

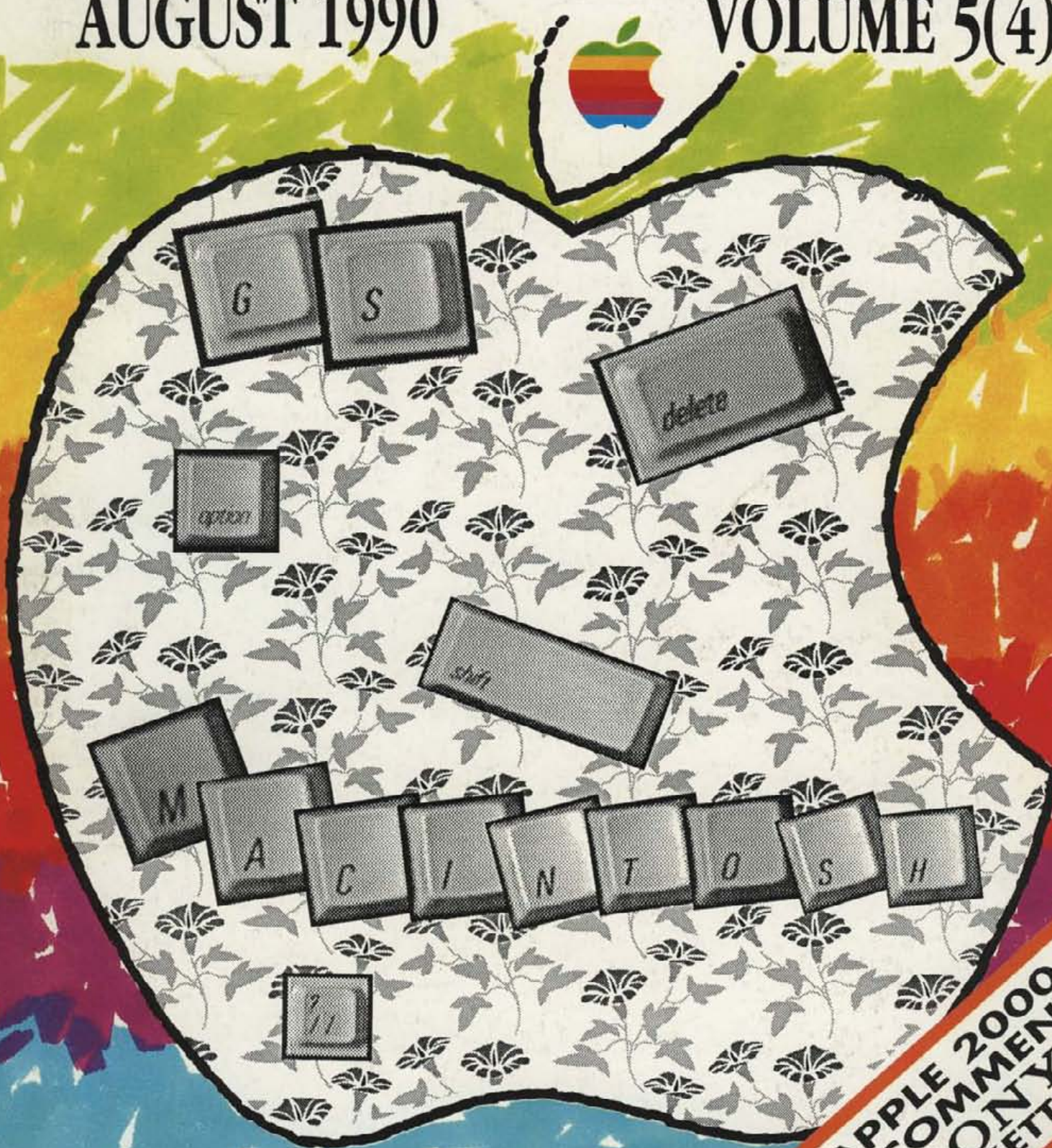
Apple2000

THE NATIONAL APPLE USERS GROUP



AUGUST 1990

VOLUME 5(4)



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There are a number of ways to contact Apple2000

Force users who have a query about the service can contact the administrator, John Lee, directly for help and advice. Call him on the number opposite or send a message to his box on the Force.

If you wish to order goods or services from Apple2000 or just leave us a message, call Irene on 0151-928-4142 (AnsaFone during the day). Alternatively you can Fax your order to 0151-949-0107 or write to the PO Box. If you use comms you can leave orders on TABBS addressed to the SYSOP or contact us on AppleLink (BASUG.1).

If you are experiencing problems with Apple hardware or software Dave Ward and Tony Dart run the Hotlines and will try and help you.

We are very interested in the activities of local user groups, and if you have any information which you would like publicised John Lee would like to hear from you.

We reserve the right to publish, without prejudice, any advice or comments given to members in the journals of Apple2000.

A little praise for a few of our authors wouldn't go amiss. Send all comments, and contributions, via the PO box, especially suggestions about what you would like to see in **your** magazine.

Apple2000 supports users of all the Apple computers. The ITT 2020, I, II, II+, //e, //c, //c+, IIGs, IIGs+, ///, Lisa, XL, Mac 128, 512 MacPlus, SE, SE/30, Mac II, IIGx, IIGi, IIGx, IIGx and Portable Contributions and articles for the magazine are always welcome. We can handle any disk size or format. Please send to PO Box 3, Liverpool, L21 8PY.

NOTE:

In general the front half of the magazine is for the Apple II, Apple IIGs and Apple /// The back half for the Macintosh and Lisa. Look out for the descriptive page icons.

Key:

Apple II, //e and //c

Apple ///

Apple IIGs

Macintosh, Lisa

Macintosh II



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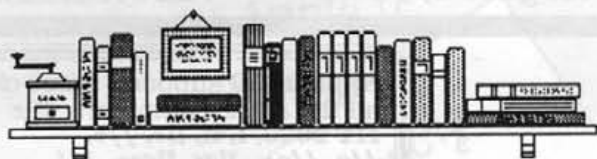
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Ewen Wannop - SYSOP
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Chairman's Corner



1980-1990



Summer is probably only just a memory for most of us now. The heatwave we all experienced in July has long gone, it is probably getting colder now as the nights draw in again. That is what it should be like by the time you are reading this if English weather is anything like normal. However, we have all grown to expect the abnormal once in a while. It may well be sweltering in the 90's yet again and the keyboard lies idle as you all try to keep cool in the shade.

Apple are as predictable as the weather. Products expected a long time ago appear suddenly without warning. Prices drop regularly on the least expected products. What sense is there in dropping the price of the Mac Plus and the SE/30 while leaving the SE where it is. The basic SE even though it now has 2mb of RAM, a 40mb drive and a SuperDrive™ is not much of a bargain next to an SE/30 2/40. The Mac Portable has dropped in price, apparently because no one

was buying it. I am not surprised at that, as it needed to be half the price with twice the memory to be a realistic proposition. Meanwhile the IIGs stays the same price ...

With no date set yet for the release of System 7.0 for the Mac it has been difficult for Apple to know what to release next. The personal LaserWriters have at last appeared, but the low cost colour Mac has yet to appear. The new LaserWriter SC will at least give the Hewlett Packard DeskWriter a run for its money, but will not really come into its own till System 7.0 appears.

It is interesting to note that Apple are going to exhibit at an Apple II show this Christmas in the States for the first time in many years. Whatever can they be showing? Not the Super IIGs at last? I await with baited breath.

Talking about the summer and idle keyboards makes me wonder yet again what happened to the paper white LCD screen we were promised some years ago on To-

morrows World. This would have allowed us to take our computers out into the sun and work quite happily in the garden. The Mac portable screen will of course work outside in daylight but the normal Mac and II screens will not. Many of you may not know that all Apple computers sold in the last few years in the UK have universal switch mode power supplies. These are quite happy to run off any voltage from 120 to 240 and from 50-60 hz. This means you can carry your Mac with you to the Costa Brava and calculate the exchange rate as long as you can find a power point next to the bar. Of course if you take a pocket modem with you it would be possible to keep in touch with TABBS and AppleLink from your hotel bedroom!

This is not as far fetched as it may sound. There are many who do take their computers with them, not on holiday perhaps, but when away on business. The Mac SE series is small and light enough to be carried over the shoulder all round the world.

The flurry of Macintosh magazines that appeared towards the end of last year is at last beginning to thin out. It was good to have more competition on the newsagents shelves, but it did affect the advertising here at Apple2000. There is only so much to go around. Please remember to tell the dealers that you are an Apple2000 magazine and that you saw their advertisement in our magazine first!

Ewen Wannop



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Apple II

Ewen Wannop
Elizabeth Littlewood

Macintosh

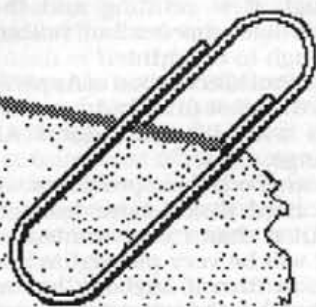
Norah Arnold
Irene Flaxman

Many thanks to all those who work behind the scenes and who receive no personal credit. These people are the stalwarts of Apple2000.

Additional thanks to Walter Lewis of Old Roan Press (051-227-4818) for our printing service, and to Ian Sharp of Sharp Studios (051-227-2788) for our cover design.

Apple2000 are Founder Members and Wholehearted Supporters of the
Apple User Group Council

Letter Box



Iigs Help Wanted

London
SBS 5 FINE
Fax: 0771-637-2769

Dear Ewen,

I have an Apple Iigs that has caused me nothing but difficulty. Although the machine is quite remarkable, I seem to have had a run of bad luck with interfacing the printer and a number of other problems.

What I would be particularly grateful for and seems to be quite unavailable is willing expert help. I am quite ready to pay for this but there seems to be considerable difficulty in locating somebody willing to do some general troubleshooting and helping out. Will such people be contactable through Apple2000?

I have worked with Bidmuthin Technologies in Harrow. They are indeed very helpful but from South London to Harrow is a very major trip and in spite of their efforts I continue to have problems.

Tom Treasure

□ As you will appreciate, we are not able to help you on the spot with your Iigs problems. If the help is of a level that a phone call could solve, please ring Dave Ward on the Hotline. Meanwhile, I hope that one of our many members in the London area might be able to help. If one of you can help, please get in touch with Tom either through a Fax or by sending us your name and phone number which we will pass on to him. Ed. 🍏

Case History

Haslemere
Surrey

Dear Irene

I have been a member of Apple 2000 for over a year now and felt that a contribution of some of the trials and tribulations of working with Apple IIe might be of interest to other readers. Please feel free to edit as you feel appropriate or indeed simply ignore if you think that my experiences would not be appropriate for the magazine.

I have a IIe enhanced with a PlusRam 1 meg. RamCard in slot 5; Grappler+ with 65k in the usual slot 1; Apple SS card in slot 2 (feeding a Pace Nightingale modem: mainly for TABBS - I have yet to get heavily into comms) a Microsoft SoftCard which includes a Z80 (for CP/M) in slot 3 for 80 col mode; a Dark Star Snapshot card in slot 4; the usual disk controller card in slot 6 and an ICE 12 meg. Microcube Hard Disk driver in slot 7.

Most of the above cards were purchased second-hand through Micro Mart, MGA or Eric Sausse of Esco (an excellent contact who has helped me many times to get things to work!)

I am the Treasurer of three societies; my wife is the membership secretary of two and my son is Treasurer of the local Rotaract so we use the computer primarily to try to keep accounts and membership records up to date. We use AppleWorks 2 and we also have version 3 with the spelling checker both on hard disk. We also use AppleWriter II on hard disk (A trusty favourite!)

My main trials came when I bought the hard disk. It came with ProSel (a marvellous program I recommend to all hard disk users), had been formatted and partitioned into 2 meg. for DOS 3.3, and 10 meg. for ProDOS. My first task was to copy various DOS 3.3 programs across using the special version of FID (called ICEFID2). Volume or whole disk copiers won't work and you have to copy file by file. This was fine but I then discovered that many Binary programs will not work. For example the Snapshot card software although it will copy across simply will not work properly. It tells me that it has allocated 8 x 64k memory blocks out of my SS card in slot 2! No matter how many times I re-configure it the response is the same.

The (aging) Apple programme selector called 'Catalogue' will copy across but won't run. Similarly with various other Binary files although all Basic files/programs I have tried have run. I

have tried quoting different addresses when 'brun'-ing the program as I think this is the problem but I don't have sufficient knowledge of these addresses to understand where I should load them. I understand that ICE has gone bust and I cannot trace anybody who can help. If any reader can suggest what I should try please get in contact!

I have partitioned the ProDOS section into 4, mainly so that I can practice with various programming tasks without risking clobbering my main partition if I do something really dumb.

My biggest mistake occurred when I tried to get AppleWorks to work properly. It works fine until you want to print anything. It will not print at all. I spoke to a couple of contacts and one suggested that as the ICE disk only operates on ProDOS version 1.0.1 I should rename the ProDOS file Old.ProDOS and copy across version 1.7 which I have. He reckoned that this version of ProDOS should be fully compatible with AppleWorks and cure my printing problem.

DON'T DO IT! I did and then when I tried to run anything at all I couldn't get back into the two main partitions of the hard disk! It hung at the ProDOS intro screen. There I was with about 3 meg of software sitting on my disk and I could only get into the small test partitions 3 & 4. Partitions 1 and 2 where all my software was loaded was totally unrecognised and all I got was "path not found"!

The Dos 3.3 partition was OK but nothing I did could get me into the ProDOS partitions 1 and 2. I had backed up the hard disk a few weeks before but the backup program presumed that you get into the disk and particularly find /pro1/ the name of my first partition Nothing I did would enable any program to recognise the hard disk. Even Copy II Plus reported 'Device not Connected' and the Restore program I needed to use would not recognise the card in slot 7 even though it was the same program that prepared the backup in the first place (Glen Bredon's ProSel) Visions of reformatting began to loom.

Finally, after about 5 hours of anguish only those who have faced this type of situation can really appreciate I telephoned Eric Sausse who had sold me a number of cards etc and poured out my hard luck story. He suggested one last avenue I had not thought of: Boot the ICE Housekeeper (the software that is supplied with the disk unit) get into the 'mount user's volumes' menu and unmount one of the partitions I could still access (3 and 4) and remount one of them into partition 1. Partitions are mounted in pairs so if I could get into partition 1 it would automatically get me into 2 as well. 🍏

Please submit all letters and articles to the magazine on disk wherever possible. The disks will be returned to you when the magazine is published. If you have a modem, send us letters, articles and Public Domain programs either to BSG005 or to TABBS (01771-637-2769).

Fortunately I had copied a version of ProDOS 1.0.1. in partition 3 (otherwise I doubt whether I could have accessed that partition) and as I had by now run out of every idea (I had tried every option but this one) I unmounted Partition 4 and mounted partition 1 in the available space.

I then rebooted the hard disk, entered partition 3 and with literally sweat on my brow typed PREFIX/PRO1. Bingo! I had got back into the first two partitions.

Needless to say the first thing I did was to delete ProDOS version 1.7 from the disk and rename the old version 1.0.1.

I pass on the above to all who have the ICE disk as a salutary tale. Don't mess with later versions of ProDOS, it will lock you out!

Finally can anybody help me with my printing problem? I have two copies of AppleWorks 2 one patched with Pinpoint and one clean. The patched version will not print at all BUT if I invoke Pinpoint notepad option and then press O-A 'P' the note prints! Pinpoint works but the program itself won't. I have changed my Grappler+ card for an old Aristocard in case this is the cause but it makes no difference. The 'clean' version with no Pinpoint won't print at all. O-A 'H' makes no difference, it doesn't work either. I have a Star LC 10 which is similar to an Epson FX model.

Also AppleWorks version 3 won't print. Everything else works in the program but the printing.

If I run AppleWorks (either version) from the floppies they work. If I then copy them to a new directory on the hard disk they won't print but if I then copy these files back to clean floppies these copies DO work! I am baffled. Can anybody help? When the printing

menu is accessed on AppleWorks 3 and the number of copies is entered the 'slider' bar rapidly moves across as though it is printing and the page break line appears but nothing gets through to my printer!

My ProDOS version of AppleWriter II also does not print but a patched version with Pinpoint does! All very strange.

If anybody has problems with the ICE hard disk I have learned more about it than I ever wanted to know and will be very pleased to assist if I can. In turn if anybody has a patch that will make my printer work I will appreciate hearing from them.

Graham Doubtfire

Articles Please

Wearwilde Road
Scunthorpe

Dear Ewen

In a telephone conversation with my son he mentioned he had decided not to renew his membership of Apple2000. He, like myself, is a comparative novice using a model //e, while I use a Europlus. He has been delighted with the excellent advice he has had from Dave Ward over the

past year, but finds the magazine has little to interest him for his particular model. The phrase he used was very few usable articles, and to a certain extent, I have to agree with him. I know that we members with older models may be in a minority, but, is it so very small?. Perhaps, through your records, you may find out exactly how the balance lies, for I find it hard to believe that all our members have fat wallets, and a desire for a Mac.

A II Plus with a modest memory can be just as much fun to program as a

high powered job, and we are all in different stages of learning. I know in "Hardcore Pips", you do, recognise this. The choice of articles must be difficult, take for example, this months article on assembly language. No doubt its fine, but before I can understand it I have to mug up Apple machine language, which is fine in the long term; but for someone who has finally mastered Dos, and is now tackling ProDOS, machine code is a long way off.

Which brings me back to usable articles. Is it possible for example, to offer a short, interesting program, say no more than twenty five lines in DOS one issue, say containing a problem to be solved (the answer in the next Apple Slices)?. Or a "How to" article again (short) do a certain thing in ProDOS with program example?. How about exploring AppleWorks, hands on wordprocessing for the novice?. Low Res graphics using read/data statements (as in 'Graphics Cookbook'. Whatever the article, or program,

let it be of the type where the reader can go to his computer and try it out, hands on.

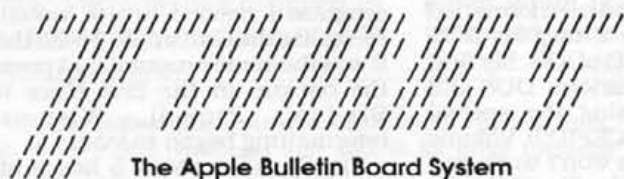
After all, the joy of having a computer is in the learning (or have I got it all wrong?)

Harry Markham

□ Thank you for your comments. No you do not have it all wrong. Your comments are all very fair and to the point. It is very difficult however to get a perfect balance in the magazine. Members have all got different interests and levels of experience. We cannot please you all, all of the time.

Half the magazine is for the Apple II, though some of this half is of course devoted to the IIgs as many of our members have this machine.

The Apple2000 editorial team are all



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The Apple2000 Bulletin Board System

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volunteers and they simply do not have the time to write all of the kind of articles they would like to put in the magazine. We have to rely on our members to write suitable material.

The choice of Hardcore Pips is a difficult one as many of these articles are no longer relevant today, reviews of unavailable programs and out of print books for instance. We include things that will still be of interest today.

You throw down a challenge with some projected titles of articles. Come on all of you, there must be someone out there who can oblige with an article on Basic or AppleWorks.

Ewen Wannop

Drive Problems

Corbridge
Northumberland

Dear Boffin,

I am trying to use a 800K Apple Drive with my IIE using a UDC (Universal Disk Controller card).

The problems I am experiencing are that the drive only READS information from the disk - it cannot format or WRITE information to the disk. The information was originally written onto the disk using an Apple IIGS.

I also have Apple II Pascal v1.3 on a 3.5" floppy which fails to write information to the disk or to format a disk.

I have CopyIIplus version 8.4 which also fails to format a disk and write any information to it. I have tried formatting it from there and also copying disk with format, none of which work. Using this method I get an error message "error on sector 0007". When I tried formatting I got error messages "error writing to track 0001, 0002, 0003" etc. and I gave up after that. I have tried ProDOS Utilities disk which fails to recognise the disk.

Can you throw any light on this? Are Apple 800k drives usable on a IIE using the UDC card? Would my best option be to try and sell the 800k drive? Do I need to upgrade my computer to an enhanced IIE?
David Beale

□ In your letter about the problems in getting an 800k drive to work, you do not mention precisely which 800k drive you have. In fact there are three drives that Apple made that have 800k capacity.

1. The original 800k external drive for the older Macintosh 128k and Lisa X/L machines.

2. The Apple 800k drive for the //c, the 3.5 disk controller card and the UDC card.

3. The Apple 3.5 drive which is the current standard on Macin-

toshes and the IIGs.

The first of these drives is not directly usable on the Apple II. The second will plug into the //c, the Apple 3.5 controller card or the UDC card. The third will only work on the Macintosh or the IIGs.

The main difference between the second and third of these drives is that the 800k drive has an intelligent interface built inside which controls most of its functions. The Apple 3.5 drive (named on the bottom as '3.5 Drive') can only be connected to a SmartPort device. This only exists on the Macintosh or the IIGs.

If your drive is of the first type, it is best relegated to an enthusiast who could use it. If it is of the second type, then you have severe problems as it should be working with that drive card. If it is of the third, you should sell it to a Macintosh or IIGs owner. The new price of these drives is over £250 at the moment so you should get a fair price for it.

You do not need to update your //e for the 3.5 drive to work. All versions of ProDOS will run on standard //e's. However it would be advisable to update your //e so that you can run the most recent software. Refer to the notes in the June issue of Apple2000 which mention this problem.

The Boffin

Super Serial Card

Trinity Through Road

Sheffield.

Dear Ewen

I have a little problem with my Apple IIE super serial card and wonder if you could offer any advice.

I have a wind speed transducer which I am trying to read into the computer via an analogue-to-digital converter. The converter sends an ASCII string of

NEW SOFTWARE

DOS STARTER DISK 7/90 Edition

(MGA) £4.00

This disk has been produced as a result of thousands of requests over the years. It fulfills several useful functions: Provides confidence tests to prove the satisfactory working of the following: monitor display, 80-column output, lower case capability, disk interface/cable/drive reading & loading, printer/interface/cable connection, checks if have 64K or more & loads Integer BASIC; plus provides an introductory tutorial on simple DOS commands to get you up & running AppleSoft & Integer programs. Works on any Apple II, and is most appropriate for beginning II+/Euro-plus users.

שפצת מיומנות

TimeOut Performance Pak

(Beagle Bros) £109.95

Combo package containing these AppleWorks v2/8up enhancements: DeskTools, DeskTools II, and PowerPak.

TimeOut Style Pak £129.95

As above but containing: SuperFonts, Paint, Thesaurus, and FileMaster.

TimeOut Decision Pak £149.95

As above but containing: Graph, Paint, SpreadTools, and SideSpread.

PlusWorks III £39.95

Patch software to use AppleWorks (all versions including v3) on a II+. Also allows use of older 128K RAMcards (Saturn/Titan type) to expand the AW desktop on both II+ & IIE. Upgrade from earlier versions £19.95.

Banner Mania (Broderbund) £29.95

Probably the highest-quality creative printing program for 128K IIS. Forget the title, - this program is also for posters, leaflets, invitations, banners, or anything you can think up. The big difference this time round, however, is that you get scaleable fonts, - yes, at last - the end of the "jaggies". Included are 20 special effects, 20 shapes (commonly called dingbats, which are available within each font, 28 special characters, and 40 ready-made banners. Gives you ultra-high-quality with an easy to learn/use front-end. (The IBM-PC version on a laser is brilliant).

Clippack 0026/0027

(AFC) ea.£15.00
More Print Shop graphics, packed hi-res screens and graffiti for Fontrix/Printrix.

English:

Picture Reading & Word Recognition

Level 1 (Ellen Nelson) £34.95

Apple II Education Early reading, Language Comprehension, and English (as a second language) skills are learned through the story of The Gingerbread Boy. Suitable for 6-8 year-olds either in school or at home. Pictures & graphics are used to match sentences, learn word meanings and teach spelling. Icon-driven menus enhance the ease of use for both early learners and ESL students. A stand-alone audio-tape is also included so the user may hear the word meanings as well as seeing them illustrated on the screen. (Also available for IBM-PC) [R]

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MORE NEW SOFTWARE

Snoopy Writer

(Random House) *£24.95

64K educational word-processor for learning writers aged 6-11.

Copy II+ Pro

(Central Point/MGA) *£20.95

This is a specially-modified self-booting Copy II+ which automatically loads Applied Engineering's ProDrive to your RAMfactor, Z-RAM, or RAMworks card before loading Copy II+. This price does not include CII+, but is our fee for modifying your program disk. Versions 8/8up of CII+ with this modification will now use your RAMcard to save disk-swapping on single-drive systems. The benefit of this mod will be realised if you've ever tried bit-copying either 5.25" or 3.5" disks on a single drive! To use this mod you obviously need an AE RAMcard as well as CII+ v8/8up (or order it from MGA).

ProDOS 8 v1.8 Update

(Apple Computer, Inc.) *£4.00

This 5.25" floppy contains the original "ProDOS User's Disk" with Filer & other utilities, plus the latest version 1.8 of ProDOS. Also available as 3.5" @ *£4.50.

Animal Kingdom;

The wonders of the (Unicorn) £24.95

Early science program for Apple II consisting of six different learning activities for 1-4 "players". Designed for the elementary student to help enhance language arts, reading development and memory skills. The program teaches children about different classes of animals ranging from prehistoric creatures to amphibians, reptiles, insects, cold-weather animals, marsupials, jungle animals etc... Stunning graphics and sound effects. (Also available in School, IIGS, Amiga, and Macintosh versions at £34.95 each.) [R]

Apple IIGS Video Keyboard v1.0B1

(Apple) *£39.95

VK is a new desk accessory that provides on-screen emulation of a physical keyboard. Its main purpose is to provide an alternative means for entering text data into GS DskTop applications using only a pointing device. [R]

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MORE NEW SOFTWARE

Apple II High-Speed SCSI Card

Utilities £49.95

(Apple Computer, Inc.)

Includes the SCSI Manager & device drivers for use with the IIGS & the following devices: hard disk, CD-ROM, scanner, tape backup. There are also ProDOS-8 utilities to partition & verify hard disks, and a backup utility to backup data. And there is the "CD-Remote" DA for using audio CDs with the GS. Requires IIE or IIGS with either Apple SCSI card (the original or the new high-speed) and a 3.5" drive. Not all features work with original card, and obviously the GS-specific utilities don't work on a IIE. Full spec on request.

Webster's Professional Spell

Checker £49.99

(Simon & Schuster)

The lowest-cost ProDOS spell-checker for AppleWriter II vers.2 etc... [R]

Everybody's Planner

(Abecedata) *£99.95

Project management system comprising scheduler plus flowcharting - 64K. [R]

Reading Professor (Artsci) *£29.95

Speed reading tutor at a budget price - additional library disks available, - was £59.95. [R]

MultiColour Graphics (PD) ea.*£4.50

These work with Labels, Labels, Labels; New Print Shop, and Print Shop GS. GS-156 people, faces & clothing. GS-157 animals of every kind. GS-158 symbols, emblems & slogans. GS-177 Education - history, science, flags, & geography. Each disk has approximately 100 pieces. These packages are supplied as 3.5", if you want 5.25" for LLL or NPS, please ask for price.

Print Shop GS Fonts/Borders

(PD) *£4.50

Approximately 100 pieces.

Spanish Grammar (AEC) *£24.95

An excellent supplement for Spanish language students. Covers articles, verbs, adjectives, prepositions, imperatives, and interrogatives. Proper punctuation, usages, sentence structure, salutations, times, dates, idioms; phone conversations, numbers, & more...

TimeOut TextTools (Beagle) *£49.95

Helps simplify your AppleWorks word-processing workload. Packed with shortcuts for producing long or complicated documents. Creates files for boilerplate or stylesheets, then instantly insert into documents any time. Also: SuperFind, QuickTabs, MarkMerge, MultiPrint, Indexor, Table of contents generator, & more...

Exorciser (Vitesse) *£39.95

This IIGS program ends your virus worries. Automatically seeks out & destroys notorious viruses like CyberAids, Fastering Hate, Lode Runner etc... Checks new files before they infect your system.

numbers when prompted by sending through the SSC a text string like 11 to initialise and then 1 to get it to transmit the reading from channel 1.

All works well using a comms package (Access II) but when I try to obtain data with a BASIC program, nothing will come back. I seem to have tried all sorts of permutations, but still no effect.

Is there something simple I am missing in sending text and receiving it? The SSC handbook is not very clear on this matter.

David Durling

□ Your attempts to use the Super Serial Card for input/output have unfortunately fallen into the various traps that are never made clear in the normal literature on this card.

Put simply you cannot expect to get input into Basic from this card at any sensible speed, and even more to the point, you cannot expect input and output at the same time. The firmware on the card allows you to access it for input, but Basic is just not fast enough to cope with incoming data at anything above the slowest baud rate of around 110 or so.

However the execution of a practical and reliable solution is actually more complex than this. Comms programs like Access II do not use the entry points that Basic uses, they in fact access the chips directly and usually have an interrupt routine to handle the incoming data as well to ensure that none is lost.

All of this may sound confusing to you, so rather than explain the problems further I will describe in outline how to use the card for your particular problem.

1. Initialise the card by issuing a standard PR# call from Basic. If the card is in slot 2:

```
10 PRINT CHR$(4) "PR#2"
```

2. Output to the card can then be made by normal PRINT statements. This so far should follow the route you have taken and will initialise the card to the settings of the switches on the card itself.

3. Input from the card must be done outside of Basic by means of an interrupt routine at machine code level. This is the only way you can reliably read and keep the incoming data. The interrupt routine must be written in assembly language or machine code and placed in a safe part of memory. The interrupt vector at \$3FE is then changed to point to this routine. The routine should have four parts to it which will all be CALLED from Basic:

a. An INT which sets up the \$3FE vector and writes to the serial chip to initialise it for interrupts.

b. The interrupt code itself which reads the serial chip and places the data into a 256 byte circular buffer maintaining a pointer to that data.

c. A READ routine CALLED from Basic

that picks up a byte of data from this circular buffer and increments a second pointer to show where you have got to. If there is no data ready, you could return a NULL from the CALL routine to flag the fact.

d. A SHUTDOWN routine that switches off the interrupt source on the chip and restores the \$3FE vector to its initial state.

As you will see this is all fairly drastic and requires a knowledge of assembly language and of the 6551 serial chip. It is the core of any comms program and is a fairly lengthy piece of code. I cannot really go into any greater detail in this letter, but it gives you a pointer to the route you should take.

If you cannot change the speed of data from the transducer to a very slow rate, or are not able to program to this level, I am afraid I have no easy solution for you. You would need to find someone with experience of the SSC card and interrupt routines to do the actual programming for you.

Ewen Wannop

Multiple Drives

Hammerley Road
East Ham

Dear Ewen,

My 3.5" disk drive (only bought a few weeks ago) has broken down, and I am awaiting advice from the dealer. It was all working well to begin with but for some unknown reason when I last booted-up, the 5.25" drive would not work and the IIGs searched the 3.5" drive first. Ordinarily, with the use, as I have, of one 5.25" and one 3.5" drive, (the latter being connected to the IIGs first in the daisy-chain) the 5.25" should startup first and if it cannot find a program it then moves to the 3.5" drive. But this has ceased to work. I have checked the cables, swapped the disk drives (with both seemingly working alone), and checked the IIGs system which shows "Godd System" and therefore am currently at a loss to know what the problem is other than perhaps a fault in one of the drives refusing to daisy-chain. Any ideas please?

Whilst on this subject I do have an old Apple 5.25" drive and dual card in Slot 6 of the IIGs and would like to reinstate the past practice of two 5.25" drives working together. Unfortunately I cannot connect the old II drive to the new type because of the different cables. However if I were to currently put a program in one drive that runs from a port in the IIGs (operating from the motherboard), and data in another, they will not work together for obvious reasons that one runs 'off the port and the other from a drive card. Can you advise how I can configure the IIGs to recognise the two 5.25" drives as well as the 3.5".

Gordon Owen

□ The problem with your disk drives

may be explained by a hardware 'bug' that exists inside the 3.5 drive. This bug only shows when a 5.25 drive is daisy chained from the back of a 3.5 drive. It is intermittent and causes no long term harm. The symptoms are that all of a sudden while accessing one of the drives, both the 3.5 and 5.25 lights will come on and both drives will access. Hitting Reset causes the lights to go off, but the 3.5 will apparently disappear from view. The only cure is to power down and back on again to clear the 'lockup'.

It is a known bug by Apple Inc. in the States, and there they will replace the offending bit of hardware. As it only shows up with 5.25 drives connected, of course it never occurs on a Macintosh. For this reason Apple UK do not know of the bug and apparently will do nothing about it. I understand that recently manufactured 3.5 drives have the fault cured. All I could suggest is to see if your dealer can kick Apple! I live with the problem on my machine by only activating the 5.25 drives in Slot 6 when needed.

To see more than one 5.25 drive you will need either to daisy chain the two from the 3.5 or have both running off the old disk card in Slot 6. When you daisy chain a 5.25 from the 3.5 it is apparently seen in Slot 6 anyway, so you could not have a card in Slot 6 as well. If you refer to page 28 of the article in the December 88 issue of Apple 2000, you will see how to rewire your existing 5.25 drives to work on the daisy chain. This is the method I use and it works fine. I took the opportunity to make the ribbon cable even longer than normal!

Ewen Wannop

Manuals Needed

Saltcoats
Ayrshire

Dear Sir,

I recently acquired an Apple //e with twin drives and running Cirtech's CP/M. I have found it very difficult to find information and any publications about the machine. Has Apple ceased to support this machine? In favour of the Macintosh.

I would be grateful of any help or direction on who to contact.

James Gilmour

□ Apple UK have indeed ceased to support this machine in favour of the Macintosh, despite the fact that it and the //c are still manufactured in the States. However there are many dealers in the UK that provide a level of support with both hardware and software. Try MGA, Bidmuthin, etc. You will see their advertisements in the first half of this issue.

Manuals are of course not available new, but some of these dealers may be able to help with old copies. Another possible source of manuals and hardware is Eric Sausse 0724-855795.

CP/M is of course another problem as it is a third party product issued originally by Microsoft. There are many books on CP/M to be found in any technical computer bookshop. The Cirtech brand of CP/M follows the normal conventions.

We stock the full Addison Wesley range of Apple books in our mail order shop. You may find that one of the //e or other manuals fits your needs. Please refer to page 17/18 of the green price list you received with your membership pack. Ed.

Next Step

Edgeware
Middlesex

Dear Apple2000,

Re: Apple //e, the next step?

As an avid //e user for the last couple of years, I find myself in a quandary. The //e has been great and with the latest addition of AppleWorks 3.0, I am able to duplicate most of my workplace computer activity at home. The set-up now comprises a Hard-Card and, at last, a usable ICE/Symbiotic Hard Drive. My thanks must go to Ron of Sheffield for the many hours of despair in terms of this latest acquisition. Great, now what next?

My budget is limited, so really the Mac is out, what about the IIGs? Will my existing software be compatible, will the Hard-Card and Drive also work? Will my Data Disks be usable?

Whilst the //e, I am sure will find a good home and help another user down the path of the APPLE STORY, can someone please help me! The recent article by Alan Remu on "A POKE OF APPLES", gave me some insight, but a step by step comparison would enlighten me and I am sure, others looking onward.

Colin Stodel

Well, another challenge for the budding authors out there. Come on, please supply something that will help Colin!

Put simply, the IIGs would be your next logical step. However, even with the recent price drop, it is still an expensive option. The IIGs will run 99.9% of your existing software and hardware. The only exceptions are protected programs that may rely on precise code timing to unlock their protection, and slot hardware that requires precise bus timing to operate. The IIGs clock is subtly different to the //e and problems have arisen in trying to use Z80 cards in the IIGs for instance.

The Hard Card should also work in the IIGs, but you will probably find that you will wish to change this for a SCSI hard drive in due course as this would be more versatile in working under GS/OS. The ICE does not see GS/OS without extreme difficulty not being a proper block device recognised by ProDOS.

Ewen Wannop

Printer Smudging

Hunstanton
Norfolk

Dear Apple2000,

Can you help me? I have trouble printing clean addresses on envelopes with my ImageWriter II even adjusting for the thickness of the paper. By removing the front cover you can locate the lever on the right-hand side, which is supposed to cure the problem. In fact all it does is slightly improve the situation. This is disappointing on such an expensive piece of equipment. Perhaps some other members have had similar problems.

W Barrie Smith

I know of no simple answer to this problem. The printing head tends to pick up spare ink and this gets transferred to the envelope as it is much thicker than a normal sheet of paper. Remove the head and clean excess ink with a soft cloth. This will lessen the problem till it clogs again.

Can anyone make any other suggestions please? Ed.

Update

Douchapt
France

Dear Boffin,

Thank you for the advice given in the March issue of Apple Slices.

1. Lack of memory?

I am pleased to report that using GS/OS version 5 there appear to be no problems with Chessmaster 2100 and VS/Draw.

2. 3.5 inch drives

I do not think that the failure of the two 3.5 drives could have been due to static as neither drive has been disconnected, nor any other drive daisy-chained, for well over six months before the failures occurred. However, I live in a country area and the power supply by overhead cables which are prone to lightning strikes. Care is normally taken to disconnect sensitive equipment if there is a thunderstorm in the vicinity.

3. Missing Top Margins

Some time ago I contacted the local dealer and he was quite positive that the fault was not in the printer, but said he would look into the matter. Meanwhile I purchased AppleWorks GS V1.1 and with this I have no top margin problems. This leads me to believe that as V1.1 has an improved printer driver the problem must be in the original driver.

Soon after Easter I visited the dealer who said that he had been in touch with Apple and they stated that the problem could occur with some programs and operating systems. It was fairly obvious that not being a Macintosh they were not interested in doing anything about it.

Since I shall be using AppleWorks

GS for most of my writing, there is little point in pursuing the matter further - can always use fan fold paper if I have occasion to use other word processors.

Again thanks for your interest and comments.

Ron Perkins

Well at least some solutions to a few of your problems.

I had assumed of course that as all Apple computers use a switch mode power supply which is normally not very fussy about the voltage that is fed to it, that all would be well with your fluctuating power supply. However lightning strikes are another matter as a surge or peak through a strike would not be stopped by the power supply alone. You would need to get hold of a surge filter that could filter out any such peaks or spikes. These are often available for fitting to HiFi amplifiers at a more reasonable cost than the computer industry would charge.

The Boffin

Compuserve

We asked you to send us your Compuserve/Forum ID's. We now have a small collection of these printed below. There are still some of you that have not responded. We cannot contact you online unless we know who you are. Please send us your ID's either to the Apple2000 ID 76004,3333 or to the PO Box in Liverpool or of course to the Sysop of TABBS.

Apple2000	76004,3333
Mateen Greenaway	100016,602
Bryn Jones	71307,1457
Peter Kemp	100016,1172
Elizabeth Littlewood	100016,401
Jeremy Quinn	100016,560
John Richey	10006,1037
Andreas Wennborg	100012,342
Ewen Wannop	76224,211

AppleLink™

Many of you will already be members of AppleLink™ and others may be thinking of joining. For simple E-Mail it cannot be beaten. It will also keep you up to the minute with what is happening at Apple headquarters. We would like you to send us your contact ID's to add to this list.

Apple2000	BASUG.1
Herts User Group	NA.HERTSUG
Liverpool Group	LIVERPOOL.UG

Hardcore Pips

The BASUG archive brings you two articles
by Richard Teed from October 1983
on working with Basic and Dos 3.3

Permanent and Temporary Strings in Basic

or How To Avoid Garbage Collection

Garbage collection is something that seldom bothers a user of BASIC: this is because memory generally takes a lot of time to become exhausted, but when it does and a garbage collection is invoked then the computer may hang-up for about five minutes and I believe the theoretical limit is somewhere in the region of four hours!

If one thinks about it, it is possible to extract enough information from a program to tell BASIC when and where to garbage collect so that a full scale garbage collection is not necessary. The problem is that no facilities exist at a high level to make this possible.

Programs that use strings fall into two groups when creating strings: the first is constantly creating temporary strings as in copying one file to another, and the second has a number of permanent strings from which temporary strings or further permanent strings are created.

Let us examine how to avoid garbage collection on the two classes of strings, but first here is a memory map of BASIC's variable space to make the explanation easier:

```

(HIMEM)
-----start of string storage
!
! strings build down from
! (HIMEM)
V bottom of string storage

+-----+top of array storage
!
! arrays!
!
+-----+bottom of array storage
!
!simple!
!varia-!
!bles !
!
+-----+start of simple variables
(LOMEM)

```

What causes a garbage collection is when there are so many strings that they have come down from HIMEM and are about to over-write the array section of memory, the interpreter then sees which strings can no longer be accessed and removes them moving valid strings up to take their place.

Consider the following program and suppose that "A\$" and "B\$" are to be permanent (by permanent I mean available to the program throughout its execution), while the value assigned to "C\$" is temporary; that is it is only valid within the subroutine after which its value may be lost:-

```

100 A$="ONE" : B$="TWO" : C$=A$+B$:
    GOSUB 1000 : C$=B$+A$: GOSUB 1000:
    C$=A$+A$ : GOSUB 1000 : END

```

```

1000 PRINT C$ : RETURN

```

The first two statements produce the following strings in memory:-

```

+----+ HIMEM
! E !
! N !
! O !
+----+
! O !
! W !
! T !
+----+

```

After the third statement the memory looks like this:-

```

+----+ HIMEM
! E !
! N ! STRING 1
! O !
+----+
! O !
! W ! STRING 2
! T !
+----+
! O !
! W !
! T ! STRING 3
! E !
! N !
! O !
+----+

```

After the fifth statement however things look like this:-

```

+----+
! E !
! N ! STRING 1
! O !
+----+
! O !
! W ! STRING 2
! T !
+----+
! O !
! W !
! T ! STRING 3
! E !
! N !
! O !
+----+
! E !
! N !
! O ! STRING 4
! O !
! W !
! T !
+----+

```

STRING 3 will no longer be accessible and would be cleared by a garbage collection.

In order to make string "A\$" and "B\$" permanent and string "C\$" temporary a little code must be added to the subroutine and just after all permanent strings have been created.

What needs to be known is the memory location at which the permanent strings stop and this is given in locations \$6F and \$70 (111 and 112). Now each time before exiting from the subroutine (any temporary strings having been finished with) we must put the bottom of string storage back to the bottom of the permanent strings so that the next temporary string overwrites the last. Here then is the complete program:-

```

100 A$="ONE": B$="TWO": PL=PEEK(111) :
    PH=PEEK(112)

```

```

110 C$=A$+B$ : GOSUB 1000 : C$=B$+A$ :
    GOSUB 1000 : C$=A$+A$ : GOSUB 1000 :
    END

```

```

1000 PRINT C$ : POKE 111, PL : POKE 112, PH
    : RETURN

```

The constant re-setting of the bottom of string storage means that it will never reach the top of array storage which would cause a garbage collection.

You can of course update the number of permanent strings simply by PEEKing location 111 and 112 just after the new permanent strings have been made.

Modifying BASIC's pointers like this can be dangerous if you are not careful, but basically the only thing that you should not do is to produce a new string from temporary strings that have just been released by re-setting location 111 and 112, because the new string will be created over the top of the strings that are to comprise it resulting in corruption.

Richard Teed October 1983

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Telephone : 0323 - 845898**

An Alternative DOS End Of File

One of the problems with reading data files in BASIC is that it is very difficult to deal with an end of file, either data has to be put in the file to show the end of file or an "ONERR" command has to be used.

Although the "ONERR" command is usable it has a number of problems the worst of which is that file reading cannot be done in a subroutine because the stack is upset.

The following is the DOS readbyte routine which is used for reading text files from disk:-

```

      ORG   $A626
      MSB   ON
      LST   OFF
;
ISEASRUN EQU $A65E
CLSWARM  EQU $A679
CSWSTATE EQU $AA52
RUIEXT   EQU $A68C
CLOFREE  EQU $A2FC
RTSS     EQU $A60D
DOERROR  EQU $A6D2
ASAVE    EQU $AA5C
XSAVE    EQU $AA5A
IN       EQU $0200
DOSXIT   EQU $9FB3
;
;
      DOS 3.3 READ BYTE ROUTINE
;
;*** READ A BYTE
;
READBYTE JSR ISEASRUN ;Is BASIC running ?
          BCS CLSWARM ;If not then shut shop
          LDA #6 ;Set DOS to state 6
```

```

RDB.1   STA CSWSTATE ;(no output
          JSR RUIEXT  ;of prompt)
          BNE TSTLWR  ;Read a byte from the file
          ;           ;into the accumulator
          ;           ;If not an end of file
          ;           ;terminator
;
;
;*** DEAL WITH END OF FILE
;
EOF      JSR CLOFREE  ;Close the file
          LDA #S03    ;Is DOS in state 3 (EXEC)
          CMP CSWSTATE
          BEQ RTSS    ;If so then exit to caller
RD.2     LDA #S05    ;Get the error number for:
          JMP DOERROR ;An "END OF DATA ERROR"
;
;
;*** CHECK AND DEAL WITH LOWER CASE
;
TSTLWR   CMP #S00    ;Is the character lower case?
          BCC LL53   ;If not then skip
          AND #S7F   ;Else remove the MSB
LL53     STA ASAVE    ;Save A
          LDX XSAVE   ;Get our position in the
          ;           ;input buffer
          BEQ LL63   ;If at the start then skip
          LDX #6     ;Set the MSB on the
          LDA IN,X   ;character
          CRA #S80   ;(last character planted may
          ;           ;have been
          STA IN,X   ;fixed for lower case)
LL63     JMP DOSXIT  ;EXIT
```

As can be seen each byte read is placed in the input buffer until a null byte is returned; then an end of file condition

exists and all text files are closed and an "END OF DATA ERROR" is output. The exception to this is if the text file is being EXECed, in which case the file is simply closed.

What is needed is for a special character to be returned on the end of file being reached and for this I have chosen CHR\$(127).

Ideally a check would be made on the number of characters read into the input buffer. If the present one was the first then a CHR\$(127) (\$7F) would be returned. This would satisfy the GET command. If the present character were the second then the routine would assume that the command was an INPUT and would return a <RETURN> character: thus a CHR\$(127) would be returned for both GET and INPUT.

Unfortunately things aren't that simple and, instead of the "X" offset being zero for a GET, it's a one, so the <RETURN> character must be returned on the third character (ie when "X" is 2). This will result in the single character returned to GET being the desired CHR\$(127) but the string returned to INPUT will be a double CHR\$(127). Still, this should not cause any real problems.

Here, then, is the modified DOS for our improved end of file condition (n.b. on end of file you have to do the closing yourself).

```

        CRG    $A626
        MSB    ON
        LST    OFF
;
SKIP    EQU    $2C
RETURN  EQU    $8D
ISEASRUN EQU    $A65E
CLSWARM EQU    $A679
CSWSTATE EQU    $AA52
RDTEXT  EQU    $A68C
CLOSEFREE EQU    $A2FC
RTSS    EQU    $A60D
DCERROR EQU    $A6D2
ASAVE   EQU    $AA5C
XSAVE   EQU    $AA5A
IN      EQU    $0200
DOSXIT  EQU    $9FB3
;
;
;      IMPROVED DOS 3.3 READ BYTE ROUTINE
;
;*** READ A BYTE
;
READBYTE JSR    ISEASRUN    ;Is BASIC running ?
          BCS    CLSWARM    ;If not then shut shop
          LDA    #6         ;Set DOS to state 6
          ; (no output
          ; of prompt)
RDB.1    STA    CSWSTATE    ;Read a byte from the
          JSR    RDTEXT     ;file into the accumulator
          BNE    TSTLWR    ;If not an end of file
          ;terminator
;
;
;*** DEAL WITH END OF FILE
;
; This routine returns a CHR$(127) for a GET
; And a two character string both CHR$(127) for an INPUT
;
BOF      LDX    XSAVE      ;Get our current position in
          ;the input buffer
          CPX    #$02      ;Is this the second
          ;character ?
          BNE    GET       ;If not then this is a
          ;GET not an INPUT
          LDA    #RETURN    ;Terminate string with
          ;a <RETURN>
          DFB    SKIP      ;Skip the next sequential
          ;word
GET      LDA    #$7F      ;End of file character
          NOP
          NOP              ;Pad out to the same length

```

```

;as the original
        NOP
;
;*** CHECK AND DEAL WITH LOWER CASE
;
TSTLWR  CMP    #$E0      ;Is the character lower case?
          BCC    LL53    ;If not then skip
          AND    #$7F    ;Else remove the MSB
LL53    STA    ASAVE     ;Save A
          LDX    XSAVE   ;Get our position in the
          ;input buffer
          BEQ    LL63    ;If at the start then skip
          DEX
          LDA    IN,X    ;Set the MSB on the character
          ORA    #$80    ;(last character planted may
          ;have been
          ;fixed for lower case)
LL63    STA    IN,X
          JMP    DOSXIT  ;EXIT

```

There are two things to be remembered with the above routine: The first is NEVER EXEC a file with it because if you do the result will be an unstoppable infinite loop, and the second is that it will not work for INPUTting to numeric variables.

