Apple2000

THE NATIONAL APPLE USERS GROUP

FEBRUARY 1991

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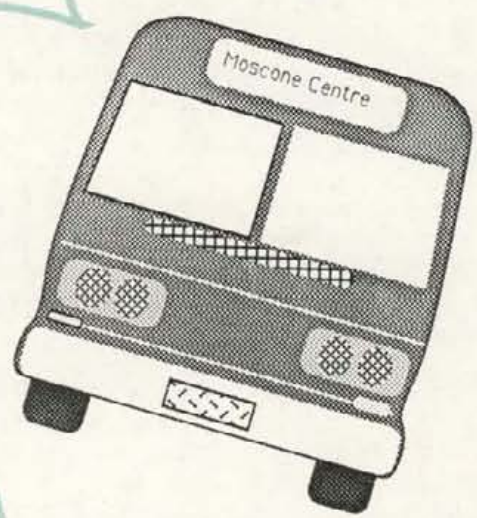
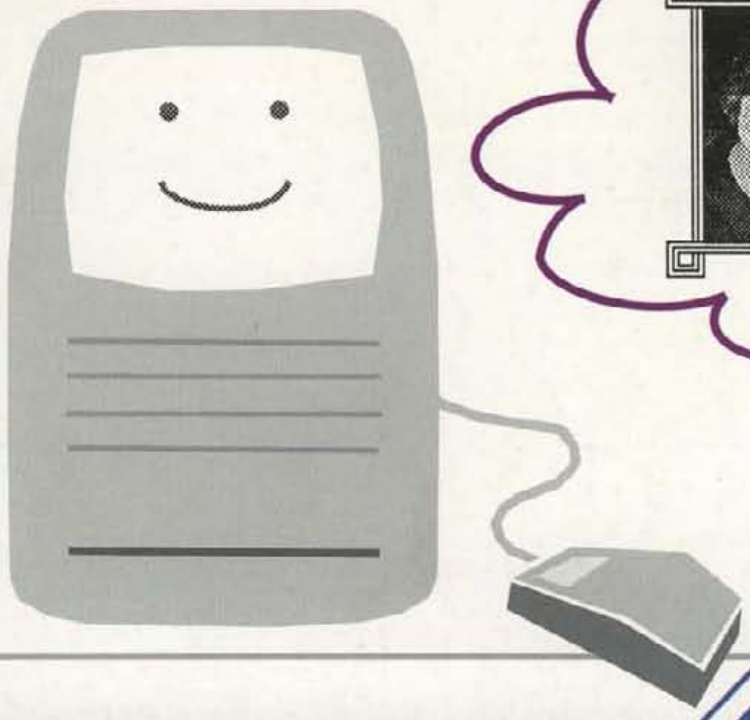


"Our goal is to put Macintosh in the hands of as many people as possible."
John Sculley



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Apple 2000 Workshop

For those of you who missed our workshop at Bidmuthin last March - hard luck. The many who made the effort were amply rewarded by a most enjoyable day, and the comments back to me were when can another be arranged. Well you will be pleased to learn that the date has now been fixed for **Saturday March 23rd, 1991.** This will be an Apple 2000 Workshop in conjunction with a Bidmuthin Open Day and should attract a good crowd of Apple enthusiasts. Bidmuthin are keen to show off their new premises and will be offering a host of special bargains on the day to mark the occassion. So don't miss it.

Date and Time
Saturday
March 23rd
10am - 4pm

Subjects
All that's new for the Apple II & Mac II
Including for II GS: Video overlay card (PAL!):
Send-Fax Card
+ All the new Macs
+ A host of special bargains on the day
Don't forget bring your flexible friend !

Venue
See below

Bidmuthin is situated at the left hand side of The Chase as you approach it from Marsh Road. Car parking facilities are available. Nearest tube station is Pinner on the Metropolitan line (7 mins walk).

Any problems phone Mike - Workshop Organiser, on (0452) 714998
or
Bidmuthin Technologies Ltd, The Chase, Pinner, Harrow HA5 5Rx
081 868 4400

By Train
On leaving Pinner station turn left into Marsh Road. Follow this around until it crosses the rail line again. Then take first left into The Chase and Bibmuthin will be found on the left just a short way along.

By Car
For those of you arriving by car and using the A to Z as your navigational aid, beware. This motorists bible has got it wrong once again. Find The Chase on the map if your eyes are powerful enough, and you will see below it, Station Road. This should not be here but on another map entirely. So for Station Road read The Chase. Bidmuthin is at the top of Station Road...sorry The Chase. Confused.... then let the train take the strain.

Apple2000
The All Apple
User Group
Committed to
All Apple Users
including Macintosh

Apple2000

February 1991

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CONTENTS

Chairman's Corner	Ewen Wannop	2
Letter Box		3
[illegible]	Competition	9
AppleXtras ProDOS 8 and IIgs		10
Library II Update		11
Hello, Apple /// Owners	Lars Bergkwist	13
Atlas Explorer — a review	Dave Ferris	14
EuroWorks v3.0 — a review	Peter Stark	17
Guitar Wizard — a review	Stuart Anderson	18
Pot Pourri — reviews	Peter Stark, Robert Hornby	19
AppleWriter II	Graham Doubtfire	21
HyperCard IIGS		23
SoftCat Corner	Jon Gurr	24
Hotline News	Dave Ward	25
Zip Chip GS — a review	Dave Ward	26
Where's My Sledge	Jim Harle	28
Online Update		29
1600k Rules OK — a review	Dave Ward	30
ProSel 16 v8.58 — a review	Dave Ward	32
The Nibbler Speaks		37
IIgs System Diagnostic Errors	Apple Computer	38
MacChat	Norah Arnold	42
Apple at BETT '91	Norah Arnold	44
The POEM		45
LabView R2		46
MacSchool		47
Mathematica		50
Programming in Mathematica — a review	John Arnold	53
Oldham L.E.A.		54
'Twelfth Night' CD Rom		55
BBC Basic on the Mac?		56
View >> Mac 3		57
FormPro		58
Stop Press		58
Voice Navigator II		59
Cacre Typist — a review	Mike Dawson	60
The Hunt for Red October — a review	Ceri Fisher	66
Disk Express II: Update	John Kishimoto	68
Serius Business		68
Canadian Mac Prices	John Kishimoto	69
Press Releases	Claris	70
Pyrol 4.0		71
MacHeads Invade!!	Dave and Irene Flaxman	73
Press Releases	Letraset and Apple	75
AppleXtras Mac 7		76
Mac Library		77
Local Groups		78
Members' Small Ads.		80
Advertisers' Index		80

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, Classic, SE, SE/30, Mac LC, II, IIsi, IIcx, IIci, IIx, IIfx** and the **Mac 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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AppleWorks: John Richey
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There are a number of ways to contact Apple2000

If you wish to order goods or services from Apple2000 or just leave us a message, call Irene on [illegible] (Ansafone during the day). Alternatively you can Fax. your order to [illegible] 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 John Arnold run the Hotlines and they will try to help you.

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

We reserve the right to publish, without prejudice, any advice or comments given to members as a result of letters received, 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.

Chairman's Corner

Apple2000 1980-1991

❑ This is the time of year for those of us at Apple2000 to think about our forthcoming Annual General Meeting. In true democratic fashion, Apple2000 elects its working committee afresh each year. Apple2000 is run by a group of enthusiastic volunteers and our only reward is in the satisfaction of helping others with their problems. In the ten years that we have been serving the Apple community, we have built up an efficient machine to serve our members needs. I think that many members only see this side of the structure and do not see how they themselves can help the whole thing work.

The committee is constantly asked if we have special interest groups within Apple2000. The answer is of course we do. There are many groups of individuals who specialise in certain subjects, but the Apple2000 workforce is just too small to be able to co-ordinate special interest groups in any formal way. We do have certain areas that we pin point though, AppleWorks is an example. What we need are more people who are willing to help us realise all the things we would like to do and have never been able to. In other words we need your help!

In the March Slices we shall be giving you full details of the coming AGM. Now is the time to ask yourself how you can put something back into the group and how you can help the Apple2000 structure continue to provide a high quality professional service. Nomination forms for the committee will be sent with March Slices, all we need is your name and signature. If you decide to nominate yourself for the committee, you will need to get a seconder for your proposal. If you have difficulty getting in touch with another member to do this, give us a ring at Apple2000 headquarters and we can see what we can do. If you simply would like to know what it is all about and what kind of commitment you might let yourself in for, just give us a ring as well.

If you do not wish to help directly we would still like to see you at the AGM itself. This is always a rewarding day out. You will meet fellow enthusiasts face to face. You will be able to put names to faces at last, and you will be able to participate in the days events of which the AGM is only a small part.

❑ The PC revolution is now four months old. Now don't get worried, I have not turned to the opposition, I only mean the 'Post Classic' revolution! At the launch I gave my thoughts on what I expected would happen over the coming year. How do we stand now that things have had a chance to settle down?

For the first time that I can remember, Apple actually had the machines ready to distribute on the day of the launch. That was not strictly true of course as only the Classic and the IIsi were available. The Classic could only be had in its 2/40 combination and the LC was only promised some time in January. I suggested at the time that it would be more like March before we saw the LC. Apple stole the limelight by releasing the LC in early December, one month early! You were lucky if you could get the 12inch colour monitor though as there was only one monitor for every two computers.

At the time of writing the waiting list for the Classic stands at 6-8 weeks. Apple are in the process of expanding production in Cork to cope with the expected increase in sales. We should see that waiting list drop very soon I hope.

We are also at the time of year when the first crop of little Apple's for 91 are released. We still see no sign of System 7.0, so things are not all going according to plan. What we might expect are new printers and an upgraded Mac portable. Rumours of links with Sony might also bring new products. We shall just have to wait and see ....

Ewen Wannop

Annual subscription rates are £30.00 for UK residents, £35.00 for E.E.C. residents and £40.00 for other overseas members.

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This issue was prepared using Aldus PageMaker™ 4.0, MicroSoft Word™ and Claris MacWrite™.

The Editorial team is:

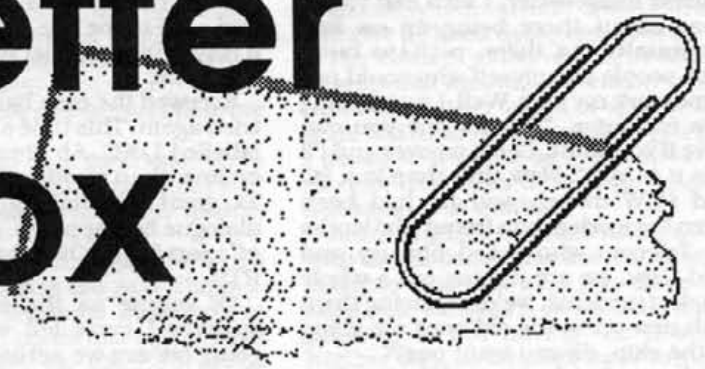
Apple II	Ewen Wannop
Macintosh	Norah Arnold, Irene Flaxman
Reviews	Elizabeth Littlewood

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 go to Val Evans for designing our front cover, and to Walter Lewis of Old Roan Press (051-227-4818) for our printing service.

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

Letter Box



Newbridge-On-Wye
Powys

Dear Apple2000,

Many thanks for the latest issue of Apple2000 - an excellent publication with something for everyone in the Mac world.

As a Mac User, I find only half of its contents relevant to me and I was wondering how many of your members have both Apple II **and** Mac products. If the number is small, would it be a good cost-cutting exercise in these troubled times to divide the mag into two separate parts - one for Apple II users and one for Mac users? Those people who have both systems, could be supplied with both parts.

On 22nd August I sent a letter to John Leftwich, in response to his letter about special Summer Offers. A copy of this letter is attached.

I have never had an acknowledgement or a reply to the letter and was wondering whether you would like to print it as 'An Open Letter to John Leftwich' or some such heading.

Frank J Pycroft

❑ The committee has debated the prospect of splitting the magazine into two parts many times. On investigation it turned out this apparently simple exercise would increase production printing and binding costs by some 50%, it would limit advertising from those who deal with all kinds of Apple computers and it would not address the fact that two thirds of the membership tells us they use both Apple II and Mac. Thanks for the thought, but life is not as easy as that. We decided some time ago to deliberately split the magazine in half. This way you should all know where to turn for your specific interests. Whether you are an Apple II or a Mac user, do not just ignore the other half of Apple2000. You may well be pleasantly surprised by some of the material you find in both halves! You will miss the competition, the online update and this letters page if you do not read the front half!

The following is the text of the letter to John Leftwich sent to us by Frank. We must emphasise that these are the personal opinions of one member. They are not reflected by Apple2000 members either collectively or individually.

J Leftwich
Director of Marketing
Apple Computer UK Ltd.
6 Roundwood Avenue
Stockley Park
Uxbridge
Middlesex
UB11 1BB
22.8.90

Dear Mr. Leftwich,

The Apple Mac Platform

Many thanks for your letter of 23rd July, giving me information about special offers available till 30th September.

But it's the statements in your letter which I wish to comment upon, as they appear to apply to the Apple Mac platform as it was when I bought my MacPlus in January 1986.

You say that the Apple Macintosh personal computer is fast and versatile, yet easy to use.

NOT SO NOW. I bought a Mac IIcx (with System 6.0.4) in March and instantly discovered that my programs were virtually useless under MultiFinder without 8mb of memory. So I buy more memory!

NEXT I am told by Aldus to use 6.0.3 to solve a problem with PageMaker 3.5, then told by Blyth Software to return to System 6.0.4 to solve a problem with OMNIS 5!

NEXT I scan a picture into the computer and save it in one format, only to discover that it needs a different format in SuperPaint and yet another in PageMaker. I hear that there are about 50 graphics formats already. When you realise what a problem the video industry had with just three formats, you can appreciate the massive difficulties that Mac people are having right now with graphics.

NEXT I get and upgrade from VersaScan 1.06 to 2.1 - only to have it bomb-out the first time I press the SCAN radio button! Solution - wait for a copy of Assk, check all the INIT's and then delete them one by one until the bomb-out is eliminated.

NEXT...NEXT...NEXT...NEXT...

Mr. Leftwich, you only have to read the Mac press to discover that my story is multiplied a thousand million times all over the world.

SO, WHAT'S THE SOLUTION?

Simple. Just accept that Mac users are getting so fed up with situation, that Apple must bite the bullet and take on the task of vetting software and giving those programs which pass all the tests the stamp of approval. Then Mac users can choose to buy 'Approved' software or go for the unapproved items. Naturally, the 'Approved' programs will cost more.

Take the situation with car spares - I can buy genuine Ford parts or those that are Ford-approved or others which simply say '...will fit your Ford'. The choice is mine.

And that is the only way out of this mess, which will surely kill Apple as soon as an equally good computer shows up which offers 'Approved' and unapproved software.

I would appreciate your comments.

Yours sincerely

Frank J Pycroft

cc John Lewis, The Macintosh User Group, Irene Flaxman, Apple2000 User Group

[redacted]

❑ I disagree with many of the conclusions in your letter. I would intrinsically agree with John Leftwich that on the whole the Mac is a fast and versatile machine. If it behaved as Frank suggests, I and many of my colleagues would not be able to instruct students to a level which makes them use the Macintosh as a real creative tool after only a days basic tuition.

If you must use MultiFinder, and only a few that I know do, then you must add as much memory as each program you wish to use needs. That is surely obvious. It is not a ploy by Apple to sell more memory, rather it is giving you a capability that you can use if you need or want to. Using your motoring analogy, you would not expect to go motor racing in your unaltered family car. You would fit a larger engine first.

There may well be 50 graphic formats, but the Mac's I know use only a few. A regular user of a scan program soon knows which one to set his defaults to and what he can do with it. There is a learning curve with everything. Try out the opposition for size if you think the

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 [redacted].

Mac is difficult and buggy to use.

I accept all of the limitations, bomb-outs and other problems, because I know at the end of the day I can work faster, better and with much greater ease and versatility than I could on any other computer. To take your motoring analogy once more, and one that has often been said before, by using a Mac we are not running a Ford, rather we are running a highly tuned racing car with all the attendant problems and innovations that make it into the thoroughbred and exciting machine that it is. I would not have it any other way. Despite all, I can and do use my Mac as a workhorse every day.

You suggest an 'Approved' scheme for software. The cost of Macintosh software is high enough already. To check out software works with every System release and with every other piece of 'Approved' software, is simply not on. The job is virtually impossible. You are asking us to see if one exhaust pipe will fit every different model of Ford motor car there has ever been.

I welcome dialogues between Apple and the Users. This is one of the things that Apple2000 stands for. Apple must be kept on their mettle. The Macintosh sells itself as we know, Apple UK and its parent company can help. We can help this process too.

What do the rest of the membership think? Come on, write and tell us!

Ewen Wannop

Aberystwyth
Dyfed

First Time On Line

Been flicking through the mags recently, looking for a modem. I produce a couple of newsletters for various people and a modem would be ideal to save me the three mile trip to my nearest imagesetter. I also had vague ideas about there being an on line community out there, perhaps business people like myself who could put some work my way. Well, I was talking to a colleague. "I've got one you can have if you want. Come on over and I'll give it to you". Now this chap is a PC and PCW owner, and he had been given the modem by a friend who works for Telecom who called him up and said "Hey, we are ripping out a whole stack of modems, we're replacing them with new ones, the old ones are going in the skip, do you want one?"

Anyway, I picked it up, it looks like a modem all right, a row of little lights and some switches, a place to plug my cable which luckily I already had in my 'useful bits drawer', a phone line and plug and a mains plug and lead. No box, No docs. Well, I thought, I'll just plug it in and give it a try. Of course I had no Comms software so after sending a Fax to Apple2000 for a copy of Red Ryder I set about searching my collection of software. MacLink Plus, which I use to transfer files from MS DOS disks on my trusty Amstrad has a 'Special Comms' feature. Opened the manual and set it up. Dialled 0225 743797 for TABBS, Zilch. No sound from the modem, nothing. The a dialogue "Modem is not responding", helpful. Try again, nothing. Tried prefixing the number with ATDT and ATDP without success.

Somewhere I heard that modems have a speaker in them, top right desk drawer, Phillips screwdriver, open the modem. No speaker. Squint at the PCB and chips for clues. Nothing doing.

Okay, Phase two. In time of trouble go to the mag rack. Looking down the spines I see a few articles that may be of use. Spend three hours reading them. Nothing to help at all. But I do find a list of the Dip switch settings for a Hayes modem. Set my Dip switches the same.

