507-9898 or 202-829-4444. His CompuServe ID is [70642,647]. His EMBARC ID is Shaddock.R .





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update in three or more files. I press **CTRL-F5** to recombine them, which takes a couple of minutes. Finally, press **F1** again to view the formatted messages and news.

EMBARC transmits news of all types throughout the day to well over 200 cities. EMBARC has an exclusive agreement with USA TODAY for wireless delivery of news. Some sample news screens follow:

```

DBARC Conn          DIV0193   1:31 pm
MAIL MESSAGE                      Page 1
# # ### ##      3## ### ## ### # #
# # # ## ##     # # # # # # # # #
# # # ## ##     # # # # # # # # #
# # # ## ##     # # # # # # # # #
### ## # -#     # ### ## # # #

```

Opening USA TODAY Screen

ZNYAFC Comm: 01/01/88 1101 pm  
 MAIL MESSAGE Page 2  
 Source: USA TODAY/Gannett, National  
 Information Network  
 SADDAM HUSSEIN AGREED TO ALLOW ESCORTS OF  
 FOOD CONVOYS INTO KURDISH AREAS OF IRAQ  
 MONDAY. THE CONVOYS WERE SUSPENDED AFTER  
 BEING ATTACKED.  
 THE RECESSION IS OVER, THE NATIONAL BUREAU

News Screen

```

ENB&C Comm      01/03/93   1:31 pm
MAIL MESSAGE      Page 5
DOW JONES OPENS ON UPSWING:
The Dow Jones average of 30 industrial
opens at 333.26 Tuesday after closing at
7.08 Monday. The New York Stock Exchange
composite opens at 341.01, down 0.23.
IN NAW ACTION: New Jersey 104 Chicago 92;
Indiana 316 Milwaukee 84; Washington 77

```

Stock Market Reports, Sports

SMCRC Comm 31/01/83 8:31 pm  
 FATH MESSAGE Page 2  
 ACROSS THE NATION:  
 ALBUQUERQUE: Rain; 51, 52. Wednesday:  
 Partly cloudy; 55, 60.  
 ATLANTA: Cloudy; 53, 49. Wednesday: Warm,  
 cloudy; 59, 48.  
 BOSTON: Sun. AM fluctuating 62, 77.

### Weather in Major Cities

Each message is automatically saved in the Mail Box, as part of the file MBX00001.MSG.

## Sending Messages

EMBARC provides General Electric's BusinessTalk (BT) System 2000 software to desktop PC users. BT allows the user to fill "Out Box" messages to send on either the wireline e-mail network for regular PCs, or the wireless e-mail network for the HP 95LX. You can also check your e-mail "In Box" for messages your NewsStream did not receive.

EMBARC provides the necessary communications software for the 95LX on a ROM memory card. The card must be inserted into the memory card slot to upload messages from the NewsStream to the 95LX.

EMBARC connects with other e-mail services and private systems through a standard X.400 gateway. Messages are routed by satellite to the appropriate station(s) and transmitted on the EMBARC nationwide radio frequency (931.9125 MHz) to reach NewsStream receivers in most metro areas.

Usage fees are billed on a monthly basis and vary depending on:

- Message length: 300, 1500, 3000, or 30000 characters
- Number of addresses (an individual or groups): unlimited
- Number of geographical/area codes: 1-5, or Nationwide
- Priority: 15 min, 60 min, 3 hour, Overnight

For example, a 1200-word price update sent to a group of 100 sales reps nationwide, within 3 hours would cost \$6.02 -- 6 cents per recipient! It is best to compose messages off line, then use your 20 minutes per month (basic plan) for sending operations.

### Things I Would Change

I have a few things on my EMBARC wish list. I wish the APNAME.LST file on the EMBARC ROM card was changeable so I could assign a hotkey of my choosing. I also wish EMBARC did not use **CTRL-F4**, which the Lotus Paste function also uses. When you press **Ctrl-F4** to paste in 1-2-3, you sometimes get "Initializing modem. Please wait." I wish paging through the EMBARC messages wasn't so awkward. You have to press

**[F3]** (Prev) or **[F4]** (Next) and you can't use the arrow keys to scroll up or down to view split paragraphs at once. This is very annoying when you are trying to read a paragraph longer than the screen. I prefer to use MEMO to view the MBX00001.MSG file (or FILER's Viewing function if the document is too large for MEMO to open).

The EMBARC software is easy to install, but a bit large at 192,497 bytes. I wish I could install the EMBARC software on the C drive and have the A drive available for data files. I was able to put a few of the files necessary to read the news on the C drive, but I still run out of room on my C drive until I delete the E-mail files.

Finally, I wish EMBARC could automatically update APPT, PHONE, or 1-2-3 files. As it is, you can save the message as a file by pressing **F1** and entering a filename and extension (.TXT for MEMO, .WK1 for Lotus, etc.).

## Conclusion

The EMBARC system is covering more and more cities and countries every week. The variety of its special information services is also growing. Motorola provides excellent, courteous technical support, a one year limited warranty, and six factory authorized repair centers. EMBARC is an excellent wireless communication choice, especially if you need to send lengthy messages or files, or if you need one of its special information services.

## Order Information

**EMBARC Basic Package — \$458**

Includes the Motorola NewsStream receiver, the HP Mobile Accessory Cradle, EMBARC software on ROM card, manual, and cable.

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33426, USA; Phone: 800-EMBARC4 or  
407-364-2000; Fax: 407-364-3683.



# Use Quicken Records on the 95LX — with QuickView!

*QuickView 2.0 lets you import Quicken registers to the 95LX and view, modify, or add and delete records from the file. It also lets you export the file back to Quicken on your desktop.*

By Jeffrey C. Zorn

I always hated balancing my check book, until I discovered Quicken. This software program for desktop PC's made it easy to keep track of my personal finances. Quicken is not available for the 95LX, but fortunately, a product named QuickView is.

QuickView 2.0 lets you work with Quicken records on your 95LX. It also lets you create Lotus .WK1 files from your Quicken data. With QuickView, you can enter and view personal financial data on the 95LX as it happens. You can then export it back to your desktop and bring the full power of Quicken to bear on the information.

QuickView	83/18/93	10:23 am
File: BANKAMER	Type: Bank	
1/12 Baby Bell Telephone Co		17.56
1991 S Basic monthly rate		
234 x Telephone	\$	894.05
1/12 Baby Bell Telephone Co		29.36
1991 S Long distance calls		
234 x Telephone	\$	864.69
1/13 Safeway		119.09
1991 S		
235 x Groceries	\$	745.60
Help	File	Edit
1	2	3
4	5	6
7	8	9
10	11	12
Function Keys		

QuickView Main Records view

## QuickView Features

QuickView is one of the most useful programs available for the 95LX. You can use it to track everything from business expenses to investment accounts. The demo version of QuickView lets the user experience most of the functions of QuickView for a limited time frame (after June 30, 1993 the demo won't let you enter data). The registered version does not have this limitation. In addition to

the demo features, the registered version lets the user do the following:

1. Export information from the 95LX back to Quicken at any time. I do it monthly and am able to balance my check book in minutes.
2. Print reports directly from the 95LX or desktop.
3. Open new QuickView files from the 95LX from QuickView.

Many of QuickView's features enhance its portability. For expense reporting you can create a new account in QuickView and enter expense information as it occurs. When you get back to your home base, just print out the QuickView report and attach it to your expense report. You can also create a .WK1 spreadsheet file from QuickView data, and manipulate the data to a format that will best suit your needs.

QuickView lets you enter checks that need to be printed from Quicken. Just put a "P" in the check number field of QuickView. Then export the file to Quicken, enter the check numbers and print the checks.

If you have a large check register

in Quicken (from years past) you may want to shorten it before importing it into Quick View on the 95LX. Create a new Quicken (.QIF) file by accessing Quicken's File option, then File Operations and Copy. Type in a date range, say from January 1, 1993 to present, and a filename. Then press OK. A new, smaller file will be created with the filename you specified. This new file will be much smaller when converted to a QuickView (.QKV) file. I have a copy of QuickView on my desktop to make this very simple (it also runs on the desktop, and other DOS Palmtops).

QuickView will also allow the user to search their entries to locate items that match specific characters that you specify. Other useful features that make QuickView user friendly are a memorization feature for entries and a manual and automatic category search feature for faster entry of new information.

## Is QuickView a Stand-Alone Product?

You could use QuickView as a stand-alone product. You can open files,



## ABOUT THE AUTHOR

Jeff Zorn, lives in Farmington Hills, MI with his wife Jan and two 14 year old sons David and Aaron. Jeff sells visual presentation products and labeling systems for a Grand Rapids based company. Jeff uses his 95LX for appointments, letters (with a BJ10e), call reports and of course CompuServe [71165,1650] or via America on Line [PDA Jeff], where he is co-forum leader of the new Palmtop SIG on AOL.



enter checks, deposits, credit card charges, cash outlays, investments, etc. You can track current balances and net worth. You can even print out an 80-column-wide report of all your transactions that are new or changed. However, the real value of the program lies in its ability to capture all sorts of information on the fly, and then transfer it to your desktop PC and a more potent financial program like Quicken.

### Conclusion

QuickView will run on the HP 95LX, Sharp PC-3000, Poqet, and Zeos PPC and clones (thanks to Marty Mankins for testing on the other machines for me). QuickView may also run with some of the other checkbook/financial programs as well as Quicken, but the testing is not yet complete. (The documentation says you can export files to Managing Your Money, by MECA Software; phone: 203-256-5000.)

QuickView's author, John Haskell,

tells me he is committed to this program and will be making constant changes, including adding a reconciliation aid feature (this aid is now in the version available for download) on the 95LX. John, is also looking into making QuickView Switchable. Future program updates will include these features and more. All updates will be available to registered users at no charge through versions 2.x, and will be downloadable from CompuServe in the HPHAND forum, as well as the Palmtop Forum and on America On Line in the Palmtop SIG (Keyword Palmtop).

John says he is always open to suggestions and would love to hear from you via CompuServe at [70750, 1243]. For those of you on AOL or other services, he is also available on Internet.

This program gets my vote for program of the year. It's easy to use, the set up is simple, and novice and advanced 95LX users alike can be up and running in minutes.

### Order Information

#### Quicken - \$69.95

Popular personal finance program for PC's.  
CONTACT: Intuit, 155 Linfield Drive,  
Menlo Park, CA 94026 USA; Phone: 800-  
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1013.

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You may be able to purchase the product  
for less from a software retailer.



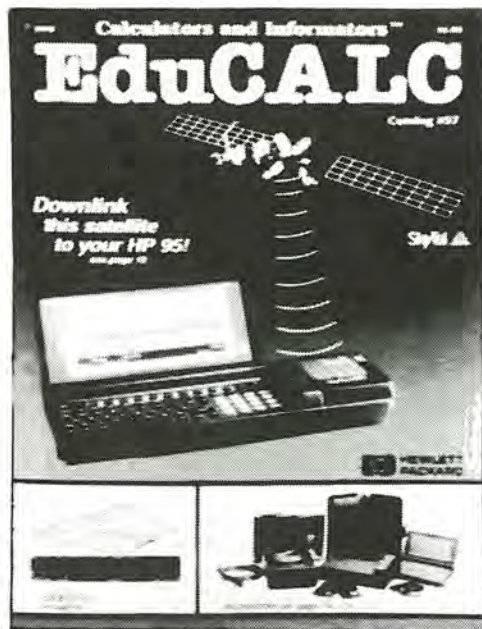
### Shareware/Freeware Mentioned in This Article

#### On the HP Palmtop Paper ON DISK

\*CIS \*\*SHR QUIKVU.EXE - M/A 93  
Demo version, also available in the HP  
Handhelds forum of CompuServe.

REGISTERED VERSION: Members of  
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you. Registration also available on CIS via  
SWREG and the ID # is 644. Not on CIS or  
AOL, send \$30 and specify disk size and  
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registration screen. Send to: John C. Hask-  
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# Freyja2: A Powerful, Free System-Compliant Editor for the HP 95LX

*Comes with source code included – gives programmers an excellent example of how to write System-Manager compliant programs.*

By Ed Keefe

Freyja  is a text editor for the HP 95LX. Freyja is an acronym that stands for, "Freyja Reduces Emacs, Yet Joins All." This recursive definition needs explaining.

## Emacs

Emacs is a text editor that has been around for decades and is available for almost any computer. The word "Emacs" is derived from the words "Editor" and "macros" (i.e. editor with

macro capabilities).

Not only is Emacs a great editor, but its freeware version comes with complete source code, usually C. If you don't like the way Emacs behaves, you're free to change it to suit yourself. All you need is a solid, working knowledge of the C programming language and a good compiler. The word "All" in the above definition refers to the various versions of Emacs – all 60 of them.

Some of the more widely known, freeware versions of Emacs go by the names of AE, VINE, DEmacs, Edwin, Edmacs, Elle, Epoch, Freemacs, Jove, MicroEmacs, and, of course, Freyja.

There are even commercial versions of Emacs. The commercial packages usually incorporate pull-down menus, multi-colored text and pop-up help screens. You may recognize some of these "brand names": Epsilon, Mince, Sage, Perfect Writer, FinalWordII, Sprint and Brief. (The last two are now distributed by Borland International. Some Borland watchers predict that Brief will soon become the built-in editor for Borland C++ and Pascal.)

## More on Freyja

Freyja is the work of Craig Finseth. Craig "wrote the book" on Emacs, or,

more precisely, he has written "a" book on Emacs. (*The Craft of Text Editing: Emacs for the Modern World*, Craig A. Finseth, Springer-Verlag, 220pp, 10 chap., 5 append. ISBN: 0-387-97616-7, 3-540-97616-7, \$39.95).

Craig had a version of Freyja available for the HP 95LX almost a year ago (see July/Aug 92 issue, page 26). We even considered giving Freyja the place of honor on the 1992 Subscribers Disk, but decided not to because it was not that easy for non-Emacs users to use. (Besides, it would have been the only program on the disk. The Free Software Foundation, to which Craig subscribes, mandates that all software should be distributed with its source code. Even though FREYJA.EXE is less than 40K bytes, its source code and documentation take up about 560K of disk space!)

We're glad we held off. The latest version, Freyja2, is now a true, System-Manager compliant program: one that can task switch with the built-in applications including 1-2-3, without the need for any "loader" program.

## Freyja2 Features

Here is a partial list of Freyja2 features:

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## ABOUT THE AUTHOR

Ed Keefe is an author, programmer, computer science instructor, and long-time contributor to support publications for HP computers. He is the president of the FastAid Company, 314 S.W. Logan, Ankeny, IA 50021. Ed's CompuServe ID# is [75300,3667].



## Print to Parallel Printers from the HP95LX

**Paralink 3** is for those times you need to print to a parallel printer from the HP95LX. Just connect one end of the **Paralink 3** adapter to your printer's 36-pin female parallel port, and the other to the 95LX via the serial cable from the Connectivity Pack.

**Paralink 3** is battery powered and works with most parallel printers. It's light, small, and easy to carry.

**Paralink 3** retails for \$80.00 (or equivalent of £49.95)

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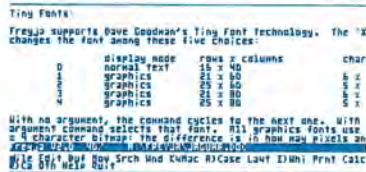
(AmEX, VISA, MasterCard accepted.)

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Herts SG3 6EX United Kingdom

- Besides being System-Manager Compliant, Freyja can use either the 95LX's built-in character sets, or tiny fonts technology.

You can edit text on a screen that ranges from the usual 40 x 16 up to one that shows an 80 x 25 screen.



Freyja2 Displaying Tiny Fonts

- Freyja works hand-in-glove with the 95Buddy program.
- Freyja uses the number format and calendar format that is specified in the 95LX's SET UP program.
- Unlike it's IBM version, Freyja for the 95LX does not contain a built-in calculator. It does have a perpetual calendar however.
- Freyja's MENU key shows a menu which is somewhat like the menu in MEMO. However, the range of options almost rivals those of Lotus 1-2-3.
- Freyja has all of the usual editing commands such as cutting and pasting, searching and replacing, file

getting and saving. It even allows split screen viewing of two files.

- Like all Emacs programs, Freyja excels in the use of macros. As a matter of fact, when you choose an option from the built-in menu, you are, actually, executing a pre-defined macro. User defined macros can be created on the fly. There does not seem to be an easy way to save and recall alternative macro sets.