A big advantage of this method for dealing with the end of files is that it will work with compiled programs as well as normal interpreted programs.

In order to use the routines easily, here is the data in poke form. You can put this into your programs at strategic places.

NORMAL DOS

```

100 FOR N=42534 TO 42589:READ A:POKE N,A:NEXT N
1000 DATA
32,94,166,176,78,169,6,141,82,170,32,140,166,208,15,32,
252,162,169,3,205,82,170,240,206,169,5,76,210,166,201,224,
144,2,41,127,141,92,170,174,90,170,240,9,202,189,0,2,9,
128,157,0,2,76,179,159

```

IMPROVED DOS

```

100 FOR N=42534 TO 42589:READ A:POKE N,A:NEXT N
1000 DATA
32,94,166,176,78,169,6,141,82,170,32,140,166,208,15,174,
90,170,224,2,208,3,169,141,44,169,255,234,234,234,201,
224,144,2,41,127,141,92,170,174,90,170,240,9,202,189,0,2,
9,128,157,0,2,76,179,159

```

Richard Teed October 1983

Apple Magazines

Several magazines on the market are dedicated to the Apple the best of which is NIBBLE, which is only available from the states. Next comes CALL A.P.P.L.E. which has been obtainable in the UK. and finally WINDFALL.

Other magazines such as PRACTICAL COMPUTING, PERSONAL COMPUTER WORLD, QUESTIONS AND ANSWERS, COMPUTER AND VIDEO GAMES and a host of others sometimes carry interesting articles and programs for the Apple, but should be viewed at your local newsagents before purchase as they may not be of much benefit at times.

At the top of my list is NIBBLE which has an amazing number of articles, reviews and good programs that actually work. The main problem is getting your copy from the states and the price. Also available are NIBBLE EXPRESS Vols 1, 2 and 3 which are splendid value and contain selected articles from all NIBBLES of 1980-81-82 which include all kinds of programs including utilities and games.

Finally we have WINDFALL which, although it is apple dedicated, has its ups and downs as far as value is concerned, but this apart it does have some quite good hardware and software reviews, interesting articles and the occasional piece of information that makes its purchase worthwhile. This is another magazine that has started to appear in newsagents and may be worth thumbing through before purchase.

Keith Chamberlin October 1983



Bidmuthin Technologies

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--	-----

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Brent House, 214 Kenton Road, Harrow Middlesex, HA3 8BT. Tel: 081-907-8516, Fax: 081-097-4398

Disk Zaps and All That (Part 1)

Reprinted from Hardcore February 1986, Ewen Wannop gives us a beginners guide to 'Disk Manager'

One of the latest additions to the ever growing software library is 'Disk Manager'. This is a general 'disc zap' and disc utility program, and is available on disc No. D105 at the usual price of £4 inclusive of VAT and P&P.

The disc allows a comprehensive set of disc utilities. Twelve assorted options are available from the boot menu. I shall describe each of these in turn, and also explain some of the uses that they may be put to.

First, let me say this disc is a DOS 3.3 utility, and although it will look at PRODOS, PASCAL or CPM discs, it is primarily intended for use with DOS 3.3. Arguments still rage over DOS versus PRODOS. APPLE themselves officially support only PRODOS now, but the vast host of DOS programs out there still need to be supported, and in fact virtually all the discs in our software library have been written under DOS 3.3. Properly handled, DOS is just as fast as PRODOS, and it has the advantage of using less memory under some circumstances. However PRODOS does have its own advantages ... but that can be left for another discussion some other time.

Upon booting the disc you should be presented with the 'Disk Manager' title page and the following menu:

```
** DISK MANAGER **                R0000
SLOT 6  DRIVE 1  TRACK  SECTOR
-----
MENU:
1 : CATALOG WITH T/S POINTER
2 : FILE T/S LIST
3 : FIND T/S SECTORS
4 : UNDELETE FILE
5 : DISK PATCH
6 : DISK MAP
7 : CATALOG SECTOR
8 : INIT A TRACK
9 : COPY A TRACK
10 : CHANGE SLOT/DRIVE
11 : DISK CLEAN
12 : BAD SECTOR SCAN
13 : EXIT

WHICH ?
```

The top line of the display shows the current status of the program. The four digit display at the top right shows the current track sector being read or written to, and the letter preceding this number shows whether we are reading (R) or writing (W) to that sector. The line below this is used for setting up the working Slot, Drive and Track, Sector combination as required.

Perhaps, before I go any further, I should explain how a disc is constructed. There are, on an APPLE disc, 35 separate concentric tracks. Each of these tracks has 16 individual sectors each with 256 bytes of data within it. On a DOS disc, tracks 0, 1 and 2, are reserved for the use of the DOS itself, but there are useful things there for us that we can look at and change. Track \$11, that is hexadecimal \$11 or decimal 17, is the Catalog track, and is the key to getting at any of the files on the disc. It is usual when talking about discs to use the hexadecimal notation, and in fact 'Disk Manager' expects hexadecimal entry for its working parameters. Hexadecimal is easy to use. In decimal counting when you get to 9 you start again at 0 and carry one, in hexadecimal you keep on counting with A, B, C etc. until you reach F, when you then go to 0 and carry one. In this way we count in lots of 16 instead of the usual 10. Nearly everything in a computer is based on numbers that are multiples of 2, and are usually then given in hexadecimal notation for convenience. A disc sector contains 256 bytes of data, a track has 16 sectors etc.

We can now get down to the Menu options, first we have ...

1 : CATALOG WITH T/S POINTER

This produces what at first looks like a normal Catalog, but without the usual display showing the number of sectors taken up by the file. However, at the right is given a pair of numbers, first the TR or track number, and second the SC or sector number of that files Track/Sector list. More about these under the next option, but make a note of the pair for any file you may be interested in. To the left of the file name, will be given a "*" if the file is locked. If the "*" is displayed in inverse, then it means the file has been deleted and will not appear on a normal Catalog. It may be possible to revive this file, but again more of that later. If the Catalog is

a long one, then pressing the space bar will cycle through the entries, finally returning you to the Menu.

2 : FILE T/S LIST

On entering this option, we must first put in the TR/SC number pair that we gleaned from the Catalog. These will display on the top display line as they are entered. Press return to go on to the next value. If you have entered a valid pair, you will be rewarded with a display of the TRACK SECTORS taken up by that file. DOS keeps a list for each file, of all the sectors used. The list takes at least one sector itself, so the minimum file length is therefore two sectors, one for the list, and the minimum obviously of one for the file itself. The left hand digit is the track being referred to, and the digits ranging to the right are the sectors within that track used by that file. They are placed in sequence, so the first one shown is the first sector of the file and so on. Entering a return only, when asked for a track sector pair, will exit back to the menu.

3 : FIND T/S SECTORS

This is where the fun can start We all occasionally get a corrupt disc, often because we have opened the drive door or hit reset while the disc was being written to. All of these could cause corruption of the Catalog track, with the files all apparently lost. Help is at hand however, as if that track is damaged, we can repair or reconstruct it. The DOS 3.3 manual has a great deal of information buried within its pages, and with care, it is possible to reconstruct a complete Catalog track. First we must find the track sector lists of all the files by using the FIND option, then we look them up with option 2 to see if they really were proper track sector lists. We then repair the Catalog using these sectors as the T/S list for a known or dummy file. If there are rather a lot of these displayed, you will need to press the space bar to see the rest.

4 : UNDELETE A FILE

As I mentioned before, it may be possible to revive a deleted file. If any are present, this option will present them one by one, and ask you for a Y/N response as to whether you would like to see them again or not. However, it is important to know that this will only revive the Catalog entry, it does not update the disc map, or ensure the validity of a deleted file. Having un-deleted a file, you must then load it in to memory, check it is OK, then delete the file from disc and finally re-save back to disc. This will ensure all the correct disc maps etc. are kept up to date. I have been saved many a time by this useful feature

5 : DISK PATCH

This is potentially a very powerful utility, and deserves a whole article to itself, I will only explain here how to use it. The many possible uses that it can be put to will have to wait till some other time.

A timely WARNING here, it is possible to damage irretrievably the information on a disc with this feature, and so it is

recommended that you first copy the disc in question, and work on the copy only, till you know what you are doing and are sure your changes have worked.

On first selection, you will be shown a further menu of options. At any time while using this Patch facility, you may return to this menu by using the '?' key. To Escape back to the main Menu press <Escape> from wherever you are.

C : CHANGE TR/SC BUT DO NOT READ

This will change the working track sector pair in the display but will not do a read or write. Use this to specify a new destination for a sector you have been working on before writing it back to disc. You must enter in the top line display, using return as before, to go to the next entry.

N : SPECIFY NEW TR/SC AND READ

The track sector specified will be read into the internal buffer and the top 128 bytes of the buffer displayed. The display takes the form of 16 rows each of 8 bytes wide. An ASCII representation of the bytes is given to the right. To display the bottom 128 bytes press 'B'.

S : CHANGE SLOT/DRIVE

Changes the working slot/drive, enter in the top display line and use return to go to the next setting.

R : RE-READ CURRENT SECTOR

This will re-read into the buffer the current working sector. Useful if you have made a mess of things and want to start again.

W : WRITE CURRENT SECTOR

Writes back to disc the altered buffer. This could be dangerous, make sure you have not done anything disastrous before you issue this command. You should be working with a copy of the relevant disc so you can re-read the sector if you make a mistake.

P : PATCH SECTOR

The main use of the Patch facility is to allow you to change bytes on the disc at will. You should know precisely what you are doing before you start with this. Always work with a copy of the disc in question, if a mistake is made you can then return to the starting point. This option allows you to change one or more bytes at will, allowing you to change the type of file for instance, or to change illegal characters to legal ones in file names in the Catalog, and many other useful changes as well.

To use PATCH, you must first enter the start offset address of the byte that you wish to work from. This is the offset within the current buffer displayed on the screen. Press return to go to the actual patching, and on entering each byte, press return to go to the next. When you have entered all you wish to change, press return by itself to enter the changed bytes into the buffer. You must then 'W' write this back to disc to make the change a permanent addition to the sector you

have been working on.

T : DISPLAY FIRST #80 BYTES

You can only display \$80 (128) bytes of the sector at any one time. As a sector is \$100 (256) bytes long, you must toggle the display between the first #80 bytes 'T' or the bottom #80 bytes 'B' of the current working sector.

B : DISPLAY LAST #80 BYTES

Displays the bottom or last #80 bytes of the current working sector.

+ : READ NEXT TR/SC

This will take you to the next sector in ascending numeric order. If you reach sector \$F it will go on to the next track and display sector 0 of this track. If you reach sector \$F of track \$22 then you will cycle round to track \$0 sector \$0. The display at the top right shows the current sector you have read.

- : READ LAST TR/SC

Descends one sector from the current position. Wraps round to \$22/\$F from track \$0 sector \$0.

ESC : LEAVE DISC PATCH

Returns to the Main Menu when you are done.

? : DISPLAY MENU

When you get lost, will display all the Menu of possible commands.

6 : DISK MAP

As well as the Catalog and the track/sector lists, DOS keeps a map of all the used and free sectors on the disc. This can show in a graphic form all the sectors that are currently in use. The display shows the tracks ranging from 0 to the left, through to \$22 (35) at the right. The sectors are shown vertically from 0 to \$F (15). If you draw a disc map of a disc that has only been initialised and thus has no files on it, you will see that tracks 0-2 and track \$11 are shown as in use. These are the DOS tracks and the Catalog track, as mentioned earlier. You will be shown also at the foot of the screen the number of free sectors left on the disc as well as the number odd sectors actually used.

7 : CATALOG SORTER

If like me, you end up with lots of odd files all over your discs, all in a haphazard order, then this is for you. On selecting this option, you will be given a second menu, with 5 further options. There are two forms of the sort, alphabetical or manual, and each may be specified with the program called 'HELLO', if present, as the first file. If you select manual sort, then each file will be presented to you in turn, simply answer 'Y' or 'N' as required until you have been through them all. They will keep cycling round at you till all have been done. Leave any deleted files to the end. All must eventually have been placed in order before it will write back to disc and take you back to the Menu.

8 : INIT A TRACK

Damaged tracks may be repaired by

re-initialising them. This simply means writing them out from scratch to an all-zero condition. It is a pretty drastic remedy, and so you should try and save as much of the track by copying the good sectors to another disc, as is possible, before using this. It is important for DOS that the volume number of the track is consistent with the rest of the disc, so on entry it goes and tries to find it first. It will then ask for the track you wish to renew. You are asked to verify you want to go on, just in case you made a mistake

9 : COPY A TRACK

The main use of this option will probably be to copy your favourite DOS from a master disc to your slave discs. A warning is given if you are writing to these tracks however. You can copy a track from one drive to another, but the drives must both be in the same slot however. If you feel like it, you can copy from one track to another completely different one, though I can't quite think at the moment where this could be of much use.

10 : CHANGE SLOT/DRIVE

This will change the working Slot and Drive. Enter the appropriate one, and press carriage return to get to the next setting. You cannot enter illegal slots or drives. The program may eventually hang if you enter a slot number that has no drive in it!

11 : DISK CLEAN

You will need a suitable cleaning disc for this option. The head will 'scrub' back and forth from track 0 to \$22 for about one minute.

12 : BAD SECTOR SCAN

This scans the disc from one end to the other for any 'Read' errors. It is assumed that if the disc reads correctly, then it can be written to correctly as well. If any errors are found on a normal disc, you will have to initialise that track again. But first copy any sectors that are good to another disc, so that you can copy them back and repair afterwards as much of the track as can be saved.

13 : EXIT

The way out from the program. If you have tried so far to get out by pressing Reset, you will simply have found yourself back at the Menu. This will finally let you go off and play that adventure game again. You didn't try to find the answer on the disc with the PATCH option did you?

Ewen Wannop February 1986

This was the first of a series of six articles by Ewen on Zapping disks and dealing with the different Disk Operating systems. They arose out of the work he did in writing Chameleon. We shall reprint the whole series over the next few magazines. Ewen never completed the series as he intended, perhaps we can hope that he will some day. Ed.

AppleXtras

/XTRAS.P8.NO.4/

All the files on this disk must be unpacked with ShrinkIt from Xtras.P8.No.1.

/XTRAS.P8.NO.4/

=P8PARTITION.SHK	\$E0	22	8-JUL-90
=CHANGEFILE.SHK	\$E0	49	8-JUL-90
=FRACTALIE.SHK	\$E0	36	8-JUL-90
=DICTCONV.SHK	\$E0	17	9-JUL-90
=GRAMMAR.SHK	\$E0	36	8-JUL-90
=RESURRECT.SHK	\$E0	30	8-JUL-90
=VANILA.SHK	\$E0	66	8-JUL-90
=FLASHWORD.SHK	\$E0	16	8-JUL-90

/XTRAS.GS.NO.4/

=PRODOS	SYS	32	8-JUL-88
=TITLE	\$C1	65	8-JUL-90
=BOOT.SYSTEM	SYS	1	6-JAN-90
=PROGRAMS	DIR	1	8-JUL-90
=GS.SHK	DIR	1	8-JUL-90
=GS.SHK.DOC	TXT	56	21-JUN-90
=GSHK	\$B3	203	24-JUN-90
=BUG.REPORTS	TXT	8	16-JUN-90
=SHRINKIT.ICONS	\$CA	18	23-JUN-90
=POWERLAUNCH	DIR	1	8-JUL-90
=PWRWR	DIR	1	8-JUL-90
=PWRLNCH.PG1	TXT	1	23-FEB-90
=PWRLNCH.PG2	TXT	1	23-FEB-90
=PWRWR.ICONS	\$CA	8	20-FEB-90
=PWRLNCH.AWGS	\$50	27	23-FEB-90
=POWERLAUNCH	\$B3	72	23-FEB-90
=WAVE.EDIT	DIR	1	8-JUL-90
=WAVE.EDITOR	\$B3	28	2-MAR-90
=PANGEASND.DOC	TXT	7	2-MAR-90
*C.C.C	BIN	18	11-MAR-90
=DA.S	DIR	1	8-JUL-90
=DFM.BXY	\$E0	223	24-JUN-90
=FIND.FILE.V1.2	\$B8	25	19-MAR-90
=WRITEI.BXY	\$E0	28	13-MAY-90
=PEEKIT	DIR	1	8-JUL-90
=PEEKIT	\$B8	12	27-JAN-90
=ABOUT.PEEKIT	TXT	3	27-JAN-90
=SSICON	DIR	1	8-JUL-90
=SOUNDSMITH.ICON	\$CA	4	4-MAR-90
=ICON.NOTES	TXT	1	4-MAR-90
=PRODOS.TOOLS	DIR	1	8-JUL-90
=FINDER.KILLER	DIR	1	8-JUL-90
=FDK.ICONS	\$CA	4	18-MAY-89
=FDK.TXT	TXT	12	18-MAY-89
=FDK.1.0	BAS	6	18-MAY-89
=NIFTY.LIST	DIR	1	8-JUL-90
=NLIST.MANUAL	TXT	44	24-MAR-90
=NLIST.REV	TXT	35	24-MAR-90
=NIFTYLIST.CDA	\$B9	70	25-MAR-90
=NIFTYLIST.OMF2	\$B9	70	25-MAR-90
=NLIST.DATA	TXT	97	24-MAR-90
=OMF2.NOTE	TXT	1	25-MAR-90
=GAMES	DIR	1	8-JUL-90
=PYRAMID	DIR	1	8-JUL-90
=CARDS.DIAMONDS	\$B0	26	9-DEC-88
=CARDS.HEARTS	\$B0	26	9-DEC-88
=PYRAMID.PIC	\$C1	65	21-MAR-89
=CARDS.CLUBS	\$B0	26	9-DEC-88
=READ.ME	TXT	3	22-MAR-89
=CARDS.SPADES	\$B0	26	9-DEC-88
=PYRAMID	\$B3	39	22-MAR-89
=LUNAR.LANDER	\$B3	174	11-NOV-89

P8PARTITION.SHK

P8 Partition - Patches ProDOS 8 to see and map multiple partitions on SCSI drives to Slots.

CHANGEFILE.SHK

Change-A-File - Batch file utility to restore damaged AppleWorks Database and Word processor files.

FRACTALIE.SHK

Fractal Ie - Displays the MandelBrot and Julia set on the Double HiRes screen.

DICTCONV.SHK

Convert - Converts Sensible Speller dictionaries for use with Beagle Bros QuickSpell.

GRAMMAR.SHK

Grammar Checker - UltraMacros 3.1 macro for AppleWorks 3.0. Checks your grammar!

RESURRECT.SHK

Resurrect - Complements Change-A-File by restoring disks with damaged directories.

VANILA.SHK

Plain Vanilla - Formats and partitions SCSI drives using the Apple SCSI card Rev C.

FLASHWORD.SHK

Flashwords - Uses UltraMacros and SuperFonts with AppleWorks 3.0 to generate a classic flash card application.

/XTRAS.GS.NO.4/

Programs Folder

GSHK - At last we have the full GS desktop version of ShrinkIt. Many enhancements have been made and GSHK will now unpack ARC'ed and StuffIt files as well as the more usual ShrinkIt, BXY or BLU files.

Powerlaunch - An alternative to the Finder to launch your programs. Neatly done and with an excellent graphic interface.

Wave Editor - A simple sound and wave form editor.

C.C.C. - BRUN from Basic for the most amazing Graphics display you have seen on the IIGs!

DA's Folder

DFM.BXY - Unshrink to make a powerful and comprehensive NDA file manager full documentation included.

Find File - Handy File Finder NDA for those forgotten masterpieces you have mislaid. Based on the Macintosh original.

WriteIt - An improved Version 2 of this handy word processing NDA with many added features.

Peekit - Look at the text content of any file to see if it can be printed. The HiBits can optionally be cleared while viewing.

Icon Folder

SS Icon - Icons for use with the SoundSmith music program

ProDOS Tools Folder

Finder Killer - Strip out all those annoying Finder Data files that you seem to collect. Automatically and painlessly removed!

Nifty List - Version 2.92 of this most indispensable aid for programmers. Now updated to include all the latest Tool calls for System 5.0.2.

Games Folder

Pyramid - From the same stable as Solitaire, another riveting game of cards.

Lunar Lander - The classic game updated to full GS Graphics.

Disk Drive Servicing

Roger Larcombe examines his disk drives with D.A.D.S and S.T.A.T. and puts his mind at rest

Having Problems?

Having Occasional problems with your disk drives? Worried about losing that precious data? Well now you can relax with two new products from ASKY D.A.D.S. Answer and S.T.A.T.

If you are receiving the dreaded I/O ERROR occasionally or getting clicks and whirs from your drives when loading files then this could be a sign of impending doom, either your disks are dodgy or the drives themselves are in need of attention. but how do you know when is the time to service the drives? You could just send them to your dealer every six months, but that would be expensive if they only actually need it every 12 or 13 months.

The Answer

Here is the answer to your problems, two new disk drive analysis tools from ASKY an innovative California based firm. The two utilities both use a novel technology which I have not come across before which is a spiral track very accurately written onto a special disk, the disk also contains the various programs required and is self booting. The spiral track allows the software to test extremely closely how well your drive reads and writes disks at various points across the surface and also checks for various other parameters such as signal strength. Most tests actually measure the error distances in thousandths of an inch from a known ideal situation.

S.T.A.T.

The first of the two products is called S.T.A.T., (S)piral (T)rack (A)nalysis (T)ool, this is a drive analy-

sis tool for end users who simply want to know when their drives are getting marginal and should be sent for overhaul although it performs almost all the tests in the higher product and does them to the same accuracy. The tests performed can be seen in Fig 1.

The tests can be run as a set automatically and you can even configure the program to suit your own needs. For instance if you are worried about some particular aspects of your drives then you can configure the automatic sequence to make only the related tests. You can also configure the test parameters to suit your own needs, for example if you don't need such good drive speed accuracy you can open out the span to suit. All of these configurations and indeed testing itself is fully menu driven, all you have to do is put the disk in the drive and boot up, ASKY even gives recommendations of what to do if the disk won't boot, but lets hope that your drives never get that bad!

When you boot you first get a graphic image of a disk drive whilst the programs load up, then an introductory screen which informs you what S.T.A.T. can do and some good advice - firstly, always take drives under warranty straight back to the dealer in case you should void the warranty, and secondly to ensure good results use a cleaning disk before running the tests. Pressing any key takes you into the main menu where the eight tests are listed under A to H and each item's selection letter is highlighted showing that it is currently selected for auto test. From this point you can either press one of the menu keys to de-select the item from auto test or 'L'

to run the auto test routine, there is also useful help screen available by pressing '?', and the configuration menu is obtained by pressing 'O'.

After the tests have run, which takes about 30 seconds for a full set, the results are displayed on the screen as passed or failed in text format and this can be printed out by typing Control-P. Pressing the space bar gives a bar graph display generated from inverse text characters showing whether the test was passed failed and if passed then whether it was optimum good or marginal. The results can be more useful to anybody who also has the more detailed product D.A.D.S. Answer II, which can take them in numerical form and convert to actual error distances etc., for this reason the results are available in numerical format by pressing 'W'.

The system is easily used and ideal for those Apple users who want to make regular checks on their drives 80 as to avoid sudden catastrophe in the form of data 1088. It could also be useful for any central service depots who can issue it to users and have centrally the use of D.A.D.S. Answer II. It is definitely a good buy at a price of £60.00 including VAT and UK P&P.

D.A.D.S.

The second product is known as D.A.D.S. Answer II, (D)rive (A)nalysis (D)iskette (T)ool, this is intended more for people with experience of adjusting drives for alignment etc. and includes all the tests previously mentioned in S.T.A.T. above again to the same stringent standards plus some minor extra tests. These are: file access which checks that full files can be correctly interpreted and transferred, write protect which just checks the switch and interference which looks for modulation of the signal from the drive often caused by bad contact between the head and the disk.

Booting this disk gives a similar graphic to S.T.A.T. whilst the programme loads up, after which is another welcome screen which gives some essential advice for novices or fiddlers; if you don't have much experience with drives use the system as a diagnostic tool only and again don't attempt to repair items under warranty. Pressing any key will now give the main menu, which is very similar to S.T.A.T.'s except that there are more tests available listed as A to K and also there is now an extra menu available under 'N' - the autotest menu. Pressing 'L' runs a full set of tests automatically, pressing any of the other letter gives a single run of that particular test.

The autotest menu allows you to select which items are run in an autotest sequence, once in this menu all the tests are listed with their key letters highlighted, indicating that they are selected. Pressing any one of the keys causes the highlight to disappear

Figure 1

- A) Clamping - Checks that the disk is clamped securely at the centre hub by the mechanism.
- B) Track zero - Checks that the drive can seek and find track Zero (the boot track) accurately.
- C) Write/read - Checks that the head can write a track and afterwards read it back.
- D) Speed - Checks that the drive is between 295.5 rpm and 304.5 rpm
- E) Cam linearity - Checks for linear movement radially across the disk.
- F) Hysteresis - Checks for backlash in the head drive mechanism.
- G) Alignment - Checks positional accuracy over a given track.
- H) Head read span - Measures width of track the head can read.

from that letter and thus the test to be omitted from the autotest routine. The configuration menu allows the numerical test parameters to be adjusted if required, where a numerical value is appropriate. All the configurations can be saved on the diskette if necessary for future use by pressing Control-X and the original values can be restored at any time by pressing Control-Y.

Unlike S.T.A.T., D.A.D.S. Answer II gives its results in the form of actual measured values where possible and in passed/failed format otherwise, all measurements are listed as 'mils' and the manual indicates that a mil is equivalent to 1/1000 of an inch so most of us would probably be more comfortable calling them 'thous'. As each test is carried out, the result is displayed on the screen and at test B the user is prompted to remove the disk, this is done with the drive still spinning and as you pull the disk out the message changes to reinsert the disk. The remainder of the tests now follow through with their results being displayed on screen. Again results can be printed out by typing Control-P and the tests can be easily rerun by pushing the space bar.

The configuration menu allows use of either the ANSI (American National Standards Institute) standards, the original ASKY determined parameters which are actually stricter or special standards to suit your own requirements. These can be saved for later use by pressing Control-X and the original values restored using Control-Y as with S.T.A.T.. The manual lists in very great detail how the tests are performed, what the tests mean, why the individual results are so important and what to do about problems when they occur, it also tells you when you had best leave it to some body else.

Conclusions

The D.A.D.S. Answer II is very easy for even the novice to use, although it is obviously aimed more at either the experienced user or the service engineer. The manual gives sound advice and lots of useful and interesting information. The product itself is clearly made to the very highest standards by ASKY in order to achieve such good results and shows a high level of initiative by its designers. I won't hesitate to buy a copy at the price of £150.00 as it can easily cost you this much for a full overhaul on a couple of

Product : D.A.D.S. & S.T.A.T.

Publisher : ASKY

Available from :

MGA SoftCat

41 Cinque Port Street

Rye

East Sussex TN31 7AD

0797-226601

Price : £150 & £60 WYSIWYP

Value : 

Performance : 

Documentation : 

drives. ASKY are bringing out a range of new and interesting items for the Apple II range recently all of which seem to be both innovative in technological terms and well priced, let's hope they keep em coming.

Roger Larcombe 

HARD-TO-FIND, UNIQUE PRODUCTS FOR APPLE II ENTHUSIASTS

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When your Iigs loses track of time and can't remember your control panel settings, it means your battery is dead. Since the Iigs battery is soldered to the motherboard, some dealers actually want you to pay for a motherboard exchange to fix the problem. Instead, just clip off your old battery and slide on one of these new replacements. No soldering necessary. Kit includes fully compatible lithium battery and complete installation instructions.

NO-001 Slide-On Battery for Iigs \$14.95

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AM-001 AMR 3.5 drive \$199.00

AM-002 AMR 3.5 controller for Iie \$59.00

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Prosel is a comprehensive disk utility package. Prosel 8 works in the ProDOS 8 environment, Prosel 16 (includes Prosel 8) in the GS/OS environment of the Apple Iigs. Includes file and disk copy and backup utilities, program selector, scheduler, and much more.

GB-001 Prosel 8 \$40.00

GB-002 Prosel 16 \$60.00

Stack Support

Stacks have arrived in the Apple II kingdom and we're ready to offer charter subscriptions to the first Apple II publication about hypermedia. Its published 6 times a year as a set of stacks and distributed on 3.5 disks. **Stack-Central** includes the latest information on Apple II hypermedia developments, authoring tips, clip art and sounds, and samples of the best public domain and shareware stacks we can find. Requires **HyperStudio**.

SC-1 **Stack-Central**, six 3.5 disks \$42.00

HyperStudio

HyperStudio is the first program to take full advantage of the sound and graphics of the Apple Iigs. It's HyperCard-like, for those of you familiar with the Macintosh, but cards can use the full-color capabilities of the Iigs and no scripting language is required. You can create stacks and add sounds by point and click.

RW-005 **HyperStudio** \$129.00

SCWH-1 Special **HyperStudio/Stack-Central** \$139.00

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These are the connectors you need to create an AppleTalk network. Not only do they cost less than Apple's connectors, these work with inexpensive telephone wire (not supplied) rather than Apple's expensive, special cables. You need one connector for each computer and printer on the network.

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Are you tired of Apple Computer's incessant message that only the Macintosh is a serious computer? Thousands of people like you subscribe to our monthly Apple II newsletter, **A2-Central**. It's a small, personalized publication concerned only with the exchange of meaningful information about the Apple II.

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A 3.5 disk subscription is also available, which includes both a paper newsletter and the full text of that issue in a disk file for full-text searches. The remainder of the disk is filled with programs from our subscribers, from our library on GENie, tech notes, system disk updates, and other hot stuff.

A2-N1 **A2-Central**, paper, 1 yr \$28.00

A2-D1 **A2-Central**, 3.5 disk, 1 yr \$84.00

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FS-D Back issue text on 3.5 disks \$39.00

FD-001 **FastData Pro**, for searches \$49.00

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M291

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A2-Central

The New Talking Stickybear Alphabet

A review of the new IIGS version of this favourite program by Dave Ferris

Introduction

Anyone who has already discovered Optimum Resource's Weekly Reader Software, particularly the Stickybear series of educational programs will probably have been impressed by their quality and ability to get a child's interest and hold it.

Now, to this line, has been added 'The New Talking Stickybear Alphabet' specially for the IIGS. It makes excellent use of the SHR graphics and sound capabilities of this machine.

Talking ABC comes supplied on 2 x 3.5" discs, a key boot/program disc and a data disc. The contents of both discs may be installed on a hard disc, but the key disc is always required for startup.

The program requires a minimum of 512K when booting from floppy disc, more to launch from the Finder, depending upon the OS version.

The Program

It starts with an animated, vocal welcome from Bedford Stickybear, then continues with him climbing up and down a ladder pointing to one of three selections. Pressing any key will select the activity he is pointing to. These are:

□ Alphabet. Selecting any letter will result in an well animated picture being displayed to illustrate that letter, usually with sound effects. There are two pictures for each letter. For instance A is for acrobat and also for airplane.

In addition Stickybear will say the letter and also what it stands for.

□ Letter Hunt. In this activity Stickybear asks the child to press a letter, for example "Press the letter T". If the letter is typed correctly, one of the two pictures will be displayed as before, with Stickybear saying the letter and what it stands for.

If the first attempt is incorrect the letter will be displayed on screen and Stickybear says "This is T. Press the letter T".

If the second attempt is incorrect, Stickybear says "This is T" again then moves on to another letter. This is important, as it prevents the child getting frustrated with the program because they get stuck on one letter. It also avoids the trap that some programs fall into, where the display is more spectacular and fun if you get the answers wrong.

□ Fast Letters. Stickybear appears on the screen and will say any letter of the alphabet that is typed in. The letter is also displayed on the screen.

Documentation

This is minimal, but then not much is required. It does include instructions for hard disc installation, and how to teach a child to start the program. It also comes with suggestions for additional activities, but not as much as there could be.

Conclusion

Unlike the original Stickybear ABC, this version displays letters in both Up-

per and Lower case, to help children learn them in both forms.

The voice synthesis is clear and easy to understand, and even the animation of Stickybear when pronouncing the letters for Fast Letters attempts to match the mouth shape to the letter.

Although the recommended age range for this program is 3 to 6 years, it has been field tested by my (just) 2 year old daughter. She has found it a delight to experiment with, and any time she finds me working on the computer, instantly demands 'Stickybear!'.
Optimum Resource claim that this program will advance computer awareness in children. I can confirm that, if I leave an unlocked disc box on the desk, I can be sure to find a disc in the 3.5" drive (correctly inserted). Fortunately my daughter hasn't yet found the switch to turn the computer on.

This is an excellent program that I have enjoyed playing with as much as my daughter. It's only problem is the difference between English English and American English. For instance 'Z' is pronounced zee and aeroplane is spelt airplane, but I think we can live with these minor details. What I would like to see now is a talking version.

info

Product : New Sticky Bears
Publisher : Optimum Resource
Available from :
MGA SoftCat
41 Cinque Port Street
Rye
East Sussex TN31 7AD
0797-226601

Price : £37.95 WYSIWYP
£85 for 5 disk LabPack

Value : ★★★★★

Performance : ★★★★★

Documentation : ★★★★★

The
Stickybear
Alphabet

Copyright © 1988 by
Optimum Resource, Inc.

tiger

Tt

Bedford Stickbear and friend?

Game Plan

Robert Hornby gets himself tangled up in a variety of action packed games

ARKANOID


Arkanoid is a kind of version of the old game "Brick Out" but a lot better. In the game you control a small Vaus escape module, battling your way through 33 levels of hard bricking, trying to destroy the space walls. You have one objective, to seek and destroy the Grid monster, a mighty force field that is holding your mothership and stopping it from getting away.

The game starts with a short theme tune before getting into the game. I played it with paddles but you can use a joystick. The first level is a basic 'knock them out' but as the levels progress you get bricks which take several hits to destroy. There are also good bricks which are impossible to destroy. In the game there are things to help you, for as you destroy certain bricks and colours, letters fall which represent lasers and other helpful items. Some of them don't always help. If you don't have these items, you will use a small energy ball which bounces around the screen, though you must deflect it at times to stop its going out of play and therefore losing a life. In the final game screen you take on the Grid monster who fires bombs at you and if you're hit, you're dead! The monster is shaped as a human head and coloured gold. If you hit him for long enough he turns green and blows up. One tip is not to stay in one place for too long or the bombs will hit you.

The screens you see in the game are shaped as a square with the bottom missing. There, on that bottom part, your Vaus module sits, moving left and right, deflecting the balls that you control. On the top side, just off the game playing screen is the score area telling you what round you're on and your score. The graphics for the game are okay but are a bit basic though the background makes up for that with its bright patterns. There is not much music to the game and the sound effects are poor.

Taito have made better games but still the game overall is quite good.

PS. Arkanoid is also available for the IIGs.

Robert Hornby (aged 13) 

AUTO DUEL

Auto Duel is a car game based on the board game by Steve Jackson and is set in the future when the right of way goes to the car with the biggest guns.

The game begins with a full screen plan of New York. Here you can move your man around, entering the shops to choose what you want to buy or what you want to sell. You start off with 2000 dollars. It seems a lot till you find it costs that much just to buy weapons so it's off to the arena, a combat area, where there are different levels of play from Amateur to unlimited. You start on Amateur where you get your own car and a machine gun with 20 rounds. Once started, you go round the large scrolling arena blasting out all the cars found there. Once you have done that you will come out, if still alive, and receive \$2000 which should help to get a new car from the assembly lines. If however you get killed you'll have to start again.

At the assembly line you will be asked what to name your car and what type you want - from a sub compact to a van. Then you are asked what weight you want your car to hold so you choose that. After a few other things, you choose your weapons which will probably save your life once on the road. You won't be able to afford a good weapon but you may just be able to afford a machine gun and ammo (20 rounds a time). Now your car is ready, pay the man and get out.

Other places you will find in the towns are the weapon shop where you can buy lasers, flame throwers and mines; all having a deadly purpose. With lasers you do not need to buy ammo because they run off the battery that's in the car, 99 shots in all. (Costs 8000 though). Then there is the garage where you can repair your car which costs \$50; and you can have mechanical lessons which will improve your chance of salvaging other

cars after you have killed the driver.

The next stop is the A.A.D.A where you can get jobs which you can take. The jobs you get range from taking fish to a pet shop or taking disks to Origin. Many jobs pay well, from 100 dollars to 50,000 dollars. But some you won't be able to get depending on the amount of prestige or money you already have. Also at the A.A.D.A. you can get road information about the latest traffic conditions.


If you're sick, drop in at your local gold cross. Here you will be able to buy a clone which is an exact picture of you and all the money you have is recorded in this clone too. So when you get killed, you are returned to life by this clone - good hey? Also here, you can have your health brought back up to 3 from whatever level it is at.

Want to rest? Drop in at the Truck Stop. Here you can sleep, up to 9 days at a time; also here you can have your battery recharged. Then you can buy body armour which gives you an extra 3 body points which can help later in the game. Lastly, you can get a bus trip to another town. This costs 100 dollars but is an easy way to travel.

There are many other places to visit including Joe's Bar and the salvage yard but we must set forth on the journey. You can leave New York down one of 3 roads. Once out on the road, you are at the mercy of the computer's cars as you battle your way down the highway to the next city. You meet cars with lasers and anti-tank guns - can you reach the next town without dying? It is a challenge at first but as you complete more jobs you can buy better weapons. Then you can repel the firepower.

There are over 12 towns to go to each with a different layout. Some have only two shops while others have more. Good luck, you'll need it.

The game comes with a 32 page manual telling you all you need to know. Also you get a key guide to help you. The game is fun and takes hours to complete. It's a bit like Elite but on the ground. Graphics are pretty good but some road scenes could be improved. This game is a real challenge. It needs a joystick.

Robert Hornby (aged 13) 

ULTIMA TRILOGY 1, 2, 3

ULTIMA I

Ultima I is the quest to destroy Mondain, an evil wizard who has sent the Armies of Darkness to devastate the tranquil kingdoms of Sosaria.

Defenceless in the face of such an attack, the people flee in vain to the mighty strongholds. The quest to destroy the power of darkness is on.

You control one man who is the only one who can save Sosaria. The challenge is great for you will have to kill countless numbers of Orcs, gremlins, knights and the Necromancers, an evil race of wizards, not as powerful as Mondain but still hard to defeat, without being killed yourself.

The game is set on a plan view scrolling as you move. There are 4 professions to choose from, and 4 races of inhabitants in the world. There are many people to speak to, demons to fight and lastly, the frontiers of Space to be conquered. However, this can only be done after you have collected enough money to buy a shuttle with which you can fly around the galaxy attacking Mondain's fighters who attempt to destroy you and stop you completing the game. Watch out for the Sun though, it can easily destroy you.

The game is well set up but the graphics are not brilliant though the game is very addictive and provides hours of entertainment. The game itself was made in 1980 and has been updated to 1990 standards but, looking at the screen, this doesn't seem to have happened. The game on its own is #24.99 but you can buy it from MGA in a set, Ultima 1, 2, 3 for #49.95.

The game is set in 4 overhead maps which scroll as you go. You can get to each map through boat travel but first you need a boat which you can buy at your local town. The town graphics are black and white and not impressive. The underground dungeons are not brilliant but passable. The map is good but could be improved. The Space view needs improving a lot more. But the graphics don't seem to matter because of the plot which unfolds as you complete missions given to you from kings who hold out in their castles.

ULTIMA II

Ultima II is set in the same world. Evil has attacked once more under the command of an Enchantress, daughter of Mondain. You play another hero trying to save the world. This time the game is set on a world map, scrolling as you move, on an 8 x 8 screen. The plot is mainly the same but the graphics are better and more colourful. Also on this game you can pass through door ways which lead to different time zones, future, legend, A.D., B.C and Pangea. All are different - all have new en-

emies to kill. This game is bigger and better than the first one but not as addictive.

ULTIMA III

The third is easily the best with new maps, bigger and better graphics and also a 4 player attack team which can take on up to 12 enemies on a separate screen all at once. The game starts on a scrolling screen set on a large island but other areas can be explored. When you meet an attacker, you switch to a different screen where you battle the enemy. When first starting, do not try to attack too powerful warriors because you will be destroyed. The game is about an Orc attack from an unknown

enemy. The only clue you have is a word scrawled in blood saying EXODUS.

All the games follow the same plot but all have new things to them and each is an improvement on the previous game. There are hundreds of people to talk to and fight.

The game comes in a nice box which helps show the plot. Inside there is a book written in the old English style which makes it look very impressive - and so it is. Also, there is a quick key guide which makes it easy for those who hate reading before playing. This is a great set of 3 released by Origin proving that old games are still loved.

Robert Hornby (aged 13)

NEW KIT 8/90

AE 3.5 Drive *£228.85
(Applied Engineering)
Fully compatible 3.5" 800K daisy-chain drive which is upgradeable to 1.44Mb in the future. Same footprint as Apple's drive; a perfect second drive.

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PROMGRAMER (SCRG) *£149.50
An inexpensive EPROM programmer for Apple II. The unit plugs into any standard peripheral card slot and allows you to program any standard 27nnn series EPROM from 2708-27512. Though not intended as a production tool, the ease of use allows rapid programming, copying, duplication, or modification of EPROMs. Ideal for a dealer wishing to offer a service for burning software to EPROMs for the S&S ROM Card. Attractive quantity discounts on EPROMs are available from MGA SoftCat to EPROM Programming Services...

RAM Express II (AE) *£249.00
Brand new memory expansion card for //c+ and later model //c with memory expansion connector. This price gives 256K, and the board may be expanded to 1Mb using standard 256Kx4 DRAMs (POA).

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(Orange Micro)
Replaces Grappier C/Mac/GS. Connects //c, //c+, IIGS, and Macs to 36-pin Centronics type parallel printers. Note: this is not just a serial/parallel converter, this device actually converts ImageWriter output codes into your printer's native codes for full compatibility. Includes UK mains adaptor. Use this great bit of kit to stick a cheap parallel printer on your IIGS at half the price of an ImageWriter.

Cutting Edge 3.5 Drive (Cutting Edge) *£199.95
Before reading on, please note that the price for this drive includes VAT & UK p&p. (£171.26 excl VAT). This unit is a fully compatible 800K 3.5" floppy disk drive without daisy-chain facilities for //c+, IIGS, or Mac, and //e or //e with UDC (drive + UDC £279.00).

SuperWriter 924 (Xetec) *£99.95
Another ImageWriter emulation adaptor, this time with a big difference: this one supports 24-pin printers for ImageWriter LQ, as well as 9-pin for ImageWriter II/15/III emulation. Just plug it into your //c, Laser-128, or IIGS serial port, configure your software for the ImageWriter of choice, connect the other end to your parallel printer, and off you go!

CrossWorks //e Null Adaptor £6.95
If you already use your super serial card to drive a printer, you don't want to have to drive inside the //e to move the jumper back to MODEM every time a transfer is required. Instead, simply plug in this D-25 null pre-configured adaptor between the card & the CrossWorks cable. Even better, buy a D-25 switch box with extra cable together with the adaptor (£29.95 includes 2 cables), and make a permanent set-up.

MORE NEW KIT

Disk Starter Pack *£24.95
Contains 40 blank 5.25" disks plus a precision disk notcher which allows you to use both sides of each of these, and each of your existing disks. In other words; you'll effectively get 80 usable disk sides (11.2 Mb), at a sensible price. (you may never need to buy disks again!). This is the ideal package/price for backing up a 10Mb hard disk.

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Calcompute v5.0 (Thought Technology) *£99.95
Computerised biofeedback stress reduction system including GSR biosensor hardware (connects to gameport), plus software, manual & audio tape. [R]

S&S RAM Card (S&S) *£99.95
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640K Maximum capacity Apple IIGS ROM expansion card. Uses standard 27nnn-type EPROMs in 64/128/256/512K sizes, giving maximum capacities of 80/160/320/640K respectively. This card piggy-backs onto the S&S RAM Card, and includes "ROM Disk Creator Utility" which makes program files for the EPROMs from any ProDOS source volume, disk or RAM disk. Additionally, you need an Apple II-compatible EPROM programmer to fire the EPROMs, (such as PROMGRAMER). Alternatively, you will need a dealer to provide the service for you. EPROMs are available from MGA in sets of 10 as follows: 27c64x10 *£34.95 / 27c128 *£39.95 / 27c256 *£44.95 / 27c512 *£59.95. Applications for the ROM Card include placing your favourite application programs onto a card with an access time much faster than that of a hard-drive, or placing your operating system into silicon, so that booting the Finder takes seconds instead of minutes... [R]

CrossWorks Extension Cable (MGA) *£29.95
This 50' null cable allows your CrossWorks set-up to become 58' apart. Supplied with either D-9 or D-25 connectors, (connects to the PC end). We can also supply a null kit which will transfer files to a boom-shape *£19.95 plus £9.95 for a 100' cable. Ask

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Disk management system - launches all executable program files including GS/OS & ProDOS system, Applsoft, binary & EXEC files. Exclusive auto-programming automatically assigns buffers to launchable programs. Extensive volume & file utilities. Built in text processor. Displays G-mes, DMR, SHR graphics. Plays saved files. The latest addition to Vitesse's 'Salvation' series for the IIGS.

GUARDIAN (VITSE) *£49.95
The original 'Salvation' product. Hard disk backup - < 1Mb/min! Reads all GS/OS files; stop/restart capture files; backup with volumes to one disk set, use with any GS/OS backup device; prints backup reports & disk labels.

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All prices include VAT
[*] Asterisked prices also include UK p&p
Any item ordered together with a postage item becomes postage free!
[R] Apple 2000 Reviewer Required
E & O.E.

MGA SoftCat

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Joe Walters brings you a Live Report from the June AppleFiesta in Phoenix

#: 28979 S15/Community Square
16-Jun-90 06:03:08
Sb: AppleFiesta - Day One
Fm: Joe Walters (Sysop) 76702,1007
To: All

Greetings from beautiful—but HOT—Phoenix, Arizona! Well, actually, we're in Tempe, but that's pretty much the same thing.

The first day of the 1990 AppleFiesta was an eye-opener, and a great time was had by all!

Keep in mind as you read this that items in quotes are taken mostly from memory, and are NOT to be considered verbatim or authoritative!

Before actually entering the show area, Dave, Ray and I met in the hotel lobby and engaged in general conversation. Interestingly, a few passersby of note came by to join in the conversation.

A high point of this get-together was the arrival of Paul Statt, who talked with Dave about APA, the AppleWorks Programmers Association, which Dave coordinates. In the course of the discussion, the subject of online services came up. Paul allowed as to how he particularly liked America Online, as he found it easiest to use. Dave had to respond! With the fire in him, he rose up as in a mighty wrath and proceeded to expound upon the virtues of archivability, automated sessions, offline message processing, and the like. It was positively evangelical, something to see!

Dennis Doms stopped by and talked a while. He said that Tom Weishaar was not at the show as he is attending an international computer conference in Moscow.

Dennis talked about a project involving trying to develop some drivers for H-P laser printers, laserdiscs, and the like. He has some interesting ideas and insight into the state of Apple marketing, particularly concerning the Apple II. As he put it, how many schools do you think went out and bought full-blown \$10,000 Mac IIcx systems after seeing that ad about kindergarten kids using one to manipulate the Mona Lisa scans?

He talked about the hopeful atmosphere developing around the Apple II community, specifically the advent of Apple II people in high places at Apple and Claris and the like, as well as the good words we've been hearing. However, he added, "we've heard it before."