Screwed the case back together and tried again. This time a light comes on, labelled LINE, Ah great I think, we're on line, then another flashes, labelled Tx, great, it is dialling. Then the same dialogue box appears. All the lights go off apart from POWER and one labelled RTS.

Of course as the modem has no speaker I can't tell what exactly is going on, are we actually dialling out, do we get a dial tone. Nip out to Tandy's to buy a little adaptor for the phone line that lets me plug two things in at once. My fax machine has a speaker so that I can monitor the call.

Okay, back to my office. Plug it all in and go. Well, I can hear squirts and bleeps and it sounds very impressive. But the thing is just not dialling. As soon as the bleeps finish I get a squeal with a dialling tone in the background.

Dialled TABBS on the phone, yes I am answered by blurps and squeaks, it's either a computer or Ewen Wannop playing silly buggers. Press the button labelled MAN on the modem. Zilch. Okay, so the problem seems to be that my modem isn't talking properly.

Phase three is to ring my friendly computer shop. "Whaddyou want?", "Listen, I've been given this modem but with no manual, have you got anything on that fancy bookshelf of yours about modems?"

"No"

"Er, oh, okay then, thanks"

"What sort of modem is it?"

"Well it says Multimodem on the front and the back panel says Lion

The Apple Bulletin Board System

The Apple2000 Bulletin Board System

Speeds: V21(300) to V22bis(2400) 8N1 24 hours
Modem: PACE Ultralink MNP error correction Level 5

❑ The TABBS message system is more than just a Bulletin Board. With a shopping mall where you can browse the Apple2000 catalogues and order the goods you require; a library with over 75mb of compressed files for the Apple II, IIgs and Macintosh; the NewsBytes™ news files updated weekly bring you the latest in world computer news; a private and public E-mail service; file transfers that can be enclosed in private or public mail; message areas covering many topics including the Apple II, the IIgs and Macintosh; Xmodem, 1k Xmodem and Ymodem file transfers; multi-speed access at all common speeds; 24 hour operation; and much, much more make TABBS the premier Apple Bulletin Board serving Europe. Give TABBS a call today!

```
>>>>> TABBS TOP MENU <<<<<

<#>Endcall <.>Utilities
<;>Time <G>oodbye

<1> Apple ][ folder
<2> Apple IIgs folder
<3> Macintosh folder
<4> Apple2000 folder
<5> Developers folder
<6> Public areas

<D>ownload Libraries
<M>ailbox
<N>ews Columns
<A>dvertisment Hoarding
<S>hopping Mall
<W>hat's new on TABBS
<H>elp files for TABBS
```

Ring **TABBS** on [redacted] at any speed through V21, V22, V23 to V22bis 8N1 MNP Level 5
TABBS is available 24 hours a day

Systems Developments Ltd."

"Oh God, Lion Systems, it's crap. They went out of business years ago, their stuff was just too English, they did everything their own way and just couldn't hack it"

"Yes, very good, so you can't help me then"

"Well Amstrad do a good one, we've got some in stock, hang on I'll check..."

"No don't bother I'm skint, thanks anyway, bye".

Phase four. Right Apple2000, it's down to you. Here's the gen. The modem is a Lion Systems Multimodem 3142. The front panel has eight LED's labelled POWER, Tx, Rx, RTS, DCD, CI, LINE and OFF LINE. There are also four push buttons labelled TEST, LOOP, MAN and AL/DL.

The back panel is pretty straightforward except for a post labelled CONNECT TO PE. A few more labels here, part number 3142/001 and a little paper sticker that says ECT.

Pretend I know nothing and you will be pretty close. Any help you can give me will be much appreciated. No I don't know what all the little labels mean. I have managed to guess at some of them, but tell me anyway.

Mark Hamer

❑ Well what a story. Just goes to show Comms isn't always easy ...
Here goes ...

First of all lets state the definitions so we know what we are talking about:

POWER This shows that you remembered to plug it into the mains
Tx Transmit Data flashes when you send something out from the computer
Rx Receive Data flashes when somebody sends you something to your computer
RTS Ready to Send indicates that the computer/modem is ready
DCD Data Carrier Detect comes on when your carrier locks with a carrier the other end
CI Don't know this one, could it be CTS for Clear to Send?
LINE You are online or offhook and able to communicate
OFF LINE You are onhook or saving the phone bills
TEST Probably this pressed in conjunction with ...
LOOP ... pressed should allow you to talk to the modem and echo on screen
MAN Probably puts the modem online manually
AL/DL Turns on Analog loopback/Digital loopback for test purposes
PE Is presumably Parity Earth

The number 3142 seems to ring a bell and I would reckon that you might have a 300/300 and 1200/75 baud modem. Look inside again for a chip with the number '7910' or '7911' on it. If there is one of those it will be of a reasonably normal kind of modem and will give at least those two speeds.

The modem could of course always be a special leased line version or any number of other kinds of special modem, but from the description you give I doubt it. It could be a synchronous modem that talks in strange tongues but again it is unlikely.

Assuming that there is nothing wrong with the modem, there are a number of possible reasons why you have not been able to make it work. Your major problem is not having the manual. Neither do I, so we shall have to guess and probe our way as best we can.

We need to start by doing some tests. You have not actually seen anything generated by the modem on your screen so we do not know if it is an intelligent modem or not.

Phase five. Check you have your cables and everything else OK by setting the computer to 300/300 and talking to the modem with the TEST and LOOP switches depressed. If you see what you are typing on screen then all is well. Release those switches and you should no longer see anything when you type. You may have to press the AL/DL switch as well. If you get nothing but the Tx light is flashing, then check that the RTS light is on. If not check your cable is correctly wired, you must have some handshake lines as well as Tx and Rx. RTS should be lit and Tx flash whatever speed you talk to the modem at.

Phase six. Type AT<CR> and see if you see an 'OK' on screen. If so you have a Hayes type of intelligent modem that most software should recognise. If you get an 'OK' then try AT?<CR> and see if it gives you a list of commands that it recognises. If you do not get an 'OK' make sure that the Tx light is flashing while you do this. If the light is flashing but you get no response, try a different speed on the computer. The normal speeds are 300, 1200 and 2400 baud. If the light flashes but you get no response at all, you may have a simple manual modem. Look again inside the thing and see if there are lots of largish chips. Especially look for an EPROM or chip with a custom label on it. This would give the clue as to whether it is an intelligent modem with onboard microprocessor and software or not. If it only has a few chips, look for relays. If there are none or nothing looking like a solid state relay, then it may well be a dumb modem that does not dial by itself. You will have to use a separate phone to dial.

Phase seven. If you have got this far then the modem seems to be working. If it responds to Hayes commands, try dialling ATDP0225743797 again. When TABBS answers wait for at least 40 seconds before giving up. The DCD light should come on when you lock your carriers. TABBS starts looking at 2400 baud and cycles down to 300 baud before giving up. If the modem does not respond to Hayes commands, try dialling TABBS manually and pressing the MAN button when you hear it ringing out. Wait at least 40 seconds before giving up.

Phase eight. Either you are on line by now, or you are having that sixth stiff drink. If you are not online, then I suggest that you either give up and buy a new modem *with* a manual, find a comms wizard who can come and help you directly with lots of gadgets and gizmos or hope that somebody out there knows the modem better will respond to this letter and can send you a manual. As a last resort you could give up the idea of comms altogether and save yourself a lot of money on phone bills.

I hope something finally worked ...

The Boffin

Newton Abbot
Devon

Dear Ewen,

Just a quickie, I hope. Is there a 'C' Compiler for the Apple //e?

Brian Gooch

❑ Well the quick answer says that I know of none. Assembler and Pascal are available and many things for the CP/M environment, but no C for the //e as we know it.

C is available on the IIgs of course, but the //e just does not have enough memory to make it a realistic proposition. Traditionally assembler was the language for the II series as it was more compact and used the limited memory more efficiently. Pascal has been available for many years now as well. The current version is 1.3.

Ewen Wannop

Charlton Kings
Cheltenham

Dear Ewen,

About a year ago I acquired a used colour IIGS with two 5.25 drives. For GSOS I needed at least one 3.5 drive but was reluctant to spend around £300 for a new Apple 3.5.

Then the A2-Central ad in the April 1990 Apple2000 for "cheap 3.5 drives" caught my eye. On the basis that if the AMR 3.5 was good enough for Dennis Doms it should be good enough for me, I ordered one. It arrived by air mail about a month later and I paid the postman £32 in duty, VAT and fees, making the total cost delivered to me about £150.

The drive was well packed in a substantial carton, with a single sheet of instructions for installing it on a IIGS, //cPlus and //e. Although advertised as working on a Macintosh there is no mention of this. The case is platinum colour, a bit smaller than Apple's, with the usual "in-use" light, eject button

and hole for manual ejection with a paper clip.

I daisy-chained the 3.5 drive with the 5.25 drives and booted several Prodos-8 disks I happened to have. Everything seemed fine; the drive operates just like Apple's but makes slightly different and louder sounds. I then sent to Apple2000 for the System 5.0.2 and System Tools disks and with your help I tried to install GSOS. At that point my problems began, the dreaded "I/O Error" message and that red Stop sign always appearing somewhere before installation was complete.

Unfortunately I was prevented from getting down to solving the problem for some time. You suggested it was either dirt on the heads or it looked as if the drive was faulty. Cleaning the heads made no difference which seemed to indicate the drive was faulty. This was confirmed when a disk written on my drive which I sent to Dave Ward proved unreadable on his machine, so I phoned AMR for permission to return it. They said they would replace it with a new unit upon receipt of the faulty one.

Several weeks of phone calls and correspondence with HM Customs followed as I threaded my way through the "Outward Processing Relief" procedure to avoid paying £32 in VAT etc. on the replacement. Eventually I received form C&E 1152 with an authorisation number and form C&E 132, Certificate of Posting, to be completed by the Post Office. I posted the drive by air mail to AMR with an explanatory letter and instructions to be sure and mark the replacement package: "Replacement Under Standard Exchange Free Of Charge", which they did.

Three weeks later I received the replacement drive without being asked to show the authorisation form and without paying any charges. I connected it up and it has been working perfectly ever since. I have been using it as Drive-1 with an Apple 3.5 as Drive-2 and have had no problems of any kind.

After this experience, if I ever have to return anything else to America for repair or replacement under warranty I shall probably omit the time-consuming "Outward Processing Relief" procedure and simply get an ordinary Certificate of Posting, telling the recipient to return the item marked: "Replacement Under Standard Exchange Free Of Charge".

The first letter on p. 6.75 of the November 1990 A2-Central describes a similar experience to mine with an AMR 3.5. Uncle Dos' reply suggests a number of possible reasons for the problems but says he knows of no easy cure. Apparently a small number of subscribers have consistent problems reading A-2 Central's disks and this does not seem to be limited to users of AMR drives.

It seems to me that I was just unlucky with the original AMR 3.5 and that the difficulties I encountered could conceivably have occurred with any 3.5 drive. Perhaps this is a good reason for buying one in the UK rather than importing direct, so that repair or replacement can be obtained expeditiously in case of faulty performance.

Recent reductions in the price of Apple 3.5 drives make the AMR drive less "cheap" than it was. I ask myself whether I would go for an AMR if I needed another 3.5 drive now; I'm not absolutely sure, but I probably would.

Peter B. Dyson

Jalan Senyum
Republic of Singapore

To: John Richey AppleWorks Guru

Good day, John. I need your advice on the following questions:

AppleWorks Questions

i) Hyphenation

There are many times that I would like to permit hyphenation in my AppleWorks files. How do I do that in AppleWorks ? I am using version 3.

ii) Patches

Please tell me more about Version 2.0 and 3.0 bugs, and what are the patches that resolve them. Can you send me a disk with instructions.

iii) FILENAMING

I will like to know if there is a way to insert the current filename into footer of an AppleWorks wordprocessor or spreadsheet. It serves as a good reference.

Consider this, you have just finish a document and printed it out. Would not it be useful, if there is a macro that inserts the filename at the base of the letter (eg. /ftgr10) ? It is somewhat like the Wang wordprocessor system that assigns a filename and prints it to the printer each a document is created.

It certainly makes scouring through your disk library less traumatic.

A.M.Merican

❑ You do come up with some interesting queries, all of which make one think more about the broader application of AppleWorks. Here goes then:

i) hyphenation: not sure I understand the question unless you are referring to automatic hyphenation in a fully justified document. In that case we are out of luck for AW 3.0 has not arrived at that level of sophistication. After all, the folks back in Cupertino think of this as a simple product for home amusement rather than a professional, integrated word processor package.

ii) patches: for AW 2.0/1 there was W. Wellman's Superpatch which was shareware, but is no more as far as my friends recollect. I think it was available through A-2 Central, and as you are now a subscriber... for AW 3.0 there is the Beagle-produced shareware patch collection last released as version 1.5 through (again) A-2 Central on disk, Jan '90 & Apr '90; I will send a copy as soon as I get it for you; then there is the AppleWorks Companion from Beagle Bros. with the above patches and several other enhancements, available from a Beagle Buddy such as Ken Dawson, 104 Pit Lane, Widnes, Cheshire, U.K. WA8 9HW; and lastly the National AppleWorks User Group (NAUG) is always coming up with helpful hints and patches and macros to make the program more utilitarian. Their address is Box 87453, Canton, Michigan 48187, U.S.A.

iii) filename printout: there has to be a straightforward macro that will print the filename wherever you would want it on the file. I am a reluctant and belated convert from Pinpoint's KeyPlayer macros, only now delving into the wonders of the Ultramacros Primer by Mark Munz to re-create my favourites. I would not be so bold as to whip a new one up for you just yet, but the book is available from NAUG @ $19.95.

John Richey

Jalan Senyum
Republic of Singapore

Dear Editor,

1) Apple 2C RGB monitor adapter

There is now a chance to use an Apple IIc with an IBM RGB CGA monitor. I would like to share my experience with all.

After working with the Apple IIc's green monochrome, it makes a nice change. I found this information in an old Incider magazine's article. Telemax makes various types of RGB adaptors including one for the Apple IIe. It would be great if they develop one to work with VGA monitors for both the Apple IIGs and IIe/c.

I had bought a Phillips CM8833 RGB digital monitor to be used with my Toshiba T1000 laptop in my house. It made sense to use the Phillips monitor for my Toshiba laptop and Apple IIc. The Telemax's version of their RGB adaptor for the Apple IIc is called Peacock. The Peacock is quite good in displaying colour on the monitor. You can even select the foreground and background colour. I prefer to use white text on a blue background. It is much more pleasing than green.

Delivery takes about 3 weeks. I attached a copy of their technical information for your perusal. By the way, the Phillips CM8833 is quite flexible, it accepts composite PAL or NTSC signal from my Apple IIc or IBM digital RGB signals from my laptop. It also has a built-in speaker with a socket input for sound. There is even a Phillips LCD CGA monitor. It about 1.5 inch thick and measures 12 inches across. Yes, the ultimate LCD monitor for the Apple IIc.

Address:

TELEMAX INC
780 LORRAINE DRIVE, P.O.BOX339
WARRINGTON, PA 18976, U.S.A.

2) Smoothtalker for Apple IIGS

This is a software-only text-talking program. I was experimenting with this program. It is very flexible permitting the user to vary the tone and pitch of voice. I found it most amusing when it pronounces bad spellings. Initially, I bought it to experiment with possible applications. Such wishful thinking as proof-reading. It is slightly slow - perhaps a Transwarp card might help. UNFORTUNATELY, it is cannot be configured as a NDA (new desk accessory). Such a configuration would expand its flexibility within other Apple IIGS programs rather than exist as a standalone programs. To make things worse, they have no plans to upgrade such an potentially excellent product. Address:

FIRST BYTE
CLAUSET CENTRE,
3100 S.HARBOR BLVD.
SUITE 150, SANTA ANA. CA 92704

3) CIRTECH DUET and OCR on the Apple II by WESTCODE Inc.

Can you tell me more about these products?

I understand from your October issue, that you are updating all your library. Is this correct ? If so, please advise which disks that have the updated programs I should order.

Next, can you send me more information about the Wordbench wordprocessor package by Addison Wesley? It was reviewed by Elizabeth Littlewood in a 1989 issue. How do I contact the publisher for more technical information of this very interesting product ?

Thank you and keep up the good work !

A. M. Merican

❑ Thank you for sharing your experiences with us. Now to answer your questions.

Firstly Cirtech have stopped work on the DUET card. It was no longer a realistic proposition after Apple halved the prices of the Macintosh. Too few people would have paid for a product when they could have the real thing for around the same price!

I am afraid that we do not have any information on the scanner as yet. As soon as we can get hold of one for a review we shall see what we can do.

We have no plans for updating our library at the moment. The old Apple II library which is mainly DOS 3.3 programs could well be streamlined and this is something we mean to embark on one of these days when we can find some time. All the libraries are added to continuously. We let you all know when this happens. You will see that the IIgs library has grown in this current issue.

Wordbench is sold by Addison Wesley, a major international publisher. I am sure they will have a branch in Singapore. You could contact them direct. **Editor**

Farnham
Surrey

Dear Apple2000,

I've been messing around with some public domain software from Computability called Money Street. It's a 1983 vintage home accounting database which produces balances and sorts by item codes. It has sparked an interest, and I'm wondering if there is a slicker piece of software around nowadays which will do the same job better.

I have a //e with 64k plus 80 col card. Is there anybody out there with a good idea?

Bob Wileman

❑ Don't know myself on that one. Accounting has always been a mystery to me. Anyone else have an answer?

Ewen Wannop

Orpington,
Kent

Dear Apple 2000,

Having had an Apple //e for nearly a year now, I've been finding my way around Applesoft,DOS 3.3,ProDos etc. and the workings of the Apple //e in general,but I have some queries that I hope you can answer.

1) On AppleXtras.P8.NO.3 the List.Descr file which explains how to use List.System says you need a program launcher, such as Don Elton's ECP, Glen Bredon's Pro-SEL, or David Lyons DAVEX to run List.System. Could you explain what this is and where can I get a copy of this program.

2) I've noticed that on some of the ProDos Discs in your Library,there are file types $BO for example,what are these file types and how do you run them.

3) I would like to learn how to use the Monitor Program on the Apple //e can you suggest any good books on the subject.

4) Last but not least I've noticed in the Members Small Ads that clip on fans have been advertised, are these necessary? are the Apple's prone to overheating.

Before closing I would like to say what an excellent job you all do at Apple 2000, well done.

