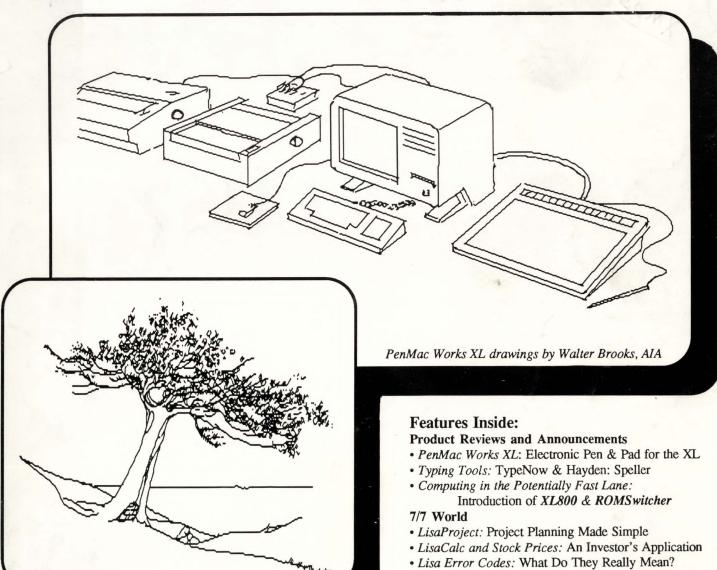
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Publishers: The NetWorkers-The LisaTalk Report

President: Lewis Guice

VP-Operations: Roxane M. Schwabe VP-Finance: John A. Zimmerman Devil's Advocate: Robert W. Johnson

Editor-In-Chief: Roxane M. Schwabe

Chief Technical Advisor: Lewis Guice

Assistant Editor: Patricia Dines

Contributing Editors/Technical Advisors:

Walter T. Brooks Diane Burns Joan D. Dickey Patricia Dines

Patricia Dines
Rob Graner
Barbara Graner
Gary Ingram
Winder Johnson
Nicolas Martin

Tim Monroe
Wolfgang Naegeli
Samuel Neulinger
Howard Pearlmutter
David Redhed
Fred Reitberger
Sherwin Steffin

Sherwin Steffin S. Venit

Staff Assistants: Patricia Celis

Vincent Ohl

Art & Production:

Layout & Design: *The NetWorkers-The LisaTalk Report* PageMaker Consultant: Nicolas Martin, San Anselmo, Calif. LaserWriter: Courtesy of Rent-A-Mac, San Francisco, Calif. Printer: Grant Printers, 809 Sacramento, San Francisco, Calif.

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AUTHOR'S GUIDELINES: The NetWorkers-The LisaTalk Report, 21 Canyon Road, San Anselmo, California, 94960, or call (415) 258-9152. Any material submitted will be considered for publication unless otherwise requested by sender.

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Table of Contents

Features		Summer 1986 Volume 2, Number	
PenMac Works XL			
Electronic Pen & Pad for the XL By Walter T. Brooks, AIA			8
Typing Tools			
Reviews of TypeNow and Hayden: Speller	r By Joan D. Dickey		28
LisaProject			22
Project Planning Made Simple By Diane	Burns and S. Venit		32
LisaCalc & Stock Prices			2.
An Investor's Application By Winder Joh	inson		36
Lisa Error Codes	0 D E 1D 11		44
What in the heck do all those numbers mea	in? By Fred Reitberg	er	41
Unix on Lisa-Part II	Tim Manua		42
Comparison of XENIX and UniPlus+ By User Profile	1 im Monroe		42
Interview with PBN Company By Lewis G	uica		59
interview with FBN Company by Lewis G	uice	• • • • • • • • • •	
Departments			
Editor's comments			4
Editor's comments By Roxane M. Schwabe	•••••	••••••	4
Editor's comments By Roxane M. Schwabe Computing in the potentially fast lane		• • • • • • • • • • • • • • • • • • • •	
Editor's comments By Roxane M. Schwabe Computing in the potentially fast lane By Sam Neulinger			4 6
Editor's comments By Roxane M. Schwabe Computing in the potentially fast lane By Sam Neulinger End of an era			6
Editor's comments By Roxane M. Schwabe Computing in the potentially fast lane By Sam Neulinger End of an era By Rob & Barbara Graner	•••••••••••••••••••••••••••••••••••••••		6
Editor's comments By Roxane M. Schwabe Computing in the potentially fast lane By Sam Neulinger End of an era By Rob & Barbara Graner Environments			6
Editor's comments By Roxane M. Schwabe Computing in the potentially fast lane By Sam Neulinger End of an era By Rob & Barbara Graner Environments By Gary Ingram	•••••		6 11 14
Editor's comments By Roxane M. Schwabe Computing in the potentially fast lane By Sam Neulinger End of an era By Rob & Barbara Graner Environments	•••••		6
Editor's comments By Roxane M. Schwabe Computing in the potentially fast lane By Sam Neulinger End of an era By Rob & Barbara Graner Environments By Gary Ingram User groups' corner	•••••		6 11 14 48
Editor's comments By Roxane M. Schwabe Computing in the potentially fast lane By Sam Neulinger End of an era By Rob & Barbara Graner Environments By Gary Ingram User groups' corner Users' Mailbox	•••••		6 11 14 48 50
Editor's comments By Roxane M. Schwabe Computing in the potentially fast lane By Sam Neulinger End of an era By Rob & Barbara Graner Environments By Gary Ingram User groups' corner Users' Mailbox Answerman	•••••		6 11 14 48 50 54



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Editor's comments

Support of a diverse community

Having talked with and corresponded with hundreds of Lisa/Mac XL users over the course of The NetWorkers' first three years in business, there's no doubt in my mind that despite the fact that we each use the Lisa/Mac XL for different purposes in different professions—ranging corporate and business programming, graphic design, scientific endeavors, and academic pursuits—we all generally shared the same underlying reason for choosing the Lisa/Mac XL over other computers. That is: We're busy people who did not (and still do not) have time to worry about adapting to technology. What we wanted instead was technology that would adapt to our needs. With its wonderfully simple user-friendly interface, powerful internal hard disk capacity, large high-resolution screen, and exceptional expansion capabilities, Lisa/Mac XL unmistakably represented the superior computing alternative to meet our diverse and growing demands.

It's no wonder then that we became so attached and loyal to this revolutionary technology, and that, since its discontinuation, we have experienced feelings of everything from astonishment to downright anger. As Apple's Trade-in offer draws to a close (August 29, 1986), many of us now-orphanned Lisa/Mac XL users are giving serious thought, once again, to our system goals, the variety of upgrade paths available to us, and, of course, the available support alternatives.

For some, the trade—in decision has been difficult. Afterall, until recently, there was no concrete evidence that new developments or enhancements would continue to be available for the Lisa/Mac XL. Many of us have also had our share of bad experiences when in need of simple explanations, hardware support, product information, or just plain empathy about the many changes we go through to get our support. Still others have even been subjected to snide remarks and offensive tactics used by disinterested vendors who

only want to sell Mac Pluses.

But despite these discomforting reminders of the price we have paid for being the pioneers of this new technology, most of us are still very content with and are still getting significant results from our Lisa/Mac XL systems. It is not that we do not have the same general concerns about Apple's phasing the Lisa/Mac XL out, or about continued availability of compatible products and support, or about our ability to keep up with tomorrow's technology. But, as you'll see in a variety of user discussions throughout this issue, for the most part, Lisa/Mac XL users just don't believe the Mac Plus represents a superior or comparable upgrade path, either technologically—although, granted, there is a lot to be said for the Mac Plus-or financially.

From all indications, the trade-in program has apparently been a viable option for upwards of 3,000 users. However, we at The LisaTalk Report are still convinced that for a vast majority of users who continue to see practical results from their equipment and who just don't see a value in trading in, there is no serious reason why they should. There is actually as much or more activity on behalf of Lisa/Mac XL users at this time as there are concerns and complaints community. throughout the developments of this exciting and hectic quarter alone seem to say it all. But you don't have to take my word for it-it's all here, at your fingertips.

The best place to start is Sam Neulinger's featured department, Computing in the potentially fast lane. But hold onto your hats! After being without substantial development and support for so long, all this product news can seem a bit much! Not only are numerous introductions surfacing, geared to increasing the power and practicality of both the Lisa and Mac XL systems, but a lot of specialized support alternatives are quickly becoming available, as well.

There's also an exciting new digitizer now available for the Mac XL, as featured in *PenMac Works XL: Electronic pad and pen for the Mac XL*, by Walter Brooks. With all these goodies, it's hard to believe people actually refer to the Lisa/Mac XL as a "dead" computer.

But that's not all. As you will notice in this first issue produced 100% "in-house," *The LisaTalk Report* has also undergone some changes for the better-including a polished, user-oriented forma with helpful summaries and clear, concise editorials, lots of 7/7-specific material, and greater visibility among vendors! Expect more of the same in the future, too!

Well, I've gone on too long once again. Let me just close acknowledging that many of the events & activities about which you will read, would not have been possible without the positive response and continued support that our readership has demonstrated on our behalf. Many thanks for your enthusiasm and very much-needed moral support. Your helpful and reassuring letters and your timely, professional responses to our surveys greatly assists us in gauging, and improving, our effectiveness in addressing your support needs. In addition, this ongoing exchange within the user community is very critical to our efforts to better determine market viability of continued Lisa/Mac XL developments (both existing and "wished for"). As individual "orphanned" computer users, we have been through some hard times. But through our continued perserverance and active pursuit of solutions to our setbacks, and through the support of some very dynamic (but not always visible) third parties, we can now stand tall, together as one community, organized, informed, and in control of our own destiny! Keep in

> Sincerely yours, Roxane M. Schwabe

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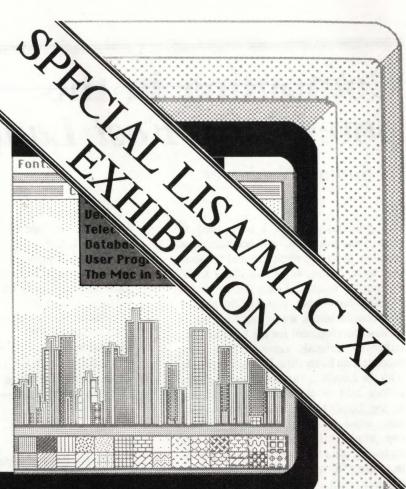
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Computing in the potentially Fast Lane

By Samuel Neulinger

In previous columns I have tried to keep you informed, as accurately as possible, as to enhancements and products that were in the wings and likely to be coming to market. Lewis Guice and I together have been pressing developers and manufacturers not to turn their backs on new development for the Lisa/XL, but rather to seriously consider how their products can be modified to be compatible with the Lisa/XL. However, with Apple's sudden cold shoulder to anything relating to the Lisa/XL, and the withdrawal of their usual technical developer support (we think this will change after the trade-in offer expires), some manufacturers with whom we have talked have felt that until Apple modified its position, the obstacles would be too great, especially in light of all the other developments they were working on for the Mac Plus. But we persisted, prodded and sought alternatives, and were gratified to find some young developers, engineers and companies not previously involved directly with the Lisa/XL, who view this hiatus as a golden opportunity to step into the breach and forge ahead. If you've been wondering what those three expansion slots in your Lisa/XLs were going to be used for, besides Apple's Parallel Card.....read on!

Products currently under research

Products currently under research and development and the quarter of their estimated time of arrival include:

• 68020 Replacement CPU Chip (3–4 times speed enhancement; utilizing a much simpler and cheaper, less–frills solution (Est. Cost \$1500–\$2000) [1st–2ndQ/87] • 30Mb Internal Hard Disk

• 30Mb Internal Hard Disk Replacement –OR–

- 30Mb Internal Hard Disk with 10Mb Built-in Tape Back-up [4thQ/86-1stQ/87]
- 4Mb RAM Upgrade [4thQ/86]
- SCSI Interface for Hard Disk and Tape Back-up [3rdQ-4thQ/86]
- Abaton Scan 300™

[Available Now — \$2,495]

"ROMSwitcherTM"

[Available Now — \$129.95]

• "XL 800™" — 800K Internal Replacement Disk Drive

[Soon to be released — \$495]

Soon to be released

The XL800™, an 800K internal replacement disk drive, is the first hardware product from NetSolutions, a subsidiary of The NetWorkers. At this writing it will interface only on Mac XLs with the internal 10Mb Hard Disk. A model for the Lisa 2 and 2/5 should follow shortly. The XL800 will read and write to both 400K and 800K disks under MacWorks and, most important, will read and write to 400K disks under the Lisa Operating System, The Workshop, and Unix environments. Interface to the system will be through a ROM chip exchange on the I/O board. Installation (as usual on the XL) is quite simple. The front panel is removed, the old drive unplugged, detached and removed, and the XL800 substituted for it. The drive will be compatible with HFS when HFS becomes available under MacWorks, or through new ROMs. Also planned for the near future is an 800K external drive interfacing with the XL through one of the expansion slots, if demand warrants it. Now there's really no excuse for not backing up those larger-than-400K data files.

XL products out now

ROMSwitcher™, product developed by Orphan Technology (a start-up development company), is an elegant solution to the pixel screen incompatibility problems that arise when both Lisa and MacWorks software are used on the same machine. In the past, if you wanted the convenience of a properly-proportioned MacWorks screen and elected to install Apple's XL Screen Kit (3A ROMs), you could no longer run any Lisa software and needed to migrate all of your data to the MacWorks environment. This also meant that you were precluded from utilizing the Pascal Workshop, Unix, or Xenix.

The alternative to the XL Screen Kit modification has been BitFixer™, which allows proper proportioning of the screen under all operating systems, but has a number of limitations. When under MacWorks, it provides a significantly smaller rectangular screen view, only using about 60 percent of the screen. And BitFixer cannot take advantage of programs such as Aldus Corporation's PageMaker™. which automatically recognize the XL Screen Kit 3A ROMs and adjust themselves accordingly. Aldus recommends the screen modification kit for their XL users, because it is more accurate, i.e., closer to WYSIWYG (What You See Is What You Get), than with BitFixer. In addition, the 3A ROMs in the XL Screen Kit have the ability to refer to 4 Mb of memory, when that is available, while the H ROMs are only able to refer to 2Mb.

ROMSwitcher solves these problems by housing both sets of ROMs (F, G or H, and 3A) and their respective video chips on a separate piggyback board attached to the CPU board. An external toggle switch allows start-up (after power-down) under either set of ROMs. Installation is relatively easy, does not require any soldering, but might require

The LisaTalk Report • Summer Issue 1986

Exhibit 1				
	MS Excel	MS Word	MacDraw	FileMaker
	Standard Default	New York 12	Std. Default	Std. Default
	Geneva 10	Width Length	Width Length	Width Length
	Cols. Rows	Inches Lines	Inches	Inches
H ROMs	A-J+ 1-21+	8.6 18	8.0 4.25	7.875 4.0
3A ROMs	A-H+ 1-26+	7.2 23	7.75 5.0	6.5 4.75
Mac Plus	A-F 1-20	6.0 18	6.25 4.0	5.25 3.6

Mac Plus numbers are included in the chart for comparison, just in case some of you were not aware of the differences in screen information displayed between the Macintosh and the XL. The "+" sign indicates that you can also see half of the next row or column.)

installation by a technician (as does Apple's XL Screen Fix Kit), unless you are mechanically adept and understand the voltage hazards and the absolute necessity of discharging the CRT prior to working around the video board. Purchase of the XL Screen Kit ROMs will be required in order to utilize ROMSwitcher. If you have already converted to the XL Screen Kit ROMs, then F,G or H ROMs and the original video chip will be required. The original video chip also housed the ID for running 7/7 software; therefore, in order to run your original 7/7 software, you need the original chip or you need to have a new one burned for you. (Note that Apple does not require dealers to return the old chips when the XL Screen Fix Kit is sold.)

Under both sets of ROMs, the full screen is used to display your work, and the pixel ratio is adjusted automatically. However, on some XLs a minor adjustment of the ports might be necessary, and the resulting square/circle alignment in one of your two environments will be slightly less than perfect. In this case, you will need to make a choice about your priority for absolute alignment. I recommend that you choose the environment with the graphics program that you use the most, i.e. LisaDraw in Lisa, or one of the various programs in MacWorks. (This adjustment is also needed when installing the XL Screen Fix Kit installation, but because this installation is a one-way fix, the adjustment is only important at the time of installation.)

There is an interesting side benefit to

having both ROMs available. Although the screen proportions are designed for the proportions of the Lisa and MacWorks modes, you can take advantage of the differing screen proportions to adjust the amount of information on your screen, especially in non-graphic programs. If you want more width for your information, start up with the original H ROMs on; this will offer you a screen size of 364x720 pixels. If you want more information to fit lengthwise and are willing to give up a little width, start up with the 3A ROMs. This trick works because the The XL Screen Kit (3A ROM) modification accomplishes its square pixel screen by dropping 112 pixels from the horizontal and adding 67 pixels to the vertical, for a screen size of 431x 608 pixels. I have included a chart showing the different configurations available for some popular programs. (See Exhibit 1.) Wherever possible, the title bar was double clicked, to attain the maximum screen size.

While it is not possible to switch back and forth between the H and the 3A ROMs while the computer is on, most of us have specific work habits and know in advance what will be required for specific applications, so where maximum screen size either horizontally or vertically is critical, we can plan accordingly.

The Abaton Scan 300[™]. Many of us wish that the Thunderscan or any of the video digitizers could interface to the Lisa/XL. Yet, even if they could and even as good as these products are, most of them cannot, at their price, provide professional 300 DPI high resolution digitizing to match the quality output

available from the Apple LaserWriter™. The Abaton Technology Corp.'s Scan 300™, now enables high-resolution (300 DPI) scanning of documents up to 8.5" wide by 14" long under MacWorks. It provides Line mode (for drawings and text), Halftone mode, Mixed mode and size reductions. Brightness, contrast and scaling are all adjustable under software control, and files are produced formatted for MacPaint™, PageMakerTM, ReadySetGo™, MacPublisherTM PostscriptTM. Interface is through the modem port of the Mac XL. Complete large-screen Desktop Publishing has now arrived!

Products in development

Orphan Technology is developing an SCSI interface system, dubbed the "eXLent Solution™ SCSI Mass Storage System." The system will include a controller card (to fit into one of the XL's three expansion slots) and a software installer for MacWorks. The card will have one SCSI connector port which will function as it does on the Mac Plus, i.e., additional SCSI devices can be added via piggybacking to the first device attached to the SCSI port. Plans are to initially market the card with its own SCSI Hard Disk, with at least 20Mb capacity, followed by a streaming tape backup unit. Only MacWorks will able to access the SCSI devices and will have to reside on the internal 10Mb HD of a Mac XL or be connected to the parallel port of

the Lisa 2 via either a 5Mb or 10Mb ProFile. However, Lisa Operating System users will still be able to use external ProFiles for their systems via the Apple Parallel Card. Until HFS is a reality under MacWorks, it will be necessary to use a program such as MacServe™ to be able to properly utilize file and disk management.

At the moment, the 4Mb RAM upgrade is on hold. Because it needs access to the additional addresses available on the 3A ROM (Mac XL Screen Modification Kit), it might be held back commercially until it is clear, what Apple will do in the way of a hardware upgrade. As it is currently designed, it would address 4Mb under MacWorks, and 2Mb under the Lisa Operating System when utilizing ROMSwitcher. (The 2Mb limitation under Lisa is imposed because only the 3A ROMs currently have the ability to access the additional 2Mb, but they do not allow the user to run the Lisa

Operating System.) Patches to the CPU board and work on the memory boards would also be required, this being done by the supplier of the upgrade as a special all-inclusive package.

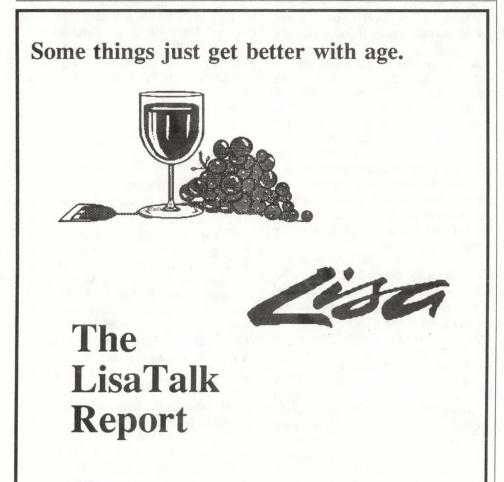
Research and development is being done right now on a 30Mb replacement internal hard disk for the Mac XL. The old 10Mb drive would be unplugged and the new 30Mb plugged in. Another option would be a 30Mb replacement internal hard disk with a 10Mb Streaming Tape Back-up cartridge; this would require modification of the front panel. No pricing information is available yet. Again, if HFS is not available when these drives are released, MacServeTM will be required for efficient operation of either of these drives.

In my last column, I touched briefly on the 68020 co-processor board with special emphasis on its estimated high cost. Since that time I have talked to

several developers who feel that if we can stick to basics (i.e., an increase in plain raw operating speed) and refrain from have more Macintosh compatibilty, the price might come in at under \$2,000. This would achieve at least a threefold increase in basic operating speed, and with a math co-processor as an additional option, even greater speed. In addition, the 68020 could theoretically provide an efficient inexpensive route for a 4Mb RAM upgrade, by being designed to include the ability to address up to 4Mb. The real key to bringing down the ultimate cost of this board would still be volume sales, both in the Macintosh environment and elsewhere. However, I now believe that there is a strong possibility that this product will actually come to market. Time will tell.

We who have decided to keep our Lisa/XLs have done so after much thoughtful consideration. We've wondered whether new technology will pass us by and have considered the cost, should we elect to keep and enhance our machines. On the other hand, the Lisa/XL does what we need it do, and does it very well indeed most of the time. It seems to me that this consideration, together with all the foregoing news about new XL tools, certainly make a strong case for our opting not to change. And, there is something profoundly satisfying in refusing to submit meekly to planned obsolescence...keeping and continuing to use and enjoy the excellent, elegant computer that we already own.

Sam Neulinger is President of Dafax Processing Corp., a value—added retailer, providing hardware and software support specific to the Lisa/Mac XL and the Macintosh Office. Sam has been involved with computers for over nine years, and he has been an avid admirer of the Lisa since its inception. He now uses a Lisa 2/10 exclusively and is Chairperson of the New York Macintosh Users Group (NYMUG) Lisa/XL SIG.



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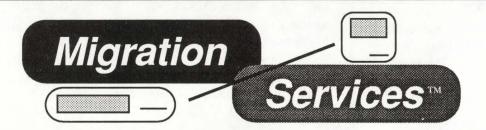
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The end of an era

To trade or not, plus migration tips By Rob and Barbara Graner



We received another startling jolt that has compounded our anxiety and confusion over whether to trade—in our Lisa. We had decided we couldn't part with her and were reassured that Apple was prepared to offer parts and technical support for her for five years. Then we got a call last week from our favorite salesman, mentor, computer buddy, and good friend, Earick. He phoned to tell us the store he worked at was closing and going back to their origins (video supplies)...going out of the computer business, ceasing to exist, defunct.

As usual, Earick was looking out for us, letting us know early about the store's "Four-Days-Only-Going-Out-of-Business-Sale." He had only been told 30 minutes earlier that he was out of a job. That's the kind of guy he is—considerate, thoughtful, not letting his troubles get in the way of helping his customers.

We have been somewhat complacent and probably in the denial stage of this terminal (no pun intended) illness Lisa has contracted. Lisa has been so faithful, she's barely needed any repairs. Only within the last six months had she shown the harbingers of advancing age (a disabled disk drive and an I/O board that disallowed **Preferences**).

We have received excellent service over the last three years since we purchased our Lisa. The necessary repairs were accomplished swiftly and promptly with very little down time. We frequently recommended Earick and his work place to harried phone callers who were desperate for a dependable computer sales and service store. We were amazed at the horror stories these callers recounted about competitive stores where, because parts were "not in stock," Lisas sat on service department shelves for a month at a time. Earick's store always came through, and our callers would express genuine gratitude for the recommendation.

It just doesn't seem possible that we've had Lisa living with us for the last three years. It seems like yesterday we walked into Earick's store, two eager computer greenhorns. We knew we were ready to advance beyond owning Atari 2600 and 5200 game machines, but we didn't know a command button from a hole in the ground. We had been dragging our two sons to video arcades on the pretense that *they* wanted to go. In reality, it was Mom and Dad who were the fanatics—laser blasting aliens in outer space till closing time. We were craving more of a challenge, something with a meatier substance.

We had been making the computer show circuit for several months prior to our Lisa purchase. We were confused, perplexed, and utterly bewildered by the vast array of computer commands that had to be memorized in order to accomplish a small task. It seemed to be so complicated, so overwhelming.

When we walked into the cool, inviting, air-conditioned The LisaTalk Report • Summer Issue 1986 store out of the hot July sun, Earick greeted us and introduced himself. He was a clean-cut, soft-spoken young man, and had an unhurried manner about him that was very appealing to us. We explained we were interested in buying a computer, that we were novices, unsure of what brand to purchase.

Earick patiently asked us what we thought would be our primary uses for the computer. We told him Matthew (then 11 years old) was interested in drawing cartoons, Andy (then 15 years old) in games, Barbara in word processing, and Rob needed a machine with business capabilities such as charting, graphing and a data base.

One of those rare magical moments frozen in our memory

Earick led us to the cubicle that held a 128K Macintosh. As he began to demonstrate it, it was obvious this was something quite revolutionary, even to our untrained eyes. It was one of those rare, magical moments now frozen in our memories that we refer to as an "AH-HA!" Something clicks in your brain that tells you to seize this opportunity, that it will be beneficial to your evolution as a human being.

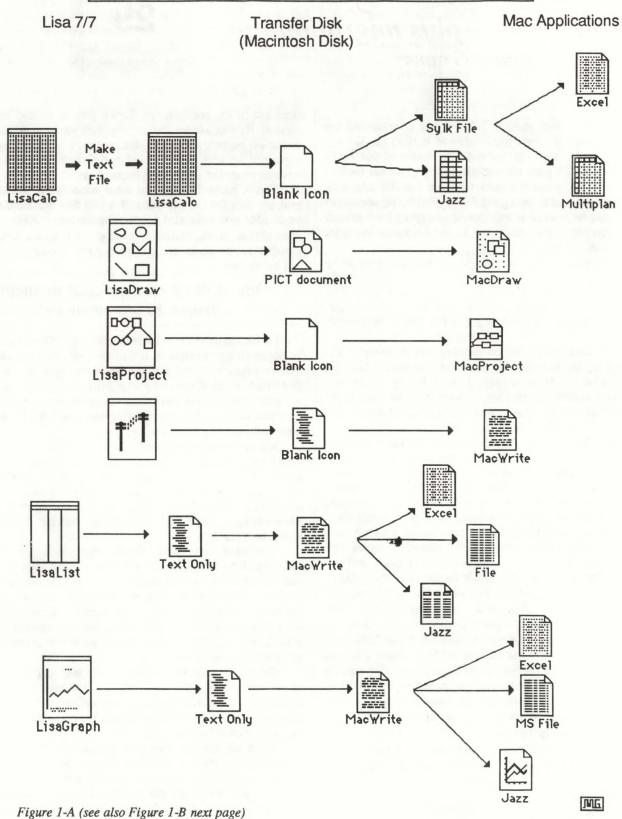
We spent the next three hours blissfully exhilarated and oblivious to everything else on earth except Earick's instruction and the Macintosh. We remarked later to ourselves about how attentive and patient Earick had been. Only one thing troubled us about that pioneer Mac—it kept running out of memory. We knew our family would generate enough material that it quickly would be a problem.

Somewhat reluctantly Earick mentioned the Lisa. In hindsight, it's obvious he was relatively sure of selling us a Mac and was afraid to confuse us and risk losing the sale. He guided us to the area where the Lisa was set up. If we were amazed at the Mac, it is sufficient to say we were astounded by Lisa. As consumers primed to buy, we had reached the pinnacle. We were ectastic, overjoyed that our computer quest had definition, form and a lovely name, Lisa.

The store's closing time was a rude interruption that forced us to break loose that day from Lisa's mystical spell. We reluctantly left and talked excitedly well into the night about whether we could afford this purchase. We could hardly wait until the store opened two days later.

When we returned, this time armed with sincere questions about Lisa's ability to perform, Earick once again patiently addressed all of our concerns. By the time we finalized our purchase and completed the paperwork, we had spent another three hours with him. This salesman was remarkable we concluded; he even offered to come to our home and set up the

Lisa-to-Macintosh Migration Paths



computer!

We're now thoughtfully weighing all the pros and cons concerning Apple's trade—in offer. Receiving Apple's latest letter listing a phone number to call for available service dealers has calmed most of our fears about being stranded alone with a declining Lisa; and, of course, we are grateful for the efforts of third—party support organizations such as The NetWorkers—The LisaTalk Report. Still, in making our final decision, we thought it best to also evaluate the differences between the two technologies. Here are the most important of these:

- Lisa currently has a maximum capacity of 2MB RAM with RamStak; the Mac+ can be expanded up to 4MB.
- The Mac Plus 9'' screen is considerably harder to read than Lisa's 12'' screen, but there are several screen kits for XL users.
 - The Mac+ is almost twice as fast as Lisa.
- The Lisa is limited to one's desktop; Mac+ can be easily transported, even with its additional 20MB hard disk.
- Mac+ has excellent four-voice sound and the ability to run MIDI systems; Lisa has limited sound capability.
- Hundreds of Apple dealers and third parties support Mac+ owners; a small but growing network of organizations and companies support Lisa.
- Although Mac+ has a much larger software base than Lisa, most Mac programs also run successfully on the Mac XL. Migration of existing Lisa files is also now readily available. (For those of you who have not yet gotten the Migration Kit, we attach Figures 1–A and 1–B for your reference.)

As you can see, Mac+ technology appears to have exceeded that of Lisa. The portability of Mac+ is especially beneficial to those individuals using engineering and scientific programming. It offers an alternative to traveling to job sites with an HP portable. Yet many of us are comfortable with our perfectly serviceable Lisas that are used to full capacity every day. Certainly, any computer seems to be obsolete the day it is

purchased, due to the incredible speed that technology is advancing.