Eventually we headed over to the registration area, where we were pleasantly surprised to find our name tags ready and waiting. The tags are colorful, professionally printed, and they look great - as opposed to last year's, which looked really ratty and were poorly made.

This year they even added AppleFest-type ribbons for speakers, exhibitors and the like. Couldn't get one - they have better security than the Fest!

The first booth we saw upon entering the show floor was the Hewlett-Packard booth. They are showing several models of their laser printers along with a really nice, quiet color paintjet printer. I asked if these machines would work with my Apple II, and got scornful looks dripping with contempt. "No, they don't, but we hear that somebody is

working on one." Apparently, I wasn't the only one to ask that question, as I heard late in the day that they were answering the question with an exasperated "We're looking into it." Great!

At Barney Stone's booth, DB Master was being shown, as well as some items for sale. He has four of the new 20-meg CDives from Ingenuity Inc. for about \$475 each.

This drive was also being shown at Ingenuity's own booth. In addition, they were talking about a high-readability LCD screen under development for the //c. They see a desire for a portable Apple II, and with an internal hard disk and usable LCD screen, they'll basically be there.

They were also showing (but not operating) a prototype of a Fax modem for the Apple II line under development (new project, no projected date or price yet). It was attached to a Fax machine, so maybe they are planning some demos. They were also showing their pre-release VCR tape backup system.

There's no booth for Checkmate here, even though they are listed in the pre-show literature as exhibitors. There is a general impression that Checkmate is dead; I haven't got any direct confirmation of this, but am looking for the answer. Jerry Cline, who along with Greg Shaeffer is now handling former Checkmate product ProTerm under their InSync label, even said no more than that they were "apparently" no longer with us.

The Big Red Computer Club booth has been empty so far, but they may be here for the latter part of the show.

Learning Services and Educational Resources have their usual large dealer booths here, and are doing fairly brisk business. Computers Plus is also moving some product, but have a general look of not being completely set up yet. A local dealer called AzTech Computer is also set up and moving merchandise.

Beagle Bros has a booth here, and Marc deJong along with a few others are showing some of their products. They brought two Macs to show off their Flash product, but had trouble getting one of them to work, which of course renders the product completely useless! Fortunately, they got a replacement Mac around midday so they were able to demo the package.

Applied Engineering has a booth here with two reps. David Hardaway and another fellow were busily answering questions and demonstrating various AE items. Interestingly, they brought two GSs along, and NOT ONE MAC.

The AE 3.5" drive is available at some of the dealer booths, and AE was demonstrating it. David Hardaway showed me how it works; it has an LED that flashes green during Read operations and red during Writes. Very pretty. David also told me that it's a 1.44 meg FDHD drive mechanism functioning as an 800K drive; with an apparently user-installable chip change and GS driver software (expected in about a month), it becomes a full FDHD drive. Looks like a winner.

Across from AE is a local dealer's booth with the nifty name of AzTech Computers. They were selling a no-name oriental-produced DMA-compatible GS memory board. This board is expandable to 4 megs with 1 meg DRAMS, and they're selling it (empty) for \$49. I bought one, and will check it out when I get home and acquire some chips. I tried to get away with the thing before the AE guys saw me buy it, but I got caught. David Hardaway asked what was in the box, so I showed him. The other AE rep (I'm sorry I can't remember his name!!) asked David, "Is that one of ours?" "No, it's an X-brand." "I mean, is it a knockoff of one of ours?" "No, it's a knockoff of the AI board." Good recognition capability!

Okay, ready? Here it comes.

Zip Technology is here. More specifically, Tony Vece is manning a booth. There is a //e set up with an 8-MHz Zip Chip in it, and he has Zips for sale at the booth (they are

also available at some of the dealers). He also has a GS set up with the cover off so you can actually see the prototype Zip GS plainly.

I quietly observed a demo he was giving to a lady who was at the booth when I arrived. The thing seemed to be working well, insofar as I could tell. He loaded a complex AppleWorks spreadsheet file and did a recalculate at "normal" GS speed. It took about 15 seconds. He turned the Zip GS up to full speed and recalculated again, taking about three seconds. Now I don't know anything about the spreadsheet he loaded up there, but don't most spreadsheets recalculate faster immediately after a previous recalculation? Well, it would take a pretty unscrupulous company to carry on such a misleading demo.

The CDA he used to reset the speed on the Zip GS looked pretty sharp, with a slider thing to set the percentage of the Zip's full speed. Vece said there's also a CDEV, and NDA and a runnable program that can do the same, so you have your choice of access methods.

The Zip is a board in a slot with a ribbon cable leading to a connector that replaces the GS's 65816, just like the TransWarp GS. The board being shown is an obvious prototype, with lots of wrapped wire particularly on the back of the card. Vece told the lady that "since this is a prototype, it only runs at 6.4 MHz, but the final version will run at 8." She asked, "When will you ship it?" All together now: "Within a month." That's verbatim.

That's right, they're going to go from a wire-wrapped prototype at 6.4 MHz to an 8 MHz production card moving out the door in thirty days. Place your bets!

California Freeware is here, offering a lot of public domain disks. These range from old Apple II DOS 3.3 disks to 3.5" Apple IIgs disks to Mac disks.

Don and Bee Lancaster are here, actively conversing with attendees and selling his various books and related products. He's one of the big attractions of this show, as it's the only show he goes to and he's very accessible here. He's doing no less than four seminars at this show, and we attended one today. More about that later!

The Bitstream folks are here, showing their Macintosh postscript fonts.

Broderbund has a booth with a GS and a Mac. This is a fairly active booth, with lots of attendees stopping by to check out the latest games.

The WordPerfect booth contains only Macs, and is generating some interest among the Mac users.

There's a booth labeled "Youth in Motion," and they're showing the motorized computer-controlled logo setup we've seen at other shows.

Chinook is here, showing various of their drives. They are running some decent show specials.

Vitesse has a booth, and is running continuous demos of their Quickie hand scanner. There were enough people around it that I haven't taken a close look yet, but the images they're showing look much better than some of the earlier scans we've seen sampled. Gray scaling instead of line art.

I don't know if this portends an update to their software or what, but I'll try to get the scoop.

Dave saw a demo of a full-page scanner they're developing, and was real impressed with its speed and function. They're aiming for it to cost around \$800.

Right in the middle of the exhibit floor is the Apple booth. Barney Stone said that on Thursday he had seen it and was angered that the booth contained a Macintosh IIfx with a LaserWriter attached, a Macintosh Portable, two stacks of Macintosh literature, and not one item related in any way to the Apple II. He went over to ask one of the Apple reps where their Apple II items were, and got only a contemptful glare in response. He then got on the phone to Nancy Stark at Apple, who was surprised at the news. Barney suggested that she at least FedEx some Apple II literature out there so that there would be something for the II users. Somehow, around noon Friday, a IIfx mysteriously appeared in the Apple booth, where it still remains.

Not far from the Apple booth is the green kiosk thing

we've seen at previous AppleFests. This is from Roger Wagner, and contains a GS running HyperStudio with a special stack that not only demos the program but also gives info and guidance concerning the show.

But wait! What light through yonder text window breaks? It is the east, and Roger's wearing a tie! Must be time for...

THE ROGER WAGNER TIE REPORT!

Today's tie would inspire Bart Simpson to say, "Don't have a cow, man!"

For Roger has cows. This is the famous Cow Tie, seen once before. Similar to, but not as disgusting as, the dreaded Pig Tie, this tie is a pleasant reddish color with several large black and white cows adorning the garment, contentedly looking outward at the observer.

Ray Merlin commented, "That tie's a lot of bull."

I presume that it was this tie that inspired Jerry Cline, when introducing Roger at an evening event, to say, "...and I don't care what anyone says, I like Roger's ties!"

Out in front of the show floor were the registration tables. They were selling club memberships and some terrific looking AppleFiesta T-shirts.

The AzApple public domain libraries were on display and selling disks. Separate tables housed the Mac and Apple II selections. They have a pretty sizable set of libraries, and seemed to be moving a few disks, especially in the Apple II area.

We attended two seminars today. These are actually held in separate rooms, and ice water is supplied in all the rooms for attendees as well as speakers.

The first session we attended was Don Lancaster's presentation on The Incredible Secret Money Machine, his book on running your own small business. Strangely, this was in a fairly small room that wasn't set up for a lecture but was instead furnished with a long table with chairs around it. Fortunately it worked out, as only about 15 people came to this session. This made for a more intimate than usual atmosphere, and people in the session found it easy to talk to the host.

Lancaster is a personable and interesting speaker. He tends to involve his audiences a lot, and there was a lot of group participation in this one. It turned into more of a discussion than a seminar or lecture. Lancaster managed to involve everyone in the room in the discussions this time around, and everyone had a good time. Dave Gair really got into it, as his APA operation closely parallels many of the concepts in the book.

Some of the questions and comments brought up involved self-publishing and publishing on demand, and Lancaster touched on these subjects briefly, mentioning that some of his later seminars will cover those topics specifically.

Roger Wagner had a two-hour session devoted to demonstrating HyperStudio. He had everything set up and discovered that his large-screen projector system wasn't working due to a burned-out bulb. So it goes! He ended up doing the entire demo from the GS screen, but as it happened, most folks had a good enough vantage point that they could keep up with what was going on.

He had a new stack specially designed to facilitate his presentation; previously, he had loaded different stacks to show certain features or capabilities. Now the stack leads him from point to point, covering desired items in a somewhat structured order. This of course does not interfere with the "sidebars" that come up now and then during Roger's presentations!

Many people present had never seen HyperStudio really unleashed, operating videodiscs, compact audiodiscs, and the like. Roger is one of the more fascinating speakers to be found at one of these shows, and is well at ease in front of a crowd.

During the question/answer period at the end, a lady said she uses HyperStudio in her work, educating handicapped students. She made a plea for designers of stacks that might be used by handicapped users to design larger buttons than she's been seeing to date; the smaller buttons are harder to actuate for some individuals. An interesting and reasonable request.

Roger at one point said that he expects that the VCR will

become a major peripheral for home computers as Hypermedia becomes more pervasive. As a printer is used to record the results of a word processor or page layout program, a videotape can record the results of a HyperStudio stack. A session can be thus recorded and mailed to anyone who wants to see it, regardless of whether he or she has a computer. A VCR will display the tape and show what the stack does, how it works, and what it sounds like. As he put it, "you can record your stack in operation on a videotape, and mail it to Grandma."

Roger described HyperStudio as, among other things, a "catalyst" that brings together other existing peripherals and uses them in ways their designers did not necessarily expect. Where else do you see touch screens and videodiscs working together? And so on.

While attempting to describe the relationship of memory requirements to the size of sounds and video graphics involved in a stack, Roger described what he called "Wagner's Paradox:"

1) Everything complex can be broken down into simple elements;

2) Nothing is as simple as it seems.

The presentation was well received despite the lack of the large display. Roger said he'll be basically repeating the session Sunday, with an intervening "advanced" HyperStudio session Saturday.

Wandering about the show, Ray, Dave and I ran into a woman who looks incredibly like Merry Perry. Every time we see her we do double takes. It's uncanny! Strangely, shortly after we saw her, we saw someone who looked like Michael Fischer. At that signpost up ahead, your next stop: The MAUG Zone!

At the end of the day, I was accosted by a couple on the elevator. They saw the word MAUG on my name tag, and jumped all over me. "We are disappointed in your group's lack of participation here!" "We contacted you and tried to get some support, and got nothing!" "We're sure let down by your lack of interest in our show." I asked if they had the right group in mind, and the lady said, "Oh, yes. The Macintosh Apple Users Group." I straightened her out as politely as I could. Turned out they were thinking of some outfit called AMUG, which apparently annoyed them somehow. AMUG does have a booth here.

During the day, some signs appeared touting a previously-unscheduled event: An impromptu evening keynote address by Jim Merritt, an Apple II Product Manager in their engineering division, to be held at 6:30.

Well, at 6:50, Jerry Cline stepped up and said he didn't know what happened to Merritt, but he wasn't present. For a time it seemed as though the show would be completely without Merritt, but that changed later. But not quickly enough to save you from that cheap pun, I'm sorry to say.

Turns out there was a misunderstanding concerning Merritt's arrival time at Phoenix, and he did make it about an hour later, arriving to find to his surprise he was scheduled for an appearance an hour before...

Meanwhile, thinking fast, Cline organized a no-notice seminar featuring, at first, the present members of the Apple II Developers Association.

With no time to prepare, these people nonetheless created an interesting and enjoyable talk. At least, no one left!

Barney Stone stepped up to the mike first, and talked about the formation of the Association and discussed how they mainly served as a lobby group intended to keep Apple informed of the needs and wants (and gripes!) of Apple II developers.

He talked about the meetings the Association has had with Apple officials, and discussed the different feelings that came from them. At one point, he was given to feel that with the appearance of the mythical low-end Macintosh, the end of the Apple II would be nigh. "After all, why would anyone want to buy an Apple II at that point?" At a later meeting, he said, the "winds of change" were readily apparent, with Apple management clearly taking a new look at the Apple II and their situation with respect to the low end. The recent appointment of Ralph Russo as head

of the entire Apple II operation is a major development, with Russo in charge of hardware, software and marketing for the line. His job, as Barney put it, is to "re-invigorate the Apple II." He reiterated the point he made in his II at Work article, that Russo has repeatedly stated that he didn't take the job to "sit around and do nothing."

Where his feeling had been very negative before, Barney said his current feeling about the Apple II is "strong cautious optimism."

He also said he has been informed that advertising and marketing the Apple II is a "top priority" for the 4th quarter of the fiscal year.

Barney also mentioned that he had called Russo when he began hearing rumors a few weeks back that Steve Wozniak was back at work on the Apple II at Apple. Russo, being still new to the job, answered the question, "Gee, I don't know!"

Roger Wagner got up next and talked about the stories we've been hearing about the "low cost Mac." He asked us to use some common sense and try to find a way that a color Macintosh that runs Apple II software could conceivably be sold for under \$1000 when the current color Macs all run well over \$5000 now. He mentioned that one concept he had heard discussed involved a third party company (such as maybe Laser) that might build an Apple II emulator card for the existing Macs, and speculated that this might result in an interesting headline at product announcement time: "Apple Computers Now Run Apple Software."

Roger and Barney both mentioned that they were tired of hearing that the Apple II is ten-year-old technology; it's not, it's just the name that's ten years old. By that reckoning, the IBM is using 100-year-old technology. Roger pointed out that the GS is still doing things the Mac does not.

Ray Heizer of Heizer software got up next, and said it was a little difficult for a Mac software developer to follow 45 minutes of Apple II discussion. Then he asked how many present had heard of Heizer Software. When only a few hands were raised, he said, "Good. Then there's still some marketing to be done."

Heizer talked about how his company keeps production and distribution costs down so that they can deliver packages to retail for about \$20, and still pay the programmer 45-50% of that amount.

He said he was with us on the Apple II situation, that he had started out on an Apple //e himself, so his roots were in the Apple II as well as in the User Group.

He said his first piece of software appeared on a user group Disk of the Month in 1983 or so, and he's still waiting for the first shareware check to come in. Sometime later, the Mac appeared, and he managed to get a little space at the User Group table at the first MacWorld, where he sold about forty software packages at \$40 each. Returning home \$1600 richer, he found himself in business.

After Heizer sat down, Jerry Cline got back up and started looking for some more folks to speak. Imagine my surprise when he asked me to go up to the mike and talk about CompuServe!

Well, okay, actually, it didn't quite happen that way. He looked in my general direction, and out of the blue said, "Anything new happening on CompuServe?" By the time I realized he was talking to me and started to open my mouth, he had moved to Dennis Doms to ask about GENIE. Roger, Dave & Ray had a few moments to give me a hard time about that, and they did well, let me tell you!

Then he came back to me to ask if I'd like to come up and say a few words. So I did!

I babbled randomly about what MAUG and similar online groups are all about, and how convenient and useful it is to have a user group available at a moment's notice all day every day. Asked about news, I mentioned the recent influx of European users and the new viewpoints they are bringing, as well as the resultant presence of some of the programmers of the particularly exciting IIGs software we've been seeing coming out of France and Spain of late.

After a little more of this, I sat down, and Dennis Doms talked a bit about the upcoming A2-Central Summerfest. He said they've been told to expect some folks from Apple, but they don't know exactly who yet. Apparently, several Developer folks want to attend, and they haven't yet decided who will and who won't. He also said they expect to see some growth over last year's conference, and reminded everyone that the discount price offer has expired, and that the cost of the show effectively went up \$50 on the first of June. There was some speculation that they might get Ralph Russo himself to attend.

It was about at this point that Jim Merritt walked in! Merritt introduced himself, and discussed the "new committed Apple II organization at Apple." He mentioned that he primarily works with "Applications, utilities, and developer environments- The Finder, Control Panel, Installer, and Human Interface elements of the GS."

He started off by reminding us that he can't comment on unannounced products or give any details about "what's coming down the line," but said he could and would talk about the directions they're moving the Apple II.

As an example, Merritt acknowledged Roger Wagner's expertise in multimedia, and said that was a direction they wanted to take the Apple II.

As for development environments, he said he wants the user "to be able to create great Apple II software," citing planned (but not specific) improvements to APW and MPW cross-development systems.

He did tend to speak of nonspecifics, often in uninformative terms. For example, he waxed enthusiastic over "Universal Access - a thing which enhances interaction with the environment." Okay...

He also mentioned some ongoing development of special tools to assist the handicapped users, and gave some details of some things we've already seen in this regard.

Merritt did state that "we are looking into new Apple II systems and hardware." Mentioning recent releases such as the Video Overlay Card and the DMA SCSI card, he said, "we're not stopping there."

Pressed specifically for clarification as to whether "new systems" referred to CPUs, he answered, "we're always looking into new CPUs." But he would not get more specific than that.

Jerry Cline asked what could be done to try to bring back some of the major developers who have abandoned the Apple II. Merritt went on for quite a while on marketing concepts ("What products to seek and develop, that will interest the end users") and did admit that "Apple has a lot to learn" about marketing its products.

Barney Stone suggested that one thing that would be helpful in luring some old and new developers to the Apple II would be to drop the \$700+ Apple Partner fee. This generated a lot of applause, and Merritt was sympathetic. He said this point had been raised from inside many times. He said he felt the "big guns" aren't the ones who will be coming out with the hot, new exciting packages; it's the two guys in a garage who will produce many of the innovations, and recognized that the high cost of becoming a developer will discourage many if not most of these.

Dave Gair pointed out that using the fee as a qualifier for developer status results in many people simply sending the \$700 fee in for the purpose of getting the low developer prices, effectively "pirating hardware," purchasing enough to more than offset the \$700. Perhaps other criteria than money could be used to define developers? Merritt responded with general agreement, but pointed out that there are now so many developers that it's hard to do more than administrate the fee, that Apple can't realistically go out and visit all the developers to ensure that they are all developing and shipping their claimed products.

Asked about a good breakdown of the growth of developers, Mac vs. Apple II, he said that in general the number Apple II developers is going down, while the number of Macintosh developers is going up. No surprise there. He did say that he believed about 20% of all the developers were Apple II developers.

He felt this was primarily due to the fee structure, but

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pointed out that was strictly his own uninformed opinion. He did say he'd like to change that structure.

Merritt also mentioned a desire to eliminate the schism between the Apple II and the Mac, because it won't always be "Apple II and Macintosh." As he sees it, it will eventually be "Apple II and Macintosh and Product X and Product Y..."

Throughout his talk, Merritt indicated the extent of the recent changes in Apple II management by repeatedly referring to "the new Ralph Russo organization..."

There was laughter when someone, alluding to a rumor mentioned earlier, asked, "Is Woz back?" Merritt answered, "Honestly! I haven't seen him." He said he didn't believe in the rumor, that Woz's interests were elsewhere these days, and that this was just a rumor that had gotten "way out of control."

He closed mentioning that he felt that the Apple II needs more advertising and needs to be mentioned more in company appearances at trade shows, in press releases, and so on. "And from things I see, coming down the pike, you'll see that."

Clearly, more was unsaid than said here. Realize that Merritt works in an area that almost exclusively deals with items and events about which he is bound to silence.

But his presence here represents something we haven't seen from Apple in a long time—they sent an actual Apple II representative to talk officially to us.

His overall tone was enthusiastic and optimistic, and little remarks here and there hinted of good things to come. Dave and Ray didn't think much of his speech, but I did. He'll be around for the rest of the show, and may be slated as the formal keynote speaker for Sunday. We'll see.

That's enough for now! Breakfast in four hours. Good night!

LIVE! From the AppleFiesta,

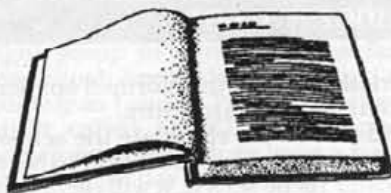
Joe T Walters

StoryWorks

Peter Stark looks at a new and topical approach to programmed learning

Introduction

StoryWorks is a hypertext type of program. It enables you to show a segment of an AppleWorks word processor document on screen and then, on pressing a key on your Apple, to jump quickly to a different screen showing another part of the document. This process can be repeated, so you can branch from one set of information to others as you wish, or go back to earlier parts of the document if you prefer. Multiple branching and multiple choices are both easy to arrange, so it is possible to access many parts of your document in an interactive way.



What is supplied, and what you need

StoryWorks can be run on any computer in the Apple II series having 64 K or more of memory. The program, supplied on a 5.25" disk, is unprotected, but your name and a short address are 'imprinted' on the disk when you first use it, and they then always appear on the Main Menu. The 32-page manual is very clearly written and easy to understand. It includes helpful Tips and Trouble-Shooting sections, and an Appendix which gives advice on various 'revert' and multiple choice procedures. An index of some kind might perhaps have been useful, but the manual is well laid out, so this is not a serious lack. StoryWorks is sold by the Teachers' Idea & Information Exchange (P.O. Box 6229, Lincoln, NE 68206, U.S.A.), who also publish many other interesting AppleWorks-based products for educational or related uses.

Segments and directives

Any version of 'classic' AppleWorks (1.0 to 3.0) can be used to produce the word processor documents needed for StoryWorks. However, the text has to be divided into suitable 'segments'.

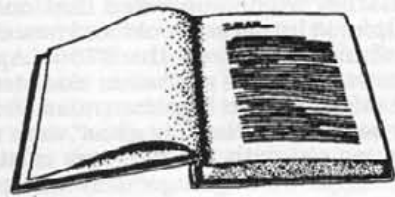
Each segment must be less than 2700 words long, and has to be sandwiched between two AppleWorks 'Set a Marker' commands. Two alternative methods for this are described in the manual; one allows up to 255 segments per document, and the other lets you have as many as 1024 segments. To link a given segment to one or more others in the same document, so that you can move among them when StoryWorks is run, you need to put a number of 'transfer directives' immediately after the second 'Set a Marker' command in each pair. This is actually quite simple to do, as is well described in the manual. Each transfer directive shows: (1) the keys which, if pressed, will produce some desired result; (2) the sign '>'; and (3) the effects to be produced by the designated keypresses. Let me give a few examples to illustrate this. Just for instance: if the transfer directive 'A,a>3b' is placed at the end of a segment, StoryWorks will jump from that segment to the segment numbered '3' (and will make 'sound b') if you press key 'A' (either capital or lower case). The transfer directive 'ESC>' will send the user back to the Main Menu if the ESCAPE key is pressed, whereas 'RTN><' will return you to the previous segment if the RETURN key is pressed. Quite a number of other possibilities exist, including that of increasing or decreasing a user's score, depending on whether the correct key or a wrong is pressed. For example: the transfer directive 'C>+4' will: (1) cause a score to be increased by one if the capital C key is pressed; (2) show the score on screen; and then (3) move to the segment numbered as 4. The set of segments (with their associated transfer directives) constitutes a 'stack', rather analogous

to the stacks used in some other hypermedia programs. A descriptive prologue (which does not appear on the screen) can be included in your document before the beginning of your stack, if you wish.

Buttons and their effects

Like other hypermedia applications, StoryWorks uses 'buttons'. With StoryWorks, however, the 'buttons'

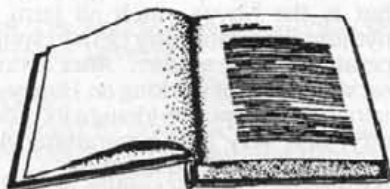
are the keys on the Apple II keyboard which correspond to the various transfer directives that you include in your AppleWorks document. (The mouse button can also be used, but is not vital). All but a few of the keys can be used as buttons. Capital and lower case letters can be made to behave either as identical buttons or as different ones. If you want to, you can have many different buttons in any given segment, each linked to another segment in the same stack and/or to a chosen sound. If a segment is too big to fit completely on the screen, small 'more text' markers appear, and you can then scroll the text up or down as necessary. The StoryWorks Main Menu includes various options, including several 'CONTROL key' selections. These allow you to choose among various possibilities - for example, whether to have the text displayed in 80 column mode or in the larger 30 column form. Twenty-six different sounds are available with StoryWorks. Most of these are buzzes or beeps in nature, some of them with a flavour of 'outer space'. The majority of the sounds are relatively simple, but they do offer the chance to add some further spice to StoryWorks stacks. The StoryWorks disk includes a Sound Sampler stack which makes it easy for you to try the sounds out and decide which ones suit your needs best. If you are using an Apple IIGS, the sounds will seem high pitched and too brief unless you first set the system speed to Normal. Also on the StoryWorks disk are several sample AppleWorks files, and it is well worthwhile to print these out (and run them with StoryWorks) to see what can be achieved, and how. One of these files, StackStarter, is designed to make it very easy for you to create your own StoryWorks stacks.



Uses and capabilities

As StoryWorks can be used on virtually all Apples, it is hardly surprising that it does not possess the full range of capabilities as more powerful programs (such as HyperStudio) that need a IIGS. In particular, StoryWorks does not provide any means of showing graphics, or of linking text to graphics, and its available sounds are limited (though useful). Nevertheless, with a little imagination it is easy to think of a host of uses for StoryWorks: programmed learning, tests and quizzes, other educational purposes, knowledge bases and information systems that are fun and flexible to use, 'variable plot' interactive fiction, and so on. Imagine, just for example,

that your first screen includes basic information on several specific topics within the framework of some wide-ranging subject. The screen should also give instructions about which keys (i.e. buttons) you can press to see other screens containing more detailed information about selected individual topics. Once you have chosen your first path to explore, you can choose to branch off further if you wish, to see still more details about items that interest you. Alternatively, you can simply return to your starting point - perhaps to set off again along different paths.



General impressions

Overall, I found StoryWorks easy to learn, and simple and enjoyable to use. The number of segments that one can have in a single stack, and the number of links possible for each segment, are impressively high, as is the speed with which one moves between segments. Obviously, you need to think logically and systematically when planning which segments to link to others, but much the same is true of other hypermedia programs. For many people, a real practical advantage of StoryWorks is that it runs on almost any Apple II. The fact that StoryWorks stacks are straightforward AppleWorks files (modified in the simple ways mentioned above) is another attractive feature. In short: StoryWorks carries out the job for which it is designed very well and efficiently. If you are thinking of possible 'hypertext' uses where graphics and/or complex sounds are not important needs, this is a reasonably priced product which you should certainly consider.

Peter Stark

info

Product : StoryWorks

Publisher : T.I. & I.E.

Available from :

Teachers Idea and
Information Exchange

PO Box 6229

Lincoln

NE 68206 USA

Price : \$49.95

Value : ★★★★★

Performance : ★★★★★

Documentation : ★★★★★

Doctor, Doctor; my Apple II is Poorly!

Recently I discovered a fault on our trusty //e. The symptoms indicated that something was wrong with the disk drives. They started to fail to boot all our favourite games etc. Did they need repairs and if so what? Finding the exact cause is not an easy task. I eventually acquired an Apple Diagnostics card. Now we will find it!! Nope, not that simple. No faults indicated.

The stalemate lasted for a couple of weeks, then a customer requested a colour monitor for use with his //e. We tested the Phillips CM8833 for him. Then our troubles really began. The drives refused to do anything! I tried various combinations of kit until I found that if I removed the monitor and drives, hooked up a new Laser drive and mono monitor then the system worked. Plug in the second drive and you guessed it, it failed to boot. Ah hah, the power supply cannot manage the load! A few days later and a new power supply... Now //e, colour monitor and their two little disk drives are doing fine (ahhh..).

The moral of the story is: don't jump to conclusions. If your drives are playing up, strip the system of cards and printers etc, render it down to one drive and mono monitor. Then add bits back keeping the variables down to one item at a time until you find something that doesn't work. Faulty power supplies are not uncommon and repairing perfectly good drives could be costly.



Other diagnostic and repair tips:

You can usually find and cure a large proportion of faults by a few simple procedures and you do not need £1000's of test equipment or nerves of steel.

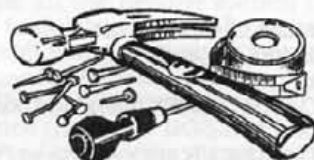
Metal contacts get dirty and could need cleaning. Try rubbing them clean with a pencil eraser (gently does it!), NOT the type with an ink eraser combined - they are too abrasive. Some contacts you cannot get to in this way, such as those on a chip. Buy a chip remover and inserter (only a few quid and very useful!). Try pulling a chip and re-inserting it, this can usually do the trick. Be sure to put it back the same way round as you find it.

NEVER touch contacts with your fingers.

Chips and plugs can work loose due to heat (expansion and contraction) or just moving the equipment. Push down gently on anything that doesn't move.

Always earth yourself and discharge any static on an earthed object such as a cold water tap.

This may seem obvious: NEVER do any of the above with the power on and always wait a few seconds after switching off before you make a move. Parts of the circuitry need time to discharge.



Fault on our trusty //e. The system started to fail to boot some of the time and that would never do!!! Did the drive/s need repairing? I know very little about repairing equipment, I am a programmer/analyst not an electronics engineer, but with a little common sense and a few helpful hints a great deal can be achieved. I thought that would be an easy task and to start with I wasn't disappointed.

First check its not your software that's at fault, try another program.

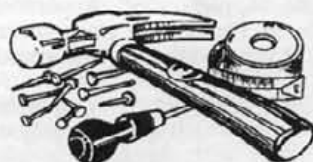
Diagnostic software that can be an enormous help, getting hold of an Apple diagnostics card can be a little difficult (not generally available - sorry folks). The software can do a few things that the card cannot and visa versa. Typical tests are disk speed, disk tracking, RAM test, ROM test, tests on various cards, monitor tests, etc. However if the fault is intermittent then finding it is going to be tricky.

A second computer of the same model is always a help, you can use it to swap chips and parts to trace the problem.

Pencil eraser (gently does it!). To clean in this way, such as those in a socket try a Tandy store. Chips mostly have a half-round 'notch' in one end, these will usually all face one direction on the board (they face the keyboard on our //e).

Pushing too hard could for example break the connecting tracks between components on a board.

Martin W Twelftree:
Principal of Chameleon Software



Our Shrinking Globe

Father and Son find the world is very small when talking on TABBS

Msg#:13833 *MAILBOX*
19/02/90 13:06:43

From:
FRED GREATOREX (Hendon London)
To:
FRED.G GREATOREX (Portland Oregon)
Subj: FAMOUS

Hey Dad! guess what? No, wrong. I have been telecommunicating with Ewen (the Sysop, and he would like us to whip up an article about us beaming our messages/letters back and fourth. I'm game, how about you.

Enclosed is a copy of the message.
Cheers **Freddy**

Msg#:13795 *MAILBOX*
15/02/90 18:28:34

From: SYSOP
To: FRED GREATOREX
Subj: REPLY TO MSG# 13787 (LETTERS HOME)

How about an article or extended letter from you to put in the magazine describing what you both do with your computers and how you have managed to communicate over the Atlantic with them? I would appreciate that very much.

Hope to see something in due course
Regards **Ewen**

Portland, Oregon

To begin, Ewen, we have been Apple II users for approximately 10 years, and our applications have run the gamut of the Apple programs.

The first Apple we purchased was an Apple II+ with a single DISK II drive and a whopping 64K of RAM. The excuse for purchase used at the time was, "it will help our son"; his school, at that time, was using Apple's in their computer class. I used the Apple to set up a home budget/checkbook with a program called The Home Accountant under DOS 3.3. It worked very well and was used until this past year at which time it was retired in favour of a newer program which runs under PRODOS.

Other programs include the perennial favourite "AppleWorks", AppleWriter II and IIe, a Genealogy program called Family Roots and games to numerous to mention.

In 1986, the trusty II+ was retired in favour of a IIe, which was promptly stuffed to the limit with Applied Engineering boards: Ramworks, TimeMaster

H.O.(clock), DataLink 2400 Modem with DataTerm software, Parallel Pro printer card, an 8 Mhz speedup chip, 40 meg hard drive by Applied Ingenuity, a new 3 1/2" disc drive and card by AMR, and, of course a pair of modified Disk II drives.

Also in 1986, I started using the IIe in a business setting. AppleWorks lends it self well to the business environment, regardless of what the users of MSDos machines would have you believe! Apple II's can easily pull their weight in the business community if given the chance.

Here in Portland, Oregon, there are at least 30 machines in use in various companies to track customers, facilitate billing and provide programming capability for computer-numerically-controlled manufacturing equipment. Not a job for a light weight computer.

Apple II's forever!
Telecommunication entered my life with the purchase of a 1200 baud modem about the time my son moved to London. The initial thought being that we could send E-mail back and forth. This has not happened as yet.

Here in the states, this referred to as a "Roundtoit"; as in "We will get 'round to it one of these days".

While waiting for some ambition to arrive at the door, an upgrade to a 2400 baud modem became available, and so the offer was seized and the change over was implemented.

The information service "GEnie" was subscribed to and used extensively in conjunction with the tracing of the Greatorex family line.

Telecommunications! An extremely practical and inexpensive method of staying in touch around the world. There is no substitute for the sound of a loved ones' voice, but this could lead to insolvency if pursued diligently!

Enter TABBS.
My son and I can send our thoughts and files very quickly and economically via E-mail, and so far this has worked rather well. The only difficulty experienced thus far, has been premature disconnect during online time. I have been unable to determine, at this point, whether or not this is from the TABBS end or a problem with the software and modem on my end. I have been told that British Telecom is occasionally unreliable. Whether this is so or not, I suppose, is a matter for conjecture.

This file will be compressed using ShrinkIt. Since this is my first attempt at this sort of thing, I sincerely hope it works.

Fred G. Greatorex

Hendon, London

I still remember 'our' old][+, and yes, it did help me with school.

Most of the time I spent on it, however, was learning to write programs that drew different shapes in hi-res graphics on the screen using simple random number formulas to generate coordinates.

After I left school, I joined the U.S. Navy and became a 'data processing technician'. That is the Navy's catch all term for anything from data entry clerk to system operator or programmer. After about a year and a half of working on Honeywell mainframe computers (doing a lot of data entry, and very little programming) I decided that I needed an Apple.

Fortunately for me Apple had just introduced the //c, a 'portable' computer with 128k, built in chips, and a disk drive. Who could want more? Who could possibly use 128k? The nicest thing about the //c was it's size, Apple's smallest computer for a sailor on the Navy's biggest Aircraft Carrier.

My //c and I made a Mediterranean cruise, a North Atlantic and a World cruise. During this time I added a flat-panel display, a Scribe printer, second 5 1/4 drive, a UniDisk and finally replaced my trusty scribe with an ImageWriter II. My 'software library' was pretty slim. I purchased Multiscribe for word processing, Beagle Graphics, and Apple logo II to keep me entertained.

Aside from the constant motion of the ship, my //c survived a couple of drops from my bunk (my //c being in it's case both times) and one night my external drives slid out of my bunk, only to be kept from falling by the connecting cables!

Just before I left on my World cruise Apple announced the //GS. So, I saved up, and sent my Father the money for A GS, Monitor and 3.5 drive which he had waiting for me when I returned home.

After that last cruise I was transferred to London and my GS came with me (with the trusty Unidisk and old ImageWriter II). It has been slowly added onto with a second meg of ram chips, and an Applied Ingenuity 40 meg hard drive, and a few other goodies. I still do a good deal of programming in Applesoft (Applesoft forever!), and it is still mostly programs that draw nifty shapes on the screen.

Almost all of my graphics programs have been compiled under the Beagle Compiler, a couple of them couldn't be run under a native mode // without boring me to tears. I also use my GS for word-processing, drawing, painting tele-communications and the odd game. Someone once asked me to describe my computer, and I told them it was basically a very flexible, and expensive doodling pad.

Fred Greatorex

AppleLink TidBits

We have trawled AppleLink and bring you the first in a series of articles from the Apple Technical Support Group

GS/OS: Making a Startup Disk With Printer Drivers

TOPIC

I want to create a startup disk for GS/OS 5.0 that contains drivers for both a direct connect ImageWriter and a LaserWriter -- but even after reducing the number of resources on a startup System Disk by using the Installer, there is still insufficient disk space to install the LaserWriter drivers.

We didn't find any ideas on how to accomplish this task in. The only solutions we found are:

- To remove drivers from the System Disk, which renders it nearly unusable (no P8, CDEVs, and so on).
- To recommend that the customer purchase a hard disk.

Is there another solution or minimum configuration that can be used.

DISCUSSION

"Chapter 5: Using The Installer" of the the Apple IIGS System Software User's Guide, version 5.0. (Apple part #030-1622-A) has a section on p. 99 called "Deciding What To Install", which discusses how to fit the desired parts of GS/OS onto a 3.5-inch disk for stand-alone Apple IIGS computers.

At the top of page 100, there is a paragraph referring the user to the "AppleTalk Network User's Guide for the Apple IIGS" -- which is included with GS/OS 5.0 -- for advice on how to install the required items for a networked Apple IIGS.

At the back of the AppleTalk Network User's Guide (Apple part #030-1633-A) is a four-page "Update to AppleTalk Network User's Guide for the Apple IIGS", which replaces "Creating a 3.5-Inch Networking Startup Disk" on pp. 24-26 of the network guide.

This update lists the procedures for:

- Using AppleShare File Servers, but not network printers.
- Using AppleShare File Servers and LaserWriter printers.
- Using one or two Types of network printers, but not AppleShare File Servers.
- Using AppleShare File Servers and ImageWriter or ImageWriter LQ

printers.

Using the third procedure, substitute a direct connect ImageWriter for the AppleTalk ImageWriter used in the procedure. The resulting disk provides access to both the direct connect ImageWriter and the networked LaserWriter.

The disk will include:

Graphic Control Panel DC Printer CDEV LaserWriter CDEV RAM CDEV P8 Drivers for:


AppleDisk3.5
Console
Atalk
SCC
Printer port
ImageWriter
LaserWriter

with 11K still available.

This does not allow support of AppleShare file services. One of the printers needs to be discarded before file services can be provided. This is noted by the Installer during the installation procedure for AppleShare on a 3.5-inch disk. When AppleShare for 3.5 is selected, a dialog appears with the following message:

"WARNING: This update makes a 3.5-inch disk into an AppleShare disk. Files will be removed. Install any printer driver you want (only one will fit)."

(NOTE: Do NOT install this on your only copy of the System Disk.)

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How IIGS Network Can Print From Single 3.5 Drive

TOPIC

I want to assemble an Apple IIGS system disk with the Chooser and other associated AppleTalk software that can use AppleWorks 3.0 on an Apple IIGS with a single 3.5 drive and networked ImageWriter II.

Here's what I need to know: What's the minimum ProDOS 8 system configuration that will allow this? Where do I get the required files, and how will I know if I've got the right versions?

DISCUSSION


Since the associated AppleTalk software is contained within GS/OS for the Apple IIGS computer, start by using the GS/OS Installer to make a GS/OS boot disk.

Install the "AppleShare on a 3.5 Disk" script. Once this has installed successfully, select the "AppleShare" script (NOT the "AppleShare on a 3.5 Disk" again) and press the "Remove" button. After this step is finished, select the "AppleTalk ImageWriter" script and press the install button.

This disk will be the boot disk for providing access to the networked ImageWriter. Contained on this disk will be all the needed system files to run both GS/OS applications and ProDOS 8 applications. Chooser.II is not needed because the Graphic Control Panel will be used.

Once the Apple IIGS has booted to the Finder, use the Graphic Control Panel's AT ImageWriter CDEV to select the desired network ImageWriter. This will leave the selected printer stored in RAM for use by AppleTalk protocols. It will also write the selected printer into the CDEV's resource file for use on the next bootup. Thus, if the same printer is desired, it will not need to be selected again. Eject (with the drive button) the GS/OS boot disk, insert the AppleWorks disk, and double-click on the AppleWorks application icon. Be sure to specify the correct slot information about the printer within AppleWorks (slot 1 for O3 ROMs or slot 7 for O1 ROMs). AppleWorks will then work as Claris has designed it to work in a one-drive environment. When you exit AppleWorks, the system will return to the Finder.

If this operation is performed with the GS/OS 5.0.2 System.Disk and System.Tools, all the correct versions will be automatically installed.

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Apple IIGS: Problem with Sort Directory When Using One Drive

TOPIC

On single-drive Apple IIGS systems, using Sort Directory on a disk other than the System disk causes a system crash. Before the disk on which the sort is to be done can be inserted, the System disk must first be ejected.

When the user chooses Sort Directory from the Apple menu, he or she is prompted to insert the System disk, and the data disk is ejected. When the System disk is again inserted and the OK button clicked, the system crashes.

Here are three workarounds:

- Use the new IIGS Finder.
- Attach another drive to the system so that the System disk doesn't have to be ejected.
- Upgrade the Apple IIGS' memory so that the RAM disk can be used. 

ESCAPING FROM APPLEWORKS' MENUS

Did you know that there is an undocumented fast escape route to get back to the main menu without all that tedious ESC/ESC/ESC/ESC/ESC/ESC? Simply press [OA-Q] & when the Desktop Index appears, press [ESC] just once, - try it, it seems to work from absolutely anywhere in the program, regardless of how deeply buried you are in any series of sub-menus...

REPAIRWORKS

Just now I had the dreaded AppleWorker's message "Getting errors trying to read xxxxx.xxx at /xxx.xxx/xxx.xxx".

Quickly reached for Repairworks by Q-Labs, booted it up, told it where my Computer Magazines Mailing List was, asked it to recover it, and five minutes later I had my press release database back! It works! (Needless to say, RepairWorks is now permanently installed on my hard drive...).

ProFILE Expansion?

Having used Apple's ProFILE hard disk drive for 3+ years now on my IIGS, I have recently come to realise that 10Mb just isn't big enough. I originally had a 5Mb unit, but changed it for the larger drive about a year later. Both these drives have given sterling service, even though they were 2nd-user devices. I have been promised a 20Mb SCSI drive from a Mac, which I was going to match with a Cirtech SCSI card. But now, after a little experimentation last Saturday, I am pleased to report that we have discovered a way of expanding a ProFILE set-up! Yup, that's right, expanding an existing ProFILE set-up, on an Apple][+, //e, or IIGS!

What you get is a set of cables, and a switching device, price £45.00* for the complete kit! Next you obtain a cheap 2nd-user 5Mb or 10Mb ProFILE, (we try to keep 5Mb units in stock for around £149.95*).

All you need to do is unplug your ProFILE cable from the interface card, re-connect it to the main "A" port on the switching device, then connect one of the supplied cables to port "B" and the second ProFILE unit, and then the 'third' cable to the main port on the switch device and the interface card connector. That's all!

You can now select either drive with a simple flick of the front panel switch (push-button versions also available). The only limitation to remember with this set-up is that you can't copy from one ProFILE to the other, but personally it doesn't present any kind of problems for me, and anyone needing to do so simply has to use an intermediary device such as a floppy or RAMdrive. Also, just make sure you never change the switch while either drive is reading/writing, or you may achieve unpredictable results! - But of course, this is simply common sense...

I'm using a "10+5" set-up on my IIGS with AppleWorks, Copy II+, MouseDesk, and a whole host of other ProDOS programs and find absolutely no problems whatsoever...

If you ask AppleWorks to load or save a word processor file from/to (drive A)/PROFILE/AW/WP while the switch is set to the wrong drive B, AppleWorks & ProDOS simply return the message that it's getting errors trying to read/save this file at this location, and all you've got to do is say you want to try again, flick the switch & off you go! - Brilliant! To extend the theory, we set up a three-way switcher, with a single 10Mb unit, plus two 5Mb drives, all running off the one interface card, and I'm happy to report that this arrangement also performed flawlessly...

TIME TO DIE

If you've seen Virgin/Mastertronic's new USA catalogue, you'll notice that there is a 'new' program for the Apple //ec called "Time to die". This is exactly the same game as "Borrowed Time" from Activision which we've got on special offer to clear at £9.95*, and Borrowed Time works on the][+ whereas Time to die is for the //ecGS only.

COLOUR "APPLE // SYSTEM" FOR £699.95

Did you know you can buy a brand-new, complete, ready-to-run colour Apple //-compatible system for just £699.95 including VAT and including UK delivery? Well, you can, and what you get is:

Laser-128 computer with 128K RAM, 80-column output, parallel printer port, serial printer port, serial modem port, internal 5.25" 140K floppy disk drive, external second drive port, headphone port with volume control, mouse &/or joystick port, plus a 14" Phillips CM-8833 colour monitor (which works not only with this Laser, but also IBM-PC CGA/RGBI, & any Apple // with an RGB interface, and it will also work on a UK PAL //e without extra RGB cards or modulators!).

Included in the package are all the necessary cables, as well as Copy II Plus v8.xx.

HYPERWARE FOR APPLE //e & //c

Scholastic have a brand-new multi-media product for 128K //ecGS called "HyperScreen". You can link text screens with other text or graphics screens, add sound effects or music, or work with images from a (USA) videodisk player.

Price £99.95 WYSIWYP.

DOS 3.3 RAMdisk for Apple IIGS

If you are interested in running older DOS 3.3 programs at lightning speed on a IIGS, take a look at RDC's "RAM 3.3" which allows you to create up to eight 192K DOS 3.3 RAMdrive partitions in your standard IIGS memory.

Believe it or not, RAM 3.3 works faster than ProDOS RAMdrives! With loading and storing data at over 300 sectors per second, RAM 3.3 beats ProDOS' 120 sectors/sec hands-down...

Just imagine that old DOS 3.3 software given a new lease of life... for only £40.00 WYSIWYP.

STOCKS/SHARES PORTFOLIO MANAGER

We are now agents for Compunetics' "Compusec" package. Unfortunately, we are never going to produce any advertising literature for this item, so suggest that people ask us for copies of the Compusec info pak.

The program sells for £59.50 WYSIWYP.

II Technical?

New(ish) (well, fourth quarterly issue coming soon), IIGS-only technical magazine. \$35.00 for 1 year (4 issues) including disk. Back issues available @ \$5.00 each with min \$4.00 foreign handling.

Write: II Technical, 18942 Dallas, Riverstone, CA 92508, tel: 0101-714-359-8480.

"FOREIGN" APPLEWORKS

Most people know that "PlusWorks" will allow you to use AppleWorks on the Apple][+/Europlus computer. However, PlusWorks only allows you to modify the USA version (same as the 'English' version sold in the UK), but not other foreign-language copies.

Well, although that is still true, we can now advise that "AW 3 Expander" from Applied Engineering will allow users of German v1.2, 1.4, and French v1.2, 1.4 AppleWorks to run on the][+. To use AW 3 Expander you will need a ViewMaster, Sup'rTERM, or VideoTerm (Videx), or fully compatible 80-column card in slot 3, preferably with a shift-key mod. You will also require a 16K RAM/language card in slot 0.

By the way, do remember that if you want a larger desktop than the 9K provided with this setup, you will need an AE RAMfactor card. The price of AW 3 Expander is £29.00 incl. p&p/VAT. (Users with earlier versions of AW Expander which may not support these special AppleWorks versions may obtain an upgrade for £5.00 WYSIWYP).

//e Quickie for youcc

Regarding John Beattie's mini-review (Apple 2000 Jun '90 pp24) on the Quickie hand-scanner for the IIGS, please note

that a //e &][+ version is now available at the same price.

INKY DINK

Dave Ward's note (Apple 2000 Jun'90 pp 29) about refilling inkjet cartridges with fountain pen ink may be o.k., but really sounds highly unlikely. If you want to save money & be safe, why not get the real deal?