Ronald Burden

❑ 1] Program launchers are simply a means of easily starting up a program from the keyboard. When you boot ProDOS it 'launches' the first SYS file with the suffix .SYSTEM that it finds on the disk. DOS 3.3 launches the HELLO program in the same way. It is easy under Applesoft to alter the HELLO program to run anything you like. It is not so easy under ProDOS to launch a program other than that first SYS file. The latest ProDOS 8 has a simple and very effective program launcher built in to it. We included this on the Xtras Toolbox disk PR025 released this month. ProSel 16 is for the Apple IIgs only and is available from many dealers or direct from Glen Bredon. See the review in this magazine for further details. ECP8 is a freeware program and we have made this available on one of our 3.5 library disks. We have included a simple program launcher called SNEEZE on our P8 Xtras disk this month. It runs under the 80 col screen on the //e, //c or IIgs and will launch List.System for you.

2] Files with type $B0 are all SRC or text source files used within the IIgs programming environment. They are files written with normal text and can be read by List.System, many word processors, or by changing the filetype to $04 (TXT), they can then be read by virtually anything.

3] To use the monitor routines on the //e you will need to get a copy of the Apple //e Technical Reference manual. Apple2000 can supply this manual. The cost is £21.50 inclusive of VAT and P&P. Order as '0 201 17750 1' from the PO Box in Liverpool.

4] Whether you need a clip on fan or not depends on what you have inside the computer. If all you have is your 80 column card, a disk controller and perhaps a printer card, then there is no need of a fan. If you have every slot filled and the power pack gets very hot in use, then yes you would be wise to fit a fan. Many cards get quite hot in use and can cause problems if not cooled. Accelerator cards are probably the worst in this respect. Check the inside after you have had the machine on for some time and see if you think it is hot or not. Place a fan carefully so that it allows the air to be blown out of or in to the the machine. It is no good if all it does is circulate the hot air that is already inside.

The Boffin

Ballybrack
Co Dublin

Dear Ewen,

Perhaps you wrote too soon about the end of the teething problems with the Xtras disks. I cannot seem to get the pictures from Xtras GS No. 5 to display correctly.

I first used the new GS SHRINKIT (which seems to be doing okay otherwise) and created a "pictures" folder on the disk I'm using for the shrinkit systems. Then I tried using the regular SHRINKIT 3.0.2 and extracting to this /PICTURES disk.

In both cases, the bottom few lines seem to be correct, but all above that is a mess. Any suggestions?

System: GS ROM 01; 2 Meg of memory, 800K of which is a RAM Drive; 1 3.5" drive, 1 5.25" drive; PC Transporter w. 1 5.25" drive; GS.OS 5.0.2 with no DA's except Control Panel.

Thanks for your help!

Finally, a request. As an amateur radio operator, I am most appreciative

of your little packet radio program on Pro22. I am now looking for a program which supports TCPIP packet radio protocols. Some other Apple2000 members who are "hams" are also interested. Actually, if you find anything on Apple II's and amateur radio, if you pass it along to me or to another Apple2000 member (I think): Ron Mallett, G0NJD, [illegible] England, we will put it in circulation if it's too specialised for an Apple2000 disk.
Michael Reaume

❑ I am at a loss to know what is going wrong here. The pictures all display fine on my IIgs. I presume you are using the View.Sys16 program from the same disk. The files are not ordinary picture files as they have been specially prepared to display 3200 colours at once. There seems to be nothing wrong with your setup. My own is very similar. I also have a Transporter so that is not the problem. Very odd indeed. I cannot really offer any solution. ShrinkIt will let you know if a file is damaged as it unpacks the original files.
Ewen Wannop

[illegible]
London

Dear Ewen,
ALUG

All over the world there are schools, public and academic libraries using Apple computers. In size they range from the largest college or university right down to a small school with one part-time librarian.

The Apple Library Users group caters for librarians who own apples or use them at work. The majority live in the U.S.A. but membership is open to U.K. libraries also. The newsletter is produced by Monica Ertel of Apple's own library in Cupertino.

The latest edition contains hard- and software news, a bibliography of desktop publishing, reviews, articles and a help column. The help columns demonstrate the wide range of interests and computer experience: installing AppleWorks on a hard disk; interlibrary loan software; Urdu scripts; genealogical software; re-inking laserprinter.

A new development is ALUG ONLINE, an on-line discussion group administered by THE WELL, a California computer conferencing system. To access it you dial a Compuserve number and type "well" at the host prompt. It isn't available through Dialplus and I suspect that a direct call to the U.S.A. is necessary, with a modem set at 1200/1200.

For further information contact Monica Ertel, Apple library, 10381 Bandley Drive, Cupertino CA 95014, or to Compuserve 76344,1113
Arthur Robinson

PRIME CUP - SOLUTION

A 1	B 7	C 5	D 6	E 1	F 6
5	G 8	7	5	3	3
H 7	J 7	K 6	0	L 8	6
M 4	8	2	N 4	1	0
P 6	4	Q 3	R 7	S 8	5
T 4	3	8	9	7	6

❑ After we actually got the questions right in the November Slices, Dave Ferris won the prize of a copy of ChessMaster 2100 for the Apple IIgs.

Compuserve®

❑ We asked you to send us your Compuserve/Forum ID's. We now have some more added to our collection and these are 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
John Beattie	100012,360
David Collins	100016,3060
Gary Doades	100016,2353
Felim Doyle	100016,1151
Mateen Greenaway	100016,602
Dale James	100016,1152
Bryn Jones	71307,1457
Peter Kemp	100016,1172
Elizabeth Littlewood	100016,401
Mark O'Neill	100016,476
Jeremy Quinn	100016,560
John Richey	10006,1037
Russell Ridout	72007,211
Arthur Robinson	73457,3614
James Southward	73767,1336
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

February Crossword

Rules of Engagement

The first correct entry drawn from the postbag wins first prize. Please remember to indicate which of the two prize choices you would like.

Only entries from current members of Apple2000 will be eligible.

No member of the committee or the editorial team may enter.

Our decision will be final.

Only entries received in the PO box in Liverpool before the 31st of March will be deemed eligible.

How to Contact You

Name: .....

Membership Number: .....

Address: .....

.....

.....

Post your completed entry to:

February Competition,
PO Box 3,
Liverpool,
L21 8PY.

Choose Your Prize

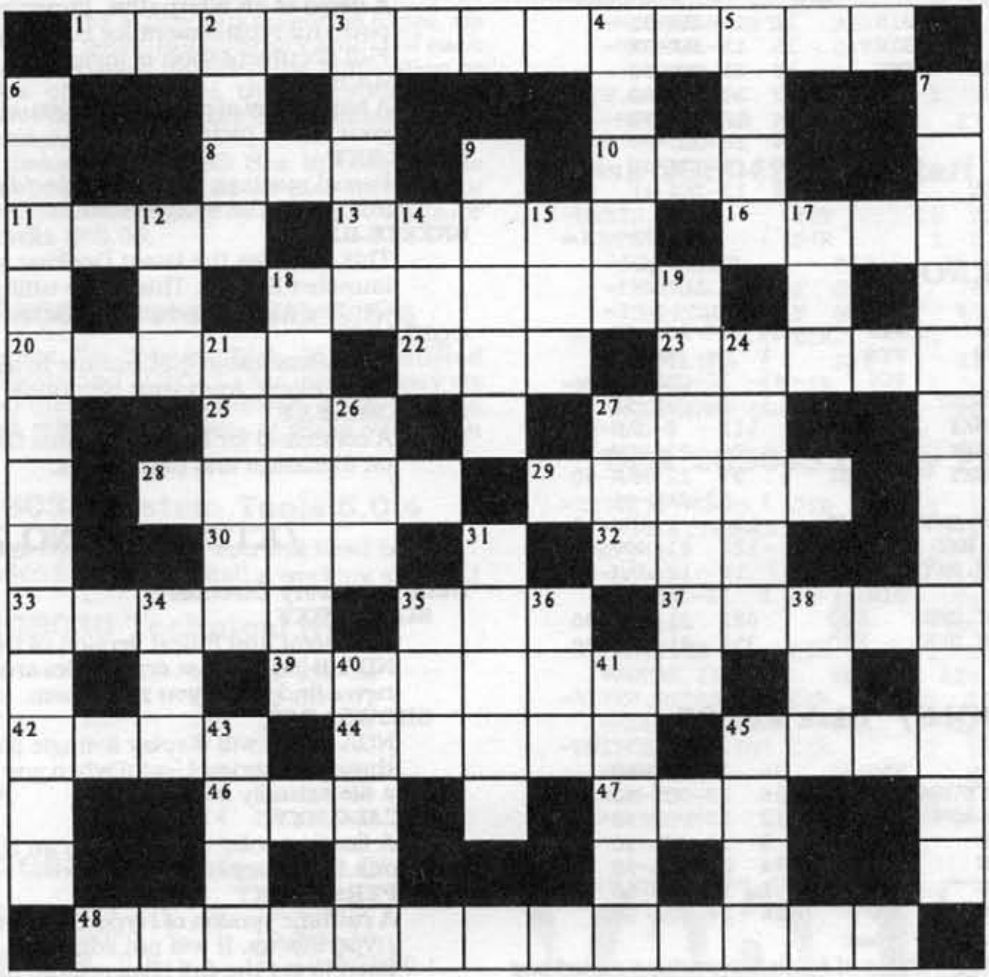
If you were to win first prize, please indicate which prize you would like. Battle Chess for the IIgs donated by MGA or LOC a game for the Macintosh.
Please tick your choice:

☐ Battle Chess

☐ LOC

Apple2000 prize competition

Apple-pie Order



Clues Across

1. Inclusive 48a. (13)
8. Urge horse after direction. (3)
10. A reduced 7d? (3)
11. Canopy, often the part. (4)
13. The colour of peace? (5)
16. We look for this when we're stuck. (4)
18. Words about the motorway provide assurance. (7)
20. Tree near border section. (5)
22. Start here with this initially. (3)
23. Stir all of French spoon. (5)
25. Fizzy drink returns the same. (3)
27. Diamond is one one but it's smaller. (3)
28. Freed to cause delay. (5)
29. A number above should provide it. (5)
30. Fresh directions. (3)
32. Scottish to dine backwards. (3)
33. A girl is unsuitable. (5)
35. Harmful elastic contains crude rubber. (3)
37. Walk round the quiet market. (5)
39. Angel Mountains are foreign. (7)
42. Of Man and of Dogs. (4)
44. Bury between or together? (5)
45. See reverse spinners. (4)
46. Cry like this, second-rate. (3)
47. Poem to confused rabbit. (3)
48. Instructively revise idea count, friend. (13)

Clues Down

2. Compiler and alien come face-to-face. (4)
3. Dress with gold in unresponsive state. (5)
4. Calls by other means. (5)
5. Move slowly short distance. (4)
6. More medicine round the French inference. (13)
7. You probably have one of these. (5,8)
9. Send up the watch. (5)
12. Projecting point in pen I bought. (3)
14. The whole destiny. (3)
15. To contend flower without 14d. (3)
17. Consequence of journalist around the North. (3)
18. Claim of teacher without alternative. (7)
19. Raise oriental swimmer up about tax. (7)
21. Work directions for starts. (5)
24. It's morning always for the prince. (5)
26. Quiet directions to seat. (3)
27. Obtained bundle of sticks without hard work. (3)
31. Unsparingly review his latest acting part. (5)
34. "One learners" is bad. (3)
35. A ballot-box that might run. (3)
36. Day before the next day. (3)
38. A record high mountain. (3)
40. First class peice of data goes up pipe. (5)
41. Robe around king shows he's developed. (5)
43. He's "hairy". (Heb.) (4)
45. An impression of drinks cocktail. (4)

AppleXtras

/XTRAS.P8.NO.7/

```
=JULIAS.BXY       BIN      11  15-JAN-91
=TRIG.BXY         BIN      15  15-JAN-91
=MICRODOT.SHK     TXT      56  21-SEP-90
=FOTOMA.BXY       BIN      15  30-DEC-90
=GDMP.BXY         BIN      74  16-NOV-90
=SNEEZE.BXY       BIN      64  15-DEC-90
=CQUIT.BXY        BIN      10  15-JAN-91
=INFO.CMD.BXY     $E0      23  12-JAN-91
```

/XTRAS.GS.NO.7/

```
=PRODOS           SYS      34  20-AUG-90
=BOOT.SYSTEM      SYS       1   6-JAN-90
=TITLE            $C0      45  12-JAN-91
=DESK.ACCESSORY   DIR       1  12-JAN-91
   =SUPERI.BXY      BIN    119   8-JAN-91
   =SHOW53.BXY      BIN     70  27-NOV-90
   =FPCALC.BXY      TXT     97  22-MAR-90
=PROGRAMS         DIR       1  12-JAN-91
   =HYPERSTU.BXY    TXT    100   1-AUG-90
   =WHAT.II.BXY     $E0    122  21-NOV-89
   =HS.ICONS.BXY    $E0     10  12-JAN-91
=MUSIC            DIR       1  12-JAN-91
   =SMTHMUSC.SHK    $E0    622  21-DEC-90
   =SNDSMITH.SHK    $E0    359  21-DEC-90
```

/XTRAS.TOOLS/ Disk PR025

```
=PRODOS           SYS      34  20-AUG-90
=UNSHRINK.SYSTEM  SYS      26  13-OCT-90
=UNSHRINK.README  TXT      12  13-OCT-90
=LIST.LAUNCH      SYS       3  13-JUL-90
=LIST.SYSTEM      SYS      74  24-JUL-90
=LIST.CONFIG      BIN       1  19-AUG-90
=LIST021.DOC      TXT      86  24-JUL-90
```

❑ We start the second series of AppleXtras with a mixed bag of goodies garnered from CompuServe and other sources.

Most of the files we include on these disks have been compressed or shrunk to pack as many files as possible onto the disks. Files compressed in this way are denoted by the suffixes .BXY and .SHK. Both types of file can be extracted using UnShrinkIt on the Apple //e or GSHK on the IIgs. These two programs have been included on previous disks in the series.

For those of you joining the Xtras system more recently and who do not have UnShrinkIt already, we have prepared a special disk for the library (PR025) which includes not only UnShrinkIt but List.System as well. This disk is suitable for II+, //e and //c owners. It also includes a copy of ProDOS 1.9 which has the new excellent Quit routine now included in ProDOS.

For IIgs users, a copy of GS ShrinkIt (GSHK) can be found on IIgs library disks 2GS039, 2GS047 and 2GS048.

We have included List.System on disk PR025. This is an excellent way of listing to screen or printer any kind of file whether it be text or data. Listing can be done either in text or as a Hex number dump. This program is suitable for use on the //e, //c and IIgs.

May we remind you that many of these programs are ShareWare. If you decide that you like the program and continue to use it, you should send the ShareWare fee requested to the author. Full details will be given in the accompanying documentation.

/XTRAS.P8.NO.7/

JULIAS.BXY
A Basic program that will draw Julia fractal sets to order. Fully configurable as you go along.

TRIG.BXY
For those mathematicians amongst you a program that will draw graphs of various functions.

MICRODOT.SHK
A demo of an alternative, improved and more powerful replacement for Basic.System. Full documentation is included.

FOTOMA.BXY
A handy way of producing a visual printed catalog of your HiRes picture files.

GDMP.BXY
Pascal routines to print Apple /// black and white images on the ImageWriter.

SNEEZE.BXY
This includes the latest DogPaw and a program launcher Sneeze. This is the utility used on the A2-Central disks to select programs.

CQUIT.BXY
A customiseable quit routine to avoid that nasty ProDOS exit from your programs.

INFO.CMD.BXY
A command for Basic programs that will return Info on filenames and pathnames.

/XTRAS.GS.NO.7/

Desk Accessory Directory

SUPERI.BXY
The latest and fullest version of this excellent little NDA. It list all those error codes and filetypes you can never find when you need them.

SHOW53.BXY
NDA which will display a single picture or cycle through a series. Useful when you want to see what a file actually shows.

FPCALC.BXY
A floating point calculator in an NDA.

Programs Directory

HYPERSTU.BXY
A runtime version of HyperStudio which will display HyperStacks. It will not edit them. For that you will need to get the full Hyperstudio package.

WHAT.II.BXY
A HyperStudio stack which is rather fun. It shows you what HyperStudio can do.

HS.ICONS.BXY
HyperStudio icons for your ICON folder.

Music Directory

SMTHMUSC.SHK
A selection of music for SoundSmith.

SNDSMITH.SHK
SoundSmith version 0.95. This is the latest release of SoundSmith. It now includes Midi support.

/Xtras.Tools/ Disk PR025

UnShrink.System
UnShrinkIt for the II+, //c and //c will extract files from .BXY and .SHK archives. It will not extract IIgs files containing resource forks.

List.System
List.System will read and display text files, binary files and in fact any file. It will display either to the screen or the printer. Suitable for the //e, //c and IIgs.

NOTE: This disk is not issued with the Xtras disks. It must be ordered separately as a normal library disk from the PO Box in Liverpool. Price £3.50 inc VAT and P&P

Library Update

❑ To save space and acres of precious magazine pages, we have not included our usual full directory listing of each disk in this update. We have included the application or other major files only and not their support files. Documenation and support files are all included on the actual disks themselves.

Order library disks from the PO Box in Liverpool as usual. IIgs 3.5 Library disks cost £4.00 each inclusive of VAT and P&P. You can save money by buying 10 disks for £35.00 and 20 disks £65.00.

Disk 2GS037 System.Disk 5.0.4

(This is the latest IIgs System Disk. If you ordered System disks 2GS035 and 2GS036 after mid January we will have sent you these two disks instead. Apple found a bug in 5.0.3 and released this pair of disks very soon afterwards.)

Disk 2GS038 System.Tools 5.0.4

(The latest IIgs System Tools. You will need both 2GS037 and 2GS038 disks to install a working system.)