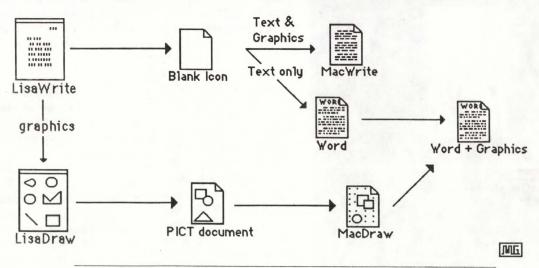
Although adaptability is supposedly the key to avoiding the fate of the dinosaurs, we're not always sure that new is better. We have always admired the pluckiness of those anachronistic drivers of Model A Fords cruising the streets of Southern California—they obviously didn't give up so easily when faced with bright, shiny alternatives. No matter what our ultimate decision about Lisa will be, we know one thing for certain. We sure are going to miss the special personal service and support shown by our friend, Earick...

Migration Hints: 7/7 To MacWorks

- 1. Remember: The Migration Package does not always install on the first try. An easy way to see if it has been installed is to Open any LisaCalc document and go to the File menu. Make sure that the lowest menu option is, "Make text file."
- 2. Documents that are larger than 450K need to be split because they may not be able to be migrated (1K = 2 blocks).
- 3. Transfer by icon-use "Copy Reference" from the Edit Menu.
- 4. Migrators: be very careful to conserve disk space. Creating text files from LisaCalc can use up large amounts of Hard Disk space. Also, remember that you cannot transfer data in excess of 800 blocks, as anything in excess of 800 blocks is too large for microfloppy disks. The Lisa to Macintosh Migration Program will fail if stressed beyond 450K.
- 5. Migration is two to three times faster and smoother if using two Hard Disks rather than a Hard Disk to micro-floppy disk.

Rob and Barbara Graner own a Lisa and Macintosh. Rob is a Beta tester of Macintosh programs, and his company, Migration Services, provides migration services to Lisa/Mac XL users.

Figure 1-B (continued)



Source: Apple Support Training Library — Using the Macintosh Migration Kit

Environments

What the Mac+ is and is not, and more By Gary Ingram

The fateful decision

Well, folks, it's time to make that fateful decision, whether to keep that Lisa we have come to know so well and been through so much with, or to trade in that Lisa for the new kid on the block-the Mac Plus. (Remember, Apple's trade-in offer through dealers expires August 29th.) It's awfully hard to take something like this lightly, friends. We've all paid our dues with this machine. I guess it would be easy to just throw up our hands and feel like we are just shedding an Albatross. Wait a minute now-isn't that how we got into this mess in the first place? Sure, it feels great to believe in the promise of "a new technology that will carry us into the next era," but is this

little guy worth it???

Well, the Mac Plus is fast! But speed kills. (Oh, c'mon, Gary!)

Oh well, I guess I just can't get used to the Mac's tiny, little screen. Why, when the standard page size is 8-1/2 x 11 inches, does Apple pin all its hopes on a machine that will look at only six inches? I still find it hard to waste 30% of my page when I'm building a form in Helix. It takes two pages on the Mac to do what the XL will do on one; however, the Plus is faster.

The Plus also still has some bugs. You'll find that some of the programs which run fine on your XL may not run flawlessly on all Pluses. I, for example, have experienced problems with

> Microsoft Word, Microsoft Multiplan, Switcher, and the original version of Sidekick. I expect that it will take quite a few months for companies produced them (especially Microsoft) make them entirely compatible with Plus. In addition, some of the programs which run fine on the Mac 512 will not run on the Plus. Specifically, I got a copy of Microsoft's Logo for my six-year old daughter when I had a Mac 512. It ran fine. and we had a lot of fun with it until I sold the 512 and got a Mac Plus. Now, I have a full megabyte of RAM, but MS Logo keeps telling me that I don't have enough memory to run it. I called Microsoft about this, and they said

that they are unsure when and if they will produce a new version for the Plus. (By the way, MS Logo won't run well on the XL either.) So here I am, paying my dues all over again.

One of my clients has a LaserWriter networked with two Pluses (and many other Mac 512s), and one of the Pluses will not print to the LaserWriter. We've tried every possible software solution and have finally come to the realization that there is a ROM problem with that particular Plus.

Keeping up with the System & Finder changes will also be more than just a part-time job. Apple is diligently staying on top of the bugs and the fixes in the Plus. However, if you don't live in close proximity to a dealer who keeps up on these things, your only recourse will be to download the latest versions from Compuserve, and that takes 40 minutes (it's a BIG file).

And then there is the price for the trade-in...

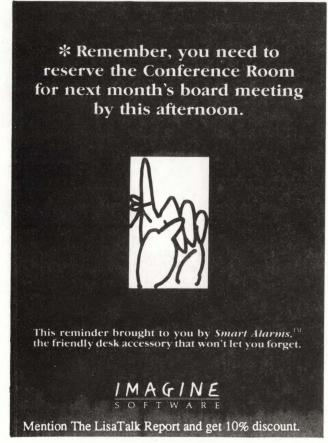
It sure sounds like I'm down on the Plus, doesn't it? Not true-the Plus is a great machine, within its limits, and the Hard Disk 20 is a very fast and reliable hard disk. For those of you who do decide to throw in the towel and get the Mac Plus, following is a look at what you'll be in for.

The options

The options at this juncture are almost too numerous to list. However, here are some obvious ones which might be helpful:

- If your machine is a Lisa 2/5, you can upgrade to the XL (for \$2,400 [OUCH!]).
- · You can also add more ProFiles using "2 Port Disk Install" (available from The NetWorkers) for more storage, although this will be slower.
- · If you look around, you can also find an additional XL in the paper (from \$600 to \$2,000), and at that rate, you can

The LisaTalk Report • Summer Issue 1986



basically get XLs for the price of one, and then network them with MacServe.

• You can also buy the XL cheap, strip out your Lisa 2/5 (that means take out the 512 RAM card and any parallel cards, and take off any ProFiles), and then trade the old one in for a Mac Plus. I should mention here that no matter what your dealer tells you, Apple only wants the basic Lisa for the trade—in (i.e., the Lisa with mouse and keyboard, the CPU board, the I/O board, and one 512K memory board), nothing else. All that other stuff you can sell to make the cost of the trade—in a little less painful.

I recently took advantage of this last option. I bought an additional machine (advertised through the local newspaper) for \$625 from a consultant who no longer used Lisas. I took out the extra 512K card and sold it (I can't believe I paid \$1,450 for my original 512K add-on board!!!). I then took off the ProFile and sold it along with an extra parallel card from another machine. By the time I traded in the stripped-out Lisa, I had only paid \$150 for it. In essence, I paid \$1,650 for the Mac Plus with the Hard Disk 20, and I still have my original XL with which to network. If you're any good at horse trading (which is probably less trouble than trading these machines), then I'm sure you can do as well, if not better. The idea is to be creative—there are still a few people out there who don't read this column (no accounting for taste, huh?).

Publishing with LisaDraw

I'll bet you didn't know that Lisa Draw was a powerful publishing tool that will format columns on a page, along with pictures and graphs—and do it at least as easily as most of the Mac publishing programs around. To make columns in Lisa Draw, you first need to select the type style and the font you'll be using for the column by clicking on the "A" in the tools and then selecting the font and style you want from the menus. Then, using the rectangle tool, make a box the size of the column you want on the page. If you don't want a box around the column, choose the invisible line option from the "Lines" menu. As soon the box is drawn, start typing—DON'T go back to the tools to

select the "Letters" option. If you do it this way, the words will automatically wrap inside the box and will move with the box if you move or resize the box. So far, however, I haven't found a way to copy text from another document into one of these boxes. (If you figure it out, please give me a call.) Of course, the pictures and graphs can easily be copied into the page in the normal manner. I've designed some pretty nice newsletters this way without having to spend \$500 for a hot-shot publishing program (they're probably worth it, but I already have one, thank you very much).



News from Apple "New" Lisas

The new Lisa count in the Apple western warehouse is 4,000. Alright, who in hell is going to buy these things now

that Apple has all but pulled the plug?! Well, friends, they are already sold. But don't expect to see "Lisa" or rainbow Apple on the front of these "new" machines. Apple is shifting the burden of support for these "new" machines to the mystery buyer. What a great way liquidate an old workhorse. (IBM has been known to put its old machines through the trash compactorthey don't even save the resistors. There reports of huge computer graveyards, not unlike the proverbial Elephant Graveyard, where thousands of these poor crushed and mangled silicon bodies lie waiting to be melted into one homogeneous slag. personally think that's

an awful disservice to IBM stockholders.)

However, with a bit of luck (and a bit of good management), Apple will come out of this one smelling like an Apple danish (mnm, pass the coffee, please). With other companies selling these "new" computer systems, which will be great for desktop publishing and able to run the Mac System, or UNIX, or XENIX, or the Workshop, or just about anything except MS-DOS or 7/7 (that's right—7/7), Apple can supply the parts in the background, while the others take the heat (or the applause).

New Hardware

Applause, please, because I have it on very good authority that there is a document floating around Apple that says they are going to support the new 800K drive for the Lisa AND the new 128K ROM board for the Lisa. This will not make a Mac out of an XL, and we won't be able to use 7/7 on it, but it will keep us up with the newest software, and if we can use the new System (3.2+) and Finder (5.3+) it might speed things up quite a



future issues of *The LisaTalk Report* to find out more about these drive and ROM upgrades.

Déjà Vu

You all might have heard of the newest "secret" program being developed by Andy Hertzfeld called Servant. For quite a few months now, the media has been playing guessing games with this one. They've called it everything from an improved Switcher to the "Mystery Desk Accessory." Well, the word is finally out, straight from the horse's mouth. Servant has been announced as a program that will allow Mac or XL users to open more than one program at a time in "windows" and never leave the desktop. Now I ask you (especially the 7/7 users out there), does that sound like something you've used before? Will the circle be unbroken (to coin a phrase)? Apple is building the Lisa Office System over again in the Mac format. All you folks out there who are still moaning about the lack of software available for the Lisa, I hope you're paying attention. Once you run all of your data through the Migration Package, you are going to find the Mac world a very familiar place to work in.

Garbled printing from MacServe

If you've noticed some oddball characters in strange places or some lines that weren't supposed to be there when your document is printed, AND you are running MacServe 2.0—don't lose heart. Your printer isn't on the fritz, and your disk is OK. The problem lies in the way the spooler un–spools. And just in case you haven't called Infosphere Inc. to complain, I thought you might like a fix for this little bug. This is called Technical Note #3. It goes like this. (Follow directions, please!):

Subject: Garbled printing with MacServe 2.0 spooler. From: Steve Bower

Date: May 23,1986

This note describes a procedure to remove a bug in *MacServe 2.0* which causes some documents to contain random garbage when printed through the spooler. This problem is especially

apparent when printing high-quality documents or graphics.

The following procedure requires a copy of *MacTools*, or some equivalent application, and the MacServe distribution disk upon which the procedure will be performed. It is then necessary to re-install MacServe for the fix to take effect.

- 1. Run the MacTools application.
- 2. Insert a write—enabled MacServe™ distribution disk in the floppy drive.
- 3. Select the file "Installer."
- 4. Select VIEWEDIT in the FILE menu.
- Select RESOURCE FORK in the MISC menu.
- 6. Select READ SPECIFIC BLOCK in the MISC menu.
- 7. Enter 115 and click OK. Block 115, part A should appear.
- 8. Click on the right-most arrow at the bottom of the screen. Block 115, part B should appear.
- 9. Move the cursor to line (0130:) which should read "EC4C DF00 104E 5E4E 754A 6CFF EA66 1439".
- 10. Position the cursor over the '1' in the eighth group "1439", click, then enter "08".
- 11. Select WRITE BLOCK in the MISC menu.
- 12. Move the cursor to line (0140:) which should read "7C01 00F EA42 6CEA 3C42 6CEA 3E39 7CFF".
- 13. Position the cursor over the '4' in the third group "EA42" and click.
- 14. Then enter "60 4E0C 6CFF FFEA 4067 544A"
- 15. Select WRITE BLOCK in the MISC menu.
- 16. Move the cursor to line (0150:) Which should read "FFEA 400C 6CFF FFEA 4067 484A 6CEA 3E66".
- 17. Position the cursor over the first 'F' in the first group "FFEA" and click.
- **18.** The enter "6CEA 3E66 1839 7C01 00EA 3E4E 714E 714E".
- 19. Select WRITE BLOCK in the MISC menu.
- 20. Move the cursor to line (0160:) which should read "0C24 6CFF F452..."
- 21. Position the cursor over the first'0' in the first group "0C24" and click.
- 22. Then enter "71".
- 23. Select WRITE BLOCK in the MISC

menu.

- **24.** Double-check your work and repeat the above procedure if necessary.
- 25. Select QUIT in the CONTROL menu.
- **26.** Now reinstall MacServe using the modified distribution diskette.

To restore the diskette back to its original state, the following procedure should be used. For each of the lines (0130:), (0140:), and (0160:), restore their contents to agree with those shown above in lines 9, 12, 16, and 20, respectively.

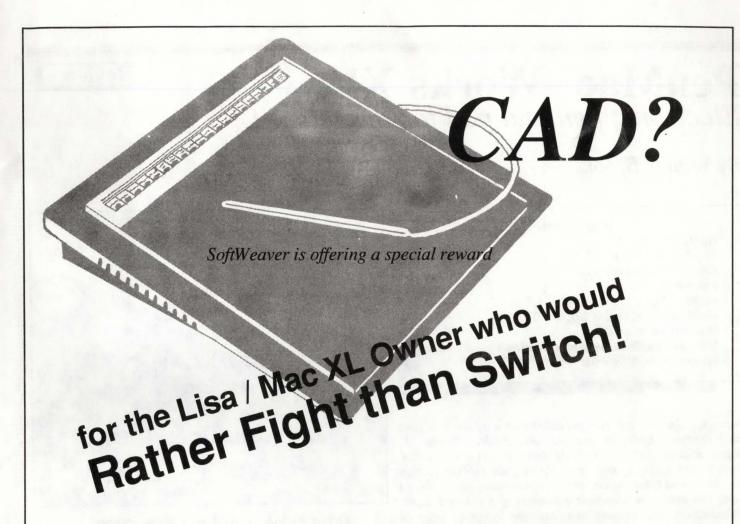
A Little Note

I've beta-tested and reviewed a lot of software for the Mac & Lisa, and no matter how many times I call in with a bug report or a suggestion, the usual response is something like, "That will be fixed in the next version." While this is a good answer, I find it very unique and a big help for a company like Infosphere to send out a do-it-yourself bug fix. Besides giving even the most casual Mac user a chance to really get into the guts of the Mac way of programming, these guys don't make you wait around for the "Promise Ware." I like this.

Well, that's "30" for this one, friends. Happy computing, and maybe I'll see you in the funny papers!

Gary Ingram is an engineer and President of Nite & Day Power Technologies. Gary also provides Lisa/Mac XL technical support through The NetWorkers.





From July 15 to August 29, 1986 you will recieve **\$500 off** the regular retail price of \$1495 when you purchase a 12"x17" PenMac™ Works XL Graphic Tablet.

Sound Great? Wait! It gets even better!!!!

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Review

PenMac™ Works XL:

Electronic pen and pad for the Mac XL

By Walter Brooks

Requirements

Hardware:

Lisa 2/5, or Lisa/Mac XL 2/10

Hard disk is recommended.

Software:

PenMac Works XL Version 2.1, 3.2, or 4.0

MacWorks Version 1.0, 2.0, or 3.0

Recommended:

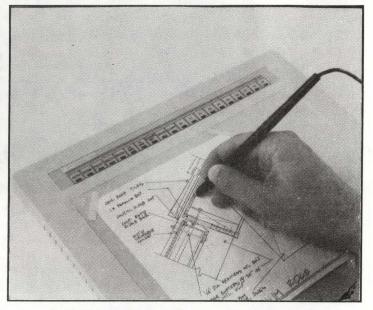
MacPaint, FullPaint, MacDraw, MacDraft

BitFixer or ROMSwitcher

Summary: In this first—ever published review of the new (and first) digitizing tablet for the Mac XL, PenMac Works XL, Walter Brooks discusses both the features and the practical aspects of configuring and using the original release Version 2.I. His remarkable accompanying illustrations, each created using this innovative electronic equivalent of a pen and paper, deomonstrate the exciting potential for computer—oriented graphic designers who, in the past, were confined to drawing only with a mouse.

T SEEMS THAT FOR A LONG TIME we Lisa and Mac XL users have been doing without our natural parents, orphans neglected and abandoned, unable to express an exciting computer potential. Sure, we have the best of word processors, spelling checkers, chart makers, spreadsheet creators, drawing systems, and an array of new software available for the Mac XL under MacWorks that boggles the mind. And then, too, we have the large storage capacity of the hard disk, the large high—resolution screen, the dot matrix and daisywheel printers, and last but not least, our favorite mouse. It's enough to make a mere Macintosh owner jealous...a little. But then the Lisa/Mac XL, even in the MacWorks environment, doesn't have some things that the precocious Mac has: digitizers of all shapes and sizes—cameras, tablets, Thunderscan, and options to the mouse. That is, until now.

As an enthusiastic Lisa 2/10-Mac XL owner and a practicing architect who greatly depends on the high quality and performance of my machine in my work, I have been dazzled by the many software innovations oriented to graphic design which are available for the Mac XL. However, until now, there has been no tool other than the mouse with which to create graphics on the Mac XL. Although technical drawings can easily be produced with a mouse in MacDraftTM(see Review of MacDraft in



PenMac Works XL: Feel the power at your fingertips

The Spring 1986 LisaTalk Report), creating freehand drawings with the mouse in any previous Mac XL medium was like trying to draw in dirt with a bar of soap. It's no wonder, then, that I was very excited to review the recently-arrived PenMac Works XL. After all, what could be more convenient than an electronic pen and paper for my electronic graphics? Now, the computer can become the drawing medium, the tablet the paper, the pixels the ink, the stylus the pen—the mouse, a dinosaur. No longer do I have to draw with my soap. The pencil is back in my hand, in the form of a stylus.

What is PenMac Works XL?

Physically, *PenMac Works XL* consists of a high-quality, high-resolution digitizing tablet, a stylus (a pen-like device), and the software which allows them to interact, essentially like an electronic pad and pen, all in one neat documented package. The tablet itself is manufactured by Kurta Corporation (the very same hardware used in the expensive Calma & ComputerVision CAD/CAM systems). The tablet comes in seven sizes (ranging from 8.5''x11'' to 42''x60'') with the 12''x17'' being the current best-seller for the Mac XL. (The two 8-1/2'' pages side by side are perfect for laying out double-page spreads, say for "desktop publishing.") The upper portion of the tablet is a keyboard, reserved for future development of a selection of macro commands (similar to AE/CADD on AutoCad).

The PenMac Works XL stylus signals the tablet by means of radio waves, hence the description "radio telemetry tablet." When the stylus touches a point on the active tablet surface, this position is sent to the software currently running on the Mac XL. (Note that using radio waves eliminates the risk of accidental disk erasures found with the electromagnetic transmission used by other tablets.) To the software, the tablet signal appears and acts exactly like the typical mouse pointer, allowing one to open documents, select items, move text and, best of all, draw more accurately.

This connection of the pad to the Mac XL is achieved by software (developed by Softwarer of Santa Cruz, California), which, once installed onto the hard disk (or any appropriate working Mac XL software diskette), automatically allows the use of the tablet and stylus.

Documentation

There is, as of this writing, no elaborate manual with which to work, just a few printed pages of information with the barest essentials. Softweaver has announced that a new Version 4.0 (scheduled to be released in late August '86), is in preparation, including better instructions on including the tablet on the hard disk. This will be of foremost importance to Lisa owners, for the ideal place for the tablet drivers to reside is, just like other peripheral drivers, on the 5 or 10Megabyte hard disk. Also needed in the manual are better instructions for physically connecting the tablet, turning it on (there is no mention of the on/off switch

on the back), and the connection of the tablet and printers.

Also needed is better information on the screen distortion (discussed later in this article) and how to address it. This is not a problem of the tablet or its software, but rather addressing the pixel ratios in the Lisa itself.

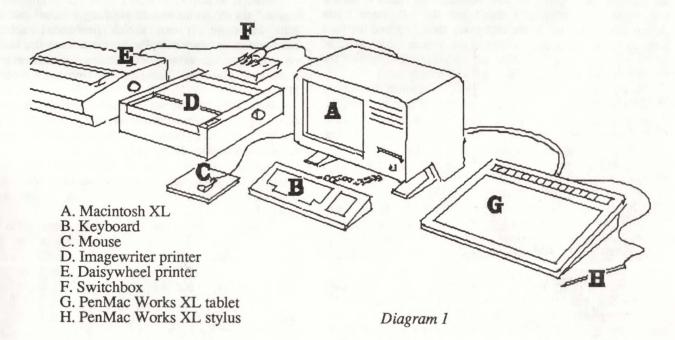
Now, because the hard disk installation is sketchy, let's examine how the Mac XL user will set up this tool.

Installing the Digitizing Tablet

The PenMac Works XL tablet connects between a 110-volt outlet and either the Lisa's Serial Printer Port (B) or the Modem Port (A). The advantage of using the modem port connection is that printers can then be installed on the Printer Port. It should be noted that other digitizers for the little cousin Macintosh connect in different ways—for instance, the GTCO Macintizer addresses the mouse port, and the SummaGraphics MacTablet, the serial port (with the power in the pen itself). However, currently neither of these works with the Mac XL.

I did have the problem of connecting two printers and a digitizing tablet to the two ports of the Lisa. If both ports are currently in use, then it is necessary to install a switchbox similar to that shown in *Diagram 1: Computer, Printer, and Tablet Layout* (drawn with the stylus in MacPaint). By installing a model MRS6DM interface cable (available at any computer store) and an RS-232 switchbox plugged into the Serial Port B, the Digitizer could remain connected to the Modem Port A. This

Computer, printer and tablet layout



connection should also be addressed under "Preferences" in the Lisa mode by connecting a serial cable to the Serial A Connector, and the Printers (I selected the Daisywheel) to the Serial B Connector. From then on, all the switching is done with the switchbox itself.

Once the hardware is installed, you can start using the tablet immediately. However, most people will probably prefer not to start from Softweaver's System disk, and so will install the *PenMac Works XL* software either on their hard disk or their current System disk.

Installing the Software

Because the hard disk installation is not covered clearly in the manual Version 2.1, the following information might be helpful in installing the Version 2.1 Tablet software on your hard disk. (To install on another System disk, read "your System disk" whenever instructions say "hard disk.")

- 1) Open MacWorks to the hard disk, and drag the Softweaver icon onto the hard disk. When you are open on the hard disk, you will see the System folder, the *PenMacWorks XL* Tablet Setup icon, and the *PenMacWorks XL* Help document.
- 2) Open the Tablet Setup icon, and a dialog box labeled "Tablet Control Panel" will appear. Pull down the new "Configuration" menu and select the menu item "Tablet Connection." The "Tablet Install & Configure" dialog box that appears will allow you to set the port to which the tablet is connected, and to indicate the size of your tablet. Then indicate your setup, select OK, and turn off the Mac XL.
- 3) Now (in Version 2.1), each time MacWorks is inserted, the Kurta screen title will appear. Shortly thereafter, the Desktop opens to the hard disk where, along with your other applications, the tablet icon now resides. The Tablet is booted and working. (Personally, I didn't like the full-screen Kurta Screen title staring me in the face every time I opened my hard disk, so I dragged its screen icon in the System folder to trash. Softweaver indicates that there are no other ramifications for trashing this file and that Version 4.0 will modify this.)

At this point, you may (if you wish), customize the amount of tablet being used and/or define any scaling ratio between the tablet and the screen. This is done by selecting "Custom Configuration." However, each time the computer is re-booted, the standard configuration is once again installed. *Ed. Note:* For more information on the latest enhancements to this feature, see Preview of Version 4.0, page 24.

Exhibit A (Tablet Configuration) shows the standard configuration areas available with the 12"x17" tablet, when using MacPaint and FullPaint in PenMac Works XL Version 2.1. These rectangles represent a comparison of actual areas of the tablet as they configure to the drawing surface available at a single time on the XL screen. When using these paint applications, it is apparent that in standard configuration, little consideration was given to the larger size of the Lisa/Mac XL screen. However, one can determine from this comparison that, even if the screen is reconfigured, FullPaint (using full screen size of a Macintosh) still offers a much larger drawing surface than does MacPaint. When graphics software is developed which takes advantage of the full Lisa/Mac XL screen, Softweaver will

Comparison of work areas using PenMac Works XL

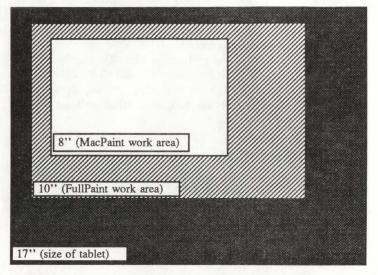


Exhibit A

no doubt address it in their standard configuration.

Using the stylus

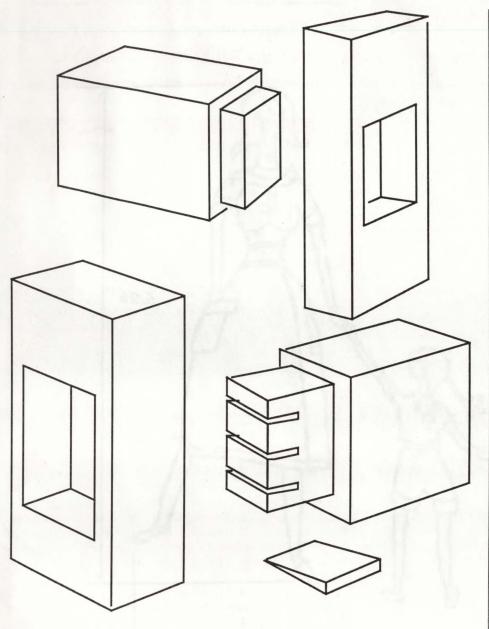
In truth, as Softweaver says, "The pen is mightier than the mouse," for the stylus can do anything a mouse can do, and a little bit more. It can sketch freehanded, accommodate handwriting, and trace complex diagrams. It can also handle every type of Mac XL software—Databases, Spreadsheets, Desktop Publishing, Charting, Planning, and Drawing (in both 2 and 3D).

For a right-handed person, the 8" sloping tablet is best set on the right, and I found it relatively easy to work the mouse on the left (see again *Diagram 1: Computer, Printer, and Tablet Layout*—drawn with the stylus in MacPaint).

The setup I used is not the only possible one—experiment until you find a setup that works for you. In deciding on a setup, just keep in mind these principles of mouse and tablet manipulation:

- 1) Both the mouse and tablet can be connected at the same time, although only one controls the screen at a time. They can, however, be freely interchanged in the production of a document. It is just a matter of keeping them physically separated so that only one pointer or cursor is on the screen at a single time.
- 2) When *PenMac Works XL* is installed, and the stylus is within an inch of the tablet, the stylus has priority (i.e., it is the signal "heard" by the Mac XL). To use the mouse, move the stylus more than one inch from the pad (to disrupt the radio signal). Then you can use the mouse as usual, even on top of the tablet if you desire. (This feature is ideal for use by two users

The LisaTalk Report • Summer Issue 1986



Mortise and Tenon Joint

Diagram 2

wishing to talk and use the tool simultaneously, in a coordinated effort—i.e., graphic designer and client, or teacher and student.

3) Because of the tablet's radio design, the stylus can actually trace through 3/4" of paper—that's over 100 sheets. Now you can trace drawings in books and printed magazines.

PenMac Works XL will work with any Mac XL program running under MacWorks (versions 1.0, 2.0, and 3.0),

and is especially appropriate for use with drawing programs such as MacDraft, MacDraw, MacPaint, and FullPaint. Although the handling and positioning of the drawing cursor in both MacDraw and MacPaint is exquisite, I would suggest using MacPaint or FullPaint for the freehand drawings, and MacDraft for the more technical details drawn to scale. Obviously, the (yet unseen) ideal program for graphic designers would be a product that would combine the large drawing sizes available in MacDraft with the

freewheeling tools of MacPaint, allowing for computerization of large freehand sketches.

Using the stylus

Using the stylus can be tricky at first. It's something new, this drawing with electricity. The primeval urge is to stare at the plastic surface of the tablet as the stylus moves over it, trying to trace the imaginary lines it has just made. The resulting product on the screen looks like child's play. If you want, you can adapt to looking at the screen without looking at the tablet. But, if you'd like to follow your instincts to look at the paper, I offer the following easy suggestion:

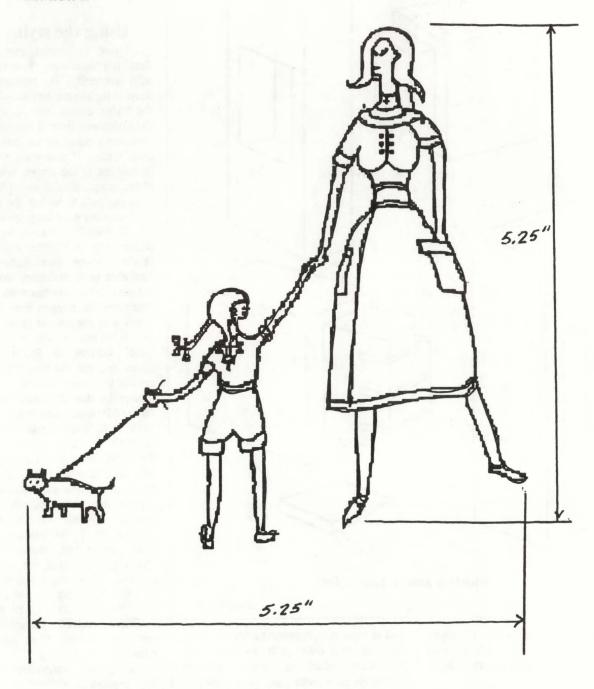
By simply replacing the point in the stylus with a "Space Age" pen point (Fisher Space Pen Refill Type PR, available in a stationery store), you can actually create ink lines on the paper as you send the images into the computer. What you see on the paper is what you get. Well, not exactly, that is, unless you have BitFixer or ROMSwitcher. For remember, our old friend the aspect ratio causes the image on the Lisa screen to look taller than it actually is—the pixels on the Macintosh screen are square, while those on Lisa are rectanglar. In MacDraft, or any drawing system with coordinates, the aspect ratio is not as critical. But in MacPaint it is very difficult to visualize the final outcome on the screen as it will appear in print. So, for the general PenMac Works XL tablet operation, BitFixer or ROMSwitcher is a must*. With either of these, I get true proportions on both the screen and the printout. There is, however, one other solution. By using the marquee selection tool (dotted rectangle) in MacPaint or FullPaint, screen distortion can be corrected before final printout. (See Exhibits B through F.)