Contact Rainbow Computers, 1a Hinkley Rd., Earl Shilton, Leics LE9 7NG Tel: 0455-840106 [fax: 843511], and buy their "Inky Dink" inkjet inks in cyan, magenta, yellow, and black - 17cc £11.73, 32cc £20.98, 64cc £39.74, plus £1.15 p&p.

CHEAP IMAGEWRITERS-2

Following my original article pp25 Jun'90 issue, I can now tell you about three ImageWriter-compatible printers you can buy new for much less than Apple's price.

The first unit is Laser Computer's excellent Laser-190A which is an NLQ 190cps 9-pin DMP, platinum colour, 110v mains input, parallel connexion, friction only.

Price *£299.95 including UK mains converter. This unit is ideal for Apple][,][+/Europlus or //e with parallel interface card, or Laser-128. (Add *£49.95 for tractor feed).

The second unit (Laser-190M) is basically the same as the 190A, except that it has a serial interface more suited to IIGS, //c, Mac, or][& //e users with super serial card or similar. The price of the 190M is also *£299.95 including mains converter. Boxes of 6 ribbons for these Laser-190 printers cost *£29.95.

The third Apple-compatible printer to come to my attention is Olympia USA's excellent "Olympian NP30apl" which is billed as ImageWriter compatible and costs *£369.00 including tractor feed, and including UK mains transformer from MGA. Ribbons for this unit cost £4.95 for fabric singles, or *£29.95 for a box of six carbon multistrike.

Some investigation in the UK has turned up the fact the Olympia UK have the same NP-30 printer available with an optional serial interface for £308.20 + £32.20, and at least one dealer regularly sells this unit to Macintosh users as an ImageWriter alternative. I am awaiting full details on the UK model, and will be talking to this dealer regarding full compatibility, - look for an update on this story in your next Apple 2000.

MAC MIGRATION

Connectivity, the buzzword of

the 90's, - the connexions possibilities continue to expand...

Potential or existing Mac users may be interested in some new kit which provides a unique data interchange capability. We all probably know that Macs with Alsoft's ProLink or Apple's File Exchange (AFE) software can read Apple // 800K 3.5" ProDOS disks.

Well, now, for the first time, a manufacturer has produced a system which will read/write 5.25" Apple // ProDOS disks! Simply plug in Kennet Technology's "Rapport" disk interface into the Mac external drive port, then connect Kennet's "Drive-360" or "Drive-1200" to the Rapport module, (additional Apple 3.5 Drives can connect anywhere in the daisy-chain).

With the Drive-360 you can now read, write & initialise Apple // 5.25" 140K ProDOS disks, - in addition, you can read, write & initialise IBM-PC 5.25"

360K MS-DOS disks! Drive-1200 reads, writes, and initialise IBM-PC 5.25" 1.2Mb MS-DOS disks, as well as reading Apple // 5.25 & MS-DOS 360K formats. An additional drive, "Drive-2.4", supports IBM-PC 3.5" 720K & 1.44Mb HD formats, Apple 400K & 800K 3.5" formats, as well as Kennet's own 1.2Mb & 2.4Mb 3.5" formats.

Drive-2.4 costs *£335.00 including Fifth Generation's excellent "FastBack II" hard disk backup software. Rapport costs *£225.00, and Drive-2.4 with Rapport costs *£545.00.

At this time I have no prices for the Drive-360/1200 which are not due for release until end June'90, (see next SoftCat Corner for prices).

Jon Gurr

(Apple II Product Manager, MGA SoftCat)

NEW CLEARANCES

ProDOS User's Kit (Apple) £19.95
Generally discontinued, but now available again from MGA while stocks last, - was £40.25. Includes ProDOS User's Disk, plus ProDOS User's Manual, Apple Part No. A2L2014. (Add *£4.00 if you want the latest version of ProDOS to be supplied with the package, - we're currently using v1.8).

Graphics Scrapbook Chapter I: Sports (Epyx) *£9.95
100+ Print Shop graphics.

Graphics Scrapbook Chapter III: School (Epyx) *£9.95
100+ Print Shop graphics.

Scrapbook Bundle (Epyx) *£24.95
All three Graphics Scrapbooks: School, Sports, and Off the wall. 300+ Print Shop graphics.

Copy II+ v8.4 (Central Point) £19.95
The undisputed champion of Apple II utilities. This is the latest version that will work on 64K][+ or unenhanced //e. We have a limited supply of 5.25"-only copies to clear - 3.5" bit-copier not included, although the utilities work great for copying 3.5" disks & files.

NEW CLEARANCE PRICES

AppleWorks v1.2 (Apple) *£79.95
AppleWorks v2.0 (Apple) *£94.95
AppleWorks v2.01 (Claris) *£94.95

NEW SOFTWARE PRICES

Flight Simulator II (Sublogic) £34.95
NewsRoom (SpringBoard) £29.95
The only newsletter printing program for 64K][+. Includes large library of clip art, plus 3 optional extra disks @ £19.95 each. Includes graphics editor.

GraphicWriter III (Seven Hills) £102.35
768K GS DTP greatly enhanced since first introduction. New version - lower price! Includes page layout, word processor/spell checker, graphics editor/paint module, hundreds of clip art images, plus many fonts. Even prints in colour.



STREAMLINE
APPLEWORKS 3.0
AW 3.0 Companion by Beagle Res, Inc. lets you customize AppleWorks to run efficiently. Tired of "Do you really want to do this?" - now get rid of it! Change Appleworks beep. Take full advantage of your machine's memory. Change "No" prompts to "Yes". Move the OA Q menu anywhere. Lots more.

NEW SOFTWARE PRICES

Here is a complete listing of revised prices from Penguin/Polarware who are renamed "Merit Software", (again?), and notice too that they have purchased the Learning Technologies titles that we had recently on special.

Crystal Sphere *35£24.95
Crimson Crown £9.95
Co-Topos £9.95
Talisman £9.95
Coveted Mirror £9.95
Transylvania £9.95
Spy's adventures in Europe £17.95
Spy's adventures in N.America £17.95
Spy's adventures in S.America £17.95
Electric Crayon: ABCs 53£9.95
: Fun on the farm 53£9.95
: This land is your land 53£9.95

Electric Crayon Deluxe:
: Dinosaurs are forever =53£12.95
: Holidays & seasons =53£12.95
: At the zoo =53£12.95
: All dogs go to heaven =53£12.95

Sesame Street Crayon:
: Letters for you =53£12.95
: Numbers count =53£12.95
: Opposites attract =53£12.95

Complete graphics system £9.95
Graphics Magician £9.95
Map Pack £9.95
All dogs go to heaven 35£19.95
Transylvania III G5£29.95

Apple II / Commodore-64 floppies
Gremlin hunt £9.95
Lion's workshop £9.95
Number please £9.95

Same or different £9.95
Scrambled eggs £9.95
Shutterbugs' pictures £9.95
Shutterbugs' pattern £9.95
Sliding block £9.95
Speedy delivery £9.95

Apple II / IBM-PC / Commodore-64 trippies:
Alpine tram ride £12.95
Animal hotel £12.95
Bike hike £12.95
Clowning around £12.95
Learning to add & subtract £12.95
Math in a nutshell £12.95
Monkey business £12.95
Pipeline £12.95

[*] also available as Apple II / IBM-PC trippy @ £12.95
[-] also available as Apple II / IBM-PC / Commodore-64 trippy @ £12.95
[GS] indicates IIGS-specific software
[S3] also available as Apple // 3.5" @ £14.95
[S5] indicates available as 3.5" or 5.25" at same price (choose)

3045 2014 3045 2014 3045 2014 3045 2014
MGA SoftCat

NEW DOCUMENTATION

Apple IIGS Firmware Reference:
1Mb Apple IIGS Update (Apple) £29.95
The firmware of the new 1Mb Apple IIGS computer is somewhat different to the original. This reference describes the new features including the system monitor and mini-debugger commands as well as the changes made to the SmartPort Firmware and the Keyboard Interface. 58 pages. (For a complete description of all firmware features you should also have the "Apple IIGS Firmware Reference" @ £22.45).

X-REF (Apple) £29.95
X-REF (Cross-reference) of Apple II books & notes is the key to all the programming books for the Apple II family and to the Apple II Developer Technical Support Notes. X-REF contains complete indexes to all of the books as well as a compiled glossary of terms. (100 pages).

Apple IIGS Hardware Reference:
2nd Edition (Addison-Wesley) £23.95
AppleWorks QuickStart (Oue) £18.45

Pushing AppleWorks to the limit (Computel) £12.95

DOS Starter Book (MGA) *£8.95
By demand, this is the cheapest way to get going with running programs, copying files/disks, and formatting blank data disks. At this price it is a real bargain for beginners as it picks all the bitsam & jetsam found in most intro books and quickly & simply tells you how to do the things you need to know. No fancy explanations, - just the bare facts ma'am! It tells you how to use the DOS (3.3) System Master Disk to format disks, copy files, and how to copy complete disks. Instructions are also provided for testing lower case adapters, 80-column cards, printer interfaces, 16K RAM/Language cards, and both drives 1 & 2 as well as the disk interface.

Describes the types of cards which will commonly be found in machines, their functions, and the de facto standards for their correct location. This book is constantly being added to, and generally improved upon as suggested by our clients. The book is a direct result of thousands of phone calls, and as such aims to cut 'em off at the pass... Written by Jon Gurr, a dedicated Apple II since 1977, the book also describes the differences between various models and their capabilities.

Using AppleWorks GS (Addison-Wesley) £17.95
New price for this excellent book.

Exploring Apple GS/OS & ProDOS8 (Addison-Wesley) £22.95
New price. (Full details on both these books can be found in our Ap Book Cat which is now in print).

The Larry Story (Abacus) £13.95
Over 150 pages of hints, tips and solutions for the best-selling Leisure Suit Larry series. Learn the Larry language and rack up more points...

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COPY][+ Version 9

Terry Cymbalsty checks out the latest version of this invaluable copy and utility program

Copy][+ is a series of disk utilities which run under ProDOS 8. Copy][+ has been available for the Apple II series of computers for a long time. I bought a copy over six years ago when it was available as version 3.4 and now version 9.0 is available!

Version 9 offers a few enhancements over version 8.2, which was the last version I owned.

To run version 9 the following equipment is compatible:

Enhanced Apple //e with at least 128k RAM
Apple //c
Apple //c+
Apple //GS

Note: To run the 3.5" Bit Copy Program one needs a Apple 3.5" drive not the 3.5" Unidisk.

Hence if one has a][+ or 64k machine then stick with a previous version or upgrade!

The program comes on both 5.25" and 3.5" disk formats. A 190 page manual is also provided.

For the easiest way to see what Copy][+ is all about, please study Copy][+'s main menu screen as shown

in Figure 1.

Most of the entries are self explanatory. The major additions from version 8.2 are the first item "Applications" and the associated item "Edit Applications". With these functions one may use Copy][+ as a front-end program and launch other programs as desired (much like ProSel). Also menu selection has been improved. Previously one selected options from the menu by using the cursor keys. Now one may additionally use the mouse or type the single letter listed to the left of each item to select the function.

Summarising the menu, one can:

- Create a list of applications or programs that can be launched, or run from Copy][+.
- When a launched application is terminated then one is returned to the Copy][+ menu.
- Copy any 16 sector unprotected 5.25" disk.
- Copy unprotected 3.5" disks.
- Copy individual files.
- Automatically copy files between Dos 3.3 and ProDOS formats.
- Copy DOS 3.3 disks (from 5.25" to 5.25" of course).

- Catalog a disk in four different views.
- Delete files.
- Delete all information from a disk.
- Delete DOS. (A DOS 3.3 function only.)
- Lock or unlock files.
- Rename files or ProDOS volumes.
- Sort the disk Catalog.
- Format a disk in DOS 3.3 or ProDOS format. Note that one may also format RAM-Disks also but for only ProDOS format.
- Verify a disk, file or check the speed of a 5.25" disk drive. The latter is useful for ensuring that one's 5.25" drives are operating cor-

rectly and adjusting them back up to speed if not.

- Compare files.
- View the contents of files as either Hex values or ASCII.
- See a map of where files are stored on a disk.
- Change the boot program on a DOS 3.3 5.25" disk.
- Restore files which may have been accidentally deleted.
- Create a new ProDOS subdirectory.
- Set the printer slot such that the user may have screen dumps of the information presented by Copy][+.
- Set the date.
- Set the mouse movement scale when using the mouse to select menu items.
- Finally save your settings of mouse movement scale, printer slot and date for future use.

Additionally to the above, available within the Copy menu is the ability to make backups of copy-protected disks in both 5.25" and 3.5" formats (although the Unidisk 3.5" cannot be used). I am not particularly interested in this feature so I will briefly list the functions provided.

- Auto bit copy a disk using parameters for that program provided from a list of parameters (regularly updated).
- Manually bit copy a disk with user provided copy parameters.
- Manual sector copy a disk.
- Nibble and sector editor.
- Edit parameters in the supplied list or add one's own.
- Print the parameter file.

The mechanics of copy protection are dealt with extensively in the excellent manual and in fact an appendix is included detailing various schemes used.

BUGS

1. One cannot use Copy][+ to copy GS/OS files with resource forks. For example, one cannot use Copy][+ to copy AppleWorks GS program files between disks. However Copy][+ can copy AppleWorks GS disks and data files.

2. Copy][+ caused severe problems when used with a GS. The GS had a 1Meg SprintDisk RAM card installed in slot 5 and a 1Meg Cirtech GS RAM card in the memory expansion slot. The SprintDisk is a regular "slinky" type RAM card. Copy][+ caused no problems whilst copying files to and from the GS RAM card but if one copied subdirectories and their contents to the SprintDisk everything looked fine. But when it came to copying the subdirectories from the SprintDisk then it was obvious that the files were corrupted on the SprintDisk. This was not a problem on previous versions of Copy][+ nor had the SprintDisk ever caused any problems whatsoever with any other program. I feel that this is a bug in the GS specific

Figure 1

```
Copy ][+ 9.0
(C) 1982-89 Central Point Software, Inc.
-----
A - Applications
C - Copy
T - Catalog Disk
D - Delete
E - Edit Applications
L - Lock/Unlock Files
R - Rename
S - Sort Catalog
F - Format Disk
Y - Verify
K - Compare Files
V - View Files
M - Disk Mapping
P - Change Boot Program
U - Undelete Files
B - Create Subdirectory
O - Set Options
Q - Quit
```

PRINTER
Off

20-May-90

APPLE IN LIQUIDATION?

AND ORANGE, PINEAPPLE, GRAPEFRUIT JUICE IN 1 LITRE PACKS

Now we have your attention, please read on...

We are now Authorised Dealers for **Applied Engineering** products. Call for information on AE's remarkable range of quality products for the Apple and for the Mac (yes, for the Macintosh as well!), or see our other ad. later in the magazine for specials and new products from AE and others...

Beagle Brothers TimeOut series for Appleworks at bundled prices (and yes, they do software for Macs as well!).

Appleworks/Appleworks GS upgrades from any earlier version of Appleworks still only £70.00. Excellent value - **Apricorn RAMPro** cards for the IIGS 0-4 megabytes.

Programmers and **HyperStudio** users call for **Roger Wagner Publishing** software and books (Commodore products as well).

By the time that you read this the new products from **INGENUITY** including the C-Keeper may be available, but their range of **Inner, Outer & CDrives** and memory cards is available now. If your GS can't keep time, try a **Nite Owl Slide On** battery

We can supply the full range of **Cirtech's** value-for-money products from **Cool-It** fans to the new **Primo Multifunction Card**, with SCSI and internal hard disc options. This card goes in the IIGS memory expansion slot and the SCSI option can support 8 external devices and save normal slot space. Achieve economical hard disc sharing with 7 users with the **InSyder SCSI card**, with or without its own internal 20 or 40 meg hard disc. Add a parallel interface to it and free yet another slot!

Discs Paper Original & Compatible Ribbons Hard Drives Cables
 PSUs Mac & PC Software Accessories See later advert. or call
CLOCKTOWER P.O. Box 1417, London, N8 9PW. Tel/Fax 081-341 9023
Prices include VAT for Apple 2000 members. Add £5 carriage for orders under £100 Others add 15% VAT



memory management code within Copy|+.

3. Versions of Copy|+ prior to version 9 experienced problems in accessing files three subdirectories or deeper on a volume. This bug has been fixed in version 9.

4. Early Copy|+ 9 disks have some further bugs. Catalog your Copy|+ disk and check the date of the file UTIL.SYSTEM. If that date is December 21, 1989 or earlier, contact Central Point (the publishers) for a free replacement.

POSTSCRIPT CHANGING COPY|+ VERSION 9.0 TO SUIT YOURSELF

Here is how to alter Version 9 to suit yourself. Break out Block Warden and follow UTIL.MORE. If you do not have Block Warden, you must adjust these instructions to whatever disk zapper you use, or get ProSel from Glen Bredon, which contains Block Warden and many other awesome utility programs.

All numbers preceded by the "#" are decimal; those preceded by the "\$" are, of course, hex. See Figure 2.

In each case the current default selection starts the list. Have a go at these patches. Let all of us know if you can improve them or you know of other possible patch points.

I have installed the above, and they all seem to work fine.

Terry Cymbalisty

Figure 2

-> CHANGING DEFAULTS <-

Default selections:

Relative block #9 (all are on second page of block):

CATALOG	-> relative byte \$1A7	\$15 = normal 16 = with file lengths 17 = with deleted files 18 = with hid chars
DELETE	-> relative byte \$1A8	\$1E = files 1F = disks 20 = dos
VERIFY	-> relative byte \$1A9	\$19 = disk 1A = files 1B = drive speed
VIEW	-> relative byte \$1AA	\$1C = values 1D = text
FORMAT DISK	-> relative byte \$1AD	\$22 = ProDOS 23 = Dos 3.3
COPY	-> relative byte \$1AE	\$0F = bit copy 5.25 10 = bit copy 3.5 11 = files 12 = disk 13 = disk with format 14 = dos
RENAME	-> relative byte \$1AF	\$40 = files 41 = volume

- Copy |+ V9.0 is available from MGA for £39.95 WYSIWYP
 Upgrades from earlier versions for £19.95

TimeOut Primer

Harvey Nyman gives us the rundown on these important additions to the AppleWorks program

Introduction

With the introduction of AppleWorks 3.0, many users were disappointed to find that they would have to upgrade their TimeOut accessories. As I am sure most readers will know, the TimeOut add-ons from Beagle Bros for AppleWorks, gave a seamless environment for many additional facilities in the integrated world of the program. Some of these have been upgraded for AppleWorks 3.0, including UltraMacros, which is arguably the most important and basic of the series. Some only work with AppleWorks 2.0 and are being replaced. The most recent of the upgrades/additions announced are 'TextTools' and 'MacroEase'. I had hoped to review both modules but so far I have received only TextTools from Beagle, but I hope to receive the second title soon having already paid for it!

TextTools

TextTools is a series of Word Processor enhancements. There are in fact eleven separate modules. User of TimeOut accessories will be aware that the modules can be disc or memory based, the latter only really practical with an expanded memory machine. However extending the number of modules, whether disc or memory based, will mean that AppleWorks takes a minute or two longer to load. If you are using only 5.25" discs, extra modules will mean more disc swapping, but with larger capacity storage device such as 3.5" discs, the extra loading is very little problem.

However TimeOut now supports over 30 applications in the same directory, and above this number a second TimeOut menu is created. As usual there is an update to the manual in the form of a notes file on the disc (both 5.25" and 3.5" discs are supplied). There are a number of module upgrades mentioned in these notes to overcome a number of bugs. Unfortunately either these upgrades were not made to the copies supplied, or other problems remain. I shall refer to these as each module is discussed.

1. Glossary

Glossary provides an alternative means of storing a set of abbreviations. A new TimeOut application is compiled, in a similar way to a set of Macros, except they are called just like a standard TimeOut module. The result is the same as a macro abbreviation, the text can be inserted anywhere in a word processing document. Up to 127 entries can be stored in one application file. I am not sure how much advantage most users would find over an abbreviation macro set. The abbreviations are probably marginally easier to set up, and the number is limited to 127 entries which is more flexible than a macro set. However there appear to be major bugs in the application. Using the sample demonstration file all is well. However if any alterations are made and the new styles compiled all hell breaks loose! Making any style selection causes a complete freeze on the word processing file, and only the emergency AppleWorks 3 Control-reset patch to return to the main menu is possible. All the contents apparently disappear and no new files can be created or loaded. The screen displays are also garbaged. A complete restart of AppleWorks is then the only way out.

2. Quickstyles

Quickstyles is a similar facility providing quick access to a set of formatting options. Again similar facilities can be achieved with UltraMacros. The advantage of this module is the placing of a 'StyleSheet' in the form of a screen window with descriptions which the user can define. Again though this module as supplied is not bug free!

3. QuickTabs

QuickTabs defines up to twenty custom rulers, which are immediately available. The application provides a more extensive ruler editor than the standard AppleWorks Tab Editor. A need for a wide variety of rulers fairly regularly would be need to make this facility useful.

4. MarkMerge

MarkMerge will be completely familiar to anyone who used AutoWorks

with an earlier version of AppleWorks. The standard Mail Merge facility of AppleWorks, is supplemented by this application. It has the facility of merging without reformatting the inserted label. This makes it possible to fill prepared forms. Like AutoWorks the field selection for merging is not as convenient as AppleWorks. A note of the order number of the relevant database fields has to be made and these numbers used in the document to be merge printed.

5. MultiPrint

MultiPrint allows the printing of up to 100 Word Processing files in one go, not from the desktop but from the disc. It is claimed to offer unattended printing of a series of files. I personally would not recommend leaving a printer to its own devices for too long! For all you authors very long documents can be printed with continuous page numbering over several disc files.

6. CopyBlock

CopyBlock adds a facility that will allow multiple columns for a word processing file. Essentially it is possible to copy a block of text, in just the same way as the AppleWorks copy within file works. Careful preparation is necessary for successful results. The text must be reformatted into suitable narrow columns and page breaks carefully worked out. The results can be very useful and avoid some of the old techniques of printing files with different margin settings and winding paper back. This section has been reformatted using the technique.

7. SuperFind

SuperFind adds some facilities to the normal AppleWorks find and replace commands, enabling the search for Printer Options and embedded commands, to include replacement, which is not possible within AppleWorks.

8. Analyst

Analyst produces a list on the clipboard, of all the words used in a document, with or without a word count. The latter is used in the indexer module and is a necessary preparation to producing an index.

9. Indexer

Indexer is a companion to analyst. It will produce a complete index for any document. The basis of the index is a word list produced by Analyst. Each word is searched for in the file in context and indexed. On a long document the procedure will take some time, and is important to prune the word list automatically produced by Analyst and remove unimportant words which are not required in the index.

10. TOC Generator

TOC Generator produces a Table of Contents for an AppleWorks Word Processor file. It will produce headers for Chapter numbers and titles, section and subsection headings as well as indexing figures and tables. The indexing points are indicated in the document with one of seven specifically numbered markers. For example a Section Heading is indicated by placing marker number 153 above the section. The index at the end of this article has been produced for the original page layout in this way.

11. CR Stripper

CR Stripper removes or adds Carriage Returns to a block of text. Text imported from for example TABBS will often contain unwanted Carriage Returns, and removing them so that the file can be easily edited is very fast. Adding Carriage Returns is necessary to produce columnar layout for use in Copy Block.

Conclusions

So what does this new TimeOut Disc offer. It is a mixed bag of utilities that will be useful for users who handle a lot of or long lengths of text files. Some of them can be almost as conveniently produced with a Macro, although if the Style and Glossary modules worked properly (!) they would provide format and abbreviation setup available from a selection window instead of having to remember a Macro letter. However I use for example, a Macro to produce my letter heading with address and date and correct formatting. Such a frequently used Macro is I suggest quicker and easier than calling windows for the text and formatting.

There are some unique and potentially very useful facilities. The Indexer and Table of Contents, together with CopyBlock for printing in columns, provide interesting additions to AppleWorks facilities. They are hardly necessary for everyone though, and many users may find limited use for them.

I would not described TextTools as a essential AppleWorks enhancement for many users. Viewed as part of the excellent range which Beagle provide to add to the basic facilities of AppleWorks it adds some additional facilities for producers of large amounts of text. I hope to hear soon that the bugs in the Quickstyle and Glossary modules are sorted out.

Harvey Nyman

Timeout Modules can be obtained from Bidmuthin, MGA and other dealers. Contact Ken Dawson, our Beagle Buddy, for details of the latest Beagle Bros. upgrades. Ken will register your copy and can supply you with updates as they become available. Ken can be contacted on 01753 611111.

Hotline News



A question that comes up fairly often is that of sorting data particularly in AppleSoft programs. Most books on AppleSoft and other languages for that matter include a sort routine but this is invariably 'Bubble sort' which is just about the slowest and simplest method available. For a long time I have used a 'Shell sort' routine in my AppleSoft programs which works reasonably well. Shell sort was devised by Donald Shell and later modified by Marlene Metzner and is usually referred to as the Shell-Metzner sort. Shell sort is a relatively fast sort but there are faster ones such as Quick sort. Quick sort works best with languages that allow recursion such as Pascal and C but Shell-Metzner sort is easy to implement in AppleSoft as is shown in the listing below:-

```
7500 REM "==== Shell-Metzner sort
      >>> for Shares <<< ===
7510 Q$ = P$
      :P$ = "Sorting Shares"
      : GOSUB 90:P$ = Q$
      : FOR M = 1 TO SH%
      :AS%(M) = M
      : NEXT
      :MI = SH%
7520 MI = INT (MI / 2)
7530 IF MI = 0 THEN RETURN
7540 A3 = SH% - MI:A2 = 1
7550 A1 = A2
7560 A4 = A1 + MI
7570 IF SN$(0,AS%(A4)) <
      SN$(0,AS%(A1)) THEN 7600
7580 A2 = A2 + 1
      : IF A3 < A2 THEN 7520
7590 GOTO 7550
7600 M = AS%(A4)
      :AS%(A4) = AS%(A1)
      :AS%(A1) = M
      :A1 = A1 - MI
7610 IF A1 < 1 GOTO 7580
7620 GOTO 7560
```

The routine shown above is one that I use to sort a long list of Shares SN\$(*,*) is used to hold the names of Shares and other details about them and the integer array AS%(*) is used to hold the pointer to the Shares in SN\$(*,*). The variable SH% holds the number of shares in the list and line 7510 initialises the array AS%(*). The sort routine then proceeds to change the pointers in AS%(*) so that they make the list alphabetical although I won't go into detail how this is done. The advantage of this method is that the share list is in it's original order. To print out an alphabetical list just use the following:

```
10 FOR M = 1 TO SH%
   : PRINT SN$(0,AS%(M))
   : NEXT
```

This routine is easily altered so that it works with any array. If any readers use faster or better sort routines in their programs, please, let us know so that we can all benefit.

Dave Ward

OCR for the Apple II

6 July 1990

San Diego, CA — WestCode Software announces the upcoming release of INWORDS, Optical Character Recognition (OCR) software for the Apple IIe and Apple IIs. This new and innovative technology, combined with the hand-held scanners now available, will revolutionize data entry for the Apple II.

With INWORDS, the hand-held scanner becomes a very powerful and productive tool. No more typing—INWORDS provides the user with the ability to scan in text at up to 3000 characters per minute. Now, in addition to the scanner's more traditional image-capturing capabilities, users will have a fast and accurate method of integrating printed material into their projects without monotonous and tedious keyboard input. A simple swipe of the information with their new scanner, and INWORDS will quickly deliver text for their favorite word processor, database, or spreadsheet.

Actively responsible for the development of this new Apple II technology is Alan Bird, creator of the Beagle Bros.' Appleworks enhancement technology known as TimeOut. Bird is widely recognized and respected throughout the Apple II community for his highly successful Beagle Bros.' programs Quickspell, Thesaurus, Beagle Compiler, and Program Writer, and for the word processor enhancements made to the latest version of the ever-popular Appleworks program by Claris.

"INWORDS represents our continuing commitment to provide innovative technology in high-quality, dependable software to the loyal Apple II user," said WestCode co-founder Rob Renstrom. "...And having established the feasibility of OCR technology in both the 8-bit and 16-bit environments of the Apple II, we are certain that the introduction of this powerful technology will greatly enhance the appeal of hand-held scanners to a much broader segment of users," added WestCode's John Oberrick.

INWORDS is scheduled for release in September of this year. Pricing and additional product information will be announced at a later date.

Inquiries contact:

WestCode Software
11835 Carmel Mountain Road
Suite 1304-311
San Diego, CA 92128
(619) 679-9200

Apple UK stop all support for Apple II

New Developer Alliance Programme only supports the Macintosh range

In announcing their new Developer Alliance Programme, Apple UK deliver what can only be described as a crippling blow to the future development of the Apple II in the UK. No mention is made whatsoever in the press release and related material of support for the Apple II series or the IIGs.

This is not an unexpected move considering the level of support that Apple II users in the UK have grown to expect, and that Apple UK recently announced to the dealers that they were no longer supporting the machines. It flies in the face however of recent moves by the parent company in Cupertino. The Macintosh remember, is only one of the three families of computer manufactured and marketed by Apple Inc. worldwide.

The Apple //e family (which includes the //c+) and the IIGs still represent a strong element in Apple's sales worldwide. Development of new hardware and software for the II series continues unabated on both sides of the Atlantic, and many of the estimated 28000 developers worldwide are in fact developing for the Apple II or IIGs.

We publish various recent articles describing the current situation. The first of these is from Apple UK itself and describes the new Developer Alliance program they have just launched. Subsequent articles describe the developing situation on the Apple II in the US and how at least in that country there is a ray of hope for the Apple II survival.

[1] Press release issued by the Apple Developer Services of Apple UK

For further information please contact:
Judith Coley/Frank O'Mahony
Apple Computer UK 081 862 3028
or
Zoe Smith/Cathy Pittham
GSW 071 402 3355

2 July 1990

APPLE UK ANNOUNCES NEW DEVELOPER ALLIANCE PROGRAMME

Apple Computer UK today announced a significant new support programme, designed to meet the needs of the growing numbers of Apple developers in the UK.

The Apple UK Developer Alliance Programme will provide an optimum level of services and support to the developer community and will be run by Apple's Systems Development team.

There are over 28,000 developers worldwide, who have created more than 4,000 applications for the Apple™ Macintosh™. This latest move by Apple Computer will help to further strengthen the worldwide contribution of UK developers in the evolution of the Macintosh range of applications.

Apple Computer UK developer services manager, Jennie Rose, commenting on the new programme, said; "The Developer Alliance Programme has been designed in co-operation with developers and offers a range of benefits

including technical support, training courses, discounts on hardware and technical briefings.

Apple is now in a position to offer total support to the rapidly expanding UK developer community."

The establishment of the programme is a natural progression for Apple, as Jane Burley, market development manager, explains, "The evolution of the Macintosh product family over the past four years and consequent increase in development tools has led to a huge growth in the developer community. The creation of

the Developer Alliance is in recognition of the need for an up-to-date programme that takes into account the diverse requirements of this important group."

The Developer Alliance will take over from the Apple Developers Group (ADG), which to date has worked on behalf of Apple to provide support and guidance to UK developers and build the community.

The membership fee for the programme is £750 per annum. Until 31 August 1990 registered members of the ADG will be able to join the Developer Alliance at a reduced cost of £400.

Apple and Apple Macintosh are trademarks of Apple Computer, Inc.

[2] Article - Barney Stone, Editor "II at Work" the Apple II productivity newspaper

Dateline: May 24, 1990

Ralph Russo, a seven-year Apple veteran, was recently appointed the director of the Apple II product line for Apple Computer, Inc. Thus, for the first time in several years, there is now one person responsible for the Apple II product line, including software, hardware and marketing. Russo's appointment fills a gap in the Apple chain of command that had been pointed out by a number of Apple II supporters, including the directors of the Apple II Developer's Association.

One of those directors, A2-Central's Tom Weishaar, had noted on numerous occasions that you had to go about seven levels down from John Sculley in the Apple organisation to find someone whose job was strictly Apple II related. That appears to have been cut by more than half; Russo reports to Don Casey, who reports directly to John Sculley.

Russo was originally hired by Steve Jobs for the Macintosh development team. At various times he has reported directly to Del Yocum and Mike Spindler, so he has been no stranger to Apple's top management.

Russo's job now is to develop a strategy for the Apple II, sell the plan to Apple management, and implement it. In his new position, Russo will draw on resources from throughout Apple, and he will be in charge of everything for the Apple II: hardware and software development, and marketing.

In a conversation with Russo yesterday, he told me that he "didn't take the job to sit around and do nothing."

I told Russo that I thought the Apple II needed three things - advertising, new CPU's, and evangelism to bring third-party developers back to the fold - and that if any of the three were missing, Apple would be wasting their time and money. Russo said that he agreed.

I also told him that no computer could thrive as a "K-12 only" system, and that Apple had to market the Apple II to home, home office, and small business users. Again, he said that he agreed.

Russo made it clear that he knows about the sad state of the Apple II third-party community, about the need for old-style Apple evangelism to that community, and about the ill will that Apple has generated among some of its best supporters by neglecting the Apple II line for so long. He also Apple II and the lack of consumer sales, and the fact that an Apple II sale should never be viewed as a lost Macintosh sale.

In short, this guy knows the score, and he's out to turn the game around.

With all of the mixed signals that have been coming from Apple lately, the appointment of Ralph Russo as director of the Apple II product line comes through loud and clear as a positive sign for "Apple II Forever".

Barney Stone, Editor "II at Work" the Apple II productivity newspaper.

[3] Extracts from article in A2-Central June 1990 by Dennis Doms

SCULLEY COMMITTED TO APPLE II

John Sculley spoke to educators on Apple's future plans during the Apple Vision 90's event broadcast to 21 Mid-west cities on April 24. Comments regarding the Apple II's role in this commitment were a significant portion of the speech.

Mr. Sculley made several introductory remarks about Apple's involvement with education, and commented on his perception that we are moving from the industrial age economy based on manufacturing from raw materials into a global economy based on the value of information. His thrust regarding Apple's partnership with education was a concern in insuring that our society did not become "resource poor" in the information age. Apple's recent focus on Macintosh at the higher education levels and the Mac's introduction into the kindergarten through grade 12 (K-12) curriculum was discussed. He then used this as the basis to address the challenge that Apple is facing ("Some of our competitors have said that we no longer care about the Apple II") by responding to the question "What is our commitment in the future?".

Mr. Sculley's remarks included several very positive statements:

"There is no computer in the world that has changed education more than the Apple II. It's a proven tool. Its one that you as educators helped shape. It is one that we are firmly committed to in the 1990's."

"...the way the Apple II is designed, it's very modular in concept. We are able to add technology to it..."

He used an interesting new term in explaining how multimedia creates a more effective learning environment: "Video overlay means that the Macintosh IIgs becomes a true multimedia environment." (emphasis ours).

The most heartening news? "Another way to look at our commitment is to look at where we are spending our research dollars. I can tell you that in this fiscal year, 1990, that we have increased our research and development behind the Apple II by some 20 per cent". So we're not walking away from the Apple II at all, but we recognize that not every technology is right for every situation, that it is important that you have choices."

In regard to those choices, some of Apple's 1990-91 strategy was revealed along with comments regarding their current technology. The first strategy involves creating low-end Macintosh systems which retain their system software consistency with the current Macintosh line. Also, Apple will be trying to solidify compatibility bridges between the two product lines. This has already been achieved to a large extent for peripherals such as printers and disk drives. Data compatibility can be facilitated through the two computers common use of a 3.5 floppy format, and the connectivity provided by AppleShare. Adding the Mac's ability to read MS-DOS disks, Mr. Sculley proclaimed that no other manufacturer can currently offer that flexibility in data exchange.

Mr. Sculley also revealed that Apple is working on an Apple II version of HyperCard, referring to the vast array of user applications ("stacks") generated by HyperCard's "end user" technology. HyperCard does not require a technical programmer to create applications, and Mr. Sculley asserted that Apple did want to bring that same capability to the Apple II as another way "the two products can leverage off each other in a mixed environment".

He stressed Apple's deep commitment to education, education reform, and the K-12 market. His concluding

remarks included:

"We also have a very strong commitment to two technology families, the Apple II and the Macintosh. Each has their own set of strengths. We want you to be in a position to choose what you feel you need to be able to do..."

One other future product was mentioned: a no-compromise Apple II emulation card that will operate inside of a future Macintosh product.

Apple's Vice President in charge of Education, Dr. Bernard Gifford, spoke next in a session where the emphasis was on computer based educational tools for a "true learning society". He began with a discussion of Apple's current programs such as the Apple Classroom of Tomorrow project and Apple's grant programs. He also discussed Geographic Television, the multimedia American history project for the IIgs born out of the partnership of Apple's MultiMedia Lab, National Geographic, the state of California, and LucasFilm.

Dr. Gifford revealed that a guide consisting of over 250 programs selected from a group of 1000 Mac educational packages would be available. He expected that the catalog might expand to 1000 application by next year. He also revealed that 900 new Apple II applications had arrived since the beginning of 1989 (over the course of the last year and a half), and that a new booklet would describe these programs. He added "...all of the applications included in this booklet, I think, clearly demonstrate that there is a heck of a lot of life left in the Apple II platform; it is still generating enormous creativity on the part of developers." He also mentioned that there is a tremendous increase in AppleShare-aware software.

But we later received a videotape titled The Partnership Continues. As part of the package which included the promised software catalogs (impressively, this arrived about a week after the Vision 90's event), and this tape referred repeatedly to the synergistic combination of IIgs and Macintosh systems side by side, and also to the longevity of the "older" Apple II systems which are still in use. John Sculley also asserted that an Apple II team had been brought together for more coordinated development. Will this be the face that Apple maintains?

Dennis Doms A2-Central June 1990

[4] Barney Stone on the Apple II Developer Summit

The following represents my own personal view of the recent summit meeting at Apple. This report has been reviewed by most of the participants, and not everyone agrees on the facts, the tone of the report, or the conclusions. I have invited those who disagree to contribute their own comments.

Apple had only minor comments to make about the report. Some of their suggestions have been incorporated in the final draft; others, which tended to make it read like an Apple press release, were not.

Barney Stone

Background

On February 26, 1990, the ad hoc Board of Directors of the recently formed Apple II Developer's Association met with representatives of Apple Computer at Apple's Marketing Department offices in Cupertino, California.

The meeting was originally planned as a follow-up to an earlier meeting between the developers and Nancy Stark, Manager of Apple II and Peripheral Marketing for Apple USA. At my request, and with the cooperation of David Hancock (Senior VP, Marketing, Apple USA) the meeting was expanded into a "summit" where we could discuss the future of the Apple II with all of the relevant departments at Apple. Present at the meeting were:

Apple II Developer's Association
Mark Simonsen, President, Beagle Bros.
Bob Hardman & Bob Carroll, President & VP, Applied

Engineering

Roger Wagner, President, Roger Wagner Publishing
Tom Weishaar, Publisher, A2-Central
Paul Boule and Dan Muse, Publisher & Editor, A+/inCider Magazine
Ron Lewin, Marketing Director, Micol Systems
Barney Stone, President, Stone Edge Technologies;
Editor, II at Work
(Mike Harvey, Publisher of Nibble, was snowed-in in Boston)

Apple Computer Inc.

David Hancock, Senior Vice President of Marketing, Apple USA
Mike Homer, Director of Product Marketing, Apple USA
Nancy Stark, Manager, Apple II and Peripheral Marketing, Apple USA
Jane Lee, Manager, Apple II Product Marketing, Apple USA
Sue Talley, Manager, Education Market Development, Apple USA
Kirk Loevner, Director, Developer Group
David Szetela, Manager, Developer Services
Scott Schnell, Manager, Evangelism
Moira Cullen, Manager, Developer Programs
Jonathan Fader, Manager, Education and Multi-Media Evangelism
Sandra Bateman, Manager, Public Relations
Rajiv Mehta, Manager, Apple II Product Marketing, World Wide Product Marketing

All non-Apple people in attendance were required to sign non-disclosure agreements covering the entire contents of our discussions, so what I can say about the meeting will be somewhat limited.

All of the participants from Apple were quite open and frank with us, although, of course, they could not reveal all of their plans for the future. David Hancock, whom many of us had expected to zip in, spout some platitudes, and zip out again, spent nearly two hours with us, and did more listening than talking.

Issues

You can be sure that most, if not all, of the issues that have been raised by Apple II owners and developers were discussed, many of them extensively.

Among the issues that we raised were marketing (including advertising, dealers, Apple reps, etc.), Apple's attitude towards the Apple II, the need for new hardware and software, the state of the "third party community", relations with developers and end-users, and un-tapped potential markets for the Apple II.

Two of Apple's major concerns were commitment to Apple II users and customers and the global nature of their business. Other areas addressed by Apple included maintaining customer loyalty, competition, margin requirements, availability of resources, and return on investments.

We came into the meeting with a variety of beliefs and preconceptions. Ron Lewin of Micol Systems had prepared and distributed an extensive 10 page report on the Apple II, including quotes and market research from a variety of sources. However, it quickly became apparent that many of the truths that are held to be self-evident among Apple II enthusiasts break down in the face of cold, hard economic and marketplace realities in the world of five billion dollar high-tech companies.

When presented with such data, Apple people tended to become a bit defensive, suggesting that our opinions were based on incomplete or inaccurate information. We, of course, responded that that was the best we could do, since Apple will not release better data.

Overall, I felt that Apple was genuinely interested in our suggestions and feedback on smaller issues (how can developer services help Apple II developers; what kind of co-marketing opportunities are we looking for).

The big picture, however, was a forgone conclusion. We didn't have anything to say that Apple had not heard before, and hearing it once again was not going to convince anybody at Apple that they had made any wrong decisions.

(That last statement - that we never really had a chance to make a major change in Apple's strategy for the Apple II - has generated more controversy than anything else in this report. One major participant from Apple has objected that it is not true, and some of the board members tended to agree with them. So it should be emphasized that this is my own personal opinion. - Barney)

Realities: Good News and Bad News

Without stepping on Apple's confidentiality toes, I think I can safely report the following as accurately representing Apple's plans for the Apple II:

The good news is that Apple is not about to drop the Apple II from its product line.

(Please read that again. Now memorize it, so you can quote it whenever some less-informed person tries to convince you otherwise!)

Apple is serious about supporting its installed base, even if their ideas about what that support should include are not exactly what we, as Apple II users and developers, would like to see. Apple II hardware and software R&D is continuing, although, I suspect, at reduced levels. And some new Apple II products will be appearing soon. We should also see some improvements in developer relations, and perhaps some new marketing opportunities.

(The new DMA SCSI interface card for the Apple II, announced yesterday, is one of the new products we've been expecting. Meanwhile, Apple's new 1 year warranty, retroactive to 1/1/90, and special offers for AppleCare maintenance contracts, both of which were announced publicly since our meeting, are examples of improved support that extends across both of Apple's product lines. Apple will also emphasize the Apple II at the National Apple User Group Conference in April, and will participate in the New Jersey AppleFest and in this summer's A2-Central conference.)

The bad news is that there will be no major new push to market the Apple II. Apple's future is clearly the Macintosh, and you might as well get used to it. As Dave Hancock said, "Our (Apple's) whole purpose in life is to bring the very edge of technology to people."

Although the Apple II's ever-present label of "10 year old technology" is patently unfair to the advanced technology in the Apple IIGS, it is likewise obvious that the Apple II will never again represent the "very edge of technology".

The Future

To Apple II users and developers, I will make the same point that I made to Dave Hancock: Not everyone needs "the very edge of technology". AppleWorks was never the very edge of technology, yet for vast numbers of people, it's all the computing power they'll ever need. And, of course, far more powerful programs have been, and continue to be, available for the Apple II.

While the nature of the Apple II market may change over the next few years, opportunities will continue to be available for hardware and software developers, particularly in the educational market, and a wide variety of products will be available to end users if you will continue to support the companies that support you. If you need "the very edge of technology", I'm afraid you'll have to buy a different computer. But then, you already knew that, didn't you?

Barney Stone, for the Apple II Developer's Association

Apple II Forever!

Two new Apple II magazines

Recently, two new periodicals, entirely dedicated to Apple II computers have been added to the somewhat meagre assortment of publications dealing with this brand of computer. A good sign for the future, because lately the opposite has been the usual, Apple magazines being discontinued or, at best, two magazines merging into one (A+ and InCider). For us confirmed Apple II users the number of still existing journals dealing with our computer have become more and more scarce.

II AT WORK *Apple II Productivity News*

BARNEY STONE, owner of the Stone Edge Tech, has introduced on the market a really superb versatile Data Base Program, the DB MASTER. Stone also thought that the Apple II world needed a magazine dedicated entirely to those Apple II owners who use their computers seriously, e.g. in business, research or production. In other words: you will never find a single article on computer games in the **II at Work**.

A lot of the text is of the pattern "this is the best way to use your Apple II". There are also various hints for special applications, equipment necessary for certain special purposes. Besides, **II at Work** is open to companies marketing software as well as hardware. The difference in style between editorial text and advertisements on these pages are practically nonexistent.

I have read two issues of **II at Work** and it has an appearance of great ambition and seriousness. Part of the magazine is of course dedicated to the use of DB MASTER, but there are also articles on AppleWorks. BARNEY STONE means (and rightfully so) that DB MASTER is immensely more powerful than the AppleWorks Data Base. On the other hand it would be unwise to ignore AppleWorks entirely.

II at Work is of tabloid format and contains about 30 pages. There are four issues a year. In the USA you get the magazine free, but if you want it forwarded by airmail outside the USA the cost is \$18 for four issues. Barney Stone asked me to emphasize that he cannot guarantee that there will be exactly four issues within the span of a year. The magazine is, after all, free of charge so you cannot really put too firm a demand on the publisher. But if you pay \$18 it should be reasonable that you get four issues, but not necessarily within 12 months.

If you are interested in reading about Apple II's used in business, production and research, then the \$18 will be money well used to get the **II at Work**.

GS+ *The first Apple IIGS Magazine + Disk Publication*

GS+ is a fairly new magazine for the Apple IIGS. It concerns itself only with products for the GS. Nothing but products for the GS+ were treated in the issue that I had the opportunity to read - not a single word about AppleWorks or other 8-bit programs. As an option to GS+ you can have a 3.5" disk with, for instance graphics, source code, icons, new levels for Arkanoid II.

My issue contained among other things: hints on AppleWorks GS; how to create graphics with your Paint Program; a beginners course on ORCA/C; reviews on HyperStudio, Xenocide, Life & Death, Programmers Online Companion. I especially valued the part about graphics. As his starting-point the author had chosen a rather attractive picture and described, step-by-step how he had created it. On the disk were three to four pictures illustrating the route leading to the final picture, also included on the disk. Very instructive! The part about programming in ORCA/C was very interesting too; evidently programming in ORCA/C will be a recurring theme. A "Trash Can Award" is included in every issue. It is given to products that GS+ means should be shunned like the plague. **Gnarly Golf** was the target in my issue.

Apparently GS+ will try to cover and write about all aspects of GS-compatible products. In one issue only, eight different GS-programs were treated.

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Do you run a business with a Macintosh system? Then ASTRA is for you. Easy to use, its not a 'PC' program running on a Mac. Written with the Mac and you in mind! We use ASTRA and we think it's the best on the Mac. From ASTRA 'Overture' to the full multi-user ASTRA Accounts, ring us now. Prices start at £120.

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The GS+ format is A4 (or thereabout). It contains 40 pages and is produced on an Apple IIGS with AppleWorks GS and a LaserWriter IINT. GS+ doesn't appear as "professional" as, say, InCider or Nibble. However, it isn't necessary for a magazine containing first class information to have a "professional" layout and exterior appearance - look at A2-CENTRAL for instance. Finally, my impression is that the articles in GS+ were of good quality and of the right level of complexity, at least from my point of view.

There are six issues a year, and for subscribers outside North America the price is, including disk and air mail, \$61. My opinion is that the GS+ can give Apple IIGS-users a lot of useful information and hints about new products for the Apple IIGS.

II at Work

P.O. Box 3200, MAPLE GREEN,
PA 19002, USA

\$18/four issues - air mail to Europe.

NOTE! To get the **II at Work** you have to fill up a special form with information about how and for what purpose you are using your Apple II. Contact your computer group for a copy.