Disk 2GS039 Technical Notes

```
=TNMAY90.SHK        $E0      179  10-JUL-90
=TNMAR90.SHK        $E0      287  12-JAN-91
=TN.FOUND.SHK       $E0      210  12-JAN-91
=FTN.LOST.SHK       $E0       42  11-NOV-90
=TNJUL90.SHK        $E0      218  19-OCT-90
=TNSEP90.SHK        $E0      424  19-OCT-90
=GSHK               $B3      214  23-JUL-90
```

Disk 2GS040 DB Master 5.0

```
=DBMASTER.SYSTEM SYS        16  10-APR-90
=V5.UTIL         DIR         1  10-APR-90
   =ABOUT.DBMASTER  BIN      4  10-APR-90
   =PATCHER         BIN      5  10-APR-90
=PRINTER.DRIVERS DIR         4  10-APR-90
      (ShareWare version of DB Master)
```

Disk 2GS041 Desk Accessories

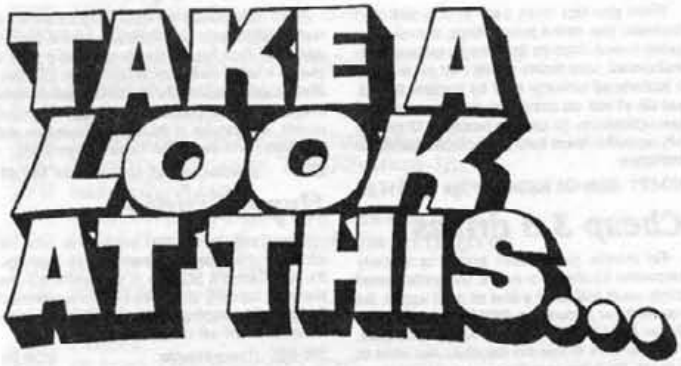
```
=BATTRAMWATCHDOG DIR         1  12-JAN-91
=CARPET.BAGGER   DIR         1  12-JAN-91
=BG.SOUND        DIR         1  12-JAN-91
   =BGSOUND         $B9      53  20-MAY-90
   =GS.GOLD.II      DIR       1  12-JAN-91
      =GS.GOLD.II      $D5    37  10-JUL-90
=FILE.CDA        DIR         1  12-JAN-91
   =FILETOOLS.1.0S  $B9      91  10-MAY-90
=SHELL           DIR         1  12-JAN-91
   =SHELL.SETUP     $B6      36  15-SEP-89
=TRANSPROG2      DIR         1  12-JAN-91
   =TRANSPROG.US    DIR       1  12-JAN-91
      =TRANSPROG.NDA   $B8    52   6-MAY-90
=RUNQ1.11        DIR         1  12-JAN-91
   =RUNQ            $B6      72  21-APR-90
=ACK             $B8        23  25-APR-90
=COLOR.CDEV      DIR         1  12-JAN-91
   =CDEV.COLOR      $C7      38   3-MAR-90
=FILETOOLS       DIR         1  12-JAN-91
   =FILETOOLS.1.0S  $B9      91  10-MAY-90
=GSCAT           DIR         1  12-JAN-91
   =GSCAT           $B9      12  16-DEC-90
=PRINTER.DRIVERS DIR         1  12-JAN-91
   =GRAPPLERPLUS    $BB       4   8-JUN-90
   =IIPRINT         $BB       3  30-JUN-90
   =EPSON.APL       $BB       3  24-MAY-90
   =PROGRAPPLER     $BB       4  16-JUN-90
   =PRINTER         $BB       5  14-JUL-90
   =PARALLELPRO     $BB       4   5-JUN-90
=MENUTIME        DIR         1  12-JAN-91
   =MENUTIME        $B8       3  10-NOV-90
=LL.RES.EDIT     DIR         1  12-JAN-91
   =LLRE            $B3      92  28-JUN-90
=RESOURCE.SPY    DIR         1  12-JAN-91
   =RESOURCE.SPY    $B3      61   2-JAN-90
   =RESLIN          DIR       1  12-JAN-91
      =RESLIN          $B3    60  12-APR-90
=HFS.LINK        DIR         1  12-JAN-91
   =HFSLINK.4A      SYS      27   2-SEP-90
```

Disk 2GS042 Jumpstart Launcher

```
=WHATS.NEW       TXT        10  22-APR-90
=JUMPSTART       DIR         1  22-APR-90
   =JUMPSTART       $B3     179  22-APR-90
   =INSTALL.JSTART  $B3      19  18-MAR-90
   =JUMPSTART.ONLY  $B3      89  26-NOV-89
=ALARM           DIR         1   3-MAR-90
   =ALARM.CDA       $B9      27  25-FEB-90
=MOUSETRAP       DIR         1   3-MAR-90
   =MOUSETRAP.CDA   $B9      22  25-FEB-90
```

Disk 2GS043 Utility Programs

```
=UTILITY.WORKS   DIR         1  12-JAN-91
   =UTILITYWORKS.GS $B3     571  23-MAR-90
=UNZIP.2         DIR         1  12-JAN-91
   =STRIP.C         $B0       7  25-APR-89
   =UNZIP           $B5      78  18-OCT-89
   =STRIP           $B5      61  14-OCT-89
=NUPAK.IIGS      DIR         1  12-JAN-91
   =NUPAK.IIGS      $B3     125  26-FEB-90
=ALTER.BYTES     DIR         1  12-JAN-91
   =ALTER.SYSTEM    SYS      12   1-MAR-90
=SWITCH.CTRL.PNL DIR         1  12-JAN-91
   =SWCP.BAS        BAS       8  25-JUN-89
=GSMEM           DIR         1  12-JAN-91
   =STARTUP         BAS      18  27-MAR-90
```



Disk 2GS044 Comms programs

```
=COPILOT         DIR         3  12-JAN-91
   =COPILOT         $B3     198  17-APR-90
=TIC.DEMO        DIR         1  12-JAN-91
   =TIC.DEMO        SYS      56  17-SEP-89
=SNOWTERM.2      DIR         1  12-JAN-91
   =SNOWTERM        $B3     207   6-MAY-90
=COMM.SYSTEM     DIR         1  12-JAN-91
   =COMM.SYSTEM     SYS      25   3-NOV-90
=NUFX.MESSENGER  DIR         1  12-JAN-91
   =NUFX.MESSENGER  BAS      17  16-APR-90
=SCRIPTS         DIR         1  12-JAN-91
   =CONF.SCRIPT     TXT       5  24-OCT-90
   =MONDO.SCRIPT    DIR       1  12-JAN-91
      =TIC.KEY.A.3.20  TXT     11  11-AUG-90
      =MM.DOC          TXT      9  11-AUG-90
```

```
   =UPLOAD              DIR        1  12-JAN-91
      =MASTER.UPLOADER TXT         11  22-OCT-90
=DIPOLE               $B3        94  14-MAR-90
=FIXER                DIR         1  12-JAN-91
   =FIXER               $B3        22   7-JUN-88
=DXFILE               DIR         1  12-JAN-91
   =DXFILE.V2.0         $B3       148  18-NOV-90
=CHGFIL               DIR         1  12-JAN-91
   =CHANGE.FILE         SYS        26   9-MAR-90
```

Disk 2GS045 Games

```
=NAX                  $B3       107  15-APR-90
=GNARLY               DIR         1  12-JAN-91
   =GNARLY.FINDER       SYS        1  14-NOV-89
=PIASMALAB            $B3       162  15-JAN-90
=CONJURERSQ           $B3       128   8-MAY-90
=CARDS                $B3       145   4-MAY-90
=KALEIDO.PRIMER       $B3        73   2-SEP-88
=SHAKES               DIR         2  12-JAN-91
   =TILE.PATCH.1        BIN        3   4-MAR-90
   =SHAKESCREEN         $C1       65  24-DEC-88
=BATTLESHIP.GS        DIR         1  12-JAN-91
   =BATTLESHIP          $B3       81  10-SEP-89
=FOLLOWER.GS          DIR         1  12-JAN-91
   =FOLLOWER            $B3       17  28-MAR-89
=METACUS.GS           DIR         1  12-JAN-91
   =CASTLE.METACUS      $B3      129   5-SEP-89
```

Disk 2GS046 Music

```
=MUSICSTUDIOSNGS DIR          1  12-JAN-91
   =PAPA.5.SNG       BIN       20  14-APR-88
=BRUCE               DIR         1  12-JAN-91
   =BRUCE.ACE           $CD      109  20-SEP-89
=HAL                 DIR         1  12-JAN-91
   =FUNCTIONING.PER BIN         219  30-JUL-90
=HOT                 DIR         1  12-JAN-91
   =HOT.IN.THE.CITY BIN          32  22-JUL-90
```

```
   =ALL.YOU.NEED     $D5        162  27-OCT-90
   =CLOSER           $D5        107  15-DEC-90
=INTROSPECTION       DIR         1  12-JAN-91
   =INTROSPECTION    $D5         84  19-APR-90
=POP.WORLD           DIR         2  12-JAN-91
   =POP.WORLD        $D5         81  13-JUN-90
=WAVE.EDITOR         DIR         1  12-JAN-910
   =WAVE.EDITOR      $B3         28   2-MAR-90
```

Disk 2GS047 Pictures

```
=MOOSE.BXY            $E0        39  11-MAY-90
=FARNUM.BXY           $E0        37  11-MAY-90
=STREK.BXY            $E0       399  21-MAY-90
=RRABBIT.BXY          $E0       570  21-MAY-90
=GARFIELD.BXY         $E0        11  21-MAY-90
=BREDON.BXY           $E0        38  11-MAY-90
=INDIA.BQY            $E0        49  28-JUL-90
=PAULA.BXY            $E0        48  28-JUL-90
=MADJST.BXY           BIN        38  15-DEC-90
=MADJS2.BXY           BIN        74  15-DEC-90
=SHUTTLE.BXY          TXT        15   2-DEC-90
=CYBER.BXY            TXT        31  21-DEC-90
=GSHK                 $B3       214  23-JUL-90
```

Disk 2GS048 Pictures/Animations

```
=ANIMATIONS.SHK       $E0       500  12-JAN-91
=REDALERT.BXY         $E0       130  21-MAY-90
=CHASER.BXY           $E0       220  24-MAY-90
=NEXUS.SHK            $E0       186  12-JAN-91
=BIGPIC.BXY           BIN       189  30-DEC-90
=TILEEDIT.SHK         BIN        32  17-SEP-90
=OVERSC.BXY           BIN         6   8-JAN-91
=GSHK                 $B3       214  23-JUL-90
```

❑ May we remind you that these are truncated directory listings. The full listing shows the support files and documentaion files included on each disk.

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M291

HELLO, APPLE /// OWNERS !

Lars Bergkwist from AUG-Sweden explains Apple /// Business Basic

This is my first contribution to the Swedish Apple User Group magazine about the Apple /// computer and its software. I hope to be able to write some more on the same subject later on.

In this first article "Apple /// Business BASIC" will be treated and I hope to come back later with views on the use of Pascal with the Apple ///.

Apple /// Business BASIC exists in three versions. I am using two of these versions on my own machine, 1.1 and 1.2. There is no great functional difference between the two.

Variable names in "Business BASIC" may contain a maximum of 16 letters, figures, and punctuation marks. For instance:

John.Income = 1000 or Stop.Now$ = "Yes"

Thus the programmer can choose variable names that are logical in their context, and this allows him to have a better understanding of the function of the program when, perhaps after several months, he wants to make some modification to it.

Another useful feature is that it is possible to write a program in Assembler code and then execute it from a BASIC program. The commands to use are these:

"INVOKE .d1/'filename'" and "PERFORM 'function'"

These commands are used, for instance, in the terminal program "ACCESS ///", where the BASIC part is only five lines of code and the rest is in machine code.

You may miss the commands "PEEK" and "POKE". They are absent, which probably has to do with the Apple /// Operative System "SOS".

Apple /// Graphics displays two graphic pages simultaneously which may come in handy, for instance, in "adventure game" programming. You work with different "MODES", which determine resolution and number of colours. To be able to use the graphics you must have a SOS-file, "BGRAF.INV", on your boot diskette. This file is used as an "INVOKE"-file and may be used to call on various commands with the preface "PERFORM". Then you don't have to make complicated detours to achieve good results. The Graphic Modes are:

Mode 0 280 x 192 Black-and White
Mode 1 280 x 192 Colour (limited)
Mode 2 560 x 192 Black-and White
Mode 3 140 x 192 16 Colours

You have to choose Graphics buffers for the modes you have selected, and you can move rapidly between these buffers. It is an advantage to be able to look at one graphics picture while the other is completed. But what happens to the text, you may ask. Don't worry: the text is stored in a third buffer which you don't need to define because it is resident in the "SOS" from the start.

You may intermix text and graphics by opening up a connection using the command "OPEN#1.GRAFIX" and then print the text to channel 1: "PRINT # 1, 'John Smith'". You have to remember which graphics mode you choose so that you know how many characters each line will accommodate.

You may wonder if there isn't a simpler way to print colours, or, if you have a monochrome display, to obtain various shades of grey. A short test program is given below with the function of every line explained.

```
10 HOME                  Clear the screen
20 PRINT CHR$(16)        Change the screen to 40 char/line
30 FOR I=0 TO 15         Start a loop from 0 to 15
40 PRINT CHR$(19); CHR$(I) Choose a colour from the
                           loop
50 PRINT "APPLE ///"     Write text
60 NEXT I                Close the loop
```

What we have been discussing so far are some simple hints about graphics and colour for the Apple ///. There is a lot more information on this subject and it is my intention to return to it at a later occasion. In the meantime I recommend APPLE /// - owners to study the "Business BASIC" manual carefully and practice with the programming examples given in it. There is another excellent Reference Manual, the "STANDARD DEVICE DRIVERS MANUAL" that every Apple /// - owner should obtain.

Finally I present below a little program which might be of interest, especially to those who are using a parabolic antenna.

```
 10 REM  Geostationary TV-satellite
 20 HOME
 30 REM  Satellite orbit radius & Earth radius
 40 rs=4.216412E7
 50 re=6.36215E6
 60 pi=3.1415926
 70 REM  Input values
 80 PRINT "RECEIVER LOCATION COORDINATES ?"
 90 PRINT "LATITUDE ?" (+ for Northern Hemisphere)
100 INPUT la
110 PRINT "LONGITUDE ?" (+ for East, - for West)
120 INPUT lo
130 PRINT
140 PRINT "SATELLITE POSITION ABOVE EQUATOR ?"
150 PRINT "+ for East, - for West
160 INPUT W
170 REM  Convert angles to radians
180 v=ABS(lo-w)*pi/180
190 f=la*pi*180
200 REM  Calculate with the formulas
210 ca=COS(v)*COS(f)
220 x=SQR(rs*rs+rj*rj-2*rs*rj*ca)
230 sa=SQR(1-ca*ca)
240 shm=rs*sa/x
250 hm=ATN(shm/SQR(-shm*shm+1))
260 IF rs*rs>rj*rj+x*x THENhm=pi-hm
270 saz=SIN(v)/sa
280 az=ATW(saz/SQR(-saz*saz+1))
290 REM Convert from radians to degrees
300 h=hm*180/pi-90
310 az=az*180/pi
320 REM Print result
330 PRINT
340 IF h<0 THEN GOTO 420
350 PRINT "HEIGHT=";h;"DEGREES"
360 PRINT "AZIMUT=";az;"DEGREES"
370 IF lo<w THEN GOTO 400
380 PRINT "WESTERLY"
390 GOTO 430
400 PRINT "EASTERLY"
410 GOTO 430
420 PRINT "BELOW THE HORISONT"
430 PRINT:PRINT "AGAIN ? (y/n)"
440 GET S$
450 IF s$="j" OR s$="J" THEN GOTO 10
460 IF S$="n" OR s$="N" THEN END
470 GOTO 440
```

Lars Bergkwist, AUG-Sweden
Translated by Paul Mitlid, AUG-Sweden

Atlas Explorer

Dave Ferris gives us a world-wide feel to his review of an educational tool

Introduction

I once came upon a most marvellous book, produced by one of those express parcel delivery services, full of information about all the countries they delivered to. One of the sources of information was the CIA World-Book. I'd just love to have that on CD-ROM (and the CD-ROM drive to read it!). Until then, there is Atlas Explorer.

The Program

Atlas Explorer is available on either 5.25" or 3.5" floppy discs and will run on an Apple //e, c, or GS with at least 128K of memory and the ability to support double-high-res graphics (in monochrome only). A printer is needed in slot 1 if hard copies are required of session analyses.

I got the 5.25" version which included a swap offer, which means sending the 5.25" disc back to the States plus $5 to get the 3.5" version, so I just copied the files from both sides of the unprotected 5.25" disc to a 3.5" disc. Perhaps the 3.5" version works better with the Finder on a // GS, launching the 5.25" version is OK but it drops into the Monitor on exit!

The program works best with a mouse, but keyboard controls can be used. These are well explained in the documentation and also in the on-line help. Of course you need to know them to get to on-line help in the first place.

In spite of its name Atlas Explorer isn't an atlas, it's a geography teaching program. If I want to find out where in the world is Burkina Faso, this program won't tell me. However, if I explore Africa for long enough I will find out eventually!

The program has three basic modes, Explorer, Tutorial and Quiz. These may be used with or without the Record Keeping facility, which allows you to keep track of how much you have learnt.

Explorer mode

This is the mode you start off in, with the program displaying the World map (Fig.1), note how the USA is in the middle! Click on any continent to zoom into it, click again for an area or sub-continent and again to select an individual country. Large countries are further sub-divided into states or provinces. This allows you to explore the world and learn the names of the continents, countries etc. Click on the Close box to return to the next higher level, or use Open-Apple-W to go straight to the World map.

Tutorial mode

On the main menu bar, pull down the Play menu and select 'Begin Tutorial'. Now when you click on the map, you will be presented with an information box (see Fig.2), telling you about the area.

For a country this can include: Name, Capital, Population, Area, Currency, Official language and the names and populations of other principal cities. The information box may be disposed of by clicking in the Close box, or on the map. Select 'End Tutorial' from the Play menu to return to Explorer mode.

Quiz mode

If you select 'Begin Quiz' from the Play menu, you will be prompted to select which categories you wish to be quizzed on, from Locations or General facts on Countries or Cities. Before starting the quiz you can set options to dis/allow second chance or limit the number of question asked.