- Finally, there is a built in help screen which shows the function key maps for the standard, control and shift-keys all in inverse video all on the same screen. You can have more help provided you have disk space for the .DOC files included.

## Some Rough Edges

If Freyja is loaded first, all other applications, including 1-2-3 will task switch with it. However, if 1-2-3 is loaded first, trying to start Freyja will merely get you an "insufficient memory" message on the screen.

The help command is not explained in the documentation. Further, the documentation assumes some familiarity with Emacs and the notion of "key-binding" (i.e. creating macros and assigning them to function keys) More extensive help on the 95LX is possible. However, you need about 120K bytes of disk space to load all the help files. You also need to put a command `setfreyjadir=c:\_dat` in your AUTOEXEC.BAT file, and then reboot.

I tried using the clipboard feature of Freyja to move text between a built in application and Freyja. Sometimes this would work and other times it wouldn't. Craig Finseth thought I had loaded the wrong resource file, but I did not have time to check this out (SYSMGR.RES is correct).

One of the menu options lets you access the DOS command line.

## Summary/Conclusion

Freyja, version 2.0, is a true System-Manager compliant editor for the HP 95LX. It is based on the popular,

Emacs style of editor. If you're familiar with Emacs, you'll feel comfortable using Freyja. If you're unfamiliar with Emacs, there is an extensive menu system that will let you get started using this editor.

For programmers who are trying to figure out how to write System-Manager compliant programs, in C, the source code for Freyja is almost required reading.

In short, Freyja 2.0 is a monumental feat of programming by a master of Emacs. It works, but still has a few rough edges. Best of all, it's freeware!

## Order Information

### Commercial Products Mentioned

#### Epsilon — \$250

Programmer's Editor

CONTACT: Lugaru Software Ltd., 5843  
Forbes Ave, Pittsburgh PA 15217, USA;  
Phone: 412-421-5911; Fax: 412-421-6371.

#### CompuWare

#### Professional Editor — \$300

CONTACT: CompuWare, 31440 North  
Wilson Highway, Farmington Hills, MI  
48334, USA; Phone: 800-535-8707 or 313-  
737-7700.

NOTE: Price listed is suggested retail price. You may be able to purchase the product for less from a software retailer.



## Shareware/Freeware Mentioned in This Article

### On the HP Palmtop Paper ON DISK

\*CIS \*Free Freyja 2.0 Mar/Apr 93

\*CIS \*\*SHR 95Buddy Jul/Aug 92

\*CIS — Also available in the HP Handhelds forum of CompuServe.  
SHR — SHAREWARE is software distributed free of charge for evaluation purposes only. If you decide to use it, you must pay the author the shareware fee. This goes for any shareware found on The HP Palmtop Paper ON DISK or CompuServe.

ORDER FREYJA DIRECT: You send either blank diskettes and SASE or US \$3.00 per disk to: Craig Finseth, 1343 Lafond, St. Paul, MN 55104, USA. Disk Requirements: Freyja only (two low density 5.25" or one low density 3.5"). Memutil only (one 5.25" or 3.5" disk).



# The HP 95LX: A Must for Serious Students!

*This profile documents a college business student's rather thorough use of the 95LX. A lot of good tips are included.*

By Douglas D. Gilbert

I am a full-time undergraduate student at the University of Pittsburgh majoring in Business. The instructor of my first business finance course highly recommended that we buy a good financial calculator. As I checked out the range of financial calculators on the market, \$20 Sharps to the \$100+ HP19B Financial Analyst, I noticed the HP 95LX. It seemed a bit pricey for a student, but I was curious so I put both the HP19B and the 95LX on my student charge account and took them home to do a detailed comparison of features.

## GRAPHICS IN BASIC?

SS95.LIB is the only graphics library with sound support designed for BASIC programmers that allows you to:

- draw lines, boxes & fills
- print text in graphics mode
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606-269-0496

Although the 95LX calculator function was missing some 19B's financial functions, I found that the power and flexibility of Solver more than made up for it. Now all I had to do was reconcile in my mind the price difference.

I went back to the store to check out the Casio BOSS, Sharp Wizard, and the rest of the pocket organizers. I added up the price of all the accessory cards needed to make one of these machines match the features of the 95LX. With a Lotus 1-2-3 and communications card, extra memory, and other add-ins, the best alternative palmtop cost about \$1,000. So for about \$400 less, I bought the 95LX and got all these features, and more. I returned the 19B and spent the weekend reading the manual and learning the 95LX.

### More Bang for the Buck

As it turns out, I'm using the 95LX more than I ever expected. I use the appointment book with WEEKABK to schedule all my classes and assignments. I use HP CALC with Solver and Lotus 1-2-3 for math,

finance, statistics, and management science classes. I use MEMO for quick notes, VDE for editing large Solver (.EQN) files, and PHONE for a number of database applications. I use DC95 and DCS95 from the HP Connectivity Kit to transfer files to and from my Desktop PC. I use Menu95 to run DOS programs like VDE and LINDO/PC (a linear equation solver). While I study or work on my desktop PC, CLOCK.EXM turns my 95LX into a large digital clock. I've even used USounds to gracefully bow out of phone conversations and get back to the books.

### Solver Helps Me with Introduction to Finance

I started experimenting with Solver immediately. I entered all of the equations from my introduction to finance textbook into the Solver catalog. The more I used Solver and TVM (Time Value of Money) the better I understood the financial equations, and HP CALC.

As the course progressed, Solver became invaluable. I finally got to the point where the financial equations




### ABOUT THE AUTHOR


Douglas Gilbert graduated Summa Cum Laude from the University of Pittsburgh with a B.S. in business. He is currently a first-year graduate business student at Carnegie Mellon's Graduate School of Industrial Administration concentrating in finance.



were too long and complex to enter into Solver, so I started experimenting with the powerful Solver/1-2-3 combination — what a great time saver! As I tried the problems at the end of each chapter, I invariably found situations where the equations I entered didn't work as expected. I ended up spending lots of time debugging and expanding the scope of some of the equations. Without the 95LX, I would have probably spent less time studying these equations, but my understanding of them would have been less. The big payoff came at test time. My level of understanding coupled with the efficiency of the 95LX let me finish the test quickly, and spend the extra time reviewing my results for accuracy.

My library of Solver equations and .WK1 files include all of the TVM equations, including perpetuities and uniform annual series (STUDENT.ZIP ). In addition I have equations relating to stock and bond valuation, portfolio analysis, investment analysis, margin trading, capital structure and budgeting, cash flow and break-even analysis, ratio analysis, inflation factors, depreciation, inventory analysis, Markov equations, waiting line equations, arithmetic and geometric series, matrix operations, and linear regression analysis.

### Exporting Excel Spreadsheets to the Lotus .WK1 Format

Connecting the 95LX to my desktop was easy enough with the HP Connectivity Kit software (DC95 / DC-S95) or the ZIP  communications software. However, creating and modifying Solver equations and 1-2-3 spreadsheets on my desktop PC was a little trickier.

I am more comfortable with Microsoft Excel than I am with Lotus, so I create my spreadsheets in Excel and save them in the Lotus .WK1 format (in Excel, press **File, Save As**, and select **WK1** as the File Type.) The only problem with the Excel-to-WK1 conversion is that some of Excel's functions are beyond the current repertoire of Lotus. I sometimes have to take a laborious, roundabout ap-



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proach in Excel to create a worksheet that I can export to 1-2-3.

### Using Alternate Characters for CALC Variables and Editing .EQN Files on My Desktop PC

I like to use shortcut names for my solver variables. The maximum length of a variable name is 15 characters. Although this is usually sufficient, I like as much information in the name as possible, since I may not use the equation for a semester or so. For example, I use the letters **Ä**, **Ë**, and **İ** to represent the Actual, Expected, and Initial values of a stock. (These letters are created on the 95LX by pressing **[ALT]-142**, **[ALT]-21**, and **[ALT]-225**. (A full list of the HP 95LX Character Set is on page E-2 of the HP 95LX User's Guide.)

### PHONE Databases Keep Me Organized

I keep a list of my most frequently

called numbers. For friends in my karate club, I put **/karate** at the end of the address field and use the Only function (press **[F6]**) when I want to call everyone for a club event. I create temporary databases when doing library research. I keep track of publications, titles, dates, author, and brief content notes. I use these temporary databases to help me efficiently search for a publication. I'll review the entries, delete those that don't have the information I want, and save the rest for bibliographies or future reference.

```

Edit card          03/17/93  3:20 pm
Enter the name
Name:  Counseling strategies -
Number: J. R. French & H. T. Bradley
Address:
Journal of Business Strategy, Vol. 3,
no.2, Feb/mar 1993.
Describes downsizing strategies of
Fortune 500 companies. IBM, Sears,
etc.
    
```

```

Help          Insert  Index
Find
    
```

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Inputs needed: year, time zone, latitude and longitude of location. Also optional inputs. HP 95LX holds time zones for 250 + 8 cities.

Available now, on 3.5" disk, including two versions: (1) for HP 95LX, file size: 110 KB; (2) for any PC running Lotus 1 2 3, Rel. 2.4. Instructions and example for both versions.

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loan applications. I list a short description of the task, followed by a due date as shown below.

Appointment Book	03/17/93	2:59 pm
my2.abk	Todo	
Friday July 30th, 1993		
1st Priority:	Invest Mgt Final 8/5	
	Upper Mgt project 8/7	
3rd Priority:	book - Tom Peters new book	
5th Priority:	movie - A River Runs Thru	
9th Priority:	bread	
	milk	
Copy	Paste	Note
Help	Cut	Goto
	Find	Watch

### APPT To-do List Entry

In this example, **Invest Mgt Final 8/5** is a first priority item, and has an attached note reading, **Covers chapters 9-14 + handouts**. I take the information right off the course syllabus and enter each item one week prior to the due date. I then copy the information to the Daily Schedule section of APPT, coincident with the actual due date. As additional homework is assigned, I add the information to the

list and schedule.

I add groceries and other needed supplies to the to-do list one item at a time, with a priority of 9. That way, I don't forget anything and the items are out of the way of more important tasks. A list of between-term projects accumulates over the term in the 3rd - 8th priority positions. These items include things I have to fix, books I want to read, movies I want to see, friends I want to visit, etc.

I use the Yearly Repeat feature to track friends' and family birthdays and anniversaries. Weekly Repeat helps me with my karate, since I workout on different campuses and at different times throughout the week. I press **MENU** Settings Timeline Appts-Only Quit so that all of my appointments are visible on a single screen. I set my alarms for a couple of hours prior to a pending appointment, to give me some warning in case I've forgotten about it. Lastly, I use **WEEKABK** with APPT for week-at-a-glance planning.

I have other **PHONE** databases, including the following:

- Important phone numbers that I may need to access (bookstore, student accounts, instructors, fellow students, etc.).
- Potential employer information / future opportunity contacts.
- Textbook information, including title, author, class, course number, instructor, and where to find if the book is out of stock.
- Vocabulary database, that I add to while reading, researching, or listening to a lecture.

### Appointment Book a Life Saver

APPT helps me juggle a heavy schedule. APPT tracks and reminds me of study time, karate workouts, homework assignment due dates, and between-term projects. I use the to-do list to prioritize homework and make sure that I meet deadlines for student