GS+ Subscription Services

c/o EGO Systems, P.O. Box 15366, CHATTANOOGA,
TN 37415-0366, USA

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You can use a VISA card

/Andreas Wennborg, AUG Sweden
Translated by Paul Mitltd, AUG Sweden



The Nibbler

□ The Apple II versus Macintosh debate is alive and kicking. You will have read the reports on the previous pages showing how Apple Inc. is reviving interest in the Apple II, and how Apple UK no longer give any support for this machine. Of course Apple UK still have the IIGs on their price lists, and they do still stock the platinum full keyboard version of the //e, but these are only available on demand.

Cirtech, our own home based Apple II peripheral manufacturer, has released the following press statement for their new *Duet* card. We shall be reviewing this product as soon as we can, but meanwhile this is what it can apparently do:

Cirtech are pleased to announce a **major** new Apple product:-

Duet

Duet transforms the Apple IIGs into a powerful, low-cost, colour Mac!

Duet is an innovative new product that provides a real bridge between the Apple Macintosh and Apple IIGs computers. For the first time, it is possible to run both Mac and GS software using the **SAME** computer!

Duet comprises a co-processor card and special 'link' software. The card (which fits into any standard slot in the IIGs) has a **16Mhz 68020** processor with one to eight megabytes of RAM together with a custom ROM. The system uses all standard Apple peripherals as 'Mac' ports or drives and is totally transparent to the computer user and all Mac applications.

Both the 68020 and the GS 65816 operate at the same time. The 65816 handles all input/output tasks while the 68020 is used to run Mac programs and the main operating system. This system results in amazingly fast performance (in

a 'normal' Mac the processor has to handle almost all I/O itself, degrading overall performance). The *Duet* system actually outperforms the Mac IICX!

Options:-

68882 co-processor chip (fits into socket on *Duet* card).
RAM expansion (supplied with 1Meg, expandable to 8Meg).
Duet is currently in the final stages of development and is scheduled for shipping by December 1990.

For further information, contact:
Catriona McKendrick
CIRTECH (UK) Ltd. on 0835 23898, FAX 0835 22471

□ I predict that this amazing announcement will cause a real storm at Apple Inc. HQ and may well steal the thunder from the forthcoming announcement of Apple's own low cost colour Mac that we expect around the end of the year.

With a PC Transporter and a *Duet* card, the IIGs will now run apparently all the software that really matters! I will not speculate further on this amazing product till I have had a chance to see the beast in person.

□ In remarking that Apple still sell the IIGs in the UK, brings to mind our announcement in Apple Slices of the small price reduction of the IIGs. We mentioned that the price reduction was not always apparent in Apple's literature. I now have copies of the Spring 90 price lists. In the recommended retail price list a

bundle cost of £1395 is given and in the education price list a bundle price of £746.25. The normal educational discount is 30% which should make a price of around £976 for the bundle. Even more curious is that the recommended retail price of a IIGs colour monitor is £410 while the educational price is £88. This all follows the announcement of a price drop for the Macintosh Plus to £475 to educational users and for a package of a Macintosh Plus with 40SC Hard Disk of £865. It is cheaper to buy a Mac Plus and 40mb hard disk than a IIGs! Are Apple trying to really enter the education market at the lower levels or are they just shifting boxes to clear stock? The SE/30 4/40 has also dropped in price to around £2440 retail.

□ The Developer Services section of Apple UK were asked to comment on the article on Page 34, and we have received a reply from them. The salient points are as follows.

"Apple Computer Europe does not proactively market or support the Apple II line of computers in Europe. The product line is sold on an "as requested" basis only.

Apple Computer UK's policy does not detract from the positive stated remarks by John Sculley that Apple Computer, Inc. is firmly committed to the Apple II. The Apple II remains an extremely important staple of education sales in the US and beyond, and development on that line will continue into the 1990's.

However, it has been decided that Apple Computer Europe's efforts are better directed to a concentrated effort solely based on the Macintosh product line in this country."

□ Do you want to have a working museum piece? MacSolutions are selling working Lisa computers from £250 (plus VAT and shipping). These have 1mb RAM, 400k disk drive, 12" screen and a keyboard and mouse. They are suitable as data entry machines as they come quipped with MacWrite and MacPaint. The 400k disks can be read by any Macintosh computer.

Contact MacSolutions (UK) Ltd. Tel: 0274 394636 or Fax: 0274 722627.

Do you use PostScript fonts? Do you want that odd border, fraction or symbol font? Lexitrope Ltd. have a range of custom PostScript fonts that might well fit your need. Ranging from a Crossword font to a Christmas and Icing font through many different border and symbol fonts, the Lexitrope range is well worth investigating. Fonts are priced from £69 upwards. To find out more, contact Lexitrope Ltd. Maybole, Colwall, Nr. Malvern, Worcestershire, WR13 6QA. Tel: 0684 40482 or Fax: 0684 40820.

You will see that Apple2000 now has an AppleLink address to add to its collection. This is the full AppleLink that Apple employees have been using for some years. The AppleLink UK edition has just been launched and provides the rest of us with the smoothest and easiest way of E-Mailing each other I have seen. Membership of AppleLink UK does not give you access to everything that is on the system, but there are many news files and libraries that are open to you.

The whole thing runs with custom software on any Macintosh. The software looks like any Macintosh program, and you open and close windows just as though you were browsing the Finder.

It is not cheap to use as the minimum charge is £20 a quarter and access charges are around £24 an hour at 2400 baud. However you can call at local rates from all over the UK and only if you intend to browse do you need to spend any time on the system. There is a very powerful feature that allows you to 'post' outgoing mail into a holding folder. You can then set up the program to call up

AppleLink automatically at some later time of day. This will call AppleLink, send any outgoing mail and retrieve incoming mail as quickly as possible. The average time online need therefore be only around 30 seconds or so. If there is no mail waiting at either end it logs off after only 1 second!

You can send files, messages and even screen snapshots to anyone with an AppleLink ID, and there are even libraries of software for you to browse as well.

For further details and an application form contact: GE Information Services, 4th Floor, Shortlands, Hammersmith, London W6 8BX Tel: 081 741 0077.

Ewen tells me that while checking out the user log of TABBS the other day, he noticed that Andreas Wennborg has clocked up over 1000 calls over the period TABBS has been running. If you bear in mind that Andreas has to call from Sweden to get to TABBS, I think we ought to give him a gold medal for his loyalty. Come on all of you, brush the dust off your modems and see if you can beat his record!

This all makes me wonder if you are getting the most from your membership of Apple2000. Why not get your next box of disks or ribbon from our mail order shop? **The Nibbler**

NEW KIT PRICES 8/90

CS-808 Joystick (CKC) £19.99
Down in price - our standard top-tire line trim self-centering unit. Switchable for Apple II or IBM-PC. At this price comes as 16-pin, D-9, or D-15 for IBM - please specify. (If you want to use the joystick for both IBM-PC and Apple II, please add £1.95 for the required additional adaptor cable - applies to CS-800 & 500XJ units as well).

PC TRANSPORTER (AE) £399.00
Provides approx 752K of Apple II Memory Expansion Card protocol memory in Apple Mode and will allow an Apple IIe or IIgs to run MS-DOS software. PCT plugs into an expansion slot (1-7 excl.3) and will use Apple's peripherals as MS-DOS peripherals. Ask for AE Cat giving full details of PCT and all other AE products.

CS-800 Joystick (CKC) £18.99
Down in price - same as 808 but has switches to allow free-floating use - more modern styling than 808.

500XJ Joystick (Epyx) £19.99
Down in price - hand-held unit for serious gaming - small stick without fire-button. Ergonomically designed to fit into the palm of your left hand and manipulate the stick with your right while the two fire buttons sit perfectly lined up with your middle & forefinger of the left hand.

OverDrive 20Mb £469.00
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Lowest price for ages, suitable for Flipper, plusRAM, plusRAM-1, RAMworks, Z-RAM, RAMfast, plusRAM-GS2, GS-RAM, etc...

1Mb RAM Upgrade £79.95
Suitable for plusRAM-16, plusRAM-GS8, GS-RAM+ etc...

64K SRAM Upgrade £19.95
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ClockPro (Apricom) £51.45
Slotted clock for II, IIe or IIc. Just went up slightly in price, but is still the best buy for anyone wanting an AppleWorks or ProDOS clock which doesn't take up any valuable slots. BONUS: ClockPro also works in an IBM-PC, and comes with software for both Apple II & IBM-PC!

TransWarp III (Applied Eng) £151.35
8MHz Accelerator card for II+ or IIe. Upgradeable to 12MHz when the new faster chips become available.

MORE NEW KIT PRICES

TransWarp III (Applied Eng) £151.35
8MHz Accelerator card for II+ or IIe. Upgradeable to 12MHz when the new faster chips become available.

3.5" Blank Disks £9.95
Pack of 10 DS/DD with labels. (Down £1).

V8/S TV Modulator (Bradford Instruments) £69.95
Regrettably we have had to drastically increase the price of this device due to changing circumstances with the manufacturer. This module goes inside a IIe & converts the composite video output to TV-grade colour signals. Also takes the audio output from the IIe & runs that into the TV too so you can have full volume control.

ImageWriter Colour Ribbon (various suppliers) ea.£8.84
Down 11p. available in blue, brown, green, orange, red, purple, and yellow. International group no.2330. fits Apple models DMP, ImageWriter, ImageWriter 1S, and ImageWriter II, plus others.

RAM EXPRESS I (AE) £199.00
Base 256K and was reduced by £52.00. Note: if you want the duplicate - use ClockPro instead (it's £17.95 cheaper).

MORE NEW STUFF
SUPERVISION GS CABLE (MGA) £14.95
Let's you use a cheap Kaga/Tanaka RGB SuperVision colour monitor direct from the IIGS RGB colour port.

GRAPH-IT! (TECHNICAL) £69.95
DHE business graphics compatible with AppleWorks, Publish-It!, etc [R]

TUTOR-TECH (TECHNICAL) £69.95
HyperCard-type system for 128K IIc/GS systems. Who needs a Mac? [R]

RISK (PARKER Bros.) £29.95
This class board game of world domination now for your IIc/GS.

MGA LABELLER (MGA) £14.95
Inexpensive, simple continuous label with credit with "The Last One" Extra multiple lines of text, choose number required, use label-line-up machine - how useful can print!

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Apple

NEW SOFTWARE PRICING

Compucase (Compunetics) £59.50
Stocks & shares portfolio manager down in price by £20 due to new UK publishing deal.

GRAPHICS DEPT (Sensible Software) £79.95
Area, 3-D pie, bar, line, pie, scatter, and X-Y charts for your Apple II. Uses Visicalc/DIF files or enter alphanumeric data by hand. Add titles, labels and other lettering in over 40 fonts in multiple sizes and 8 colours. Draws ellipses, points, lines, & rectangles. Transfer picture sections, merge, filter, reduce, and use over 100 colours for painting portions of hi-res screens. Make slide shows of up to 32 hi-res pictures on your monitor/TV. Each screen can be selected manually, or incorporated into a pre-limed presentation. Great for shops! Contains 3 disks, and runs on all Apple IIs as well as the Apple III. [R]

MasterType (Mindscape) £29.95
Re-introduces pricing finished, this is the normal price.

AppleWorks v3 (Claris) £175.00
MGA's low special price finished; this is our normal price. (RRP £201.25).

Castle Wolfenstein (Muse) £12.95

Beyond Castle Wolfenstein £13.95

Wolfenstein Bundle £24.95

Robot War (Muse) £13.95

Titan Empire (Muse) £12.95

Robot War + Titan Empire £24.95

The Voice (Muse) £14.95

Caverns of Freitag (Muse) £12.95

Know your Apple IIe (Muse) £14.95

Know your Apple II (Muse) £14.95

SuperText Professional £27.95
Now postfree, this word processor provides excellent value even on a 48K II+, (requires lower case adaptor or 80-column card on II+).

Muse MegaPak (Muse) £39.95
Contains four great games worth £62.80. Includes Castle Wolfenstein, Beyond Castle Wolfenstein, Caverns of Freitag, and Titan Empire.

(for details on these Muse items, check Apple 2000 4/90 pp33 or ask for a brochure)

Record Master (Bridget) £49.95
Database program with lots of sophisticated features for the price, yet still runs on a 48K II+. Works on all Apple IIs. Demo available. [R]

MacPuter II (Lorne) £224.25
The only realistically priced fairly-modern accounting software for the IIc/GS. Runs under Pascal, and can use 3.5" drives if available. Handles sales/purchase/nominal/cash/management accounts, invoicing, cash flow, VAT return, and back up. [R]

MacPuter Pro (Lorne) £362.25
As MacPuter II, but requires at least a 3.5" drive or a hard drive. Adds stock control, and invoicing from stock.

MacLine

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UTILITIES

FILE AND DISK MANAGEMENT

1st Aid Kit Deluxe (the pro's file & disk recovery)	115.
Complete Undelete (recover trashed documents)	36.
Can Opener (view data files without the application)	75.
Copy II Mac (backup some protected software)	29.
Disk Express II (speed up, unfragment hard drives)	59.
DiskDoubler (file compaction to save space)	49.
Disk Tools Plus (9 essential DA's)	39.
Disk Quick (catalogues floppy and hard discs)	32.
Disk Top 4 (powerful DA finder)	69.
Goler (search key words in multiple text files)	54.
HandOff (no more "application is busy or missing")	35.
InitPicker 2.0 (choose startup inits)	42.
MultiDisk (best hard disk partitioner)	44.
Norton Utilities (hard disk utils from the PC)	75.
Now Utilities (12 wonderful inits & DA's)	95.
On Cue (launch applications and documents from menu bar)	39.
On Location (lightning fast file location)	75.
Shortcut (extra commands in open dialogue box)	49.
SUM II (essential utilities plus guard against crashes)	89.

SECURITY

After Dark (screen saver with many options)	29.
A.M.E. (very sophisticated data security)	195.
DiskLock (reasonably priced data file security)	125.
Empower II (complete file & data security)	265.
MacSafe II (file security)	125.
FileGuard (data encryption)	135.
Nightwatch (hard disk security)	150.
QuickLock (lock out prying eyes from your data)	75.

BACKUP & VIRUS PROTECTION

AutoSave (saves your work at user determined intervals)	29.
Backmatic (for those who hate backing up)	55.
FastBack (very fast and compact)	115.
Redux (best backup program on the market)	59.
Retrospect (most sophisticated archival backup)	150.
SAM 2.0 (Symantec's anti virus utility)	79.
Virax 2.6 (best virus tracer & eradicator of all)	59.

PRODUCTIVITY ENHANCERS

Calculator Constructor 2 (create DA calculators)	54.
Calendar Maker (customise calendars)	39.
DynoDex (phone/address DA database with filotax printout)	75.
Exposure (screen dump utility with paint tools)	60.
Hyper DA (read HyperCard files from a DA)	49.
MacInUse (register time spent on applications)	59.
Master Juggler (100's DA's & fonts bypassing Fon DA Mover)	59.
MultiClip 2.0 (multiple copies & pastes)	75.
QuickKeys (macro maker, time saver utility)	69.
QuickDex (lightning fast DA database, essential)	35.
Stepping Out 2 (software big screen extender)	65.
Smart Alarms (DA reminder/diary system)	55.
Smart Alarms multi user (network diary version)	call.
SmartScrap & Clipper (enhanced scrapbook)	55.
S.P.A.M.M. (software maths co-processor)	57.
StopWatch 2.0 (logs time usage of applications)	95.
Suitcase 2 (manages 100's DA's & fonts)	49.
SuperGlue II (print images to disk)	69.
SuperSpool (best ImageWriter spooler)	59.
SuperLaserSpool (Laser & ImageWriter spooler)	89.
Tempo II (the most powerful macro maker)	99.

WORD PROCESSING

Acta Advantage	95.
End Note	95.
End Link	70.
Expressionist 2	85.
Grammatik	79.
Inside Information	79.
MindWrite	155.
MacWrite II	155.
Microsoft Word 4	175.
Nisus	220.
Thunder II	59.
Vantage	60.
WordPerfect	195.
Win Text	call.
WordPerfect	195.
Wordfinder	39.

GRAPHICS

Canvas 2	195.
ColourStudio	1150.
Comic Strip Factory	49.
The Curator	85.
Claris CAD	475.
Cricket Draw	175.
Crystal Paint	33.
Desk Paint 3.0	125.
Digital Darkroom	225.
Dreams	249.
Freehand	365.
Illustrator 88	415.
Image Studio	415.
MacDraw II	275.
MacPaint II	89.
MacroMind Director	450.
Mini Cad	495.
Model Shop	425.
PhotoShop	695.
Pixel Paint 2.0	235.
Pixel Paint Professional	375.
Streamline	299.
StrataVision	295.
Swivel 3D	295.
SuperGlue 2	69.
Super 3D ver 2	299.
Studio 1	75.
Studio 8	255.
UltraPaint	140.

DESK TOP PUBLISHING

DesignStudio	595.
DTP Advisor	59.
FrameMaker	750.

LetraStudio	385.
MacKern	125.
Metamorphosis	195.
Multi Ad Creator	675.
PageMaker 4.0	495.
PageMaker Studio	89.
Partner	65.
Pre Print	365.
Publish It	250.
Quark Xpress 2.1	495.
Quark Xtras	69.
Ready, Set, Go 4.5	399.
Smart Art 1,2,3	each 99.
TScript	125.
TypeStyler	155.
TypeAlign	79.

FONTS

Adobe Fonts	call.
Adobe Type Manager	69.
ATM Plus Pack	130.
Adobe Type Reunion	49.
Adobe Type Set	79.
Art Importer	95.
Club Type	call.
Fraction Fonts	45.
FontStudio	450.
Fantastic Plus 2	65.
Fontographer 3	295.
Fluent Fonts	36.
Fluent Laser Fonts	59.
Monotype Fonts	call.
World Class Fonts	each 49.
"The Originals", "The Stylish", "The Giants" and "The Triples" great for LO and IISC printers.	

CLIP ART

The Visual Arts	150.
MacAtlas EPSF	115.
Comic People	29.
WebPaint	each 49.
"Classic Clip Art", "Animal Kingdom", "Printers Helper", "Old Earth Almanac", "Industrial Revolution", "For Publishing", "Special Occasions", "Island Life", "All the People".	

PROGRAMMING

Programmers Online Comp	35.
Prototyper II	195.
QuickBasic	59.

SmallTalk V	139.
Think C 4.0	135.
Think Pascal 3.0	135.
TMON	98.
ZBasic 5	125.

BUSINESS

101 Macros for Excel	49.
Access Bookkeeper	495.
Business Plan Toolkit	69.
Cricket Graph	120.
DeltaGraph	105.
Extend	320.
Invoicell UK	65.
KaleidaGraph	149.
KeyPlan	250.
MacMoney 3 UK	75.
MacProject II	325.
MacSchedule	140.
Microsoft Excel	175.
Microsoft Works 2	159.
Microsoft Office	425.
More III	295.
Persuasion	365.
PowerPoint	175.
RagTime 3	350.
Sales & Marketing Toolkit	110.
SmartForms Designer	275.
Visual Business No. 5	299.
Wall Street Investor	395.
Wingz	245.

MATHS & STATS

Super Anova	425.
StatView II	345.
StatView SE & Graphics	295.
Theorist	250.

DATABASES

4th Dimension	495.
C.A.T. 3.0	325.
DAtabase	75.
Double Helix II	350.
DynoDex	75.
FileMaker II	195.
FileForce	255.
Foxtbase-Mac 2	390.
Omnis 3 Plus	175.
Omnis 5	425.
Panorama	225.
QuickDex	35.

HYPERCARD

101 Scripts & Buttons	49.
DTP Advisor	59.
EuroStack	35.
Icon Factory	55.
HyperAnimator	115.
HyperComposer	45.
HyperBible	150.
HyperTutor	39.
HyperTMON	67.
Plus 2.0	265.
Reports!	75.
Script Expert	49.
SuperCard	125.

PC COMPATIBILITY

DOS Mounter	69.
MacLink Plus	135.
MacLink Plus Translators	110.
Soft PC Mac OS	250.
Tops Flashcard	110.
Tops DOS 3.0	125.

NEW THIS MONTH

Inside Information (from the publishers of Wordfinder this is a "reverse dictionary" in a DA allowing sophisticated word searches.)

FrameMaker (another heavyweight contender for the DTP crown, FrameMaker looks very powerful. It runs on Sun and NeXT machines and is file compatible.)

StopWatch (this program is essential for those who earn their living on a Mac as it logs time spent on applications and allows export and manipulation of data. It's also one of the few British programs around.)

Games (Sky Shadow and Mission Starlight are in and unmissable. Let Christmas come early this year.)

SPECIAL OFFER

42 MB Disk only

£350.00

British made, extremely fast, very reliable high quality drive at unmissable low, low price.

HARD DRIVE HEAVEN



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- *Credit cards will not be charged until the order is shipped.
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- *Same day motorcycle delivery in London area is available.
- *Defective software is replaced immediately.
- *Refunds will only be given on unopened packages that are returned within 7 days of receipt.
- *Prices are correct at time of going to press.



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- *Add VAT to the total price, except on books.
- *Payment is by credit card, cheque or money order.
- *Government depts, Educational establishments and P/c companies are welcome to purchase with an official order.
- *International orders accepted with credit card only. Postage added at cost.

COMMUNICATIONS

Carbon Copy promo Twin Pack	145.
InterFax	350.
InterFax 9600	525.
In/Out	210.
LapLink 3.0	120.
Liason	159.
MicroPhone 3.0	210.
Microsoft Mail Server	185.
Microsoft Mail 10 User	395.
QuickMail 2.2 10 User	325.
TopMail Unlimited User	95.
Timbuktu 3.0	95.
Timbuktu Remote	130.
TOPS 3.0	145.
Vicom 3	140.
VersatermPro	180.
WS3000 Modem	235.
WS3000 V22 BIS	295.
Courier HST 9600 baud	595.

MUSIC

Concertware	49.
Concertware + MIDI	125.
Jam Session	39.
Practica Musica	80.
Super Studio Session	69.
HyperComposer	45.

ACCESSORIES

Cables (those not shown below)	call.
SCSI cable	15.
SCSI extension 1m	22.
SCSI extension 2m	29.
SCSI 25 to 25	15.
Modem cable	10.
ImageWriter cable	7.
DD Floppy Disks	0.90.
HD Floppy Disks	1.50.
Diskette storage box 80	9.
ImageWriter Ribbons	3.75.
Toner Cartridge NT	75.
Anet (AppleTalk)	25.
MacNet (PhoneNet)	19.
Anti Glare Screen Plus	39.
Anti Glare Screen SE	55.
Anti Glare Screen 13"	65.
Infra Red Mouse MacPlus	55.
Cordless Mouse	89.
TrackBall	call.
Security System	35.
Mac II Stand	65.
Joystick MacPlus	45.
Joystick Mac SE or II	59.
Gravis MouseStick ADB	95.
Gravis MouseStick	80.
SE Silencer	35.
Mac Carry Case	59.
Toolkit	15.
Wiz	179.

HARDWARE

Radius Accelerator Plus or SE	545.
SIMMS	check
Kurta Graphics Tablet	295.
MacRecorder II	165.
Psion 400	795.
Agenda 32K	155.
Z88 MacLite	299.

MONITORS

Radius Pivot Mac II, SE30	995.
Radius Grey Scale	1995.
Radius Direct Colour 8	3750.

Radius Direct Colour 24	4795.
Raster Ops 19" 24 bit	4995.
Raster Ops 19" 8 bit	3750.
Supermac Spectrum 8 SIII	1175.
Supermac Spectrum 24 SIII	2750.
Hitachi Colour 8 bit	3100.
Hitachi Mono 21" Mac II	1100.
NEC 20" 8 bit colour Mac II	2595.

SCANNING

ScanMan	265.
Thunderscan	189.
HP ScanJet Plus	1450.
Sharp JX 300	2495.
Sharp Colour Hand Held	620.
Sharp Colour A3	5995.
Agfa Focus II 800GS	4230.
Panasonic Scanner	1395.
OmniPage	550.
OmniDraft	75.
Colorset	275.
Read-It 2.0	295.
Read-It Personal	155.

PRINTERS

Epson LQ software	69.
Grappler LX	130.
HP DeskWriter	695.
HP LaserJet III	1595.
HP PaintJet	850.
LabelWriter	195.
Tektronix ColorQuick	1995.

DATA STORAGE

Qisk 20 Mb	295.
Qisk 42 Mb	special.
Qisk 70 Mb	535.
Qisk 100 Mb	695.
Qisk 210 Mb	870.
Qisk Tape Backup 150 Mb	695.
Qisk Optical Drive 600 Mti	2495.
Toshiba CD ROM Drive	695.
External 800K Floppy Drive	159.
45 Mb Syquest Drive	625.
Panasonic WORM 940 Mb	2350.

CHILDRENS

Cosmic Osmo	47.
KidsTime	35.
KidsMath	35.
The Manhole	35.
Rabbit	39.

NumberMaze	35.
Reader Rabbit	39.
Talking Tiles	35.
Where in World is CSDiego?	35.
Where in Europe is CSDiego?	35.

TRAINING

PageMaker College	175.
Typing Instructor Encore	25.
Mavis Beacon Typing	24.
Learn FileMaker II (4 modules) each	39.
Learn Illustrator 88 (4 modules) each	39.
MacTeach (specify Mac) each	39.
TEACH YOURSELF GUIDES TO:	
4th Dimension, PageMaker, Excel	
HyperCard, Quark Xpress, Word 4	
each	69.

EDUCATION

Special very low Education prices are available on some products to authorized educational establishments only with official purchase orders. These include **Clarisc, Microsoft, Letraset, Adobe, Symantec** and others. Please call us before placing an order if in doubt as to whether you qualify.

Calculus	65.
Physics	65.
Voyager Astronomy	95.
TOPS 10 pack	425.
Word Torture Language tutor	
French, Spanish, German, Russian	
each	35.

BOOKS

Apple Macintosh Book	19.95
Dr. Macintosh	17.95
Big Mac Book	25.95
Inside Mac 1, 2, 4, 5	each 23.95
Inside Mac Vol 3	19.25
Macintosh Bible 2nd Edition	24.95
Macintosh Font Book	19.80
Mac Revealed 1 & 2	each 23.95
Complete HyperCard Hbook	27.45
Mastering Excel 2.2	22.95
Mastering Illustrator 88	21.95
Mastering FreeHand	19.50
Mastering WingZ	22.95
SuperCard Handbook	23.95
Using Aldus PageMaker 3.0	22.95
Making Art on The Mac II	20.95
4th Dimension	19.95
Design for DTP	12.50
Using Microsoft Word 4	19.95

£55.00

MEMORY

These are 80 nanosecond terms which will work in all current Macintoshes over the IIx range. We also have memory for the Mac Plus as well as 3rd party upgrades for the Mac Portable.

WORRIED ABOUT INSTALLING MEMORY YOURSELF? For an additional £35 our couriers will not only install your memory anywhere in England and Wales but return it 3 or 4 days later with your extra memory fitted, tested and working.

ENTERTAINMENT

ARCADE	
→Beyond Dark Castle (more of the classic game)	27.
✓Crystal Quest 2 (Britain's favourite game)	29.
✓Crystal Quest with Critter Editor (edit game to your taste)	49.
✓Colony (loosely based on the movie "Aliens")	24.
→Dark Castle (the classic Mac game still going strong)	27.
✓Gauntlet (colour arcade game)	32.
✓Mission Starlight (addictive space shoot em up)	29.
✓NetTrek (network space warfare)	42.
→PipeDream (arcade game from Lucas Films)	24.
→Shufflepuck (air table ice hockey)	29.
✓Sky Shadow (exciting shoot em up from Crystal Quest authors)	29.
✓Star Wars (great shoot em up game)	25.
✓Super Hang On (motorcycle racing, build own track too)	29.
✓Tetris (award winning colour Soviet game)	24.
✓Welltris (3 Dimensional Tetris, could drive you insane)	24.
SIMULATIONS	
✓Chuck Yeager Flight Trainer (colour & different aircraft)	25.
→Flight Simulator (the famous Microsoft one)	39.
→4th and Inches (manage an American Football team)	29.
✓Falcon 2 (exciting & networkable flight simulator)	34.
✓Ferrari Grand Prix (the best formula one simulation)	36.
✓Fokker Triplane (World War One flight simulator)	29.
→Harrier Strike Mission (jump jet combat action)	32.
→Hunt For Red October (read the book, see the film...)	24.
✓Life and Death (be a doctor, perform actual operations!)	24.
→MacGolf (superb graphics (Plus & 1Mb SE only!))	35.
✓MacGolf Colour (highly addictive (all other Macs))	56.
✓Mean 18 (alternative colour Golf simulation)	29.
✓P51 Mustang (fast & furious flying)	39.
→PT 109 (graphic patrol boat simulation)	29.
✓Sim City (design and run your own city)	32.
✓Sim City Colour (design and run a colour city!)	52.
✓Space Rogue (equivalent of Elite only better)	27.
STRATEGY	
→Ancient Art of War (Sun Tsu's high quality war simulation)	29.
→Ancient Art of War at Sea (seafaring version of above game)	29.
→Balance of Power (use political strategy to keep the peace)	24.
→Balance of Power 1990 (sequel to the best seller)	24.
→Balance of the Planet (save the environment and the world)	35.
✓Guns & Butter (run your own country)	27.
→Patton vs Rommel (strategy war game)	19.
ADVENTURES	
✓Arthur (text based adventures of the round table)	32.
✓Citadel (fantasy adventure)	29.
→Deja Vu (hard boiled private detective adventure)	24.
✓Deja Vu II- Lost in Las Vegas (the sequel)	24.
→Leather Goddesses (raunchy and witty adventure)	15.
✓Manhunter New York (excellent graphic adventure)	35.
✓Manhunter San Francisco (the adventure continues)	35.
→QuarterStaff (role playing with colour)	33.
→Shadowgate (text/graphic adventure)	24.
→Trust & Betrayal (intuition, ethics not bullets)	24.
→Uninvited (text/graphic adventure)	24.
→Zork 0 (classic adventure now in colour)	39.
BOARD GAMES	
✓Bridge (from novice to advanced playing levels)	29.
✓ChessMaster 2100 (best Chess game now updated)	25.
→Solitaire (9 different patience games)	24.
✓Solitaire Colour (with beautiful graphics)	24.
✓Shanghai (Mah Jonghish game with stunning colour)	21.

KEY Works on → Plus & SE only → Plus, SE, II ✓ all Macs inc. CX and SE30. Many games do not work on the Ci and Portable.

All MacLine products are sourced from the official UK distributor where one exists. This entitles you to full backup and support in this country, not the United States. Accept no less. This may be more expensive in the short term but consider what happens when an upgrade is released.



MacChat

Norah Arnold looks at the latest Macintosh developments and product news.

New Apple LaserWriters

Apple have released details of two new printers, the Apple Personal LaserWriter SC and the Apple Personal LaserWriter NT.

The Personal LaserWriter SC is a QuickDraw printer with 1 MB RAM. The Personal LaserWriter NT is a PostScript printer with thirty-seven resident fonts from twelve font families. It has 2 MB RAM.

Both the new printers have a much smaller footprint than the previous LaserWriters and a more accessible price, with the Personal SC at approximately £1360 and the Personal NT at approximately £2195.

One drawback of the Personal SC is the fact that it has no network support, connecting as it does to the Macintosh through the SCSI port, so cannot be added to an AppleTalk network. The Personal NT has a LocalTalk connector and an RS-232 connector.

Although the new printers are slower than the LaserWriter II range the print quality is good.

Demo of HyperCard 2.0

At the July meeting of the Herts. and Beds. Computer Group, Colin Holgate from Technical Support at Apple Computer UK, gave a demonstration of the new capabilities of HyperCard 2.0.

Colin began by importing into HyperCard 2.0 a dashing colour image of a car, showing that colour images generated outside HyperCard can now be used to brighten up your stacks.

Colin also demonstrated the many features that have been included in HyperCard 2.0 as improvements to the HyperTalk programming environment. A script debugger has been added, a navigator allows you to make

buttons for menu items and to control external devices, and with the Palette Maker you can design palettes and assign actions to each of the buttons.

Other features of HyperCard 2.0 include multiple print reports, multiple windows, styled text, and customisable menus.

Education Price of MacPlus

Apple have made significant changes to the entry level pricing of the Macintosh for education. This has been done to enable schools to integrate the Macintosh as part of their Information Technology strategy and to open new avenues for the use of Macintosh across all areas of education. The price changes are effective immediately and the following price and product bundles are available to education customers only. The Macintosh Plus computer has a new Education RRP (ex VAT) of £475.00 compared with the old price of £695.00. The Macintosh Plus with a 40 MB HD system has a new Education RRP (ex VAT) of £865 compared with the previous £1182.50. Mac Plus owners will be able to run System 7.0 software when it becomes available, if they upgrade to 2 MB of RAM.

PageMaker Wins

Aldus PageMaker was voted the 1990 World Class winner in the page layout category by the readers of MacWorld magazine in the United States.

In addition the readers of MacWorld also voted Aldus Persuasion 2.0 the 1990 World Class winner in the Business Presentation Graphics category.

Aldus adds these two awards to its already impressive list of product awards. In 1989 PageMaker

was voted "Best Publishing Software" - MacUser (United Kingdom), "Best Buy" Award - PC World, "Best Desktop Publishing Software Product of the Year" - MacWorld, "Best Software Pack" - PC World (Spain).

Aldus Persuasion won "Best New Desktop Presentation Product" - MacUser and "Highest Rating for an Advanced Desktop Presentation Product" - Software Digest.

Aldus Sponsors Awards

Aldus UK Ltd was the main sponsor for the British Association of Industrial Editors National Awards, designed to seek the best in corporate communication. Aldus also introduced a new category for the best design using PageMaker.

Also new in the 1990 Editing for Industry Awards is a class for Humour in Print.

"In a busy world humour is something many of us are in danger of losing sight of - so I hope we can make a small contribution to help redress the balance," said Awards chairman, Sam Weller.

Among the forty categories were classes for newspapers, magazines and videos, as well as skills classes such as photography, and news and feature writing.

There have been a record level of entries this year for the BAIE Awards, with over 1200 being submitted. Alasdair Boyle, managing director of Aldus UK commented, "Aldus was delighted to sponsor the BAIE Awards for the second year running and to be given the opportunity to recognise such achievements in industry."

Astra Overture

DMS Computer Systems has recently begun shipping their new entry level accounting package "Astra Overture," the most recent addition to the Astra range of accounting software. DMS say that with a retail price of £375.00, the package contains all the sections required for the small business: sales, sales invoicing, purchase ledger, nominal, cash book, trial balance, balance sheet, and VAT. It is a fully integrated package and can be used with either hard or floppy disk drives giving reasonably low cost entry level into accounting on the Macintosh.

Unlike most entry level packages,

AstrA Overture provides an upgrade route without data re-entry. The package has been designed to give the same feel to the interface as all the AstrA range, providing a smooth transition into more advanced AstrA systems when a user requires additional sophistication from the package.

Blyth Launch Awards

Blyth Software Ltd are launching the second Young Software Designer Awards in September 1990, to search for the best young software designers of 1991 who are currently undergraduate or postgraduate students in higher education. Blyth Software has initiated this award scheme in association with sponsors, Tulip Computers UK and AppleCentre (West London).

Blyth Software are announcing the awards at this time specifically to allow tutors to build the YSD awards into project work for the 90/91 academic year. Tutor information packs are currently being sent to Heads of Computer Studies and Business Studies Departments in over four hundred universities, polytechnics and colleges of higher education throughout the UK.

The awards scheme will run for six months, from September 1990 to February 1991. The winners will be announced in March 1991. Comprehensive Student Entry Packs and Posters will be sent to the students within the higher education establishments during September. Those students who register their entry with Blyth Software will receive complimentary Omnis 5 software in which to develop their application.

The two main award categories are:

1. The "Best Presented Application." The winner of this category will be presented with a Tulip 386sx personal computer by Tulip Computers UK.
2. The "Most Original or Innovative Application." The winner of this category will be presented with an Apple Macintosh Plus personal computer by AppleCentre (West London).

The Young Software Designer Awards were successfully launched for the first time in 1989 and the winners (Adam Boyes from Brighton Polytechnic and Jeremy Doig from the University

of Newcastle Upon Tyne) were presented with their prizes by the Rt. Hon. Margaret Thatcher, Prime Minister.

Enquiries about the Young Software Designer Awards 1991 should be addressed to Debbie Charman (Project Co-ordinator) at Blyth Software on (0728) 603011.

Addison-Wesley

Addison-Wesley has announced the publishing of "The Art of Human-Computer Interface Design," a book edited by Brenda Laurel and, in the words of Addison-Wesley press contact Abigail Genuth, "Conceived of and technically supported by S. Joy Mountford, manager of the Human Interface Group at Apple."

The book, priced at \$29.95 in the USA, contains pieces by more than fifty of the best known thinkers in the field of human-computer interaction and explores such new technologies as cyberspace, animation, multimedia, and speech recognition. Its contributors include Donald Norman, Nicholas Negroponte, Ted Nelson, Alan Kay, Jean-Louis Gasse, Timothy Leary, and Ben Shneiderman.

"The Art of Human-Computer Interface Design" will be required and fascinating reading for all those concerned with the relationship between computers and people.

For more details contact Abigail Genuth, Addison-Wesley, 617-944-3700)

New Operations Centre

A new centre in Apeldoorn, the Netherlands, is being built by Apple Europe and it will cost approximately \$45 million. The new centre will serve as Apple's Northern European Operations centre. According to the company it will be used for the distribution of spare parts and finished goods for Europe as well as for the final configuration and localisation of many Apple products.

The centre, which will replace Apple's existing distribution centre in Zeist, is expected to open for business by the end of 1992. Apple's sales and marketing organisation will remain in the Netherlands at its present location in Zeist.

Apple Invests

Apple intends to invest in companies of strategic interest and to encourage products they develop. Among them are companies creating connectivity products to link Apple computers with IBM, DEC, and other environments, as well as those creating products in the area of multimedia and Unix. Apple Europe has given \$15 million to a venture capital run jointly with Advent International and its affiliated network of venture capital firms. Apple and Advent expect to assist over 30 companies over a 10-year period, providing a total of \$60 million in direct venture capital financing.

MacWorld Expo/Boston

MacWorld Expo/Boston announced that John Sculley, chairman and chief executive officer of Apple Computer, Inc. will deliver the keynote address at the Wang Centre on the first day of MacWorld Expo/Boston.

This year's MacWorld Expo/Boston is to be held in three locations, The Wang Centre, The World Trade Centre and at the University of Massachusetts' Bayside Auditorium. The Expo is from August 8th to Saturday, August 11th.

Pocket Modem

The Smart One Traveler pocket modem enables users to send faxes to any G3-compatible fax machine or PC fax card according to its manufacturer, Best Data Products.

The modem is small enough to fit into a pocket or briefcase and has an RS-232 pin connector that attaches to most laptops or desktops. It is available in two versions, one for Macintosh computers and one for AT/XT compatibles.

As a fax transmitter, the Smart One Traveler sends files by converting them to a bit-mapped format. It operates completely in background and can send a multiple file fax to multiple locations. It also has fax-mail-merge features for form letters and broadcasting. While the unit is a 2400 bits per second modem, the fax transmission speed is 4800 bps. It is fully Hayes compatible and can be used with almost any computer and data communication

tions software.

The unit sells for \$299 including communication and fax software, a 9-volt battery and external AC power supply, LED lights, speaker, a built-in power-down feature and other extended fax and modem features. The Smart One Traveler has no DIP switches.

OmniShare

Corvus Systems has announced a software program that can be used in conjunction with Novell's NetWare. OmniShare, which began shipping at the end of last month, carries a suggested retail price of \$995. The product is targeted toward the educational market which has a large installed base of Corvus Constellation for Apple II.

DaynaPORT

Dayna Communications has announced that, through an agreement with Novell Inc. to license that company's EtherPort technology, it will begin shipping a line of Ethernet cards for Macintosh computers in July. The interface cards, to be called DaynaPORT, will be available for all Macintosh SE and II series computers. The DaynaPORT E/II is a NuBus card for all Macintosh II models, the DaynaPORT E/SE supports all Macintosh SE models, and the DaynaPORT E/30 supports the Macintosh SE/30 bus topology. The cards provide either a thin Ethernet connector or an AUI port for external transceiver connections to thick Ethernet, twisted pair wiring and fibre optic cables. Both cards will have a suggested retail price of \$499.

Press Contact: David Pascoe, Dayna Communications, 801/531-0600

Ostrakon and BackTrack

Santorini Consulting & Design, Inc., the developers of the recently announced Farallon Traffic Watch II product, has announced the first two products to be marketed under its own name. Both products, Ostrakon, an application development system, and BackTrack, a file backup and control system, are scheduled to be available from July 1990.

Ostrakon, named for the Greek word for "shell," provides an application skeleton that may then

be fleshed out to create sophisticated applications. It contains routines to perform the common functions that all Mac applications share, such as event handling, menu handling, and window management, as well as powerful memory management, volume management, error handling, and colour management features.

The shell provided in Ostrakon is intended to be an example of modular, top-down, extensible software design which may serve as a tool for teaching programming techniques in general.

Dimitri Zarboulas, vice-president of Santorini, says the product will aid programmers. "The Mac is notoriously difficult to program, so developing even a basic Mac program is a daunting task for the uninitiated. With Ostrakon, beginners now have a 'running start.'"

Zarboulas said that his firm's other two recent products, Traffic Manager II and BackTrack, were developed using Ostrakon. Ostrakon currently works with Think C and is being expanded to also work with Apple's MPW development environment.

BackTrack is a file control system intended to bring the automatic backup and versions control features found on mini and mainframe computers to the Macintosh. It will, under the control of user parameters, back-up all or selected files and maintain version control of the files. Once configured, BackTrack works in the background and requires no user interaction. As new versions are created, BackTrack automatically deletes older versions beyond the user-specified limits.

BackTrack will, under user parameters, back files up to another local disk or network file server. This feature protects the single user or network manager from loss of data due to disk or machine failure.

Macintosh in Opera

A contemporary rock opera called Paris has been produced to a great extent using Apple Macintosh Computers. The opera, based on the story of the Trojan wars, was composed by Englishman Jon English and Australian David Mackay over the last seven years. English works from a farm 90

minutes drive from Sydney, while Mackay lives on a farm in Surrey, England. Created over seven years, the opera required the two composers to travel between Australia and England until Apple offered its services in providing a computer link between the two farms. The link involved Macintosh II computers set up at each end, with Apple's worldwide database and messaging system, AppleLink, used to allow the composers to communicate. Through this system, English and Mackay were able to transfer MIDI files of new compositions for the opera over AppleLink, rather than mail them, or wait for the visits each composer needed to make. The composers were travelling between the two countries quite often — English would visit England for six weeks, then Mackay would visit Australia for three. The electronic exchange has, according to English, moved the production of Paris forward by 3 years. A recording of the opera was made last year, with such artists as Barrie Humphreys, John Waters, Harry Nilsson, Trevor White, Philip Quast, Terence Donovan, Angela Ayres, Demis Roussos, David Atkins and the Philharmonia Chorus with the London Symphony Orchestra performing the score. It is expected that the first performances of the opera will be in 1991 at the Victorian Arts Centre in Melbourne.

Phaser PX colour printer

With the Phaser PX colour printer, Tektronix looked like it was ready for the 1990s with the hit of the Spring Comdex show in Atlanta. The printer costs \$7,995, offers serial, parallel, and AppleTalk plugs, and delivers high-quality colour images on specially-coated, thin copy paper for roughly 44 cents per copy. Tektronix is offering a four megabyte memory upgrade which not only lets the printer handle print jobs from any of the three connections without user intervention, but buffers jobs on a first-in, first-out basis. The printer comes with 6 megabytes of memory as standard. The printer was demonstrated using both Apple Macintoshes and IBM PCs, running Microsoft Windows 3.0 and Microsoft PowerPoint 2.1. 

Z88 - Mac

A review of the Cambridge Z88 Link Pack for the Mac by Mike Dawson

In this review I am going to give an overall impression of the Cambridge Computers' Z88 laptop computer. This computer has been in the past billed as the Mac Lite until Apple stepped in with their usual style and requested that the Mac reference be stopped. So why the Mac name dropping from a computer that does not even boast compatibility with anything? The reason can be found in the Z88's ability to communicate with other PC's. Software and hardware is available to enable file transfer between the Z88 and a IBM PC or naturally the Mac. As we do not want to do things the hard way I'll only describe the Mac interface for the Mac Man on the Move (M3). The Z88 is lightweight that much is true, it also has the advantage of being considerably cheaper than the Apple luggable. As opposed to the Apple offering, the Z88 can with justification be called a laptop computer. I can attest to this as most of this review was written in just that position on the 17:38 from St Pancras (yes it is possible to get a seat on British Rail!).

First, what do you get for your cash? - Mac-Link-Pack Components

The Mac Link Pack comprises of the following equipment :-

- a) Z88 computer with 32K of internal RAM fitted.
- b) Computer carry case (for the computer only, not mains adaptor)
- c) One set of batteries (4 off AA size Alkaline)
- d) One mains adaptor (240v AC only/6.5v DC)
- e) One EPROM cartridge containing the communications software for the Z88 - Mac file transfer.
- f) One interconnection cable for Mac - Z88 file transfer (this is a 9

pin D connector plug to 5 pin mini din plug for Mac Plus or higher. If a 512K Mac is to be connected an adaptor will be required which is not supplied by Cambridge Computers. A potential user would have to go to an Apple dealer or Apple 2000 for this)

g) One Mac Disc (Single sided) containing the Mac file transfer software.

h) One Z88 users manual

i) One Mac Link users manual

Mechanical Design

The Z88 computer is just over the size of an A4 sheet of paper, the exact dimensions are 294mm long, 20mm deep & 23mm high. The case weight is slight at just under 2lbs and coloured black with a light green LCD screen. It's expansion capabilities are catered for with three slots for plug in cartridges located below the keyboard. These are designated slots 1, 2 & 3 and it is into one of these slots that the EPROM cartridge is fitted to handle the file transfers to and from the Mac. The other two slots can be for either RAM packs of which there are 32K and 128K sizes or EPROMS. An EPROM cartridge can be either blank and be programmed by the Z88 or pre-programmed as in the case of the file transfer software. Therefore to guarantee the safety of that latest report that's going to dazzle the boss and get you promotion it is possible to save the work onto an EPROM for absolute safety.

As Sir Clive Sinclair had a big hand in designing this computer it will come as no surprise to find that the keyboard is another 'rubber' effort. However it is quite commendable and should not be compared with the likes of the Sinclair Spectrum. The keyboard

is standard sized and coloured black to match the case, the key lettering is in white. As it is based on a continuous 'rubber' sheet it should be reasonably resilient to liquid spills. Compared with some of the latest PC compatible pocket computers the keyboard is a positive luxury. How people use the alpha sequence keyboard defeats me, still that's PC users for you always wanting to do things the hard way!. The Z88 has a standard QWERTY layout I with cursor keys etc. but with also help, index and menu keys. The display is a supertwist LCD with an eight line by 80 column working area. The distinction must be made of working area as either sides of the display work area are used by the system for user information. The size of the text is small but easily visible from the lap position by someone like myself with average vision and slightly above average height.

There is only one port fitted to the Z88 and that is a serial one, a RS232 with user selectable transmission rates up to 9600 baud. It is through this port that the Z88-Mac file transfer is facilitated. It is also possible to directly print from the Z88 via this port. The utility software allows the user to configure the Z88 to send the correct control codes and baud rates to the printer of your choice. The computer comes ready set up for an Epson printer. Not owning or having access to a serial Epson printer I have not been able to test this option. Porting data to the Mac really alleviates the necessity of trying to interface the Z88 to the ImageWriter II so I have not tried this either. The mains adapter is a substantial 'block' moulded into a standard 13 amp plug and is rated at 500mA. Display contrast is adjusted via a rotary 'volume' control on the left side of the case next to the mains adapter input socket. On the opposite (RHS) of the case is the 9 pin D connector socket for the serial port. There is no facility to link the Z88 to a conventional disc drive although I understand that a battery powered portable is available from a third party. This is where the Mac Link comes in enabling not only file transfer but also file translation between programme file formats. What is missing then? Well there is no way to connect an

external VDU to enhance the display capabilities.

For the technically minded among us the microprocessor behind this black box is a Z80 CMOS microprocessor. The Z88 RAM is also CMOS technology which explains the approximate twenty hour life of the internal batteries when in use.