Ed. Note: Softweaver indicates that this proportion difference can also be handled using their latest implementation of "Custom Configuration"; therefore, although useful, BitFixer and ROMSwitcher are not prerequisites.

Exhibit B shows an original sketch at size drawn on tablet. (Note dimensions & Proportions.)

The LisaTalk Report • Summer Issue 1986

Exhibit B



This is a photocopy of the original sketch as laid out on the PenMac Works XL tablet using stylus with pen replacement tip.

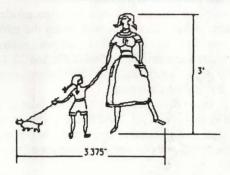


Exhibit C: These are the dimensions and proportions of figures as they appear on the screen directly from the tablet Proportion width/height is 3.375/3 or 1.125

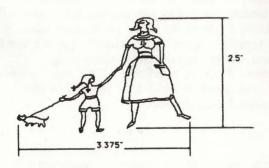


Exhibit D: These are dimensions and proportions of figures as they appear in the printout from the tablet (without stretching)

Proportion width/height is 3.375, 2.5 or 1.35

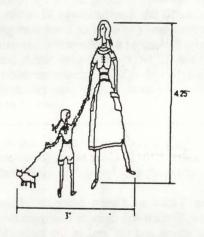


Exhibit E: Printout showing stretching necessary in FullPaint to get sceen to print out final drawing in same proportion as the original tablet image.

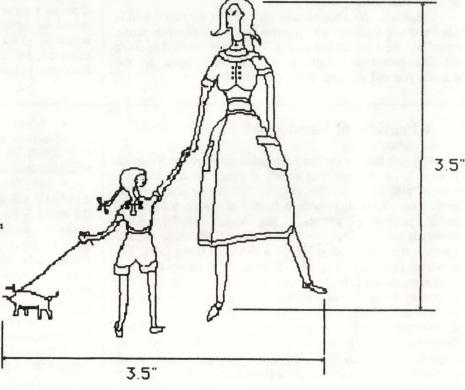


Exhibit F: This is the final printout from stretched version in FullPaint. Notice how proportions of width are similar to the original proportion width/height is 3.5/3.5 or 1.0

Exhibit C shows the dimensions and proportions as they appear immediately on the rectangular–pixeled XL screen.

Exhibit D shows an actual instant printout of the screen. (Unfortunately, our elegant lady has gained fifty pounds!)

Exhibit E shows the use of the marquee selection tool. By simply copying and pasting the screen image in a new FullPaint document, that tool can stretch the screen image.

Exhibit F shows a printout of the new stretched image which more closely resembled the proportions (not dimensions) of the original tablet drawing.

* * *

Once operational, in control of proportion, it took me almost an hour to master the technique of controlling the stylus. It was then that I created my first architectural sketch (see Diagram 3, page 26) created with the computer pencil on an 8–1/2" x11" sheet of MacPaint. In the second hour I was into MacDraft creating the more exacting isometric of the Mortise and Tenon Joint using the full 760 pixels across the XL screen (see Diagram 2, page 21). This is a very large drawing reduced fifty percent in the printing mode.

Usage note: You might have noticed that the pencil tool in MacPaint and FullPaint will sometimes draw with white pixels, rather than the intended black ones. This can be avoided by using the fine paintbrush (single pixel) and black paint. In this manner, you will get black every time you draw.

Using the PenMac Works XL tablet with advanced applications

• The software contains a menu selection entitled "Custom Configuration," which allows the user to set the tablet in either Landscape or Portrait orientation; allows enlargement or reduction without distortion; allows reflected and magnified images; 90 degree rotation and translation; even reverse, backwards, and inverted mapping.

• The tablet, as delivered, comes with a piece of clear mylar taped to its drawing surface. Additional mylar sheets can be purchased from Softweaver and can be prepared with different-sized grids and perspective charts for other professional

applications.

• Although the tablet has an accuracy of from 100 to 1000 ppi (points per inch) and affords automatic translation and scaling on every coordinate, the actual accuracy of the document being worked on, is only as accurate as the screen itself (72ppi). Although no current software program can take advantage of the precision available (or number of pixels) on the tablet, if a user–developer were interested in taking advantage of the tens of thousands of pixels across the *PenMacWorks XL* tablet surface, they can work with Softweaver to interface a software product to the XL driver directly. According to Softweaver, this would give access to 32 bit X and 32 bit Y coordinates which are scaled, translated, and rotated through a 32 bit transformer matrix. What this means is that every coordinate coming from the tablet could

continued on page 27

A Preview of Version 4.0

An Editor's Note

Although this review has been based on PenMac Works XL Version 2.1, Softweaver was already shipping Version 3.2 at the time of publication of this review. Softweaver also recently announced efforts to provide a further enhanced Version 4.0 update, targeted for release in late August '86. In general, numerous software revisions such as these might cause users to question the overall viability of a product. However, unlike numerous development updates, Softweaver's updates have not, to date, represented "fixes" to bugs, but rather "enhancements" to an already powerful and sophisticated program. In the words of Softweaver's President, Howard Pearlmutter, "Softweaver strives to maintain a tight communications loop with users. Thus, Softweaver is able to respond to users' needs and to introduce frequent updates without making users go through the traditional merchandising problems that occur in dealer inventories and other distribution channels."

The most important of the planned Version 4.0 enhancements will be the addition of the PenMac Desk Accessories menu, which will be installed via the Installer. These enhanced menu selections are being designed to offer users more complete control of their digitizers. Some of these selections are: "Dafault Tablet to Screen Mapping," "Custom Tablet to Screen Mapping," "Open Configuration," "Save Configration," "Save Configration as Startup," "Port in Use," "About PenMac," and "Choose PenMac Tablet." (See Exhibit J.) Of these, several major enhancements deserve mention:

- "About PenMac" will include an extensive set of documentation accessible in the PenMac menu. (Softweaver says that almost all documentation is now "on line" and easily accessible to users).
- The "Custom Tablet to Screen Mapping" feature (see Exhibit G) will allow Version 4.0 users to configure the area of the rectangle on the screen and the area of the rectangle on the tablet by simply typing in the numerical coordinates of those areas to be configured. (Users can use this new method to configure the tablet and screen, or they can use the stylus to select coordinates, or they can use both methods interchangeably.) This feature will inevitably offer the user greater flexibility and accuracy in creating intricate graphics.
- "Save Configration" will allow users to save and re-use their configuration settings again and again.
- "Port in Use" and "Mode" menus (see Exhibits G, H, I, J) feature easy selection of ports to which the tablet connects, porting to other things (e.g., in order to unplug tablet and plug in a modem for use with AB switches), and, of course, selecting the mouse or tablet modes.

Look for a news update on any additional features specific to the Version 4.0 release in *The Fall 1986 LisaTalk Report*. We look forward to continued innovation and creativity in the community of Lisa/Mac XL developers. **Please let us know** if there are other specific graphic applications (or other applications) which you are interested in seeing reviewed in this publication. Better yet, if *you* are interested in reviewing products, we might just have a project for you!

Exhibit G: Custom Tablet to Screen Mapping Menu (New menu selection in Version 4.0 Desk Accessory Menu)

Screen H,y:			РепМан н,у:	6	24
left right	top bottom	left right		top bottom (OK Help Point tance
xhibit H: Port in lew menu selecti n Version 4.0 lesk Accessory M	on		PenMec Port) Printer) Modem t Connected	OK Help Cancel	
hibit I: PenMac M ew menu selection Version 4 0			PenMec Mod) Mouse	OK Nein	

Not Connected

Cancel

Desk Accessory Menu)

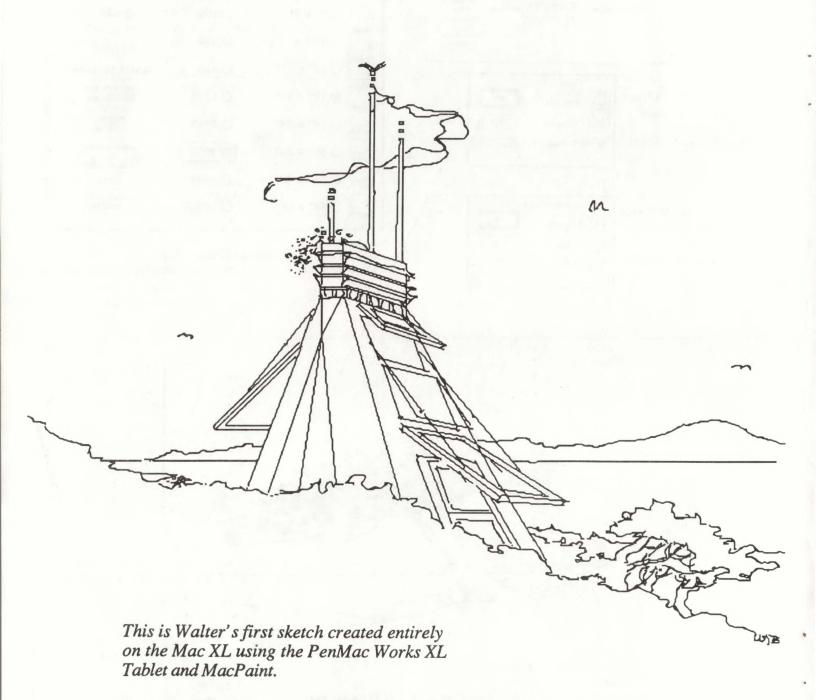
PenMac Tablet:	Bits/Sec.:	Points/Inch
□ ○ 6" н 9"	O 150	② 200
○ 8.5" н 11"	○ 300	○ 400 ○ 1000
○ 12" x 12"	0600	Tablet Switches:
● 12" x 17"	O 1200	PROGRAM JULIJIJI MODE/BAUD
₩ 024" H 24"	○ 2400	0000
☐ ○ 30" H 36"	a 4800	OK .
Q ○ 36" H 48"	O 9600	Help
☐ ○ 42" H 60"	O 19200	Cancel

Exhibit J: Choose PenMac Tablet (New menu selection in Version 4.0 Desk Accessory Menu)



Walter created this tree sketch after using PenMac Works XL in his work for several weeks. This sketch is also featured on the cover of this issue.

n



Brooks Residence, Pt. Richmond

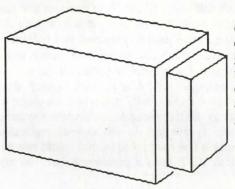
continued from page 24 be processed through a matrix at their existing high precision and then utilized by programmers.

Printing

Other than the issues of controlling distortion and establishing port management, I found no differences between printing with the mouse and with the tablet.

Support

Softweaver has announced that they are continually updating, streamlining, and enhancing PenMac Works XL.



While PenMac (Macintosh version) owners in general are guaranteed only one upgrade, Mac XL owners will receive any additional upgrades made available

the tablet and software. But no matter what, this is an important piece of machinery to the graphic artist, and other design professionals, giving us the opportunity to flexibly combine, on a larger-than-screen surface, freehand sketching techniques with hard-line symbols and lettering fonts-the very essence of graphic design. Now architects, engineers, cartographers, surveyors, contractors, desktop publishers, designers, and illustrators have for their Lisas and Mac XLs the tool of their choice. For myself, I will never regret the purchase. It is an incredible tool. PenMac Works XL represents for the computer artist, complete liberation from the mouse. If PenMac Works XL version 2.1 is any indication of things to come for Lisa/Mac XL graphics, we just might have ahead of us a chance to express our full computer potential. Now maybe one day we'll also have a super-wide carriage Imagewriter, a LaserWriter driver, and our own version of Thunderscan™...well, hopefully...but in the meantime, here's to bigger and better drawing!

introduction—is exactly simple, for it never is. But really, the

hardest task might be putting aside the \$895 to \$1,495 to buy

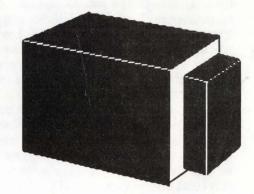
for PenMac Works XL users at no cost.

PenMacWorks XL is available for sale either directly from Softweaver or from Dafax Processing Corp. Softweaver and Dafax Processing Corp. will gladly provide

any support which may be required by their respective registered customers. Both of these companies are committed to customer support and will include any major future upgrades, including Version 4.0 updates, at no charge to existing registered customers.

spective as are committed to

Walter Thomas Brooks, a practicing architect out of Berkeley, California, is the designer of many national award—winning buildings. His work, exhibited at major universities, has been published nationally.



Conclusion

Well, I will not say that testing and using a new form of computer technology—especially during its initial

XL software developer
PenMac Works XL manufacturer
Softweaver, P.O. Box 7200
Santa Cruz, CA 95061
(408) 425–8700
PenMac Works XL (Current Version 3.2)
(PenMac versions are also available for 128K and 512K
Macintosh and the Macintosh Plus.)

Lisa/Mac XL product distributor
Dafax Processing Corporation
14 North Drive
Malba, NY 11357
(718) 746–8220
PenMac Works XL (Current Version 3.2)

PenMac Works XL Tablets Available

PenMac Works XL comes in seven sizes in a total of eight variations.

Active		Suggested
Area	Resolution	Retail Price
8.5" x 11"	200 ppi	\$ 895
12" x 12"	200 ppi	\$1,095
12" x 17"	200 ppi	\$1,495
	1000 ppi	\$1,995
24" x 24"	1000 ppi	\$4,995
30" x 36"	1000 ppi	\$6,995
36" x 48"	1000 ppi	\$7,495
42" x 60"	1000 PPi	\$8,995

Review

Typing tools

By Joan D. Dickey

Summary: Typing tools features brief but enlightening reviews of two products sure to be of interest to anyone who wants to get something typed quickly and professionally. TypeNow lets you type right from your Mac XL to any document loaded in the printer. Hayden: Speller is one of many spell checkers designed for the professional but imperfect typist or speller.

TypeNow

Mainstay 28611B Canwood St. Agoura Hills, CA 91301 Voice (818) 991–6540 Mi

Voice (818) 991-6540 Modem (818) 991-5037

Price: \$39.95

TypeNow is Mac XL-compatible under MacWorks (Vn. 3.0).

Since my personal background includes over 30 years as a typist, I was more than interested in "test driving" the *TypeNow Desk Accessory*. One of my greatest disappointments with microcomputers has been the inability to type something and get it in and out of the printer quickly. Well, my patience has finally paid off, because someone at Mainstay understood that being able to type something once can still be important — especially if you own a computer rather than a typewriter.

TypeNow installs in the Apple accessory menu on the Macintosh desktop and can be used with other applications open; just pull down the menu, choose "TypeNow," and print.

You can save the format (or the actual document) to use again, but the real beauty of this program is that each time you hit your **Return** key, your ImageWriter prints out a line of type (this could also be a drawback if you haven't taken the trouble to proofread your work).

TypeNow gives you a choice of eight sizes of type:

*Extended *Pica *Elite *Pica Proportional *Elite Proportional

*Semi-condensed *Condensed and *Ultra-condensed. This variety
of typestyles allows you to do some jobs on the micro that you
really couldn't do on the typewriter—like filling in a form that
was put together by a printer who didn't seem to understand that
typewriters only come in 10 and 12 pitch, and that a person
living in Tallahassee just might need more than the 10 spaces
allocated for the City name. You can also increase the size of the
type by using a Header selection that doubles the horizontal
width of the typed letters, and adjust the line spacing from six to
eight lines per inch!

Information that has already been saved as a document is printed out line by line each time you hit your **Return** key. This feature gives you the opportunity to edit each time you play out the record. Holding down the **Return** key will simulate

automatic printing, making addressing attractive envelopes a breeze.

Producing forms is a little trickier than just typing out an envelope, but I'm confident that most operators could master this program without much difficulty. It's the first program that has given me the courage to even attempt filling in a form with the computer; up until now I have used a typewriter or a ball point pen because I didn't have enough control over the printer, and I didn't have hours of time to spend figuring out how to do it.

Mastering this program will take a little longer than learning it, but somehow I think it will be a whole lot easier to master TypeNow than to master procedures to achieve the same results on the memory typewriters it will end up replacing. Incidentally, it only took a few minutes to learn. I would rate it a 10+ on a scale of 1 to 10. It rates a permanent space on my desktop.

Hayden: Speller

Hayden Software Company 600 Suffolk Street Lowell, MA 01853 Sales: (800) 524–1274

Tech. Support: (201) 393-6319

Price: \$79.95

Hayden: Speller is Mac XL-compatible under MacWorks. Developed for Hayden Software Company, Inc., in 1984 by Dave Winzler, Microseeds, Inc.; Rin Lichty, Softwest; and Dale L. Puckett, DaleSoft.

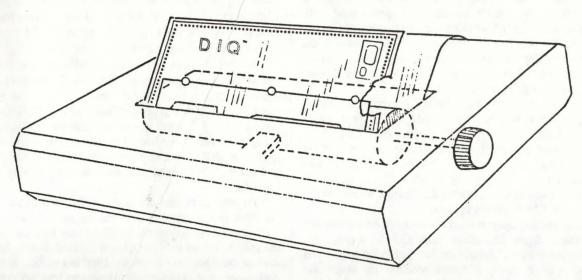
Before my stroke in December 1985, I didn't really have much use for spelling programs because I was a proficient typist and speller. I have been working as an executive assistant for almost 30 years and operating my own word processing business for the past five years, so I earned my keep as a speller (more or less). Now that I have this slight "handicap," however, I find that a spelling program helps me to maintain the same quality of work as in the past, with little additional work. I look at spelling programs as compensatory devices that allow me to continue functioning in my chosen field.

I test drove Hayden: Speller under MacWorks on my Lisa 2/5 (with 5 Mbyte ProFile). It was easy to install and didn't present any problems to my system. It works both on MacWrite and Microsoft Word documents.

Using Hayden: Speller to check for spelling errors is very straight-forward. You simply open the speller application from the desktop and select from the Choose File dialog box the document you wish to check. Note that: if you choose a Word continued on page 30

DIQTM=Does It Quick

for Regular ImageWriters™ and Apple® DaisyWheel Printers



Insert any DIQ DOC handler into the printer as you would a piece of paper, and roll forward to the bottom line of the document image. Place the scaled document immediately behind the DIQ document handler (position can be checked through openings provided), then roll the platen backwards until you reach the point where you want printing to begin. Print out, remove the first document, and insert the next. It's that easy!

DIOTM	ORDER	FORM:
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ANY ONE OF THE FOLLOWIN	IG \$9.75; ANY TWO, \$17.50; ANY FIVE, \$36.00
DIQ™ FOR LETTERHEAD ENVELOPES	DIQ™ FOR POST CARDS
DIQ™ FOR PLAIN ENVELOPES	DIQ™ FOR SM. ENVELOPES/ROTARY FILE CARDS
DIQ™ FOR INDEX CARDS	DIQ™ FOR LARGE LABELS (2 3/4 X 2 3/4)
	(One for Index cards, Business Letterhead Envelopes, and Small
Envelope/Rotary File Cards)	
Home Users Set of 3 DIQ™ Handlers - \$24.00 (Or Combined Business & Home Users Set of all 6 D	ne for Plain Envelopes, Post Cards, and 2 3/4 x 2 3/4 labels DIO™ Handlers - \$42.00
8" Printer Set of 4 DIQ™ Handlers - \$30.00 (One	e for Post Cards, Index Cards, Small Envelope/Rotary File cards and 2
3/4 x 2 3/4 labels)	The second state of the second
	COUNT FOR LISATALK SUBSCRIBERS
For sets other than as specified above, add an add	ditional \$2.50 for special handling. Add \$1.50 (\$4.50 Europe) per California residents must add 6.5% Sales Tax.
Send check or Money Order Payable to: DIQ DO	OC .
Mail to: DIQ DOC ORDER DESK-L1, P.O. Box	x 626, Moss Beach, CA 94038, OR CALL:
FOR VISA/MASTERCARD PURCHASE SIGNATURE_	E: EXP DATE:
NAME:	
ADDRESS:	A since /
	(1) (1) (1) (1) (1) (1) (1) (1) (1) (1)

Apple and Lisa are registered trademarks of Apple Computer, Inc. MacXL, ImageWriter, and DaisyWheel are trademarks of Apple Computer, Inc. DIQ is a trademark of DIQ DOC. © 1986 DIQ DOC.

^{*}Does not work on ImageWriter IIs. Note: The larger envelope sizes will not work in smaller printers.

document and only the MacWrite tool is available (or vice versa), you will get a message indicating that the document is being converted to the other format. Hayden: Speller will then quickly scan that document. After going through the Demo document, which took about 35 seconds to scan, I experimented with several other different—sized word processing documents on my disk, and it didn't appear that the number of words in the text had any direct relationship to the time taken to scan the text—a document at least twice the size of their demo didn't seem to take more than a few seconds longer to be checked.

After scanning, a window pops up and tells you how many Total Words, Different Words, Valid Words, and Suspect Words are in your document; also noted are Corrected Words, which, of course, are "0" until you go through the correction process. At this time you have several options: Within the Display/Print Menu are the Display Suspect or Display Valid and Print Suspect or Print Valid options. Within the Correct Menu are the Scan Document or Check Words options.

The most important options used to check spelling errors are Display Suspect, Scan Document and Check Words. By choosing "Display Suspect" (under the Display/Print menu) you are presented with a basic selection window in which the "suspect" words (i.e., words within your document not listed in the Hayden Dictionary) can be easily scrolled as single words. By choosing "Scan Document" or "Check Words" (under the Correct menu) you are presented with another more powerful selection window which includes a variety of options to correct "suspect" words.

"Scan Document" allows you to view "suspect" words in relation to other words within your text; a special pointing finger symbol points to the suspect word in relation to the text surrounding the "suspect" word. "Check Words" allows you to view each "suspect" word separately as single words. Within the selection window displayed you have the following options: Accept the suspect word as it is, Accept and Save the suspect word to dictionary, Postpone Action, or Replace the suspect word. Also, if you are interested in knowing the words within the Hayden Dictionary which are similar in spelling to the "suspect" word, you can select Look Up; all words within Hayden's Dictionary which are similar will appear within a mini-scroll box.

Once you determine whether you would like to Accept the word as it is spelled (in this and all times it appears in this particular document), Accept and Save to the Dictionary, or Replace the "suspect" word with another word (there is adequate space to type in any replacement word in any form of upper and lower case), you simply select Okay to execute the command. (Of course, there is also a Cancel command to be used to cancel the correction process.) Selecting Postpone Action, followed by Okay, will call up the next "suspect" word for consideration.

After you have made your corrections, you can review them easily by choosing "Scan Corrections" (also within the Correct menu), which allows you to scan your corrections in relation to the other words within your text. I found this particular feature very helpful, since the use of the word could determine its proper spelling. If you discover that you have made a mistake, you can then select "Review" (also within the Correct menu) to review

the changes you made to any particular "suspect" word and change the word again.

If you want to keep a record of the changes, you can tell Hayden: Speller to "Print Corrections" and it will give you a list of the original "suspect" words, and the changes that you made. You can also ask for a list of suspect and valid words, either on screen or in a printout to review in hard copy.

One of the inherent problems with spelling programs, and one of the main reasons that I have not chosen to use them more often, is that I have found that a "speller" is only that—a speller—and if you happen to have included a real word in the wrong place, i.e., book instead of look, the speller won't pick it up as a "suspect" word, and you go on your merry way thinking that all is well. There is just no substitute for true proofreading, and spelling checkers are best used as an aid to your proofreading sessions.

Another important consideration when deciding among spell checkers is the quantity and quality of vocabulary within the spell checker's dictionary. While testing Hayden: Speller demo document, I was a bit surprised to find that it failed to find several ordinary words in its Dictionary, i.e., using, general, preliminary and bibliography. However, you can easily save any additional words within either the speller's dictionary, or within a personalized dictionary called "MyWords."

Besides finding your spelling errors, Hayden: Speller also does a word count of the number of words in the document, and the number of different words in the document. I find the fact that spellers will count the words for you rather intriguing. I have recently read several articles on the controversy over whether Shakespeare really wrote several works. One of the ways used to determine who had written the document was by performing a comparison of the number of old and new words used and similar words in the author's vocabulary. Apparently we all have a "writer's fingerprint" that can be exposed at a later date by anyone willing to take the time to analyze our work. These spellers have made it easier to detect a "phony" document because they take the manual labor out of the task. (Ghost writers, beware!)

The only other experience I have had with spellers is with the one available with LisaWrite on 7/7. Hayden: Speller is at least comparable to the LisaWrite dictionary and actually has more features, since all you can do under 7/7 is check the spelling. While I understand that there are other more powerful spellers available on the market, I would recommend this one for the average writer who simply needs to ensure that his spelling is correct. (Again, spelling checkers should only be used as an aid in proofreading, and they are not fool—proof.) It is relatively easy to use and understand, although you will want to keep a dictionary handy for the occasional word that will not be available in the Hayden: Speller vocabulary. On a scale of 1 to 10, I would rate Hayden: Speller at least an 8.

Joan D. Dickey is Data Management Chief for The NetWorkers, co-founder and President of the Peninsula Lisa Users Group of San Francisco, and owner of DIQ DOC.



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7/7 World

LisaProject:

Project planning made simple By S. Venit and Diane Burns

Developed by:

(LisaProject was developed by Apple Computer, Inc., as a part of the Lisa 7/7 integrated software. Apple Customer Relations says they are no longer distributing Lisa 7/7 software and are directing users to contact Lisa/Mac XL dealers if they wish to purchase it. To find out the nearest Lisa/Mac XL dealer near you, call Apple at (800) 538–9696, ext. 874.

Hardware Requirements:

Any Lisa computer, 1 Megabyte of RAM, hard disk with at least 5 Megabytes.

Summary: Could LisaProject assist you in bringing your projects in on time and within your budget? This article discusses some of the features and some example applications of LisaProject.

long will it take to build a solar home in the mountains of Virginia? What are the steps in producing a Broadway play? How late can a particular activity start without affecting the final completion date of a project?

Questions like these occupy people who are responsible for making things happen on schedule. Sometimes the main concern of managers is not, "When will it happen?" but rather, "How many items on our list can we accomplish on time?" Or, "Is this project feasible at all, given the time frame and current resources?" LisaProject can help answer questions such as these. LisaProject is a project—planning tool that lets you create charts that are similar to PERT (program evaluation and review technique) or CPM (critical—path method) charts. (See box this page.)

Until recently, graphic planning tools like this have been available only on mainframes and minicomputers. Some microcomputer packages offer help with simple scheduling, but they cannot draw the kinds of charts available through LisaProject (and its offspring, MacProject). These LisaProject graphics offer visual clarity that is not possible with other comparably—priced software. Not only can LisaProject help set calendar dates for each step in a project and evaluate the related costs; it can also produce clear graphic presentations of these plans for review by project team leaders.

The program

So, what sorts of projects are particularly suited for planning tools such as these? Simply projects which can be broken down into a series of sequential, dependent steps. If you're going to

produce a Broadway play, for instance, steps include choosing the play, selecting a cast, choosing understudies, scheduling rehearsals, building the set, and so on. Before any new activity can begin, all preceding steps on which it depends must be completed (i.e., you cannot begin scheduling rehearsals until the cast is selected). Furthermore, *LisaProject* assumes that each person involved in the project does only one task at a time. (This assumption can, however, be circumvented, as we'll discuss later.)

At the heart of the *LisaProject* program is a diagram that shows the activities required to accomplish a goal. Based on the information you enter into the schedule, *LisaProject* can create GANTT-type charts which use horizontal bars to show the scheduling and amount of time allotted with each activity, or for each resource (e.g., person or a group).

You begin using *LisaProject* by identifying the tasks in the project, and placing them in order. The program initially represents each activity with a rectangle drawn on the screen, and it draws lines to connect activities that are dependent on each other, hence indicating the sequence and relationship of the events. Figure 1 shows a simple project plan, a possible series of steps for producing a newsletter.

You can then print out such a diagram and distribute it to the major participants in the project for review and input for the next step, scheduling. In their simplest form, LisaProject's project plans show the name of each activity and its duration (in days). If you specify the project–start date, the number of days required per task, and the number of work days per week, the program will calculate the projected completion date of the

continued on page 34

PERT & CPM CHARTS

PERT (Program Evaluation and Renew Technique) charts were originally developed in the 1950s to help accelerate the development of the Polaris missile. These charts consist of a series of events with estimated completion times or start/finish dates. With a PERT chart, planners can ask "what if" questions such as, "If a certain event is completed by a certain date, how soon will the next event be completed?"

The CPM (Critical Path Method) was developed independently at about the same time as was PERT. CPM is useful in determining the trade-offs between the costs and completion dates of a given project. In the latest released version 3.1, *LisaProject* can automatically calculate costs, and it identifies the critical path of the project.

Figure 1: A simple sequence of activities created with LisaProject

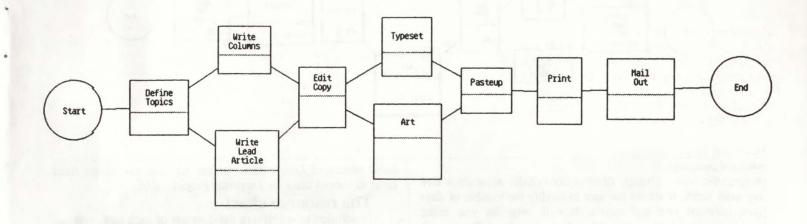


Figure 2: A project plan with Lisa Project's calculated start date displayed above each activity rectangle

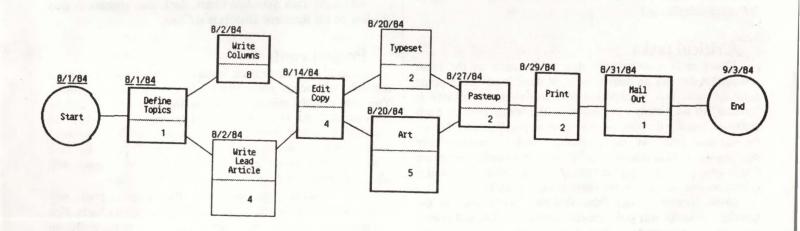
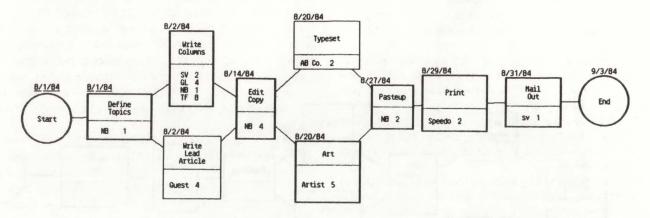


Figure 5: Full project plan with personnel time assigned to tasks



continued from page 32

project. Ed. Note: Though LisaProject initially assumes a five day work week, it allows the user to modify the number of days from between one and seven. It will even let you make projections based on weeks rather than days by defining each week as having only one "work day."