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* Articles
: Focus on the Family/Parenting
: Christianity Today/Missions
: Shopping List
+ MEDICAL NOTES/MEMOS
* Osteochondrosis 01-11-93 08:01
: Premature Osteoarthritis
: Hydrocortisone side effects
0: View Edit Alter Mark Bin Go Fmt Lvs
  
```

#### fastLINE! Features

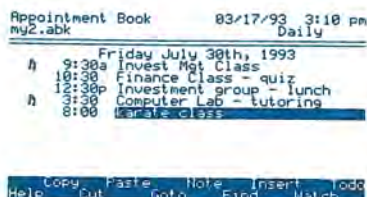
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fastLINE! version 1.0 (C1105) .....\$89





#### APPT Daily Screen Appointments Only Displayed

I wish APPT could magically add time to my term breaks. Fortunately its ability to prioritize and make sure important tasks don't fall through the cracks saves me plenty of real time and headaches.

### MEMO and VDE for Note Taking

I mentioned earlier that I use VDE<sup>®</sup> to edit Solver's .EQN files. VDE is a full-featured word processor, suitable for most applications. I would like to see a System-Manager compliant version made available. (*Editor's Note: fastWRITE, a Switchable version of VDE is now available from ACE Technologies, see page 51 this issue.*) I still use MEMO for taking short notes. I use VDE for taking longer notes, and for creating lengthy outlines to be expanded later into a paper.

I have created a few MEMO files that I refer to often. One of them is ASCII.TXT<sup>®</sup>, a complete listing of the 95LX character set along with the ALT-key combinations needed to create the character. ASCII.TXT also includes separate listings for the special characters I use in Solver along with the description of what they mean. I also have a MEMO file called SPCLTRNG.TXT<sup>®</sup> that I use as a packing checklist. I consult this when packing for my karate special training trips around the country.

### Experiences in Graduate School

The preceding portion of this article was written while I was an undergraduate at the University of Pittsburgh. I have since entered Carnegie Mellon's Graduate School of Industrial Administration. I found better ways to track assignments over each of GSIA's seven-week mini-semesters.

I now use PHONE to track assignments and my schedule. I

dropped WEEKABK because I needed to see a detailed week at a glance. The Todo list no longer tracks homework, tests, or any other academic events. It is reserved for reminders about things like tuition bills, changing batteries, and the things I try to cram into the short break between semesters. The Appointment Book is reserved for group meetings, interview times, and birthdays. PHONE takes care of the rest.

In HOMEWORK.PBK, I use the Name field for the date, day and class. I also use one record to separate and number the weeks remaining in the semester. Since PHONE sorts the Name field information, as new tasks are added they are automatically sorted by date due.

The Number field is used for the assignment detail (i.e. "Midterm" or "Case 3 due"). The Address field contains the details of the assignment (i.e. "test covers chapters 1-16"). As the weeks progress, I delete each task as it is completed. This approach usually gives me two full weeks of detailed schedule information on one screen.

### Conclusion: The 95LX is a Must for Serious Students

The 95LX goes with me everywhere and has helped maintain order in my hectic life. I do spend some time studying and programming business functions into Solver and 1-2-3, but the 95LX has freed up time elsewhere with its scheduling functions.

Stress levels during math-intensive tests have been reduced considerably. After all of these years doing arithmetic grunt work, I'm glad to see a machine that reduces the work to a combination of study, understanding, and simple data entry. At last I don't have to keep proving to the world that I know how to add and multiply.

My desk is now free of the hundreds of little post-it notes that I used to shuffle and lose in the process of trying to keep on top of things. I now have quick access to phone numbers anywhere I am. The 95LX unloads some of the clutter in my head, and makes more room there for effective study.

## APPLICATION BUILDER FOR THE HP 95LX

With QAPalm you can create custom data collection and viewing applications for your palmtop on your PC without programming. Uses an easy screen painting approach. Transfers data to dBase and Lotus 123 formats. Demo available.

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The 95LX should be considered as one of the necessities of student life. You pay your tuition and buy your books, 95LX, etc. Familiarity with financial calculators and powerful business tools like Lotus 1-2-3 is already expected of students in many professional programs. Student life is a time where your total focus is learning. You might as well spend some of your time learning to use the HP 95LX, one of the most useful business tools I've ever seen.



### Shareware/Freeware Mentioned in This Article

#### On the HP Palmtop Paper ON DISK

\*CIS \*\*SHR VDE162.ZIP — Fall 1991  
\*CIS WEEKABK3.ZIP — Nov/Dec 92  
STUDENT.ZIP — Mar/Apr 93  
ASCII.TXT — in STUDENT.ZIP  
SPCLTRNG.TXT — in STUDENT.ZIP

#### On the 1992 Subscribers Disk

\*CIS CLOCK.EXM  
\*CIS USOUNDS.COM  
\*CIS ZIP.COM  
\*CIS WEEKABK

\*CIS — Also available in the HP Handhelds forum of CompuServe.

\*\*SHR — SHAREWARE is software distributed free of charge for evaluation purposes only. If you decide to use it, you must pay the author the shareware fee. This goes for any shareware found on The HP Palmtop Paper ON DISK or CompuServe.



# Phone Enhancing Products

Check out these PHONE databases, conversion utilities, and programs that extend the usefulness of Phone Book.



By Hal Goldstein

One of the most robust applications built into the 95LX is PHONE. Sure, it helps you keep track of names, addresses, and phone numbers. But as past issues of *The HP Palmtop Paper* have documented, it's potential is far greater than that!

Over the last year we've discovered that many creative people have exploited and expanded the usefulness of PHONE with what I'll call "Phone-enhancing" software. These Phone enhancers can be divided into three categories: data bases, conversion utilities, and PHONE extenders.

Databases are simply PHONE files with different kinds of information. The PHONE databases that people have created range from Old Testament verses and references, to airport longitudes and latitudes, to an HP Calc Solve help file.

Conversion utilities let you exchange PHONE file data between the HP 95LX and software on other organizers and computers.

PHONE extenders are programs that add to the capability and functionality of the PHONE program.

Fortunately, much of this software is available at no or little cost. The rest of the software is commercial, but still relatively inexpensive for the value received. Most of the free and shareware PHONE enhancers are available in the CompuServe HP-HAND forum and on this issue of *The HP Palmtop Paper ON DISK* (Mar/Apr 93, available as a single issue or part of an ON DISK subscription).

If you have PHONE data bases or other PHONE enhancers you wish to share, send them to me in care of *The HP Palmtop Paper*, or upload them to CompuServe.

## PHONE Enhancing Products

Most of these files are found on *The HP Palmtop Paper ON DISK*, or in the HP Hand forum of CompuServe. A few commercial products are also mentioned. Below each product description is a line indicating where the software can be found. For example, ■ CIS, ON DISK (J/F 93) indicates that the program is available on CompuServe's HP Hand forum and the Jan/Feb 93 issue of *The HP Palmtop Paper ON DISK* (ON DISK issues can be obtained individually, or subscription from Thaddeus Computing, Phone: 800-373-6114 or 515-472-6330; Fax: 515-472-1879). COMMERCIAL, indicating a commercially available program, will be followed by contact information or a page reference for more information.

### PHONE Database Files

These .PBK files are examples of unique and interesting Phone Book databases. They are listed by product name, filename, file-size, and brief description.

#### Help for 1-2-3

123HELP.ZIP

Bytes: 9,166

A PHONE file (123HELP.PBK) that contains 1-2-3 @functions and 1-2-3 macro commands with definitions for each in the address field.

■ CIS, ON DISK (M/A 93)

#### Airport Abbreviations Code, Longitudes/Latitudes

AIRPOR.PBK

Bytes: 6,629

Use this file and Solver equation on page 30-18 of *HP 95LX User's Guide*, to determine the distance between locations.

■ CIS, ON DISK (M/A 93)

#### Area Codes

AREACO.PBK

Bytes: 2560

Telephone area codes

for North America, American Territories, Canada, and Mexico .

■ CIS, ON DISK (M/A 93)

#### CompuServe (USA)

Phone Numbers

CIS.PBK

Bytes: 31,197

CompuServe network phone numbers in 95LX .PBK format. These files contain the list of CompuServe numbers current to 7/1/92. It is sorted by state, then city, and can be searched using the Phone Book ONLY function. Each record shows state, city, number and baud rates. Data source is "GO PHONES."

■ CIS, ON DISK (M/A 93)

#### Dictionary of 95LX/Computer Terms

COMPDICT.PBK

Bytes: 22,633

A database dictionary of computer terms from subscriber Ahmet G. Ozisik.

■ CIS, ON DISK (M/A 93)

#### Useful List of HP Telephone Numbers

CONTAC.HP

Bytes: 3,295

Phone numbers for HP pre-sales and post-sales product support. Downloaded

HP SUPPORT LINK 4/30/92.

■ CIS, ON DISK (M/A 93)

#### 1992 Cubs Schedule in Phone Book and Lotus Format

CUBS.ZIP

Bytes: 8576

CUBS.PBK is a list of all CUB games including date, time, home/away, and opponent. With the ONLY command you can display just home games, just Giants games, just games in June, etc. Unfortunately, this is the 1992 schedule, but is still an excellent model for creating disciplined useful database files using PHONE.

■ CIS, ON DISK (M/J 92)

#### International Dialing Codes in PBK Format

DIALCO.PBK

Bytes: 5,248

An international dialing code listing with city codes for major cities. Similar to the \_1.PBK phone book that comes with the HP 95LX.

■ CIS, ON DISK (J/F 93)

#### International Direct Dialing

IDD.PBK

Bytes: 14,976

IDD.PBK is a

95LX Phone Book with many Country and City telephone codes.

■ CIS, ON DISK (M/A 93)

#### New Testament Bible Verses

NEWTES.PBK

Bytes: 38,12

This Phone Book file allows 95LX users to select New Testament Bible verses by topic or reference. It contains selected verses from various translations.

■ CIS, ON DISK (M/A 93)

#### List of CompuServe Nodes

NODES.PBK

Bytes: 20,021

List of all the CompuServe 3-letter NODE abbreviations. If you use the "UST" command to show what other users are on-line, this file will tell you where each user is connected to the CompuServe network.

■ CIS, ON DISK (M/A 93)

#### Old Testament Bible Verses

OLDTES.PBK

Bytes: 19,456

This file contains Selected Old Testament Bible verses in



the phonebook format. Individuals can select verses by reference or by key words or topics. Uses various translations.

■ CIS, ON DISK (M/A 93)

### SupplyLine Electronic Catalog of HP 95LX Products

SLINE.ZIP

Bytes: 8,398

Updated edition of U.K. Palmtop Paper distributor SupplyLine product guide for the HP 95LX as of January, 1993.

■ CIS, ON DISK (M/A 93)

### Solver Help File for the HP 95LX

SLVHLP.ZIP

Bytes: 7,665

SLVR\_HLP.PBK is a Phone Book file adapted for use with the 95LX CALC program. It provides

pop-up help for all the known Solver commands, along with help for some of the lesser known functions. SLVR\_HLP.PBK is an update of the version available on the PTP Subscribers Disk, and is one of the bonus programs on the Multi-Macro Manager disk. Upload by Ed Keefe.

■ CIS, ON DISK (M/A 93)

### Full Special Character Set for the 95LX

SYMBOL.PBK

Bytes: 1,644

A full special character set for the 95LX, in .PBK format for easy reference. From code page 850 and Appendix E of the HP 95LX User's Guide.

■ CIS, ON DISK (M/A 93)

### Longitude and Latitude in the USA

USA.PBK

Bytes: 8,108

Use this file and the Solver equation on page 30-18 of the HP 95LX User's Guide to determine the distance between two locations.

■ CIS, ON DISK (M/A 93)

### Other Database Files in TXT (MEMO) Format

#### CompuServe Command References

CISHLP.ZIP

Bytes: 5,369

This file has a listing of CompuServe commands, their abbreviations, and the prompts where each is valid. It is formatted to display well in MEMO. It is not complete, but it has more

than the CIS reference card you get from the CIS Tour.

■ CIS, ON DISK (M/A 93)

#### TV Guide Text File

GUIDE.TXT

Bytes: 4,596

A text file of prime-time TV shows to impress your couch potato friends. Courtesy of Dave Goodman.

■ CIS, ON DISK (M/A 93)

### Conversion Utilities

#### Data Exchange for Mac: Connectivity Pack with Phone Book Translation

Macintosh-to-95LX connectivity package with Phone Book-to-Mac file translation utilities.

■ COMMERCIAL, see page 14 this issue.

#### Data Exchange for Windows: Connectivity Pack with Phone Book Translation

PC with Windows-to-95LX connectivity package with Phone Book-to-Windows files translation utilities.

■ COMMERCIAL, see page 8 this issue.

#### MacLink Plus: Connectivity Pack with Phone Book Translation

Macintosh-to-95LX connectivity package with Phone Book-to-Mac file translation utilities.

■ COMMERCIAL, see page 14 this issue.

#### HP Connectivity Pack

This PC file transfer program comes with a merge utility

that lets you combine two .PBK or .ABK files. It also comes with a translate utility that you convert Phone Book or Appointment Book files to the formats of Lotus Metro, Borland Sidekick, Central Point PC Tools Desktop, or Conventional Data Format.

■ COMMERCIAL, see page 15 this issue.

#### IntelliLink/XLT; IntelliLink for Windows

IntelliLink/XLT adds additional translation support to the 95LX's Connectivity Pack. IntelliLink for Windows is a file transfer program that provides the translation utilities of IntelliLink/XLT.

■ COMMERCIAL, see page 16 this issue.

## INTERNET E-MAIL SERVICE FOR THE HP 95LX

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- ▲ Two-way wireless access is available for \$69 per month - **flat rate** - through RAM Mobile Data if you sign up by June 30, 1993.
- ▲ 1200, 2400 and 9600 bps dialup access is available.
- ▲ Canadian, European and Pacific Rim dialup access is available at additional cost.
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#### 952ORG 1.10:

#### 95LX-to-Lotus

#### Organizer Conversion

952ORG.ZIP

Bytes: 14,075

This utility converts 95LX appointment and phone book files to an ASCII format that is suitable for direct import into Lotus Organizer for Windows. This new release converts the Todo list as well as appointments and phone records. The names in phone records are now optionally parsed into title, first name and last name.

■ CIS, ON DISK (M/A 93)

#### HP 95LX Phone Book File Format

FORMAT.PBK

Bytes: 2,503

The specifications of 95LX Phone Book files.

■ CIS, ON DISK (M/A 93)

#### 95LX-to-Macintosh Conversion

HP95MA

Bytes: 84,992

This is a freeware prerelease version of a program for converting HP 95LX Phone Books to a Macintosh Database compatible TEXT file. Field names from the 95LX become RecNbr, Name, Number, Adr1, Adr2, Adr3, Adr4, Adr5, Adr6, Adr7 & Adr8 where each line of the address field of the 95LX becomes a separate field. The Mac file may be imported into another Mac AddressBook application or used as a Mail Merge file.

■ CIS, ON DISK (M/A 93)

#### Power Up Address Book Plus-to-Phone Book Conversion:

AB2HP 1.1:

AB2HP.ARC

Bytes: 32,523

Utility to convert address files from Power Up Software's Address Book Plus to the format used by the 95LX Phone Book.

■ CIS, ON DISK (M/A 93)

#### Phone Book-to-Psion Organizer Conversion

HP2LZ.LZH

Bytes: 4,992

Utility to convert 95LX Phone Book files to the format used by the Psion Organizer pocket computers. Non-Psion owners should note that the Psion file format is tab delimited text with records that terminate with CR/LF! Written in Turbo Pascal, source code included, released to the public domain.

■ CIS, ON DISK (M/A 93)

#### Psion-to-Phone Book Translation Utility with Source Code

PHONE9.LZH

Bytes: 7,168

A quick and dirty Turbo Pascal utility that will take a Psion Organizer database file uploaded to a PC and create a properly formatted .PBK file for the 95LX. Use at your own risk, et cetera. The 95LX phone book file format is documented in the program source code.

■ CIS, ON DISK (M/A 93)

#### 95LX Conversion Utility in Hypercard Stack

MACPBK.SIT

Bytes: 52,736

A Macintosh Hypercard V2.x Stack to convert Phone Book files between the 95LX, Atari Portfolio, and user selectable delimiter database file formats. Self unstuffing Stuffit archive.

■ CIS, ON DISK (M/A 92)

#### Strip EOF Markers from Text Files

STRIP.EXE

Bytes: 6,400

Small utility to strip EOF markers from DOS text files. Useful for those having trouble converting Phone Book files using the 95LX Connectivity Pack translation routines.

■ CIS, ON DISK (M/A 93)

#### To SideKick: Phone Book-to-Side-Kick Translation

TOSK.ZIP

Bytes: 8,352

"To SideKick" is a utility to convert a 95LX .PBK file into a SideKick phone book. Written in standard C with source code included.

■ CIS, ON DISK (M/A 93)

#### THOR 2.0 Converts ABK and PBK Files to ASCII Format

THOR.ZIP

Bytes: 26,299

Thor, by Craig Finseth, has two programs. THORABK .EXE converts .ABK files to ASCII files. THORPBK.EXE converts .PBK files to ASCII and back; useful for merging two PHONE files. In FREYJA2.ZIP

■ CIS, ON DISK (M/A 93)

#### 95LX Phone Book-to-Windows Card File Conversion

CRDPBK.ZIP

Bytes: 16,070

Programs and documentation to convert HP 95LX .PBK files to and from Windows cardfile (.CRD) format. The index line of the cardfile card becomes the name, the first line of the card the phone number, and the rest of the card the address. Long cardfile fields are truncated.

■ CIS, ON DISK (M/A 93)

### Phone Book Extenders

#### 95Buddy:

#### Adds Functions to 95LX Phone Book

95BUDDY.ZIP

Bytes: 74,676

Adds dozens of features and keystroke shortcuts to PHONE, and other 95LX applications. Features include: Open PHONE from FILER; go directly to the File Open menu; link a MEMO file to a card; change default directories; paste to the phone card editor; 10 preset file "hotkeys" to the file open/save menus; quick date/time stamp in Memo, Phone, or Appt; change titles of Phone's name, number, and address fields; find & replace function added to search; delete to end or start of line, delete entire line added; add labels to User Defined keys. (See Jul/ Aug 92, pg 6; Nov/ Dec 92, pg 18 for more on 95Buddy.)

■ CIS, ON DISK (J/A 92)

#### Calendar Supplement for the HP 95LX

Utility that provides a simple-to-use menu interface for selecting, removing, and merging Phone Book and Appointment Book entries.

This supplement to Appt's calendar lists holidays and important dates worldwide; lunar, solar, and time zone days; national holidays for over 150 countries; religious holidays for 6 major religions; zodiac days and more. Includes system utilities for battery life, file pro-

tection, and more.

(See page 46 of the Sep/Oct 92 issue for more on Calendar Supplement.)

■ COMMERCIAL: Contact: ASP, P.O. Box 81270; Pittsburgh, PA 15217, USA: Phone: 412-422-4134; Fax: 412-422-4135.

#### Dialtone 1.1:

#### 95LX Tone Dialer

DIALTO.ZIP

Bytes: 35,652

A minor revision of the 95LX Touch-tone dialer. Now supports '\*' & '#' in dial strings, displays the PBK "Name" field while dialing, and sports a slimmer DOS EXE version. General Description: DialTone allows you to dial the phone numbers in your Phone Book(s) by directly playing DTMF tones into the microphone end of a telephone handset.

■ CIS, ON DISK (M/J 92)

#### PhoneBook

#### File Repair Service

This service requires that you send in your 95LX to recover corrupted Phone Book or Appointment Book files (see announcement, page 10 for more information).

#### PBKMRG: Phone Book PBK Merge Utility

PBKMRG.ZIP

Bytes: 10,328

Utility to merge .PBK files. Allows merging many files with a single command and outputting only names and numbers (not addresses) to the merged file. DOS application, Diets down to under 10K.

■ CIS, ON DISK (M/A 93)

#### Suggestion for Those with Large PBK Files

PBKTRIP.TXT

Bytes: 3,442

A text file that describes a solution to

the problems of running out of file space with PHONE. Create several .PBK files and use a batch file to switch from one to the other as needed.

■ CIS, ON DISK (M/A 93)

#### View PBK Files on the 95LX or PC

PHONE2.ZIP

Bytes: 13,758

This is a "beta" release of a phone utility that lets you view .PBK phone files from DOS on your 95LX or PC. It will also dial a selected item using your modem.

■ CIS, ON DISK (M/A 93)

#### PRT95: Print Address Books / Labels from Phone Book

PRT95.ZIP

Bytes: 25,897

PRT95 provides the ability to convert or print the 95LX Phone Book. It can convert the Phone Book to a Universal format, comma delimited ASCII file, or can print it in several formats: Rolodex cards, Daytimer, labels, double sided folding address book, or Day Runner format. If names are entered as "Smith, David", they will be inverted for labels. Also, an honorific will be placed in front of the name.

■ CIS, ON DISK (M/A 93)

#### Swap Phone Book Files on the 95LX

SWAP.PBK

Bytes: 4,083

The technique of using multiple files is mentioned in the Users Guide; this file describes the steps to use to make the technique work.

■ CIS, ON DISK (M/A 93)



# What's It Worth? Bond Calculations Using the HP 95LX

*The 95LX has taken criticism as a business calculator because it does not have a built-in bond price and yield function. However, it is relatively easy to use HP CALC or Lotus 1-2-3 for such calculations.*

By Ralph Butler

Consider the following problem: A firm has a bond with an annual coupon rate of 8%, face value of \$1000, annual yield to maturity of 10%, and makes semi-annual payments. What is the current selling price of the bond?

It's an easy problem to solve with a number of HP calculators, including the HP 12C, 17BII, and the 19BII. You can also solve this problem using the 95LX's HP CALC "Time Value of Money" (TVM) function or the Lotus 123 \_CFLOW.WK1 spreadsheet included with the HP 95LX.

graphic.

Time Value of Money - case 1			
Number of periods.....	N	=	0.00
Annual interest.....	I/YR	=	0.00
Present value.....	PV	=	0.00
Payment.....	PMT	=	0.00
Future value.....	FV	=	0.00
Payments per year.....	P/YR	=	12
Begin/End mode.....	B/E	=	END
0.00			
Report	E E	N	PV
Help	Iconv	P/YR	I/YR
		PMT	FV

HP CALC's TVM Screen

Number of periods ..... N = 20  
(10 years of semiannual payments)  
Annual interest ..... I/YR = 10  
(Current YTM % not face value %)  
Present value ..... PV = 0  
(HP CALC will solve for this value)  
Payment ..... PMT = 40  
(Face value of bond x face value %)  
Future value ..... FV = 0  
(Not used in this calculation)  
Payments per year ..... P/YR = 2  
(Semiannual payments)  
Begin/End mode ..... B/E = END  
(Payments made at end of period)

Press **[F8]** to calculate PV, and you get -498.49 (rounded) or \$498.49. This

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*Written by Ed Keefe, Contributing  
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## Determining the Selling Price of a Bond using HP CALC

The selling price of a bond in this example is simply the present value (PV) of all expected future yields of the bond. Since bonds usually make periodic interest payments through the life of the bond and make a lump sum payment equal to the face value of the bond at maturity, this problem can be stated as:

Selling Price = PV of interest payments + PV of maturity value.

On the HP 95LX, press **[HP CALC]** **[MENU]** TVM to get to the TVM screen. Next, enter the problem data as indicated in the next column below the

## ABOUT THE AUTHOR

Ralph Butler is an engineering manager at Groupe Bull Large Systems Engineering in Phoenix AZ. He is currently a graduate student in the M.B.A. program at Arizona State University where he uses his HP 95LX extensively in the finance and accounting classes. Contact: Ralph Butler, Groupe Bull, P.O. Box 8000, MSC71, Phoenix, AZ 85066-8000; Phone: 602-862-4158; E-mail: r.butler@az05.bull.com



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is the PV of the interest payments half of the solution.

For the PV of the maturity value enter the following values:

Number of periods ..... N = 20  
(10 years of semiannual payments)  
Annual interest ..... I%YR = 10  
(Current YTM % not face value %)  
Present value ..... PV = 0  
(HPCALC will solve for this value)  
Payment ..... PMT = 0  
(No periodic payments made)  
Future value ..... FV = 1000  
(Face value of bond)  
Payments per year ..... P/YR = 2  
(Semiannual payments)  
Begin/End mode ..... B/E = END  
(Payments made at end of period)

Press **[F8]** to calculate PV, -376.89 (rounded) or \$376.89. This is the PV of maturity value half of the solution.

Therefore, the current selling price of the bond is the sum of the two present value calculations = \$498.49 + \$376.89 = \$875.38 (rounded).

### Determining the Selling Price Using Lotus \_CFLOW.WK1 Spreadsheet

This bond problem can be solved in a single step using the \_CFLOW.WK1 spreadsheet included with the HP 95LX. Press **[123]** **[MENU]** File Retrieve, highlight C:\\_CFLOW.WK1 and press **[ENTER]**. Next, press **[ALT]-E** Yes **[ENTER]** to erase the data in the worksheet.

Enter the problem data as follows. At t=0 (cell B44), enter 0 and press **[<Down Arrow>]**. Then at t=1 (cell B45), press **[ALT]-G** 40 **[ENTER]** 20 **[ENTER]** to copy the \$40 interest payment for 20 periods. Next, add 1000 to the t=20 (cell B64) payment to represent the maturity value (t=20 now equals 1040).

To calculate the present value press **[ALT]-N**, and after a couple of seconds, NPV = 489.18617681 appears. We didn't get the right answer because the default interest value is 10% and we need to use the semi-

annual period interest rate which is 5%. Press **5** **[ENTER]** and the correct answer appears (NPV = 875.3778965-7) (rounded to 875.38).

I find it a lot easier to use the \_CFLOW.WK1 spreadsheet to solve this type of bond problem.

### You Try It!

Now, consider the same bond except that the current selling price is \$1055. What is the annual yield to maturity? This is left as an exercise for the reader or perhaps the subject of a future article.

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### System requirements

**PC version:** MS-DOS 2.1 or later, only 512Kb RAM and one 3.5" or 5.25" disk drive. Suggested retail price \$250.

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# User Keys Make Built-In Applications Work Together

*Develop user defined keys to coordinate the activities of two or more built-in applications, and to pause and prompt you for input. Learn how you can break through the ten-key barrier!*

By Ed Keefe

Modern medicine has discovered three certain causes of headaches: drinking too much of certain beverages; listening to rap music; and having to enter too many keystrokes on a tiny computer keyboard. Fortunately, the HP 95LX offers a way to avoid the last headache — User Keys.

User Keys, also known as system macros, are powerful tools to help you customize your 95LX. A good introduction to User Keys was given in Hal Goldstein's article, "User Defined Function Keys: An Advanced Lesson for Beginners" (page 41 of the March/April 1992 issue). The *HP 95LX User's Guide* also describes them in a section called "Creating and Using User Keys" (see pages 21-14 to 21-20).

This article assumes that you're familiar with the basics of creating and using User Keys. Let's see some of the wizardry User Keys can perform.

## Using HP CALC and MEMO to Pick a Winner

Using your 95LX to pick a Lotto number makes about as much sense as anything. You'll still lose, but you'll have fun doing it. This example shows how to develop a User Key that will coordinate the activities of HP CALC and MEMO.

The winning number in many Lotto games is a series of five numbers, each between 1 and 36. We'll develop a system that randomly selects a series of five numbers and displays them on your screen, prefaced by "Your lotto numbers are..."

*[Editor's Note: The contents of all User Keys and Solver equation can be found in UFK.TXT.]*

### Entering the HP Calc Equation

On your HP 95LX press **HP CALC** **MENU** **S** to enter CALC's Solver. Highlight a blank field and press **F2** to go to the Solver Editor. Key in the following equation. (Note that the last line uses slightly different numbers.)