The questions themselves are multiple choice (see Fig.3), either type the letter or click on it to select an answer. The program calculates your score based not only on accuracy, but speed. If second chance is allowed, a correct second choice can only earn half the maximum score. The quiz is over either when the preset number of questions has been asked, or when 'End Quiz' is selected from the Play menu. At this time a high score window is displayed with ☛

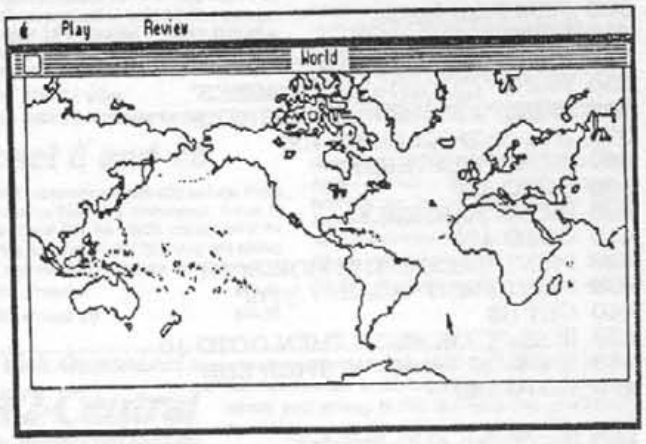

Fig. 1

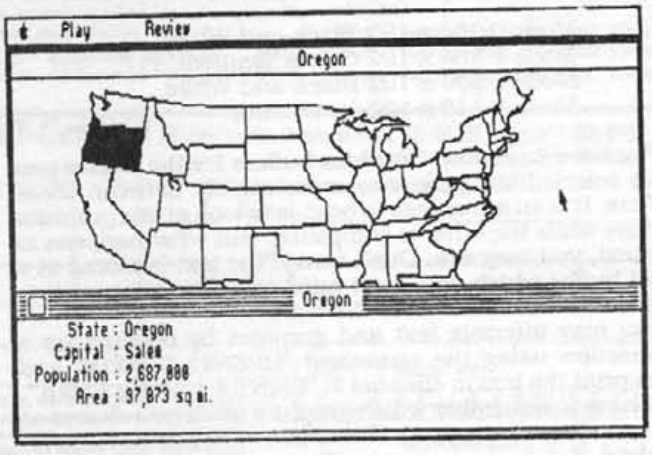

Fig. 2

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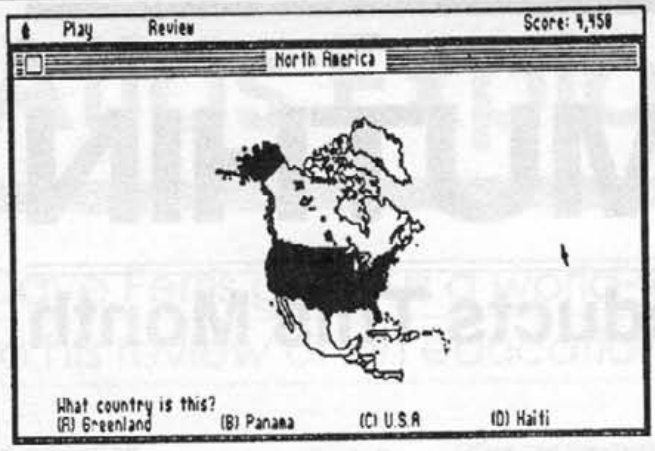

Fig. 3

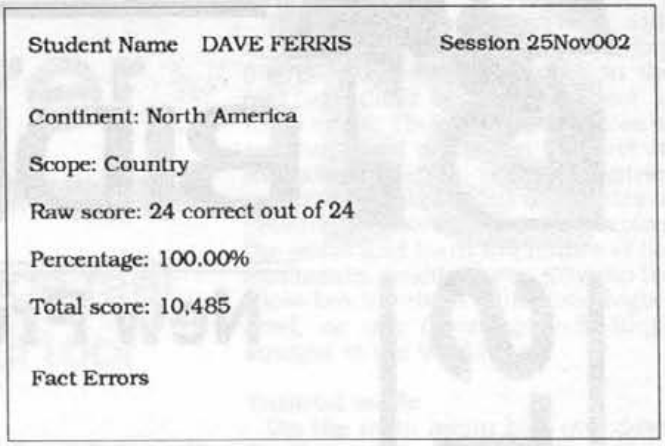

Fig. 4

the five best scores on record.

Record keeping

This allows a student to have a disc which records their progress in identifying continents, countries, capitals and so on. Special symbols on the screen associated with each continent indicate a level of mastery, starting with a Shoe for Provincial and going up though Camera (tourist), Suitcase (Traveller), Jet (Jet Setter) to Compass for the expert Explorer.

The students disc keeps information on quizzes taken and scores and also allows a quiz to be retaken, by replaying the same set of questions for another go.

Session analysis allows a teacher or parent to review the questions asked and to see a summary of each session. These may be printed out to keep a permanent record of progress (see Fig.4). After doing so well in my quiz on North America, I was instantly promoted from Shoe to Jet!

Documentation

This consists of a 64 page booklet (5 pages of which is the Licensing Agreement - formidable!). It details the use of each mode in depth and with plenty of illustrations. There is also the online help facility, selected from the Apple Menu, which is also detailed and thorough.

Conclusion

The publicity blurb on the back of the box led me to expect a Gazetteer function, that would allow me to find

specific countries etc. This was not the case. Discounting that and looking at the program purely as an educational tool, it works quite well. The quizzes can be a bit too easy at times, with a lot of repetition, but then I am probably a bit older (all right,

a lot older) than the target age range. Springboard rate it as 8 to Adult, but Quiz mode is definitely for the lower range.

The Tutorial mode could give a lot of other information about each country, state or province than it does, e.g. climatic, geopolitical, chief imports/exports and all those other things I had to do in geography at school. I would have liked to have seen flags, but these don't work too well in black and white.

Of course the problem with any atlas or equivalent these days is the speed with which they become out of date, look no further than Germany. There is no way to update the database used by this program, perhaps Springboard see this as a lucrative sideline, selling periodic updates. If they have no intention of doing this, then the data is going to become rapidly out of date and then the program will lose its educational value.

Dave Ferris

P.S. According to this (American written) program the Falkland Islands belong to Argentina!

P.P.S. If you would like to know where in the world Burkina Faso is see Fig.5.

Copyright Notice:
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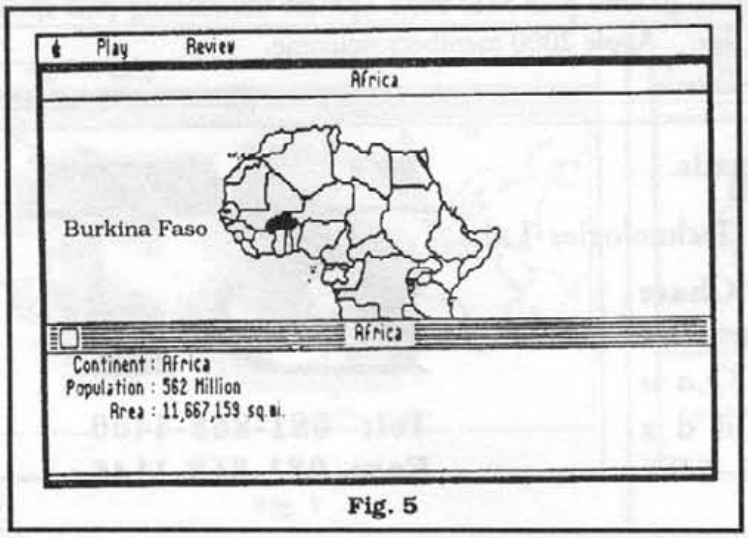


Fig. 5

info

Product : Atlas Explorer
Publisher : Springboard
Available from :
Egghead Software
Seattle
Washington
USA

Price : $30
Value :
Performance :
Documentation :

EuroWorks v3.0

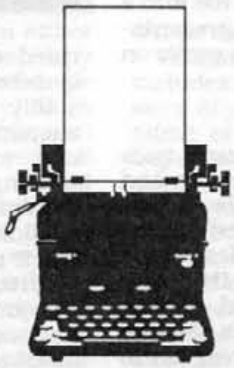
Peter Stark describes an AppleWorks utility for foreign language printing

Introduction

EuroWorks v3.0 is a program which modifies the AppleWorks v3.0 word processor so that text in various foreign languages can be printed out satisfactorily. In the resulting hard copy, the various accented foreign letters and/or other special characters appear in their proper forms. In addition, eight special symbols (British pound sign; article/section symbol; degree symbol; cent sign; and plus-or-minus, greater-than-or-equal, less-than-or-equal, and non-equal symbols) can be printed correctly, in either English or foreign language texts.

What is supplied, and what you need

EuroWorks was supplied to me on a non copy protected 5.25" disk whose reverse side contained the various sections of the EuroWorks manual in the form of AppleWorks files. Three editions of EuroWorks v3.0 are available: English + French; English + Spanish; and English + French + German + Portuguese + Spanish.



EuroWorks v3.0 requires AppleWorks v3.0. Various printers can be used: details are given in the EuroWorks manual. Although EuroWorks is based on the use of macros (and is written in the TimeOut UltraMacros language), it is not essential to have UltraMacros here. If your AppleWorks system does not include TimeOut UltraMacros, EuroWorks v3.0 is operated in 'TaskMaster' mode. On the other hand, if TimeOut UltraMacros is present, EuroWorks v3.0 can be operated in 'TaskFile' mode. Detailed and clear instructions for installation of EuroWorks are given in the manual, for both 5.25" and 3.5" disk users.

Capabilities

EuroWorks enables the user to print: French with all 13 accented lower case characters; German with umlauted (lower and upper case) a, o, or u, as well as the lower case "s digraph" character; Italian with all 10 accented lower case characters; Portugese with all 13 accented lower case characters; and Spanish with all seven accented lower case characters, the upper case N-tilde, and the special question and exclamation marks which are used at the beginning of sentences in Spanish. In each case, the eight special characters mentioned in the first paragraph above can also be printed if required.

Although at first sight EuroWorks v3.0 looked a little complicated, in practice I found the program straightforward to install and easy to use. The printed results are clear and of quality comparable to that of normal AppleWorks documents. Details of how to produce the various accented letters and special characters are given in the EuroWorks v3.0 manual, and are easy to follow in practice. The procedure is that to produce accented letters in the final hard copy, you need to put, in your AppleWorks file, the appropriate letters followed immediately by a defined symbol (e.g. a caret, to produce a circumflex accent, or an asterisk in the case of a German Umlaut). To define one of the eight special characters, you need to type a two-character code sandwiched between a pair of asterisks (e.g. *pd* to produce a pound sterling sign in the final print-out). A few special macros are included which help to make EuroWorks v3.0 easier and quicker. To print a suitably prepared word processor file which is on the AppleWorks/EuroWorks desktop, press 'Both Apples-P', then choose the required language, and proceed further as described in the EuroWorks manual.

Limitations

The EuroWorks v3.0 manual draws attention to a few limitations and points for caution. Fortunately, none of these is a serious drawback. For example: although they appear in the correct form when printed out on paper, the various accented letters and other special characters do not appear as such when displayed on the screen. There are some restrictions as regards super- and subscripts, and proportional printing is not possible. A few of the normal AppleWorks Open Apple-O options are not supported (GB, GE, PE, PH, and EK).

Certain printers have a few individual quirks when printing from EuroWorks v3.0. In particular, the ImageWriter II and LQ printers often do not give good results at 4, 5, 6, 7, or 8 characters per inch (except in the case of German). This is unlikely to be much of a nuisance in practice, however. The results of printing at 9, 10, 12, 13, 15, or 17 c.p.i. are fine.

Problems may sometimes also occur when you try to print a mixture of English and a foreign language. Generally, few difficulties are likely to arise with English plus either German or Italian. On the other hand, mixing English with French, Portugese, or Spanish can lead to incorrect printing. (This particular topic was the only one where I felt that the EuroWorks manual was not sufficiently clear; the rest of the manual was easy to comprehend and follow).

Other versions of AppleWorks and EuroWorks

This review deals with EuroWorks v3.0, which is designed for use with AppleWorks v3.0; a different version of EuroWorks (v2.0) is available for use with AppleWorks v2.1 or v2.0.

Overall comments

EuroWorks v3.0 provides an easy means of printing AppleWorks word processor files in French, Italian, German, Portuguese, or Spanish (and of printing documents with some other special characters). The EuroWorks manual describes a few limitations which the user will need to bear in mind, but none of these detracts unduly from the usefulness of this program. If from time to time you are likely to need to produce printed text in any of the languages mentioned here, EuroWorks could well be of value to you.

Peter Stark

info

Product : EuroWorks v3.0
Publisher : The S.A.AuTeur Co.
Available from :
The S.A.AuTeur Co.
P.O. Box 7459
Beaverton
OR 97007 U.S.A.
Tel: USA 503-645-2306.
Price : $39 + $3 S&H full
$24 + $3 S&H French
Value :
Performance :
Documentation :

Guitar Wizard

Stuart Anderson plucks a review from the Scottish soundscapes

Guitar Wizard from Baudville is a package many guitar players would have benefited from had it been available when they were learning. It allows you to examine an on screen representation (HGR Mode) of various scales and chords for guitar. This may seem to be merely the equivalent of looking these up in a standard text book. however the package doesn't stop there.

On booting the 5.25" disk from the package the user is presented with a title sequence which contains a small animated character playing a few chords. Thrash Metal Fans who own a IIGS can gain inspiration by running the GS in fast mode at this point. There then follows a simple menu which allows access to the four modules that make up the package, selection being carried out using the arrow keys and return. At this point a bug crops up on the IIGS if you mistakenly hit any other key, the system hangs requiring a reboot, this did not appear to happen on a //e however.

Chord Wizard

This section allows you to find different chords and positions on the guitar neck. You are able to change the root, the chord and the position, and show either fingering, intervals or notes. This is probably the simplest section of the package, but it does beat the alternative of looking up a text book as it is easy to step quickly through different chords and see the relationships between them. The display used here shows the guitar neck from the bridge to the 12th fret in a manner which is easy to translate to a guitar you have sitting in your lap. Standard guitar notation is used to specify which fingers do the fretting and where, so anyone who has started to learn from a text book using this notation should feel right at home. To change which chord is displayed is merely a case of selecting the root note and then the chord, the display will then change to reflect this. To examine which notes are being used you flip to the 'show intervals' mode.

Chord Wizard will display all types of chords at different positions on the neck and allow you to print them out on a range of standard printers, Epson and ImageWriter included. Obviously the fingerings used are pretty much standard and recommended but as any more experienced player will tell you once you become more experienced you may find you start to adopt some of your own fingerings. This is especially true of some of the more difficult chord progressions. There is a fairly decent discussion of the relationship between chords in this section in the manual, which is well written and manages to throw light on a few things some beginners texts do not. This may be because it is written in a much friendlier style than these texts or it may well be that using this package got me into a 'fun' mode which made the presentation of the information much easier on the eye and brain.

Scale Wizard

This section of the package uses exactly the same layout and command sequence as Chord Wizard but introduces the user to the dreaded scale. I recall being horrified by scales when I was learning, but yet again the information is easy to follow and understand. The manual suggests starting with major scales before going on to the minor, pentatonic or blues variety which is very sensible unlike my tutor's advice, but then he was a Grateful Dead fan.

Fretboard Wizard

This section is kind of an amalgam of the first two sections in that it allows you to display chord and scales patterns over the entire keyboard at once. This has the advantage of allowing the user to see and try out different fingerings for chords and scales learned earlier. It also allows the user to change the tuning of the instrument, which allows you to try out different types of open tuning and still see the correct fingerings for the standard chords and scales. Selection of chords/scales is as in the previous modules but in addition you can manually set notes and intervals to create custom chords and scales. The manual goes into a fair amount of detail, but does get a bit confusing at times. It is a good idea to try out the examples as you sit at your computer with your guitar before you start tinkering. You can also at this point save a set up you have created to a previously formatted disk for use later. Already created are several Bass, Mandolin and Guitar tunings, a nice touch!

Improvisation Wizard

Once you have learned the basic chord and scale structures you are then ready to tackle the best part of guitar playing, soloing. This module allows you to take a chord and see which scales fit within that progression. Obviously this is only a guide, but for a novice this sort of stuff is valuable.

The final section of the manual provides a short primer on fretboard harmony with information on the chromatic scale, major scales, intervals, creating chords and extended intervals.

Conclusion

From a novice's point of view there is a bewildering amount of material to choose from, and a package like this has to have something a bit extra to justify its purchase. The information provided certainly goes further than a standard chord or scale book and the ability to change tunings and create custom chords in Fretboard Wizard is very welcome. Any Apple][owner wishing to learn guitar would certainly be advised to purchase this package as used in conjunction with a good tutorial it provides much of the information required for a good start. It would also prove to be a good reference for the more experienced player. The only thing missing is the ability to hear the actual chords and scales displayed but then presumably a CD Rom version with sampled sounds and still video shots of some of our heroes is in the offing !?

Stuart Anderson

info

Product : Guitar Wizard
Publisher : BaudVille
Available from :
MGA SoftCat
41 Cinque Port Street
Rye
East Sussex TN31 7AD
0797-226601
Price : £29.95 WYSIWYP

Value : ●●●●
Performance : ●●●●
Documentation : ●●●●●

Pot Pourri

A Pot Pourri of short reviews and articles presented for your delight

Menu Master

Introduction

Menu Master is a menu system which is useful for launching programs of various types. One major advantage over other program selectors is that Menu Master allows you to store DOS 3.3 disks on 3.5" disks or hard drives. It provides a simple and elegant means of launching not only ProDOS and GS-OS programs but also DOS 3.3 disks.

What is supplied, and what you need

Menu Master is available on either 5.25" or 3.5" disks, and is not copy protected. I have been using the single user version of Menu Master (v.1.5). (A network version is also available, and is described as compatible with all Apple II networks). The 19-page manual which accompanies the disk is well written and easy to understand. An additional simple introductory section could perhaps have been worth inclusion, for the benefit of inexperienced users, and an index might possibly also have been useful, but in practice the instructions in the manual proved easy to follow.

To use Menu Master, you need an Apple II-series computer with 128K or more of memory and an 80 column display.

Operation

Menu Master is really simple to install and use. If you wish, you can arrange for it to be the program that is run first when you boot a disk. Alternatively, Menu Master can

be placed in a sub-directory and run from there. It employs menus and submenus in mousetext-based windows which are very easy to create and modify, and you simply use these to select the program that you want to run (or the text that you wish to display or print). Menu Master's automatic pathfinding capability makes life very easy for the user when setting up the menus. Also available are a password security system and a means of preventing access to the IIGS control panel.

The method which Menu Master uses in the case of DOS 3.3 disks is interesting and ingenious. In essence, the whole DOS 3.3 disk is effectively packed into a single (142K) 'archival library' ProDOS file, which is then saved onto a selected 3.5" or hard disk. An entry corresponding to this new file is added to the chosen menu or sub-menu, so that you can then launch in much the same way as for ProDOS or GS-OS programs. The original DOS 3.3 disk must not be copy protected, must not use the language card, and must use an unmodified DOS. (The manual does describe a procedure for use with disks that have a speed-up DOS, however).