In scheduling tasks, LisaProject follows a rule of most planning methods: An activity cannot begin until all of the preceding activities on which it depends have been completed. Following this rule, LisaProject calculates from your estimates of task length each task's earliest and latest projected start date, and earliest and latest projected completion date. Figure 2 shows the newsletter production plan with the start date, final deadline, and days per task that the planner entered. LisaProject calculated the starting date for each task in the project (shown above the top left corner of each activity rectangle). (You can optionally enter these dates manually, if you wish, thus overriding LisaProject's automatic scheduling.)

Critical tasks

If the earliest completion date is the same as the latest completion date for an activity—i.e., if there is no "slack" time until the next task is expected to start—then the activity is "critical" to the timely completion of the whole project. Such activities, usually the longest of a series of parallel tasks, fall on the "critical path" of the project. LisaProject automatically signifies this critical path with boldface type, to make you aware that, if any activities along the critical path are delayed, the entire project will be set back by the same amount of time.

Non-critical tasks are those that have some slack in the schedule, tasks for which the earliest completion date is different from the latest completion date. The slack time for these tasks appears as gray shading on a (GANTT-type) Task Schedule Chart, which *LisaProject* creates based on the information on the basic project plan. The Task Schedule Chart in Figure 3 shows each activity stretched out across the time scale for the whole project. Any changes you make to the project plan will automatically show up in the Task Schedule Chart (you cannot make changes to this schedule directly). Additionally, in the

latest release of *LisaProject*, version 3.1, you can assign fixed costs to various tasks on a separate Project Table.

The resource chart

In addition to specifying the duration of each task, you can specify the name of the person responsible for that task. A task may involve more than one person, and you can specify a different amount of time for each person required for an activity, as shown in the personnel plan in Figure 5. Based on this information, *LisaProject* creates a Resource Distribution (GANTT) Chart using each person's activities over time, (see example in Figure 4 which is based on the personnel plan in Figure 5). Here *LisaProject* follows the rule that each person can be involved in only one activity at a time. If you want people to do more than one thing at a time, you can deliberately set up the schedule accordingly by giving them a different "name" or function identification in each overlapping activity.

As on the Task Schedule Chart, slack time appears as gray shading on the Resource Distribution Chart.

Project control

Controlling your projects begins by comparing the planned schedule, and actual performance, over the life of the project. You can identify review points on the schedule as circular "milestones." At these review points, you can update the schedule to reflect revised task-duration estimates, personnel assignments, and start/finish dates. You can also enter the time remaining for completion of each task, and the program will adjust the scheduled dates for the activities that follow.

Any changes you make in the project plan will automatically be reflected in the Task and Resource Charts. You can print each of these charts out, horizontally or vertically, on 8–1/2 inch wide paper. *LisaProject* lets you preview pages before printing, so that you can manipulate the project plan to accommodate page breaks. For emphasis or aesthetics, you can make individual task rectangles and circles larger or smaller. The program also lets you reduce the size of Task and Resource Charts which span a long time period, by changing the scale of the time axis from one week to two, four, or eight weeks.

You can also copy charts you create with *LisaProject* into *LisaDraw*, where you can then add borders, shading, and more text for your final presentation. Lisa Project provides only two areas—for headings and subheadings—for text entries outside of task descriptions.

For large projects, you can start with an overall plan and then break it into segments, which you copy into subfiles and then expand. You can build alternative plans, copying and changing the first basic plan. With LisaProject at your service, you might find that your needs for clearly-documented plans expand to include simple office routines, such as end-of-month closing procedures, which can then go into an in-house training and reference manual.

With the additional ability to assign costs to different phases of the project plan, *LisaProject* is a truly complete planning tool. Once you've entered dollar figures in the Project Table, *LisaProject* automatically calculates both incremental and cumulative costs of the project.

LisaProject is not offered as a stand-alone program. Instead,

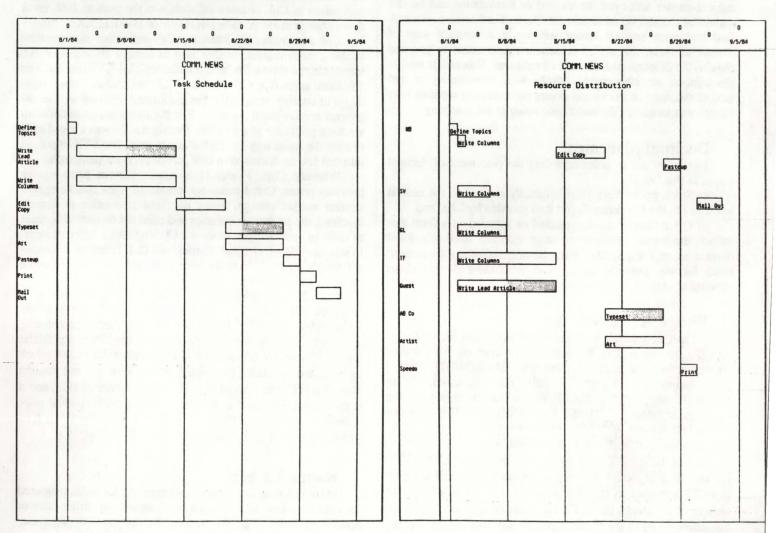
it is part of the Lisa 7/7 integrated software package. The documentation is also part of the Lisa 7/7 package. The manual is attractive, with many graphic examples, and easy to use. It contains setup information, a tutorial, a reference guide, and an index. If you use the tutorial, which has you access associated disk files, or study the excellent examples of project plans on the LisaProject diskette, you'll find the programs easy to learn.

In summary, LisaProject goes a long way toward simplifying the previously complex task of planning a project.

Diane Burns and S. Venit use a Lisa/Mac XL along with other Mac's, IBM PC's, and a LaserWriter, to produce camera-ready text and artwork in their graphics production storefront, TechArt, in San Francisco. They have also written many articles about desktop publishing for A+ and PC Magazines.

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Figure 3: Gray areas on the task chart show "slack time."



7/7 World

LisaCalc & Stock Prices

By Winder Johnson

This is an attempt to show how LisaCalc can be used to formulate the prices of stocks into certain common but useful results. This article is not a primer on the stock market. Rather, it assumes that the reader understands the term *yield*, knows that *P/E* stands for price-earnings ratio, and that the *S&P* 500 is a general stock market index. In addition, this is not atutorial on either LisaCalc or LisaGraph.

he particular layout of the chart shown on page 38 was chosen because the editor wouldn't sell me two pages for the price of one. This format, the column sequence, the column subject—matter and even the method of formulation can be and should be the individual investor's choice. Furthermore, you will find that your original layout will be in a constant state of change as better and different measurements occur to you and require the deletion and addition of columns. This article and its illustrations are concerned entirely with formulating in and around the *price* of stocks and makes no attempt at working with figures that measure "the underlying value of the company."

Decimal placement

Two notes are in order regarding the placement of decimal points in this layout:

 a) Stock prices have been originally entered to the nearest tenth, not to the full decimal, and then rounded by Lisa; and

b) Other figures are decimalized or rounded in a form that reflects the author's preferences rather than any fixed rule. Most dates used are for a Sunday, automatically indicating the closing price for the previous Friday and precluding doubts about opening or closing of the market.

Range A1:K19

Almost all columns have been replicated from Row 4 (stock "XYZ"), so that will be the reference or example row. Where necessary, formulae is shown in brackets: E4= [(D4/D21)*100].

Columns A through E are not discussed, being self-explanatory (cf:¶1). Col. F shows percent change in the stock price since 12/31/85: F4= [C4/10.4]. This remains unchanged (except for splits, etc.) throughout the year, since other changes can be shown in other columns.

In Col. H, April 27 was picked as a portfolio high for 1986 (so far). Similar to Col. F, the price of each individual stock on April 27 was used as the divisor in Col. H. H4= [C4/11.8], the answer of .92 shows that XYZ has declined 8% since April 27. Sometime along in the future, April 27 will lose its significance to another high or low date, at which time that date's price will

have to replace the old one in the formula.

Col. G is merely an adjunct to Col. H. in that it shows a warning if the Col. H figure has exceeded a pre-determined price change; this is, of course, triggered by the actual price in Col. C. In the present case, Col. G raises a flag in the form of "XX" if the current price varies more than 10% from the April 27 high. (Look at stock CT in cell G8: the "XX" calls your attention to H8 which shows that stock CT has declined 23% since the high of April 27. Uh, what do I do now, Coach?)

The % change that you allow without flagging in Col. G is yours to decide, and can be different on the upside from the downside. It can also be different for each stock, but that makes replication in Col. G more difficult. On the present 10% up or down change in H4 is: G4= [IF(H4<.9 or H4>1.1,"XX","")].

Col. J measures the strength of an individual stock relative to the general market, in this case as gauged by the S&P 500 index. Cell J4 shows .96, which indicates that XYZ has declined 5% more since April 27 than the S&P has changed since April 27. Put another way, XYZ has performed 95% as well as the general market since April 27. For the moment, go outside our working perimeter to cell H38. The figure .96 was arrived at in exactly the same way for S&P that was used for XYZ to put .92 into cell H4, as discussed in first part of previous paragraph.

Whereas Cols. F and H measures current price against previous prices, Col. J measures individual price change against general market change. Since no fixed past price is directly involved, the formula is constant and need not be altered because of splits or date changes, or even switching into a different stock. In this case: J4= [H4/H38]. Throughout Col. J, cell H38 remains a constant in each formula with only the H4 row reference changing for each stock.

Col. K is comparable to Col. J. but strategically it measures the individual price change against the portfolio Stock-index (STKDX) change—or how the part is contributing to the whole. More about the two indices used in this portfolio later. For now, we are concerned only with the STKDX which includes the six items (weighted) above Row 17, but nothing else. Cell H32 was arrived at in the same manner as H38, and it is the change indicated there against which the individual price change is measured. In this case, the formula would be K4= [H4/H32], with H32 remaining constant throughout Col. K.

Range L1:S19

In the columns of the previous range, the formulae measured the current individual price of a stock against an earlier price or against an index. In this range, the results will show the relationship between the current price and certain external factors such as earnings and dividends.

In Col L. LisaCalc figures the total gain or loss on each individual stock based (as is the whole sheet) on the current price as entered in Col. C. For the present portfolio, the Cost per Share (Col. S) is an average (total costs divided by total shares), so that the figure in Col. L is accurate for all of any one stock, but would have to be adjusted for sale of a particular portion. In any case, Col. L is far more useful in its present form than it would be on a gain or loss per share basis. L4= [D4-(B4*S4)].

Columns M, N and O show how different formulations can yield similar results. Col. M shows the ratio of current price to sales per share with the sales figure included as part of the formula rather than in a separate column. M4= [C4/14.75]. (See discussion below.)

There is no formula in Col. O, just a plain earnings entry of .91. From that and the current price, Col. N derives the P/E ratio. N4= [C4/O4]. If one were interested in the P/E but didn't really care what the earnings actually were, the earnings figure in Col. O could be incorporated into the Col. N formula, as is done in Col. M. It would mean slightly more work to change the earnings figure, but this would be balanced by the fact that Col. O space would be available for other uses. There exist many instances such as this, and the problem can often be solved by deciding just what it is that you want to be able to see/read easily.

Cols. P, Q, R, S are self-explanatory. P and S contain no formulae, only the figure shown. But these figures are necessary to other columns. Herewith XYZ (Row 4) formulae for Col. Q and Col. R: Q4= [B4*P4] and R4= [(P4/C4)*100].

The matter of using past or projected figures for sales, earnings and dividends (or even both) is a judgmental decision and not truly pertinent to this article, which is only attempting to show how to relate current price to any available figure.

Rows 10 & 11

In Col. A for these rows, find TU and VWA. TU is a bond that is convertible into 2.4 common shares of VWA, an entirely different company. Because they are different companies, the conversion mesh is not as close as normal, but the interlock is still there. Very important to this portfolio is the fact that TU is owned and VWA is NOT owned. Because of that situation there are certain gaps in both Rows:

a) P/S and P/E are not affected by the current price of a bond; and

b) value and dollar yield can't be included if the stock is not owned.

Due to the conversion feature, the prices of both bond and stock have to be followed, but not all other information is usable. Col. C gives the current price of each item, and the conversion relationship is that between cells C10 and B11. At present, there is a large gap, 107 vs. 82, and the bond is trading on its yield basis rather than riding on the conversion value. The comparable value of the bond if it were converted into the stock is: B11 = [C11*2.4].

(Range A29:S42)

With the exception of cells C32 and C33 (see next section). all of the entries in this range are handled as was discussed in the first section above. The only difference is that this area involves market indices rather than individual stock prices. Because all the indices are measuring the general trend, there is less discrepancy between them, particularly as happened on the actual date used.

As in the upper section of Cols. J and K, the changes of all indices since April 27 are measured relative to the change in S&P and the STKDX. Cell J38= [H38/H38] and cell K32= [H32/H32]; these two cells will, of course, always read 1.00. Just to note again: In all of Col. J the constant divisor is H38, and in all of Col. K the constant divisor is H32.

(Range A20:S28)

Col. B in this Range shows the number of shares used to calculate the STKDX and the TTLDX from the \$ value of the portfolio. This method of valuation is the same as that used in calculating the value of a mutual fund. The main difference here is that the Stock portion is considered a separate but subsidiary portion of the Total.

The STKDX is determined by dividing the stock value by the number of Stock Shares: C32= [D21/B21] = 209.1: the TTLDX by dividing the total value of the portfolio by the number of Total Shares: C33= [D27/B27] = 192.5. The concept of keeping stocks separate from but subsidiary to the total is best illustrated by an example.

Any calculations used in this example can be made in any blank section or cell of the active LisaCalc sheet. Assume you want to buy 500 shares of ABX now selling at 40. Cell D24 shows insufficient cash and it would be best to add \$6,000 to that pot. In order to maintain the TTLDX at 192.5, it is necessary to increase the number of shares in B27 and that needs to be calculated. (This operation is exactly the same as buying stock in a no-load mutual fund.) Use any blank cell and insert the formula [B27+(6000/C33)] which yields 1512.07. Change Cell B27 to 1512.07 and change Cell D24 from 15002 to 21002. The TTLDX as shown in Cell C33 remains the same at 192.5.

The purchase of ABX is made at 40.5. On Row 5 enter "ABX,500, 40.5" and at D5 the formula [B5*C5]. This gives a Value of 20250 which when deducted from the cash pot leaves Cell D24 at 752 and the TTLDX still reading 192.5. But the STKDX is distorted because the number of Stock shares has not been increased to absorb the increased Stock Value. Using any blank cell, insert the formula [B21+(20250/C32)] and change Cell B21 to read the answer of 627.84. Now both the STKDX and the TTLDX read the same as before the operation was started. However, Cell E21 proves its worth by reading 85 instead of the 100 that it should. The % STK was not formulated in Cell E5. Insert E5= [(D5/D21)*100] and now E21 reads 100%, as it always must.

When a stock is sold, the same steps are taken in reverse, always bearing in mind the number of Stock shares to be subtracted via the STKDX. The \$ that are added to the pot in Cell D24 can be left there for future operations, thereby making

1 2	A STOCK	B SHS.	C PR.	D VALUE	E STK	F \$ 86	G 10%-H	H APR27	I STOK	J S&PTND	K	L PAPR	M P/S	N P/E	O EARN	DIV	Q \$YLD	R %YLD	S COST/SH
4	XYZ	1500	10.8	16200	15	1.04		. 92	XYZ	. 95	. 95	(3225)	.7	11.9	.91	.16	240	1.5	12.95
6	FWL	900	21.1	18990	17	1.10		. 91	FWL	.95	. 95	2691	1.4	11.6	1.82	. 18	144	.8	18.11
8	CT	1200	11.6	13920	13	1.30	XX	.77	CT	.80	.81	(756)		4.6	2.54	0.0	0	0.0	12.23
10 11 12	TU(cv)} VWA}		107.0 34.9	26750	24	1.04	xx	. 95	TU(cv) YWA	. 99 . 92	. 99 . 92	(3705)	.3	9.3	3.75	8.00	2000	7.5	121.82
13	PDQ	300	62.2	18660	17	1.04		1.00	PDQ	1.04	1.04	4401	1.3	12.8	4.86	0.0	0	0.0	47.53
15 16	DAMX	1500	11.0	16500	15	1.22		1.01	DAMI	1.05	1.05	3480	1.5	-12.2	(.90)	0.0	0	0.0	8.68
17 18 19	AVERAGE	+++++		18503	17	110.6		. 92	AVG	. 96	. 96	481	1.0	6.3			*****	****	
20 21 22	STOX	531.0		111020	100 -\$TTL-	113.9		. 96	STOX	1.00		2886					2384	2.15	
23 24	STOX			15002	39 5												975	5.83	
25	BONDS			159000	56												11523	7.25	
26 27	TOTAL	1480.9		285022	100												14782	5 19	
28		. 400.0		-						-APR.	27-								
29								APR27		SAPTND	STKTND								
30 31		CLOSE	5-16-86							-	-								
32		STKDX	209.1			113.9		. 96	STKDX	1.00	1.00								
33		TTLDX	192.5			102.7		. 99	TTLDX	1.03	1.03								
34 35																			
36 37		D/J	1759.8			113.8		. 96	D/J	1.00	1.00								
38		S&P-500	232.8			110.2		. 96	S&P-500	1.00	1.00								
40 41		NASDAQ	384.7			118.4		. 98	NASDAQ	1.02	1.02								
42	A	8	С	D	E	F	G	н	I	J	K	L	М	N	0	P	0	R	S

INDXGRF-LTS

1986

STKDX

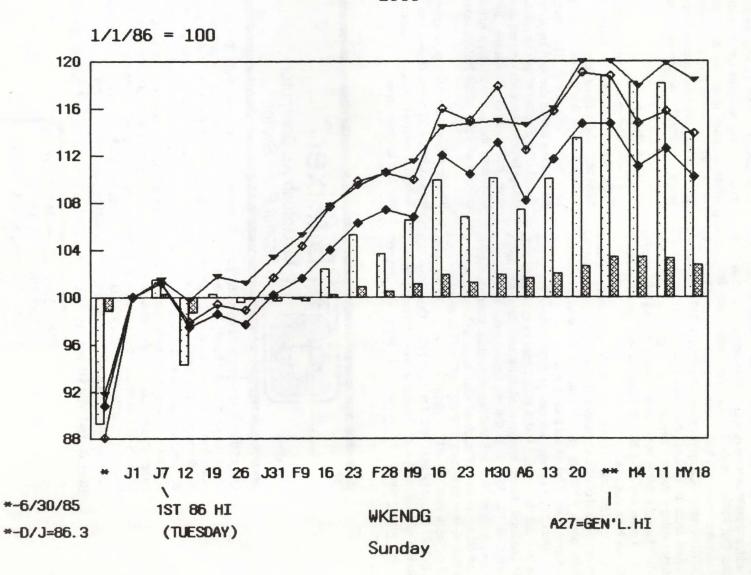
TTLDX

S&P500

NASDAQ

D/J

5/18/86



continued from page 37

it unnecessary to adjust the Total number of shares at this time.

Both the STKDX and the TTLDX are weighted, in that they are based on the Value shown in Col. D and not on the pure prices in Col. C. Since stocks are frequently changed, bought and sold, a straight average of actual prices would have no meaning. But Cell F18 shows the Average Price Change since Jan. 1, and has some meaning which could be made into an AVGDX vs. STKDX ratio. Comparison of 110.6 with 113.9 [F18/F21] would seem to indicate that more \$ have been put into the faster-rising stocks, indicating a degree of cleverness. Unfortunately this is misleading, because although the figures are accurate, not all of the present stocks were owned on Jan. 1. So much for statistics.

The **LisaCalc** layout has been condensed, altered, re-spaced, and otherwise changed from two landscape (and side by side) pages. This has caused a number of omissions, mostly columns, *some* of which are listed below:

1&2) 52-week high and low. 3) TIGR – shows the % gain or loss that the items in PAPR (Col. L) are of the total G & L. 4) Statistical reference page number for each item. 5) BETA rating. 6) BLUSKY – % that the current price is towards a hoped-for goal. 7) Month and date of purchase when short-term, then change to year of purchase when becomes long-term. 8) % TTL – % that each stock is of the total portfolio rather than just of the stock total. 9) SITE – which broker is holding the stock. 10) 1987 P/E. 11) 1987 P/S. 12) 1987 P/C – Cash Flow. 13) Section of a column pre-formulated to show discount brokerage costs when numer of shares and price are entered.

14) Abbreviated IRS Schedule D showing NET short— and long–term gain or loss. 15) Section listing open–limit orders.

Planning and making the layout and formulating the LisaCalc spreadsheet will take 10 times longer than anticipated, but three to four weeks should do it. There are ever—changing decisions such as what order to use, the width of columns, what items are truly pertinent and useful, etc. HOWEVER, once the layout is finished, the posting of prices of 15 stocks and printing of two landscape sheets can be done in 20 minutes. Interpreting the printed answers takes a little longer.

The chart

The figures used to construct the accompanying LisaGraph index were taken from the current and previous editions of LisaCalc. The periods are weekly except that Jan. 7 was inserted to show that the 1986 market headed up first before it went down to Jan. 12. This chart is unique in that the well–known market averages are shown together by percentage change from a common starting point. The TTLDX shows little change because the bonds were not marked to market. If the chart were moved from LisaGraph by Copy and Paste into LisaDraw, the top and bottom run–offs could be shown and different accenting added. Perhaps next issue.

Winder Johnson has been an investor for 50 years and was a stockbroker for 15 years. He was one of Apple's first customers during the original commercial Lisa shipment, and has been an avid Lisa user ever since.



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Lisa error codes:

What the heck do those numbers mean?

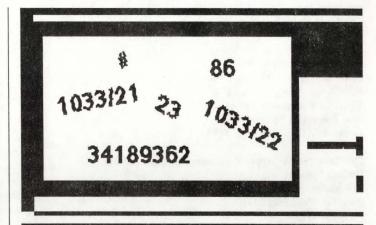
By Fred Reitberger

I'm sure everyone has at one time or another faced the alert box telling them that an error has occurred. Included in this box is usually a cryptic number or numbers that you are supposed to look up in the *Owner's Guide*. With feverish speed you grab the manual (for those of you who are lucky enough to have one), and lo and behold, you find...nothing! Since this happened as you were saving the spreadsheet on which you just spent eight hours working, visions of axes, bulldozers, and other devices of destruction come to mind. Well, I wish I had good news. But, alas and alack (whatever alacks are), unfortunately I have little.

The Lisa Office System is a massive, 2 Megabyte, software machine that has an incredible amount of self-protection and correction built in. Examples are such things as three separate catalogs on your disk and verified writing of documents to the disk. This built-in error checking catches all but the most terrible problems. For instance, when a minor error such as that which occurs while you are trying to save to a write-protected disk, the Office System intercepts the error generated, #618, and translates it to English: "You must remove the write protection from this disk." But when a major problem arises, you must contend with the "Oops, I have an error" box and the error code.

Error codes fall into three major categories. The first is a series of low and high tones generated by the Lisa during the first few moments of being powered on, usually before the screen lights up. (These error tones are documented in the Owner's Manual.) Different combinations of these low and high tones indicate different problems. For example, the Hi–Lo–Lo signal is translated as an expansion card problem. In this case, Apple suggests you call your friendly local repairman. (I suggest you take off the back, pull the cards, clean the contacts, and try again!) In any case, I imagine that sometimes during start–up the built–in diagnostics can make a mistake—I have found that, for some unknown reason, I can turn on my Lisa and get an error tone once, but there may be nothing wrong and the tones do not recur.

The second category of errors are number codes that appear under the device icons after you start—up. Once the screen warms up, you will see the visual representation of the Lisa checking itself. If an error is found, the Lisa will show a box with an icon crossed out and a number below it. It will be a two—digit number and is not documented in the *Owner's Manual*. One common error is a #23. It means that the Lisa was not able to read the diskette. (In my case, it usually means that I forgot to put the diskette in the drive when I started up!) Errors in the #80s indicate problems with the hard disk. In most cases, these errors are pretty severe and will usually mean a trip to the repairman or



an erasure of the offending disk. A complete list of these errors is not possible here. (Perhaps, if demand warrants, Lewis Guice can distribute them in the future.)

The third and last set of errors occur when you are working in the Office System, usually when opening or closing a document. At this time most errors are caught by the Office System and translated, ("out of paper," "printer off line," etc.). But a few are not understood by the Office System and are passed on to you. The most common error code is "1033/21" and then a string of numbers. The 1033/21 and 1033/22 error codes are the most severe problems the Lisa can have. They mean there was an error in the very code of the computer operating system or application and that it occurred on the listed line of code. For example, an error of 1033/21 34189362 means it found an error at the 34189362 line of code! I know this might help the programmers some, but it doesn't help me at all. If you get any type 3 error codes, the best solution is to back—up all of your work, repair or erase the disk, and re—install the Office System.

Finally, even though I have a list of over 600 error codes, Apple added more codes when they released the 7/7 Office System! What's worse is that they didn't document them. Even if you had a copy of my list, it probably wouldn't help. Cheer up, though! As I said, the Lisa Office System is a robust self-correcting system, and you will not run into major problems in most cases. If you do have a problem, you could always write the numbers down and play them at your local lottery! Best of Luck.

Fred Reitberger has served as director of technical services for a variety of companies, including the now-defunct Lisa Hotline. Fred is now an independent, private consultant for businesses in Boston and is a contributing editor for The LisaTalk Report.

UNIX on Lisa: Part II

UNIX Corner

A comparison of XENIX and UniPlus+

By Tim Monroe

XENIX for the Apple Lisa was manufactured and is marketed by:

The Santa Cruz Operation, Inc.

500 Chestnut Street

P.O. Box 1900

Santa Cruz, California 95061

(408) 425-7222 (800) 626-UNIX

XENIX Operating System: \$395

XENIX Development System: \$395

Text Processing System: \$195

Complete XENIX package: \$895

UniPlus+ for the Apple Lisa was manufactured by:

UniSoft Systems

739 Allston Way

Berkeley, California 94710

(415) 644-1230

UniPlus+ for the Apple Lisa is marketed by:

UniPress Software

2025 Lincoln Hwy.

Edison, New Jersey 08817

(201) 985-8000

Single-user system with utilities and C compiler: \$990

Single-user system with utilities and text tools: \$990

Multi-user system w/ C compiler and text process. tools: \$1,350

Summary: In this second part of our two-part series of UNIX on the Apple Lisa, Tim Monroe compares in detail two versions of the UNIX Operating System which run on the Lisa/Mac XL: XENIX by Santa Cruz Operations, and UniPlus+ by Unipress Software. He concludes that, although both are good implementations of UNIX, they are not the same and each offer different benefits.

UNIX is a powerful Operating System with lots of good, powerful software. Lisa is expandable, has plenty of hard disk storage, a bit-map screen, and is relatively attractive. Apple's January 1985 price cut made Lisa one of the lowest-priced UNIX-capable 68000-based supermicros. So, the Lisa is a good machine to put UNIX on, particularly if you are on a tight budget.

I noted in *UNIX* on the Apple Lisa:Part I (see The Spring 1986 LisaTalk Report) that there are in fact two distinct implementations of UNIX for the Apple Lisa, available under the trade names 'XENIX' and 'UniPlus+'. XENIX was implemented on the Lisa by The Santa Cruz Operation, Inc., and has been exclusively marketed by them. UniPlus+ was ported to the Lisa by UniSoft Systems and is marketed by UniPress Software. Both XENIX and UniPlus+ provide most of the essential capabilities

that UNIX users have come to expect from a UNIX system. Indeed, parts of both systems (particularly some of those based on Berkeley source code) are absolutely identical. So, if you want a multi-user, multi-tasking computing environment with the usual Berkeley enhancements, either system will probably give you what you seek.

Yet, there are differences between the specifics of XENIX and UniPlus+ implementations, and here in *UNIX on the Apple Lisa:Part II* I will explain what I find to be the most important of these. Before I begin, however, a word or two of caution is appropriate. First, I intend to discuss XENIX and UniPlus+ only as they are currently implemented on the *Apple Lisa*. UniPlushas been ported to (i.e., implemented on) many other machines; it is, in fact, the most widely–ported version of UNIX available. XENIX has also been ported to several other machines, most notably the IBM PC/AT. However, I am not at all concerned with those other ports (or versions). In this piece, when I say 'XENIX', I mean 'XENIX on the Apple Lisa', and similarly for 'UniPlus+'.

Second, you have a right to know what my qualifications are to offer a review of these two systems. I am an employee of UniSoft Systems, the company which ported UniPlus+ to the Lisa. I am also a XENIX licensee and certified independent software developer. When I first went looking for a UNIX implementation for my Lisa, I chose XENIX (primarily because of the "virtual terminals" feature, discussed later). At work, however, I use UniPlus+. I have, therefore, about the same level of acquaintance with each system, and I have nothing particular to gain if you should purchase either one of these systems. In any case, I intend that you should consider this as a review article; the opinions expressed are wholly my own and are neither those of my employer nor of anyone whose product I have purchased. So, with these two points understood, let us see how the Lisa versions of UniPlus+ and XENIX differ.

Keyboard layout

Perhaps the most immediately obvious difference between UniPlus+ and XENIX is the way the keyboard works. The standard Lisa keyboard has no keys labelled 'delete', 'escape', or 'control', while it does have 'Clear', 'Option', and 'Apple' keys. Some decision therefore needed to be made about which Lisa keys should correspond to which UNIX (i.e., ASCII) codes. XENIX and UniPlus+ have chosen slightly different solutions here (see Figure 1).

Both systems map the Apple key to the Control key. XENIX maps the Clear key to the Escape, while UniPlus+ maps it to the Delete key. Under UniPlus+, both Options keys are

mapped to the Escape key (which is convenient), while under XENIX they are both non-functional (which is not very convenient). To my knowledge, there is no way, under XENIX, to get the Option keys to do anything at all. There is, in addition, no Delete key on the XENIX keyboard. To kill a current foreground process, you need to hit two keys simultaneously (Control-C), which is slightly less-convenient than striking just a Delete key.

Hard disk drives

Both XENIX and UniPlus+ support the Lisa 2/10's internal Seagate (or "widget") 10Mbyte (Megabyte) hard disk, as well as the very common 5Mbyte ProFile. Also, both XENIX and UniPlus+ support a variety of non-Apple hard disk systems, including the Priam DataTower and Sunol disks, though software drivers for some of these might cost extra. (Corvus drives are apparently not supported by The Santa Cruz Operation, Inc.)