```
lotto=IP(MOD(RAN#*100,35)+1)+
1E2*(IP(MOD(RAN#*100,35)+1))+
1E4*(IP(MOD(RAN#*100,35)+1))+
1E6*(IP(MOD(RAN#*100,35)+1))+
1E8*(IP(MOD(RAN#*100,25)+10))
```

*[Note that the five lines are almost identical. It is faster to type this formula into MEMO and then transfer it to the Solver Editor. After you enter the first line of the formula in MEMO, you can use Mark (F9) and Copy (F2) to put a copy of it on the four subsequent lines. Then modify the copies so the formula is correct. Finally, use Mark (F9) and Copy (F2) to copy the whole formula. Then go to HP CALC's Solver function, move the cursor to an empty line, and press **CTRL**-**F4** to Paste the formula into Solver — Hal.]*

This equation uses the RAN#

function to generate a random number, the integer part of which is kept in the range 1...36 through the use of the MODulo function. Each of the five lines multiplies a random number by an even power of 10 (i.e. 1E2 means 10<sup>2</sup>). All five lines are added together and assigned to "lotto."

When you've finished typing the equation, press **F9** (CALC) to show the Solve Calc screen. Press **F2** (lotto) twice to make sure the equation is working. (The number will always be 1 billion or larger. Don't worry that it doesn't look like a lotto number yet.) If it does not work, go back and make sure you entered the equation correctly. Next, press **MENU** **File** **Save** to save the file. Supply a file name if needed. Finally, press **MENU** **Quit** to exit HP CALC.

### Creating the User Key

Now, press **SET UP** **Char** and highlight an empty field to enter your User Key. Press **F10** (Macro) to enter the User Key editor. If your keys are all assigned, you can copy a couple of them to MEMO to free up some room. Highlight the key you want to copy and press **F10** to enter the edit screen. Then Mark and Copy the



### ABOUT THE AUTHOR

Ed Keefe is an author, programmer, computer science instructor, and long-time contributor to support publications for HP computers. He is the president of the FastAid Company, 314 S.W. Logan, Ankeny, IA 50021. Ed's Compu-Serve ID# is [75300,3667].



contents of the key. Press **[MEMO]** **[F4]** to paste the contents of the key to MEMO for safe keeping. Then go back to Set Up and delete the contents of the key. Later you can copy it from MEMO and paste it back to the User Key contents field.

Once you're in the User Key editor, type the word **Lotto** in the Comment field and press **[ENTER]**. Type the following macro in the Contents field.

(You can speed up your typing by using the **[F6]** key. For example, instead of typing **[ENTER]**, press **[F6]** and then **[ENTER]**. However, with 95Buddy running, pressing **[F6]** **[MENU]** produces **[F10]**, not **[MENU]**. There may be some additional mappings that Buddy does. Switch Buddy off (**CTRL** **[ ]** **[ ]** if you're going to use **[F6]** to enter user key codes.

Also, if HP CALC is set to Options Format All, the period (.) between the two **[F7]** characters on line five below should be removed.)

Since it's often difficult to see spaces in a printed listing, I've used the tilde (~) in place of spaces. Whenever you see a ~, press **[<Spacebar>]**.

Lastly, type in the User Key as running text. Don't press **[ENTER]** for a carriage return at the end of each line.

```
{CALC}{MENU}s
{F7}lotto{ENTER}{ESC}{F9}
{F2}{F2}{Ctrl-F2}{MENU}q
{MEMO}{ENTER}{F4}{HOME}
{F7}.{F7}{F9}{END}{F3}
{LEFT}{LEFT}{LEFT}{BACKSP}
{LEFT}{LEFT}{LEFT}{BACKSP}
{LEFT}{LEFT}{LEFT}{BACKSP}
{HOME}Your~lotto~numbers~are~
{RIGHT}{RIGHT}~{RIGHT}{RIGHT}~
{RIGHT}{RIGHT}~{RIGHT}{RIGHT}~
{RIGHT}{RIGHT}{ENTER}{ENTER}
```

The first three lines of the User Key open the HP CALC program and choose the Solver option. The last saved file is opened automatically. The program finds the word "lotto", and solves the equation for the lotto number. It then copies this number to the clipboard and quits CALC altogether.

The next five lines open MEMO, jump to the end of the file and paste in the number from the clipboard. It

then finds the decimal point in the number and marks and cuts everything from that point to the end of the line. Finally, it moves to the left, deleting commas as it goes.

The final four lines type out the phrase "Your lotto numbers are" before the number, and then inserts the appropriate spaces in the number.

European Readers: this macro assumes that CALC uses a period as a decimal point and commas as thousands separators. You'll need to switch to US formatting by pressing **[SETUP]** International Punctuation and select (,,). (This is option A on US Palmtops. It may be something else on other versions of the 95LX.)

### Using the Lotto Macro

Once the macro is keyed in, press **[F10]** to save the User Key and press **[ESC]** to return to the Set Up Menu. Press **[CHAR]** and the newly defined function key and watch what happens.

Lotto number screen

If all goes well, you'll see the CALC program spring into action and your lotto numbers will appear in MEMO. If you want another set of numbers, just press **[CHAR]** F-key again. If it does not work, go back and make sure you entered the User Key correctly. [Editor's Note: If you win the lottery using this method, please send half your winnings to Ed Keefe, care of Richard Hall, care of Hal Goldstein.]

### A User Key to Pause for Input

Here's an example of how to implement a "pause for input" feature. We'll do this by using two User Keys in tandem.

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Suppose you wanted to produce a list of ALL the files on either the C drive or the A drive and view the list using FILER. You could exit to the DOS prompt to create the list with the following DOS command:

```
CHKDSK <drive>: /V > C:\FLIST.LST
```

(where <drive> is either A or C). This command runs the CHKDSK program in Verbose mode and uses the DOS redirection symbol (>) to send the output to the file, C:\FLIST.LST.

Here's a way to do this without having to go to the DOS prompt.

### Create these User Keys

On your 95LX, open SET UP and press Char. Make sure you have space for at least two new User Keys. (In this example I'll use F2 and F3. You can use any two User Key fields you wish.)

Now enter the new User Key. Start by highlighting the desired User Key and pressing **[ENTER]**. In the comment field, put the word **Input** and press **[ENTER]**. Key the following macro into the contents field. (Remember, tildes (~) indicate blank spaces.)

```
{MEMO}{Ctrl-END}If Memo is not empty,
save any text: quit and start
over.{ENTER}On the line below, enter
```



A or C ; then{ENTER}press ENTER and CHAR F3{ENTER}

If need be, change "F3" in the last line of this User Key so that it matches the name of your second User Key. When you've finished, press **F10** to save the macro.

This macro opens MEMO and goes to the last line of the file. It posts a reminder to save any work and start over. It then puts a prompt on the screen and waits for you to press the letter A or C for whichever drive you want to list.

Now go to the second macro field and key in this macro. (Remember, tildes (~) indicate blank spaces.)

```
{UP} {F9} {F3} {MENU}qn{MEMO}ECHO
OFF{ENTER}CHKDSK~(F4):~/V->~C:\flist
.lst{ENTER}{MENU}fs{BACKSP}{BACKSP}
{BACKSP}{BACKSP}{BACKSP}{BACKSP}
f.bat{ENTER}{MENU}q{FILER}{F5}
c:\f.bat{ENTER}{ESC}{F4}{F3}y{F5}
c:\flist.lst{ENTER}
```

Press **F10** to save this User Key and then press **ESC** to return to the SET UP menu screen.

This User Key Marks and Cuts the letter A or C and saves it in the clipboard. It then quits MEMO and restarts it with a blank screen. It writes a simple batch file, pastes the drive letter into the second line of the batch file, and saves the batch file as C:\ F.BAT. The User Key then quits MEMO and uses FILER to goto C:\ F.BAT. It runs this batch file and then deletes it. Finally the User Key displays the file C:\FLIST.LST, created by the batch file.

### Running the User Keys

All applications but FILER must be closed for these User Keys to work properly. Press **CHAR F2** (or whatever F-key you've chosen) to start the first User Key. Then key in A or C and press **ENTER CHAR F3** (again, whatever F-key you've chosen). The screen will flash and, eventually, you'll see the words "Press any key to continue..." Press any key and the screen will flash and display the file listing. You can edit the file in MEMO or delete it with FILER.