It must be noted that in effect the computer is never switched off even though the screen is off. This is so that the memory is retained making the Z88 an easy and effective portable note book. In the power down mode the batteries should last for about a year according to the manual. When the batteries start to go down the battery low indicator comes on to warn you. Don't panic however as there is plenty of time left. The first time that this happened to me I replaced the batteries and used the old ones in a personal stereo. The batteries lasted for about 6 sides of a C90. When changing over the batteries there is a built in capacitor that will power the RAM for a specified period depending upon the amount of RAM installed. With two RAM packs the manual quoted time is 30 seconds with a 100% safety factor, ie the capacitor should last for 60 seconds but why take the chance?

The serial port is a RS232 with user selectable transmission rates up to 9600 baud and is used to connect the Z88 to printers and other computers including of course the Mac.

Getting Started

The instructions for starting up the Z88 by inserting the batteries and doing a hard reset is well covered in the manual. A nice touch is an A3 sheet which is folded around the Z88 in it's packaging which gives a clear set of instructions for getting started for impatient people like me who don't read manuals. However the information on the hard reset in the manual differs from that given in the single sheet quick start instructions. The quick start instructions are correct. The manual instructing the user to perform a soft reset for both hard and soft resets, is the one error I've found in the manual. Once the machine is fed with the batteries and the hard reset is performed

the insertion of the RAM pack and the EPROM can be undertaken. The instructions for doing this are quite explicit as the power has to be ON, ie. the display active. This is done not by a switch but by pressing both shift keys together (switching 'off' is the same action again). Having the power on is a departure from the usual bold type that accompanies instructions for inserting RAM chips. However this was duly done and with another (soft) reset the whole system was ready for use. The Z88 has a comprehensive set of software already installed in ROM some of which will not be lost on the hardened Mac user. These can be categorised into four distinct areas.

These are :-

- 1) Operating System
- 2) Utilities
- 3) BBC Basic
- 4) PipeDream

Operating System

The operating system is unique to the Z88 and is described as 'concurrent'. This is because running programmes can be suspended and the computer moved on to handle another task. Several PipeDream files can be open at any one time as can any number of BASIC programmes be running. There is of course a limit and that is the amount of memory available. This arrangement can be likened to MultiFinder except on the Mac usually an application will only allow one file to be active at any one time eg HyperCard. There are limitations with the memory available even though there may be a 128K RAM module fitted. This is because the operating system treats each available area of RAM as a separate entity like a disc drive. Therefore the working area is the internal 32K RAM denoted by the Z88 as RAM.0. The RAM modules if fitted become RAM.1 and RAM.2 and are available as RAM discs.

Utilities

At any time the utilities can be called upon such as the Diary, clock, calendar, filer, terminal, printer editor and alarm clock. Most of these utilities should be self explanatory however the printer editor and filer will bear a

fuller explanation. The printer editor allows the user to configure the Z88 to the printer of choice. This includes the conversion of control codes and printable characters. The 'filer' is the open door to the Z88's hierarchal filing system. As explained the Z88 treats the available RAM modules as disc drives. Within the RAM discs it is possible to create directories which are analogous to the Mac's folders. This enables the files that are created to be put away in an orderly fashion. To stop a long list of files from confusing the issue there is a facility to catalogue only a list of string matched files.

Also provided is a terminal emulation of the VT52 communications protocol. This is to enable communications with computers which support this standard or indeed another Z88. Another communications utility is available called import/export which will send or receive files or batches of files to or from the Z88.

Basic

The BASIC programming language provided is the BBC BASIC in a slightly cut down version. What is missing is the high resolution graphics commands which is hardly surprising given that this is not a games machine and will spend it's entire life as a work-horse. However if someone could get a flight simulator into one of these I'd be interested. There is not much else to say about the BASIC language except it treats the RAM areas as RAM discs like PipeDream and can be ported over to the Mac to run under the Mac version of BBC Basic.

'PipeDream'

This is an all purpose word processor and spreadsheet rolled into one and should not be confused with integrated software. With integrated software the spreadsheet and word processor are moulded into the same programme but operate quite separately although there may be live links between the two halves. With PipeDream the two programmes are in fact one and the same thing as both elements are present at all times. PipeDream contains much of the basics of both programmes but having them together simultaneously is a mixed blessing.

PipeDream is manipulated with a long list of control codes accessed with a 'diamond' key which is unique to the Z88. In effect it is the equivalent to the Mac 'command' key. For those people like me who have difficulty in remembering long lists of control sequences then there is an on line help menu to assist appropriately called 'menu' which is a dedicated key. This brings up a series of options which are accessed by repeatedly pressing the same menu key.

Selection is rather like a Mac drop down menu. When the menu is available the desired control code is displayed together with an explanation. Using the cursor keys the function can be selected and with a press of the enter key, executed. The sections available are :-

'Blocks' - which details the marking and moving blocks of text or spreadsheet cells, as well as the search and replace and word count features.

'Cursor' - which details how to move the cursor about the page as well as shortcuts to scroll pages or go to top or bottom of the screen.

'Edit' - these control sequences enable basic word processing functions to be accessed. These include new line, justify and insertion and deletion of text.

'Files' - here reminders can be obtained as to how files can be loaded or saved.

'Layout' - control codes are listed as to how to set margins and formats of cells if using PipeDream for spreadsheet purposes.

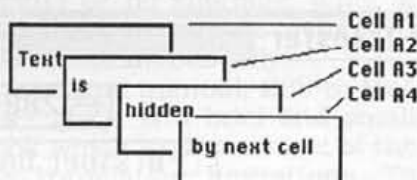
'Options' - this option is also always available from PipeDream directly by typing 'diamond'-O. These options allow a host of settings to be altered. The long list includes the document margins, page numbering, page footer, header and title. Page length can be altered as can the page justification to arrange text alignment. Other options affect the spreadsheet such as whether a cell is for text or numbers/formulas and the leading characters for numbers ie. £.

'Print' - this details the embedded printing options available such as bold underline and italics. Setting underline or bold text actually enables these features to be displayed directly on the LCD

screen so that headings are visually highlighted and not just control codes.

PipeDream as a Word Processor

My early attempts to use the word processor had erratic results. Some of the editing commands are reminiscent of WordStar and as an old WordStar user I quickly fell into the swing of things. The spreadsheet side of the programme kept causing all sorts of things to unexpectedly happen. Please refer to the sketch below to see the relationship between the vertical column cells. Due to the layering effect of the cells writing on cell A1 for example will extend over the whole 80 columns. PipeDream assumes that the other horizontal cells A2, A3 etc. will be empty. If an entry is either deliberately or accidentally made in cell B1 then only cell A1 of the original text will be visible, the rest of the line being hidden by the contents of cell B1. This is because cell B1 is now the 'top' cell of the stack and all the characters to the right of B1 will be 'visible'. When using the tab key to indent letters or reports in text this 'overlapping' will become apparent with text disappearing from view. This is disconcerting at first but then that will teach me to read manuals first rather than later when I can't figure out what is happening.



PipeDream Layered Cell Structure

The word processor is competent and fast until text insertion is conducted in a large document. Because of the high workload suddenly presented to the processor all screen activity is stopped to concentrate on the key bashing going on. When the key pressing has stopped then the screen updates to reveal your typing errors in all their glory. I cannot type so fast as to determine if there is a limit to this type-ahead buffer but I have not lost any text input yet.

To the right of the text display is a strange area which is a graphical layout representation of the document being written. Each

word is represented by a single pixel. The result is similar to the page preview used in Wingz so that the user can see in general terms the resulting document as will be printed. It may sound a bit mickey mouse but it is surprisingly effective particularly as the cursor position is represented by a vertical line to the right of the condensed document. I have found this feature very useful in laying out reports and thus reducing much of the reformatting necessary on the Mac before printing. With approximately 3 to 4 Kbytes of memory being used for an A4 page of text the standard configuration of the Z88 Mac link pack of 128K +32K memory will give 40 pages of portable text storage.

PipeDream as a Spreadsheet

The spreadsheet is, well, a spreadsheet, it has cells and formulas as do other spreadsheets. As such there is nothing to really condemn or praise the spreadsheet. It is limited but as the word processor, competent. Given this is a truly portable computer it tackles the basic tasks such as expenses records and bank balances with ease. Facilities exist to build more complex sheets but don't expect an Excel or Wingz type of power, it just is not there. In the spreadsheet guise the 'hiding' of text is not such a problem. From my experiences I would say the spreadsheet is marginally the more dominant partner in this schizophrenic software. Overall PipeDream is quirky, having to explicitly declare a cell as a formula or number can be a pain, it assumes everything is text unless you tell it otherwise. Nevertheless I have come to terms with it without too much trouble. Having the two entities together does mean that text and spreadsheets can co-exist very easily. One very annoying omission is the lack of a percentage format for a cell. Percentages must be entered as 0.17 and not 17 (being divided by 100 by the spreadsheet secretly). The trailing character can be selected as a % but the dividing by 100 is missing.

Communicating With The Macintosh

Communications with the Macintosh are achieved with a mini-

mum of fuss. First the interconnecting cable is plugged into the Mac and the Z88. In the Mac the mini DIN plug is inserted into the modem port and on the Z88 the 9-pin D plug is inserted into the serial link socket on the right hand side of the case. It does not appear to be important if the power is on or off for both units. Next the Z88 'LINK' programme is run from the index. The Z88 then waits for it's master, the Mac to tell it what to do. The communications controller is the Macintosh and the file conversions are performed in the Mac and not the Z88.

The supplied link software is run on the Mac and when up and going presents the user with a font/DA mover type of display. The Z88 is treated as another disc device with each RAM area (0,1,2 etc.) as folders. Usual Mac conventions are used to open these RAM folders to get to the files that are required for transfer to the Mac. Next the file conversion required is selected from a pull down menu which offers the following options.

```
PipeDream > MacWrite
PipeDream > WKS
Z88 Basic > BBC Basic
No Conversion
```

The conversions above can be reversed if required to transfer files from the Mac to the Z88. However the transfer is left to right only (see screen dump) and not right to left. Therefore a degree of disc 'swapping' is required to reverse the transfer.

Clicking on the transfer button will invoke the required porting across of the file or files selected. If the incorrect file conversion is selected then an error will occur and the programme will stop with a warning of a file type mismatch. The transfer process takes some considerable time considering that the transfer speed is 9600 baud. After the transfer the file conversion takes place which can be as time consuming if there is a lot of ruler insertion going on when for example converting a PipeDream document to MacWrite.

Additionally it is possible to select multiple copying of files to save having to repeat the process. holding down the shift key when clicking on a file name enables a list to be built up. When backing up files that already exist either on the Mac or the Z88 the software asks if the old version is to be erased and offers an opportunity to change the name of the file about to be transferred.

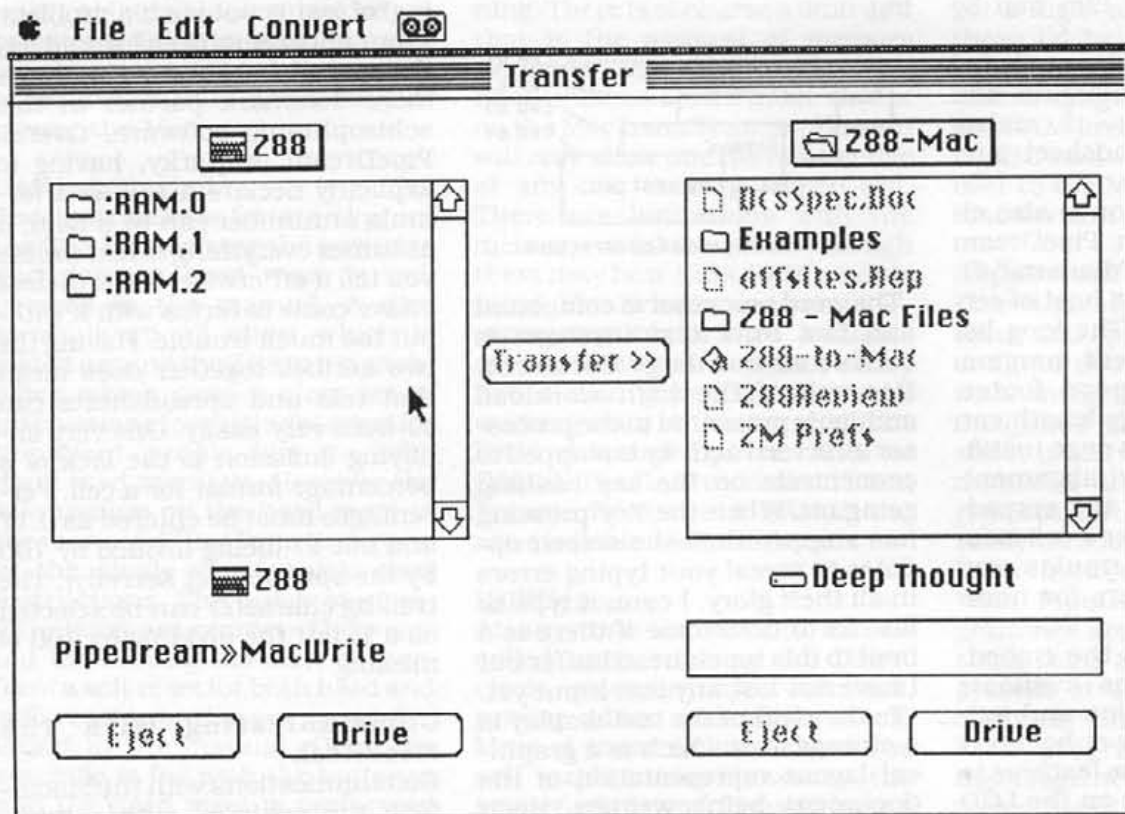
Opening a converted Mac Write

document presents no problems as the conversion is comprehensive. The conversion process inserts rulers with tab stops where required and also where not strictly necessary. Given a standard report document with repeated formatting you might be forgiven in thinking that one ruler would be sufficient. Wrong, the conversion process will insert an identical ruler at every new paragraph. This is a small complaint considering that bold type, underlining, italics and super/subscripts are correctly retained. Also retained are the headers and footers complete with page numbering.

Transferring tables of figures across to a MacWrite document causes complete confusion if the columns are separated on the Z88 by tab stops ie each column is a new cell. On converting across to the Mac the layout is destroyed and cannot be reformatted as there seems to be invisible tabs inserted to offset the text which cannot be removed. It must be accepted that some rework on the formatting is inevitable on converting a PipeDream file to the Mac. However the important thing, accuracy of transfer has not failed me yet. In an interesting experiment I ported a MacWrite document which included graphics over to the Z88.

It should come as no surprise to find that the graphics were lost. However after tweaking the text I ported it back to the Mac and opened the document. To my complete surprise I found spaces in the text with a message in the middle "A Picture Was Here". So PipeDream must keep track of Mac graphics somehow!

Converting a PipeDream spreadsheet is just as easy with the WKS format being selected. I use the Wingz



Z88 SUMMER SPECIAL

For a limited period only, Ranger Computers Ltd are able to offer a "summer special" Z88 starter pack for Macintosh Users. The pack is the same price as the standard Z88 Link Pack, but contains FREE 32K EPROM pack and EPROM eraser (normally priced at £52.10 + VAT) and the "summer special" includes free carriage for Apple2000 members only.

The "summer special" Z88 Link Pack contains:-

- Ranger Z88 Computer (with 300-page manual)
- 128K RAM Expansion
- Z88 to Mac Link (contains software and cable)
- 32K EPROM
- Mains Adaptor
- Carrying Case
- One set of batteries
- EPROM Eraser

PLUS

All at a very special price of £299.95 plus VAT (including carriage).

Send your orders to Shop2000, P.O.Box 3, Liverpool, L21 8PY. The total cost, including VAT and carriage is just £344.94. Please include a cheque to this value (payable to Apple2000), or authorise us to charge your VISA or Mastercard account with this amount.

PLEASE NOTE: OFFER APPLIES FOR A LIMITED PERIOD ONLY, SUBJECT TO AVAILABILITY.

RANGER

COMPUTERS LTD

Ranger Computers Ltd
Boughton Green Road
Moulton Park
Northampton
NN2 7AH

spreadsheet which does not appear to support this file format. However with a little experimentation I found that the Lotus 123 format worked equally as well. I have ported simple spreadsheets back and forth using this WKS format and have only had problems with the dates entered in Wingz. When my bank balance sheet was ported to the Z88 for some reason the dates were corrupted. The day and month was correct but my cheque book time travelled from 1990 to 1991 and then inexorably to 1992 even though I only ported 1990 over!. Fortunately the word processor came to the rescue with the search and replace feature. All was quickly amended and my cheque book was no longer getting away from me.

Finally the manuals are clear and have useful worked examples to get the new owner started. There are many sections to the Z88 manual with the getting started section at the beginning and the reference section at the end, all very logical. Lacking is a tutorial on using BBC basic or the

Basic programming language. The manual makes no apologies for this omission and recommends that the user obtain books on the subject of which there should be no shortage. What is included is a reference to the BBC BASIC commands only.

The second manual, Z88-to-Mac User guide is a brief and small book which explains some of the file translation limitations. To show how easy the file transfer was I did my usual trick of trying the Z88-Mac transfer with conversion from PipeDream to MacWrite without reading the manual. I succeeded without any hiccups only referring to the manual once again when things did not go according to plan, see the date formatting comments earlier.

All in all a well thought out package with a usable word processor and spreadsheet. The file transfer to and from the Mac is smooth and faultless except when looking at some of the finer conversion points of the spreadsheet programmes. The Z88 has become a constant companion and I've

grown to like it. A Mac it's not but at about 12% of the price of a Macintosh portable I can live very easily with it's shortcomings in the price and weight departments. For someone who is looking for a viable portable which fits into a briefcase (and the magazine pocket of an Airbus A310 passenger airliner) and works with a Macintosh then this little British designed and made machine deserves a closer look. 🍏

info

Product : Z88 Mac Link
Publisher : Cambridge
Computers

Available from :

Apple 2000
P.O. Box 3
Liverpool
L21 8PY

Special Price : £344.94
(incl. carriage & VAT)

Value : 🍏🍏🍏🍏
Performance : 🍏🍏🍏🍏
Overall : 🍏🍏🍏

FoxBase+ / Mac: The Race Goes to the Swift

By Mick O'Neil

As the Macintosh penetration of the corporate and small business market has accelerated, compatibility and connectivity with resident MS DOS software and systems has become increasingly important. Thus, multi-system software developers like Microsoft, Aldus, and Word Perfect Corporation have insured that their latest spreadsheets, desktop publishing software, and word processors include the ability to recognise, open, and format data files created under both MS DOS and the Macintosh operating environment.

Compatibility between high level data management systems is complicated by the variety and function of files generated by each package. Ashton Tate's DBase, the most popular database software under both CP/M and MS DOS, has evolved into a full-blown, 4th generation applications development system, and businesses have invested enormous resources in developing specially tailored DBase applications using the built in DBase programming language. A program claiming 'DBase compatibility' on the Macintosh must recognise and employ DBase program files and report files as well as access DBase data files.

Recognising this niche in the database market, Fox Software has introduced FoxBase+/Mac, a full relational database featuring 100% compatibility with DBase III Plus programs, reports, and data files. The company has carefully blended the Mac's feature laden graphics interface with backward compatibility with DBase to produce much more than a straight DBase 'clone' like Nantucket's McMax. Though both programs should be considered by inveterate DBase enthusiasts, we feel that FoxBase will charm even the most hardened MS DOS veteran.

Compatibility

In order to run a DBase application on the Macintosh, the user must simply move all appropriate files from the PC to the Mac. This can be accomplished via hard wire or modem with software like MacLink Plus from DataViz or Lap-Link from Travelling Software, through the use of an IBM compatible drive, or over a local area network like TOPS or 3COM. The company claims that any DBase III Plus application must work "immediately and perfectly" under FoxBase+/Mac and thus the Fox software is compatible with source programs (.PRG files), databases (.DBF files), memo files (.DBT files), memory variable save files (.MEM files), screen format files (.FMT files), report format files (.FRM files) and label defini-

tion files (.LBL files). Because of format differences, the first time you USE or SET INDEX TO a dBase-style index file, FoxBase+/Mac will automatically reindex the database. Though there may be an initial investment of time in the reindexing process, the whole procedure is seamless and accurate. Another initial task required in order to move applications is modification of printer commands to meet ImageWriter or LaserWriter specifications. An alternative is to load other printer drivers into the system disk and utilise a non-Apple printer.

Speed

FoxBase+ made a name for itself in the PC world by offering DBase compatibility with incredible speed, and the Mac version of the software does not disappoint in either category. Our tests confirmed that this software leaves DBase Mac in the dust on a Macintosh II with 1 megabyte of RAM and a 40 Meg hard disk. Some sample benchmarks include 5.5 seconds for FoxBase to append 1000 records to a file while dBase Mac took 153.8 seconds for the same task. FoxBase took about 25 seconds to sort a 2000 record file while dBase Mac more than doubled that, and incredibly FoxBase took 3.5 seconds to index a field in the same file while dBase ate up 115.5 seconds. Benchmarks aside, FoxBase+/Mac has a more responsive 'feel' than DBase Mac. Somehow, the Fox Software programmers avoided the Macintosh screen refresh problem so prevalent in DBase Mac, FullWrite, and much of the new integrated software.

Graphical User Interface

First-time database users can access the power of FoxBase+/Mac without learning programming or arcane screen commands. Databases can be opened, examined, and modified through the use of a sophisticated but simple to use graphics 'control panel' along with the traditional pull down menus. The program's graphics interface is everything that DBase III Plus' 'Assistant' strived to be but wasn't.

While the user merrily works away on the Mac opening files, indexing, sorting, applying filters, constructing expressions, and printing reports, equivalent DBase commands are automatically entered into a command window. For those users more comfortable working in DBase syntax, commands can be entered from the keyboard for immediate execution. Commands generated through the user interface or entered directly can be edited and re-

executed through the Command window and can even be cut and pasted directly into a user program. For those of us who have spent countless hours struggling with awkward DBase syntax, the combination of the non-procedural graphics interface with the Command window equivalent is nothing short of a minor miracle.

Browse Facility

Information in several files can be viewed by opening browse windows and resizing them so they all fit on the screen. The browse facility includes a 'window splitter' that lets you split the window into two panes or close the window back into one; a field resizer that lets you resize the display of selectable fields in the browse window; a pusher icon that allows you to change the order of the fields in a browse window; a scroll bar for moving through records quickly, and optional grid lines that divide your data into spreadsheet-type information.

The View Window

The View Window constitutes a graphics based control system. Ten small circles represent files. When a file is opened one of the windows is darkened and shows the filename and if the file has been indexed, a small pointer appears superimposed on the circle. Thus, ten files can be opened at once and the user can keep track of the status by quickly glancing at this window. Creating a relation between two files is as simple as dragging the mouse pointer from one circle to another. An arrow appears and the expression builder dialog box is called up to clearly define the relationship. Double clicking on an open file opens the browse window and thus the view window can be used to trigger multiple views of related data.

The Expression Builder

The expression builder offers the user a painless method of building complex expressions for filters or relations. Numerical, logical, date, and calculation functions are all accessible from pull down menus and field and variable information can be included by double clicking in the appropriate box. Expressions can be tested prior to their use in order to eliminate obscure error messages or confusing results.

Programming Tools

FoxBase+Mac Version includes FoxForm, a form design tool that allows users to create custom screens by using traditional Macintosh draw and paint tools; FoxCode, a program generation language and a 'Template' file compiler, and FoxGen, a program generator, that combines a selected template with a screen form to generate a program.

FoxForm combines elements of MacDraw and MacPaint to give the user control over objects and text and adds some standard window and dialog box controls to provide the unique feel and power of the Macintosh environment to input/output screens. The FoxForm toolbox has a selection pointer, a text tool, a line tool, rectangle and rounded rectangle tools, a text region tool, a text button tool, a radio button tool, a check box tool, a field tool, a pop-up menu tool, and a picture tool. Objects can be se-

lected, resized, respaced, moved, grouped, duplicated, and stacked. Stacking objects allows a kind of multidimensional approach for the creation of elaborate input screens. Text is treated as an object and the user has complete control over font, style, and size for editing purposes. Graphics can be imported as objects and can be assigned pen and fill colours and characteristics.

FoxCode refers to both an applications development language and a template compiler. Templates are simply sections of code either created by the user or selected from a growing template library of FoxCode applications. A few stock templates are provided with the FoxCode package which can be used to generate a limited variety of applications and Fox Software promises to include 'shareware' templates with future shipments and updates of FoxBase+Mac. FoxCode's procedural language allows the developer full access to Macintosh features though programming with FoxCode is complex. While conventional program code acts on databases, indexes, reports, and other data files, Fox Code statements act only on FoxBase+Mac programs being written by FoxGen. That is, FoxCode is actually one step removed from actual program code and the distinction can be confusing.

FoxGen is a program generator that produces FoxBase+Mac program code or format files using information from compiled templates (FoxCode) and FoxForm screen files (FoxForm).

FoxBase+Mac also offers a full range of programming and debugging tools, including program editing, trace, and debugging windows. The trace window allows you to monitor program execution line-by-line and shows surrounding program statements to add a sense of context. The trace window can also be used for single-stepping a program through execution with each line controlled by a mouse click. The value of arbitrary expressions can be monitored in the Debug Window and FoxBase+Mac can be instructed to suspend execution based on these values.

Multi-Window, Multi-Font, Multi-Colour

Up to nine user output screens can be activated simultaneously plus a whole range of editing windows. Output screen support includes multiple fonts, colour background and foreground, and icons and pictures.

Screen I/O

Screen Input/Output takes full advantage of the Macintosh user interface. For example, user defined input forms can include radio buttons and with associated text in any desired font, size, style, or colour; check boxes; pop-up menus for selecting from a list of possibilities; user-defined menu bars with standard Macintosh pull-down menus; vertical and horizontal arrays of buttons with spacing and alignment handled automatically; text editing of character string or memo fields in a rectangular box of any desired size; and standard dBase language screen input/output.

Context Sensitive Help

FoxBase+Mac includes a HELP facility designed to provide on-line, context sensitive help. Help text can

be selected and displayed based on topic name, program name, selected field, or any combination of these criteria. Because the HELP text and data used to retrieve it are stored in standard FoxBase+/Mac databases, it's a relatively simple matter to generate a sophisticated HELP facility for any FoxBase application.

RunTime System

Fox software also announced a RunTime System also due to be shipped in mid-September. Software developers can distribute applications written in FoxBase+/Mac to an unlimited number of purchasers for one low cost license (\$300) and end users need not buy individual copies of FoxBase+/Mac. That is, the runtime license permits each user to access any number of applications without any additional payment.

What's Missing

In the struggle to develop a sophisticated Macintosh application while maintaining backward compatibility with dBase, Fox Software gets high marks. Still, some initial compromises were required. The Reports facility in FoxBase+/Mac is as sterile as its big blue cousin. The report creation process excels at creating simple columnar displays and labels that would have pleased MIS in the 60's but that has little relevance to Mac users spoiled by the report capabilities of FileMaker Plus. And speaking of FileMaker's features, FoxBase+/Mac could sure use the ability to duplicate a record, enter the same field information in multiple records, and check for uniqueness of an entry without elaborate programming.

dBase vs FoxBase — The Bottom Line

MS DOS dBase users will have somewhat of a dilemma to face in selecting a data manager on the Macintosh. Ashton-Tate recognised early on that the Macintosh is an incredibly powerful tool particularly for complex tasks like constructing multiple file data relationships. Instead of 'porting' their best selling dBase software over to the Mac, they started from scratch and developed a very elegant (if slow) management system. Though the company kept 'dBase' in the name, this was a marketing decision rather than an indication that dBase Mac had anything in common with dBase III Plus. On the other hand, Fox Software have directly catered to the MS DOS dBase enthusiast by producing software on the Macintosh that they can immediately recognise and use. At the same time, FoxBase+/Mac may entice these users to develop and enhance their old dBase software while taking advantage of the Macintosh graphics interface.

More details from: Fox Software, 118 W. South Boundary, Perrysburg, Ohio 43551 Tel: (419) 874-0162

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Support Program for SuperCard Developers

Latest announcement from Silicon Beach Software

Silicon Beach Software, a subsidiary of Aldus Corporation, recently announced a new, professional-level support program for SuperCard users.

Aimed at software developers, consultants, and in-house corporate developers, the support program will provide fast-turnaround responses to problems with SuperCard scripts and externals.

The developer support program, which will cost \$450 a year, will provide developers with scripting support via AppleLink, telephone, FAX and America Online. Silicon Beach will attempt to provide 24-hour turnaround on all questions.

In addition to scripting support, subscribers will also receive technical notes, sample projects and externals, and beta versions of SuperCard, where appropriate. A SuperCard forum, accessible only to subscribers, will be maintained on America Online to provide a place for developers to exchange information. It will be monitored by Christopher Watson, a member of the SuperCard engineering team.

Silicon Beach will continue to provide free technical support for SuperCard (as it does for the rest of its products) that includes support for the use of SuperCard and SuperEdit and the syntax of the SuperTalk language. Silicon Beach has never supported scripting through conventional technical support.

Since its introduction last May, SuperCard has been adopted as the development tool of choice by users in a wide range of applications, including multimedia authoring, interactive presentation software, education and training, object-oriented simulation, front-ends to Mac and mainframe databases as well as commercial software development.

SuperCard Version 1.5, which was shipped late last month, will strengthen the product's position as a development platform by the addition of such features as ScriptTracer, an online debugger; a configurable editor for working while a project is running; and on-line help for SuperTalk.

Silicon Beach Software, a subsidiary of Aldus Corporation, publishes a family of graphics, multimedia, and publishing software. The firm's other programs include SuperPaint, a combined paint-and-draw program; Super 3D, a 3-D modeling and animation package; SuperCard, a personal software toolkit program; and Personal Press, a desktop publishing program. 🍏



SILICON BEACH
SOFTWARE



Powerful Languages for Macintosh

Fortran Version 2.0, Modula-2 from P1 and Procyon Common Lisp

FORTRAN v2.0

The New Generation of Power Language Systems Fortran provides the power, speed and extensions to simplify your programming tasks. It compiles full ANSI 77 Fortran plus all major VAX™ extensions; more than any other FORTRAN compiler on the Macintosh. Partial and conditional compilation, library creation and nested include files are all supported.

Several levels of code optimizations are provided and arrays can be as large as the available memory. Thousands of programs have been ported to the Macintosh from other computers using Language Systems Fortran, including NAG and IMSL libraries. It compiles the largest programs of any FORTRAN on the Macintosh, handling tens of thousands of lines of code with ease.

There is an easy-to-use yet powerful multi-window editor and error messages. The UNIX™-like MPW© programming environment has optional dialogs for most commands. Command files to compile, link and run a program with different options are provided with the compiler.

Language Systems Fortran provides a scrolling window for every FORTRAN program. Features include full editing capabilities in addition to file handling such as Print and Save. Elegant commands allow you to access your subroutines from menus and customise the size and scrolling behaviour of the window. Another option provides access to the familiar file selection dialog from your FORTRAN OPEN

statements. Direct calls to the Macintosh Toolbox can be made as documented in Inside Macintosh..

Features

- Full ANSI Standard FORTRAN 77 (not a subset)
- Support of Apple's SANE™ numerical environment (IEEE standard 754 for Binary Floating-Point Arithmetic) and the 6881/2 math coprocessor
- Extensions from VAX™ FORTRAN:
NAMELIST, Structures & Records, DO WHILE & END DO, %VAL, %REF, %LOC, %DESCR, IMPLICIT NONE. All intrinsic functions including bit intrinsics. Intrinsic functions allowed in PARAMETERS
- Output options:
Position-independent native 68000 code, Compiler switches for 68020/030 and in-line 68881/2 code, FORTRAN object files can be linked with object files from MPW Pascal, C and Assembler, Full source code listing with symbol cross-reference tables, Assembler source code for hand optimisation, Warnings for source statements that deviate from ANSI FORTRAN 77.
- A full set of compiler options including conditional compilation, include files and nested include files, range checking of array indexes and strings, overflow checking, check syntax only, FORTRAN 66 compatibility.
- Other extensions:
SELECT CASE...END SELECT, CYCLE and LEAVE, Exclusive OR operator (.XOR.), Predefined value of PI, Use of Binary, hexa-

decimal, octal, and engineering field descriptors in FORMAT statements.

- VAX and MIL-STD 1753 formats for hexadecimal and octal constants
- Built-in diagnostic capabilities include DUMP of variable values and TRACE of execution.

System Requirements:

- Macintosh Plus, SE, SE/30, Macintosh II family
- Hard drive with at least 5 Megabytes free space
- Macintosh Programmer's Workshop© (MPW)
- 2MB with MPW Version 3.0 and above

Now available from the Apple Developer's Group, Tel. 031 S57 S719

Prices:

- Fortran with MPW £335.00 + VAT
- Fortran without MPW £275.00 + VAT
- Fortran Upgrade 2.0 £77.50 + VAT
- MPW 3.1 Upgrade £35.00 + VAT

Modula2

OBJECT ORIENTATED COMPILER FOR APPLE MACINTOSH UNDER MPW A Program from P1

p1-Modula-2 v4.1 is the ultimate tool for the professional Macintosh developer. It is fully integrated in MPW and compatible with all MPW languages, including MacApp. It is also well adapted for writing desk accessories, INIT resources and external routines for HyperCard or 4th Dimension. The Language defined by P1-Modula-2 is based on the 3rd Edition of "Programming in Mod-

ula-2" by Niklaus Wirth and it implements language extensions from the current standardisation drafts of ISO. It does not have language restrictions which were introduced with some single pass compilers (no FORWARD declaration for functions and procedures necessary, NEW and DISPOSE are still available).

The main features of the compiler:

- Sets with up to 65535 elements
- Structured function result types
- Multiple dimension open array parameters
- Structured constants for ARRAYS and RECORDS
- Standard function calls and type conversion allowed in constant expressions
- Octal codes within string constants
- No size limit (eg 32KB) for structured types and global variables
- 68020 and 68881 support
- 3 options for real computation:
 - fast 32-bit reals
 - 68881-Code with SANE-emulation
 - especially optimised 68881-Code
- Free access of processor registers and inline machine code.
- Listing with optional cross-reference information

Pl-Modula-2 is the first Modula-2 implementation which offers language constructs for object-oriented programming. The language extensions correspond to those of Apple's MPW@ Pascal. It is link compatible with Object-Pascal and therefore also with MacApp. It is the first language which allows programmers to combine its object types with those of Object-Pascal. For debugging MacApp programs, two debuggers are available - the MacApp debugger and the pl-Modula-2 debugger. Definition Modules for MacApp are included in the compiler package.

The compiler package includes a library with modules for file I/O, string handling, conversions and more.

The same library is available with implementations of the compiler on several other machines (Apollo, UNIX, PDP-11 with

RSX11M) allowing machine independent software. Modules for easy access of toolbox and MPW routines are provided. pl-Modula-2 includes a complete debugging environment at source level, i.e. all variables are displayed with name and value according to their declared type.

The last statement executed is displayed in the source window with highlighting. For special cases there is a direct view on the Macintosh memory in various formats (including 68000 disassembly).

Utilities- two utilities are provided, "GenMake" and "M2Cross".

GenMake automatically creates a "MakeFile" for your Modula-2 programs and M2Cross analyses module dependencies and creates a global cross-reference listing of all exported names. The compiler package includes an additional MPW startup file which defines an edit menu with supports of Modula-2 syntax constructs.

Summary: Runs on every Apple Macintosh with MPW, 3-Pass-Compiler, about 220KB size, Peephole - Optimiser, Code-Generation for 68020 & 68881, Sample programs for applications.

Available from the Apple Developer's Group Tel. 031 557 5719
PRICE £220.00 + VAT

Personal Procyon Common Lisp v2.1

An extended implementation of the language which includes full COMMON LISP as defined by Guy L Steele, and all revisions by the X3J13 Standards Committee up to March 1988.

The system is the fastest complete implementation for the Mac and includes an extensive programming environment. It is ideal for teaching Lisp. The Personal runs on any Macintosh (Plus, SE or MacII) with 2Mb memory and comes complete with many built-in features including:

- Over 1300 pages of specially written documentation, including tutorials and reference manuals, in binders.
- COMMON GRAPHICS™ giving safe, easy access for Mac Toolbox. No need to read Inside Macintosh, all the work is done for you.

- An extensive programming environment which includes customisable editors, window-based debugger, fully integrated inspector, stepper, on-line help and much more.

Personal Procyon Common Lisp:

Price £495.00 + VAT
Professional

The Professional is aimed at the serious Lisp user who needs the additional power of object-oriented programming.

The system will run on any Macintosh (plus, SE and MacII) with 2.5Mb memory. As well as all the features of the Personal, the Professional is enhanced by: The world's first commercial implementation of Common Lisp Object System (CLOS).

Professional Procyon Common Lisp:

Price £995.00 + VAT
Developer

The Developer is the ultimate environment for rapid prototyping and developing. It contains all the features of the Professional and is further enhanced by the following powerful facilities:

Interface Designer™ The combination of five sophisticated tools for building Mac dialogs, windows, menus and icons faster than ever before.

Foreign Function Interface No need to throw away your existing code, the FF- allows Lisp to call Assembler, THINK C and Pascal, and MPW C and Pascal.

Runtime Generator Convert your programs into standalone applications without paying royalty fees.

Developer Procyon Common Lisp: Price £1595.00 + VAT

All three versions of **Procyon Common Lisp** are now available from the **Apple Developer's Group** -

For further information please contact:

Bernice Simpson
Apple Developer's Group
Rosebank House
144 Broughton Road
Edinburgh
EH7 4LE
Tel: 031-557 5719

CommGATE

Solutions Incorporated Announces MCI Mail Gateway to Microsoft Mail.

CommGate, the MCI Mail gateway for Microsoft Mail, was introduced recently by Macintosh publisher Solutions Incorporated. The \$595 gateway runs on a Microsoft Mail server and provides all authorized users on Macintosh or MSDOS workstations full access to MCI Mail services. These services include delivery by fax, telex or courier as well as electronic delivery of both messages and binary files. Incoming messages from MCI Mail are routed directly to the correct addressee on the Microsoft Mail network. Error free delivery is assured by use of the MEP2 protocol. Optionally, X.PC can be used for error correction.

Messages are created with the Microsoft Mail desk accessory in the way users are already familiar with. There is literally nothing new for Microsoft Mail users to learn in order to send or receive via the gateway. Messages can also be created using the "Send" capability of Microsoft Word and Microsoft Excel. The recipient list for any message can include both local users on the Microsoft Mail network and users reached through any of MCI Mail's delivery methods. CommGate automatically polls MCI at times specified by the network manager to retrieve incoming messages and route them to their ultimate recipients through Microsoft Mail.

CommGate is currently in Beta test at sites around the country. First commercial shipment is expected late second quarter, 1990. CommGate will be available through software retailers worldwide. Access scripts can be customized for foreign telephone systems or modem pools; but no customization is required for use with a Hayes compatible modem

in the United States.

"Microsoft Mail users can now communicate around the world via MCI Mail in the same effortless way they communicate around the office using Microsoft Mail," said John Morey, group product manager for workgroup applications at Microsoft. "CommGate automatically routes incoming messages and files to the correct recipient on a Microsoft Mail network. We are pleased with the excellent support Microsoft Mail is receiving from 3rd party developers and welcome Solutions' CommGate as the MCI solution for Microsoft Mail users."

"MCI Mail and CommGate together provide Microsoft Mail users a complete solution to their worldwide communications needs. This powerful combination supports a wide range of business applications from fax broadcast to file transfer," said Douglas Brackbill, Director of Marketing for MCI Mail. "MCI is committed to LAN electronic mail connectivity and is delighted with Solutions' introduction of CommGate."

CommGate will often be used as a bridge between Microsoft Mail networks which are not connected through AppleTalk. For example, Microsoft Mail users in a sales office in New York can send individual messages to Microsoft Mail users in a corporate office in San Francisco so long as both offices have CommGate. No long distance phone call is required since MCI Mail is reached through an 800 number. It is not necessary for the modems on both networks to be available at the same time since MCI Mail will hold messages originated in New York until San Francisco picks them up.

CommGate requires Microsoft

Mail 2.0. It can be run on any Microsoft Mail server with at least 2 megabytes of memory. Load permitting, the server can also be used as a workstation with or without MultiFinder. No workstation software is required for CommGate. A network administrator can make a single copy of CommGate accessible to as many workstations as desired, even workstations on other connected Microsoft Mail servers. The only limit on the number of users supported by a single copy of CommGate is the amount of traffic a single modem can handle (1200 and 2400 baud access are supported). Administrators of large networks can purchase additional copies of CommGate to spread the communication load among several servers.

New Network Fax Capability Announced

Solutions Incorporated have also recently announced FaxShare, AppleTalk network facsimile capability for BackFax users who don't have local area mail systems. The product is an alternative to Solutions' FaxGate which provides network fax to users of Microsoft Mail and which will shortly be available for QuickMail as well. With FaxShare, all the Macintoshes on an AppleTalk network can share a single fax modem and phone line attached to any one of them.

"Our users have been telling us that they want networked access to their fax modems," says Solutions' president Mary Evslin. "It is not practical or desirable to put a fax modem on every Macintosh and then run an extra telephone line to every desk. FaxGate solves this problem for people who have QuickMail and Microsoft Mail. FaxShare solves the same problem for small offices and work groups who don't currently use LAN mail."

FaxShare requires a BackFax supported fax modem and a single copy of BackFax which comes bundled with modems from Orchid Technologies, Circuit Research, Prometheus, and Relisys. BackFax is also available as an add on for the AppleFax modem. The Macintosh to which the modem is attached (the server) requires at least two megabytes of RAM and a hard disk.

Workstations need not be larger than one megabyte but must also have a hard disk. Any Macintosh Plus or later is supported both as workstation and a server; and, load permitting, the server may also be used as a workstation.

The FaxShare server software comes with a five pack of Solutions' MailMaker workstation software. MailMaker includes the MailSender printer driver for creating facsimile messages including full graphics and fonts with almost any Macintosh application and the MailViewer desk accessory for displaying and printing incoming fax messages. The FaxPrinter application is also included for automatic printing of received faxes from an unattended Macintosh. FaxShare including the five pack of MailMaker has a suggested retail price of \$495. Additional five packs of MailMaker are available for \$195.

The major benefit of FaxShare is cost savings. For about the initial cost of one additional fax modem and with no additional recurring costs, a five person work group can all have desktop fax capability with one modem and one telephone line. Additional workstations cost \$40 each based on the purchase of MailMaker five packs.

FaxShare supports both server based and individual address books. Usage reports allow allocation of fax and phone costs. Major features include custom graphic cover pages, automatic retry, after hour transmission, and file transfer with modems which support it. Incoming faxes may be saved in a variety of formats including TIFF for translation by character recognition software like OmniPage from Caere.

First commercial shipment is expected in the third quarter of 1990. FaxShare will be available through software retailers worldwide.

Solutions is also the publisher of Eddie award winning SmartScrap & The Clipper; SuperGlue 11 with GlueNotes; and The Curator. All Solutions software comes with a money back guarantee. Telephone and E-Mail support are available from the company which is located in Williston, Vermont; phone: 802 865-9220; fax: 802 865-9224; MCI: Solutions inc. 🍏

POSTSCRIPT



THE POSTSCRIPT™
FONT HANDBOOK 1990

Irene Flaxman reviews an invaluable guide for typesetting professionals

The PostScript Font Handbook is a new publication from The Ivanhoe Press in Oxford.

The handbook is a directory of PostScript Type 1 fonts, and has the official backing of Adobe. The Ivanhoe Press have enjoyed the cooperation of the publishers of major font libraries such as Adobe, Linotype and Monotype — allowing them to provide sample pages of 182 Type 1 fonts. This represented a complete set of the Type 1 fonts as at the time of going to press, but obviously additional fonts are being issued continuously.

The handbook is presented in a strong A4-size, looseleaf ring binder. The reason for the looseleaf format is to allow users to extract pages from the folder to facilitate type comparison, which is essential for typesetting and printing professionals.

The handbook is divided into three sections. The first section deals with the history and development of typography, guidance on font selection and page design, and a useful glossary of printing and typesetting terminology. The second section deals with PostScript fonts — including the history of PostScript, the different types of PostScript fonts available, the installation of PostScript fonts (Macintosh and IBM!) and an explanation of the NFNT numbering system. The third section comprises the font directory, including a history of each of the major suppliers as well as the full directory of fonts.

The major part of the publication is, of course, the PostScript font directory — with a separate page being devoted to each typeface. Each of these pages has a standard format to allow easy comparison of typefaces. Each

page shows the full character set; a standard piece of text, set in each variation of the font, in standard type sizes; an indication of the supplier(s); a history of the font and an indication of its uses.

The quality of the publication is excellent. It has been designed to be a working handbook, in that the publishers expect users to extract pages from the binder for the purpose of comparing typefaces. The fact that it has been printed on a good-quality, heavy weight of paper means that it is ideal for this kind of usage.

The publishers describe the handbook as "an invaluable tool for professionals and students of design, publishing, typesetting and printing as well as an essential guide for the office DTP user". Certainly, we have found that there has been much interest by those who have seen it whilst we have been in possession of a copy. As Ivanhoe Press point out "It will not turn a bad designer into a good one but it may prevent potential typographical disasters".

We were pleased to find this book, as we feel that it performs a very useful function. We had heard of a similar publication being developed in the USA, and we tried to purchase a copy, but it did not materialise. It's good to see a UK publisher taking the initiative — hopefully, it will be popular in the USA and Europe, too.

The PostScript Font Handbook 1990 normally retails at £29.95 from booksellers; or direct from the publishers, The Ivanhoe Press (0865 791006) — but you must then add £2.50 for postage and packing.

Apple2000 members can save the cost of postage by ordering the Handbook from Shop2000 for just £29.95. 🍏

JAM Software Upgrades

A Press Release from the Australian software house offers special prices until the end of August 1990

JAM SOFTWARE the publishers of the very popular time management desk accessories for the Macintosh, announce an amnesty registration with the release of their new versions Smart Alarms 3.0 and Appointment Diaries 3.1. Unregistered users have until August 30th to send in their registration cards to receive their upgrade at no charge. For those unregistered users who never actually purchased the package, JAM is offering registration under the amnesty program until August 31st for significantly less than half price. Users who wish to turn over a new leaf and become registered should send in a screen dump of the program or its icons on a blank disk with \$49. JAM will send the new versions with documentation by return mail.

The new versions implement many user wishes, including enhanced variability over advance warning period, recurring interval and re-scheduling times. With its newly built in Macro trigger function, Smart Alarms v 3.0 can be used in combination with

QuickKeys, Tempo or Macro-Maker to trigger a sequence of events at any time and with any periodicity. Users can set their reminders to go off with different sound or tunes and an automatic file checking and backup function has been implemented at start up. The program no longer requires an installer and can be simply dragged into the Macintosh's System folder. There has been greater integration achieved with the Appointment Diary and JAM has also integrated MacList, its desk accessory database-list manager with these reminder functions. Furthermore, JAM has made available the protocols to integrate and enhance their programs with the Smart Alarms reminder function. These technical notes are available on most bulletin boards or may be obtained by writing to JAM Software directly.

A Diary Migration utility is included in this upgrade and provides uploading and downloading to the Cambridge Z88 MacLite laptop with both append and replace features, as well as stand-

ard text format downloading. The Migration program provides users with easy diary archiving facilities. Early seeded sites have acclaimed this upgrade is "...everything I've been wishing for."

For further information, JAM Software can be contacted at 27A Nowranie Street Summer Hill 2130 AUSTRALIA.

Tel: (02) 7991888 Fax: (02) 799 4042 AppleLink AUST0134, MCI Mail JAMAUS

There are various international distributors of the package in Europe with multiple translations in preparation and imminent release. Smart Alarms is also soon to be released in Kanji for the Japanese market. In the United States & Canada, users can contact JAM Software's branch office, JAM Software USA at Point Reyes Station, California Tel: 415 6631041

Upgrade Costs

- Smart Alarms v3.0 UPGRADE Inc. Appointment Diary 3.1 & Diary Migration \$30
- Multi-User Appointment Diaries v 3.1M inc Smart Alarms v3.0 & Diary Migration \$30 plus No. of Users/nodes ... \$15ea
- MacList 1.5.3 Special for Smart Alarms users \$60
- MacList v1.0.3 to v1.5.3 \$20
- V1.5 to 1.5.3 postage only
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Designing Cards and Drivers for the Macintosh Family, Second Edition by Apple Computer, Inc

This 2nd edition replaces Designing Cards and Drivers for the Macintosh II and Macintosh SE. It has been revised to include Apple's recently announced systems and provides expanded information about the design of declaration ROM and driver software.