The only difference between XENIX and UniPlus+ in terms of hard disk drives is the difference in maximum total external storage. Since you need a parallel port for each external ProFile, XENIX allows a maximum of 20Mbyte total external storage, if using only Apple equipment. On the other hand, UniPlus+ allows a maximum of 40Mbyte total external storage, if using only Apple

equipment. Of course, with either system, you can also use the Priam or Sunol hard disks.

Adding peripherals

Both systems allow connection of all the standard types of peripheral equipment, including modems, printers, hard disks (see above), and the Lisa mouse. There is, however, no applications software distributed with either system which takes advantage of the mouse. You are free to write your own software accessing the mouse, and both systems include the necessary software drivers to allow this. But unless you do actually write your own software, or if you find someone to write it for you, the Lisa's mouse is as good as dead. The Santa Cruz Operation, Inc., did, at my request, supply me with some demonstration programs that access the mouse, so at least you would have some working code to start from.

There are several points to note when adding peripherals to the Lisa. First, if you plan to put UNIX, in either implementation, onto your Lisa, you will probably want to get a TecMar four-port serial card. This is a circuit board which fits

UniPlus+ Keyboard delete tyui ghj b n ent space control escape XENIX Keyboard escape lock a s d f ghj shift z b n m ent space control unused (Figure 1)

into one of the Lisa's three expansion slots, and gives you four additional serial ports. Without the TecMar board, you can add only two serial peripherals; if you add a modem and a printer, for instance, you have no room left for additional terminals, modems, or printers. With the TecMar board, however, you have a total of six serial ports, about as many as the Lisa can manage with her relatively slow CPU and limited RAM. I have heard some reports of malfunctioning TecMar boards, but I have used one for over a year with no apparent problems. And, I could barely imagine doing without it, now that I have a printer, two modems, two terminals, and a Radio Shack Model 200 portable computer connected to my Lisa. This ability to add multiple peripherals is important to me in my work: as a writer, I like to be able to take the portable anywhere, write notes as they occur to me, and then transfer them to the Lisa for future editing.

Second, under XENIX, if you add peripherals while the system is active, you will either crash the system or send the internal software clock racing furiously. By the clock "racing," I mean that the software starts keeping time too rapidly, so that you are soon into next week (or so the system thinks). (Ed. Note: representatives of The Santa Cruz Operation, Inc., say they

have never heard of these problems.) Indeed, you don't even have to connect or disconnect the peripheral to cause these problems: merely turning a peripheral's power off or on will provoke the clock to do strange things. So, if your printer jams and you need to power it off to correct the jam, you will have to reset the Lisa's clock. Further, if you unplug the cord on the keyboard while the machine is running XENIX, the system beeps loudly and crashes. Under UniPlus+, none of this happens. (Ed. Note: representatives of The Santa Cruz Operation, Inc., also say that users can attach a serial or parallel device while the Lisa is on, without complications.)

Apparently, the only way to add (or remove) peripherals to XENIX safely is to bring the system down. And the only way to reset the clock to the correct date and time once it has begun racing is to re-boot the system. This is a definite bug in XENIX, which is not shared by UniPlus+. Under UniPlus+, you can add or remove peripherals, or turn them off and on as desired, without crashing the system or interfering with the software clock. Once again, SCO representatives are aware of this problem. I do not know if a fix is planned.

It is worth observing that UniPlus+ includes a *real-time* clock driver. The real-time clock is an actual piece of hardware inside the Lisa which keeps time, even when the machine is turned off; the software clock, on the other hand, is the Operating System's way of performing date and time functions. Under UniPlus+, you can set or read the time and date on the Lisa's real-time clock. To my knowledge, this is not possible with XENIX. Also, under UniPlus+, you can instruct the system to set the system time to the real time (as defined by the real-time clock). Once again, this is not possible with XENIX. As far as I can tell, XENIX allows no interaction at all with the Lisa's real-time clock.

Software

Most of the standard UNIX utilities work identically under XENIX and UniPlus+, with a few important exceptions. Both XENIX and UniPlus+ include vi, the full-screen visual editor which is one of the nicest Berkeley enhancements to UNIX. It is fair to say that vi is the most widely-used editing system available under UNIX today; it is used both for text entry and editing and for program entry and editing. But in vi under XENIX, neither the "Abbreviate" nor the "Map" commands work, even though the manuals list them as available. (Ed. Note: SCO confirms that this is a bug, and they are aware of this bug.) These two commands allow you, in differing ways, to store a series of keystrokes and recall this series with a single keystroke (like Mac macros). This, while not necessary, can save a significant amount of typing, as well as automate a good bit of the editing process. Both of these commands are available in the UniSoft port, since their version is based on a later release of vi. Since I use vi every day, often for hours at a time, I like having the full spectrum of editing features at hand, and I find this omission to be an annoying limitation of the XENIX implementation.

On the other hand, one command that is more full-featured under XENIX than under UniPlus+ is the "mail" command.

Electronic mail delivery is one of the really useful things about the the multi-user capabilities of UNIX in general. You can, for instance, send mail to other users, perhaps informing them of changes to the system or impending downtime. Or, you can mail yourself reminders to do certain things. Reading your mail is as easy as typing 'mail', and sending mail to a user named 'fred' is as easy as typing 'mail fred', though what you do from that point depends on which version of the mail command you have. The XENIX "mail' command is derived directly from the Berkeley version, while the UniPlus+ "mail" command (at least the one I got with the standard distribution) derives from AT&T versions and has many fewer features. For instance, the UniPlus+ version of mail does not print a summary of incoming messages when you type 'mail', it just starts printing your mail. The XENIX version, however, does print this summary.

Multi-tasking

In terms of capturing the fundamental UNIX multi-tasking and multi-user capabilities, the two systems are virtually identical. Both XENIX and UniPlus+ allow any user to run several tasks at once. Of course, the more tasks you have running at any one time, the less the system is able to allocate resources to any one task, so the system will get sluggish if you try to do too many things at once. Just how many things you can reasonably expect to do at once depends heavily on the configuration of your system. One Megabyte of main memory (RAM) is highly recommended, and two Megabytes is even more useful if you want to have two or three users accessing the machine at the same time. Also, you should have a sufficient amount of hard disk storage. Either implementation (XENIX or UniPlus+) will occupy more than half of the internal 10Mbyte hard disk. I would recommend adding one or two additional ProFiles to ensure adequate user file space.

How many users can such a system support? This is really asking two different questions: (1) How many ways are there to access the system? and (2) How many people can use the system at once? The answer to the first question is easy. If you have a standard Lisa port configuration, you can add a maximum of two additional terminals (or one terminal and a dial-in modem, or two dial-in modems) to the two existing serial ports, thereby allowing a maximum of three ways to access the system. On the other hand, if you have a TecMar 4-port serial card, then as many as six more terminals/modems can be added to the system, allowing seven avenues into the Lisa. Obviously, each time you devote a serial port to some other peripheral, such as a printer. you reduce the number of ways to access your machine. A reasonable setup might be to add one modem, one printer, two or three terminals, and keep one serial port open for future expansion.

The second question, "How many people can use the system at once?" is harder to answer. As I noted, the number of users who can access the machine simultaneously is highly dependent on the amount of main memory and hard disk space, as well as on what each user wants to do. On a system with 1 Megabyte of RAM and plenty of disk space, I have had as many as five users logged in to my Lisa at one time, but I wouldn't want to work for long periods of time with any more than one other person

working at the same time. I think that three people using either system at the same time, would be a reasonable maximum. Clearly, then, if your usage is largely single-user, you will experience very little sluggishness in running programs.

Virtual terminals

The primary feature that XENIX has that UniPlus+ lacks is an enhancement called "virtual terminals." Under XENIX, the Lisa screen is really three screens in one, which you can access sequentially. Suppose that you are logged in at the Lisa console. By hitting the Apple key and the Enter key on the numeric keypad, the system will display a new screen, complete with a new login message. This is your second "virtual terminal." If you log in to the new "terminal," you can run new processes independently of anything that you might be doing on the first virtual terminal. Hit the appropriate keys again, and you see yet another new screen. Hit the appropriate keys once more and you are back at the first screen. A hidden screen display is not lost; it will reappear when you come back to that virtual terminal, along with any change in information that has occurred since you last viewed the screen.

Because UNIX can support multiple users and multiple tasks, these virtual terminals are a convenient method of allowing a user to run multiple tasks without erasing or over-writing the output of another task. So the user can, for example, be editing two different documents at once, on two different virtual terminals, and can switch from one to the other at the touch of a key. Another nice setup is to login over a modem to another computer from one of these virtual terminals. Then, in one console, you have screens into two different computers. Note that these screens all "exist" in the Lisa console, so you shouldn't think that these virtual terminals will let numerous users access the Lisa at once. Each user will want his own screen and keyboard, and virtual terminals don't allow for that.

Screen

If you've used Lisa 7/7 software or any of the versions of MacWorks, you have noticed that the screen dims after a certain amount of time when there has been no input through the mouse or keyboard. Under UniPlus+, this feature has been preserved, so you can safely leave the Lisa running unattended without worrying about etching or burning the screen by leaving one image up too long. There is no such screen dimming under XENIX, however, so you will either have to remember to turn down the brightness (using the brightness knob on the back of the Lisa) when you leave, or write some program which blanks the screen or moves the cursor around periodically. Personally, I prefer having the operating system take care of this automatically.

In addition, UniPlus+ includes a utility program to let you specify how long to wait before dimming the screen, how rapidly to do so, how rapidly to bring the display back up when input is given from the console keyboard, how to set the screen contrast, and more. (You can even select how rapidly the keys should repeat when held down.)

Speaker control

UniPlus+, but not XENIX, allows you to access the built-in speaker, making it possible to make the speaker emit sounds in thousands of pitches, for variable lengths of time, at variable volumes. That is to say, you can add a whole new touch to your programs by having them emit melodies or discordant tones at appropriate places (for instance, errors or achievements). UniPlus+ also includes a utility program to let you select the pitch, duration, and volume of the console bell.

Conclusion

The differences that I have outlined above lead to the fairly obvious conclusion that UniPlus+ is a much better-engineered version of UNIX for the Apple Lisa than is XENIX. UniPlus+ allows you to utilize many more of the hardware capabilities of the machine, and it is significantly less likely to crash than XENIX. These two points alone would seem to speak loudly in favor of UniPlus+. In addition, where there is any difference in the distributed software, UniPlus+ utilities generally have more features than their XENIX counterparts.

I find all of this to be evidence of a much tighter fit between the hardware and the operating system than you get under XENIX. By this I mean that the operating system allows the user to gain greater control of the hardware under UniPlus+ than under XENIX. If you are only an applications user, and word processing (for example) is your primary use of the machine, then this might not mean much to you. But if you have the least temptation to write a program yourself, or consider yourself a true "hacker," you will probably appreciate the greater capabilities of UniPlus+ in accessing the underlying Lisa hardware.

Nonetheless, there are features of XENIX which make it attractive to the user. The main attraction is that the standard UNIX benefit of multi-user and multi-tasking capabilities is further enhanced by implementation of "virtual terminals." While both XENIX and UniPlus+ allow optional addition of physical terminals, it is hard to understate the usefulness and convenience of having three pseudo-terminals in one Lisa console. In a situation where one user needs to do multiple tasks at once, virtual terminals have a clear edge over the standard UNIX practice of putting tasks in the background.

If you are interested in putting UNIX on your Lisa, you are going to have to settle for one of the two currently available implementations, complete with all their known bugs or deficiencies. XENIX has trouble keeping accurate time and is more prone to crash than UniPlus+, but XENIX does have more powerful terminal control facilities in its virtual terminals. UniPlus+, on the other hand, has only the standard UNIX job control, but it lets you access more of the Lisa's hardware than XENIX. So there is no obviously correct answer to the question, "Which version do I want for my Lisa?" Perhaps the safest thing to say is this: if you are a programmer and are interested in having more functions available rather than fewer, UniPlus+ seems to be the right choice; but if you want the ability to run numerous screen—oriented applications without

having to turn to other terminals, then XENIX has capabilities to help you do that.

Some of the problems that I have mentioned could, I suspect, easily be fixed. In some cases, the distributor need only supply an updated version of a command. Some of these problems, however, strike me as quite difficult to fix, particularly those that require changes to the operating system itself. Since Apple has discontinued manufacturing and selling the Lisa, it is not very likely that either UniSoft or The Santa Cruz Operation, Inc., will invest very much programming time in fixing bugs or adding features. Still, both UniPlus+ and XENIX on the Apple Lisa are good implementations of UNIX. If you like UNIX and you are strongly considering UNIX for the Apple Lisa, either of these implementations will give you what you need.

Tim Monroe is a translator and philosophy graduate student living in Oakland, California. In 1983, he founded his own UNIX-based graphic design firm which produces and markets UNIX posters. Currently he is employed with UniSoft Systems of Berkeley, CA, as a graphic designer and technical writer. He is also a co-author of the forthcoming logic textbook, Rudiments of Logic.

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Ed. Note: Representatives of The Santa Cruz Operation, Inc., have brought to our attention two additional features of XENIX which have not been discussed herein. One is the run-time installation feature which allows users to load on Lisa's hard disk only specific XENIX utilities and applications needed at one time (for instance, to run the Open Systems Accounting Software), rather than the complete XENIX utilities and programs. Executed during the initialization process, run-time installation actually prompts the user to decide if they wish to continue installing additional XENIX software.

Another beneficial feature available to XENIX users is a serial line local area network called *micnet*, which allows XENIX users to communicate with other XENIX-based machines and with other versions of UNIX machines. Featuring an easy-to-use menu-driven installation procedure, this LAN allows remote execution of commands (for instance, to execute a print command at another station), as well as other document resource sharing commands.

For more general discussion on the UNIX Operating System on Lisa, refer to UNIX on the Apple Lisa: Part I—The Spring 1986 LisaTalk Report. For more information specifically on XENIX by The Santa Cruz Operation, Inc., see also Robert Reed's review of XENIX in The Winter 1985 LisaTalk Report. For general knowledge of UNIX and how it works, refer to the Unix Primer Plus, by Michael Waite, et al, Howard W. Sams & Co., Inc., Indiana.

Manufacturer drops XENIX

Bruce Steinberg, Marketing Communications Director for The Santa Cruz Operation, Inc., recently notified *The LisaTalk Report* that SCO has suspended development on Lisa XENIX at this time. In his July 14th letter, Bruce states that "... The Santa Cruz Operation, Inc., feels that Apple's unfortunate discontinuation of this great machine has effectively eliminated any new market for Lisa XENIX. Furthermore, SCO feels there is negligible demand from the large installed base for continued development of new features for the product, which demonstrates that XENIX was already excellent for most user applications when it was frozen."

In the event there is a significant demand, however, SCO has stated that they will consider reintroducing XENIX, as well as other Lisa 2/Mac XL-compatible products which were also recently taken off their price lists, i.e., Informix relational database by RDS (\$795) and Compact LEVEL II COBOL by Micro Focus (\$795). But until this market shows signs of renewed growth, upgrades will not be available. SCO will also continue to support current Lisa XENIX customers and will continue to provide and support the Lyrix Word Processor (\$595) and MS Multiplan (\$495), which are also Lisa 2/Mac XL-compatible.

So long as a continuing explosion of interest in XENIX and applications for 8086 and 8286 machines is evident, The Santa Cruz Operation, Inc., remains committed to excellent product development and customer support for that market.

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Lisa/XL SIG at the Association of A32 Users



Name

Street

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I am enclosing \$20 for the first year's membership and a \$20 enrollment fee. I will receive the LaserWriter printed "bon" club magazine seven times a year.

Checks accepted only; credit cardsnot accepted. Outside U.S.A. memberships are \$45 and \$25, respectively (\$US). PO Box 634, Santa Clara CA 95052

2/4

A32 has a Lisa special interest group (SIG) that includes 300-400 active Lisa/XL owners and users. We are actively involved in Lisa/XL support. Plan to use us as a resource for Lisa and Mac. Electronic BBS (408) 988-6693. Information, Ken Silverman - (408)-988-5594. Join at the door of our meetings, or fill in this ad and mail it to us; and look for us at the next Lisa/Talk online event.



User Group

UniPlus+™ and Xenix® user have been left with even less support than users of Lisa 7/7 and Mac-Works XL. Let us form a user group to facilitate cooperation among users and to assure further development, bug fixes, upgrades, and enhanced capabilities.

Are you interested in bringing to the Lisa:

Writer's Workbench, Korn Shell, multiple process windows, access to AppleTalk and beyond, UNIX graphics, troff output to the LaserWriter and high quality typesetting machines, enhanced system performance or capacity for more users (with a 68020 card and 4-16 megabytes or RAM)? WOIF 615 574 6143

Contact: Heidy and Wolfgang Naegeli PO Box 1351, Oak Ridge, TN 37831, (615) 481-3276 37830

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New York Macintosh Users Group LISA/XL Special Interest Group

New York, New Jersey and Connecticut Lisa/XL Owners..... JOIN the Lisa/XL SIG of the New York Macintosh Users Group

We meet monthly in Manhattan to review, discuss and share ideas and information. Call Sam Neulinger, Chairperson at (718) 746-8220.

Peninsula Lisa Users Group

Dedicated to Lisa and Mac XL business users.
President: Joan Dickey, DIQ DOC, P.O. Box 626,
Moss Beach, CA 94038 (415) 728-5462.

Membership Dues: Regular (receive both notes and notices) \$22.00
Associate Member (receive notes only) \$18.00
Notices only member (reduced LisaTalk rates do not apply) \$6.00

New Meeting Place: Infomax, Opera Plaza (Manager: Suzanne Simmons) 601 Van Ness Avenue, San Francisco, CA 94102. Next meeting: September 10, 1986 (second Wednesday*) 6:15 pm (program starts at 6:45 pm) MAChui 1/5/58

*If you miss this meeting, catch us on the second Wednesday of any month.



NA

San Diego Mac XL-Lisa SIG

Meetings held first Wednesday of month, 6 p.m.
UCSD Basic Science Bldg., Rm. 2000
For more information, call:
Keith Adair-(619) 453-0616



NATIONAL X/LISA USERS GROUP

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NA

Users' Mailbox

SHENSON WHEN



Address letters to:
The Editor
The LisaTalk Report
21 Canyon Road
San Anselmo, CA 94960

Lisa 7/7 is just fine for us

Thank God for *The LisaTalk Report!* Without this journal we would surely be "gonners." As it is, the third Apple dealer with whom we have dealt has gone belly-up, so we have nobody to turn to at all for support and questions about either the Lisa 2/5 or the Macintosh XL which we use heavily.

Is there not one dealer in Eastern Massachusettes interested in and knowledgeable about these sweet orphans? The "parent" company is no help. They get their information out of last year's phonebook and don't even know about the demise of their "authorized dealers."

I am enclosing the so-called "MacWorks Survey" (from *The Spring 1986 LisaTalk Report*), though I haven't much interest in MacWorks. Please don't think I am not interested in progress, but we are sticking with what we have in the Lisa Office System because it works for us. No more investment in software or hardware until we can at least get a copy of an up-to-date MacWrite and the long promised migration package (which I just ordered, using the form included in the spring issue).

I would like to encourage the idea expressed by some of your writers and readers to develop a UNIX operating system. Then, if somebody would plagiarize the format and convenience of the Lisa Office System Desktop concept to operate under UNIX, we would have the best of all possible worlds. Particularly so, since we would not have to rely on programs designed to operate under the hodge-podge of incompatible Macintosh Operating Systems. The possibility of a future declaration of independence from Apple Computer Inc. would suit me fine-particularly in my present mood. Right now both systems

are running fine, but if anything busts, I don't know who can doctor Lisa.

Very truly yours, Raymond G. Stevens, Ph.D., President The Levity Corporation Falmouth, Massachusettes

We agree that so long as users are achieving their system goals using the Lisa Office System, they should not feel pressured to abandon this technology. The NetWorkers has committed to support the Lisa 7/7 environment—if you experience difficulty, you will not be totally without support. Although most Apple dealer's attitudes towards Lisa users are far from empathetic or helpful, the fact is that this attitude is not unique to the Lisa, nor to Apple dealers. Dealers, in general, are set up to sell products, not to "doctor" computers, and these attitudes are becoming more common. On the other hand. The NetWorkers has based its business on the viability of before- and after-the-sale consultation and support to Lisa/Mac XL users. In addition, as you will read in The LisaTalk Report, The NetWorkers continues to promote and participate in the development of 717 programs. (The NetWorkers is also in a position to offer continued hardware and parts as demand warrants it.)

We do recommend, however, that 7/7 users also keep up to date with migration procedures as discussed within The LisaTalk Report. Migration can be a difficult process for some, however, Macintosh compatibility represents a very important alternative to Lisa/XL users who are concerned about the longevity of their systems. Look at it this way—it's not every day that a discontinued computer can actually run a majority of the software developed for the manufacturer's current technology!

There are already currently two implementations of UNIX available on the Lisa, XENIX and UniPlus+. An

in-depth discussion of these two products can be found in this issue under the UNIX Users' Corner.

If I had wanted a Mac, I'd have bought one!

I find the Lisa situation quite frustrating. I am a small businessman, a marketing/technical consultant, and salesman, who uses the system for business purposes. I invested \$9,000 in Lisa hardware and \$2,000 in Lisa software. If I had wanted a Macintosh, I would have bought one. I hoped that your group might encourage people to continue developing software for the Lisa OS. The Spring 1986 LisaTalk Report showed conclusively that you have no interest in pursuing such software. Your only real interest appears to be hardware. hardware that runs under MacWorks, I will say again, if I had wanted a Macintosh, I would have bought one.

Apple is absolutely no help. They are a major contributor to the frustration. The dealer from whom I originally bought the Lisa, Computer Craft, is useless. I have been told that Apple paid off Computer Craft's debts; I cannot imagine why they would do such a thing. I now deal exclusively with Computer Connections in Oklahoma Oklahoma. They are 560 miles away, but they try to get me the help that I need. Apple supports them no better than the original dealer, however. Apple support for Lisa is non-existent and has been for over one year. The whole situation would be laughable if it were not so painful. Everyone says that IBM is at least as bad about support as Apple. If that is truly the case, then it will be a very long time before I buy another piece of computer hardware from anyone.

I do some work in the Macintosh format, but the experience is highly frustrating. The interminable waits, the

system hangs, the system crashes and the software that does not work makes me very glad that I did not buy a Macintosh.

In his Just For You column, Lewis Guice says that Apple needs "to know how you feel and what it is exactly that you want." The way I feel is frustrated. What I want is improved Lisa, not Macintosh, software. What I do not want more ludicrous 'trade opportunities or Macintosh hardware for my Lisa. In keeping with your request I am sending a copy of this letter to Mr. Sculley. Though calling him could be worthwhile-it would be interesting to see what might happen if he were to get a few thousand telephone calls from other frustrated Lisa owners. I picture a squeaky wheel being greased.

Cordially, Michael R. Childers, President ChemAid, Inc.—Houston, Texas

As you will see in the above response to Raymond Stevens, we at The NetWorkers do support 7/7 users, and The LisaTalk Report is still committed to addressing support issues for 7/7 users. Yes, we did avoid explicitly committing to supporting the 717 environment and pursuing continued 7/7 development in The Spring 1986 LisaTalk Report. However, it was not out of lack of interest, but rather we did not want to excite users about something that we. ourselves, could not in good conscience take on without getting additional feedback from customers, and from the development community. Our first order of business has been to gather all available information about this base and to organize constructive communication channels within the community.

Orphanned or not, I wanted more

A complimentary copy of *The Spring 1986 LisaTalk Report* convinced me that it is a MUST journal for anyone seriously using the XLisa. I bought my first Lisa after Apple announced the Mac, with the intent to combine a Lisa in my office with a Mac at home, for the kind of work that engineering professors do. Fortunately, I realized what a cripple the 128K Mac is before the order for it was placed, and I ordered a second Lisa instead.

After MacWorks 3.0 made the machine really useful for running Mac software, I ordered two more XLisas—orphanned or not—one for my students, and one for my secretary.

All four machines run exclusively assorted Mac software under MacWorks 3.0. two of them use MacServe. Three machines Apple's screen have converssion installed (the fourth will probably follow), one has a 2MB RamStak installed (the rest so far still run at 1MB). I wouldn't dream of trading any of them in for a narrow-screen Mac+, even for much less than the \$1,500 conversion price. But all four macines are ripe candidates for whatever hardware upgrades might become available. Almost any upgrade would go into at least two of the machines, and something like an 800KB floppy and/or a true Mac+ ROM board would immediately go into all four. Yes, I would like to get rid of MacWorks 3.0 altogether by a hardware modification, but a decent MacWorks 4.0 combined with a faster board would also be fine.

Sincerely yours, Herb Kroemer University of California, Santa Barbara

MacWorks • Migration Kit • Apple's Trade-in

Thanks for the tip on contacting Dave Redhed concerning Pascal Workshop version 3.9. I'll let you know how it turns out.

Any further word on MacWorks 4.0? Do you have any reports from that "relatively small number of users" of the "main software bug" being present in the Part Number 682–0087–D version of MacWorks 3.0?

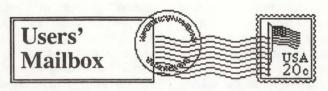
I have received my set of the Macintosh XL Migration Kit (the Microsoft version), but I haven't implemented it yet. Right now it's on my shelf to provide me more flexibility on my Lisa 2/10-not because I intend to use it routinely. I'm still most satisfied with Lisa 7/7 and reading the Migration Kit instruction manual just reinforces my belief that collectively Lisa 7/7 is the best thing going on any microcomputer today. While it's true that there are some limitations (LisaList and Lisa-Terminal, in particular), one has only look at the appendix in

manual devoted to "conversion" of functions, constants, and operators to get the distinct impression that LisaCalc has some definite advantages over even Excel. I'm looking forward to the *The Summer 1986 LisaTalk Report* regarding the distribution of the "scrapbook" portion of the version 0.9 pre—release of the Kit.

As a final note on the Migration Kit, earlier this month I noticed that my local Apple dealer had a 72-page book entitled "Using the Macintosh Kit." Migration The book provided to him by the Apple Support Training Library. I asked him how I could get a copy since it was much more detailed than the "Macintosh Migration Kit" manual that arrived with my Kit. He didn't know the answer to my question-but about a week later, a copy of the book arrived in the mail with an Apple Computer return address. While I don't know for sure, it appears that either God is a Lisa owner and answered my prayer—or Apple is sending the books out to everyone who bought a Migration Kit.

The more information that I ferret out on the Macintosh Plus exchange offer for Lisa/Mac XL owners, the more I want to hold onto my Lisa 2/10. Please add my name to the list of Lisa owners who intend to wait and see what Apple intends offer in the way of "open-architecture" machine before we retire the "most powerful Macintosh workstation Apple has every sold." Until Apple offers me a deal on a multi-user. multi-tasking, expandable machine that is DESIGNED to work with a hard disk, I have no intention to go backwards in time! [P.S. I find it truly amusing that recently there have been any number of magazine articles containing interviews with Apple personnel. Many of these articles include a picture of said Apple personnel, and almost every one of them has a Lisa/Mac XL on his/her desk! You don't suppose that Apple wants us to exchange our Lisa's and Mac XLs so that it can refurbish them and issue them to its employees?]

I'm convinced that many local dealers are only interested in selling a Macintosh Plus, not with providing detailed (or even sufficient) information to help us owners decide whether the exchange is in our best



interest rather than theirs. This dealer attitude bodes ill for the success of the five years of support that Apple is still promising us.

Thanks for your continued interest and your fine *Report*. I'll send my input to the survey, as well as an order for the "Disk of the Quarter," under separate cover.

Sincerely, Major Michael S. Jindra United States Army Jacksonville, Alabama

It would be nice to believe God is indeed a Lisa owner, let alone willing to answer our prayers for timely support; unfortunately, there is an easier explanation for your receiving the unsolicited manual. This enhanced documentation was published only after many Migration Kit orders had already begun shipping. Fortunately, Apple had it together enough to track and follow up with their initial migration customers. (When I recently told Jackie Whiting, Apple's Trade-In Coordinator, about your experience, she was very pleased to hear that "the plan to follow up with first migration customers is working!") The new manual is now being bundled directly with new Migration Kit orders. (Those Migration Kit recipients have still not yet received "Using the Macintosh XL Migration Kit" should contact Apple and request a copy.)

Regarding dealer responsiveness to Trade—In customers (that is, those dealers who have "signed up" to assist in the Trade—In), we have heard several reports that due to very limited profit margins, dealers are not willing to provide LisalMac XL owners with equipment currently occupying dealers' shelves. Dealers are instead taking Trade—In customers' orders and then making specific requests to Apple for additional stock to fill those orders. Jackie Whiting said that although dealers are in no way barred from trading stock on hand, Apple

had anticipated dealers would not wish to trade their current stock. This has probably been most frustrating for initial Trade—In customers, as there was limited availability of Apple's Hard Disk 20 during April, and hence customers experienced a longer wait for their equipment. However, Jackie has said that the backlog is under control now, and the turn—around time before Trade—In customers will receive their equipment should be minimal.

Thanks for your support.

User wish list

Thanks to you and *The LisaTalk Report*, other computer magazines appear empty, boring, and not worth taking the time to read. I will let all other subscriptions except *Infoworld* and *The LisaTalk Report* expire. Your publication is perfect and required reading for any Lisa owner.

I have read and re-read *The Spring 1986 LisaTalk Report* with great interest. The numerous opinions and comments about Lisa are both insightful and varied, and prompted me to write this letter. I felt a need to add some perspective and focus to all I've read, hopefully to help all people connected with Lisa. The Lisa dilemma could, in my opinion, be best dealt with to the benefit of all three parties involved as follows:

Apple Computer

In addition to their minimum five year parts and service support, I feel they have an obligation to establish a base for owners to expand their Lisa's as their needs grow, either on their own or by offering third-party support with specifications. I feel this obligation could best be met by releasing a reliable, bug-free MacWorks (hopefully MacWorks 4.0).

Reasoning: It is Apple's prerogative to drop production of a machine; but after a big marketing push, advertising, and substantial Lisa sales, they have a duty to make the Lisa usable and expandable for the owners. The easiest, most face—saving, and most profitable way for Apple to accomplish this is by releasing a bug—free MacWorks, since it provides Lisa owners with new software, Apple with increased sales of Mac software and thus a stronger Mac user base, which encourages more third—party software development, which sells more Macs, etc. Apple may also be missing another profit and image opportunity by not developing a Lisa "card" or other interface which allows Lisa to use all Mac accessories.