```
Filer
Viewing file: C:\flist.lst
83/17/93 11:31 am
Directory C:\
C:\_COMMAND.COM
C:\_CHKDSK.EXE
C:\_CFLON.WK1
C:\_EXPENSE.WK1
C:\_STRT.WK1
C:\_TF.COM
C:\_HOMEBUY.WK1
C:\_CARLOAN.WK1
Directory C:\SYS
C:\SYS123.DYN
C:\SYS1000.PCX
C:\SYS_COMPUSRV.DCF
```

File listing screen

(If you attempt to use these keys with one of the built-in applications open, the process will stop in the middle. You'll then have to press **ESC**, close down all the built-in applications except FILER, delete F.BAT, and try it again.)

Once you see how this works, I'm sure that you'll be able to come up with macros to run other MS-DOS applications. The technique is especially well suited for those applications that require command line arguments, such as DEBUG, DIET, ZIP.COM, etc.

### Some Limitations

User Keys are powerful tools that you can use to customize your HP 95LX. However, System Macros do have their shortcomings.

For instance, there is no "debugging mode" with User Keys. Since each User Key can have up to 255 keystrokes, the chances of getting one keystroke wrong is pretty high.

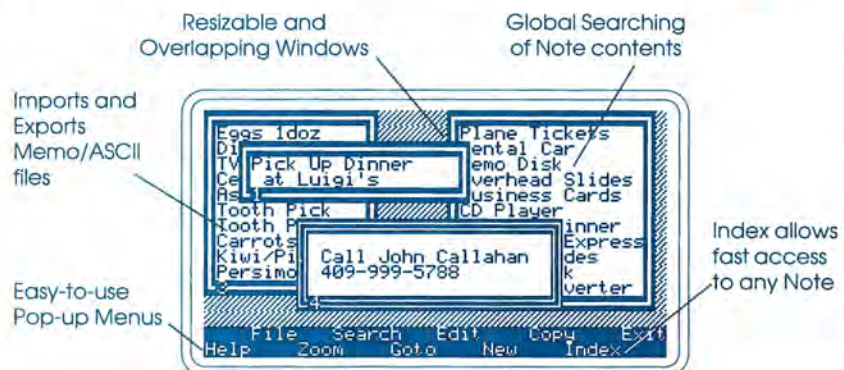
As a substitute for a "debugging mode," I suggest the following technique for building complicated User Keys. Instead of building one, large, User Key, build parts of it in separate, CHAR-Function keys. When each part is working just right, use the clipboard to copy and paste each part into the main User Key.

### Overcoming the Ten-Key Barrier

As most of us already know, only ten macros can be active on the 95LX at any given time. This feature was probably incorporated into the 95LX

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because it only has ten function keys. Here's a way to get around that limitation.

User Keys are kept in the SETUP.ENV file in the C:\\_DAT directory. If you want more than ten User Keys, you'll need to use alternate SETUP.ENV files. Here's one way to get another SETUP.ENV file.

First, use FILER to copy your existing SETUP.ENV to SETUP.OLD. The SETUP.OLD file will save all your original macros. Then press **SetUp** Char and delete any (or all) of the User Keys. You now have room to enter additional User Keys.

To reinstall your original macros, use FILER to rename SETUP.ENV to SETUP.NEW and rename SETUP.OLD to SETUP.ENV. You might even create a User Key to automate this process.

If this all sounds like too much work, read on.

### Multi-Macro Manager

The FastAid Co. offers the Multi-Macro-Manager program (MMM) as an elegant way to overcome the ten key barrier. If you need more than ten User Keys, then you'll want to read on.

Multi-Macro Manager allows you to have up to 200 macros (User Keys). You can choose one macro from a list of macros and run it by pressing a single key on the number keypad.



Multi-Macro Manager Screen

Individual macros can be copied or moved from one set of macros to another, or to a different location within the same set of macros. Individual macros may also be deleted without using the SET UP program. New, empty sets of macros can be created and old sets can be deleted at

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The disk also includes several sets of User Keys, created by those who have earned their MM (Master of Macros) degree.

MMM is a small MS-DOS program (under 15K bytes). It can be run from FILER. However, with the addition of a suitable loader program (two are supplied) the MMM program can pop-up on top of any built in application except 1-2-3.

If you'd like to save \$5.00 on your registration fee, just include a printed copy of five of your own User Keys. (If they are complicated, please include a brief description of what they're supposed to do.) With your permission, these macros may be included in subsequent releases of MMM with your name attached to them.

This is a special offer to readers of *The HP Palmtop Paper*. It will be withdrawn two months after the publication of this article. Don't delay.

Until next time, Happy Palm-topping.

### Order Information

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NOTE: The author of this article is also the author of Multi-Macro Manager.



### Shareware/Freeware Mentioned in This Article

#### On the HP Palmtop Paper ON DISK

UFK.TXT — Mar/Apr 1993



# Using Memory Cards

*How do you use them? What files should you store on them? What do you need to watch out for? What's the difference between SRAM and Flash ROM cards?*

By Mark Scardina

Last issue (page 10) we took a look at expanding the storage of your HP 95LX with the addition of a RAM memory card. This issue, I would like to focus on its use, including specific strategies and concerns.

## General Points on RAM Cards

There are some general points that pertain to a RAM card, regardless of the kind you are using.

1. Store your data files on a RAM card! Due to the design of the HP 95LX, it's easy to lose C drive data. This is especially true if you use programs other than the built-in applications.

The beginning of your C drive is actually at the end of your system memory. There is no physical barrier preventing a program from writing data into this region. The flexibility that allows you to change the ratio of RAM disk to System RAM also makes it vulnerable to corruption by an errant program or battery failure. By purchasing a RAM card you can reduce the size of your C drive as well as store irreplaceable files out of harm's way. In fact, on my system, data resides on RAM cards and programs on the C drive. This allows me to easily replace C drive files should they become corrupted.

2. Put all of your start up files, CONFIG.SYS, AUTOEXEC.BAT, etc., on your RAM card(s). Should you make an error in one of these files that prevents your 95LX from properly booting up, you can simply remove the card, press **CTRL-ALT-DEL** and have a working 95LX again.

Many PC users are familiar with creating bootable disks for their PC. The **format /s** command on a PC turns a floppy or hard disk into a bootable "system disk" with some hidden files

and a copy of COMMAND.COM on it. You don't have to try and turn the RAM card into a "system disk" to boot from it. You don't need any hidden files or COMMAND.COM (it's launched from ROM). If you have your AUTOEXEC.BAT and CONFIG.SYS files on the card, in the card slot, whenever you press **CTRL-ALT-DEL**, you'll boot from the RAM card.

3. RAM cards provide easy data exchange and backup capabilities. A PC Card drive is a device that connects to your desktop PC and lets it read RAM cards like it would read a floppy disk. It is far quicker and easier to slip the RAM card out of your 95LX and into a PC Card drive than it is to connect your 95LX up to your PC and run file transfer software. (See pages 12-19 for a look at popular file transfer software.)

**WARNING:** If you plan on purchasing a notebook PC that comes with a PCMCIA card slot, beware! You may not be able to read a 95LX-formatted memory card in it. Take a 95LX-formatted RAM card with you and test it out on the notebook you're looking at. If it doesn't work, make sure a device driver IS AVAILABLE that will allow the notebook's card drive to read a 95LX-formatted card. Many of the popular notebooks don't have these device drivers available.

## SRAM Cards

Static Random Access Memory cards



(SRAM) are by far the most popular cards available for the 95LX. Their only limitation is that their data is preserved through the use of a lithium backup battery that keeps the microchips in the card "alive." These batteries generally last for a year and are cheap enough, costing about \$3.

There are a few things you should be aware of when using SRAM cards with the HP 95LX.

## Change the Backup Battery Every Ten Months

Power is supplied to the card by the 95LX only when the 95LX is on. If the card is removed or your 95LX is off, the card's memory is preserved by its internal battery. Even though a card battery may last a year, change the battery more often!

The 95LX was designed before the current series of RAM cards. The Palmtop cannot respond to the intermediate low battery signal that the newer SRAM cards deliver when getting low on battery power. Instead it can only respond to the final low battery signal sent by the card. This is a point at which your SRAM card may lose its data. It is my recommendation that the SRAM cards backup battery be changed ten months after it was installed, regardless of its condition. Set an APPT alarm reminder.



## What to Do If You Get a Low Card Battery Warning

The first thing to do is to try and keep the HP 95LX on. Immediately

## ABOUT THE AUTHOR

Mark Scardina is a computer consultant based in San Francisco, specializing in palmtop-based applications. He can be reached on CompuServe at (76711;-732) for commercial projects.




connect it to the AC Adaptor or turn off its timeout function using programs such as TIMEOUT , SWITCH!, or 95BUDDY . Many SRAM cards will then let you replace the card's backup battery while it is still in your 95LX. A little slide lock or screw holds the retaining ring for the battery. By releasing the ring the battery can be removed. PLEASE note whether the old battery's plus side is up or down and insert the new battery the same way. Also, remember to re-lock the retaining ring to prevent removing it while trying to unplug the card.

### Maximize a SRAM Card's File Storage Capability

When SRAM cards are formatted, they are divided up into storage units called "sectors" and "clusters." Each sector on a SRAM card has 512 bytes. Each cluster has one sector.

Any file takes up a minimum of one cluster, or 512 bytes. A small batch file of a few lines may require less than 50 bytes of storage space.

However, it must occupy at least on cluster, or 512 bytes on your SRAM card. A 520-byte text file can't quite fit into one cluster, so it must occupy two clusters, or 1,024 bytes.

This fact means that it is very wasteful to store many small files on your RAM card. If you use MEMO to keep scraps of information and save each to a separate file, you're wasting precious space. You should check out programs like fastNOTES (ad page 39 this issue), Keep-In-View (ad page 48, Nov/Dec 92 issue) and NOTES95  to recover that expensive real estate.

Unfortunately, the DIR command of DOS reports the space required for storage, not the space actually used (i.e. it reports the small batch file as taking up 50 bytes, not the 512 bytes it's really occupying). DIR also reports the "bytes free," the remaining storage space. It subtracts the space needed for each file (not the space actually occupied) from the total bytes available. If you have many small files stored on your card, this "bytes free" figure can be way off.

On last thing: You may have no more than 63 entries in the root directory, A:\, of your card. If you want to store more files on a card, you have to put them in a directory.

### ACE DoubleCard

A variation of the SRAM card is the DoubleCard marketed by ACE Technologies (see add, back cover this issue). This card has onboard compression software from STAC Electronics. While it offers "plug-n-play" installation, there are some things about this card you should be aware of. First, there is a startup file on the card called CONFIG.SYS. This can be seen by inserting DoubleCard in the card slot, and pressing **FILER** **F5** b:\ **ENTER** **ENTER**. The B: drive displays the uncompressed portion of the card, the A drive shows you the compressed portion. If you want to have an AUTOEXEC.BAT file processed when booting with this card, the AUTOEXEC file has to reside on the compressed portion of the drive (A:\). In addition, the following line

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*Andrew Seybold, Industry Expert,*  
February, 1993



must be added to CONFIG.SYS on the B drive (NOTE: make sure there is an space between "COMMAND.COM" and "/P".)

SHELL=C:\COMMAND.COM /P

Device drivers referred to in CONFIG.SYS prior to the Stacker command line must reside on the uncompressed portion (B:) of the card if the A drive designation is used. Any files loaded after the Stacker command line must reside in the compressed portion (A:). All programs that are called from the AUTOEXEC.BAT file should reside on the compressed portion of the card, or the 95LX's C drive.

If you store confidential information on your 95LX, it's important to be able to secure your data. ACE provided Password protection with their DoubleCards. (Stacker 3.0's password protection cannot be used on the 95LX.)

The DoubleCard can compress your C drive, if you wish. I am opposed to doing this for several reasons. First, once you have created this compressed "G" drive you may not change your System RAM/Drive partition without destroying the drive. Next, you cannot put an APNAME.LST on this drive. Also, since the G drive is really one big file, if it gets corrupted you will probably lose all of the files instead of individual ones. Finally, you can achieve most of the space-saving benefits by first compressing .COM and .EXE files with DIET or PKLITE, and then storing them on the C drive. If they corrupt, or you lose them you can easily replace them. Besides, they don't compress very well with Stacker. Storing compressed .EXE and .COM files on your C drive leaves more room on your card for your highly compressible data files.

The final feature incorporated into DoubleCard is built-in reset protection for your C drive. Every time a hard reboot is performed (by pressing **CTRL-Shift-ON**) four bytes in your C drive get corrupted, if you are using a 512K 95LX or a 1MB Palmtop with system RAM set to less than 512K. As long as the DoubleCard software is in memory those four bytes will not get corrupted.

## Sundisk Flash ROM Cards

At the time this article was written, the only Flash Technology entry that may be used on the 95LX is from Sundisk (see ad, page 10 this issue). This card has the advantage of not needing a battery to retain its data, however it does require its software driver be in memory in order to read it. The result of this is that you must have its driver either on C: drive or on a SRAM card when you reboot your 95LX. Sundisk is planning to include a ROM card to be used when rebooting, after which you can insert the Flash card.

The Sundisk card is available with or without Stacker compression software. As delivered, the card is formatted with large, 4K clusters. This has no impact on disk space if you are using Stacker, but it has a big impact if you are not. (See the discussion of cluster size above.) Sundisk may make available a utility that can format the Sundisk card with the smaller, 512 byte clusters.

If you decide to use Stacker on

the Sundisk card, I recommend altering the way that Sundisk sets things up. As installed by its installation program, the STACKER.COM file is stored on your C drive. This is not preferred because the file is large, and the corruption of the C drive would make it difficult to access the compressed files on the card. A better strategy is to have STACKER.COM reside on the card. This can be done by following these steps:

1. Back up all files on the card.
2. Put STACPALM.EXE on your C drive.
3. Reformat the card with the SFORMAT utility.
4. Copy the STACKER.COM file to the card.
5. Stac the card by entering STACPALM A:
6. Reboot your 95LX.
7. Delete STACPALM.EXE and STACKER.COM from the C drive.

If you have Diet 1.44 or later you can compress (diet -g) the STACKER.COM file for greater space savings.

Another issue concerns the use of the Sundisk cards regards the AA batteries used in your 95LX. The Sundisk card requires a higher current than SRAM cards to write to it. The

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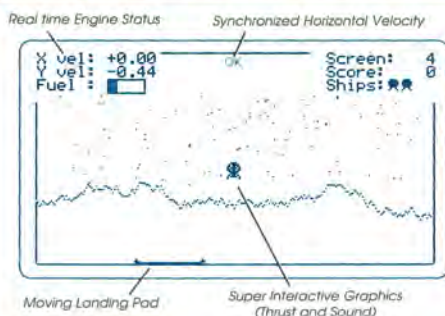
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device driver, SDPDRV.SYS, does include a battery check routine to make sure there is enough left in the batteries before the write is started. Versions 1.1 and 1.2 of SDPDRV.SYS put the card into a write-protect mode when the battery was low, causing the card to be corrupted under certain circumstances. Version 1.3 and above turn the 95LX off. Unfortunately, 1.3 and above are only setup for alkaline battery use. The best solution that works on all versions and battery types is to use BATTman from ACE Technologies. It will safely turn off your 95LX under all conditions that I have tested.

Finally, it is very possible that the current HP 95LX Sundisk cards will not work with future palmtops.

### Memory Card Drives

Card drives are floppy-drive-like devices that attach to your PC and let you read a RAM card like it was a floppy disk. They come in internal (mounted in a floppy drive slot) and external (connect to the desktop via a cable).

The Databook Thincard Drive is an example of an internal floppy drive. It offers great flexibility in the range of cards that it supports. It's attached to the PC bus, so it's very fast. The only problem I found with it was that if a card was in the drive when I turned on my PC, it sometimes corrupted the card. Otherwise, it was a dream to use and makes backing up your card a simple procedure.

Both Databook and Adtron offer external card drives that connect to the PC's parallel port. I did not receive the Adtron in time for this review, but the DataBook drive is very well implemented. It comes with two DB25 parallel connectors and an AC adapter. This allows you to use one port for both your card drive and printer. While its performance is definitely slower than that of the internal drive, it's a lot faster than using anybody's file transfer software (for more on file transfer software, see page 12 this issue). Also, if you are at all squeamish about opening up your PC, the external drive is a snap to install.

Both types of drives require a device driver installed in the PC's CONFIG.SYS file in order to read cards. Make sure the one you select will support the type of cards you want to use. Currently, Databook's software will support both SRAM and the Sundisk cards.

### RAM Cards More Attractive As Prices Fall

With prices falling monthly this form of storage will gain in popularity. This will cause further price drops. The RAM card in any of its flavors is the best place to keep your data files. It is impervious to vibration and shock, and offers significant speed advantages over mechanical drives. The ability to have 20MB of storage in the equivalent of a credit card offers tremendous productivity po-

tential. The different card technologies require different strategies to optimize their use and enhance their reliability.

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**SWITCH! 2.0** — \$69  
**fastNOTES** — \$69

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 408-428-9722; Fax: 408-428-9721.

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NOTE: Price listed is suggested retail price,  
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### Shareware/Freeware Mentioned in This Article

#### On the HP Palmtop Paper ON DISK

\*CIS \*\*SHR 95BUDDY — N/D 92 issue  
 \*CIS \*\*SHR NOTES95 — M/A 93 issue  
 \*CIS DIET 1.44 — M/A 93 issue  
 \*CIS TIMEOUT — M/A 92 issue  
 \*CIS \*\*SHR PKLITE — J/F 92 issue

\*CIS — Also available in the HP Handhelds forum of  
 CompuServe.

\*\*SHR — SHAREWARE is software distributed free  
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 to use it, you must pay the author the shareware fee.  
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 Palmtop Paper ON DISK or CompuServe.



# The HP 95LX, How to Keep it Clean!

*Protect your investment, your files, and the appearance of your 95LX. Here are some simple, and adventurous ways to keep your 95LX clean!*

*[This article is a compilation of tips collected for the HP Hand forum of CompuServe. Thanks to everyone who knowingly or unknowingly contributed to this article – Rich.]*

By Cindy Ericson

Most HP 95LX users are more concerned with learning how to use their Palmtop than keeping it clean. But dust and dirt have always been a bane to computers. Although the 95LX seems indestructible, why take chances?

## Q-Tips, Alcohol, and More

It doesn't take a lot of time or ingenuity to keep your 95LX clean. It's as simple as grabbing a Q-Tip and a

bottle of isopropyl alcohol. A few Q-Tips (or small camel-hair paint brushes) dipped in alcohol removes most grime from the keyboard. Of course be careful not to let the alcohol drip below the keyboard overlay. This can easily be prevented by rolling the top of the swab over a tissue. You can also hold the 95LX upside down when cleaning and allow the alcohol to evaporate.

Some 95LX users like Armor All, a spray-on "protectant" that cleans and coats surfaces with film that "protects against ozone, oxygen, and ultraviolet rays." It's alright to spray Armor All directly on to the outside of the case. Use Q-tips or a clean cloth to apply it to the area around the keys and screen. Allow Armor All to harden for two hours on the 95LX case and then wipe off any excess.