Other useful facilities

Version 1.5 of Menu Master also includes: (a) a screen saver; (b) 'hot keys' (if you type the first letter of the name of your chosen program, the highlighted menu bar jumps to that choice); (c) a text viewing and printing utility; (d) a BOOT.SLOT facility; and (e) various system and copy utilities.

Overall comments

Menu Master is delightfully easy to use, and it does its job very satisfactorily. It works well as a selector for ProDOS 8 and GS-OS programs, and its ability to store DOS 3.3 disks in a launchable form on 3.5" or hard disks is useful, elegant, and very unusual. Although the range of utilities that Menu Master offers is not as wide as with some other program selectors (e.g. ProSel 8 or 16, or JumpStart), it does include various facilities which usefully supplement the main functions of this excellent program.

Summary

To summarise: I have been pleased with Menu Master; it has proved genuinely useful. Its system for handling DOS 3.3 disks could well be an attractive feature for quite a number of people, and it also works smoothly with ProDOS 8 and GS-OS programs.

Peter Stark

info

Product : Menu Master
Publisher : Electronic Learning
Available from :
Electronic Learning
Systems Inc.
2630 NW 39th Avenue
Gainsville
FL 32605
USA 1-800-443-97711
Price : $49 + S&H $149 netwrk
Value :
Performance :
Documentation :

Street Sports

Street Sports: Basketball

Street Sports: Basketball is just one of a few street sports games. It is played on one of five pitches which includes a schoolyard, an alley, a suburban backyard and an inner-city parking lot. The game for you starts by choosing your team. There are ten to choose from, each with their own skills. You choose three players and then the computer picks its team. If you want to, you can play a two player game, one player using keys and one using joysticks. You then flip the disk and start the game.

Control Yourself

You control just one of your players at a time while the others move anywhere over the three screens. You can change players by jumping and pressing down on the joystick button. Before the game starts though you choose what score you want to play up to, from 2 to 48 and also which level of play you want to try, from easy to hard.

Tour off! There is no time limit to this game so it can go on for hours but sooner or later someone will win. There are other things you might have to avoid or the ball will go to the opposition. In the alley you could give away the ball by bouncing it on a gutter or oil slick whereas on the suburban course you could misbounce it in the grass or on the kerb.

My Conclusion

The game has good graphics but the players' movements could be speeded up a bit. The sound to the game is poor except for the title screen music which I liked. The game comes with a manual which tells you how to play and what each player's skills are. Altogether it is a good game but misses the addictiveness of most other Epyx games.

Robert Hornby (aged 13)
Game supplied by MGA

Might and Magic II

Gates to Another World

Might and Magic II is set in the world of Cron, a flat world bordered by four Elemental planes (Air, Fire, Water and Earth). Cron though is under threat from the evil creatures who seek to destroy all good - and guess who's job it is to save it.

You take control of a party of six that you may create yourself using the computer to assign a random number of points to each character's profile of might, speed, luck, hit points and so on. You also have to choose what type of creature you want (Elf, Human, Dwarf, Gnome, Half-Orc) and also the class of fighter. Once finished you can journey onwards.

Setting Out

You start at a town called Middlegate with 100 gold coins and enough food to last quite a while. All the towns in Cron are about equal in size and each one has an Inn where you may save your game and hire up to two more people for your quest. In the Inn, once you exit your room you come out into the registration area where you can save your game. Here you can start to see the highly detailed screen showing the inside of the Inn. Also on the screen is text showing the strength of your character and all the options you have and in what day, month, year it is.

The game screen scrolls as you move allowing you to see up to four squares in front of you and three to each side. Each step reveals something new and exciting as you journey through the town. Everything in the town is very well drawn from the walls to the doors, each detail down to the last centimetre.

Standing Your Ground

To start with, the best thing to do is to stay in the town and fight the odd attacker to gain more experience points and once you have gained them go to the training area and use them to advanced to the next level of might and gain more hit points. When you are attacked you go to a new screen showing your enemy, each one animated, and also how many there are and what your options are, Attack, Retreat, Bargain (give them some gold) or Run. If you choose to attack some more options will come up, a set for each character, telling them either to attack or defend. If you attack you will inflict pain upon the enemies reducing their strength while they fight back or defend. You keep on doing this until you kill them (or die yourself of course). If you are successful you will gain more experience points and treasure if there is a chest and if you can open it safely.

As the plot unfolds you will be given jobs to do such as rescuing someone or finding an object. For each task completed you will gain more gold and power. Finally you will exit the town and journey through the lovely world of Cron but not all you will meet will be friendly. Robbers, Orcs and Goblins try to stop you from winning. You will enter new towns and castles with their guards and then journey back in time to right ancient wrongs so Cron will once more be at peace. As you journey onwards spells and magic will be given to the wizards of your group which will defend you. If you meet someone who is more powerful than you and you die then you will have to try again. No game is the same as the one before.

My Conclusions

Might and Magic II is a great game. If the graphics don't catch your eye then the feel of the game will. Might and Magic also comes with a copy function which helps you to back up your disks. Also for those players who have Might and Magic I you can use your characters from that game in this one. With the game comes a map of Cron, which is not needed because an auto-mapping function means every step you take is recorded for you and the map may be viewed to help you keep track of where you've been and what remains to be explored. Then finally a detailed page guide to the game.

Robert Hornby (aged 13)

Apple IIGS

How To Pick Up Video Blanking Signals

There is no way to physically pick up the video blanking signal since it is now buried inside the VGC chip. However, through software, there are two ways to pick up this signal.

1. Arm the Vertical Interrupts as one would do with an Apple IIc.
2. Read the Vertical Blanking location at $C019 as one would do with an Apple IIe.

Research the appropriate manual for how to do these operations. If a routine is written to handle video timing for the Apple IIe by picking up video blanking signals from an IO chip (UE5), the routine can be converted for the IIGS environment with these two techniques.

You Must Optimize Applications for RGB Video Display

Some users have reported display problems with the Apple IIGS and the RGB monitor. Some packages mentioned included Wizardry, Chuck Yeager's Flight Simulator, Reader Rabbit, and Bismark.

The problems sometimes occur only with text, and sometimes show up as "bleeding" on the video display.

Programs that are written to run on non-RGB systems do not concern themselves with where, or how, the display is generated – in other words, "video is video" for non-RGB systems.

With RGB video, there are other constraints, and many programs do not adhere to them, even if they are modified to run on the Apple IIGS. Many times the package reads "Runs on the GS in IIe emulation mode", which indicates the video will be normal for composite monitors and NOT optimized for RGB.

This usually indicates that it should be run with the system speed at Normal– not at Fast.

(Wizardry was written for the Apple IIe a number of years ago; Chuck Yeager's Flight Simulator is recent but still written for the Apple IIe – and is not optimized for RGB.)

When a program is written for use on the Apple IIGS, it is usually optimized for RGB, which looks fine when displayed on composite monitors.

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Apple IIgs ROM Versions

QUESTION: What are the differences between the various ROM versions on the Apple IIgs? How do I tell which one I have?

ANSWER: There have been three different versions of the Apple IIgs ROMs.

The first ROM was available for only a short time. This ROM was replaced by the version 2 (also known as revision 1) ROM to correct minor problems and provide support for future system software enhancements. This upgrade is available free of charge to all Apple IIgs owners who have the original ROM. The version 2 ROM continued to be used until the introduction of the Apple IIgs with 1MB of RAM.

At that time, it was replaced with the version 3 ROM. This ROM (actually two ROMs) added support for the new 1MB logic board and improved slot support.

There is no way to upgrade from an older version ROM to the version 3 ROMs. All software which works with the version 2 ROM should work with the version 3 ROMs.

The reverse also holds true. The few exceptions that have been reported are related to copy protection schemes. The publishers of affected products, such as PrintShop GS, have upgraded versions of their software available to correct the problems.

The easiest way to tell which version ROM a given Apple IIgs contains is to watch the screen when the computer is powered on. The original ROM displays nothing at the bottom of the screen at startup. The newer ROMs (version 2/revision 1 and version 3) display "ROM Version 01" or "ROM Version 3" on the bottom line of the screen. These messages appear when the power is turned on, but before the computer actually starts booting.

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AppleWriter II

Graham Doubtfire revisits this venerable and still powerful program

Although nearly 8 years old now this wordprocessor program has many useful features including a powerful inbuilt programming language. It can also be picked up for less than £20!

In the age of Mac's, mice, hard disk clones at £499 and WIMPs the old text based wordprocessor program is often cast aside. Every magazine article extolls the benefit of this or that integrated program which is apparently essential for the correct running of the business or home.

Many non-business users of wordprocessor programs however want a simple typewriter replacement that is cheap and easy to use. Mail merge may be useful but in the non business environment, indeed even in the office, how often is it really necessary to send exactly the same letter to more than a few people?

Most Apple II users rely on Appleworks and nothing I outline here cannot be better organised with Appleworks and a few Time Out modules but if you don't happen to own Appleworks and need a cheap wordprocessor program which also happens to come with an inbuilt programming language then this is the next best thing – and it is cheap! I have seen second-hand copies for sale at under £20.

Applewriter II comes in DOS 3.3 and Prodos versions. The DOS version is copy protected but the copy protection is very rudimentary and even an old copy program like Diskmuncher will enable backup copies to be made. Prodos versions are not copy protected.

The programs I indicate below were written on a Prodos version but will work on a DOS version with minor changes.

The Power of WPL

So what does the inbuilt programming language, called WPL, do?

First, we have to prepare a couple of files the program will access.

I am assuming you have booted Applewriter II and you are faced with a blank screen except for the top status bar.

Press 'ESC' key once to show all tab stops. Now delete all except the ones just before positions 2 and 5. (Ctrl 'T' then 'C' with cursor at the tab position you want to delete. Mistake? Re-enter one with an 'S')

Now use the Ctrl-Q menu to save the tab file (Ctrl-Q B) under "TAB.FILE"

Press Ctrl-P then '?' for the Print/Program command menu and set the left and right margins as appropriate. For A4 paper I use LM 3 and RM 78.

Use Ctrl-Q then D to save the print/program value under "PRT.FILE"

The program will add suffixes to these two binary files and in the catalog you will see PRT.FILE.PRT and TAB.FILE.TAB.

Now we need to create a Glossary file and enter addresses plus some simple codes.

Using the wordprocessor create a file called 'Glossary'; I suggest you enter your own plus say Apple 2000 address as under. Remember that Glossary files, although created as text files use ']' in place of 'Return' and they must be

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Beagle, TimeOut & Appleworks products price each:	1 item	3 or more
UltraMacros Primer	19.00	15.00
Platinum Paint	69.00	58.00
TimeOut SuperForms	48.50	38.50
Outliner 3.0	48.50	38.50
SuperFonts Activity Guide	34.50	27.50
AW 3.0 Companion	27.50	22.00
Decision Pak	104.00	85.00
Style Pak	90.00	72.50
Performance Pak	76.00	62.50
TimeOut TextTools	34.00	27.50
DeskTools I or II	34.00	27.50
FileMaster	34.00	27.50
Graph	62.00	49.50
PowerPack	34.00	27.50
QuickSpell	48.50	38.50
ReportWriter	55.00	44.00
SideSpread	34.00	27.50
SpreadTools	41.00	33.00
SuperFonts	48.50	38.50
TeleComm	48.50	38.50
Thesaurus	34.00	27.50
UltraMacros	41.00	33.00
MacroEase	27.00	22.00
MacroTools I or II	17.50	13.00
GS Font Editor	34.00	27.50
MiniPix 1,2 or 3	20.00	16.50
Program Writer	34.00	27.50
Beagle Compiler	52.00	41.50
Point-To-Point	69.00	55.00
BeagleWrite GS	69.00	55.00
GS Desk Accessories	41.00	33.00
Clip Art vol 1	34.00	27.50
Font Library vol 1	34.00	27.50
BeagleDraw	62.00	49.50
BeagleWrite	55.00	44.00
* Desk Acc, Pic Mgr or FontPaks	27.00	22.00
Prosel 8 (5.25" or 3.5")	26.00	18.00
Prosel 16	42.00	35.00
√ New 'Professional' Prosel package available in April		
Dos.Master or PRO.CMD	17.50	15.00
Double Data	21.00	19.50
Mr Invoice	28.00	24.00
FlexiCal	21.00	18.00
I.O.Silver, Late Nite or PathFinder	14.00	12.00

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HD upgradeable,][+ & //e needs controller card £55.00

Nite Owl slide on battery for GS £13.75 inc post

RamFast SCSI card VERY FAST! £170.00
Full range of Cirtech Products - call

Appleworks 3.0 or GS upgrades £70.00
from ANY version. New, S/H available for upgrading

CLOCKTOWER *DRAM & SIMMS - call!*
84 a WESTON PARK, LONDON, N8 9PW
(callers by appointment, or at least, please phone first)
TELEPHONE & FACSIMILE Nº 081-341 9023
Ribbons, discs, toners, CD, Hard Drives, Mac and more further on ⇒

preceeded by a single letter 'designator' which is used to call the entry when required by pressing 'open-apple x' where 'x' is the designator. If in doubt consult the manual but an example would look as follows:

```
a23 Holland Ave]Haslemere]Surrey]GU27 1AF]]
```

The two ']]'s' at the end of the address leaves a blank line before the date prints. If you want more add another ']'

```
bMr Ewen Wannop]Apple 2000]P O Box 3]Liverpool]L21
8PY]]]Dear Ewen]]Apple 2000]]
```

(As ']'s are interpreted as 'Returns' the second entry above will print the address then after the post code three blank lines then the salutation followed by two blank lines then the heading 'Apple 2000' then two blank lines)

We also need to enter codes to be able to 'Tab' two places right and also a code to enter two 'Returns'

Leave two lines after Apple 2000's address and enter the following:

```
Q]]     (Interpreted as two 'returns')

Z       (This is Ctrl-V, Ctrl-Tab Key, Ctrl-Tab key, Ctrl-V. It
will print as two inverse 'II's. Ctrl-V,xx,Ctrl-V is the way of
entering Ctrl codes into a text file in Applewriter II. The Ctrl
code required must be preceeded and followed by a Ctrl-V)
```

Save the file to disk under the name "Glossary" then use Ctrl-Q then E to load the file just created as a Glossary file.

Now if we cleared the screen and pressed Open-Apple 'a' (or whatever was used as the designator) the above name and address would print on screen at the left hand side as though it was the addressee. That may be fine but how do we get your own address over to its usual right-hand side position?

This is where the codes come in. Reload the file 'Glossary' to the edit screen and set the cursor on the letter or number immediately after the designator of your own address. Using the above example the cursor would be on the '2' of '23'. Now type Ctrl-V, Ctrl-Tab key, Ctrl-Tab key, Ctrl-V. You will end up with two inverse letter 'I's on screen immediately after the designator. These will jump the cursor two tab stops to the right before printing that line of the address. Do this after every ']' to jump the line that follows to the right two tab stops.

Now save this to disk again under the name 'Glossary' and then load the file into its proper place by using Ctrl-Q E 'Glossary'

Now press O-A 'a' or whatever and this time your address will appear on screen in the right place. If any line doesn't appear in the correct place check that you have the correct number of ']'s and inverse 'II's'.

If you have been following along you should now be able to press O-A 'a' and get your address on screen in its correct position and O-A (say) 'b' and get in this case Apple 2000's address on the left side of the screen. Fine, but what about the date? The program that follows also looks after this. It will be explained later.

Creating a Menu Screen

We will now make a menu screen that will appear on startup.

Type the following exactly as shown, including the indentations. Explanations will come later.

Note that the 'L's' in "PPRL " are Ctrl-L's entered by typing Ctrl-V,Ctrl-L,Ctrl-V

```
WPL.STARTUP NY
  PND
  QEGLOSSARY
  QATAB.FILE
  QCPRT.FILE
  PPR
  PPR L
DATE P THIS ENTERS THE DATE
  PPR
  PIN ENTER DATE (Return to skip) ->=$A
  PCS/$A//
  PGOINTRO
  G?X$A
  NY
  PPR L
INTRO PPR
  PPR
  PPR
  PPR DO YOU WANT TO:
  PPR
  PPR                1) WRITE TO APPLE 2000
  PPR
  PPR                2) LOAD THIS WPL PGM
  PPR
  PIN WHICH (Return to quit) =$A
  PCS/$A//
  PQT
  PCS/$A/1/
  PGOWPL.APPLE
  PCS/$A/2/
  PGOWPL.PGM
  PPR TRY AGAIN
  PPR
  PIN PRESS RETURN
  PPR L
  PGO INTRO
WPL.PGM PPR
  LSTARTUP
  PQT
WPL.APPLE
  PPR
  NY
  Ga
  GZ
  GX
  GQ
  Gb
  PQT
```

Now save this as "Startup"

Reboot Applewriter II (or press Ctrl-P and type 'DOSTARTUP') and follow the instructions!

Well there we are. Instant menus which work!

Over time I have built up many menu screens which automatically load standard letters, print the address on an adhesive label and then print out the letter with only one or two keypresses.

The trickiest bit is entering anything into the Glossary as it depends on how many 'pages' (ie after the initial '?' to bring up the glossary on screen how many 'returns' are needed to show all pages of entries) as to the exact code needed. If the date or address or anything won't enter the glossary work on the codes and lines ie:

1 page = G?x$A where 'G?' brings up the glossary, 'x' is the designator and $A is the string being entered.

2 pages = try 'G?' then on the next line '?x$A'

3 pages = try 'G?' then on the next line '?' then on another line 'x$A'

In the end you'll find the combination that works. Moral: keep Glossaries short.

And of course Subroutines

The WPL 'language' also includes loops and subroutines. I usually use a standard subroutine for entering the date although for simplicity I have shown it in the body of the program in the above example. One program can also 'call' another so in the above case rather than using "PGOxxxx" I could use "PDOxxxx" and it would look for the named program on disk and execute it.

I hope the above has provided a small insight into this useful wordprocessor program and so if you see an opportunity to purchase Applewriter II for about £20 think seriously about it, especially if you can also get the WPL

manual which should come with it but often gets lost! It can save a lot of routine layout and setting up time and also it's fun to use.

Below is a line by line explanation of the above program.