It describes the implementation of the NuBus, processor-direct and application-specific interfaces on the entire family, including the Macintosh IIcx, IIci, IIx, SE, SE/30 and Portable. It includes an electrical and mechanical description of NuBus cards; information on data transfer lines, signals, and arbitration logic; and a comprehensive analysis on developing NuBus drivers and firmware. £22.95

Guide to the Macintosh Family Hardware, Second Edition by Apple Computer, Inc

This second edition of the Macintosh Family Hardware Reference includes information on all Macintosh computers, including the new Macintosh IIcx, IIci, and Portable. It also provides comprehensive information about the Macintosh 128K, 512K, 512K Enhanced, Plus, SE, SE/30, II, IIx, and IIcx.

The book has been completely revised and reorganized by feature, to allow the reader to compare the differences and similarities among members of the Mac family. Whole chapters are devoted to the VIA chip, memory configuration, power supply, mouse and keyboard, ADB & floppy disk interfaces, serial I/O, SCSI, video display, and sound. £23.35

ShareWare Author Survey

By Kevin Garrett (down-
loaded from CompuServe)

This is the result of a poll of shareware authors regarding the writing and publishing of shareware.

Because of the small number of respondents to the survey, the results cannot be considered statistically accurate. Also because of the small number I found it necessary as the editor to not include some responses which were clearly not in line with the general trend of the data and would have skewed the results into meaninglessness. What follows is, I believe, a good picture of the shareware field.

The number following each question is the numerical average of the responses. The numbers in parentheses are the minimum and maximum responses. Text in quotations are comments by the respondents.

Disclaimer: The comments express the opinions of the participants of the survey and do not necessarily reflect the opinion of the editor or of Soft•Lab.

1) How many shareware programs have you authored?: 4 (1 min, 15 max)

2) How many freeware programs have you authored?: 4 (0 min, 20 max)

3) How many commercial programs have you authored?: 1 (0 min, 4 max)

4) What shareware fee range do you ask for your programs?: \$15 (\$10 min, \$30 max)

5) How many people have paid shareware fees for your programs (total for all non-commercial programs)?: 234 (4 min, 1500 max)

6) Total amount shareware fees received: \$3220 (\$125 min, \$10,000 max)

7) Your estimate of the number of people using your shareware programs: 12,000 (200 min, 100,000 max)

8) Your estimate of the percentage of people using your shareware programs who actually pay the shareware fees: 4% (1% min, 10% max)

Breakdown:	Usage	Responses
	1%	40%
	2%	25%
	3%	5%
	10%	30%

(Essentially the authors polled are split between 1 to 2% and 10%. The editor's experience tends to support the lower number; in fact, I tend to think that it is high.)

9) Your estimate of the total shareware fees you

would have received if all users of your shareware were to pay the appropriate fee: \$98,800 (\$3,000 min, \$1,000,000 max)

"\$8000 or more. It would mean a new Mac, that's for sure."

10) Are shareware payments your main source of income?: No

"Well, a good half of it. The other (bigger!) half being commercial programs."

"No, I couldn't survive, and these are good programs, I think!?"

11) Do you depend on shareware payments in any other way (putting yourself through school, a budget for buying software, etc.)?: 50% Yes 50% No

"Yes, it pays for development software, manuals, etc."

"Yup! Paying for college!"

"Yes. New hardware & software."

"Beer money...I'm a programmer, right?"

"Yes (buying hardware and software)."

"It's become my "blank disk" fund."

12) Why do you write shareware (as opposed to freeware or commercial programs)?:

"I can get reimbursed for my efforts while giving good value to customers."

"It's a good way to get stuff out there."

"I enjoy having total control of the product, you don't have the hassles of dealing with a publishing firm, and it's a nice utopian concept. There are enough cynics in the world."

"Author receives a small portion of total revenues in a commercial program."

"The shareware cost, in my humble opinion, was to raise the value of the program in the eyes of others—if it is free, it cannot be good, is the attitude of some. It is also exciting to receive even a small cheque in the mail, though."

13) What is your opinion about the shareware system:

"A noble failure."

"Of course it doesn't work!"

"It beats not getting any money..."

"It's a nice system."

"I like it (although I wish more people paid for it). Without it, we never would see a lot of great and useful programs."

"Use "demoware" for all stuff not often used or highly specialized. PROVIDE SUPPORT TO YOUR CUSTOMERS!"

"The system has been abused, both by users AND by developers. It originally started out as a commercial venture with a non-commercial distribution medium; now every greedy kid makes their little "hack" shareware."

"One program had over 150 downloads from one major service - not a single payment!"

"It's good but even Ray Lau doesn't make a living!"

"Nice way to distribute software. Too bad we authors depend so much on the honesty of the users."

"IT SUCKS."

"I think that it can work, given two or three essential items:

i) Ease of distribution, i.e., electronic via commercial bulletin boards, local BBSs, Internet, etc."

ii) It is the type of program one uses more than once or twice: I think the attitude that "I only used it twice, and shall not anymore, so why should I pay?", is not unreasonable or uncommon. (No matter how important a job was completed with the software that one or two times.) If one is always using it, guilt will make most of the lazy users pay up in the end."

iii) Continuing support in form of enhancements or information. This makes the user feel that someone deserves some remuneration for the work. I think most Red Ryder users (Macintosh terminal emulation) paid up for their copies."

14) How do you feel about the shareware distribution companies (Educorp, Public Domain Exchange, etc.)?:

"I'm not too fond of them."

"A necessary evil."

"I think they're a very good idea."

"Learn how to play their game (i.e. Demoware)."

"Some are reputable, and look out for the authors (e.g. Somak Software); others (e.g. EduCorp) don't seem to care."

"Somewhat redundant in their function (distributing software) when you think about on-line services or user groups."

"I find them one of the better sources of how my programs are distributed. They are fair."

"I gave Educorp permission to distribute my program on their disks. I think they help get one's products to those customers without BBS or Internet access."

"I've ordered from them before I got my modem. I see them as beneficial to the users who don't have modems, or decent local networks, but I don't see how THEY sleep at night. Of course they do it for a profit at our expense. Hey, for the beginning author, it gets us exposure. I do think it inhibits the users from sending in shareware fees ('Hey, I already paid for it.')."

"Maybe they're OK, but I'm a bit suspicious of them."

15) Have you tried being your own publisher?: 19% Yes 81% No

"No, I looked into the issues and decided that I would rather spend my time designing and coding."

16) If so, what is your opinion of doing that?:

"It takes too much time away from 'productive' work."

"Too much work"

"Extremely positive"

"Taught me I'm not a marketing or sales professional. Next time I'll find myself a real publisher."

17) How long have you been programming?: 10 ave (3 min, 25 max) years

18) Which programming languages do you use?:

Assembler	47%	BASIC	20%
C	80%	C++	13%
HyperTalk	20%	Modula-2	7%
Object Pascal	7%	Pascal	53%

19) Any other comments?

"It has never been my intention to make any money off of shareware because I know people don't pay the fee. But a lot of the stuff that I've written has taken HOURS to write and is not something that someone could casually 'whip' up, so I feel justified in asking for a token payment for its use. I receive a lot of 'fan mail' for the stuff that I've written. I enjoy the mail almost as much as the checks. It gives me a good feel for what people out there are wanting. You'd be amazed how often I'll get a check in the mail for \$5 from someone along with a letter complaining that I've charged them for the use of my product. These people seem to think that software grows on trees and that the hours that I've invested in putting together a solid and useful application is something that is 'owed' to them."

"I find that people are extremely thrifty when it comes to paying for a product. It is rare that individuals pay for software. I believe piracy has a lot to do with it."

"It is important you provide quality code and support at a price 'reasonable' for your services. Don't be afraid of charging what your program is worth. Provide users with some form of 'receipt' when you get their money (like a user license). Keep them informed of updates, etc. In essence run your shareware service like a REAL small business and support your customers the way you want to be supported from ANY software vendor. I've received the BCS award for doing so."

Thanks to all the participants who took the time to answer the questions. 25/6/90

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Network News

The latest news, tips and gossip
from the networks.

Subject: Invisible System Folder - HELP!!

From: Bryon Lape @ University of Tennessee Computing Center, Knoxville

Something very strange was happening on the Mac at work. After running the free CD-ROM from Apple, the system folder has now become invisible! The hard drive boots fine and all INITs get loaded but the icon of the system folder is missing. Mac-Tools says that it is there and not invisible! How do I fix it?

Bryon Lape

Subject: 14" monitors: Magnavox, NEC, Seiko

From: Jeff Bellsey @ Massachusetts Institute of Technology
Hi!

Has anyone out there used or seen one of these monitors in action? I'm mail-ordering much of my new system, but I wonder what kinds of problems I'm throwing myself into. Is there a convergence problem? Are the colors "rich" and "accurate"?

Thanks (in advance, of course...)
Jeff

Subject: My Good Old Lisa Harddisk broke :(

From: Mulder @ Eindhoven University of Technology, The Netherlands

After coming back home after a nice though wet holiday last week I turned on my Lisa. All of a sudden the Lisa's internal harddisk made a noise like a saw-mill... Somehow the drive's heads are in contact with the disk, I don't know what caused this. Could it be that this problem is caused by the workmen repairing the roof of my flat? This causes quite heavy vibrations all through the building. Well, my harddisk is broken be-

yond repair. Is there any place where I can get a new Lisa internal harddisk? Are there any other drives which can be connected to the Lisa? (I heard a rumour that there's a type of harddisk found in some of the older IBM PC's that can be connected to the Lisa) Has anyone got a spare 10MB profile which I could buy? What else (besides heavy vibrations) could have caused this?

PS: and of course I didn't make a back-up last week :-)

Subject: Mac-based typing speed tester wanted

From: M Kositch @ PBS:Public Broadcasting Service, Alexandria, VA

I need a Mac-based typing speed tester. You know, one of those things that times you typing for ten minutes and tells you how fast you typed, how many mistakes you made, etc.

Any leads are gratefully accepted. Thanks.

Margaret Kositch

Subject: Re: Backup to file?

From: Andrew E Wade @ The Portal System (TM)

RE: Can you backup to a file with retrospect?

Answer: Yes. It works. I have done it to local and remote (AppleTalk) Mac disks. Also, I do it regularly to back up my Mac to a Unix disk (Sun or DEC), which is connected via gatorbox to ethernet/nfs. Works flawlessly with latest software. Unattended, incremental, good ui. I recommend it highly.

Drew Wade

Objectivity, Inc.
800 El Camino Real, 4th Floor
Menlo Park, CA 94025

Subject: Query: Want to dial up

my Mac from another Mac?

From: Mark Young @ Silicon Graphics, Inc., Mountain View, CA

I was wondering if anyone could give me any information on software available for the Mac that would allow me to leave my Mac at work in server mode when I go home at night so that I could dial it up and transfer files back and forth.

Mark Young

Subject: Re: Query: Want to dial up my Mac from another Mac?

From: Mark Vita @ GE Simulation & Control Systems

Scott Watson's Okyto program will allow you to do this. (He gives this program away for free when you purchase [or upgrade to] White Knight.) Okyto is a multi-channel file transfer program similar to the shareware programs MCS and MultiXfer; it lets you transfer files between two Macs over a modem link. The file transfers occur simultaneously in both directions; there's also a "chat" channel that lets the two users type messages to each other while the transfer is in progress. Okyto also has a mode where you can leave one Mac in a unattended "server" state; the remote Mac can call up the server Mac, browse through its directories in a SFGFile-like manner, and retrieve files.

You can probably also do this using Timbuktu Remote. It's more expensive, but you also get the screen-sharing capabilities of Timbuktu...

Mark Vita

Advanced Engineering
GE Simulation and Control Systems
Daytona Beach, FL

Subject: A/UX V2.0 on a Conner 105mb drive

From: Phil Hunt @ Digital Equipment Corporation
Hi,

I am about to bring up A/UX V2.0 on a Conner 105mb drive. A while back someone posted how to patch Apple HD SC Setup to allow non-Apple drives to be partitioned by the app. I thought it was patching the code resource named "%a5init" by finding the first drive in that code and patching a length of 0 for it allowing anything to 'Match'. I tried that.

but still get the 'No suitable SCSI device found'...Did I do something wrong?

Failing this, does anything else allow A/UX setup besides HD SC Setup?

Phil Hunt

Digital Equipment Corporation

Subject: **History of the Mac, Part I.**

From: Dwayne Johnson @ California Polytechnic University, Pomona

Hello,

I am working on a historiography project about the Macintosh. The idea is to trace the how people thought about the machine from conceptualization to its status today as the preferred machine of many people. What I am looking for is:

A) Primary sources

Literature/Documents/memos/etc. outlining some of the ideas and possible uses for the Mac. This would most likely have to come from within Xerox or Apple, however if someone could point me toward contacts, I'd be most appreciative.

B) Secondary sources

Any good books reviewing the Macintosh and its usefulness. I'm aware that there are thousands of articles in magazines on the subject, and I'm currently wading through them. If you would like to suggest places to look, this too would be helpful. (Assume I just fell from the sky....take me to your Mac info...)

C) Thoughts/comments

I'm also interested in how the user community feels about the Mac, its development, and its future.

When I'm finished researching what the different philosophies of the Mac are, I'm hoping to write a short history on the subject. I must admit that I was never a big fan of the Mac. Having made my living in systems programming and communications, I used to regard the Mac as a "quaint little toy" that I swore I'd never use. As you may have guessed, I'm typing this message on a Mac. The Mac is my machine of preference whenever I find myself writing. I wouldn't dream of using anything else.

I appreciate any and all replies, even those who just want to drop me a line and say hi (variety, ya know!).

Thanks in Advance...

Dwayne

Subject: **The size of scanned images TOO BIG!**

From: Glen A. Reece @ Arizona State Univ, Tempe

Greetings all:

A seemingly dismayed individual asked me why the drawings that he was scanning take up so much disk space...after all these are simple line drawings and not full grey-scale images. Well, since I couldn't give a satisfactory answer, I need your help. Please explain why scanned line drawings take up so much space, let me know what is the "best" scanning software available, and let me know if some sort of compression can be done when storing and uncompression when recalling the drawings. I'm sorry but I don't know what equipment he is using now :-)

Please (as always) respond directly to my email address and I'll post the conclusions back to comp.sys.mac once a sizeable number has been received.

Thanks in advance,

Glen A. Reece

Industrial Fellow

Artificial Intelligence Lab.

State University

Arizona

Subject: **Mac owners guilt at Mac high prices (Why, Apple? Why?)**

From: pfr654 @ Computer Services, Australian National University

(37 lines) More? [ynq]

Robert Minich) writes:

" Me: I personally think it is in Apple's best interests to come as close to giving away Macs as is possible to increase the installed base. In the long run, this would be very beneficial."

Robert, you have hit the nail on the head.

Every Mac user/owner since Adam has the same feeling: GUILT because s/he decided that the extra expense was worth it, in other words that s/he is better off than s/his friend who says they'd love one but can't afford one.

How many of us have sold our old Macs at bargain basement prices to friends/relatives (i.e. less than normal 2nd hand) to encourage them to join the fraternity?

(i.e. I am considering selling my

SE for 70% of the price it would sell for via the papers, to a brother-in-law who's decided he should get a computer, and thinks that Windows + cheap clone is the same as a Mac)

How many of us would LIKE to *give* a Mac to the nearest 'Macs are toys' MS-DOS user to convert them?

WE all know that the Mac is better. We all know that you get more in a Mac box than in a PC box BUT WE STILL WANT A CHEAP Mac THAT EVERYONE COULD AFFORD *WITHOUT* HAVING TO MAKE EXCUSES FOR APPLE. ('R&D' being the favourite)

Phil Ryan

ANU Department of Physics and Theoretical Physics
Canberra, Australia

Subject: **Death by Windows**

From: pfr654 @ Computer Services, Australian National University

Lots of posters to this and other Mac newsgroups are Mac evangelists (including me).

I think that unless Apple does something drastic, that the Mac will die (death by Windows). Mac sales are probably going through the floor right this minute!

People with limited \$\$ (isn't everyone in this boat, from home users to corporations) will be buying a 'nice' interface for less money if they get a PC. These people are NEW COMPUTER USERS and don't know/understand or care about the finer details of lots of the discussion going on about Win 3 vs Mac.

Apple's advertising is good, but it has to be followed up by cheap Macs.

Suggestion: a cheap modular Mac, able to do colour, based on 68000 or 68020: to compete head-on with clone makers.

Phil Ryan

ANU Department of Physics and Theoretical Physics
Canberra, Australia

Subject: **Re: Death by Windows**

From: Jonathan King @ Psychology, Carnegie Mellon, Pittsburgh, PA

Funny. I remember reading recently that the sales of Macs were *up*, much to the surprise of analysts everywhere, and the price of Apple's stock has gone up about 10% since the Windows

announcement. These are not generally accepted corporate death signs. Of course, the whole market could turn sour for them pretty quickly, as it has happened to others in the field, but I don't see any evidence for this now.

Another funny thing is that most of the people I know who are raving about Windows are people who already own a PC. I'm sure Windows will sell plenty of machines, but I wouldn't be surprised if most of the PCs sold to naive users are sold through dealers, where the potential savings are less than elsewhere because these first time buyers are, well, naive.

Personally, I'd abandon the 68000 altogether if I were Apple. It will end up being such a royal pain trying to write innovative operating systems that will be useful on both 68000s and 68030s that I don't think Apple can stand to do it next time.

J King

Subject: Re: Death by Windows

From: David Hairston @ Gaia II
I'm a macophile, doing my duty by convincing a few friends to go Mac. Only one has regretted it so far, he's a wanna-be programmer and finds the Mac OS very strange. I believe in time he'll come around. These people had a common denominator: they could get Macs at discount prices on an expense account! The people I can't convince (like my neighbours) have figured out that the IBM PC is the most popular computer, the industry leader in such things, has the most software available and now it's developed a new interface (Windows) which probably works better than a Mac (in their opinion). Besides, it's cheaper. I'm frustrated, it's hard to argue "you get what you pay for" when to them it seem like they'll be getting a lot more for less bucks. Funny thing is, anyone who's tried a Mac (and doesn't have to buy it) loves the way it works. I think Apple has made a grave mistake in not making the low-cost Mac line available awhile back. This would serve one very good purpose: get people hooked on the Mac interface at affordable prices. Color is also important (unfortunately, a market reality). Apple needs to have the low-cost Mac line compete head-to-head

with the PC clones running windows. They'll win such a war. I also believe that most people understand that more bucks usually means enhanced performance, so people using a low-cost Mac could be expected to get higher priced Macs as circumstances warrant. For now, Windows is a serious threat simply because it appeals to the pocketbook ("the price is right"). To do the Macs justice they need a fighting chance. A 68000, color IICX-style package would be just the ticket (in my opinion) ...

Dave

Subject: Death by Windows

From: Edward P. Costello @ English, Carnegie Mellon, Pittsburgh, PA

Just to throw some gas on the fire: Why doesn't Apple just have a fire sale on the low-end Macs?

I mean really low, wipe out the inventory of Plus'es and Se's before the new low-end computers come out. Then the people who want a cheap Mac can get one and Apple can wipe out its inventory while gaining a few more customers. Colour is really nice, but how many people (in the "low-end" - I use it to type papers - market) need it? How many people REALLY need the blazing fast speed of an SE/30? The main problem with this approach is that stock Se's and Plus'es don't have the memory to do anything with Multifinder and I doubt Apple would be that willing to trade customers for profits...:-)

Ed Costello

Subject: Cost of Hypercard

From: Jonathan King @ Psychology, Carnegie Mellon, Pittsburgh, PA

I'm sorry, but I believe that the initial premise of this thread (that the development cost of Hypercard is making Macs unaffordable) is pretty far off. Even if the Hypercard team had 100 people, and the cost of supporting each one of them were \$250,000 a year, the (putative) \$25,000,000 cost of Hypercard development would add just \$25.00 to the cost of a Mac if Apple sells a million Macs a year.

This isn't an enormous cost, I don't think, and since it is likely (certain?) that the Hypercard team is only half this big, Apple's

support a little less generous, and Apple's sales somewhat better than a million Macs a year, the cost of Hypercard would seem to be a non-issue, taken by itself.

Whether or not Hypercard is worth developing at all is a slightly different question. I would have to say it is, given my personal experiences and the general improvements announced for the new version. But for some people, it may not be worth the disk space it takes up. In any case, it is providing a number of users with substantial benefits for a price that doesn't seem to be enormous.

J King

Subject: Apple pricing (was Re: Cost of Hypercard)

From: John Doner @ University of California, Santa Barbara

This whole thing is getting out of hand. In my original posting, I maintained that Apple could not sell computers at PC-clone prices and also have their rather elaborate R & D program. I mentioned Hypercard only in one phrase, not even a whole line, as an example of innovative software.

Incidentally, it's important to realize that companies engaged in real innovation on a wide scale are almost certain to incur much higher costs per successful product. They must chase down all the blind alleys. Probably only one idea in 10 turns out to be a good one, and only a minor percentage of good ideas actually lead to successful products. That's just the way research is, and pretty much the same holds for creative development work.

Contrast that with the task of a firm simply trying to follow the lead of another, even if they aren't just copying. Someone else has already found what works and what doesn't. They can focus on implementing the good ideas, and don't have to pay people for working on projects that don't pan out. Apple's chosen place is the forefront. Their prices will reflect the costs of staying in that place.

John E. Doner
Mathematics, UCSB
Santa Barbara, CA 93106

Subject: SCSI Problems

From: Scott Johnston

I am having problems connecting an external SCSI HD to a Mac. I

would appreciate any advice or pointers.

The Equipment:

Mac IIci, 5MB RAM

Internal 40MB Quantum HD

External 20MB Jasmine HD

Latest System Software from Apple (6.0.5?)

The Problem:

All machines off. Connect Jasmine to external SCSI port. Turn Jasmine on. Turn on Mac IIci. After a brief power-up, "sad-Mac" comes on the screen

with 0000000F<cr>00000001 underneath it.

What I've tried:

1. The new system is installed on the internal HD. I've tried starting off the Jasmine with a system installed on there (with help from an old Mac II), but with same results.

2. The Jasmine is internally terminated. I've tried giving the Jasmine a new SCSI ID #, anywhere from 0 to 6, but with no result. The internal HD is always 0, and the Mac is 7.

3. If I plug in the Jasmine after the IIci has gone through its startup routine, I cannot see it on the desktop, but I CAN see it with programs like Apples HD SC Setup and SCSI Probe/Tools. These tools, however, have not helped/been successful in updating or mounting the Jasmine.

4. The Jasmine is fine with older Mac IIs.

Please EMAIL suggestions to johnston@portia.stanford.edu. Thankyou in advance for your help.

Scott Johnston

Subject: Re: SEX! (Now that we've got your attention...)

From: Viki @ Oakland University, Rochester MI

John Starta writes:

"Neither of them were sexual or provocative in my opinion. For the record, the May 1990 issue has a woman standing behind three nineteen inch monitors with her hands on her hips. Her face, shoulders and elbows are showing. Sexually stimulating? No."

Hmm not sexually stimulating? I hate to say this but I wonder what you find sexually stimulating? I find both covers stating a sexual and provocative interest in computers... I think that the woman who does the cover is exploiting her own sex. If the woman was

dressed in what we consider normal work clothes I might think otherwise but the dress she is wearing on the cover of the May 1990 issue is tight fitting and shoulderless. Something I am sure that if I came to work in I probably would be highly harrassed and get little done in. Oh and I almost forgot the heels.... I have heard several renditions on heels, what are mens honest opinion on them? Believe me I know the answer to that and it usually is not clean when they are that high! As far as the issue with the woman licking the stamp that is a different issue. Anyone can lick a stamp but no one holds a stamp that way and no woman wearing that much lipstick ever licks a stamp. This is just my opinion of course and I am a woman. I don't agree with seeing a woman exploited on a computer magazine. Other magazines that sell fashion, clothing and are informational to womanly topics are in a different category all together. I also don't agree with using woman to sell cars and other things but of course it is up to those woman to do what they want and it is up to those company's to sell there product anyway they want within the law.

Viki Dorazio

Academic Computer Services

106 Kresge Library

Oakland University

Rochester Mi. 48309-4401 USA

To know is nothing at all; to imagine is everything. Anatole France.

Subject: Re: SEX! (Now that we've got your attention...)

From: Steve Martin @ US West Marketing Resources Group, Aurora CO.

You know, I have recently seen a parallel conversation in 'Wine Spectator' magazine. They had a picture of a woman in a bathing suit on the beach with a bottle of Chardonnay. The issue was dedicated to reviews of Chardonnays. Lots of people wrote in complaining about the woman on the cover, but the editors said that they were trying to show that wine could be enjoyed in a lot of places, not just around the dining table.

I got the definite feeling that if it had been a man on the beach there would have been no letters. Why does a woman's picture make her an object, while a man's

does not? I think women will have achieved full equality when we can have pictures of either sex on magazine covers, and not get inundated with letters to the editor about making people 'objects'!

Steve Martin

U S West Marketing Resources Group

Subject: Arrrgggggg.... more THINK C limitations

From: John T. Nelson @ Advanced Decision Systems, Arlington VA

This is getting tiresome...

Now I'm getting an error from THINK C that says "debug table overflow." Pretty clear what's going on here... the debugger symbol table has overflowed. Now we look in the THINK C manual to find out how to expand the size of the debugger table and it says...

"You overflowed the debugger table... consider using precompiled headers." Oh great, I'm trying to compile and link code that has been generated by a preprocessor (.vis. Flex and Bison) which rearranges the order of the include files and inserts code in front of the precompiled header include. When you compile files like this, THINK C complains because the precompiled headers wasn't the very first thing in the file.

GGGRRRRRRRRRRRRRRR.....

THINK C is a good package but I'm turning up just too many wierd and limited things. NEVER EVER make assumptions concerning the size of projects/files/symbol tables/data segments etc.

John T. Nelson

Info-Mac digests consist of submissions by individuals on the academic computer networks. Submission and distribution of these digests is by network, moderated by volunteers at Stanford University.

Usenet is a loosely-coupled network of co-operating academic and commercial computer systems. It is a non-profit network whose primary aim is the sharing of technical information and the spreading of research results.

Delphi is a commercial time-sharing and bulletin board system. The Delphi Digests are made available thanks to Jeffrey Shulman of Rutgers University.

Mac Viruses

By John Norstad, author of the anti-virus program Disinfectant 2.0

Introduction

Viruses and other kinds of destructive computer software have become an increasingly serious problem in the computing world. In the Macintosh community, viruses continue to spread rapidly and widely. Viruses will continue to cause problems for some time.

A virus is a piece of software which attaches itself to other applications or files. Once you run an infected application, the virus quickly spreads to your system files and to other software. Viruses spread from one Macintosh to another via the sharing and distribution of infected software or infected disks.

Viruses may be malicious or non-malicious. Non-malicious viruses replicate, but they do not attempt to do anything destructive. For example, they may beep, display messages on the screen, or do something else innocuous, but they do not intentionally try to do any damage. On the other hand, malicious viruses, in addition to replicating, do attempt to damage something. For example, there have been several viruses in the IBM PC world which intentionally delete files or destroy the contents of hard drives.

We are very fortunate that to date all known Macintosh viruses are non-malicious. It is very important to realize, however, that even non-malicious viruses are almost always damaging, even if the damage is unintentional. Many people who have experienced infections have reported problems with the normal operation of their Macintosh. Viruses occupy memory and disk space and this is enough to cause problems all by itself. They also live at very low levels in the operating system and can interfere in unexpected ways

with other parts of the system. We have also discovered errors in most viruses which can cause unexplained crashes and strange behavior.

Disinfectant version 2.0 recognizes the Scores, nVIR, INIT 29, ANTI, MacMag, WDEF, ZUC, MDEF, and Frankie viruses. It also recognizes all the known variations and clones of these viruses. Furthermore, Disinfectant also recognizes many possible unknown variations and clones. It will both detect the viruses and repair files which have been infected by the viruses.

Disinfectant will not recognize all possible viruses: only the ones it has been configured and programmed to recognize. If a new virus or strain appears, we will have to modify the application to recognize it, and you will have to get a new copy of the application. Disinfectant does not recognize the "Dukakis" virus, which only propagates between HyperCard stacks and is very rare.

Disinfectant also includes a virus protection startup document (INIT). When properly installed, the Disinfectant INIT will protect an uninfected system against infection by any of the known Mac viruses.

Viruses should not be confused with other types of destructive software such as "worms" and "Trojan horses."

A "worm" is an application which replicates and spreads, but does not attach itself to other applications. Unlike a virus, it does not require a host to survive and replicate. Worms usually spread over a network of computers. They are not spread through the sharing of applications. The most well-known example is the Fall 1988 Internet worm, which infected

and disabled several thousand government and university UNIX computers in a single day.

A "Trojan horse" is an application which appears to do something useful, yet additionally does something destructive behind your back. An example is the "Sexy Ladies" HyperCard stack, which erased your hard drive while you ogled the cheesecake images. Trojan horses do not replicate. Disinfectant does not attempt to address the problems of worms and Trojan horses.

There is no need to panic over the current virus situation. However, you should take the problem seriously. Using Disinfectant, it only takes a few minutes per week to effectively protect your Macintosh against the known viruses. See the section titled "Recommendations" for a short list of the simple things we suggest you do to protect your Mac.

There is a misconception that you can protect your Macintosh against viruses by merely avoiding shareware and freeware software. This is far from the truth. There have been many reported cases of (inadvertently) infected commercial software, while most of the major national sources of freeware and shareware software are remarkably virus-free.

The virus problem is serious, but even more serious is the tendency to overreact to the threat. Organizations which impose severe restrictions on the use of personal computers and personal computer software are doing more harm than good. For example, some companies keep computers in locked rooms and do not permit their employees to use unapproved software. Some companies have even gone so far as to prohibit their employees from joining bulletin boards or user groups! These restrictions are completely unnecessary and are in fact very dangerous. The heart of the personal computer revolution (especially the Macintosh revolution) is the empowerment of the individual. At their best, personal computers are extensions of each individual's imagination, unfettered by arbitrary rules and regulations imposed by the corporate MIS priesthood. We cannot let the virus problem and other security concerns endanger this revolution.

The analogy between biological viruses and computer viruses is striking. Both of them replicate and they both require the assistance of a host to survive. In both cases, the infected system is sometimes severely damaged. With both kinds of viruses, it is sometimes possible to remove the infection without damaging the system and it is sometimes possible to inoculate or vaccinate the system to protect it against future infection.

As with all analogies, however, it is possible to carry the analogy between biological and computer viruses too far. Computers are not living organisms. Biological viruses usually occur naturally and are almost never created by people. Computer viruses are always created by people; they never occur naturally. Most importantly, it is not possible to compare the enormous suffering caused by biological viruses such as AIDS to the comparatively meaningless damage caused by computer viruses.

For more information on the problems of computer viruses and destructive computer software in general, we refer you to the report "Computer Viruses—Dealing with Electronic Vandalism and Programmed Threats," by Eugene H. Spafford, Kathleen A. Heaphy, and David J. Ferbrache, published by ADAPSO, the computer software and services industry association. Contact ADAPSO at 1300 N. 17th Street, Suite 300, Arlington, VA 22209, (703)522-5055, for information on how to obtain a copy of this report.

Protection

The Disinfectant application by itself will not protect your system against infection. It will only locate and repair previously infected files and disks. To protect your system against infection, you must install a protection startup document (protection INIT). Disinfectant includes such a protection INIT. When properly installed, it will protect your system against all of the known Macintosh viruses.

WARNING: The Disinfectant protection INIT will not protect your system against unknown viruses! If a new virus appears, we will have to release a new version of Disinfectant to recognize it.

Use the "Install Protection INIT" command in the "Protect" menu to install the Disinfectant INIT in your currently active System folder. You must restart your Macintosh to activate the INIT.

Use the "Save Protection INIT" command in the "Protect" menu to save a copy of the Disinfectant INIT to any file of your choosing. The Disinfectant INIT is simple, small, efficient, and unobtrusive. It does not need to be configured. In fact, it has no control panel interface at all, so it cannot be configured. The INIT will never ask you to make a decision. It should have no noticeable effect on the performance of your Mac. It is very small, and can easily be used on floppy startup disks (e.g., in University labs with floppy-only Macs). The INIT does not interfere with the normal operation of Disinfectant or other antiviral applications, or with programming environments, installer applications, or other system software.

An alternative to the Disinfectant INIT is Chris Johnson's excellent GateKeeper protection INIT. GateKeeper is a "general purpose suspicious activity monitor." Unlike the Disinfectant INIT, GateKeeper checks not only for the known viruses, but also for suspicious activity characteristic of viruses in general. Thus it can often provide protection against even unknown viruses. GateKeeper requires some configuration and it will sometimes ask you to make complicated decisions. It is much more powerful than the Disinfectant INIT, but it is also larger, more complicated, more obtrusive, and harder to use than the Disinfectant INIT.

It is important that you understand this difference between the Disinfectant INIT and GateKeeper. There is an unavoidable tradeoff between simplicity and power. Each individual must decide which kind of protection is best for his or her particular situation.

If you run an application which is infected by one of the known Mac viruses, the Disinfectant INIT beeps ten times, quits the application, and presents an alert. The Disinfectant INIT only detects and blocks viruses; it does not remove them. To remove a virus, you must use the Disinfectant appli-

cation.

If you use a disk which is infected by the WDEF virus, the Disinfectant INIT beeps ten times, presents an alert, and temporarily neutralizes the virus. You can safely use the disk; the virus will not spread. To remove the virus from the disk, you can either rebuild the Desktop file or use the Disinfectant application. Rebuilding the Desktop file is usually easier. See the section on the WDEF virus for more information.

If you use a HyperCard stack which is infected by the MacMag virus, the Disinfectant INIT beeps ten times, presents an alert, and temporarily neutralizes the virus. You can safely use the stack; the virus will not spread. You should use the Disinfectant application to remove the virus from the stack.

The Disinfectant INIT also checks your System file at startup time to see if it is infected by any of the known viruses. If it discovers one of the known viruses at startup time, it beeps ten times and presents an alert.

The Disinfectant INIT uses the Notification Manager to present its alerts. The Notification Manager is not available on systems older than System 6.0. With these old systems, the INIT only beeps ten times and it does not present an alert.

The name of the Disinfectant protection INIT begins with the special symbol "◊":

◊ Disinfectant INIT

The special "◊" symbol is present to force the Disinfectant INIT to be the last INIT loaded when you start up your Macintosh. This is important: the Disinfectant INIT must be loaded last! If you rename the INIT, make certain that you rename it so that it comes last in alphabetical order in your System folder.

The Disinfectant INIT icon should appear at the bottom of your screen every time you restart your Macintosh. If an error occurs and the INIT cannot load properly, the INIT will beep ten times and it will draw a special error version of the icon (the normal icon with a large "X" superimposed.)

The Disinfectant INIT requires the hierarchical file system (HFS). If you try to use the INIT on a very old system which does not support HFS, it will not load properly

and it will display the error icon.

If you wish to remove the Disinfectant INIT for some reason, open your System folder and drag the INIT icon to the trash (or anywhere else outside of the System folder). Then restart your Macintosh.

It is very important that you use either the Disinfectant INIT or GateKeeper to protect your system.

You can use both GateKeeper and the Disinfectant INIT if you wish. Just make certain that the Disinfectant INIT loads last at startup time.

Recommendations

There is no need to panic over the current virus situation. However, you should take the problem seriously. Using Disinfectant, it only takes a few minutes per week to effectively protect your Macintosh against the known viruses.

- If you do nothing else, religiously use the Disinfectant INIT or GateKeeper. They only take a minute to install and they can save you much grief.

- Keep original software on locked floppies. Use copies. When you obtain a new piece of software, immediately lock the disk on which it came, make a copy, and use the copy. Never unlock the original disk. It is impossible for a virus to infect files on a locked floppy.

- Make periodic backups of your hard drive, at least once per week.

- Run Disinfectant just before each backup to make certain the backups do not become infected and to ensure your system has not become infected.

- Before using new software, check it for possible infections with Disinfectant. This rule applies to all new software: commercial software, shareware, and freeware.

The remaining recommendations are for people who manage Mac networks, Mac laboratories, Mac bulletin boards, or collections of public domain and shareware software. An environment where many people share Macs, or share a Mac network, is a perfect breeding ground for viruses. People who sell software also have a special responsibility to make certain that their software is free from infection.

- Install the Disinfectant protec-

tion INIT or GateKeeper on all your lab start-up disks.

- Check all your lab disks frequently with Disinfectant to make certain that they are uninfected. Also check to make certain that the Disinfectant protection INIT or GateKeeper is still installed and active on all your start-up disks. We have discovered that students love to play with the start-up disks. At Northwestern University, we try to check our lab disks once per week.

- Educate the people in your organization about viruses and how to protect against them. Give them copies of Disinfectant and teach them how to use the application. Distribute printed copies of the Disinfectant manual.

- Create a special "virus scanning station" in your lab. See the section about the Preferences window for details.

- Try to put software in write-protected folders on AppleShare server disks. Viruses cannot infect applications if they are in folders which do not have the "Make Changes" privilege. On the other hand, if an application is in a writable server folder, any infected Mac on the network that accesses the disk and uses the application might spread the infection to the application on the server. If it is a popular application, it will in turn quickly infect any other Macs on the network which are not protected by a protection INIT. This is one way in which viruses can spread very rapidly. Since some applications insist on writing to their own file or folder, it is not always possible to put applications in write-protected folders, but you should make every attempt to do this when it is possible.

- Check server disks frequently with Disinfectant to make certain they are uninfected. For best results, you should take the server out of production, start up the server from your virus tools disk, and run Disinfectant from the virus tools disk. This is the only way to guarantee that Disinfectant will be able to scan all the files on the server disk. At Northwestern, we try to check all our servers once per week. For more details on scanning servers, see the discussion in the "Special Features" section.

- Check all new software with

Disinfectant before installing it on a server.

- Back up your servers frequently. Run Disinfectant just before each backup.

- The WDEF virus can cause serious performance problems if it infects an AppleShare server. To avoid these problems, administrators should never grant the "make changes" privilege on server root directories. We also recommend deleting the Desktop file if it exists. See the section about the WDEF virus for details.

- Bulletin board operators and other people who maintain and distribute public domain and shareware software have a special responsibility to the Mac community. Please carefully test all new software before distributing it. You should also, of course, run Disinfectant on all new software you receive.

- If you sell software, please check your master disks for infections before sending them out to be duplicated and distributed.

This article is Copyright © 1988, 1989, 1990, Northwestern University. It is part of the documentation for Disinfectant 2.0.

Disinfectant 2.0 will be circulated on the Mac AppleXtras Disk this month.

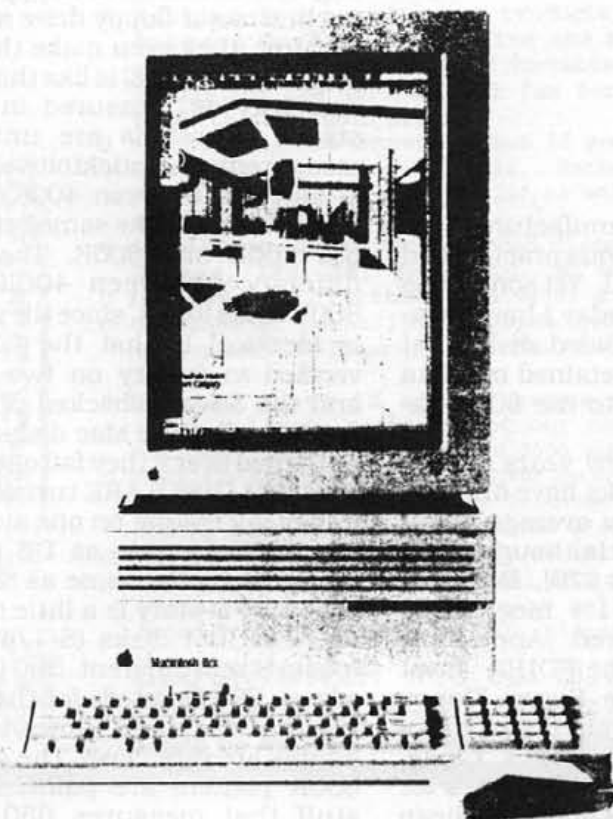
News from the USA

There are rumours of a PostScript virus in the USA. It is reported that a rogue PostScript file of some sort has reset passwords on PostScript printers, stopping owners using their printers. The only solution to the problem is to replace the EEROM. The problem is still a puzzle, but a number of programs have been developed to stop the virus affecting the password mechanism of Adobe controllers. 🍏

Initial details of Adobe Illustrator 3.0, due for release in September, indicate that the new version will include a new tool for charts and graphs and a better interface as well as many improvements to the text-handling features. This latter feature seems the most important, moving away from the dialogue box for text entry; text can also be wrapped around an object or created on a curve. 🍏

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How to \$ave buck\$ to buy toys

By Jack Ziegler (downloaded from CompuServe)

HOW TO \$AVE BUCK\$ TO BUY TOYS OR HOW TO MAKE HD DISKS OUT OF 400K/800K DISKS!

Remember back in the dark days, when all Mac's had 400K drives, and a box of 10 400K disks cost from \$30 to \$50. Well I do! In fact I bought several boxes of "Apple" Single Sided disks at \$49.95 a pop, before I actually bought my Mac. I wanted to get ahead of the game! Ah yes, those were the days... The 3-1/2" disk was new and in short supply and it was expensive. Just as the price started to come down, lo and behold, Apple introduced the 800K drive! Now "double sided" disks were needed and once again they were expensive and in short supply. My daughter bought me a box of 800K's for a Christmas present and paid \$79 for them. I naturally returned them the next day and the salesman said "well, they are guaranteed and they come with their own labels!" But then he worked at ComputerLand...

Of course we were all warned not to use the 400K disks (Single Sided) as 800K disks (Double Sided). Nothing prevented us from doing so, except in the dark recesses of our minds we were reminded that nothing is for free and somehow the higher priced Double Sided disks had to be better than the lower priced Single Sided disks. So we bought Double Sided disks by the hundreds, thousands, millions, and cheerfully paid from 30% to 70% more for this supposed quality. Some daring folks did reformat the 400K's to 800K status, and wonder of wonders, it worked! But we continued to get dire warnings

from the disk manufactures that this was a dangerous practice and should be avoided. Yet some of us persisted, and today I have hundreds of Single Sided disks that have cheerfully retained my data while formatted to the 800K capacity.

Over the past few years quality Double Sided disks have dropped in price and now average about \$22 (or less) a box (although Apple still lists theirs at \$79). But now, the age of the 1.4 meg floppy (1416K) has arrived. Apple calls it's new drive, the FDHD, most users call it the Super Floppy Drive! Once again floppy disks are in the \$50+ a box range. EggHead Software has HD's for \$37.95 and that's about as cheap as I've seen them. And once again we are told, "you should not (and this time can not physically) format a standard Single Sided or Double Sided disk to the new HD format. The disk manufacturers placed a second hole on the disk, opposite the write protect shutter.

If the new FDHD Super Floppy Drive does not see this hole it will refuse to format the disk as anything other than an 800K (or 400K) disk. If it sees the hole it automatically formats the disk as 1416K. Now this does prevent you from using an expensive HD disk for anything less than a 1416K super disk. But it also prevents you from using the less expensive (\$22.00 or less a box) Double Sided or (as low as \$10.00 a box) Single Sided disks as the new 1416K disks. That is unless you circumvent the self protection the drive/disk manufactures have built in.

I'm sure you're thinking, but should I circumvent this built in "protection" and will my data be safe if I do. Linda Kaplan (a

MAUG™ member and noted Macintosh consultant) did some research in to how disks are manufactured. The information she discovered is very interesting, with her permission, I quote the following:

"The data, which I got from the engineer in charge of floppy making at a major floppy drive manufacturer (they even make the Apple brand floppies) is like this. The coercivity as measured in Oersted's (Oersted's are units of measurement of sticktoitiveness), is different between 400K/800K and HDFD. It's the same between our 400K and 800K. The only difference between 400K and 800K disks for us, since the media is identical is that the DS are verified in factory on two sides and the SS are checked on only one side. But the Mac disks can't be turned over if they fail one side. THE IBM DISKS ARE turned over if they fail testing on one side. So if a 400K formats as DS it will work exactly the same as 800K.

The HDFD story is a little different. For IBM disks (5-1/4") the media is real different. 300 Oersted's vs. 690 Oersted's for the IBM. For the Mac disks, however, the figures are very close. The 400K/800K platters are painted with stuff that measures 650 Oersted's.

Our HDFD disks are coated with stuff that measures 730 Oersted's. The paint is different, but not very different. Of course, there is difference between samples, I'd guess, and certainly all our hardware isn't identical. By that I mean that some of our floppy drives may be more sensitive than others.

Basically, they may work slightly less time than the true HDFDs, but not necessarily. I bought 100 KAO HDFD disks. Formatted 50 and have 6 disks that won't format!! That's a far worse success rate than I'm getting with my \$.99 800K disks that I'm formatting at HDFD."

As you can see from Linda's research, there seems to be little risk connected in "side stepping" the disk manufacturers and saving a few bucks to boot!

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Using an HD disk as a template,

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Apple][+ //e IIGS Macintosh Software Hardware Peripherals from most manufacturers

place a mark with a soft lead pencil 1/4" from the top edge of the disk on the rim or border of the diskjacket. Use either a 1/8" drill bit on an electric drill, or the tip of a hot soldering iron, to place a neat hole, all the way through the diskjacket, in that location. If you use the electric drill make sure you hold the disk firmly in place as you drill it, on a surface that doesn't matter if it gets damaged. (I used an outdated issue of MacGuide magazine. I mean I have to find some use for all the defunct Macintosh magazines laying around my office.) Be sure to remove any burrs or rough edges surrounding the newly drilled hole. Also be careful not to let the plastic shavings get inside the disk jacket.

While I have not used the "soldering iron" method, according to Linda, it seems to be the easiest and best way to make the hole that is needed. Also you don't

have to worry about the shavings from the drill getting inside the cover and damaging the media or your drive. An inexpensive "soldering iron" can be bought at Radio Shack for well under \$10. Be sure to file or buff away any rough edges. It is very important for the disk to seat properly in the drive. I have heard that a commercial product is also available to make this second hole. I don't know much about it, except it retails for about \$40, and "punches" a hole in the plastic. It seems rather expensive and I'm sure it doesn't do the job any better or easier than the methods described above.

Now insert the disk into the FDHD SuperDrive (or third party drive) and viola... it should format to the 1416K capacity, if it doesn't succeed the first time, simply place a piece of tape (scotch tape will do) over the hole and format it as an 800K disk. I drilled 40

Double Sided disks and 11 Single Sided disks. 38 of the DS and 7 of the SS formatted to the HD value on the first try. If the disk does not format to HD density on the first try, I don't push my luck, I simply format it to 800K, and go on to the next disk. I can not vouch for the long term integrity of these disks. But I can vouch for the long term integrity of the 400K(SS) that were formatted to 800K(DS) status. I've never had one go bad in over two years.

Remember all floppy disks, no matter what they cost and what the guarantee, have been known to "go bad"! So make multiple backups and keep your disks in a safe place away from heat, water, dust and little kids with peanut butter on their fingers!

Enjoy, and save those disk dollars to buy some really neat toys! Remember... those with the most toys at the end... WINS!

Jack Ziegler CIS 72356,1077

Software Circus

Details and Publishers of Macintosh software.

Software: **Master Tracks Pro**

Version Number: 3.0

Compatible with: Apple Macintosh 512E, Macintosh Plus, Macintosh SE, Macintosh II; Atari 520ST, 1040ST, Mega ST

Press Information: The Macintosh version is compatible with the Macintosh II and with Multi-Finder. A dialog window is added for automatic setting of punch-in and out points. Users can also set the punch in/out region by highlighting the area in the song or step windows. A conductor track data window has been added to the windows menu. This window graphically reflects changes made to the conductor track from the change window, or with the pencil and eraser tools. Improvements have been made to elapsed time, quantize window and measure insertion.