Another cleaner and polish for the 95LX is Snap, a product available through EduCALC. According to an EduCALC representative, Snap is the only product recommended by HP to clean computer surfaces. Snap also cleans glass used in photographic

processes and repels dust from the surface it is used on. According to the product's label, it "minimizes glass and plastic maintenance by cleaning faster while imparting a satin smooth water repellent anti-static finish to treated surfaces."

You'll want to brush loose dust and dirt off the 95LX before applying a cleaning solution or protectant. You might use the camel-hair brush mentioned earlier. You could also use a camel-hair lens brush, normally used for cleaning camera lenses. The brush, which is available in most camera shops, comes in a twist-up container resembling a lipstick canister. The compact lens brush stores easily, and is protected from wear and tear when not in use.

A couple of resourceful users swept Post-It notes and Tack Rags across their 95LX display to keep the screen free of dirt and grime. Post-Its are available almost everywhere. Tack Rags are available at hardware and paint stores in the painting supplies section.

Finally, some users recommend one of the small vacuums available



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## ABOUT THE AUTHOR

Cindy has her B.A. in English from Iowa Wesleyan College. She has worked as a staff writer for the local newspaper and currently works in the circulation department at Thaddeus Computing. She is also a free-lance writer.



for cleaning dust from tight places. (Radio Shack has a battery-powered one for \$9.95, part # 612504.) They are good to run over the keyboard to remove small dry particles of dust, lint, sugar, coffee grounds, etc.

### Dangerous Launderings

(Note: Although some users claim to have successfully rinsed the 95LX in water, we did not test this and DO NOT recommend this procedure!!)

Computers don't like water, coffee, or any liquid for that matter. It's not a good idea to take your 95LX out in pouring rain, nor is it good to pour your favorite beverage on a Palmtop.

Unfortunately, these things happen!

It's very interesting, and a bit ironic, that an industry standard method for cleaning circuit boards is to wash them off. One CompuServe member described a three-step process: Rinse the board with warm water copiously; rinse it again with deionized water; finish the procedure by rinsing it one last time with Freon TF to dry it. Of course, the AC adapter must be disconnected and all batteries must be removed before the cleaning takes place.

Another 95LX user spilled a drink on his 95LX. He said he removed the batteries from his palmtop, disassembled the case, and then ran warm water through the entire computer. He then carefully dried it with a hair drier. He said most of his data was backed up so he didn't lose much from the system. (Editor's Note: We once corrupted a ROM chip in another computer by blowing dust out of the computer with a bottle of compressed air. We don't recommend using a device that forcefully blows air across a computer circuit board.)

All of these cleaning tips were discovered by 95LX users. There are undoubtedly many more ways keep it clean. You probably have all the equipment you need in your medicine cabinet or desk drawer. Add a little imagination and — happy cleaning!

## HOW TO USE:

## pcANYWHERE Remote Access Software

# Control Your Desktop from Your 95LX with pcANYWHERE

*Use your HP 95LX, a modem, pcANYWHERE and SuperKey to access and run your desktop PC wherever you are.*

By J.D. Fleming, Jr.

pcANYWHERE 4.5 is remote access software that makes it possible for you to run a PC-compatible "host" computer from an HP 95LX or another "remote" computer. For example, while traveling you could connect a modem to your 95LX and access your office desktop computer. You would be able to remotely control the office PC to run programs on the desktop, or transfer files back and forth between the desktop and the 95LX.

The host computer (your desktop PC) runs the main pcANYWHERE program. The package comes with AWREMOTE, a communications script designed for the remote computer. Unfortunately, AWREMOTE does not work on the 95LX. I used the 95LX's COMM program with VT100 terminal emulation.

### Setting Up the Host Computer

Only one change is necessary in the host configuration (using pcANYWHERE 4.5). Go to the host menu, select **View/Modify List of Callers**, and

select the caller designation to be used. Then go into the **Caller Information** screen and use the same default settings except for the Terminal Type setting. Change that one to **Ask Caller**, which lets you select the terminal emulation you desire. If you intend to use only the VT100 emulation offered by the HP 95LX COMM program, set the Terminal Type to **VT100/200** instead of **Ask Caller**.

The **Ask Caller** setting and other terminal settings such as **VT100/200** are entirely different from the AW-REMOTE default setting. Since the non-standard serial port of the 95LX won't allow it to run AWREMOTE, it can't be used with the 4.03 LAN version of PCAnywhere, the last one I tested, because that version doesn't allow selection of a non-AW remote. However, the freestanding version of PCAnywhere can be used on a terminal in a LAN to access the network through that terminal. That is the way I use pcANYWHERE.



### ABOUT THE AUTHOR

J. D. Fleming, Jr., is a partner in Sutherland, Asbill & Brennan, a law firm with offices in Atlanta, Washington, and New York. His major practice areas include product liability, chemical, engineering, scientific and tax litigation. He received a B.Ch.E. degree from Georgia Tech in 1955 and a Ph.D in Chemical Engineering in 1959. He received his law degree from Emory University in 1967. J. D. is a fellow of the American College of Trial Lawyers, a fellow of the American Institute of Chemists, and a registered professional engineer. J.D.'s CompuServe ID# is [76376,2022].



## Getting it to Work on the 95LX

pcANYWHERE must be running the host (PC) computer back in your office before you can make the remote connection. When the remote calls in, the host asks the caller to press **[ENTER]**. When this is done, a list of terminal types appears and the user selects the one to be used. The only emulation I have tried is VT100/200, since the 95LX and portables I use provide VT100 emulation with the built-in communications software.

## Making the Connection

The VT emulations have a significant disadvantage in that they do not transmit the F-keys, which are required for many of the programs the caller will want to use on the host. For example, if you're running WordPerfect remotely on the host, you can't use any of WordPerfect's Function Key commands.

In order to get around this, I load the SuperKey macro program with pcANYWHERE on the host. I assign F-keys to control characters, so that sending the control character from the remote causes execution of the assigned F-key on the host. I assume any macro program will do as well, and it may well be that other terminal emulations will avoid this difficulty, but I have not tried any besides the VT emulations.

The 95LX COMM configuration used to connect the 95LX with the pcANYWHERE host is **8 Char, 1 Stop, Parity None, Emulate VT100**. You also need the phone number of the pcANYWHERE host in the dial number field. When the configuration has been set in COMM, press **[MENU]** Connect, and the 95LX calls the host. When the connection has been made, wait patiently because the connection takes several seconds to get going. With Ask Caller, the host will request the user to press **[ENTER]** as the first step. If the Terminal Type is set to a specific type, the first step is for the host to ask for the password, which is set in the Caller Information screen on the host during its setup.

## Using pcANYWHERE

My most frequent use of pcANYWHERE is to connect with my office E-mail system, which runs WordPerfect Office. I use the following key assignments with SuperKey on the host to provide the functions required for E-mail. (The ^ symbol indicates pressing and holding down **[CTRL]**.)

List Files	^L (F5)	Help	^B (F3)
Backspace	Bksp	Options	^C (ShiftF8)
Delete	^D	Esc	^E (ESC)
Retrieve	^F (ShiftF10)	Quit	^Q (F7)
Save	^K (F10)	Transmit	^T (F9)
Undelete	^U (F1)	Go back	^G (ShiftF3)
Name search	^P (F2)	Page up	^N (PGUP)
Page down	^O (PGDN)	CursLeft	^A (CRSLFT)

CursRight ^S (CRSRT) Cursor up ^W (CRSUP)  
CursDown ^Z (CRSDWN)

The batch file, which goes into E-mail after the pcANYWHERE connection is completed, loads this SuperKey file automatically. Many TSR programs will interfere with pcANYWHERE if they are loaded before the pcANYWHERE host-to-remote connection is made. If they are loaded after the connection is made, they are much more likely to run successfully. SuperKey is an example.

Communications programs normally transmit the cursor control keys properly. However, the 95LX

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has a non-standard 16-line-by-40-column screen and uses the cursor keys to move to off-screen portions of the display. The VT100 emulation in COMM does not transmit a key-code when the cursor keys are pressed. I tried disabling the cursor tracking on the 95LX and still had no luck using the 95LX cursor keys to control the host.

To get around this, I use Super-Key to define control-key combinations to activate cursor movement on the host. The key combinations I've chosen are reminiscent of WordStar's cursor control keys; ^W (Ctrl-W) on the 95LX causes a cursor up on the host, ^A a cursor left, ^S a cursor right, and ^Z a cursor down.

### Transferring Files

I transfer files using XMODEM on the 95LX, and the AWSEND program that comes with pcANYWHERE on the host. I connect the host and remote, and activate XMODEM from the 95LX: Press [COMM] [MENU] Transfer XMODEM Receive file.ext (or whatever the filename is.) Then, from the 95LX I remotely go to the C:\ prompt of the host (desktop) computer and type the following: **awsend file.ext from host to remote**. When I press [ENTER], the host computer begins sending FILE.EXT to the remote Palmtop. I could reverse the process by telling XMODEM to **Send** the file instead of receiving it and by typing **awsend file.exe from remote to host** on the host. Since XMODEM works well, I have not tried Kermit or ZMODEM. (For more on using XMODEM on the 95LX, see page 31-14 of the *HP 95LX User's Guide*.)

Another minor point: The 95LX screen does not clear before overwriting during communications. This leaves characters from the previous screen still present unless the new line is long enough to overwrite those characters. I have found this only to be a nuisance.

[Editors Note: The 95LX does not display CGA, EGA, or VGA graphics. If the screen display of the program running on the host requires these

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modes, you won't be able to see it on the 95LX's screen. In addition, programs configured to display in color may not display properly on the 95LX's monochrome screen. Finally, you may also encounter some word wrapping problems, due to the 95LX's 40 column screen.]

### I Don't Have to Lug a Laptop Around Anymore!

The need for a key translator and the limitations imposed by the 95LX's 40x16 display may lead many to reject this approach. However, my goal was to avoid having to lug along a laptop and charger on every trip. I have found the 95LX, a small modem and a serial cable to be a vast improvement. This has allowed me to connect up with and control my office desktop computer on trips across the U.S. I have also used this arrangement with reasonable success when traveling abroad.

### Order Information

#### pcANYWHERE 4.5 — \$179\*

Remote access software that lets you run a PC-compatible host computer from another computer.

CONTACT: Symmantec, 1452 Kifer Road, Sunny Vale, CA 94086, USA; Phone: 800-441-7234 or 408-252-3570; Fax: 800-554-4403 or 408-255-3344.

#### Special Offer — \$69

We found pcANYWHERE 4.5 available from Tiger Software. According to Tiger Software, this offer is good at least through June 21, 1993. Offer includes Norton Anti-virus.

CONTACT: Tiger Software, 800 Douglas Entrance, Executive Tower, Coral Gables, FL 33134, USA; Phone 800-444-3363 or 305-529-2990; Fax: 305-443-0528.

#### SuperKey — \$99.95\*

Keyboard macro program. (Other macro program may be suitable.)

CONTACT: Borland International, 1800 Green Hills Road, Scotts Valley, CA 95067, USA; Phone: 800-331-0877 or 408-438-8400; Fax: 408-439-9119.

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# Hacker Gives Tips for Programming System-Compliant Applications

*Craig Finseth's Anatomy of an Application is a 32-page .TXT file jam-packed with information on programming system-compliant applications for the 95LX.*

By Ed Keefe

## The Hacker Ethic

If you enjoy reading about the early days of electronic computing, let me recommend Stephen Levy's book called *The Hackers*, (published by Dell paperback). It's an easy and enjoyable book to read.

*The Hackers* chronicles the exploits of a group of MIT students during the 1960's and '70's. The students were best known for breaking into the school's Artificial Intelligence lab just so they could get their hands on the sole minicomputer.

Over the course of several months these students taught themselves how to program the machine just by "poking around" and seeing what would happen. Their work resulted in one of the first text editors, a prim-

itive sketch-pad program and even a flight simulator.

One of the tenets of these "hackers" was that their programs, and everything they learned while writing the programs, should be given away freely.

The last of the MIT "midnight hackers", Richard Stallman, believed so strongly in this "free exchange of information" that he formed an organization called the Free Software Foundation (FSF).

One of the first projects of the FSF was to write a clone of the popular, but expensive, UNIX operating system and give it away. Emacs, a very popular text editor, is another FSF program (see page 25, this issue for more on Freyja, an Emacs editor).

What makes this unique is that both programs are System-Manager Compliant. They run on the 95LX and can task switch with any of the built-in applications.

Both programs are written in C and contain a gold-mine of information for developers of programs for the HP 95LX.

Beyond the comments in the code, Craig has provided extensive documentation for the MEMUTIL program. The documentation is contained in a file called ANATOMY.TXT which comes on the distribution disk for MEMUTIL and FREYJA.

The full title of the documentation file is "Anatomy of an Application: What HP Doesn't Tell You About Developing System Manager Compliant Applications for the HP 95LX."

The printed document takes 32 single-spaced pages and is jam-packed with interesting discoveries. For example, Craig has discovered that the System Manager video display routines are fairly fast. One should use them before trying to write directly to the video memory.

Craig explains such things as why

## Anatomy of Some Free Software for the HP 95LX

Craig Finseth, the author of MEMUTIL and FREYJA, obviously subscribes to the tenets of the Free Software Foundation. Not only has he placed both of these fine programs in the public domain, but he has also provided all the source code for both programs.

### ABOUT THE AUTHOR

Ed Keefe is an author, programmer, computer science instructor, and long-time contributor to support publications for HP computers. He is the president of the FastAid Company, 314 S.W. Logan, Ankeny, IA 50021. Ed's CompuServe ID# is [75300,3667].

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there is a 64K limit placed on all data files and why there can only be eight active system-compliant programs at any one time. He also goes into great detail about how to handle keyboard input.

There are sections on how to put a message on the screen and wait for user input, how to construct a menu that looks like those in the built-in applications, and how to use the file picker routines.

Craig also discusses how to use the clipboard to transfer data between your system-compliant application and the built-in applications. Finally, he spends a good amount of time explaining the nature of "fixups" and a major bug in the 95LX. He provides several pages of work-arounds for this flaw.

Craig has included many code snippets to illustrate his ideas and, for this reason, the article IS not for beginners. You have to be fairly conversant with C programming and familiar with the System Manager routines for event-driven programming. Otherwise this article will leave you scratching your head and wondering where you are.

## Who is the Article For?

The "Anatomy of an Application" document is one of the best examples of program documentation that I've ever seen. It will be most appreciated by registered Independent System Developers for the HP 95LX.

If you've ever tried your hand at writing a system-compliant program, or if you're thinking seriously of writing one, I'd urge you to get your own copy of this priceless document. When you do, print it out, along with the source code for MEMUTIL and FREYJA. Read it all and store it with your copy of the ISV Manual. You'll have more than enough programming tips, traps and techniques to become a full-fledged programmer of System-Manager compliant applications.

To Craig Finseth, I extend a very great thank you, on behalf of myself and 95LX programmers everywhere.



## Shareware/Freeware Mentioned in This Article

### On the HP Palmtop Paper ON DISK

\*CIS FREYJA2.ZIP — M/A 93  
ANATOMY.TXT — in FREYJA.ZIP  
MEMUTIL.EXM — in FREYJA.ZIP

(MEMUTIL.EXM is also on the 1992 Subscribers Disk. The version in FREYJA2.ZIP is more recent.)

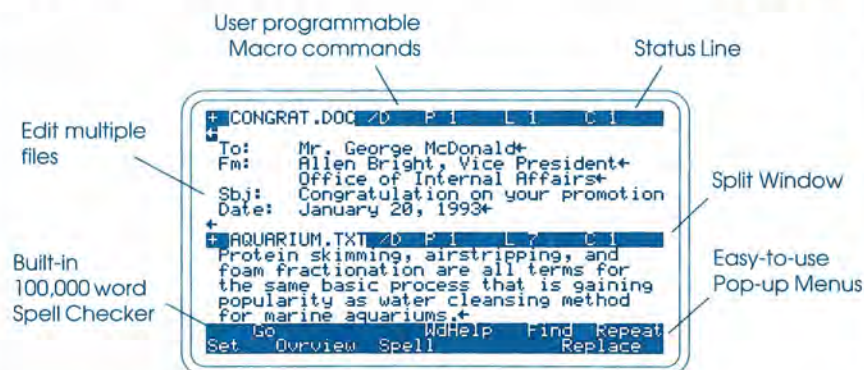
\*CIS — Also available in the HP HAND forum of CompuServe.

ORDER DIRECT: You send either blank diskettes and SASE or US \$3.00 per disk to: Craig Finseth, 1343 Lafond, St. Paul, MN 55104, USA.

Disk Requirements: Freyja only (two low density 5.25" or one low density 3.5"). Memutil only (one 5.25" or 3.5" disk).

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[Letters continued from page 5.]

available because you don't have room for it. The program lets you keep up to 20 sets of the ten macros and swap them at the touch of a few keys. It is not System-Manager compliant but Ed provides a loader to pop up over everything but 123.

Ronald Viecei  
Carbondale, IL, USA

### Cold Kills 95LX Batteries

I thought I would report to you and your readers what leaving the 95LX out in the cold will do. Last weekend I went skiing and inadvertently left my 95LX in the glove compartment of my car for three days. At night the temperature was in the teens and during the day it rose to the thirties. When I returned home and turned it on, I got a faint screen, warnings of low main batteries and low backup battery, and that the C: drive was erased. Interestingly enough, the low power caused by the cold adversely affecting the battery power erased the RAM memory, but the A drive on my battery powered Ace Double Card was unaffected. All of the files on the RAM card were untouched.

I immediately plugged into the AC adapter and once powered up, the batteries came back to almost normal. I re-

placed the main batteries, and the backup came back to 2.78 volts, although it was measuring 3.0 prior to its ski trip. The RAM card battery registered 4.82, exactly where it has been since I first installed it. Fortunately, I backup daily and was able to reinstall everything quickly.

The lessons to be learned is that the HP 95LX is sensitive to the cold and we should backup often.

Michael Allgood  
Lafayette, CA, USA

[Lithium batteries generally perform very well in the cold, that is why we use them in flashlights for winter camping trips. They are usually unaffected by the cold. This explains why the RAM card survived so well. Since you probably lost the main AA's, the HP backup lithium was probably doing a lot of work and could not keep the memory going for that long — Fred Kaufman.]

### Correction on Instant Recall

Your latest issue of Palmtop Paper (Jan/Feb 93, page 6) mentions that Instant Recall 2.0 has full import/export capabilities for the 95LX. Unfortunately it has only limited export, but no import capability. I even called the IR people and they confirmed this.

Ygal Giramberg  
Thousand Oaks, CA, USA

### Well Men, Welcome to the 90's

I've noticed your contributors and correspondents tend to be mostly male, but your description of a wallet carrying case that is "Made of premium men's wallet leather" is going too far (Sept./Oct. 92, page 44). "Made of premium wallet leather" would have been sufficient.