WPL.STARTUP NY – Any line starting at the left margin is classed as a label and the program can 'go' to it. NY is the same as Ctrl-N then Y(es) to clear memory

PND – 'no display' prevents every line printing over itself. Try it without and see!

QEGLOSSARY – Invokes the 'additional functions menu' by Ctrl-Q and 'E' loads the glossary

QATAB.FILE – As above and loads the tab file

QCPRT.FILE – ditto loading the print value file (margins, printed lines per page etc)

PPR – Prints anything that follows, in this case a blank line

PPR L – This is a Ctrl-L entered by holding down the ctrl key and pressing V,L,V. The Ctrl-L will show in inverse. It clears the screen.(It also ejects any paper if you try to print the program out. Use the find/replace function – Ctrl-F– and type /L/L/A. Note that the first 'L' is a Ctrl-L and it is replaced with the second 'L'. The last 'A' means 'all' so that every Ctrl-L is changed. Don't forget to change it back again if in error you save this version over the disk version which must have the Ctrl-L's to function properly.)

DATE P THIS ..... – another label. The 'P' on its own is the same as a 'Rem' and in this case the words following will not be printed on screen.

PPR – blank line

PIN ENTER DATE (Ret....)– >=$A – 'PIN' waits for IN(put) and whatever is typed is asssigned to string $A (Syntax is '=$A'. Any combination of letters or numbers can be assigned. There are three strings A,B &C available.) In this case the date will be assigned to $A.

PCS/$A// – Compare String. In this case if 'Return' had been pressed instead of the date being entered the string $A would be empty (//). The program would execute the NEXT line. If something was in $A and thus the match could not be made the program would JUMP a line and try another match. In this case if return had been pressed (ie skip the date) the program would branch to label 'INTRO' and thus skip the date entering codes.

PGOINTRO – label

G?X$A – This is the tricky bit. It loads the contents of $A (the date in this instance) into the Glossary. The 'G?' brings up the first page of the Glossary. 'X' is the designator and $A will load its contents (the date) into the glossary under designator 'X'. If you cannot get the contents of any string to load into the Glossary experiment with these codes. If your Glossary is two or more 'pages' (ie you have to press return to bring up another page of entries) refr to my comments above. It will work in the end but you need patience. The codes and line spacings are critical.

NY – clears memory

PPR L – Ctrl-L clears screen

INTRO PPR – A label. **PPR** prints a blank line

all **'PPR's'** – blank lines

PPR DO YOU ....prints the question

PPR 1) Write to.. etc prints this on screen

down to **PIN WHICH** (Return ...) =$A. Awaits input and loads answer into $A (overwriting the date if you used this function)

PCS/$A// – if return pressed then jumps to next line and quits to edit screen

PQT – Quits. If return NOT pressed then $A would contain an entry and the program would jump a line (the quit line) and make another comparison.

PCS/$A/1/ – compare strings again and if $A contains a '1' executes NEXT line

PGOWPL.APPLE – The PGO.... branches the program to label 'WPL.APPLE' I prefix all my WPL programs with WPL so that I can identify them in the disk catalog.

PCS.... – as above and if a '2' pressed program executes the next line which send it to label WPL.PGM which is then executed.

PPR TRY AGAIN – rudimentary error trapping

PPR – blank line

PIN PRESS RETURN – awaits a keypress otherwise it is so fast you cannot read any words before program branches back to the INTRO label.

PPR L – ctrl-l which clears screen

PGO INTRO – if no matches are made in the 'compare strings' lines this is an error trap to send you back to have another go.

WPL.PGM PPR – label and print a blank line

LSTARTUP – This program is called 'startup' 'L' means 'Load' so this line loads 'startup' into memory from disk

PQT – Quits program. Not strictly necessary as the previous line loads another file and effectively jumps out of the WPL program environment.

WPL.APPLE – label called by keypress '1' above.

PPR – blank line

NY – clears memory

Ga – calls the glossary entry under designator 'a' into memory (Your own address usually)

GZ – prints two 'tabs' ie sets cursor underneath your address so that the date prints in the correct position and not at the left of the screen

GX – designator for the date which is printed at the cursor which in turn is now in line with your own address at the right hand side of the paper due to the 'GZ' (print two tabs) above.

GQ – designator for two returns (']]') Places cursor two lines down and at the left hand side of the screen correctly positioned for the addressee

Gb – Addressee. In the example above this is Ewen at Apple 2000

PQT – quits program and reverts to the edit screen with the addresses, date and any letter on screen.

Graham Doubtfire

HyperCard IIGS

Apple Inc. have recently announced the release of HyperCard for the Apple IIgs. At the time of writing its appearance had not been noted this side of the water. Check with your local Apple dealer for availability.

HyperCard IIGS uses the color capabilities of the Apple IIGS while providing all the power, graphic tools, text editing, and scripting abilities of HyperCard 1.2.5 for the Macintosh computer.

HyperCard IIGS features include:

❑ Support for multiple media. HyperCard IIGS lets you work with information in virtually any form, including text, graphics, video, sound, and animation. It takes full advantage of the advanced color graphics capabilities of the Apple IIGS.

❑ Built-in stacks and templates. The program comes with a collection of ready-to-use stacks to let you get started right away. The templates and card designs help you as you begin to create your own stacks.

❑ HyperTalk scripting language. HyperTalk® expands your options for customizing the function of buttons, cards, and stacks to build more sophisticated programs. It includes advanced debugging tools, as well as other utilities designed to speed the preparation and performance of your stacks.

Equipment requirements:

❑ Apple IIGS computer with at least 1.5MB of RAM (2MB recommended).

❑ One 800K disk drive and a hard disk drive or connection to a network environment.

❑ Apple IIGS system software 5.0.4 or subsequent version.

❑ Order Number: A0027LL/A

❑ Price is approx $99 in the USA

SoftCat Corner

CLOSE ACCOUNTERS

We have good news that the famous 'Systematics' series of accounting modules are still available for the Apple II. Written in Pascal, they provide the most extensive business accounting system available on the Apple II platform today.

Originally selling at £402.50 per module, you can now obtain the same modules for just £150.00 each! Available are:- Sales Ledger, Purchase Ledger, General Ledger/Financial Planning, Invoicing, Stock Control, Sales Order Processing, Payroll (maybe), Job Costing, Administrator (report generator for Sales/Purchase Ledgers and a stand-alone database in its own right), Cheque Writer (maybe).

PICTURES FOR LESS

If you want to create your own artwork for programs like Publish-It! you've probably been dismayed to find that a suitable double hi-res editor costs loadsa money.

Well not now; for until they run out, we've got Penguin's brilliant 'Complete Graphics System' clearing at just £9.95!!! This versatile tool can create both single and double hi-res pictures and was £79.95.

NETWORKER

While investigating some 2nd-user hard drives for a client I turned up some interesting info regarding Corvus networks. Probably most people know that you can get a hard drive and add multiple Apple IIs all of which can share the mass storage. Corvus have been at the forefront of Apple networking technology since '79, and they're still innovating.

Their latest re-incarnation is "OmniShare", which is a rather expensive solution, but nevertheless might be interesting to some. What OmniShare does is to provide networking capability to IBM-PCs, Macs, and Apple IIs; all sharing disk space on an IBM-PC server. OmniShare is available as an upgrade to existing Constellation II/III users for around £249.00*. Apple DOS 3.3, ProDOS, GS/OS, Mac, and MS-DOS applications can all be used.

All you need to do is provide a hard disk IBM-PC (up to 256Mb), then add OmniNET Transporter cards to the machines requiring connexion, (as well as the necessary cabling/node kits/terminators etc). MGA suggest contacting Corvus directly on 0635-580300, or 0101-408-281-4100.

LASER ALTERNATIVES

There has been a lot in the press about using HP DeskJets as low-cost alternatives to LaserWriters for the Mac. Well help is at hand for Apple IIGS users! An all-new driver kit is available which unleashes the power of the IIGS for top-quality text & graphics printing under GS/OS. "Harmonie" supports HP LaserJet, DeskJet, PaintJet, (& workalike) printers, as well as 24-pin DMPs - serial and parallel. Harmonie costs £49.95*.

The 300dpi HP DeskJet lists at £746.35, but MGA are shipping at £399.95* while existing supplies last.

OCR

Fed up with re-typing? "InWords" should be available by the time you read this to work with the Quickie hand scanner, enabling you to scan text for use with your word processor, DTP, database, or spreadsheet. Requires 512K/ /eE or GS, price TBA - probably around £129.95.

GLOBAL UPDATES FOR APPLEWORKS DATABASES

If you've ever been in the position of having to change lots of common data in multiple records, you may have sighed and wished for a global update facility, (like wot 'real' databases have).

For example, a couple of years ago I had to change all the records in a 4000+ record database, so that "5.25 DISK" became "5 DISK", "3.5 DISK" to "3 DISK", and "5.25/3.5 DISK" became "3/5 DISK". After the first few hundred records, I quite naturally became quite exasperated, and strove to find a more automatic solution. The answer was of course to use TimeOut UltraMacros, and this was done after some fiddling so that all I had to do was to press my macro keys entry. All my simple macro did was to move up a line to the previous field, use OA-Y to clear the field, enter the new value, press return; and then cycle around again by pressing the macro key entry. (Of course, I had already selected all the records equalling (say) "5.25 DISK' using OA-R, and my macro entered the new text "5 DISK"). Not exactly automatic, as I had to keep pressing my macro command to renew each record, but certainly did save a lot of time in the end. Of course I also had to redo the macro to suit all three different changes, but it did work.

My latest discovery is that you can quite easily achieve similar results, and do all kinds of dynamic rejigging of your databases, using an IBM-PC with a more powerful database. It's very simple; just transfer your database to the PC using CrossWorks, (converting to dBASE .DBF format in my case, as I use Symantec's Q&A database on the PC), run the file in to your favourite powerful PC database, then globally update to your hearts delight, then transfer the database back to the Apple as a new AppleWorks file with all the attributes changed to their new values. Simple? - Yes it is, and also you can set up programs like Q&A to do this kind of thing completely unattended.

O.K., I know you're going to say that this is a bit extreme, but for people with both IBM-PCs and Apple IIs, its a very real option.

Having said all that, the secondary reason for mentioning all this is that you can also do a similar function completely on your Apple. In fact, I've just phoned Stone Edge to check, and they have confirmed that DB Master Pro will import an AppleWorks file, perform the necessary updating, then export the file as DIF, which can then be picked up again by AppleWorks for your new database.

SCANNING AROUND FOR SOLUTIONS?

I seem to spend most of my time these days writing about multiple-platform products, and I guess this has to be an indication of current trends.

This item will be of particular interest to schools, colleges, universities, and businesses using both Apple IIs and Macs or IBM-PCs.

1990 saw the introduction of the first hand scanner for the Apple II series, - "Quickie". My first impression on seeing the device was that it was exactly the same 'engine' as my DFI Handy Scanner HS-3000+ which I use on my IBM-PC. So throwing caution to the wind, I coupled the Quickie up to my IBM-PC, and lo & behold; it worked. Not surprising really, as many of the IBM-PC & Mac hand scanners all seem to be based on the same engine as the DFI unit, and there don't really seem to be an awful lot of different units around.

So, it wasn't with much surprise that I read Vitesse's 9 Oct press release announcing "Quickie Update". This is a package of Apple II & IIGS software together with an Apple interface card, providing hi-res, double hi-res, and IIGS 320/640 graphics modes using scanners other than Quickie. Priced at £99.95, you can plug in the following scanners:- LightningScan, ScanMan+, GeniScan, Genius GS-4500, and of course the DFI HS-3000, (and "many others" as the press release says).

So, armed with this new info, MGA has quickly repriced Quickie, (RRP £299.00*), so that for our old price of £249.00*, you now get the HS-3000+ scanner unit, an IBM-PC card, an Apple II card, the Quickie Apple II software, the DFI IBM ImageTools software, plus Zsoft's brilliant IBM graphics editor PC PaintBrush+.

The Apple-only Quickie package is accordingly reduced to £229.00*. *WYSIWYP What You See Is What You Pay.

Yours with good cheer

Jon Gurr
(Apple II Product Manager, MGA SoftCat)

Hotline News

Disappointment?

Peter Green informs me that he recently purchased ProSel-16 for use on his Apple IIgs but found problems. After donning his Deerstalker and lighting his pipe he found that the conflict was due to either ProSel-16 or SoftSwitch. The solution (not 6%) was apparently due to the position of the CDAs required by each program in the DESK.ACCS folder in the SYSTEM folder. You must have the Appointment Calendar CDA before the SoftSwitch CDA!! After making this change everything worked perfectly. Excellent detective work. JHW

Better Uunderstanding:

It would appear that I was not the only one to think that those excellent books 'Understanding the Apple //e' and 'Understanding the Apple II' were out of print. Well A2 Central in their January 1991 catalogue are offering these books for sale after discovering some that had, apparently, been laid down! Anybody interested in the hardware of the Apple //e and Apple][would benefit by reading one of these books. My copy is well thumbed in answering Hotline questions.

Time Bomb!

At 1 January 1988 the time ran out for ProDOS 1.1.1 because the routine that calculates the year, for those clocks that don't have that facility on board, only lasts at most for 6 years. In the February issue of Apple 2000 magazine I wrote the following:

❑ Two members have contacted me regarding problems with ProDOS 1.1.1 which does not give the correct date in 1988. In fact the year is given as 1982. Many clocks supplied by third parties did not provide the year so this had to be input by the user. When ProDOS was introduced an algorithm was written to help calculate the year from data provided by clocks that did not include the year. Due to the fact that there are just 7 days in a week and leap years tend to occur when the last two digits divide equally by four excepting some of the last year of certain centuries where the number does not divide equally by 400 (eg 1900), it seems only possible for an algorithm to calculate within 6 years. ProDOS 1.1.1 works for the 6 years through 1982 to 1987. A simple patch will make it work through 1985 to 1991. The following patch should work :-

1] Boot a ProDOS 1.1.1 diskette into Applesoft BASIC when the] prompt should appear.
2] Enter - UNLOCK PRODOS
3] Enter - BLOAD PRODOS,TSYS,A$2000 - followed by the carriage return
4] Enter - CALL -151 - followed by the carriage return when you should see the * prompt.
5] Enter - 4F76:5A 59 58 58 57 56 5B - followed by the carriage return.
6] Enter - 0G - followed by the carriage return when the Applesoft prompt] should reappear.
7] Enter - BSAVE PRODOS,TSYS,A$2000,L14848 - followed by the carriage return. The deed is done!

Notice the sequence:

5A = 90	1990
59 = 89	1989
58 = 88	1988
58 = 88	1988
57 = 87	1987
56 = 86	1986
5B = 91	1991

The first column is in Hexadecimal and the sequence can be updated by replacing the lowest value with the next number; eg. replace 56 with 5C which corresponds to 92 (1992). Always move up the table and note that leap years have two entries. When you reach the top start over from the bottom.

Of course a simpler way would be to update to a later version of ProDOS - the latest I know of is version 1.4. This version will work until 1991. It is only possible for Apple to update their algorithm every 3 or 4 years.

On 1 January 1992 all current versions of ProDOS even the latest ProDOS 8 version 1.9 will run out of time and display the year 1986!! Apple IIgs users and very few other users who have clocks that count years, too will not notice this problem. Those who use the classic Apple // computers will almost certainly find this a problem. For optimists like me that indicates that Apple Computer Inc. are going to produce a new version of ProDOS 8 during 1991. Let us extend the sequence above to start at 1990 and go as far as possible:

Notice the sequence:

5A = 90	1990	-> 5A = 90
59 = 89	1989	-> 5F = 95
58 = 88	1988	-> 5E = 94
58 = 88	1988	-> 5D = 93
57 = 87	1987	-> 5C = 92
56 = 86	1986	-> 5C = 92
5B = 91	1991	-> 5B = 91

Starting at 1991 would not help since there will be two entries for 1996 which could be done in 1992.

To update your older versions of ProDOS 8 you could do one of the following patches:

Firstly make sure that the diskette containing the ProDOS file is in a drive and neither the file nor the diskette is write-protected. Then make sure that you are in Applesoft BASIC. Next make sure that you set the PREFIX to that diskette. Two ways, for instance, are:

```
PREFIX,S6,D2
PREFIX /APPLEWORKS
```

Then do the following to enter the system monitor:

```
CALL -151
300:5A 5F 5E 5D 5C 5C 5B
3D0G
```

Now you should be back in Applesoft, so type the following depending upon which version of ProDOS 8 you wish to update:

```
BSAVE PRODOS,TSYS,B$3276,A$300,L7
  : REM — ProDOS 8 version 1.9
BSAVE PRODOS,TSYS,B$3176,A$300,L7
  : REM — ProDOS 8 version 1.7
BSAVE PRODOS,TSYS,B$3192,A$300,L7
  : REM — ProDOS 8 version 1.4
```

Would anybody interested in this please try out the patches to check that they work OK; unfortunately I don't have a clock that I can test them upon. Perhaps a member could produce an article with an Applesoft program that will automatically update diskettes with any current version of ProDOS 8. Anyone wishing to write such an article should contact Elizabeth Littlewood who co-ordinates the Apple // reviews and articles. Publication should be in October or December 1991 to be ready for the 1 January 1992.

I hope nobody feels that this problem has been blown up out of all proportion.

Syquest SCSI Drives

Ewen tells me that he has recently changed his SCSI card to one of the new High Speed DMA cards. He is now able to fully confirm that these cards will see the Syquest removeable SCSI drives. The older Rev C card would apparently see the drives at first until you tried to read and write to them.

There are some limitations however, and some oddities. If you are adding a Syquest as an extra to an existing SCSI chain, you will find that you may not see the added drive from ProDOS 8. A Slot can only see two drives in it unless it is Slot 5, the SmartPort. Of course most people will not put the SCSI card into Slot 5 as they will want that to be kept for their 3.5 drives. GS/OS has no problems seeing anything and if you are using the Syquest drive as a boot drive P8 shows no problems either.

The cartridge must be unlocked for the drive to be selected by GS/OS. It will become switched out if not. You cannot eject the cartridge and change it either, without powering down and rebooting. You may well corrupt and lose a disk if you try to change cartridges midstream!! Format and partition using the HDSCPARTITION file provided. **Dave Ward**

Zip Chip GS

Dave Ward puts puts his foot down and sees how fast he can make his IIgs go ...