Lisa Owners

The LisaTalk Report could definitely help here, by publishing and collecting a survey of Lisa owners/users which would give Lisa owners/users the opportunity to select a maximum of five hardware and Lisa 7/7 Office System software products that they would definitely support through purchase when produced. (I understand this might be in the works?)

Reasoning: This is very necessary in order to focus developers' efforts, monies and demonstrate the economic feasibility toward production of very specific products.

The LisaTalk Report/ Third-Party Developers

The LisaTalk Report needs to encourage development of products to allow Lisa to use other existing hardware and software products, and future Mac products. I would think this means "card" for Lisa slots or other products to "interface" Lisa to Mac and IBM products (LaserWriter, Mac 20 hard drives, etc.).

Reasoning: These would be hot sellers and any Lisa owner would be a fool not to buy one. This can only help Apple's image, sales, and profits by expanding the Mac user base. I do not feel developing other than a select few specific Lisa products is realistic or economically feasible.

Sincerely, Kenneth D. Goetsch Goetsch Electronic Servicing Seattle, Washington

Thanks for your comments!
Although we cannot speak for Apple, The
NetWorkers-The LisaTalk Report is very
much interested in pursuing similar
developments. You might be interested in
more information regarding The

NetWorkers' new XL800-800K drive for the Lisa/Mac XL—if so, please feel free to call or write. We are also still compiling the marketing results from our two previous surveys, and we will bring you up to date as soon as possible, either in The Fall 1986 LisaTalk Report (to be released October 1st) or in a supplement within the next month.

Lisa/XL Publications

I originally sent in for my subscription to *The LisaTalk Report* in early January, 1986, and totally immersed my mind in the issue, *Winter 1985*. Later, I ordered the *Premiere issue* and recently I received the *Spring 1986* issue, and I must tell you that each issue gets better. Thank you for your efforts and continued support for the best personal computer ever designed.

I was somewhat disturbed by a point Mr. Kurt Schmucker made twice in the *Premiere issue, September 1985*. On both page 9 entry#22 and page 22 entry#157, Mr. Schmucker alludes to the fact that he "wrote the only book" on Lisa and its 7/7 OS. I thought your readers should know that not counting the excellent manuals that Apple published with the 7/7 OS, there are at least two other books written about Lisa besides Mr. Schmucker's.

Introduction to the LISA, Copyright 1984 by Arthur Naiman, Addison-Wesley Publishing Co., \$9.95. This book was written just before the introduction of the Lisa 2, but Mr. Naiman compares the differences of Lisa 1 and Lisa 2 in the first chapter. The remainder of the book deals primarily with the 7 tools that eventually became the 7/7 OS.

Apple LISA: A User-Friendly Handbook, Copyright 1984 by Joseph Coleman, TAB Books, Inc., \$16.95. Although Mr. Coleman does not mention the 7/7 OS, he does take you step by step with exercises through all of the 7/7 tools with the exception of LisaTerminal. It is an excellent tutorial handbook.

I purchased Naiman's book July 31, 1984, Coleman's book October 9, 1984, my LISA 2/10 on December 17, 1984, and Schmucker's book, *The Complete Book of LISA*, Harper & Row, \$17.95, on March 12, 1985.

On another note, I have a 34-page document I obtained from Apple Computer entitled *The Macintosh and Lisa Development Team*, 2nd Quarter 1984. It lists the names, addresses, phone numbers, as well as products of developers up to that point. The document is broken down into Lisa, Macintosh, and Unix environments and has a cross-section page on application categories.

Videx, Inc., 1105 Northeast Circle, Corvallis, Oregon 97330, originally designed probably the first Desktop Calendar for the Lisa 2, and it integrates with the Office System. It was priced very high at \$295. Later, Videx came out with MacCalendar at \$89, but it does not have all the features of its predecessor. Since I no longer see the original Desktop Calendar advertised, I thought that possibly The NetWorkers might be able to make an agreement with Videx to offer Desktop Calendar to its subscribers through your new "Disk of the Quarter" program. Since Videx has already done all the development, I would think it would be to their benefit to recoup some money out of the program. It is a shame to see such a good program be shelved because of its high price.

Enclosed is my copy of the Spring, 1986, MacWorks Survey. Although there is a lot of information included on the survey, the main question I believe is if I intend to trade "down" to the Mac Plus with Hard Disk 20? My Answer: NO!!!

Sincerely, Ron Nelson, President Contemporary Design Concepts Albuquerque, New Mexico

Thanks for the additional information on various publications available—this will be very helpful for us in our efforts to compile a complete list of software, etc., available for Lisa/Mac XL (see The Fall 1986 LisaTalk Report). Reader input is very critical to the overall success of The LisaTalk Report.

As you'll notice in this issue, The NetWorkers is marketing a desktop appointment calendar of its own (developed by Scientific Enterprises) called LisaCalendar. Used in conjunction with LisaPhonebook (a phonebook-phonedialer), we feel this

product is an efficient alternative to Videx' Desktop Calendar. However, we appreciate your input. Keep the letters coming!

International Subscribers

European distribution

We recently received a copy of the Winter, 1985, Issue of *The LisaTalk Report* and, frankly, we are quite excited about it. Since there is quite a large base of installed Lisa Systems in West–Germany, your magazine could be quite interesting for the German Lisa community, too. If you have any plans in selling *The LisaTalk Report* in Europe as well, we would like to inform the German Lisa community about your organization and your publication so that people will be able to participate.

Best Regards, Hans L. Gerke, Market Strategies Apple Computer-GMBH Munich, West Germany

We have, in fact, recently agreed to distribute The LisaTalk Report through a central European distributor. Please write Stefan Youngs, Mac Europe Limited, 9A Lyne Court, Church Lane, London NW9, England, or call (01) 200–1696, for more information about subscribing to The LisaTalk Report. We would also appreciate any referrals you might make to other Apple dealers or Lisa customers in Germany. Thank you for your enthusiasm and support.

No LaserWriter Printer Driver Yet

Do The NetWorkers—The LisaTalk Report know about a LaserWriter printer driver to be used within the Workshop 3.0 and/or the Lisa OS 7/7 environment? Did anybody at the time while the Lisa was still vivid and the LaserWriter at least in prototype phase implement a Lisa LaserWriter printer driver to be used outside the MacWorks environment? Is there any private or commercial Lisa LaserWriter printer driver known to you? Is there any



possibility to laser-print *directly* from LisaWrite documents without having to transfer to MS Word or MacWrite by migration software? Would you be so kind as to ask your readers?

After several years of LisaWriting, I am not willing to switch to MS Word except out of sheer necessity.

Truly yours, Peter Michael Fischer Federal Republic of West Germany

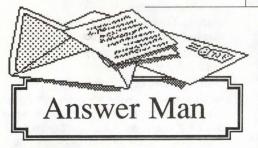
Sorry, but there's still no LaserWriter printer driver for the Lisa 7/7 Office System. However, due to the great demand for such a device, future development is very possible. In the meantime, it might be worth it to consider actually using MS Word or MacWrite under MacWorks to create documents which you wish to print on the LaserWriter. Keep in touch with us!

MacWorks 3.0

I am a dedicated Lisa owner who is now inthe process of switching over to 100% MacWorks because of the many benefits of packages such as Helix and Excel. While I will miss certain attributes of 7/7 and the Office System, which is a fine piece of work by anyone's standards, the current state of things leave little option but to enter the Mac world as gracefully as possible.

I commend you for publishing The LisaTalk Report and have learned a tremendous amount from it. I seem to have been fortunate in having a machine and software which are in excellent working order because I have not experienced the type of problems that many of your readers have. I have been running under MacWorks 3.0 with MacServe for a few weeks now, and so far so good. I have attempted to crash the system to test its limits, and thus far, no serious problems. After a few months of running under MacWorks and 7/7; I plan to switch to 100% MacWorks, using Excel, Helix, Red Ryder, MS Word and Switcher with Excel, Helix, and MS Word as separate volumes under MacServe.

I look forward to future issues of *The LisaTalk Report*. Best Wishes, Peter Streit, New Orleans, Louisianna *Thank you, Peter, for your encouragement. It's really appreciated.* Ed.



In light of Fred Reitberger's contribution "Lisa error codes: What in the heck do those numbers mean?", Lewis Guice agreed to answer this issue's questions to The AnswerMan.

Wants to get money's worth...

I really appreciated talking to someone regarding our Lisa/Mac XL. I find it somewhat astounding to have just purchased a piece of equipment only to find it obsolete, and I really don't know what I should try and do about it. When I upgraded from Lisa to the Mac XL to avoid obsolesence, at the suggestion of the local dealer, I felt that Apple had already decided to discontinue the machine at the time. So I actually purchased an obsolete machine. I would be interested in learning the exact date of Apple's decision to discontinue development.

My father always told me if you want to avoid trouble, you have to watch the company you keep. In this case, we are second-time Apple owners, having previously purchased an Apple][+, and I thought we were keeping good company. This company hasn't even had the courtesy to write me directly. I can't believe it! I have to get my information from a magazine.

The whole idea of what is happening just doesn't make sense to me as a user. The machine is basically an Excellent piece of equipment. The 7/7 operating system appears to work well. The BPI Accounting System used to work well until they upgraded to the 7/7 version, at which time the systm developed printer spooling problems. Subsequently, it hangs and clips off parts of reports when restarted. BPI say it's Apple's problem. If it weren't for these problems, the 7/7 operating and BPI accounting systems would have given us fairly good use of the equipment without further expense.

It appears now, as no one is supporting the machine, that our only option open is to convert to the Macintosh environment and purchase programs for the areas currently running under the 7/7 system. The problem with

this is that it requires further expense and investment in Apple and Apple-related products, and I am not sure if it is a good idea to put more money in without support.

What I would like to achieve is to at least be able to continue to satisfactorily use the machine until we can write off the \$20,000+ we have sunk into equipment. This, however, is very difficult to do, when the accounting software company (BPI) advises that they are dropping support for their system, after Apple's lead, of course. They have agreed to upgrade the software to Apple][e or IBM XT. I have no intention of buying further Apple computers after the treatment I have received on this one.

I wish you every success in your efforts to address the problems associated with this machine and will support you in any way I can. I still feel tricked by Apple and haven't given up on the idea of legal action. I feel that their advertising was extremely misleading, and as far as Apple Canada goes, I don't feel they are totally off the hook. I would appreciate hearing if anyone else feels this way.

I can't tell you how pleased I was to see mention of on The NetWorkers in *MacWorld*. I thought for a while

maybe I owned the only Lisa/Mac XL in existence. I hope you can set me straight about what is happening, as even the dealers don't seem to know. Thank you.

Yours truly, W. S. Hewlett Copper Tree Holdings Kamloops, British Columbia

It was actually May 7, 1985, when Apple announced it was discontinuing the Mac XL. Approximately two years ago Lisa 7/7 was voted by a popular trade magazine the best integrated software package available (I believe it was InfoWorld). Lisa 7/7 has still yet to be superceded in its integrated ability. Even Apple admits that "multi-tasking" is an absolute must to make the Macintosh a more productive personal productivity

Indeed, further Lisa 7/7 development still discussed within user-developer community, and The NetWorkers-The LisaTalk Report is doing everything we can to encourage continued interest by third parties. There were also sevral additional developments for the 717 environment (by outside parties) which we recently became aware of, and we are very interested in completing these products and bringing them to market. It is, however, still unknown whether independent developers will be able to provide enhancements to the existing Lisa 717 Version 3.1. We are looking into this, and compiling information about users' specific expectations for additional enhancements (or fixes) to this system.

In terms of accounting, if your BPI Package is doing the job, by all means continue to use it. The minute BPI fails to do the job, there are some excellent packages coming out for the Mac, such as Accountant's Choice. We will be reviewing many accounting packages over the next year. Unfortunately, I don't believe there is a way to easily migrate your data, so if you decide to take this path, you will have to re-enter data.

Thank you for your generous support and for taking the time out to write to us-we hope that you will continue to look forward to our publication.

Contributing Technical Editor. Lewis Guice

Who are power users?

I recently subscribed to your publication and am looking forward to receiving the first full issue following the promotional sample sent in November. I think the work you are initiating is exciting and needed. But, I have a question. In your forwarding letter to the promotional piece you used the expressions "hundreds of power users" and "power users around the world." What is a "power user?"

I have a Lisa 2/10 with a 2MB RamStak, and my wife has a Mac XL. We want to be able to interchange data and programs on them, and I'm hoping the Migration Kit will do the job.

It is my view that Apple made a strategic blunder in its failure to continue the Lisa effort, as they had a truly superior machine that was well ahead of the market and it's time - and they blew

We use our Lisa/Mac XLs professionally and they do the job superbly. Truly a joy to use. Aside from occasional problems with LisaCalc and LisaGraph (they crash for no apparent reason), the 7/7 software meets my needs ideally. I am especially impressed with LisaProject and have used it a number of times with great success.

Very truly yours, James O. Justice Los Angeles, California

There are several "power uses" of computers. These uses range from programming to financial management. About the best example of a power user that I have is myself. I manage a 5 Megabyte database on Omnis 3 and constantly work with large spreadsheets for budget tracking, forecasting and business projections. I feel these are powers uses. However, power use could also be compiling programs, statistical analysis or basically any operations which tremendous require manipulation, such as programming, coding and number crunching. Most Lisa/Mac XL users that we have been in contact with fit into the category of "power-users." As far as Migration is concerned, we have our very own "power user" migration expert, Rob Graner. Please refer to his article in The Spring 1986 LisaTalk Report; in additiona, you will find more information in this issue in "End of an Era."

Contributing Technical Editor, Lewis Guice

User hints

· Since installing Apple's Screen Kit, I experienced the following problem: While using Finder version 4.1, and using the Clean Up routine on the desktop, the Icons jump half way off the screen. However, this bug appears to be fixed in Finder version 5.1 (January 4th).

· The following Microsoft Basic programs will not run from the diskette. only from the hard disk: Shots, Orca Systems, P.O. Box 701, Redmond, Washington 98073-0701; Vampire's Castle 4.0 - Attn: Dave Culbertson, Ludlow, Massachusetts.

· MacTerminal 2.0 and Red Ryder 7.0 do not work on the same disk together when switching between them, as Red Ryder becomes corrupted.

(This needs more testing.)

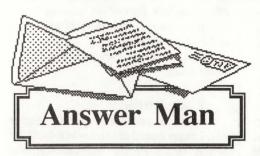
· XL Disk Copy program is the best copy program (is better than Copy II Mac) for the XL to copy protected disks. This Public Domain program can be downloaded from Compuserve, MAUG, Lisa Section. If someone could make a tool like this for the hard disk, it would be excellent.

Contributed by Mark Forish Southwick, Massachussetts

Thanks, Mark, for that bit of information and for your additional contributions and feedback of late. Please keep in touch with us.

Databases and more

First, I would like to thank you and The NetWorkers for producing The LisaTalk Report. It's reassuring to know there are some people out there who believe in this machine. During the past year I have invested a fair bit of time struggling coax to an order entry/invoicing/receivables system from MacLion. Although I managed to achieve some worthwhile service for my efforts, I finally abandoned the program because of the elaborate rewriting necessary for every change in the report



criteria and because I couldn't produce a decent looking invoice.

Last month I worked for awhile with Odesta Helix, but this program lacks the ability to generate detail records linked to orders. I understand there will be a business version that will address this problem, but I'm also concerned about the overall speed of the program. I do like the ability to use windows in Helix, so reports can be running in the background as you add and edit records. I also like the forms printing capability, but again, there is quite a trade-off in speed.

All this leads me, finally, to Omnis 3. If this program will allow me to set up an order entry system linked with both a customer file that records invoice totals and payments, and an inventory file that is updated as items are ordered, I might finally be in business. I would like to be able to have a screen-form that shows the order header and the detail lines if possible, and I would like to be able to print invoices as each order is entered, as well as in batches. These requirements strike me as pretty typical for a small manufacturing business, yet it surprises me how difficult it is to find appropriate software.

For the past 5 years I've been using Apple II and then the Mac XL in my business, and I have had a pretty good dose of both general applications and database theory. In spite of this experience, I've never really been able to get a computer to fulfill my original goals which have remained pretty much as I outlined above.

I am also enclosing your survey. Sooner or later I would be willing to pay for continued Mac compatibility. To date, I've added a second-hand, guaranteed 512K memory board and a BitFixer, both of which I purchased from Sam Neulinger of Dafax. He was very helpful with installation advice

which is good for people who live 150 miles from a dealer. It was not difficult and worked fine after I tracked down a short which occurred when I pinched one of the wires to the fan between a screw and disk drive assembly. Luckily, the machine is smart enough to NOT power up under such circumstances! Soon I will also be purchasing from Sam Neulinger the new version of MacServe. By the way, the Bit–Fixed screen is very nice, although I feel a bit foolish with a third of the screen blacked out...

These additions, which might be considered items that should have come with my original purchase of the X/L, add up to about \$650. I just heard from a friend who reads InfoWorld that Apple will trade my machine for a new Mac Plus and sell me a 20 meg hard disk for an additional \$1,400. If I hadn't made these purchases, I'd be halfway there. Although I like the X/L very much, this offer from Apple may be preferrable to the expensive upgrades suggested in your survey for those who use only Mac software and wish for continued compatibility. Of course, if people are happy with what they've presently got, then the swap isn't so attractive.

Also, will this swap offer discourage any further third party development of the items listed in your survey? I guess a big unknown for me is the quality and utility of Lisa software which I've experienced. If enough people want to use both, then maybe these new products will be produced. I don't wish to discourage your efforts on behalf of Lisa and X/L users. However, it's hard for me to imagine a better combination than Excel, Word, MacDraw, and I hope, Omnis 3, all running with Switcher.

Thanks again for the support of The NetWorkers. It is clear to me that the efforts of your people are giving Apple the kind of pressure they evidently need to transform the original Lisa concepts into a viable business system.

Sincerely, Richard Fisher U.S. Bells, Prospect Harbor, Maine

Thank you for your enthusiasm and your support of The LisaTalk Report! I'm a little unclear on your final comment regarding the programs you listed. If you are saying that those programs run better on the Macintosh, then the statement is incorrect. I personally use every program you listed EVERY DAY, and I could not get the same results on a Macintosh. For example, I have used some very large Excel spreadsheets, and if I generate a chart, I still have a better view of both worksheet and the graph. Recalculating a 500K spreadsheet takes about three seconds. With Microsoft Word I can view a full 80 columns PLUS. I can open four documents and manipulate data much like LisaWrite in

With MacDraw, again, I can view much more of my drawing, and with my RamStak, I don't have to wait for hours to scroll my documents. In terms of Omnis 3, our company develops turn-key applications for small- and mid-sized businesses on Omnis 3. Our exclusive development system is the XL. It operates quickly and, again, the viewing screen offers several advantages. When I am developing applications, I need several tools on my window to work with-I might have an entry layout or sequence screen plus a notepad and calculator on the screen at the same time. In addition, I might have two to three applications up at the same time with Switcher. Finally, Omnis 3 offers a "large screen" feature which allows me to view 140 column reports. In my opinion, Omnis 3 on the XL provides an excellent solution and will fit your business needs.

Contributing Technical Editor, Lewis Guice

Look for reviews of Omnis 3, Double Helix, Brock Keystroke, and (hopefully) Interlace, in The Fall 1986 LisaTalk Report. Ed.

Miscellaneous

Printers

Q: Which printers can be used, and how, under which versions of MacWorks, etc.?

A: It is not MacWorks that support printers but the applications running on the Mac. If you use the Imagewriter driver, then you can use an Imagewriter. Conversely, the Apple Letter Quality, Apple LaserWriter, Diablo, Brother (and

other) printer drivers are also available to you if you run Microsoft Word, etc.

Q: Does 2Mb increase speed on LaserWriter?

A: No. All data to be printed is passed to the LaserWriter at the fastest speed the AppleTalk will allow. The slow down is in the LaserWriter as it organizes the page to be printed.

Cartridge drives

Q: Is there a replaceable cartridge drive for Lisa, such as Bernoulli?

A: None at this time.

Running 7/7 & MacWorks simultaneously

We are an Apple Lisa/Mac XL user and do subscribe to *The LisaTalk Report*. We greatly appreciate the service *The LisaTalk Report* and The NetWorkers are providing those of us who enjoy the Apple Lisa/Mac XL. We use this system quite extensively, virtually for every office situation, including all the programs in 7/7 version 3.1 and BPI Accounting. We have recently purchased some Macintosh programs, including Jazz and Thunderscan. However, we have had a limited success with running them under MacWorks.

It seems as though some of the comments made in *The LisaTalk Report* indicate that there is an easier way to run 7/7 and either/or the Macintosh programs via MacWorks. That is to say, can we run MacWorks and the Macintosh programs on a separate disk, such as a ProFile, without involving the XL's internal hard disk? Currently the only safe way we see to run the Macintosh programs on the XL is to erase our internal hard disk and dedicate the entire system to this operation. Is it possible for us to dedicate a ProFile to the Macintosh environment?

We have dedicated quite a bit of time to 7/7 and have the equivalent of 50 megabytes of data under the 7/7 system. Therefore, we are not eager to completely convert all of this time to the Macintosh environment, but would rather have the option to use either/or. Please advise us as to the best way to operate the Lisa/Mac XL on both the 7/7 and the Macintosh environments.

We would appreciate very much your comments on how to acheive this, and again we appreciate the work you are doing to support the Lisa/Mac XL.

Sincerely,
Dale Hopkins, President
EastLab Corporation
New Bern, North Carolina

MacWorks must run from the Lisa default drive, whether the internal 10MB on a 2/10, or the ProFile on the parallel port on the 2/5. On the other hand, Lisa 7/7 can boot from any drive on any port.

Contributing Technical Editor, Lewis Guice

Partition options

I have partitioned my 5MB ProFile

hard disk under MacWorks to 4MB Lisa 7/7 Office System and 1MB MacWorks. This seems to be the only partition option there is. Do you know of any way to change this partition to another value, for example, 2.5MB each? Thanks for your help on this, and for providing a great magazine for Lisa owners!

Sincerely, Roger Wagner, President Roger Wagner Publishing, Inc. Santee, California

We recommend that you do not partition the disk. We recommend that you maintain each Operating System on separate hard disks.

Contributing Technical Editor, Lewis Guice

Errors in 7/7

I am currently operating under the Lisa 7/7 Office System version 3.1 and have had the following error numbers:

Error Number

1033/22/788762 Unknown
1033/21/9064554 12/07/85
859/948 12/22/85
1033/21/413030 01/03/86
1033/21/793662 01/23/86

Error Number

Date

859/826

01/30/86

Address Error in System Code* 01/30/86

*Happened while attempting to repair a microfloppy disk. The system dumped me into LisaBug and required OSQUIT to escape.

875/972

03/12/86

This is the only listing I have left (there was more, but I threw it away in my frustration). I have reloaded the Office System from time to time and the tools as well when I thought it would help, but my main strategy has been to make several backups of my important documents onto microfloppies.

Is there a list of what these error codes mean somewhere? It would be nice to know what particular bug has eaten my data every time I get one of these error codes. I don't really know what constitutes a hardware or a software problem (aside from the obvious problems, i.e., sparks shooting out the back, etc.).

Sincerely, Launcelot G. Weber University of Minnesota

Please see Fred Reitberger's article Lisa Error Codes: What in the heck do all those numbers mean?

Meanwhile, The NetWorkers is investigating these bugs, as well as additional comments regarding bugs received in previous LisaTalk surveys.

Contributing Technical Editor, Lewis Guice

See also unsolicited letters to Apple Computer Inc. on next page. And keep the cards and letters coming! We're always happy to hear from subscribers, and we answer as many as time allows! Ed.



Wants Mac support!

I am a physician-scientist and a member of the Apple Certified Developer Program. My colleagues and I are in the process of developing medical programs for Macintosh which will be utilized in actual patient care.

We have each owned our Lisa computers for nearly two years and rely on them for our productivity. The Lisa clearly is the computer solution to our needs, whether as a development, scientific or personal tool. For that reason, each of us is greatly disappointed in the recent Lisa/Mac XL Trade—In program announced by Apple. Frankly, the Trade—In proposal seems not only inconvenient and costly, but this program also takes away the best computer suited to our needs . . . lest we risk no support, no service.

We would like to propose an alternative solution, a solution for developers, users and businessmen. We have no expectations for further support of the Lisa operating environment and feel Apple Computer and the majority of Lisa owners share this view. However, we believe a very realistic expectation as a Lisa owner is the ability to continue to utilize a supported Macintosh operating system. Whether by updated MacWorks disks or 68020 co-processor plug-in cards, the Lisa owners I speak for are eager to pay the necessary costs to keep our Lisas and Apple's support. We have confidence there is interest in Lisa by third-party vendors who will continue to offer hardware and software enhancements as they have in the past.

Apple Computer has offered a solution to Lisa owners for which there is no problem. Support of the Mac environment renewed the strength and now is the strength of this far-sighted computer which, for our needs, stands above Macintosh Plus.

We feel your decision at this crossroads might either renew or extinguish the enthusiasm your Lisa customers have for Apple. Please seriously reconsider, promote, and then notify us through *The LisaTalk Report* of continued Macintosh support for Lisa. We would like to continue to echo the [California Cooler] ad which says it all..."As always, we thank you for your support."

Sincerely, Anonymous LisaTalk Subscriber

Wants 7/7 support!

Several years ago I purchased three Apple Lisa computers along with the Lisa 7/7 Office System for my business. From the beginning, I have been very impressed and happy with the 7/7 software package. The system was able to accommodate almost any application. I particularly liked the fact that all the various programs or "tools" could be used simultaneously. When the Lisa was discontinued, we obviously had to either convert to the Mac format or eliminate the possibility of adding more computers to our system. We eventually purchased two Mac 512s, as we needed more machines. We had no choice but to make the painful transition from the Lisa OS to the Macintosh OS.

You will surely realize that it was a big step backwards for a Lisa owner to go to the Mac format. The handwriting was on the wall early that if we wanted to grow with the Apple system, we would have to go with the Mac. After switching over almost one year ago, I am still amazed there is no Mac software available that even comes close to the comprehensiveness of the original 7/7 package. I can say that with a fair degree of authority, as I have used and own Jazz and Excel, and many other Mac programs.

Now that Apple has introduced a 1 MB Mac and a 20MB hard disk drive to go along with it, why can't the original Lisa 7/7 OS be rewritten to run on the Mac and be in every other respect totally Mac compatible? The new Macis now essentially the same hardware as the Lisa, (i.e., 1MB of memory and an attached hard disk). Surely the code could be reprogrammed to work on the Mac Plus. Iwould strongly suggest that Apple

take advantage of the tremendous amount of work that went into the Lisa OS by bringing out a Mac version now.

I honestly think that such a system would outsell the heck out of Jazz, Excel and the other integrated programs, offering that all-important initial system that any small business needs and would then allow users to add further third-party Mac programs as they wanted. As a long-time business user. I can unequivocally tell you that I would give my right arm for such a piece of software. Obviously the revised package would have to accommodate the LaserWriter and AppleTalk, as well as a new improved set of desk accessories, but that should be fairly simple compared to the work that went into the system initially. At \$695, you'd sell 1,000's of them.

We Lisa customers are fiercely attached to our systems simply because it was such a good system to begin with. A new Mac user has no idea what he is missing, in terms of performance and general ease of use, compared to the Lisa Office System. The LisaTalk Report will attest to this devotion. Here is an easy way to appease all of these old Lisa owners, particularly those who use them in their business and need to add more machines but hate to because they have to go to an inferior operating environment.

The Lisa 7/7 system was a jewel, and we Lisa owners sorely miss it. I have no doubt that Apple could make a tremendous financial success with the original 7/7 system by converting it to run on the Mac in a similar fashion to the way it does on the Lisa; with multiple windows and transfer capabilities among the various programs, a printer buffer and all the other wonderful Lisa features. What better way to milk your already invested effort than by making it available to the half-million Mac owners who are willing to upgrade to the new Mac Plus. With the new Mac+s you finally have a serious business machine again. What you don't have, however, (or anyone else for that matter), is a serious software package. Get on the stick and revive the 7/7 system now! It was ahead of its time 3 years ago, and it still is. I am anxiously awaiting your response.

Jon W. Davis, President Sunlight Homes, P.O. Box 4366 Albuquerque, New Mexico 87196

7/7 World

User Profile:

Interview with PBN Company

By Lewis Guice

Summary: In this User Profile, Lewis Guice, President of The NetWorkers, meets with Peter B. Necarsulmer, President of the San Francisco-based PBN Company. In this interview, Peter discusses his viewpoints about Lisa 7/7 technology in his company and his many needs for additional support as his company grows. Like many Lisa owners, Peter attributes much of the PBN Company's success in being able to provide clients with timely, professional service to the performance of their Lisa computers. However, the PBN Company also faces many questions about the future availability of support, and expansion alternatives available for these machines.

Introductory comments

The computer has maintained its stronghold primarily in business. By automating the mundane, redundant tasks of business and having extensive date accessible to enhance decision—making, the business person is ideally, through computerization, offered more flexibility to grow and increase profits. However, business automation is still relatively new and unmastered. Many business users experience considerable frustration, and additional expense, in automating their business. Not only do business users face problems of software and hardware incompatibility in the course of their automation endeavors, but as their business grows, they often find it necessary to reassess or expand their current systems. Even greater challenges arise for the business user who makes considerable investment into a computer which is subsequently discontinued, such as Apple's Lisa/Mac XL.

A case in point is the PBN Company (the subject of this interview). Typical of many small and mid-sized businesses which have invested almost exclusively in the Lisa computer to solve their automation needs, the PBN Company has found tremendous utilility in their hardware and software. However, in light of Apple's discontinuation of the Lisa, and with the need to expand their current system, they invited me to discuss cost-effective alternatives available to them. It is important to note before we begin, however, that the purpose of these interviews was not address every possible option available to Lisa/Mac XL users. Rather, these discussions demonstrate two business users' particular concerns about continued Lisa/Mac XL support and their viewpoints on the subject of expanding their company's existing system. Throughout these interviews I will offer enhancement recommendations, based on this company's goals and particular business applications.

Interview with PBN's President

Please tell us about yourself and your business.

PN: My name is Peter Necarsulmer, and I am president of the PBN Company. PBN Company is a 15-member public affairs/public relations/government relations firm based in San Francisco, with a second office in the state capital (Sacramento). We specialize in Public Policy Issue Management for a variety of corporate and trade associations, as well as for non-profit clients. Occasionally we also do work for government entities. We do a lot of work with lobbyists (I was a lobbyist in a former life), but we are not lobbyists.