Published by:

Passport Designs, Inc. (California);

Passport Des CA (0-926096)

Address:

625 Miramontes St.

Half Moon Bay,

CA 94019

Telephone: 415-726-0280

Software: **Harmony Grid**

Compatible with: Apple Macintosh

Press Information: MIDI-Based improvisational tool which enables users to learn the basics of harmonics. Contains documents through which users move the mouse to learn intervals, chords, modes, and traditional keyboard patterns.

The program shows basic harmonic structures with graphics and shapes on the Macintosh screen. Users learn the musical concepts at their own pace and

create chords, modes, and interactive instruments. Includes 24 documents, reference cards, over 60 explanatory figures, and material including the basics and more advanced instruction for sophisticated musicians. Supports the Mac's 4-voice internal sound.

Published by: Hip Software Corp.; Hip Soft

Address:

117 Harvard St.,

No. 3,

Cambridge,

MA 02139

Telephone: 617-661-2447

Software: **Accu-Weather Forecaster**

Version Number: 1.08

Compatible with: Apple Macintosh, IBM PC and compatibles

Memory requirements: Macintosh 1Mb, IBM 512k

Press Information: Turns a PC or Macintosh into a weather station. Using a modem, users download live weather data, which can then be seen in several easy-to-understand formats — charts, narratives, maps and graphs. The connect-time is kept to a minimum, usually \$2 per download. Recommended for home and school education, for weather-related businesses, and for people who enjoy "weather watching."

Published by: Metacommet Software; Metacommet Soft (0-925262)

Address:

P.O. Box 31337,

Hartford,

CT 06103

Telephone: 203-223-5911

Software: **The Art Importer**

Version Number: 2.0

Compatible with: Apple Macintosh

Press Information: Organizes a library of drawings into a font usable in any Macintosh application. Company logos, symbols, signatures, graphics, and pictures can be used in line with regular text. Creates high resolution postscript fonts. Reduces user manipulation of clipboard/scrapbook artwork. Converts images from several object oriented Macintosh drawing programs. Each font supports up to 256 graphic characters. Creates screen and postscript font files after import. Integrated bitmap font editor allows screen font touchup.

Published by: Altsys Corp.;

Altsys

Address:

720 Ave. F,

Suite 109,

Plano,

TX 75074

Telephone: 214-424-4888

Software: **TableTools 1.1**

Compatible with: Apple Macintosh Plus, Macintosh II, Macintosh SE

Press Information: Designed to meet a wide range of publishing needs. Incorporates versatile table creation tools, a complete word processor, computation of numeric data using microsoft excel, placement of graphic, paint, and chart objects inside table cells using other Macintosh applications, and style sheets for fast formatting of text and tables. Also provides the ability exchange data between tabletools and other Macintosh applications. Pours text and data from database, accounting, spreadsheet and financial applications into a preformatted table.

Published by: Mansfield Systems, Inc.; Mansfield Sys

Address:

550 Hamilton Ave.,

Suite 150,

Palo Alto,

CA 94301

Telephone: 415-326-0603

Software: **FReditor**

Author: Batelle

Compatible with: Apple Macintosh

Press Information: Has the standard Macintosh text editing features along with some special functions, such as multiple windows, grep search and replace,

custom autowrap, on-screen column markers, and the ability to generate tables for export to spreadsheets.

Published by: TechAlliance;
TechAlliance (0-927988; 0-928503)

Address:
290 SW 43rd St.
Renton,
WA 98055
Telephone: 206-251-5222

Software: MetCom Modula-2

Compatible with: Apple Macintosh Plus, Macintosh SE, Macintosh II

Press Information: Integrated programming environment for the Mac includes a multiwindow text editor, a one-pass compiler, and an interactive debugger. The MetCom editor uses information from the compiler to show various positions in the source program where syntactic error occur. The one-pass compiler generates native code for the 68000/68020 processors, and the code needs no explicit linking. Each compilation produces two files: an object file used by the linker for execution, and a reference file used by the source-level debugger. Programmers can view the execution environment at runtime with the runtime examiner. If an error occurs, the debugger is called. A variety of libraries and Macintosh interface modules are included with the program.

Published by: Metropolis Computer Networks, Inc.; Metro Comput Netwks

Address:
Trimex Bldg.,
Rte. 11,
Mooers,
NY 12958
Telephone: 514-866-4776

Software: Smalltalk 5 Mac

Compatible with: Apple Macintosh Plus, Macintosh SE, Macintosh II

Memory requirements: 1500K
Press Information: Delivers an environment suited to problem solving. Consists of a development language and an interactive development environment. Users can create smalltalk code, highlight it with a mouse, and immediately test it without compilation and linking steps. Allows users to port smalltalk/v or smalltalk/v286 (for pcs) applications di-

rectly to smalltalk/v Mac. The resulting application, without being modified, will display standard Macintosh windows, as well as standard zoom, close, and grow boxes.

Published by: Digitalk, Inc.;

Digitalk
Address:
9841 Airport Blvd.,
Suite 604,
Los Angeles,
CA 90045
Telephone: 213-645-1082

Software: MacFortran MPW

Compatible with: 68020/68881 or 68030/68882-based system

Press Information: Designed for Apple's Macintosh Programmer's Workshop environment. Fully validatable ANSI 77 Compiler including all military 1753 extensions. Also supports most VAX/VMS, many Fortran 8X extensions, namelist, and Complex*16. Provides complete inter-language calling with the MPW C and PASCAL Compilers, supports the toolbox, and is 100 percent compatible with Apple's Standard Arithmetic Numerical Environment and the Standard Apple Debugging Environment.

Published by: Absoft Corp.;

Absoft Corp
Address:
2781 Bond St.
Rochester Hills,
MI 48309
Telephone: 313-853-0050

Software: KeyMaster

Compatible with: Apple Macintosh Plus, Macintosh SE, Macintosh II

Press Information: Font product that lets users create high-resolution postscript fonts from Macintosh artwork. Users can organize a library of drawings and print it in line with regular text. Imports images in eps format from Aldus Freehand, and Adobe Illustrator and in PICT form from MacDraw II, Superpaint and other Macintosh object-oriented drawing programs. An integrated bitmap font editor allows touch up of the fonts after they have been created. Each font supports up to 16 graphics characters.

Published by: Altsys Corp.;

Altsys
Address:
720 Ave. F,
Suite 109,

Plano,
TX 75074
Telephone: 214-424-4888

Software: MacPrint

Compatible with: Apple Macintosh Plus, Macintosh SE, Macintosh II

Press Information: Device management tool that lets users drive Laserjet, Deskjet, or any Hewlett-Packard-compatible printers from a Macintosh. It is installed as a chooser level device and is then operated with standard Mac printer dialog boxes. The MacPrint chooser shows each printers' features, and lets users print in duplex and create cover pages. Uses the resident fonts of the printer and also lets users create a printable font based on the Macintosh quick-draw screen font in print resolutions of 300, 150, or 75 dots per inch.

Published by: Insight Development Corp.; Insight Dev

Address:
2200 Powell St.,
Suite 500,
Emeryville,
CA 94608
Telephone: 415-652-4115

Software: Prototyper

Version Number: 2.0

Compatible with: Apple Macintosh Plus, Macintosh SE, Macintosh II

Memory requirements: 512k
Press Information: Includes C code generation capability and other features to help a programmer design user interfaces and prototypes of applications. Supports hierarchical and pop-up menus, offers support for large screen monitors, and includes linking facilities to help users create full mock-up prototypes of applications. With the linking facilities, users can link controls to open or close windows, dim or undim menus, or use the Macintosh's standard open, print, page setup, and save dialogs. Supports the leading C compilers, being able to generate source code for Lightspeed C and MPW C. Included are code generators for both Pascal and C. These code generators also create all standard Mac user interface resources.

Published by: SmethersBarnes;
SmethersBarnes

Address:
P.O. Box 639,
Portland,
OR 97207
Telephone: 503-274-2800

Software: MacTAE

Compatible with: Apple Macintosh, DEC VAX/VMS
Memory requirements: 512k
Press Information: Consists of two communications programs that allow a Macintosh to function as a vax front-end workstation. Based on Macworkstation, the programs enable users to access data and execute programs on the Vax using the standard Macintosh interface. Supports MultiFinder, allowing users to transfer data from Vax applications into Macintosh programs.
The program also supports desk accessories. A connection command language (CCL) provides a scripting capability for automatically logging onto the Vax; extended code segments (ECS) enables users to integrate programs in custom configurations.
Published by: Appaloosa Systems; Appaloosa Sys
Address:
345 Flume Rd.
Aptos,
CA 95003
Telephone: 408-662-2473

Software: CodeCheck

Compatible with: Apple Macintosh; IBM PC and compatibles, PS/2
Memory requirements: DOS 512k, Macintosh 1Mb, OS/2 2000k
Press Information: Designed to target code for portability between DOS, OS/2, UNIX, VMS, and the Macintosh environments. Analyzes source code for portability, maintainability, and style, without requiring the programmer to own more than one operating-system based Machine.
The expert system allows users to modify its rules, allowing them to tailor it for just one platform that users want to port to, or to conform to corporate or individual standards. Users can also alter the program to work in a foreign language.
Published by: Abraxas Software, Inc.; Abraxas Soft
Address:
7033 SW Macadam,

Portland,
OR 97219
Telephone: 503-244-5253

Software: Checkwriter

Press Information: Macintosh desk accessory that allows the user to print cheques while using spreadsheets, accounting software, and other programs for ongoing maintenance of a personal or business cheque account. The user may customize cheque printout to fit almost any computer cheque, and Checkwriter will maintain a cheque ledger for one or more accounts along with various budget categories.
Deposits and bank fees may be entered to maintain balancing of accounts. The ledger can be exported as a text file to spreadsheets or accounting programs, and tax deductible cheques can be reported separately.
Program will track payment due dates and print cheques automatically when payments are due.
Published by: Aatrix Software; Aatrix Soft; Mac Plus, SE, II family
Address:
P.O. Box 5359
Grand Forks,
ND 58206
Telephone: 701-746-7202

Software: TimeCard

Press Information: Aatrix TimeCard is an employee time tracking software program which allows employees to punch in and punch out on the Macintosh computer. It accumulates this logged time and then prints payroll reports at the end of each period or exports the data to Aatrix payroll for payroll calculations.
TimeCard also works with a magnetic card reader, making "punch-in to paycheck" a very simple process.
Published by: Aatrix Software; Aatrix Soft; Mac Plus, SE, II family; IBM PC
Address:
P.O. Box 5359,
Grand Forks,
ND 58206
Telephone: 701-746-7202

Software: Kinetic Collector-Macintosh
Press Information: Kinetic data

analysis software for use with the Bio-Rad model 3550 microplate reader. Collects absorbance readings from reader according to user defined protocol.
Determines kinetic velocity for each well in microplate. Saves raw data in spreadsheet compatible files. Transfers velocities to microplate manager/Macintosh software for further analysis.
Published by: Bio-Rad Laboratories; Bio Rad Labs; Mac Plus, SE, SE/30, II,
Iix, Iicx (0-9618315)
Address:
3300 Regatta Blvd.,
Richmond,
CA 94804
Telephone: 415-231-6891

Software: MultiSet

Version Number: 2.0
Press Information: Enables Macintosh MultiFinder users to quickly configure and load a set of applications, documents, and/or desk accessories.
Published by: Neff Systems Group; Neff Sysys Group; Macintosh (1Mb)
Address:
3286 Knightswood Way,
San Jose,
CA 95148
Telephone: 408-274-1110

Software: NI-488 Software

BASIC A and Quick BASIC provided w/interface purchase, NI-488
MS-DOS
No cost with purchase of Mac GPIB interface
Press Information: Software package has a high-speed driver that installs as part of the operating system and has several utilities that help users develop and debug application programs. The handler controls the company's GPIB Interfaces on IBM, Macintosh, Sun, AT&T 3B2, and Pro-log STD-DOS computers running under DOS, OS/2, UNIX, SunDS, XENIX, and 386/ix Operating Systems.
Published by: National Instruments Corp.; Natl Inst; IBM PC/XT/AT, PS/2, PC convertible; MacSE or II (0-925769)
Address:
12109 Technology Blvd.,
Austin,
TX 78727-6204
Telephone: 512-794-0100

KOALA

Source Book

Irene Flaxman reviews this new guide to Mac software

The Koala Source Book of Macintosh Software is published by Koala Publishing Ltd of Bristol. The first edition has just been launched, but the publishers promise that the Source Book will be published on a twice-yearly basis, to ensure that it is continually updated with the latest product information. The format of the Source Book is A5-size and paper-backed.

The book represents a significant research effort, covering more than 250 Macintosh applications. It must have taken some effort, just to obtain the information from the numerous authors/suppliers of the products.

The Source Book has three main sections. After some introductory notes and guidance on how to use the book, the first section is a useful glossary of terms in common usage in the Mac world. The second section is the product reference section, which comprises the main part of the book. The third section contains three indexes — an index by product name, an index by product type and an index of UK distributors and suppliers.

The indexes are useful for finding your way through the Source Book, but the product reference section is the core of the book — being 321 pages out of a total of 361.

The product reference section provides details of application programs immediately available for the Macintosh — i.e. it does not include any programs which are "available imminently" (or however else the publishers may describe their 'vapourware'). Each product is listed on a separate page — usually a single page is sufficient to describe the product, but there are a few which over-run onto two (or even three!) pages.

The information provided for each product comprises:-

- Type, e.g. spreadsheet, word processor
- Recommended retail price, in £sterling
- Originator
- UK contact
- System requirements, i.e. type of Macintosh; RAM; hard disk required?; system/other software required?
- Status, e.g. current version number
- Notes, including a description of the main functions of the application.

The products are included in the reference section in alphabetical order of product name, so they are very easy to find if the product name is known. If the exact name is not known, or if you are just

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ROGER D'ARCY COMPUTERS

Tel.: Oxford (0865) 728787

looking for a type of product (e.g. a database management system), the index by product type will make it easy to locate the alternative products of the required type — so you can compare the definitions to identify the most suitable product.

The publishers do point out, though, that they cannot be held responsible if you make the wrong decision — it is stressed that you should seek more information and/or a demonstration from the distributors/suppliers. They also stress that software applications may be designed to run on different hardware platforms (e.g. Mac and IBM), but it is important that any demonstration should be run on the correct hardware — you should not assume that different versions will perform similarly.

The Koala Source Book of Macintosh Software retails at £12.95 + £1.50 P&P. It is available to Apple2000 members through Shop2000. We are not allowed to offer books at discounted prices, but you can save the additional cost of postage by ordering through the Shop in the usual way.



KOALA

KOALA PUBLISHING LTD.
(0272 584234)

stopWatch



The timing & logging utility

Irene Flaxman checks out version 3.0 of the timing and logging utility

I, personally, use my Macintosh for all manner of work — some on behalf of Apple2000, some for Professional Bodies of which I am a member, even some for my employers (despite the fact that company policy decrees that we must use IBM-compatibles!).

It is useful to know how long I spend on each project, particularly those undertaken for my employers (after all, this is the easiest way to demonstrate how much the Mac increases productivity!). I have tried to keep a note of how long projects take to complete, but that is virtually impossible.

Most of us feel that it is not cost-effective to keep a check on our time, but for some Mac users it is essential to maintain such an analysis — e.g. consultants, freelance programmers, etc. — as they are required to quantify the work undertaken in order to justify the accounts rendered to their customers.

This is why I was so pleased to find this utility program called stopWatch, as I feel that this will quickly become an indispensable tool. This review has been written about version 3.0, but users of previous versions can upgrade for a small fee. The utility works in the background, while you work on the Macintosh, keeping track of the time spent working at the computer.

It is simple to install the program in the system folder, and then all time is automatically recorded as you work on the Mac. You can set a time-limit, so that a period of inactivity will stop the automatic logging of time — this is to allow for the occasions when you might be interrupted (e.g. by a telephone call), so that you need not worry that such interruptions would artificially inflate the charges to your client. This can invoke a rather nice "Bezier doodle" screen saver when the autopause is activated.

You can set up any number of clients, projects and activities — to which you can then allocate the time spent working at the Mac. A cost can be associated with each activity, to allow stopWatch to evaluate the costs of the work, for invoicing to the client.

There is provision for you to record your own name, too, in case there may be several personnel working on the same project, and a comment field allows the entry of descriptions or explanations which may later help to justify the charges being raised.

Two special files are created for use with the utility — the audit file and the summary file. The audit file is used by the program to record details of work undertaken. The summary file is used to store costed data which can be

used for invoicing. Both files are stored in a tab-delimited format, so that they can be opened by many application programs — e.g. word processors or spreadsheets.

When work for a specific client/project/activity has been completed, it is a simple matter to activate the stopWatch control dialogue and select "log" — this adds a new record to the audit file, detailing the start and end times of the work undertaken, the date, the duration and value of the work, the client, the project, the activity, a comment (if entered), the user and the application program used. This should be sufficient data to baffle even the most argumentative of clients! When the data has been logged to the audit file in this way, the current stopWatch time is reinitialised to zero and the current client/project totals are updated by the accumulated costs.

There may be some time which is not chargeable to a client — e.g. invoicing. stopWatch copes with this by the use of a special "client" associated with the option to "bin" the time currently logged. The default is a "client" named "Waste Basket", but this is easily changed if necessary.

The stopWatch summary file maintains a summary of all the data chargeable to each client and project. This, too, is updated via the control dialogue. Data can be summarised for a client (including all projects for that client), or for an individual project.

Although data is added to the stopWatch audit file by using the "log" option, the costs associated with each client and project will continue to be accumulated until you specify that you wish to "summarise" the data for a particular client or project. Summarising the data writes a new record to the stopWatch summary file and also reinitialises the current balances for the client/project(s) summarised.

The summary file is ideal for the provision of invoice data — each record shows the date, the client, the project(s), the value of work done and a grand total. If necessary, a further breakdown can be supplied to the client by reference to the more detailed audit file.

The program is quick and simple to

stopWatch




The timing & logging utility

use — the time is recorded automatically, so the only effort required is that you have to remember to "log" the data when you finish a task. When compared with the amount of time required to maintain a manual timesheet, it will be obvious that there is a great potential saving here.

The market may be somewhat limited — after all, not everyone will need to account for their time in this way — but I think it is ideal for anyone who does need to produce this type of data, e.g. a consultant who carries out work for a number of clients (complete with a portable Mac?).

stopWatch is available from Apple dealers at the normal retail price of £99 + VAT for a single copy or £260 + VAT for a "4-pack". The program can also be purchased directly from Hi Resolution Wizzardware (0580 211194) at a similar price, but you must add £1.25 for postage and packing. An upgrade is also available to existing users for £20 + VAT.

Apple2000 members can order stopWatch version 3.0 through Shop2000, and take advantage of a "special offer" negotiated with the publishers — so that the single copy will cost £105 (including P&P and VAT — a saving of more than £10), and the "4-pack" will cost just £250 (including P&P and VAT — a saving of more than £50).

Simply order the program(s) from the shop in the usual way, to take advantage of these special prices. 



Resolution
WizzardWare



Bulldog

Bulldog Regular
Bulldog Medium
Bulldog Bold
Bulldog Regular Italic
Bulldog Medium Italic
Bulldog Bold Italic

Irene Flaxman looks at a new PostScript font developed in the U.K.

I used a new PostScript font for the July issue of Apple Slices, and we promised to publish a review of the font in this issue of the magazine. I've used it again for these two pages, as it seems appropriate to use the font which is the subject of the review.

The Bulldog font which we have used is a PostScript Type 1 font, developed in the UK by Adrian Williams and published by Club Type. It is the first font which Club Type have produced, but they are committed to the introduction of more new fonts — the second in the series being Monkton. They are also committed to producing fonts in other formats — i.e. IBM format and TrueType for Apple's System 7.0 (when available).

Club Type quotes its aims and objectives as "to provide the technical expertise, production and distribution environment, allowing designers to get on with what they do best — inventing new and original typefaces".

To this end, they have stated that they will:

- market only high-quality typefaces
- ensure that each typeface designer is properly accredited
- provide a point of contact for their customers
- keep their customers informed of new and forthcoming typefaces
- make typefaces available in any output format for which there is a viable need.


I used the Bulldog font to set the July

issue of Apple Slices and for these two pages. I enjoyed using the font, because it was remarkably easy to work with. We use PageMaker to set our publications, and naturally we need to view the pages at various magnifications — I was struck by the clarity of the text on screen, even when magnified to 200%.

It is accepted practise that a serif font should be used for body text, so I broke a few rules by using the Bulldog font in this way — but I felt that it was a legible typeface which could happily be used for our newsletter, even though it is a sans serif font.

I used the Bulldog Medium font for the headlines, and this is quite acceptable by anyone's standard — it is generally accepted that a sans serif font is better for headlines.

The 6 weight family normally retails for £280 plus VAT, and can be obtained from Apple dealers or directly from Club Type (0580 211194) at a similar price, but you must add £1.25 for postage and packing.

We did promise that a special price would be offered to Apple2000 members. As stated above, the retail price is £323.44 (including P&P and VAT), but Apple2000 members who order the Bulldog font through Shop2000 before 30th September 1990 can take advantage of a "special offer" negotiated with the publishers — the full font family is offered to our members for just £250 including P&P and VAT. 

AppleXtras

Mac 4

Disk 400 AppleXtras Mac 4

Disinfectant 2.0

This is the new version of John Norstad's powerful anti-virus program (see page 64). Disinfectant 2.0 will locate and repair previously infected files and disks. Disinfectant 2.0 now includes a protection INIT to protect your system against infection. When properly installed, it will protect your system against all of the known Macintosh viruses. The Disinfectant protection INIT will not protect your system against unknown viruses.

To install the Disinfectant INIT in your currently active System folder use the "Install Protection INIT" command in the "Protect" menu. You must restart your Macintosh to activate the INIT.

Use the "Save Protection INIT" command in the "Protect" menu to save a copy of the Disinfectant INIT to any file of your choosing. The Disinfectant INIT is simple, small, efficient, and unobtrusive. It does not need to be configured. In fact, it has no control panel interface at all, so it cannot be configured. The INIT will never ask you to make a decision. It should have no noticeable effect on the performance of your Mac. It is very small, and can easily be used on floppy startup disks (e.g., in University labs with floppy-only Macs). The INIT does not interfere with the normal operation of Disinfectant or other anti-viral applications, or with programming environments, installer applications, or other system software.

The Disinfectant INIT also checks your System file at startup time to see if it is infected by any of the known viruses. If it discovers one of the known viruses at startup time, it beeps ten times and presents an alert.

The name of the Disinfectant protection INIT begins with the special symbol "◊":

◊ Disinfectant INIT

The special "◊" symbol is present to force the Disinfectant INIT to be the last INIT loaded when you start up your Macintosh. This is important: the Disinfectant INIT must be loaded last! If you rename the INIT, make certain that you rename it so that it comes last in alphabetical order in your System folder.

The Disinfectant INIT icon should appear at the bottom of your screen every time you restart your Macintosh. If an error occurs and the INIT cannot load properly, the INIT will beep ten times and it will draw a special error version of the icon (the normal icon with a large "X" superimposed.)

Virus Detective 4.0.2

VirusDetective is a desk accessory that unearths and sniffs out active and inactive viruses and Trojan Horses. It provides a means to search for the fingerprints a virus leaves after it infects an application (your System file or any other file). In technical jargon, these fingerprints are called "resources".

VirusDetective searches resources by means of various matching criteria called search strings. The search strings are

programmable. In fact, VirusDetective was the first Macintosh anti-viral program to be programmable—all other anti-viral programs (including commercial programs) that are changing over to be programmable are "VirusDetective copy cats".

You don't have to purchase a new update of VirusDetective every time a new virus comes on the scene. The search string language allows for multiple search criteria for maximum flexibility, effectiveness and speed.

VirusDetective is designed primarily to hunt down and expose viruses, not to remove them.

The Talking Clock FKEY

Talking Clock is an FKEY that will speak the current time. (The voice is the author's.) MacinTalk is NOT required. You can open the FKEY with Suitcase or MasterJuggler, or you can install it with any FKEY installer or ResEdit. After installing it, you can use it by typing command-shift-6. Of course, you can always change the FKEY number with ResEdit (if you know how) or an FKEY installer.

The file "Talking Clock Sounds" must be kept in your System folder. Do not change the name of the sounds file.

This FKEY requires system 6.0.x. Earlier system versions will crash the FKEY. Sorry, but that's the way it is.

You may use the FKEY and sounds file however you want. Both are public domain.


MacSink

McSink V6.5 is a general-purpose text editing shareware Desk Accessory. It's a multi-window memory-based editor. This means you can open up to 16 windows, and the size of the text in each window is limited only by the amount of available memory. In addition to normal text editing capabilities, McSink provides a number of special purpose editing and file access commands.

The disk also contains version 1.6 of Virus Rx, SuperClock! version 3.9 and Flex.

MacBRAVO!

MacBRAVO!



Info

Schlumberger

MacBRAVO!
(Click for Info)

Demos

Self-Running
Interactive
Quit

MacBRAVO!

Three of the most powerful features of MacBRAVO! are its task optimization, integration, and ease of use. You are encouraged to look at these features first and then continue. You can choose a feature by clicking on its button.

TASK OPTIMIZATION

INTEGRATION & ASSOCIATIVITY

EASE OF USE

Click "Continue" at any time in the demo to continue to the next screen

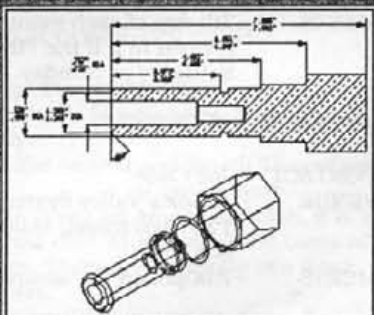
Continue

Click "STOP" at any time in the demo to return to the previous topic.

STOP

»Task Optimization«

The first two MacBRAVO! products are optimized for mechanical design and detailing. Each offers tailored operations: fast dimensioning in the DETAILER, and quick and easy creation of surfaces and other 3D geometry in the MODELER.



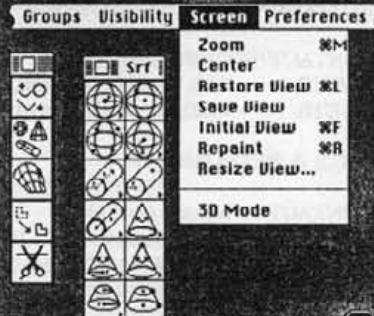
Continue

STOP

»Task Optimization«

Optimization also adds simplicity and clarity to the presentation of the task. The icons, menus, and prompts can all be tailored to that specific application. This makes it much easier for the person unfamiliar with the computer or the casual user who is expert in their application to quickly and easily learn and use MacBRAVO! products.

Groups Visibility Screen Preferences

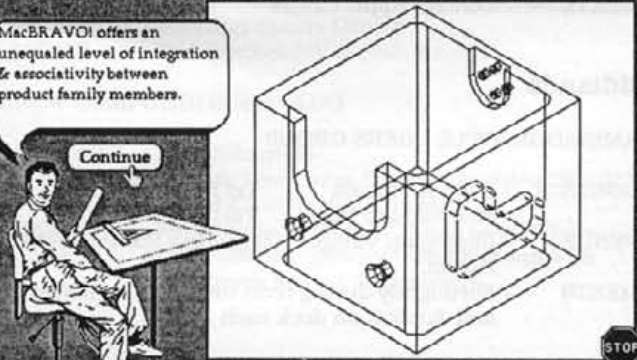


Continue

STOP

»Integration & Associativity«

MacBRAVO! offers an unequalled level of integration & associativity between product family members.

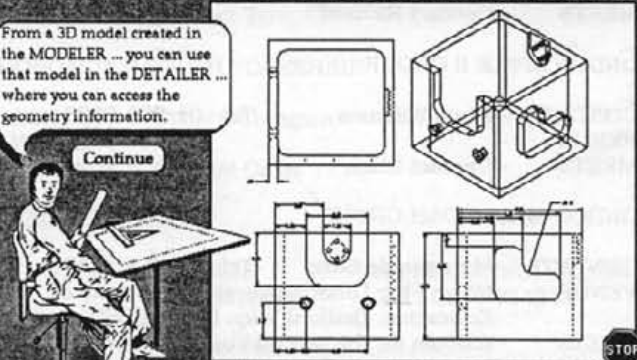


Continue

STOP

»Integration & Associativity«

From a 3D model created in the MODELER ... you can use that model in the DETAILER ... where you can access the geometry information.

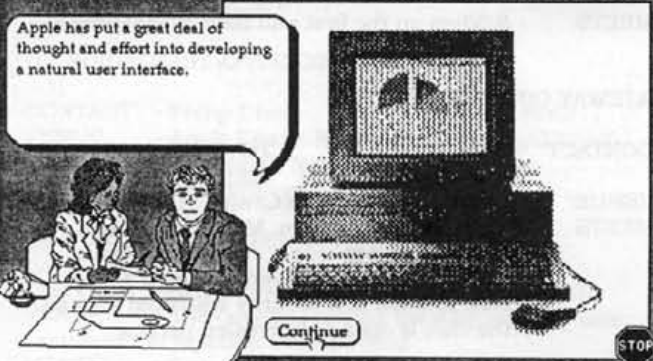


Continue

STOP

»Ease Of Use«

Apple has put a great deal of thought and effort into developing a natural user interface.



Continue

STOP

Disk 401 MacBRAVO Demo

MacBRAVO! is an optimized CAD/CAM program that will run on any Macintosh with at least 4 MB of RAM.

The Modeler is task optimized for 3D mechanical design and is the foundation of the MacBRAVO! CAD/CAM system.

This demo is in the form of a HyperCard Stack which introduces you to the features of MacBRAVO!

User Groups

London Region

ESSEX GROUP

CONTACT - Pat Bermingham Tel : (01279) 451166
VENUE - The Y.M.C.A., Victoria Road, Chelmsford
MEETS - Third Friday of every month

CROYDON APPLE USERS GROUP

CONTACT - Graham Attwood Tel : (0181) 8510 5612
VENUE - 515, Limpfield Road, Warmingham, Surrey
MEETS - 7.30pm on the third Thursday of every month

HERTS & BEDS GROUP

CONTACT - Norah Arnold Tel : (01525) 571111
VENUE - The Old School, 1, Branch Road,
Park Street Village, St Albans, Herts.
MEETS - 8.00pm on the first Tuesday of each month

KENT GROUP

CONTACT - Richard Daniels Tel : (01892) 421122
VENUE -
MEETS - Contact Richard

LONDON APPLE II GROUP

CONTACT - Chris Williams Tel : (011) 4911 0133
VENUE -
MEETS - Contact Chris

LONDON MACINTOSH GROUP

CONTACT - Maureen de Saxe Tel : (011) 4711 4444
VENUE - Room 683, London University Institute of
Education, Bedford Way, London, WC1
MEETS - 6.00pm on the second Tuesday of every
month.

M25 BUSINESS MAC GROUP

CONTACT - Jim Panks Tel : (01753) 611166
VENUE - Sir Mark Collett Pavilion, Heaverham Road,
Kemsing, Sevenoaks, Kent
MEETS - Phone Jim for details

SOUTH EAST ESSEX MAC GROUP

CONTACT - Mick Foy Tel : (0775) 511111
VENUE - D.P.S. Acorn House, Little Oaks, Basildon,
Essex
MEETS - First Monday of each month

South

POOLE MACINTOSH USER GROUP

CONTACT - David Huckle Tel : (01202) 471111
VENUE - Deverill Computers (dealer)
Itec House, 34-40 West Street, Poole, Dorset
BH15 1LA
MEETS - Four times a year

SOUTHAMPTON

CONTACT - Geoff Parson Tel : (0703) 571111 (week)
Tel : (0703) 551111 (homed)
VENUE - Contact Geoff for details

Wales and West

BRISTOL GROUP (B.A.U.D)

CONTACT - Malcolm Ingsley Tel : (0454) 411111
VENUE - Decimal Business Machines
Three Queens Lane, Redcliffe
MEETS - 7th day of each month, or the Thursday
nearest to it if the 7th falls on a Friday,
Saturday or Sunday.

HANTS & BERKS GROUP

CONTACT - Joe Cade Tel : (0489) 471117
VENUE - Thames Valley Systems (Apple Dealer),
128 High Street, Maidenhead, Berkshire,
SL6 1PT Tel 0628-25361
MEETS - 7.00pm on the second Monday of every month

MACTAFF - SOUTH WALES MAC GROUP

CONTACT -
VENUE - Apple Centre South Wales, Longcross Court
47 Newport Road, Cardiff
MEETS - Contact Apple Centre

Midlands

CAMBRIDGE APPLE USERS GROUP

CONTACT - || Ian Archibald Tel : (0432) 311117
Mac Richard Boyd Tel : (0432) 441111
VENUE - Impington Village College, New Rd, Impington,
Histon.
MEETS - Fortnightly during term time with both Mac
and Apple II on deck each night.

EAST MIDLANDS MAC USER GROUP

CONTACT - Tel :
VENUE - Wilford Cricket & Rugby Club, Nottingham
MEETS - 8.00pm on the first and third Wednesday of
every month.

GATEWAY COMPUTER CLUB

CONTACT - Vern Tel : (0145) 511111
Robin Boyd Tel : (0145) 511111
VENUE - Bob Hope Recreation Centre, R.A.F Mildenhall
MEETS - AMS conference room, Mildenhall base.
Normally at weekends, check with Robin
NOTE : Although the venue is on a service
base it is not in a security restricted area so
the club is open to interested parties.

LEICESTER GROUP

CONTACT - Bob Bown Tel : (0533) 477515
VENUE - Shakespeare Pub, Braunstone Lane,
Leicester
MEETS - 7.30pm to 10.0pm on the first Wednesday of
every month

LIVERPOOL GROUP

CONTACT - Irene Flaxman Tel : (0151) 434417
VENUE - Check with Irene
MEETS - Second Monday of every month.

MIDAPPLE

CONTACT - Dave Ward Tel : (01827) 563118
VENUE - I.T.E.C., Tildasley Street, West Bromwich,
West Midlands
MEETS - 7.00pm on the second Friday of every month

THE MIDLAND MAC GROUP

CONTACT - Ivan Knezovich Tel : (01827) 441118
VENUE - Celtip Computers (AppleCentre Kidderminster)
Lower Mill Street, Kidderminster, DY10 2JG
MEETS - 7.30pm on the first Tuesday of every month

WEST MIDLANDS AMATEUR COMPUTER CLUB

CONTACT - John Tracey Tel : (0121) 700097
VENUE - Hill Crest School, Simms Lane, Netherton,
Near Dudley.
MEETS - 7.00pm on the second and fourth Thursdays
of each month.

NOTE - - This is not an Apple user club, it is a
general interest club which welcomes users of
all machines. There are currently two Apple
user members.

North

BURNLEY APPLE USER GROUP

CONTACT - Rod Turnough Tel : (0706) 783311
VENUE - Michelin Sports Centre
MEETS - 2nd Wednesday of each month

CREW COMPUTER USER CLUB

CONTACT - Paul Edmonds
45 Oak Tree Drive, Crewe, Cheshire CW1 0LN
VENUE - Christ Church Hall, Crewe
MEETS - Fortnightly, Fridays, 7.30pm to 10.00pm
NOTE: this is a general interest group with
Apple users among its members

HARROGATE AREA

CONTACT - Peter Sutton Tel : (01937) 477111
No active organised group in this area but there
are a number of keen Apple users in contact with
each other.

THE NORTH EAST APPLE COMPUTER CLUB

CONTACT - Philip Dixon Tel : (0434) 606311
VENUE - Apple Centre North East, Ponteland Road,
Ponteland, Newcastle-on-Tyne
MEETS - First Wednesday of every month

THE NORTH WEST APPLE COMPUTER CLUB

CONTACT - Ken Dawson Tel : (0151) 434417
VENUE - The Coachman's, on the A49, about 1 mile
south of the junction with the M62
MEETS - Second Thursday of every month

THE NORTH WEST APPLE USERS GROUP

CONTACT - Max Parrot
Tel : (061) 276-3311, Mon-Fri daytime
Tel : (061) 434-3477 evenings
VENUE -
MEETS - Ring Max

Scotland

EDINBURGH GROUP

CONTACT - Ricky Pollock Tel : (011) 637-0768
VENUE -
MEETS - Meetings monthly, check with Ricky

Postal

APPLE II PROGRAMMERS CLUB

CONTACT - Philip Dixon TEL : (0434) 606311
VENUE - None established yet
MEETS - No meetings yet, has operated through
postal newsletter published quarterly

NOTE : Philip started the club some time ago based
on a membership fee of £1.00 to cover the cost of
newsletters. Original intention was to concentrate
on BASIC and Assembler programming.

New Groups

BROADSTONE APPLE II USERS GROUP

CONTACT - Ron Hoare Tel : (01223) 555555
VENUE - Stuart Magnus & Co., Station Rd, Broadstone
MEETS - Meeting on June 20th at 7.30pm

ORPINGTON COMPUTER CLUB

CONTACT - Terry Wheeler Tel : (01223) 555555
VENUE - G.E.A. Hall, Woodhurst Avenue, Petworth
MEETS - Contact Terry

DONCASTER SOUTH YORKSHIRE

CONTACT - Colin Withington Tel : (01924) 555555
VENUE -
MEETS - Contact Colin

LEEDS

CONTACT - Bob Miller Tel : (0113) 5778334 Tel : 0477
- T Veluppillai Tel : (0113) 7764343
VENUE -
MEETS - Contact Bob

**If you want to start a group, find out about a
group that might be near you, please write or
contact John Lee the Local Group Organiser at
the PO Box in Liverpool, or phone John Lee on
0373 84 861.**

**If you are a local group organiser and have not
been in touch with John Lee, please contact
John with details of your group, or any
changes there may be to the above details.**

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WARNING: The sale of copied or pirated software is illegal. Please ensure that items offered for sale are new or are re-registered.

FOR SALE

Symbiotic 10 Mbyte hard disk with manual and software interface(negotiable) **£200**

'Phone Arthur 081 535 2451

EXCHANGE

"ScanMan Plus" with software for a PC (but without card) will swap for a "Thunderscan" or Iigs expansion card or Iigs graphics or HiRes Iigs games

'Phone Gordon 081 470 7025

WANTED

ProFILE Interface Cards, ProFILE 5/10Mb Drives, Apple DMPs, ImageWriter I/II/15", IEEE-488 Interface Cards, Mouse Interface Cards, UniDisk 3.5, Accelerator //e, 400/800K 3.5" Disks Drives, Parallel Dot Matrix Printers.

If you have lists of software/hardware for sale, please send on disk (Apple II DOS/ProDOS text or AppleWorks WP/DB or QuickFile or IBM-PC WP/DB: most formats), and we will try to match your parts up with potential buyers on our "Wanted List". Jenny Green, MGA SoftCat, 41 Cinque Ports Street, Rye, E. Sussex, TN31 7AD

'Phone Jenny Green 0797 226001

FOR SALE

Enhanced Apple //e system complete with Apple Monitor, Clip-On fan, DuoDisk, 80-Col. Card, Super Serial Card, Apple Mouse Card, UniDisk 3.5 Card, 1 meg AST Sprint Disk (500k installed), Z-80 Card. All used by one owner since 1985 **£400 ono**

'Phone Peter Davis 0618 57085

WANTED

Software writers interested in converting (or rewriting) existing primary education software (written in BBC Basic and Machine Code) to run on IIGS or Mac - fees or royalties by agreement.

Brian Stevenson, Keyboard Technology Ltd, Unit 3, Gordon Road, Loughborough, Leics., LE11 1JX

'Phone Brian Stevenson 0509 610706

FOR SALE

DB MASTER version 3 (Powerful Database & Report Generator) + free utility disk **£75.00 ono**

(Only requires 48K, 40-column screen and upper case - 2 drives or more recommended!)

OR swap/part exchange for serial printer.

'Phone David (evenings) 0434 632158

FOR SALE

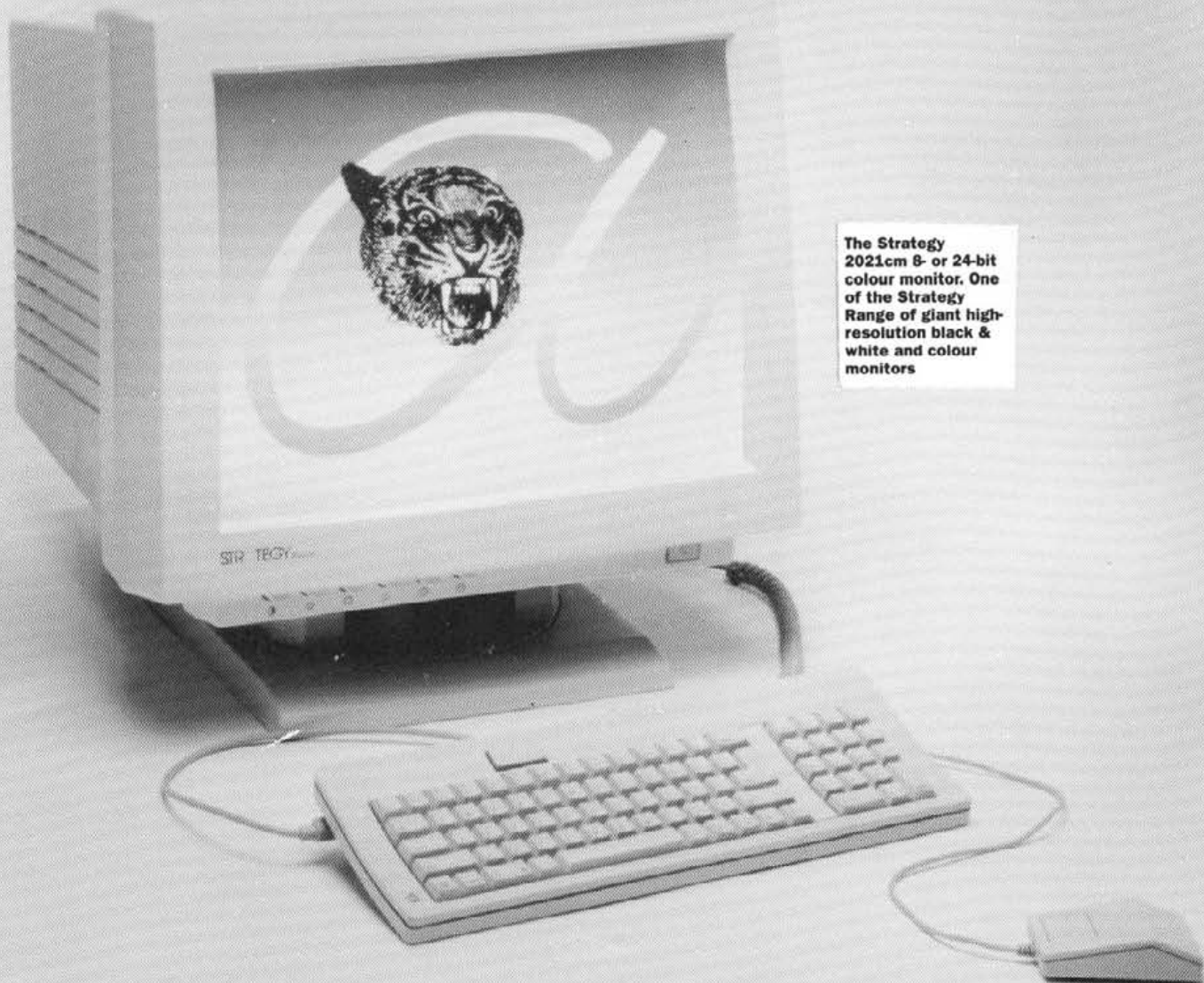
Apple // software:-
 Temple of Apshai, Upper Reaches of Apshai, Mystery House, Tigers in the Snow (Strategy), Morloc's Tower and Datestones of Ryn (together), Secret Agent (High res adventure), Thief Casino & Baseball (together) **£5 each**
 List handler (mini database),
 Ampermanager (ampersand utilities),
 Higher Text Plus,
 Apple Access // (terminal emulation) **£10 each**

Books:-
 All about Applesoft, Imagewriter users manual (parts one and two), Database management for the Apple (inc program listing), Mastering Visicalc, Visicalc for Science and Engineering **£5 each**

'Phone Gordon 0373 587062

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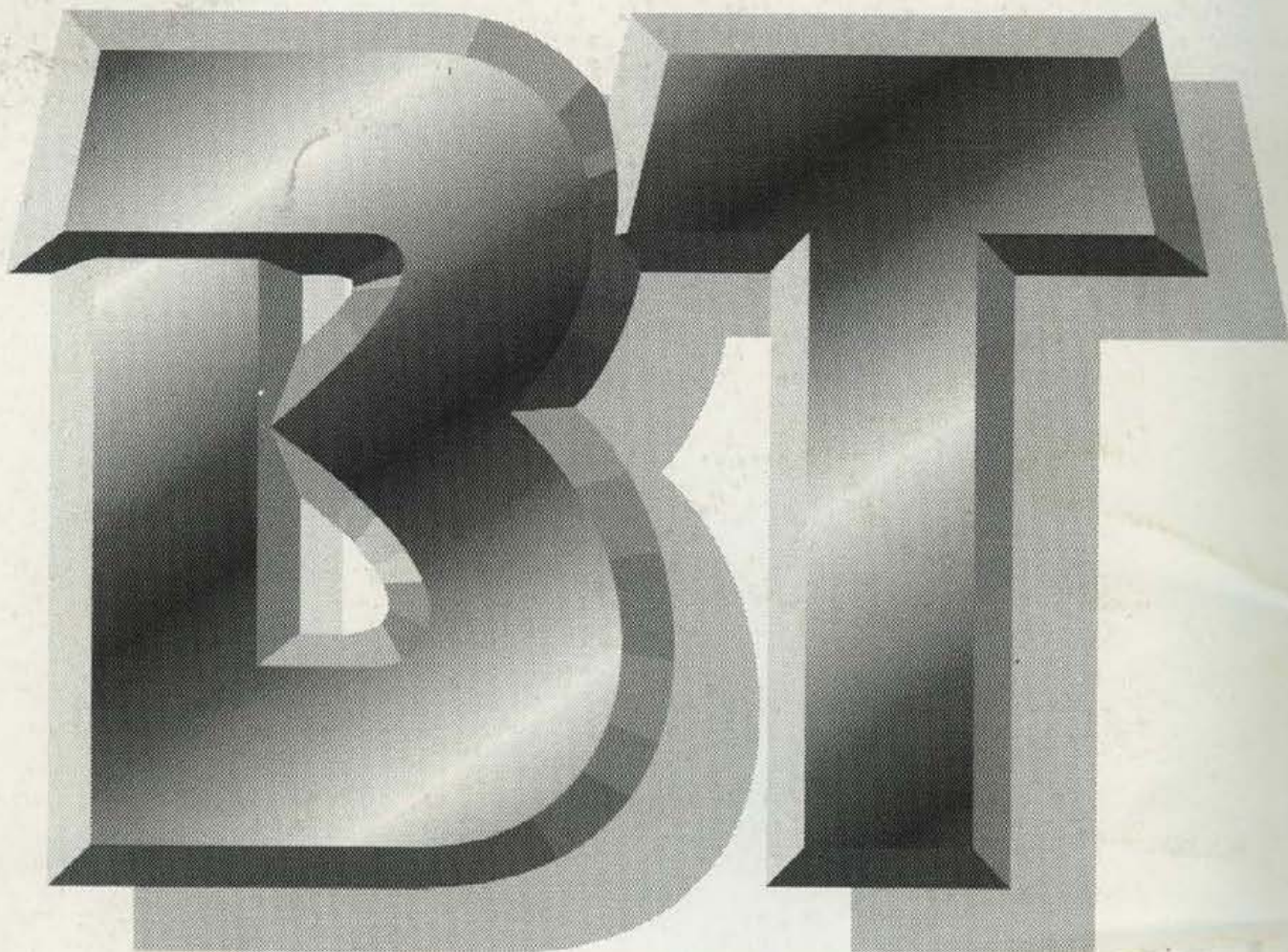
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