Maureen Brock  
Hewlett Packard  
Davis, CA, USA

### Maritime Shipping Software for the 95LX

I have been communicating with The Baltic and International Maritime Council (BIMCO) in Denmark, who have introduced some very good Shipping software, and they are willing to look at the possibilities of introducing the software on RAM cards.

I am interested in finding any HP Palmtop Paper readers who are in the Shipping Industry and who would be interested in the BIMCO software. Also, it would be interesting to exchange information on how best to adapt the 95LX to our industries requirements.

(Incidentally, I am sending this fax to you through the New Media PalmFax Modem and the 95LX.)

Capt. J. Misra  
Gulf Azov Shipping Co. Ltd.  
Dubai (U.A.E)

### Lexmark Printer a black version of the Citizen PN48

Lexmark is marketing The IBM Portable Printer, which appears to be a version of the Citizen PN48 printer I reviewed on page 7 of the Sep/Oct 92 issue of *The HP Palmtop Paper*. It appears to be the identical printer, except its case is black. I find that the black case looks better with the HP 95LX, makes it visually easier to properly align paper in the printer. It is a parallel printer, and requires a serial-to-parallel adapter to work with the HP 95LX. For more information in the U.S. call 800-358-5835 or in Canada call 800-663-7662. (No international contact information available.)

Robert Newins  
Richmond, VA



### Shareware/Freeware Mentioned

#### On the HP Palmtop Paper ON DISK

\*CIS\*\*SHR UNO13.ZIP — M/J 92 issue

#### On the 92 Subscribers Disk

\*CIS REEXE

\*CIS — Also available in the HP Handholds forum of CompuServe.

\*\*SHR — SHAREWARE is software distributed free of charge for evaluation purposes only.

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# ... BASIC TIPS ...

## Appt

### CREATING AND DELETING A REPEATING APPOINTMENT

It is easy to set a repeating appointment on your 95LX. From the Daily Calendar view, press **[MENU]** View. Then select the kind of repeating appointment you want to set (Weekly-Repeat, Monthly-Repeat, or Yearly-Repeat). Finally press **[F8]** to insert a new appointment, key in the appointment information and press **[F10]** to insert the repeating appointment. (For more information, see pages 17-9 to 17-14 in the *HP 95LX User's Guide*.)

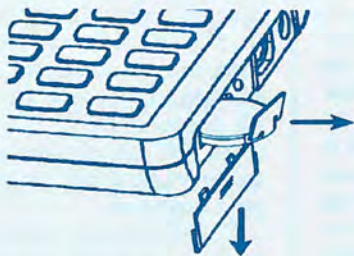
Deleting a repeating appointment is still pretty easy. Press **[MENU]** View, select the type of repeating appointment you want to delete, and press **[ENTER]**. Cursor down to the appointment you want to delete and press **[F3]** to cut the appointment out.

Robert Roney  
Rich Hall  
The HP Palmtop Paper

## Battery

### PUT THE BACKUP BATTERY IN RIGHT SIDE UP

The backup battery protects your data if the main batteries die, and when you change main batteries. However, you have to put it in the right way! The backup battery is located on the right side of your 95LX, behind a removable cover.



There is a top/bottom +/- side to the 3-volt CR2032 coin cell backup battery (available at Radio Shack or other electronics stores). You need to place the battery plus (+) side down in the plastic tray. The *HP 95LX User's Guide*, page A-4, also says to turn the unit off before replacing the backup battery.

Fred Kaufman  
CompuServe ID: [72560,36]

## Filer

### DISPLAYING FILE CONTENTS IN FILER

You can display the contents of any file by going into FILER, moving the cursor to that file and

pressing **[ENTER]**. The file appears on the screen, where you're able to cursor up and down to read it, but not able to make changes in the file.

A text file that was created with MEMO will appear the way you see it in MEMO. PHONE, APPT, 1-2-3 and other specially formatted files will display a lot of funny faces and strange looking control characters that the programs use to identify types and lengths of fields, and records. Some files, such as .EXE, .COM, .EXM and .ENV files will display nothing but funny faces and unusual characters.

Robert Roney  
The HP Palmtop Paper

## Phone

### HOW TO SPLIT A PHONE FILE

The largest Phone Book file you can have is 47K. Depending on how much information you have on each entry, this translates to about 400-600 names. To increase capacity, some users keep two .PBK files, one for A-M and another for N-Z names. If you want to do this you'll need to split your existing Phone Book.

Make two copies of your original PBK file by going to FILER, highlighting the PBK file, pressing **[F2]** (Copy), giving the file a new name, and pressing **[ENTER]** (do this two times). Now you've got three identical Phone Book files (say, PHONE.PBK, PHONE1.PBK and PHONE2.PBK).

Now open PHONE2.PBK within the PHONE application by pressing **[MENU]** File Open, selecting the file and pressing **[ENTER]**. Then use **[F3]** (Cut) to delete half of the entries out (i.e. A-M) and save it. Next, open PHONE1.PBK and delete the other half of the entries (i.e. N-Z).

You should now have 3 files PHONE.PBK — your original complete phone book, PHONE1.PBK — your A-M's, and PHONE2.PBK — your N-Z's.

Stanley Dobrowski  
CompuServe ID: [71031,2162]

## Set Up

### SETTING A PASSWORD ON THE 95LX

You can password protect your 95LX so no one but you can turn it on. Exit all your built-in applications, go to FILER and press **[MENU]** System. At the DOS prompt type **password** and you will be prompted to enter and verify your password. Now if you want to password protect your 95LX, turn it off by pressing **[ALT]-[OFF]**. The next time you try to press **[ON]**, the 95LX will prompt you for the password. If you don't enter the password, the 95LX will not come on. If you forget the password, you are out of luck! You will have to remove the

batteries and lose your data.

Rich Hall  
Editor, The HP Palmtop Paper  
[If you've forgotten your password and it isn't locked yet, you can find out what your password is with a shareware program called STATUS (see "Goodies I", pg 45, M/J 92 issue) — Rich.]

### DON'T ACCIDENTALLY REFORMAT YOUR RAM CARD!

In SET UP, the Format command is located in between the Owner and Quit commands. This command formats any RAM card in your card drive, and formatting completely erases any data on the RAM card. Be careful when you Quit SET UP, or when you change Owner information. It's relatively easy to accidentally move the cursor from Owner or Quit to Format.

If you do move the cursor to Format and press **[ENTER]**, you're asked to "Insert new card for drive A: and press ENTER when ready..." If you do not want to reformat your RAM card, DO NOT PRESS **[ENTER]**!!!

If you don't have a RAM card in the 95LX, it doesn't matter what you do. Press **[ENTER]**, the 95LX will respond "Not ready, Format terminated, Press any key to continue..."

If you have a card in drive A, remove it and press **[ENTER]**, or press **[CTRL]-C** to abort the format.

Robert Roney  
The HP Palmtop Paper

### BACK UP YOUR FILES OFF THE 95LX

If the backup battery is low, pulling out the main batteries without connecting to an AC adapter will destroy your memory and you'll lose everything, even if you saved it on other occasions!

You may get a warning like, "damaged files on the C: drive, do you wish to initialize, Y or N ?". When you answer "N", the 95LX responds with the same message again. You are about to lose ALL the files on the C drive. The HP 95LX is very reliable, but it is still a computer and computers lose power and lose data. How do you avoid losing 95LX files? BACK UP YOUR FILES!

1. Copy them to a RAM card.
2. Copy them to a desktop computer's hard drive using the HP Connectivity Pack, Mac-Link plus 95LX, Kermit, Zip, or any other communication program.
3. Copy them to a floppy disk in your desktop's floppy drive or in an external disk drive like the Sparcom95.
4. Make a print out of the file.

Backing up your files is the only protection you have against losing files on any computer, including the 95LX.



## 1-2-3

### LINKING LOTUS WORKSHEETS

The 1-2-3 file linking feature lets you use the *values* from cells in saved (source) worksheets in the current (target) worksheet in memory. This means 1-2-3 copies the value or solution of the formula in the source worksheet to the target worksheet, not the formula itself. Here's how to link to spreadsheets:

1. Move the cursor to the desired cell in the target worksheet.
2. Type a plus (+), followed by the file name enclosed in double brackets, followed by the cell reference. For example:

`+<<A:\SS\DVDGET>>B2`

The *file reference* is the location and name of the file. You need to enter the complete path of the file if it is not in 1-2-3's default directory. The *cell reference* is either the address of the source cell or its range name.

You may not include a linking formula in another formula of the target worksheet. Instead, you must place the linking formula in another of the target worksheet's cells, and then reference that cell in the other target worksheet formula.

Lotus 1-2-3 links only one cell of the source worksheet per target worksheet reference. Even if you specify a range in the linking formula (i.e. `<<file reference>>A1..B2`), Lotus uses A1 as the source cell.

For more information on creating a link, and the restrictions involved, see pages 2-45 to 2-48 of *HP 95LX User's Guide*.

Ahmet G. Ozisik  
Istanbul, TURKEY

## 3rd Third Party

### ASK SAM RUNS ON THE 95LX

Ask Sam, a personal information manager, runs on the 95LX without problems. If you want to save memory your C drive, first run the configuration program to set the display to monochrome and to set the directories. Then run PKLite or Diet to compress AS.EXE.

Tom Bergemann  
CompuServe ID: [100034,3643]

### ZIP DOESN'T WORK ON MAC WITH SOFTPC(AT)

ZIP.COM (the file transfer program used in the Palmtop Paper Subscribers Disk) will not work on the Mac under SoftPC(AT)! It expects to have some very reliable hardware timing that is not possible to emulate with the Mac software. I tried this very early on in various different configurations, but have concluded that it was a lost cause.

Perhaps it can be made to work with the newer, high-speed Macs (Quadra 950), but I did not test it.

David J. Marsh

CompuServe ID: [70750,3146]

### Appt

#### SETTING BIRTHDAY REMINDERS

I enter birthdays as repeating appointments starting on the person's birth date and running out 100 years. By making them at 7 a.m., the appointments always show up at the top of the list. It's grim, but when someone dies, I update the ending date for the appointment.

Ted Dickens (HP Forum Sysop)

CompuServe ID: [76701,272]

I put two asterisks around the name, \*\*Name\*\* that way I know it is a birthday or an anniversary.

Jeff Zorn

CompuServe ID: [71165,1650]

#### MOST RECENT APPOINTMENT ALARMS PROCESSED

If you have multiple Appointment Book files, only the most recently opened .ABK file will be processed for alarms.

Ted Dickens (HP Forum Sysop)

CompuServe ID: [76701,272]

#### SET APPOINTMENT FOR A DATE EVERY 2 WEEKS - VERSION 1: REPEATING APPOINTMENTS

I have an appointment every other Wednesday. To have the 95LX remind me of this appointment, I created five repeating appointments, each one for a different week (1st-5th). To do this, press **[MENU]** View Monthly-Repeat Position **[F8]**, and then insert the appointment.

- Each of these five appointments

has the same title, preceded by the week number (1Appt, 2Appt, etc.).

- The week number will change for each appointment (1st-5th).
- The Weekday is Wednesday.
- Start/End time vary.
- Start/End date vary (see below).

I vary the Start/End date, depending on how the Wednesdays fall. For Example, the first two months in 1993 have four Wednesday's each. March has five Wednesdays. If I start my bi-weekly meetings on Jan 6, the sequence of meetings is as follows: 1st and 3rd Wednesday in January; 1st and 3rd Wednesday in February; 1st, 3rd, and 5th Wednesday in March.

Remember that I created five repeating appointments. I enable the 1st, 3rd, and 5th Wednesday repeating appointments by setting their start dates to 01/01/1993 and their end dates to 04/01/1993. For those first three months, the repeating appointments will appear on the 1st, 3rd, and 5th Wednesday of the month. The 5th Wednesday appointment in January and February is ignored because those months don't have a 5th Wednesday.

The final Wednesday meeting in the above sequence is on the 5th Wednesday of March. The next Wednesday meeting will be on the 2nd Wednesday of April, and subsequent Wednesday meetings will fall on the 2nd and 4th Wednesdays through June 1993. So I set the 2nd and 4th Wednesday repeating appointments start dates to 04/01/1993 and their end dates to 07/01/93. The 2nd and 4th Wednesday repeating appointments will show up in those months.

Depending on the current month and on how future months work out, I either have the repeating appointments for weeks 1, 3, and 5 enabled or those for weeks 2 and 4.

July through September are on the 1st, 3rd, 5th Wednesday schedule, so I reset the Start/End dates on those repeating appointments sometime in April. I set todo items on future dates remind me to reset the Start/End dates. The thing to remember is that the 2nd/4th, 1st, 3rd, 5th pattern switches whenever you have a month with five Wednesdays.

The single digit suffix is there so

that I can tell which entry is causing a problem if I see an appointment pop up in the wrong week. How's that for a kludge?

Jeffrey Mattox

CompuServe ID: [71044,2356]

#### SET APPOINTMENT FOR A DATE EVERY 2 WEEKS - VERSION 2: USER DEFINED KEY

The following User Defined Key automatically copies the appointment you have highlighted in Daily view to the same day, same time two weeks later.

`{F2}{ESC}{DOWN}{DOWN}  
{ENTER}{F4}`

You'll then have to press **[ENTER]** and make sure the start and end times are correct. If you know that the start/end times are always going to be the same (say, 8:00 am to 9:00 am) you can add that information to the end of the User Key (add `{ENTER}{ENTER}{ENTER}8a{ENTER}9a{ENTER}{F10}` to the above user key, after `{F4}`).

Ronald Viecei

CompuServe ID: [73310,3663]

#### SET APPOINTMENT FOR A DATE EVERY 2 WEEKS - VERSION 3: WORDPERFECT'S CALENDAR PROGRAM

My favorite PIM is Wordperfect's calendar program CL.EXE. It lets you program just about any bizarre combination of requirements for a repeating appointment such as: the last tuesday of every month after March 1993, but not June or July and before December. I've tried it and it works great.

CL.EXE works just fine on the HP 95LX. It does help to have the 1MB model and have more than 200K for user RAM (after SYSMGR). The only problem is that it has an 80x25 display, so you need to use the Shift and Alt-Shift Arrow keys to move around. The program is pretty good, if you are using version 3.0 or above. It takes up about 150K (or less) disk space. It's part of the Office package, which is around \$89.

Mark Crocker

CompuServe ID: [72550,3322]

Marty Mankins

CompuServe ID: [75300,1770]



## Connectivity

### MAKING APP95 SMALL & PORTABLE


I have discovered that the minimum files needed to use the HP Connectivity Pack's APP95 to move files back and forth between the 95LX and another PC are as follows:

APNAMEUS.LST	52
APP95.EXE	44,330
SETUP.ENV	5,842
FILER.ENV	16
JFRESUS.RI	4,264
MQBTAUS.RI	2,146
MFLER.EXM	55,271
MTASK0.EXM	11,271

Total: 123,192

I edited APNAMEUS.LST to maintain only the two EXM's listed here. App95 restores the SETUP.ENV file even if you erase it, so you could eliminate that one to reduce further the number of files you put on the disk. By carrying a disk with these files and a 95LX serial cable, you can connect to another PC to back-up and transfer files when you're away from home.

Fred Kaufman  
CompuServe ID: [72560,36]

If you want to access APP95's setup, you'll also need MSETUPM.EXM and MSETUPUS.RI. A program like ZIP  is much smaller than solution above, but you need to have ZIP on the 95LX before you can use it. If ZIP gets corrupted or erased on the 95LX, you have to reinstall it.

FILER is in ROM and won't get corrupted. The APP95 on disk approach is even more important to me now that I have a Sundisk card. Sundisk requires a driver on the 95LX's C:\ drive. If the driver gets corrupted or erased, I keep a copy of it on my APP95 disk and reinstall it on my 95LX.

Thomas Rundel  
CompuServe ID: [100023,2477]

## DOS

### HOW TO GET BACK TO SYSTEM MANAGER WHEN STUCK IN DOS

When you load software onto your 95LX, many programs, such as Switch, ACT, or the PTP Subscribers Disk, add or modify your AUTOEXEC.BAT file. If that file gets further changed, or deleted and you press **CTRL-ALT-DEL** to re-

boot, you may end up in DOS without any way to access the regular built-in applications.

You must return to the System Manager in order to use the built-in applications. To do so from the C:\ prompt, type **\$sysmgr** and press **ENTER**. This starts System Manager and allows you to use the built-in applications.

You should then call your AUTOEXEC.BAT file into MEMO and make sure that it has **\$sysmgr** as the last line of the file. You may have to create a new AUTOEXEC.BAT file if your original file has been deleted.

Larry Tachna  
CompuServe ID: [76520,1630]

### HOLIDAY SHOPPING LIST WITH PHONE AND 95BUDDY


I went through my Phone Book and tagged everybody who was to get either a card or gift. Then I exported it to another phone book using the **MENU** File Extract command.

I used BUDDY to change the PHONE data field labels to Name, Address, and Gift, and used that as a shopping list. I then exported the names and addresses to print labels for the cards and packages. Everybody got their cards and gifts. You can use the same system to send thank you notes, or for any mailing.

I'm going to tag names for all the people who sent me cards and use that as a basis for next year's gift/card list.

George Roukas  
CompuServe ID: [76044,723]

### XCOPY ON THE 95LX

For those who would like to run XCOPY on the 95LX, see XCOPY.95  in library 7 on the CompuServe HPHand Forum. This file lets you patch XCOPY to make it work on the 95LX.

Bob Berardino  
CompuServe ID: 76711,1025]

### REFORMAT DISK TO INCREASE OR DECREASE ROOT DIRECTORY FILE LIMIT

You can normally only put 64 files and/or directories in the root directory (C:\). DOS divides any disk up into "sectors" and, by default, allocates 4 sectors for filename storage in the root directory. You can reformat the disk to increase or decrease the number of sectors available for filename storage using the **FORMAT** command with a **/r** switch.

For example, the command **format c: /r:5** would increase the number of sectors to 5, allowing you to store 80 files on the root directory. Conversely, **format c: /r:2** would let you store only 32 files on the root directory. The advantage of reducing the number of sectors is that it gives you a little more actual storage space for files, and indeed I was able to set my RAM disk space to 511K instead of 510K.

This may not apply to a double-card or stacked drives.

Larry Tachna  
CompuServe ID: [76520,1630]

## Misc.

### KEYS WEARING OUT

Quite a number of users have discovered that the labels rub off the 95LX keys, especially the most often used keys like **ENTER** and the arrow keys.

Apparently there was quite a debate at HP over whether the keys should be "shot through" (i.e. the paint is infused into the plastic) or applied to the surface. Since there are many different language versions of the 95LX, the latter method was chosen.

When mine went back for an upgrade last April with a totally blank **ENTER** key, it created quite a stir. They did give me a new key-board, but the key is almost gone again after 7 months.

Mark Scardina  
CompuServe ID: [76711,732]

*[A solution I have recently tried is to carefully apply a couple of thin coats of clear nail polish to the top of the more frequently used keys. It goes on easy enough and dries quickly. The nail polish is thick enough not to run down into the cracks, but you could hold the 95LX upside down when you apply it just to be safe. It makes those keys shinier and sometimes the reflected light off the key makes the label harder to see. Mark Scardina tells me he's tried this approach on other things and thinks it looks tacky. However, it does seem to protect the key top and I doubt that the label will wear off — Rich.]*

### WHERE TO FIND 95LX INFORMATION ON INTERNET

If you are looking for online HP 95LX information, beside CompuServe, you can try the **comp.sys.**

**palmtops** newsgroup on the Internet for 95LX talk.

Victor D Roberts  
CompuServe ID: [70413,1423]

### SAVE/BACKUP USER KEY

I have created this quick little save/backup User Key that works in PHONE, APPT, or MEMO (provided the data files are found in C:\\_DAT and you have a \_DAT subdirectory on your A drive where the backups will be saved.). The commands are as follows:

```
{MENU}fs{HOME}{DEL}a  
{ENTER}y{MENU}fs{HOME}  
{DEL}c{ENTER}y
```

You would have to modify this User Key if the data files were located in directories with different names.

Charles Gagnebin  
Boston, MA, USA

## Set Up

### HOW TO DISPLAY OWNER INFORMATION ON THE TOPCARD

Go into **SET UP** and press **Owner** to enter owner information into your 95LX. This information is displayed if the Picture-File is C:\\_DAT\TOPCARD.PCX. Other PCX files in other directories will display, but will not allow the owner information to be shown. You could develop your own PCX file with blank areas for the owner information to display. However, you will have to put it in the C:\\_DAT\ subdirectory and rename it TOPCARD.PCX if you want the owner information to display.

Frank Nagle  
CompuServe ID: [71140,1253]



### Shareware/Freeware Mentioned

#### On the HP Palmtop Paper ON DISK

\*CIS\*\*SHR PKLite — J/F 92  
\*CIS Diet — Fall 1991  
\*CIS Free XCOPY.95 — M/A 93

#### On the 1992 Subscribers Disk

\*CIS ZIP.COM

\*CIS — Also available in the HP Handhelds forum of CompuServe.

\*\*SHR — SHAREWARE is software distributed free of charge for evaluation purposes only.



## HOW TO CONTACT US

There are a number of ways to get in touch with *The HP Palmtop Paper* staff. You can write; mail us a disk with your comments; send CompuServe mail; fax; or call. Our address is:

**Thaddeus Computing, Inc.**  
**The HP Palmtop Paper**  
**PO Box 869 or 57 E. Broadway**  
**Fairfield, IA 52556, U.S.A.**

**Fax #:515-472-1879**  
**Phone: 515-472-6330**  
**or 800-373-6114**

**CompuServe ID:**  
**Hal Goldstein, [75300,2443]**

To advertise in *The HP Palmtop Paper*, contact Brian Teitzman or Margaret Martin.

To subscribe, change address, or clear up any problem with your subscription, contact our subscription department (Director Sharon Dilmore).

## Technical Support

**HP Technical Support** — HP offers these options:

- **FREE TECHNICAL SUPPORT** — is offered to all 95LX users and is available by calling (503) 757-2004.
- **FREE AUTOMATED SUPPORT** — is offered 24 hours a day by calling (800) 443-1254.
- **COMPUSERVE GO HPHAND FORUM** - Call 800-848-8199 or 614-457-0802: For FREE membership state #231.

## How to submit an article

The richness of *The HP Palmtop Paper* comes from the contributions of 95LX users. We and your fellow users welcome your submissions. (We do not offer payment for articles; your reward is knowing that you've helped others.)

If you have a good idea and want to "go for it," send it in via CompuServe EMail [75300,2443] or send disk or hard copy to Hal Goldstein or Rich Hall at the above address. Alternatively you can send an outline of your idea. We will try to guide you as to when and whether we would use the article and contact you if we need clarification or have any suggestions. We may want to use an article but for a variety of reasons you may not see it for many months. Please understand that we cannot promise to run any article.

If you can, especially if you write a Palmtop Profile, send us a black and white photo of yourself.

## Products Advertised in *The HP Palmtop Paper*

Company	Product	Page number
ACE	(DoubleCard RAM Memory Cards) . . . . .	outside back
	(Switch) . . . . .	inside front
	(BATTman Battery Monitoring Software) . . . . .	4
	(myREMOTE) . . . . .	5
	(Classic Lunar Lander) . . . . .	44
	(fastLINE) . . . . .	29
	(fastNOTES) . . . . .	39
	(fastCOMM) . . . . .	43
	(fastWRITE) . . . . .	51
Computer Instructors	(95LX, Lotus, ACT! Training Classes) . . . . .	13
Connection Point	(Leather Case) . . . . .	9
Contact Software	(ACT! Contact Management Software) . . . . .	33
CSS	(Environmental Case) . . . . .	15
Databook	(Memory Card Drive) . . . . .	17
DataViz	(MacLink Plus) . . . . .	inside back
EduCALC	(95LX Accessories Catalog) . . . . .	24
El Dorado	(95LX & Accessories) . . . . .	48
EMBARC/Motorola	(EMBARC service) . . . . .	11
Essex Marketing Services	(UTIL - Forth Programming) . . . . .	18
FastAid	(Multi-Macro Manager) . . . . .	35
File Recovery Systems	(File recovery service) . . . . .	16
Genus Software	(Mileage Log) . . . . .	51
Geodata	(Navigational Software) . . . . .	29
GlobalLink	(Language Translation Software) . . . . .	49
Greenwich Instruments	(Serial-to-Parallel converter) . . . . .	42
IntelliLink	(Windows/95LX Connectivity Software) . . . . .	42
Interloop	(Double Header; HPIL Interface) . . . . .	36
Kodak	(Printer) . . . . .	2
Lighthouse	(PalmData) . . . . .	25
Memory Card Associates	(Palmtop Solutions) . . . . .	13
Mirical Corp	(Personal Food Analyst) . . . . .	47
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Neutek	(Palmtop Access) . . . . .	50
New Media	(Palm Modem) . . . . .	21
	(SRAM Cards) . . . . .	40
	(FlashBak) . . . . .	28
	(Monthly 95LX video) . . . . .	38
New Visions, Inc.	(EMBARC Motorola) . . . . .	8
On-Site-Info	(E-mail software) . . . . .	32
PSI Internet	(QA Palm custom database builder) . . . . .	30
Q/A Systems	(ASCERTAIN 1-2-3 Add-in) . . . . .	17
Septimia	(SS95 Basic graphics) . . . . .	27
Snappy Software	(DERIVE) . . . . .	36
Softwarehouse	(Accessories) . . . . .	12
Steele Creek	(EasyData Acquisition) . . . . .	14
Systonix	(Mass Storage Memory Cards) . . . . .	10
Sundisk	(Binders, fax/modem) . . . . .	52
Supplyline	(HP Palmtop Paper ON DISK) . . . . .	1
Thaddeus Computing	(Paralink 3 Serial/Parallel Adapter) . . . . .	26
Widget		

## Software on The HP Palmtop Paper ON DISK (March/April 1993)

Product	Function	Type	Page
DIET144.EXE	Application: New version of file compression utility	Free	17
FREYJA2.ZIP	Application: System-compliant Emacs text editor	Free	25
	Package also includes the following files: ANATOMY.TXT; THORABK.EXE; THORPBK.EXE; MEMUTIL.EXM; EMACS.DOC		
NOTES95.ZIP	Application: Database	Shareware	42
STUDENT.ZIP	Templates: Solver equations and .WK1 files useful to students of finance. Also includes files: ASCII.TXT, SPCLTRNG.ZIP and VOCAB.PBK	Free	28
PHONE_EXT.ZIP	Built-in: Phone Book extenders, includes: PBKMRG.ZIP, PBKTP.TXT, PHONE2.ZIP, PRT95.ZIP, SWAP.PBK.	Free	34
PHONE_DB.ZIP	Built-in: Phone Book database files, includes: 123HLP.PBK, AIRPOR.PBK, AREACO.PBK, CIS.PBK, CISHLP.ZIP, COMPDICT.PBK, CONTACT.HP, GUIDE.TXT, IDD.PBK, NEWTES.PBK, NODES.PBK, OLDTES.PBK, SLINE.ZIP, SLVHLP.ZIP, SYMBOL.PBK, USA.PBK.	Free	31
PHONE_UT.ZIP	Built-in: Phone Book conversion utilities, includes: 952ORG.ZIP, AB2HP.ARC, CRDPBK.ZIP, FORMAT.PBK, HP2LZ.LZH, HP95MA, PHONE9.LZH, STRIP.EXE, THOR.ZIP, TOSK.ZIP.	Free	32
QUIKVU.EXE	Application: Checkbook register and investment management	Shareware	23
UFK.TXT	Utility: User Keys and Solver equations from User Keys article	Free	37
XCOPY.95	Utility: Patch XCOPY to work on the 95LX	Free	55
UNZIP.EXE	Utility: decompresses .ZIP files	Free	na
HPALL.ZIP	Text: Descriptions of files in all HP forums of CompuServe	na	na
ADVERT.ZIP	Text: in-depth descriptions, products advertised this issue	na	na
PTP8.ZIP	Text: The HP Palmtop Paper, Mar/Apr 1993	na	na
README.ZIP	Text: cover letter for HP Palmtop Paper ON DISK	na	na

## Software mentioned and included in other issues of The HP Palmtop Paper On Disk or the 1992 Subscribers Disk.

95BUDDY.ZIP	(Nov/Dec 92) New version of a popular utility	Shareware	26
CLOCK.EXM	(92 Subscribers Disk) Large digital clock display	Free	27
CUBS.PBK	(May/June 92) Chicago Cubs schedule in .PBK & .WK1	Free	31
DIALCO.PBK	(Jan/Feb 93) U.S. area codes and country codes .PBK file	Free	31
DIALTO.ZIP	(May/Jun 92) Touchtone dialer for the 95LX	Shareware	34
DIET.EXE	(92 Subscribers Disk) File compression utility	Free	16
MACPBK.SIT	(Mar/Apr) Hypercard stack to convert PHONE to Mac files	Free	34
PKL103.ZIP	(Jan/Feb 92) Compression program for .COM and .EXE	Shareware	43
RE.EXE	(92 Subscribers Disk) File viewer and text search	Free	52
TIMEOUT.COM	(92 Subscribers Disk) Adjust auto timeout	Free	42
UNO13.ZIP	(May/June 92) Free-form database program	Shareware	5
USOUNDS.COM	(92 Subscribers Disk) 10 sound effects on 95LX	Free	27
VDE	(Fall 92 ON DISK) Word Processing program	Shareware	27
WEEKABK	(92 Subscribers Disk) (newer version N/D 92 on disk)	Free	29
ZIP.COM	(92 Subscribers Disk) File transfer program	Free	17



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