Our clients range from the California Hotel and Motel Association, Pepsi USA, Friends of the Golden Gate Bridge-15th Anniversary, and the GTech Corporation. We are also slightly active in the computer business, supplying and managing over 50% of all of the on-line lotteries in the world today. In fact, we're managing the Lotto system in California, which will be coming on-line this fall.

I understand PBN Company has been in business for about three years? What does PBN Company use its Lisas for?

PN: Yes, we've been in business since November 1983. We actually purchased our first Lisa in December 1983. Primarily, we use our Lisas for word processing. By far, that's 75% or 80% of our application use. We like Lisas because they're simple, easy for us to learn to use, and they have nice, big screens. We also do a fair amount of mail list management, direct mail applications, and occasionally we use Lisas for graphics and project management.

We use our Lisas for only a limited amount of spreadsheet activity. We do not use Lisas for managing our own finances or business. Instead, we depend on outside accountants to manage our finances, and they use mainframes.

What attracted you to Apple's Lisa Computer?

PN: I think we were attracted most by the user-friendly technology offered by the Lisa Computer, and als by Apple's mode of thinking, in that their products were gered to the user. We also developed a fairly good relationship with eretailer.

Prior to the Lisa, had you had any previous PC experience?

PN: Zero, in terms of personal use.

In terms of your business, how essential are your Lisa Computers?

PN: We built our whole computer system around our Lisas, and our computers are central to our productivity as a business in the

field that we operate. We would be "dead in the water" without computers. They make everyone's life absolutely 200% more productive. We look to computers as tools to make our lives easier—we're not into the niceties of RAMs and ROMs and various software packages. Like many other Lisa/Mac XL users, we don't have a lot of time to spend investigating various types of software, applications, fine—tuning equipment and pricing stuff, either.

We are in business to service our clients and to develop our business. We are not a collection of computer "junkies." There are only one or two people out of the fifteen people in our operations who have particular interest in computers. For the most part, we use our Lisa/Mac XLs as tools, and we are primarily interested in getting our work done. Lisa Computers are very easy for us to use and for our people to acclimate to them.

Are there any notable elements of your overall system that you can say helped your business in its start-up phase and has helped it to grow?

PN: Our business is communications. We do a lot of document production here everyday, whether it's memos, proposals, speeches, press releases, testimonials for legislative hearings—you name it. We must produce between 15 and 20 documents, which vary from one page to one hundred fifty pages, every day. We also do a lot of newsletter production for various clients. In all of these areas, our computers have made it all possible.

We particularly like the Lisas because of their ease of operation, and the large screen. One of the primary reasons we chose Lisa Computers was based on the fact that we can easily train consultants around here who work with us only on a short-term basis, in addition to our regular staff who, again, are not "computer junkies."

How did you feel when you found out that Apple discontinued the Lisa?

PN: Not real good. I don't think our experience is much different than most Lisa users, from what I gather in reading *The LisaTalk Report*. That is: here's this great computer, this great idea which spoke for itself, in terms of its beauty, practicality, and application. And we, too, bit into the unending 'hype' about how great these machines were (by both its manufacturer and its retailers), how it was "the cutting edge" of Apple personal computer technology.

The Lisas were also very expensive, but apparently at the time, it was worth it to my company. As a small business (and we were even smaller a few years ago), our investment in this line of computers was significant. This made it especially difficult for us when we learned that Apple dropped Lisa support. Apple never really communicated anything to the people who invested in their machines—including us.

We have to date, apart from our Apple warranties, never received a single communication from Apple directly. I don't think it was good marketing; I don't think it's good customer relations; and I think it has shaken the consumer's general confidence in Apple. I know it has for us.

What specific aspects about Apple's discontinuation of the Lisa Computer have affected the PBN Company?

PN: A continuing source of real frustration is that the retail outlet we selected to supply our computer needs is no longer helpful. Our initial decision to select that outlet was based on a number of considerations: 1) Their proximity to our offices; 2) Their price competitiveness; and 3) The apparent compatibility of their sales and "support" people with our office and our needs.

However, once the people with whom we felt compatible with, who sold us our basic computer equipment, departed to "greener pastures," we had no working connection with that retail outlet. Notwithstanding the fact that we purchased 11 Lisas, all "top of the line" (probably more than we need for our applications here). In any event, we are "left out in the cold." Yeah, there are service people and organizations like yours, who we are now looking to for our support, but quite frankly, the kind of investment involved in 11 Lisas suggests to me that we ought to be having ongoing support or cooperation from our retailer, at best.

Meanwhile, I feel very frustrated with Apple, as well. Apple has done absolutely nothing, although I don't believe they're totally to blame. Apple's certainly an element of the problem, in that they provided something on the market that made sense for us, and they thought it made sense for us, and they made the investment, but then they got out of the market. The fact is that there has been no follow—through, no communication, no support, no information from Apple that is valuable. Here we are, in a variety of ways, suffering from their bad business decision—not the least of which is that we made considerable investment in the Lisa, both "financial" and "psychic," and we want to continue to build on that. But nobody really tells us how, and all we hear about are the negatives.

Have you considered Apple's Trade-In offer?

PN: Not really. Only because I think we overpaid for our Lisas to begin with, and we did some fairly heavy shopping around. The idea of now turning these things in and having to pay \$1,500° more for a Mac Plus with Hard Disk 20 just doesn't make sense. I don't understand why anyone would want to trade in.

Most people don't want to trade in. With the people with whom I have spoken, one of the first reasons that they mention for not trading in is that not wanting to lose Lisa's large screen.

PN: That's true. The Lisa's screen is definitely easier on the eyes.

What are the specific downfalls you have experienced as a result of choosing Apple's Lisa for your computer system?

PN: There are two specific downfalls that come to mind right away. One, there are still a lot of bugs that have not been worked out in the third release of 7/7, and from what I gather, these continued from page 60

bugs aren't ever going to be worked out—we've got what we've got.

Two, there is no continuing support from the manufacturer

Continued on page 63

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The NetWorkers Subscriptions Office 345 Lorton Avenue, Suite 200 Burlingame, CA 94010 continued from page 60

or the retailer for the consumer/user of the system. We're in the consulting business ourselves, and we understand that if you want particular types of customized, first-rate, personal, and professional service, you have no choice but to go to a third party. But here again, we feel that we have made a very substantial investment in hardware and software with Apple Computer, and with our retailer (with every check written). Once Apple decided to change their plans, there was no follow-up.

We recognize that we can't turn back the hands of time, so we are poised to do whatever it takes to allow us to continue to expand, and not throw out our investment, or "the baby with the bath water," so to speak. There are a lot of things about the Lisa which make it a great device, and very practical and useful for us to manage our business. Our people like them.

What kinds of enhancements to your present system would you like to see, and how do you want to expand this system?

PN: First of all, we've got more people who need to use Lisas than we have Lisas for them to use. As you can see, I no longer have a computer in my office, because I don't have the time to use one efficiently, relative to the needs of other people around here.

The fact is, on the open market place today, we've been needing new machines for several months now. We can't find them, best as I can tell.

What are your specific additional hardware requirements?

PN: We are a growing company. We need *more* hardware. However, we do have a fair amount of trepidation and concern about where to buy more Lisas. Here we are needing more machines, and we can't find them. While we're sitting here with 11 of Apple's machines, wanting to expand further, we represent a perfectly good marketing opportunity for Apple. But they haven't given us any direction.

Lisa hardware is still available. In fact, NetSolutions, a division of The NetWorkers, is now selling specialized Lisa/Mac XL workstations. There's also good possibility that enhanced Mac XLs with additional memory will become available as early as September of this year.

PN: I don't know what in God's name we'd do with *more* memory. From our viewpoint, we don't need more memory. We've got 110 Megabytes of memory (combined) within our 11 Lisas. The fact is, I don't think we even need machines with 10 Megabytes, as it is. What we really need are more workstations.

Well, Lisa 2's (with no hard disks at all), are also available, and they might be an option for you to consider.

PN: We've been looking for Lisa 2/10s for three months, and we've told ten stores, "You got 'em, we'll buy 'em!" Apparently, even Apple can't get them for the dealers. Now, despite everything, we like the Lisa and we want to expand our systems, but we can't even find anymore "orphan technology," at any price.

2/10s are hard to get. However, they are still available to The NetWorkers.

PN: You know, when I look back at the kind of money we spent on our systems twelve months ago, and then find out what they now cost, if you can find them today, frankly, I can't help but feel "had."

If you're looking at it in real dollars, then yes, I can understand how you, and others, might feel "had." But since you want to buy more, you've obviously gotten something out of your systems.

PN: Well, I look at it both ways, because I'm a business man. I look at things in terms of real dollars, as well as applications. We've spent an awful lot of real dollars for a system which neither the manufacturer nor the retailers support.

What are the other kinds of enhancements you would like to see for your systems?

PN: Second to our need for additional hardware, we'd also like to see some improvements in software. Most people here have used a variety of word processors, etc., on one system or another, and the general consensus is that LisaWrite is as good a word processor as there is, and better than most. LisaWrite has been incredibly successful for us. Some of our machines have the Spell Checker, and it works. However, on some, the Spell Checker is not working...this was another problem that was never resolved by our retailer (even though it was promised it would happen). I've now started to use MS Word. In addition, we use LabeList—the Lisa is worthless for mailmerge without it. We would like a good, working spell checker to work with MS Word. Weare seriously thinking about converting everything to the Macintosh environment and changing software.

Third, I feel that the database management, list management, and mail-merge functions are very difficult to use on our Lisas, at least the way we have them set up now.

Fourth, in addition to our 11 computers, we have four DaisyWheel Letter-Quality Printers. However, we think that a LaserWriter Printer would be much more efficient for us for mass mail production.

If I may, you definitely do not want to do any kind of mass mailing on your LaserWriter—the LaserWriter is just too slow for that kind of task. You could easily do this on your Daisywheel printer. One thing you could consider is to pay someone to come in to do this particular job on a Sunday, for instance. It would probably come out a lot cheaper to do it that way than to send the jobs out. From a technical standpoint, this kind of mailing can easily be done in—house.

Is there anything else?

PN: Fifth, we'd also like a better project management system than *LisaProject*. Sixth, we'd also like better graphics than LisaDraw, in terms of charts and other representations.

Seventh, we need the ability to easily communicate by computer from the offices of one of our companies to other offices, without trashing the whole system. Specifically, my partner and I bought a research and decisions corporation (a separate company), which is a full-service market opinion research firm based in the city. Everything over there is IBM. Although we have two separate companies, the principals of both companies work in both places, and we need an application that allows us to take documents prepared on the IBM and be able to "punch them up and modify them" here, and vice versa. We have a program that allows us to go back and forth from WordStar-IBM to Microsoft Word-Macintosh, without losing anything.

How are you proceeding now?

PN: Our current planning is to switch to Macintosh under MacWorks; that way we can pick up machines more readily and have many more options, instead of sticking strictly with Lisa 7/7. We realize this will require converting to the Macintosh environment and implementing the software that best meets our needs.

We really love our Lisas, but it's important for us to be able to use a system which is readily supported and which continues to offer readily supported upgrade paths. What are your observations about the upgrade paths available to us?

Well, based on what you've told me, I agree that you might be better off going into the Macintosh environment, under MacWorks, rather than staying with Lisa 7/7. I know that migrating will not be an easy transition for the PBN Company, as everyone is using Lisa 7/7 and will need additional training. However, the option does offer versatility. In addition, as your system stands now, all of your hard disk storage is isolated to each individual user. Whereas, by migrating to the Macintosh environment and using MacServe (by Infosphere Inc.), you can hook all of your Lisa/Mac XLs together, and people can share the hard disk storage under the AppleTalk network.

Perhaps before we outline a proposal for PBN Company, I should speak with your assistant, Linda Moyer, about making another appointment with you, and meanwhile you can give some more thought to your overall system objectives and whether migration to the Macintosh environment is what you really want.

PN: Yes, I can see where that would represent a definite advantage for us. There is still, of course, a lot more that we must investigate before we can make a final decision. Perhaps another time.

Yes. Thank you very much for your time, Peter. It has been a pleasure meeting with you today.

Interview with Linda Moyer

Good afternoon. Please tell us about yourself and what your responsibilities here at PBN Company.

LM: My name is Linda Moyer, and I'm the Production Coordinator-Personnel Director for PBN Company. I also manage and oversee the computers. This includes training people, making sure that the Lisas are maintained properly, and

assisting in the decision-making process regarding future software purchases.

In interviewing Peter, I learned that PBN Company's current configuration includes 11 Lisa 2/10s, and you're interested in more hardware. In addition, the staff is primarily using LisaWrite, LisaCalc, and LisaDraw, as well as a limited amount of spreadsheet management, project management and graphics.

LM: Yes, that's right. Most of what we do is word processing and spreadsheets.

What are your overall DP objectives, generally speaking. What do you want to do, what are the problems you are facing, and what kind of options have you looked at?

LM: I don't think we're using our computers as productively as we could. Unfortunately, my job is so complicated and I have so many things to do, that I really don't have enough time to just sit down and learn a new application.

That seems to be the case for most business users.

LM: Recently I was finally able to spend an evening learning the basic functions of the Interlace database (by Singular Software) from our retail salesperson. I've since purchased the package in response to our need to put our prospects on database and print them out on labels. But I'm still not completely sure this will best serve our needs.

What kinds of things about the Lisa do you see that really help the staff here?

LM: Definitely ease of use, along with sophisticated word processing sofware. Together, these features allow each one of us to prepare a majority of our own documentation, and we don't have to deal with transcribing others' documentation from longhand, etc.

Did you have any prior experience did you have with computers before you came to PBN Company and began working with Lisas?

LM: I worked for a multi-user computer company in the East Bay called CompuPro, where I was a graphics artist. I also used their computers using WordStar and DBase II.

How did you find the transition from CompuPro equipment to the Lisa equipment?

LM: Coming from a computer company that had, of course, a lot of "computer wizards" around, I was required to have more direct knowledge about general programming. Using Lisas is more about pushing buttons, while I definitely had to be more of a computer person to use CompuPro's.

So you've found using Lisas after using CompuPros has been easier?

LM: Yes. It's like the difference between night and day. However, the Lisa does seem much slower than CompuPro—CompuPro was a very fast machine. I never used to lose documents on the CompuPro, either. But on the Lisa, I

constantly experience system lock-ups.

What kinds of enhancements in your systems would you like to see to increase your staff's overall productivity?

LM: One, I would like the computers to operate faster, specifically in printing and saving documents. When we save long documents, it seems like we wait forever. Of course, we've been spoiled—the greater the technology becomes, the more we expect of it, I guess. (I would also like to be able to absorb this stuff through osmosis, rather than taking as long to learn it and having to worry about which applications are better.)

Two, I think it would help if all the computers were hooked up to a centralized computer. That way, we wouldn't have to transfer everything to floppy disks or bump someone off a particular system when we need to use the printer at their workstation, etc.

Three, we also need some way to network all of our Lisas to a LaserWriter, because printing has become a real problem.

I understand the PBN Company is considering doing its mass mailings on the LaserWriter.

LM: I think at this point, it's still cheaper to job-shop this aspect of our business out, as everyone uses our Lisas as workstations, and our mailing list management needs would really inhibit regular in-house use of these workstations.

As I told Peter, you definitely do not want to do any kind of mass mailing on a LaserWriter—the LaserWriter is just too slow for that kind of task. You could easily do this on your Daisywheel printer.

LM: Yes, that sounds reasonable.

Is there anything else you'd like to be able to do?

LM: Yes, we need to be able to interface with IBMs. We are still not using our modem or telecommunications program; it's continually breaking down. In addition, we haven't really established a system to use the telecommunications capabilities, and we will require training in these areas.

We also have a definite need for a service agreement with a support company such as yours. Has The NetWorkers investigated performing consulting and system maintenance under service agreements?

Yes. The NetWorkers provides these services to Lisa/Mac XL customers. What we basically do is analyze each prospective businesses' needs, implement the agreed-upon system(s), and provide group training seminars on the new system(s).

LM: What can you recommend for us, from what you've learned about our specific needs?

I believe PBN Company should decide to migrate to the Macintosh world and then determine which specific systems will remain Lisa workstations. Once PBN has made that decision, it would just be a matter of our installing MacWorks on the appropriate machines, and networking all of the machines with MacServeTM. In addition, you'd need someone to come in here and set up the cables.

We'd then set up an electronic mail system and install all of

the software. In terms of PBN Company's telecommunications needs, I would strongly recommend that you first get your systems up and running in the Macintosh environment. You must first make a definite decision on which route you plan to take, in terms of converting to the Macintosh environment. Then, once your system is up and running, you would be familiar with your new capacities, and limitations.

The group seminar(s) would only cover the fundamentals of the overall network and use of the applications, as well as basic system maintenance. In terms of specialized use of specific applications, that would be up to you (unless you requested additional training).

System implementation, basically getting each system to run properly, would require the longest amount of time. System recommendation and training would be relatively short.

LM: What particular applications in the Macintosh world would you recommend we look at?

Based on your current uses, I would recommend Microsoft Word, Microsoft Excel, and MicroPlanner by MicroPlanning Software USA (San Francisco) or Apple's MacProject.

For your database and in-house accounting needs, I think you would benefit from Omnis 3. However, all you would need to do is learn basic use of Omnis 3 and how to generate reports. The rest, we can do. In terms of charts, I believe Excel will be adequate.

In terms of hardware, I think you should consider installing RamStak' memory boards, by AST Research Inc. Increasing internal memory will speed up your system, and in general, will ensure a more productive system.

LM: Thank you. We certainly appreciate the advice. Thank you. It's been a pleasure speaking with you today. Thank you for your time.

Closing statements

In summary, the PBN Company has found that their current Lisa 7/7 configuration has greatly increased the productivity of their business, and overall, they love their current hardware—so much, in fact, that they would like to buy additional Lisa/Mac XLs. They have also found the majority of the Lisa 7/7 applications very beneficial to their overall system performance. However, Apple's discontinuation of the Lisa/Mac XL and the subsequent lack of Lisa 7/7-specific support has been genuinely frustrating for this company. In light of these difficulties, the PBN Company must now decide between the Lisa Operating System and the Macintosh Operating System. Because they have already made significant investment into this technology, however, they are not willing to totally abandon their hardware or to participate in Apple's Trade—In Program.

Although they are still not sure which Macintosh applications would be the best-suited for their needs, they are intrigued by the abundance of software available for the Macintosh environment, and they recognize many advantages to moving to a more sufficiently supported Operating System, such as Macintosh. They also realize, however, that there are still

additional questions that they must ask themselves in order to make a complete decision: What percentage of their current machines should they convert to run MacWorks? And, which particular applications are comparable to or better than the 7/7 applications which they are currently using?

In the event the PBN Company needs additional workstations, they must also decide between additional Lisa/Mac XL hardware or Macintosh hardware; due to the recent unavailability of additional Lisa/Mac XL hardware in the Bay Area, they are also concerned about the future availability of hardware should they decide to stay strictly with Lisa/Mac XLs.

As I stated during my interview with Peter Necarsulmer, additional Lisa/Mac XL workstations are still available, and quite a well-spring of Lisa/Mac XL support channels, including The NetWorkers-NetSolutions Sales and Service, will continue to be available for Lisa/Mac XL users. In addition, as discussed throughout this issue of *The LisaTalk Report*, the momentum of interest shown by numerous third parties is a strong indication that Lisa/Mac XL support is on the increase and will be available through these parties for a long time to come. Whatever decisions that the PBN Company makes, a variety of forms of support will be accessible to them and to other users who decide to keep their systems.

Lewis Guice, President of The NetWorkers, has been supporting Lisa/Mac XL customers in the San Francisco Bay Area since the Lisa's introduction in 1983.



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Lisa's Latest

Update: the International Lisa/Mac XL Task Force

New Alliances: The NetWorkers would like to take this opportunity to thank the numerous organizations and individual Lisa/Mac XL users and developers who have responded to our announcement of ILMTF membership openings, (see Report of Events of First Quarter, The Spring 1986 LisaTalk Report). Without question, the future availability of Lisa/Mac XL support greatly depends on continued user and developer participation in and visible support of the ILMTF's primary goals: 1) to share technical and marketing resources; 2) to share ideas and solicit user feedback; and to seek, introduce, and modify Lisa/Mac XL support alternatives internationally.

Indeed, the process continues of defining cooperative third-party relationships to offer continued system enhancements and support programs for Lisa/Mac XL customers (and possibly

other orphanned Apple computer customers).

As we speak, some exciting new alliances are forming among specific participating ILMTF members. Since the first introductory meeting of the ILMTF in January 1986, organized by The NetWorkers and well-represented by third-party Lisa/Mac XL supporters, ongoing communications among third parties have resulted in encouraging new Lisa/Mac XL developments and support programs. In particular, the combined efforts of Dafax Processing Corporation, Migration Services, The NetWorkers-The LisaTalk Report, and SunData, will result in a nationally-structured Lisa/Mac XL service, sales and support.

Through these new alliances, Lisa/Mac XL customers can be confident that a full range of products and services will continue to be available, including: • Sales and support of existing hardware and software and specialized Lisa/Mac XL workstations • hardware repair • migration support • consulting services • and extended warranty programs. In addition, the interchange among these companies will likely include implementation of an electronic support network from which additional computer service companies (including Authorized Apple dealers) can get support answers and to order parts.

Each of these companies believes that Lisa and Mac XL computer systems not only provide powerful practical utility, but that they are also superior in power to many contemporary applications and well worth selling and supporting. Says Lewis Guice, President of The NetWorkers, "People seem to have the idea that computers disintegrate after they have either been deemed obsolete or technologically outdated. Our basic philosophy about this issue and the market in general, however, is relatively conservative: the fact is that most computers, whether old or new, provide the same practical

utility and can perform tremendous tasks in business and professional environments. We feel that if a computer system is doing the job for users, users should not be forced to abandon it—if it works, don't fix it!"

LisaTalk'n electronic network

update: As touched on briefly above, still another project that might emerge from ongoing ILMTF affiliation is the LisaTalk'n electronic network. Through this, involved third-parties could coordinate technical and marketing research activities, as well as perhaps develop the electronic service for broader use by general subscribers. Currently, however, other items have moved higher on our priority list (especially the new above—mentioned support liaisons), and the exact scope of LisaTalk'n has yet to be concretely defined. If you have any ideas abut how such a network could benefit you, please let us know,

ILMTF activities: Although plans for specific ILMTF-related activities are still developing as of this writing, The NetWorkers and many other third-parties remain committed to expanding the ILMTF to enhance international Lisa/Mac XL support. We hope that the recent introduction of new products and support channels for Lisa/Mac XL customers will further promote confidence and support in our cause. As founders of this organization, The LisaTalk Report strongly encourages ALL users and developers out there who have specific ideas or information about support alternatives currently available (whether they be dealers, hobbyists, consultants, etc.,) or who have not otherwise demonstrated to us their specific wishes for continued support, to please contact us. Simply submit a letter of introduction and any background information about yourself, the constituency you wish to represent, or your particular individual Lisa/Mac XL development, support, or usage goals to: The NetWorkers-ILMTF, 21 Canyon Road, San Anselmo, CA 94960.

Lisa/Mac XL Orphanage: As mentioned in our first LisaTalk Product Update (shipped to subscribers in mid-July), The NetWorkers-The LisaTalk Report once again sets out to hoist its now famous Lisa/Mac XL Orphanage banner at another otherwise strictly Macintosh show. That show is the Aug. 1-2-3 MacExpo™, sponsored by The MACazine™, and set in lovely Anaheim, California. Although we can't very will report on this event at this writing (as the show is still over one week away), we do wish to express our excitement with the prospect of meeting and helping more Lisa/Mac XL users! Again, (many of you will recall our exhibit at the San Francisco MacWorld in Lisa/Mac January), XL will find a warm welcome at our Lisa/Mac XL Orphanage. Featuring special "Mac-XLent" product introductions and

demonstration, and hosted by principals and technical associates of The NetWorkers-The LisaTalk Report, Dafax Processing Corporation, and Migration Services, we have worked very hard to organize another eventful and enlightening exhibit! Special demonstrations will include helpful user tips and hints, questions and answer, AND compatible products at special discounts.

Though many of you will not have been able to attend, it's our guess that you will nonetheless benefit from our presence at this show! In addition to supporting users and enhancing relations third-party among existing Lisa/Mac developers/supporters, we will visibly address one of the most common Lisa/Mac XL user complaints in the Macintosh world: Mac software packaging, advertising, and exhibits which lack any indication of XL-compatibility. It is our hope that with a little education about Lisa/Mac XL users' needs and frustrations and a little bit of our own time in communication with participating vendors, many Macintosh vendors will come around to see what we've known all the time-Lisa/Mac XL users are good customers and should be treated as such!

Meanwhile, we'll bring you up to date on these and other events of the MacExpo in The Fall 1986 LisaTalk Report!

Hardware Service and Support

In an effort to offer combined Lisa/Mac XL support services throughout the greater San Francisco Bay, Santa Clara, and Sacramento areas, The NetWorkers, publishers of *The LisaTalk Report*, recently established a sales division called *NetSolutions Sales and Service*. The NetWorkers has consistently supported Lisa/Mac XL customers for three years, and the establishment of *NetSolutions Sales and Service* marks the first—ever attempt by any one group to offer full specialized Lisa/Mac XL support throughout Northern California. Initial efforts by this organization have already included convenient carry—in service/hardware repair through the newest Software For Less walk—in outlet, located at 950 Taraval Street (and 20th) of San Francisco.

In addition to continued carry-in service through Software For Less, NetSolutions is working in a cooperative effort with Software For Less to open an additional walk-in outlet called the NetSolutions Sales & Service Center. This full service center will offer Lisa/Mac XL users a variety of service and support, including hardware repair, system installation, sofware and hardware sales, upgrades, and specialized system consultation. This division is dedicated to enhanced support for Lisa/Mac XL users, and they are actively pursuing continued Lisa/Mac XL development. Based in Marin County, The NetWorkers' NetSolutions Sales & Service Center is scheduled to open its doors, located at 8 Mariposa, San Anselmo, CA 94960 as early as the third week of August.

The NetWorkers will also continue to cooperate with other service companies and with Apple dealers around the country who are in need of information to support their Lisa/Mac XL customers. The NetSolutions Sales & Service will also be involved in gathering Lisa and Mac XL-specific products on the market, re-marketing them at more competitive prices, and supporting these products. For more information about these services call NetSolutions at (415) 258-9152.

New Apple Releases

Date: June 16, 1986: Following are the current Apple releases for Macintosh, showing the current version number and which versions these new releases supercede. (Previously published in the Apple User Group Connection.)

File	Vn.	Supercedes
System	3.2	3.1.1, 3.1, 3.0, 2.1, 2.0
Finder	5.3	5.2, 5.1, 5.0, 4.1, 1.1g
Imagewriter	2.3	2.2, 2.1, 2.0, 1.0
Imagewriter 15	1.0	(NEW)
AppleTalk		
Imagewriter	2.3	2.2, 2.1, 2.0
Laserwriter	3.1	3.0, 1.1, 1.0
Laser Prep	3.1	3.1, 1.1, 1.0
Hard Disk 20	1.1	1.0
Installer	2.2	2.1, 2.0
Font/DA Mover	3.2	3.1, 3.0, 2.5, 1.0
The Namer	2.1	2.0, 1.0

These files are currently available from authorized Apple dealers and are also downloadable on CompuServe (MAUG), Genie (MAC), Delphi (ICONtact), and AppleLink (NEWS). (Note that many of these files will require in excess of 1.5 hours to download.)

New Product Announcements

LisaCalendar9/9TM: Compatible with Lisa 7/7 versions 3.0 and 3.1, LisaCalendar 9/9 is a perpetual calendar and appointment book in a single desktop window. Accessible on your Lisa 7/7 desktop along with all of your other Lisa 7/7 programs. Enter and edit up to nine appointments a day upwards into the 21st Century. LisaCalendar 9/9 is well integrated into all of Lisa's capabilities. Retail List Price: \$59.95. SPECIAL PRICE: \$49.95 to all subscribers. Available from The NetWorkers–NetSolutions, 8 Mariposa, San Anselmo, CA 94960. Phone: (415) 258–9152.

LisaPhonebook 9/9TM: Compatible with Lisa 7/7 versions 3.0 and 3.1, LisaPhonebook 9/9 organizes names, addresses, and phone numbers on your Lisa 7/7 desktop. Automatically sorts in alphabetical order at entry. Quickly searches for records on all categories. Automatically dials telephone numbers through Apple™ or Hayes™ compatible modems. Retail List Price: \$59.95. SPECIAL PRICE: \$49.95 to all subscribers. Available from The NetWorkers—NetSolutions, 8 Mariposa, San Anselmo, CA 94960. Phone: (415) 258–9152.

XL800TM: NetSolutions Sales & Service, a subsidiary of The NetWorkers, has been hard at work developing a double-sided 800K internal replacement disk drive for the Lisa/Mac XL. Currently, this drive will only work on Mac XLs with the internal 10MB hard disk. However, NetSolutions developers also plan to release a model for the Lisa 2 and 2/5. The XL800 will read and write to both 400K and 800K disks under MacWorks and will read and write to 400K disks under the

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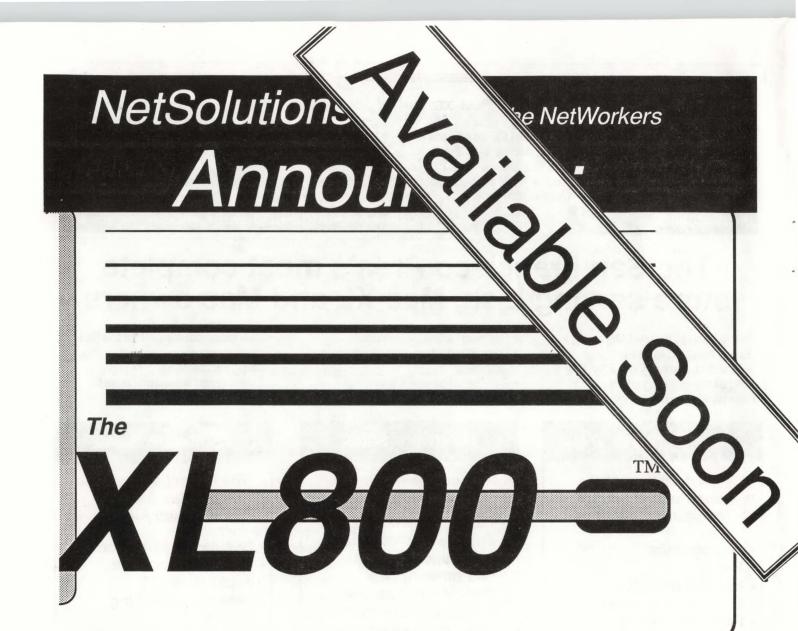
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A prototype of this drive will be on hand for demonstration at the MacExpo[™], Anaheim, California, August 1–3. For more information, read Sam Neulinger's article in this issue Computing in the potentially fast lane, or write to: NetSolutions Sales & Service, 8 Mariposa, San Anselmo, CA 94960.

ROMSwitcherTM: Enables Lisa/XL users to switch between any Lisa Operating System and MacWorks with a proper pixel–proportioned full–sized screen under either mode. Install your existing F, G, or H ROMs and the 3A ROMs that come with the Apple Mac XL Screen Fix Kit, for total screen control. Installs piggyback onto the CPU board with external toggle switch, controllable when power is off. Installation by a technician may be required. Discussed in this issue, *Computing in the potentially fast lane*. Introductory Price: \$129.95. Available from Dafax Processing Corp., 14 North Drive, Malba, NY 11357. Phone: (718) 746–8220.

Office Productivity System (Ops)

Contributed by George McLain, Applied Micronetics

Applied Micronetics just ran across a powerful billing and job costing system for the Macintosh XL called the Office Productivity System (Ops). *Ops* was developed for a geo-technical engineering firm in Palo Alto and has since been implemented by civil and structural engineers, consultants, accountants, architects, designers and advertising agencies. In addition to billing and job costing, *Ops* includes accounts receivable, employee productivity, and mail-merge interaction with Microsoft Word. Perhaps its most intriguing feature, however, is the optional ability to use one of the provided programs to bring the system up as a multi-user system. A later release will also allow users to use the multi-user features as a subset of MacServeTM (Infosphere Inc.).

Ops will be reviewed in *The Fall 1986 LisaTalk Report*. If you would like more information on the *Office Productivity System*, write to George McLain at Applied Micronetics, 1078 Carol Lane, Suite 202, Lafayette, CA 94549, or call (415) 283–4498.

Still Available

LabeListTM: Compatible with Lisa 7/7 versions 3.0 and 3.1, LabeList allows you print LisaList file data in a label format to generate mailing labels. LabeList is very straight-forward and easy to use. For more information, see Review of LabeList in *The Spring 1986 LisaTalk Report*. Retail List Price: \$49.95. SPECIAL PRICE: \$39.95 to all subscribers. Available from The NetWorkers-NetSolutions, 8 Mariposa, San Anselmo, CA 94960. Phone: (415) 258-9152.

PCBasicTM: PCBasic is a BASIC compiler that runs under the Lisa 3.9 Workshop and produces compiled BASIC programs that run under the Workshop. Because the command set

of PCBasic is nearly identical to IBM PC BASICA, you can transfer BASICA source code into the Lisa 3.9 Workshop. Once there, with a few minor modifications, that program will then compile and run under the Workshop. KEY statements are recognized, giving function keys on the bottom of the screen; these can then be chosen by the user with a mouse click, or with key combinations that you've assigned. PCBasic programs can also be directly entered into the Workshop editor. Available from The NetWorkers–NetSolutions, 8 Mariposa, San Anselmo, CA 94960. Phone: (415) 258–9152.

PCMacBasic (Cross—Compiler Version)TM: As with PCBasic, PCMacBasic

(Cross—Compiler version) compiles IBM PC BASICA source code under the Lisa 3.9 Workshop. The programs that result from this compile are intended to run in the Mac environment (either under MacWorks or on the Mac). This version will generate programs that work with MacPlus, but these programs cannot reference files within folders, so all referenced files must be at the Desktop level. Available from The NetWorkers—NetSolutions, 8 Mariposa, San Anselmo, CA 94960. Phone: (415) 258–9152.

PCMacBasicTM (Mac version):

PCMacBasic (Mac version) is a compiler that runs in either the Mac or the MacWorks environment, and creates compiled programs that will work in either of these two environments. The result is a self-contained application program that is run by the double-click of the user. This version is compatible with the MacPlus. Compiled programs can reference items within folders, using the commands MKDIR, RMDIR, and CHDIR familiar to those in the IBM PC world. Technically, this compiler includes an assembler and a linker, but they are called automatically by the compiler and are invisible to the programmer. (Minimum 512K Mac required and external drive or 800K drive strongly recommended.) Available from The NetWorkers—NetSolutions, 8 Mariposa, San Anselmo, CA 94960. Phone: (415) 258–9152.

Disks of the Quarter

Pre-release (V.09) Migration Scrapbook: Available to subscribers only. The pre-release Version 0.9 Migration program features the Migration Scrapbook (also developed by Apple but not included in Apple's 1.0 Migration Kit). Scrapbook allows users to move documents previously migrated to Macintosh from Lisa BAC TO LISA. Send self-addressed stamped mailer and check or money order in the amount of \$10 to: NetSolutions, 8 Mariposa, San Anselmo, Calif., 94960. Please allow four to six weeks delivery.

2-Port Disk Install: Available to subscribers only. 2-Port Disk Install is a beta program which allows MacWorks (Vn. 3.0) users to increase hard disk storage capacity by adding an additional Apple ProFile to their system via the Apple Lisa Parallel Board. Also included on this disk are the

popular Public Domain programs, JClock and WayStation. JClock allows you to easily view the time in the top right-hand corner of the Command Bar. WayStation works much like the Mini-Finder, but the interface and capabilities are superior (the Desk Accessory Menu is still available under Way Station). Send check or money order in the amount of \$19.95 (California residents send \$21.25) to The NetWorkers, 21 Canyon Road, San Anselmo, Calif., 94960. Please allow four to six weeks delivery.

Updates

Lisa 3.1 Updates

Updates to Lisa Office System 3.1 are available from The NetWorkers. The following items are required:

- Copies of O.S. disks #1-4, LisaWrite Disk #1, and LisaProject—these are the disks which are updated to 3.1 version—(label each disk in advance);
- · A written request for Lisa O.S. 3.1 update;
- Check or money order for \$25 for copying services; and
- A self-addressed, stamped return mailer, with complete postage for return of six disk copies.

Send To: The NetWorkers, 21 Canyon Road, San Anselmo, CA 94960. Allow two to three weeks for delivery.

MacWorks 3.0 Updates

Updates to MacWorks 3.0 are available from The NetWorkers. Simply enclose:

- A copy of your current MacWorks disk (label disk MacWorks 3.0 in advance);
- · A written request for MacWorks 3.0;
- Check or money order in the amount of \$10 for copying services; and
- A self-addressed stamped return mailer (w/39 cents postage).
 Send to: The NetWorkers, 21 Canyon Road, San Anselmo,
 CA 94960. Allow one to two weeks for delivery.

Fixes/Tips/Hints

HDA Fix

Contributed by Roxane M. Schwabe, Editor

According to Carol Jinks, Apple Product Service and Support Supervisor, Apple recently provided a special diagnostics disk called the "Remount Program," to authorized Apple dealers for distribution to Mac XL users. If you are experiencing 0F00064 Sad Mac (oomph) error while using MacWorks on your hard disk, this unofficial* work-around program will allow you to retrieve data lost as a result of the hard disk failure. Lewis Guice reminds users that after using the "Remount Program," users must then download all of their data and repair their hard disks by re-installing MacWorks.

*This program is a beta-release program which has no part number. It is not expected that a revised copy will be provided by Apple at a later date.

Migration Kit Version 1.0

Contributed by John Love, Apple Product Support In light of several questions which have arisen regarding

- Migration-conversion, here are some reminders:

 Users must have the Version 3.1 Office System to use the
- · Users should back up all data to be migrated.

Migration Kit.

- Start up with Install Disk #1 (just as you would with Lisa O.S. Disk #1). You'll notice no real differences on the desktop, and no icon will appear. Basically, this procedure allows for the inclusion of additional menu options, for instance the "Make Text File" option used in converting LisaCalc documents, etc.
- Then, install Disk #2. Copy the Migration icon to hard disk.
- · Proceed as instructed for each Migration tool.

In previous announcements, it was stated that the Migration Kit would no longer be offered after May 31, 1986, or while supplies last. However, in the event users still need the Migration Kit, it will continue to be made available through the Apple Computer Processing Center. (In the event supplies run short, Apple will arrange to have more Kits made.)

To order, send check or money order, or authorized Mastercard or VISA card number, in the amount of \$30.[∞] (+ local sales tax), made payable to Apple Computer Inc. In a sturdy mailing envelope, enclose the original Lisa 7/7 System Disk 2, part #682–0097–A or 682–0097–B (the part number is located on the reverse side of the diskette on the lower right corner of the diskette label), along with your request. Clearly writeyour Name, the address to which you wish to have the Kit sent (Company Name, Address, City, State, Zip), and your telephone number. Send to: Apple Computer Processing Center, Attn: Migration Kit, P.O. Box 7003, San Francisco, CA 94120. Please allow four to six weeks for delivery. This offer is good only within the Continental U.S., Hawaii, and Alaska.

Using 2-Port Disk Install with MacServe

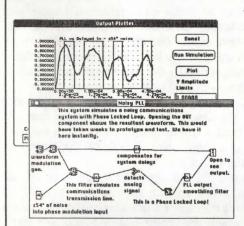
Contributed by Rob Graner, Contributing Technical Editor
Because both 2PDI (which actually updates a current
System) and MacServe (which is System software) address the
same slot number INIT 31, these programs reportedly run into
conflict with each other unless one is moved to another slot
number.

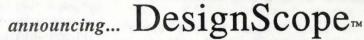
To install on a System that does not have $MacServe^{TM}$:

• Run the 2PDI Installer. • Choose the disk on which you wish to install 2PDI and install. • To install MacServe™ after installing 2PDI, move 2PDI's INIT setting to 29 using ResEdit™. (ResEdit is a programming tool which can be obtained from almost all Mac user groups across the country, as well as from on—line services such as CompuServe and The Source. See instructions below on use of ResEdit for this particular procedure.) • Then install MacServe™. • MacServe™ continued on page 74

Put power in your drives. BRAINPOWER.



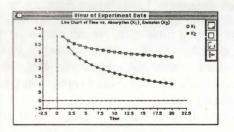




DesignScope is the first electronic circuit-design simulation that you use before designing component circuitry. With DesignScope, you can develop optimum systems without knowing component values in advance! DesignScope lets you connect components into a block diagram, assign them parameters, and run a system simulation and view the waveforms. If results warrant, the system can be changed in seconds and a new simulation attempted. The process is quick, flexible, accurate, & modular.

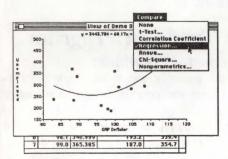
DesignScope has: amplifiers; comparators; filters, analog switches; voltage controlled oscillators; voltage sources; integrators; differentiators; rectifiers; log-exponential amplifiers; multipliers; sample & holds; peak detectors; delay lines; noise generators; clippers; phase locked loops; logical ORs, NORs, ANDs, NANDs, and EX'ORs; D flip flops; frequency dividers; monostable one-shots; transient input generators; output plotters; & more. \$249.95

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StatView, the interactive, graphic statistics utility, computes Descriptive, Comparative, and Nonparametric statistics including Frequency Distributions, Regressions, ANOVA, Chi-Square, Correlations, and *more*. Graphic views of results and ease of use are outstanding. Data interchange with other Mac applications. \$189.95

demo disk \$10.00

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ChipWits, the robot-programming simulation, is fun and challenging. MacUser's and Macazine's educational program of the year for 1985! \$49.95

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ThinkFast challenges you to improve your memory! Set the difficulty levels and then concentrate as both your Left and Right Brain get a workout.

\$39.95

PowerMath_™

PowerMath, the Symbolic Mathematics program, is a significant application of Artificial Intelligence to mathematics. This expert system is a problem-solver that does Algebra, simultaneous equations, polynomial Calculus, matrix Algebra, & much more... all with numbers of unlimited size. Outstanding ease of use. \$99.95

demo disk \$10.00 requires 512K "Loader" will install INIT 31 without conflict.

To install 2PDI on a System with existing MacServe™:

Move MacServe's INIT setting to 32 using ResEdit*.
 Run 2PDI.
 Move 2PDI's INIT setting to 29.
 Move MacServe's INIT setting to 31.

If you wish to install System 3.2 and Finder 5.3, you must follow these instructions:

• Install 2PDI onto the normal System and Finder found on the MacWorks System disk (4.1 Finder and 2.0 System). • Move 2PDI's INIT from 31 to INIT 29 using ResEdit*. • Run Installer version 2.2. • Next, run Mac Plus 1.1 System update, which will update System, Finder, and Desk Accessories to 5.3 Finder and 3.2 System. (The Mac Plus 1.1 System update can be obtained from any Mac user group or any authorized Apple store.) • Now, if you have MacServe™, you can install it into the new System and Finder. This System and Finder seems to be very stable and much faster on a Lisa under MacWorks 3.0.

Make sure you have a backup of both your System 2.0 and 4.1 Finder or 3.2 System and 5.3 Finder (which ever you are using). Then, all you will have to do is install the System and Finder in the hard disk, and you will never again have to go through this procedure.

*Instructions for using ResEdit in this procedure:

Open ResEdit and scroll to the System File. Open System by double—clicking. Scroll to INIT, and double—click on it. Choose INIT ID=31. Double—click on it. Go to the File Menu and choose "Get Info." Press tab bar once. Type the numbers: 29. Close all windows, including the System window. When asked to save changes, choose: Yes.

WARNING:

Do not close ResEdit by clicking the Close Box of the hard disk window!!! Doing so would inevitably cause your System to CRASH! Instead, choose Quit under the File Menu.

The 0F00064 Crash:

Changing MacWorks disks might be worth a try

Contributed by Herb Kroemer University of California, Santa Barbara

Like many other XLisa users, I have had my share of the dreaded 0F00064 crash under MacWorks 3.0, which is usally unrecoverable, leading to a complete loss of the content of the hard disk and requiring a complete re-loading of that disk. But, having four XLisas under my control, I have been able to make some observations on machine-to-machine as well as disk-to-disk variations that lead me to believe that the problem might not be a problem with MacWorks 3.0 itself, but one of a sizeable fraction of defective MacWorks XL distribution disks of Version 3.0 (Apple part #682-0087-D) in circulation. Not so defective that MacWorks wouldn't load at all (I have had that,

too!), but defective enough that a wrong bit pattern somehow gets past whatever error checking is employed in reading the disk, causing a crash at its own convenience later.

Of my four XLisas, two were bought before the release of MacWorks 3.0. They were eventually loaded with what is probably a beta version of MW 3.0, from the MW 3.0 disk contained in the May 85 Software Supplement (Apple part #026-2001-B). Neither of these two machines ever had an unrecoverable 0F00064 crash. The other two machines were bought later; they were loaded with MW 3.0 from the release disks (Apple part #682-0087-D) that came with the machines. Both machiens crashed with sickening frequency, on the average once a week, usually at startup in the morning. In November 1985, I finally had the idea to reload both machines from the same MW 3.0 disk from which the other two machines had been loaded. I haven't had a single unrecoverable 0F00064 crash on either of these machines since then.

The idea to try that old disk again did not come out fo thin air. Somehow, I had ended up with six copies of the MW 3.0 release disk, and during the many reloads after crashes I had noted that my machines would not accept one or two of the disks, implying disk-to-disk differences. I had also noted that copies of certain programs made with Copy II Mac on a Mac 512, which would run flawlessly on a Mac 512, would not even be recognized as Mac disks by any of my four XLisas, implying significant differences between the disk drives and/or controllers in the two kinds of machines. Maybe the mass copying machine that made the distribution disks is just a little bit out of whack relative to the parameters of the disk drives in many XLs, or vice versa.

For those plagued by 0F00064 crashes, changing MacWorks disks might be worth a try.

Apple's Trade-in Program

Important reminder

Most of you are probably aware of Apple's trade-in program, but here's a quick reminder for those who are not (see also: Report of Events, 1st Quarter 1986—The Spring 1986 LisaTalk Report). In response to owners' concerns about continued support of their machines by Apple and its dealers, in January 1986, Apple announced a dealer trade-in program which would in effect provide all Lisa/Mac XL owners in the continental U.S., Alaska and Hawaii with the option to trade in, for an additional \$1,500, any Lisa/Mac XL (working or not) for Apple's latest release, the Macintosh Plus with Hard Disk 20. (This \$1,500 charge essentially covers the additional cost of the Hard Disk 20.) Trade-ins began April 14th and will end on August 29, 1986. To find out which dealers near you are participating in the trade-in, Apple has an 800 number: 1 (800) 538–9696, extension 874.

Is Apple's Trade-In Program For You?

Staff members at The NetWorkers are often asked why we support orphanned Lisa/Mac XL users, and most recently, whether we are trying to convince users not to participate in

Apple's trade—in through dealers. For the record, The NetWorkers supports orphanned computers, specifically the Lisa/Mac XL, because we believe the technology still represents a viable solution to a majority of users. We feel strongly about the capabilities of the Lisa/Mac XL, and we are committed to supporting Lisa/Mac XL users in a variety of ways.

Reports received recently by The NetWorkers via phone interviews and a series of hard copy surveys indicate that a lot of large companies are not going to participate in Apple's Trade–In Program. One of the most interesting examples is GTE, California, which has 480 Mac XLs. Says Cliff Huff, "The Mac Plus does not offer those features that we've grown accustomed to in our applications, as does the Mac XL. We use a lot of spreadsheet applications and database management systems, and the big screen just does a better job for us."

* * *

Jim Banks, Technical Specialist/Mechanical Engineer for ALCOA, says there are currently 22 Lisas within his particular division, of approximately 100 Lisas at ALCOA. The majority of these Lisa/XL systems are running under MacWorks 100%, most of which are individual workstations. However, Jim also uses two ProFiles with the Office System and MacWorks on the internal. Jim has also set up two machines which are "split" for migration purposes, as the division will not all be converting everything all at once.

In terms of 7/7, Jim has had very little trouble, outside of a corrupted System which caused System crashes every other day. Since he began using the Pascal Workshop to format his disk, however, his system corruption problems seem to have dissipated. Other than this aspect of the Lisa system, he will not miss using Lisa 7/7 software too much. He also thinks he might be able to keep one Lisa formatted in Lisa and therefore continue to use Pascal, if he can switch the CPU of one of his machines.

Rather than participate in Apple's trade-in, Jim's division at ALCOA plans to hang onto most of its Lisas and gradually replace them with "Open" Macs. If, during the Trade-in, they do experience specific hardware problems, however, they will trade those systems in.

* * *

Jeff Allender, Liaison Engineer at Du Pont's Savannah River Plant (a large government installation which DuPont runs for the Department of Energy), has been using Lisa since 198). Jeff is involved in project design in the construction of a new plant "closer to the meca." At his worksite, there are a total of four other Lisa/Mac XLs. Jeff currently has his hard disk partitioned between Mac and Lisa; however, he uses his Lisa 7/7 version 3.1 system constantly, and the Macintosh is loaded only about once a month.

Lisa's desktop environment is really liked by most of the staff at SRP, and Jeff often has to wait for other users intrigued by the machine to let him use his system. Jeff especially appreciates Lisa's larger screen, and he feels the smaller screen on the Mac+ is definitely a disadvantage. Jeff has used a Macintosh, and is still not familiar with the similarities between Lisa software and Macintosh software. He's particularly concerned whether the time he will have to invest in converting a majority of his documents will actually represent a savings, or a

loss, of his time. A case in point is that although LisaCalc documents can apparently be converted with relatively few mistakes or loss or disorganization of data, Jeff rightly believes that it would still take a week or more to debug a 400K spreadsheet, which are not uncommon in his work.

In regards to the trade—in program, Jeff offered, "The last thing I think we need to do at this plant is spend more money. Right now the Lisa does everything I want to do for business, and I don't expect my needs will change too much over the next three to four years. In addition, I have an Apple II+ at home, and I like the fact that these machines are compatible." The staff at the Savannah River Plant is apparently not being pressured to trade—in. However, due to the larger user base at those plants and the need for dependable, supported machines, Jeff believes that the other DuPont offices are pushing for conversion to the Mac+.

In addition to his desire to keep the powerful features of LisaCalc, one of the major drawbacks in converting to the Macintosh, in Jeff's opinion and for his work, is that there are no drawing programs for the Mac, in his opinion, which have yet matched LisaDraw (especially MacDraw). He really likes having the ability to move from LisaGraph to LisaDraw to customize his graphics.

Programmers' Corner Farewell to ToolKit Users' Group

Contributed by Roxane M. Schwabe, Editor

Lisa/Mac XL business users are not the only users being forced to make serious decisions about sticking with their machines. Apple's discontinuation of Lisa has also required many development—oriented users to take a hard look at their long—term programming objectives using the Lisa. The recent disbandment of the ToolKit Users' Group, founded by Dave Redhed, is a major example of this dilemma. (Dave is also well—known for his Orphan Support column for The MACazine and as a contributing technical editor for The LisaTalk Report.)

Dave had been admittedly uncertain about the future of the ToolKit Users' Group as early as January of this year, when he published the last issue of his periodical, *The DeskTop Junction*, (the original service-oriented publication for inspired Lisa user-developers interested in producing additional software for the Lisa). However, with a lot of perserverance, and hope that signals at Apple (and in the general development community) would change in Lisa's favor, Dave and the TUG crew (approximately 135 members strong) continued to correspond and publish their ToolKit-specific newsletter, *Professor Overrider's Almanac*. But alas, the disheartening realization that Apple's signals would not change for the better persisted, and Dave has just made the official announcement of TUG's disbandment.

Although we have heard from one TUG member disgruntled by TUG's break-up, Dave has shared that a majority of TUG members have actually quit using the ToolKit and are taking heart in the fact that Apple is promoting a *MacApp* Users Group. For those former TUG members, or anyone else, who are still interested in a formal organization or in any way interested

information gathered by the now defunct group. In addition, you are welcome to have any information which has been organized regarding TUG's membership. Back issues of Professor Overrider's Almanac (a total of four) are available for \$5 each, or if you would like all four issues, Dave is offering them for an even \$10. The ToolKit package is no longer on Apple's price list; however, interested parties can likely find a copy from any one of several former TUG members. For more information, write: Dave Redhed, 712-35th Avenue, Seattle, WA 98122.

We at The LisaTalk Report wish to salute Dave Redhed for his continued commitment and support of the Lisa/Mac XL community. He is one of the original "support pioneers" in this community, and we know the TUG membership will miss his thoughful editorials and straight-forward reporting. We hope he will continue to share his insight and experience with us all. Best of luck to Dave and to all the ToolKit users! If subscribers to The LisaTalk Report have any comments regarding ToolKit-Workshop support, etc., please let us hear from you.

Development Tools Available

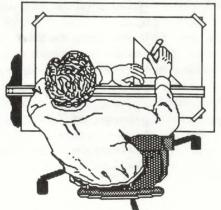
Contributed by Dave Redhed in 7/12 telecon with Roxane M. Schwabe, Editor

For those of you who are still interested in purchasing Pascal Version 3.9, as well as other programming and development tools, simply request a Technical Materials Order Form from Apple Computer Mailing Facility, 467 Saratoga Avenue, Suite 621, San Jose, CA 95129, or call (408) 988-6009. Following are the available items listed on this form:

- · Mac Software Supplements 1, 2, and 3
- MacApp
- Lisa Workshop C System
- · Inside AppleTalk
- · Inside LaserWriter (with or without PostScript)

The Mac Software Supplements 1, 2, and 3 are not independent items, in that you will generally need more than one Supplement to achieve many general tasks. For example, you must first install Supplement issue 1 before you can implement the Workshop C.

Pascal Version 3.9 is primarily oriented to Macintosh development (object Pascal), and is contained within Mac Supplement Issue 1. Although there are also apparently some



in ToolKit information, Dave will gladly offer assistance and any non-Mac enhancements in V.3.9 (i.e., Editor programs, etc.), if you are more interested in sticking with Lisa as opposed to Mac development, the 3.9 update is not generally recommended, as you would face a large task of weeding out the predominant Mac-related enhancements (for instance, the compiler only generates Mac code). Write for more information.

MacApp User Group Meeting—MacWorld Expo

Contributed by Roxane M. Schwabe, Editor

Although licensed MacApp users have already been notified, the following information is provided for the ToolKit/MacApp users (or potential users) within our readership. Among the activities scheduled to take place during the MacWorld Exposition Boston, Massachussettes, Aug. 14-16), will be a special MacApp User Group Meeting. This meeting will take place Friday, August 15th, beginning at 9 a.m., at the Westin Hotel in Boston. It is recommended that you contact Apple directly in advance if you are interestedin participating. For more information, contact: Eileen Mayes, Object-Oriented System Group, MS-22Y, Apple Computer, Inc., 20525 Mariania Avenue, Cupertino, CA 94087.

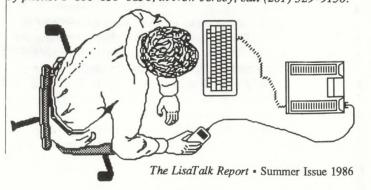
Macintosh Publication Object-Oriented Programming for the Macintosh



By Kurt J. Schmucker \$34.95—ISBN 0-8104-6565-5

In his latest book, Object-Oriented Programming for the Macintosh™, Kurt J. Schmucker explains the object-oriented approach to developing software for the easy-to-use yet difficult-to program Macintosh computer. In discussing fundamental object-oriented concepts of objects, classes, instances, message passiing, and method calls, as well as more advanced topics such as meta-classes and inheritance, Kurt instructs on how to customize this ready—made program shell to perform any task you desire from scratch and avoid programming resizable windows, dialog boxes, and scroll bars. In addition, Kurt includes a thorough discussion of Apple's MacApp, the Expandable Macintosh Application, examination of all the major design choices that affect object-oriented applications, as well as the major Macintosh object-oriented languages, such as SmallTalk-80, Neon, Exprlisp, and QuadWorld, a fully developed MacApp application.

To order: Send check or money order, or provide VISA/MC/AEX account number to Hayden Book Company, Box PPI, 10 Mulholland Drive, Hasbrouck Heights, NJ 07604, or order by phone: 1–800–631–0856, in New Jersey, call (201) 329–9150.





Classifieds

To place your classified, send a check or money order in the amount of \$25 for 25 and 75 cents for each additional word, to: The NetWorkers, 21 Canvon Road, San

or fewer words and Anselmo, CA 94960.

Items For Sale

Lisa/Mac XLs

Mac XL with 1MB and parallel card. Randy Tsudama, P.O. Box 11962, Fresno, Calif. 93706, or call after 5 p.m. PST (209) 487-7727. WILL ACCEPT BEST OFFER.

Lisa 2/10 with 1MB, 7/7 vn. 3.1, Wide-carriage ImageWriter. Less than 10 hours used. Levtech, Inc., Contact: Mr. Pentacost, P.O. Box 516, Jacksonville, Florida 32701, or call (904) 634-1981. \$2,500 OR BEST OFFER.

Lisa 2/5 with 1MB RAM, almost brand new. Manuals still in shrinkwrap. \$1,500 or BEST OFFER. Also, has miscellaneous Macintosh software. Scott Lavered. Phone: (415)452-5252 or (415) 345-6146.

Package deal: 2 Port Parallel Card (New), 5MB ProFile, Lisa Pascal Workshop 3.0, MacWorks 3.0, Lisa 7/7 Combination—\$800. (Firm.) Call James Donnell after 6 p.m. PST: (805) 772-4580.

Boards

Two 512K Boards. Wolfgang Naegeli, 101 Union Road, Oak Ridge, Tennessee, 37830. WILL ACCEPT BEST OFFER.

Two 512K Boards and One BitFixer (BRAND NEW). Jon E. Benjamin, Phone: (415) 541-3569 or (415) 367-1133. WILL ACCEPT BEST OFFER.

Printers

Apple Daisywheel Printer (original price: \$2,100). WILL ACCEPT BEST OFFER. Also for sale, Apple 1200 Baud Modem. BEST OFFER. Bill Drummy, Phone: (201) 742-3994.

Developer's Tools

Lisa Pascal Workshop 3.0 Never Used! Apple part #AD60301 Only \$275. For more information, write Irwin Poche, 1020 Franklin Avenue, New Oreleans, LA 70117 or call (504) 948-4088.

Documentation

Eight full sets of 7/7 Manuals. WILL ACCEPT BEST OFFER. Contact The NetWorkers, 21 Canyon Road, San Anselmo. CA 94960. (415)258-9152.

Ten Full sets of Lisa Ver. 3.1 Manuals. Jim Nicol, Phone: (818) 841-9470

Wanted to Buy

Disks

10MB External Hard Disk, WILL Darrell ACCEPT BEST OFFER. Tonie, CPM, 4917 Emerald Street, Boise, ID 83706. Phone: (208) 345-3969.

BBS/Services

24-Hour BBS: MacCircles. (300, 1200, and 2400 Baud) Number: (415) 484-4412. MacCircles is run on Mac XL, using the Red Ryder Host communications program, featuring Macintosh and Mac XL-related news and programs. Contact: Ms. Pat O'Connor.

Hardware Repair for Lisa/Mac XL avallable owners now from NetSolutions Sales & Service, a of The NetWorkers. subsidiary Convenient carry-in service available at 8 Máriposa, San Anselmo, CA, or through Software For Less, 950 Traval Street (at 20th), San Francisco, CA 94116. Or call: (415) 258-9152,

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Back Cover

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Page 40

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Page 3

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Page 73

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Page 66

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P17, Inside Cover, Inside Back Cover

DIQ DOC:

Page 29

Imagine Software:

Pages 14, 15

Infosphere Inc.:

Page 5

The MACazine

Page 78

MacExpo (MacIntosh Exposition):

McMatt Computer Cons

Page 10 Migration Services:

Page 10

NetSolutions Sales & Service:

Page 31, Page 69-70

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Page 47



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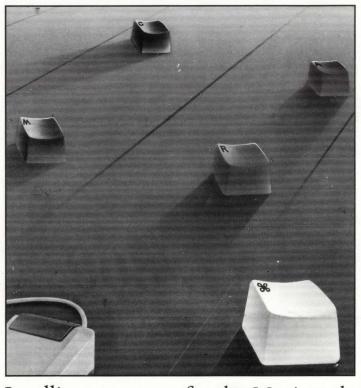
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