Just like its predecessor the Zip Chip GS has been bandied about for a long time. Well at last it has arrived and after a couple of weeks of use I can state that the product actually meets the features claimed in the advertisements (see box) except that I didn't require the last one! Actually the Zip Chip GS is available in three different incarnations listed below:-

1) ZipChipGS Model 1500 - Card fits into 65815 socket.
2) ZipChipG Model 1525 - Card fits into 65815 socket.
3) ZipChipGSX Model 1600 - card for slots 1-4

- ❑ 8 MHZ Speed
- ❑ 16K Cache Memory
- ❑ User Upgradeable to 10MHZ
- ❑ 100% Hardware/Software Compatible
- ❑ DMA Compatible
- ❑ 30 Day Money Back Guarantee

At the time of purchase only the ZipChipGSX Model 1600 was available but I would have probably purchased that particular option anyway as it appears to offer better flexibility. Considering that the product is called ZipChip I was a little taken aback by the size of the card which measures just 21cm by 7cm. On it are two banks of DIP switches a large custom gate array chip, the 65816 , 4 RAM cache chips and a socket to park the old 65816 so that it doesn't get lost.

The card is neatly packed in a reusable an anti-static foam lined box together with a 3.5" diskette and a 7 page photostatic manual. I read the manual first! which then tells one to launch the program RUNME.SYS16 on the 3.5" diskette from your favourite program launcher. This is a 'run-time' HyperStudio stack which nicely describes the installation process, making use of the few utilities on the diskette and

Installation part 1:

After reading the manual and running the HyperStudio stacks I was ready to install the card. After switching off the machine the first thing to do was to remove the 'old' 65816 chip, using the tool provided, and then parking it on the spare socket on the card. You can put the card into any of the first four slots and still be able to use the internal function of that slot; a very useful feature as I suspect most users have few if any free slots! Although the card generates very little heat I would suggest that it is placed in slot 4 which will be the furthest away from the fan, if you have one installed, which will allow a better flow of cooling air. Slot three is the next best choice since it is most unlikely that there will be cards in these slots which normally use the internal functions of video output and mouse. On my machine I couldn't use slot three as I have the HyperStudio digitiser above, but not in, that slot effectively blocking it. You may find that slot one is also unavailable if you have a fan attached to the power pack, I have a Cirtech Coolit! fan and the card just fouls it. The ZipChipGSX card fits nicely in slot two, however, leaving enough of the fan showing to give a reasonable airflow. When you have chosen the slot you'll first need to fit the 40-pin plug, fixed by a flat cable from the card, into the vacant socket where the 65816 used to reside. The pins are not very long and appear to be rather fragile, it should be firstly gently located and then very firmly pressed into the socket. Then carefully press the card connector into the chosen slot. If the machine doesn't boot it is almost certainly due to the plug not having been pressed sufficiently well into the socket; remove it and then try again.

If you like you may now boot-up your machine and the ZipChipGSX will perform perfectly for most users. But if you like you can install the utilities as follows:-

Installation part 2:

Next job is to install the utility software. Since this diskette does not contain any operating system the INSTALLER program, which incidentally is the same as on the SYSTEM.TOOLS diskette, must be launched from the FINDER or your favourite program launcher.

Another, possibly, better way is from the file RUNME.SYS16. When you invoke this HyperStudio set of stacks you soon see the following screen:

```
*** Zip.Screen.1 ***
```

You've already followed through the box titled INSTALLATION, so click the box titled CONFIGURATION. This describes the default configuration of the DIP switches which are factory set and will almost certainly not be required to be altered. The second invokes the INSTALLER program. There are two sets of utilities here:-

1) Zip utility files.

ZipGS.CDev - This file is loaded into the Cdev folder in the System folder. When you invoke the control panel from the Apple menu you can alter the configuration of the ZipChipGSX.

ZipDA -This file finds its way into the Desk Accessories file in the System folder and can be used from the CDA menu.

ZipInit - This file is a TIF Temporary Initialisation File that is loaded into the System.Setup folder in the System folder. It can override the DIP switch defaults at boot-up.

2) Zip System files.

ZipGS.SYS16 - This is a GS/OS System file that can be launched from your favourite launch program and can do the same job as the CDA or CDev (control panel). It can also alter the ZipInit file.

Configuration:

There are three ways in which one can configure ZipChipGSX:

1) By altering the DIP Switches.

2) By using the ZipGS.SYS16 to alter the ZipInit file which, if present, will override the DIP Switches at boot-up.

3) You can alter the configuration of the ZipChipGSX temporarily by using the CDA, Cdev control panel or the ZipGS.SYS16 file. An NDA may also be provided in the future.

I was a little surprised to find that there was no way of changing the speed of the ZipChipGSX from software since I expected that this would be necessary to run games software, for instance. As I found out later this is hardly required and the only reason I needed to use the configuration programs was to test the ZipChipGSX!!!

Performance:

ZipChipGSX is supposed to speed up Apple IIgs software and be compatible with ALL configurations of the hardware and software: let's see how it performs in the table on the next page.

ZipChipGSX appears to give a general overall speed up of between 225% and 250% compared with the theoretical value of 285%. Any programs

requiring disk access will appear to give smaller increases as disk access is a constant factor irrespective of the processor speed.

ZipChip GSX appears to have been given some 'intelligence' by its authors in that animated programs show no speedup what-so-ever. Games such as Crystal Quest and others work as normal. Some games that use a lot of sound show some slight defects but these effects do not detract from enjoyment of those games. The Finder and other programs, where speedup is a bonus, do show increases of 200%+

ZipChipGSX also respects the speed setting on the control panel (normal 1Mhz & fast 2.8Mhz) and software speed set by using the $C036 softswitch register. There is a DIP switch and configuration change to override this but that might lead to other problems.

In general the default configuration settings made to the ZipChipGSX need very rarely, if ever, to be changed.

Compatibility:

The manual gives a whole list of hardware and software that the manufacturers have checked out and all has been found to work perfectly. I have checked out a few which I list below with appropriate comments:

1) Hardware:

All the Cirtech cards that I could lay my hands upon worked perfectly.

2) Software:

I could not find any software that would not work with the ZipChipGSX installed that worked with the old 65816 chip. The old 5.25" protected games diskettes required the control panel settings monochrome and 40 columns and speed set to 1Mhz. Apple IIgs games, without exception worked at their correct speed.

Dave Ward

Operation	Norm	Zip	Increase%	Comments
Bootup time	30s	24s	125	Through GS/OS version 5.03 into ProSel 16 Your times may vary somewhat as boot time depends on how many DAs etc. are loaded in.
Calc. PI	78s	31s	250	Using Glen Bredon's P8 program to calculate PI to 1000 decimal places.
Chess Problem	395s	138s	280	4 move problem by Dr A Mandler. Colossus 4 AppleIIgs version 1989. Bd7,Kc5,Bc1 kd3,pg3
Applesoft programs.			220-230	Many operations were tried which did not involve disk access.
Beagle Compiler			240-260	Beagle Compiler used to compile various Applesoft programs.
HiRes Graphics			230-250	Tests were made with many older games and graphics programs that use the Hires and double hires screens.
Super Res			220-250	Many tests were made with Apple IIgs Super resolution drawing programs, not games.

info

Product : Zip Chip GSX
Publisher : ZIP Technology
Available from :
ClockTower
P.O. Box 1417
London
N8 9PW
081-341 9023
Price : £280.60 inc VAT

Value :
Performance :
Documentation :

MAC CONNECTIVITY

WorkStation // Card £249.00*

Now your //e can become part of an AppleTalk network. May be used to create an all-Apple //e &/or IIGS AppleTalk network for sharing printers.

If you want to share hard disk space amongst the network workstations, you need to run "AppleShare" on a Mac hard disk network server.

AppleShare v2.0 £599.00*

Hard disk server for AppleTalk networks. Runs on a Mac, and lets IIGSs (or //es with WorkStation Card) share files, hard disk space, and printers. IBM-PCs can also be connected to the net, using the LocalTalk PC Card @ £249.95*.

Rapport £199.95*

Macintosh disk drive adaptor which allows connexion of Kennect Drives 2.4/1200/360, giving capability of reading IBM-PC 720K & 1.44Mb 3.5" disks, IBM-PC 360K & 1.2Mb 5.25" disks, and Apple II ProDOS 140K 5.25" & 800K 3.5" disks.

In addition to the connectivity benefits listed above, Rapport also allows you to store 1.2Mb on the standard 800K floppy disk!

Appropriate drives for connexion to Rapport include:- Apple 800K & SuperDrives, and all Kennect 5.25" & 3.5" drives, as well as compatibles like Applied Engineering, AMR etc...

Works on Mac 512E, Plus, SE, II, IIx, SE/30, IIex, and IIci. (Note: Mac II & IIx users need an additional cable to provide the required external drive connector).

Kennect Drive 1200 £249.95*

A 5.25" external floppy disk drive which when used with Rapport, allows you to read, write & initialise IBM-PC 1.2Mb disks, as well as read IBM-PC 360K & Apple II ProDOS 140K disks.

Kennect Drive 360 £249.95*

As above, but instead reads, writes, & initialises IBM-PC 360K & Apple II ProDOS 140K disks.

Kennect Drive 2.4 £335.00

A 3.5" drive which when used with Rapport provides conectivity with all current Apple & IBM-PC 3.5" disk formats as well as expanding Mac storage on standard disks from 800K to 1.2Mb, and to 2.4Mb on high density disks. Formats supported are:- IBM 720K & 1.44Mb, Apple II/Mac 400K & 800K, & Mac 1.44Mb, as well as Kennect's own proprietary Mac 1.2 & 2.4Mb. Also bundled with the Drive 2.4 is Fifth Generation's great backup software "FastBack II". This allows hard disk backup averaging 4Mb per high density disk, with data compression, when used in combination with Drive 2.4. For example, a 20Mb hard disk can be backed up on approximately 5-7 disks!

NEW KIT

AmberCiens £3.95

400ml can of foaming cleanser that will bring any computer, disk drive, monitor, or printer back to it's former glory. Dissolves that nasty yellowy-brown dirty coating to leave your kit beautiful again. The professional stuff that most service engineers use...

FM-GS4 RAMcard £69.95

At last, a seriously sensible price for a 4Mb IIGS memory expansion card. Simply replaces your old 1/2Mb card, and is fully compatible with Apple's original unit, expands original GSs up to 4.25Mb, and new GSs to 5Mb. This price is for unpopulated, and you need to add £59.95 per 1Mb required. (By comparison; the latest 1Mb GS can only expand to 2Mb, and that costs an extra £299.00! - whereas with our card it'll cost you just £129.90...).

RAMfast SCSI £195.50/170*

The fastest way to run your SCSI hard drive. This card drastically decreases your access times, and can make your system up to six times faster! This magic is performed by a fast 10MHz coprocessor and 256K fast cache memory on-board.

Philips CM-8833 Monitor £287.49

14" colour monitor covering most needs. Carries CV, RGB, RGBI/CGA inputs so you can use it with UK Apple //es just with the standard phono/phono cable you normally connect to a mono monitor. Alternatively, you can use an RGB card/adaptor for crisper colour from //ec or][+. Connects directly to Laser-128s, and all IBM-PCs with RGB/CGA output. Can also be used with BBCs, Amigas, Atari-STs etc, - definitely a good buy if you may change computers one day.

Atari PC3 Computer £573.85

8086 IBM-PC compatible 8MHz unit with 720K 3.5" floppy and 30Mb hard disk drives. Includes mouse, clock/calendar, parallel & serial ports, MDA CGA Hercules EGA display capability, keyboard with numeric keypad, MS-DOS 3.3 & GW-Basic software. Why buy a PC Transporter & still only have a floppy IBM-PC??? (No monitor at this price).

Atari PC3 Mono System £688.85

As above with 12" hi-res EGA mono monitor.

Atari PC3 Colour System £803.85

MGA SoftCat AD ONE
Tel: 0797-226601 [fax:226721]
prices include VAT *=prices include p&p & where two prices digits, the lower price is for Apple 2000 members ONLY Access/Visa accepted
sensible software since '79

Where's My Sledge

Jim Harle slipping about in AppleWorks with UltraMacros

Snow Joke ...

Corn in the middle of winter? It's snow joke. Especially when you try to do something seemingly simple and it just won't work.

There I was, on a late December evening, blissfully modifying a mildly complicated AppleWorks (USA V2.0) spreadsheet on my Apple II, and all I wanted was to move the contents of one cell to the cell next door. I knew formulae elsewhere in the spreadsheet referred to the cell, but how many, and which ones, was beyond my ken. Still, all I needed to do was search the formulae for all references to that cell, and duly change them. Hmmph!

Zooms ..

Zoom with oa-Z to display the formulae, find text with oa-F: G17 ..... "Couldn't find G17" ..... even though a reference to G17 in a formula is grinning at me from the middle of the screen! How silly.

Right. Create a new blank AppleWorks word processor file which I know can be searched adequately. Back to the zoomed spreadsheet. Copy the lot to the clipboard and dump it in the new WP file. That's better. A bit of a mess, but the formulae are there. Hang about. They're a bit short. Only the parts that can be seen in the cells have been transferred. Clearly a case of three blind mice. Try it again with all the columns expanded using oa-V to allow for the longest formulae. Still more of a mess, but we can find all references to G17. But which column and row are they? Not only that, but there's a bug a-lurking. Some cells are still truncated, and run into others. Hardly satisfactory!

What else can I try? How about printing the zoomed spreadsheet to a text file on disk, and then creating a new AppleWorks word processor file from the text file? Works admirably. One snag. AppleWorks only seems to print the current values of the cells to a text file, irrespective of zoom mode.

What's the DIFference?

More head scratching, and then we try the same idea printing a DIF file to disk for examination with AppleWriter. Still no formulae, and I'm running out of AppleWorks ideas. Seems like one nut has found another which needs cracking! Where's my sledge(hammer)?

Nefer Mind ..

Ah! There's corn in Egypt. TimeOut UltraMacros (v1.7) solves all AppleWorks problems. Well, nearly all. It did solve this one at the cost of the rest of my evening. While it is possible to do just the search of formulae for references to a specified cell's coordinates, I elected to have the formulae displayed in a specially created WP file.

Remembering the fun I had a little while ago discovering just how and why the Shell-Metzner sort worked (Apple 2000, Aug 90, p33) even though I don't program in Applesoft, it crossed my mind that someone might enjoy doing the same sort of exercise with my solution to the problem I encountered. There's the added incentive that there should be neater ways to accomplish the feat. For example, there's probably an AppleWorks location which could be read to distinguish a Value from a Label directly, which would save several bytes of macro table space.

Get in a Trance

My apologies for the choice of macro keys and variables, but the macros were developed as a subset of an existing task. To attempt the required magic (assuming you have UltraMacros installed with AppleWorks and are familiar with their operation): make a WP file consisting of the macros listed below, compile them, ensure there is room on the desktop for a new file, put the highlighting on any cell in the rightmost occupied column of the appropriate spreadsheet, depress both apple keys and tap the V. You may then choose to be hypnotised until awoken by the beep, or break for coffee.

The second sa-ctrl-P macro has a space as the first character on the line, which causes the compiler to overlook it. I find this a very useful technique for handling alternatives. Delete the space, and pop one in at the beginning of the first sa-ctrl-P, and the set of macros compiles with the alternative without further ado. The comments following these two macros indicate the choices available.

Is there another solution?

If I've missed the obvious solution to my little problem, or anyone wants to comment on their own refinements, discoveries or whatever, please get in touch. For those who have AppleWorks V3.0 the problem probably doesn't exist, but this I cannot say for certain. So far, I haven't seen or heard of anything so superior about the new version which might tempt me to undertake the immense task of upgrading. Ignorance may still be bliss.

The example macro can be found on the next page.

Jim Harle

NOTES

1. As the macros refer to certain AppleWorks locations, modifications may be necessary for other versions than that mentioned.
2. Before using macros a second time in the same session, remove or rename "SSValues" WP file.
3. Coordinates of cells containing values or formulae are split in the WP file to avoid the nuisance of picking them up with oa-F.
4. Postscript: A second stab at the macros produced an improved set at the cost of a further 220 bytes of macro table. The larger version may be downloaded from Tabbs.

Macros which write AppleWorks SS values to a WP file

```
start
<ba-V>:<asp><J = 1 : $6 = "SSValues" : oa-9 posn H, I : oa-F>C<ctrl-
Y>A1<rtn Q = peek 3156 : oa-Q esc rtn>3<rtn rtn print $6 : rtn oa-
C>IM<rtn>0<rtn>RM<rtn>0<rtn esc oa-Q print Q : rtn goto sa-ctrl-N>! —
Print Constants and/or Formulae to "SSValues" WP file
 added to desktop to permit searches for cell coordinates, etc.

<ctrl-N>:<asp><W = 4 : posn U, V : if U = 27 J = 2 : elseoff : if U >
H goto sa-ctrl-Q : elseoff : $0 = screen 1, 22, 9 : $7 = left $0, J :
begin : if W = 0 goto sa-ctrl-O : else : $0 = right $0, W : U = asc $0
: if U = 86 goto sa-ctrl-P : else : W = W - 1 : rpt>! — Ascertains
 whether cell contains a Value, etc.

<ctrl-O>:<asp><ifnot V = I down goto sa-ctrl-N : else : oa-1 onerr
goto sa-ctrl-Q : right goto sa-ctrl-N>! — Move to next cell

<ctrl-P>:<asp><X = 34562 : U = peek X : Z = U : $8 = "" : begin : X =
X + 1 : Y = peek X : if Y < 46 K = 1 : elseoff : if Y = 47 K = 1 :
elseoff : if Y > 57 K = 1 : elseoff : if Z = U K = 0 : elseoff : $8 =
$8 + chr$ Y : U = U - 1 : ifnot U = 0 rpt : else : if K = 0 goto sa-
ctrl-O : else : $0 = $6 : oa-Q find : rtn print $7 : tab print V : tab
print $8 : rtn oa-Q print Q : rtn goto sa-ctrl-O>! — Prints
 formulae only to WP file "if K = 0" and prints constants only "if
 K = 1"

 <ctrl-P>:<asp><X = 34562 : U = peek X : $8 = "" : begin : X = X + 1 :
Y = peek X : $8 = $8 + chr$ Y : U = U - 1 : ifnot U = 0 rpt : else :
$0 = $6 : oa-Q find : rtn print $7 : tab print V : tab print $8 : rtn
oa-Q print Q : rtn goto sa-ctrl-O>! — Prints formulae and constants
to
 WP file

<ctrl-Q>:<asp><oa-F>C<ctrl-Y>A1<rtn $0 = $6 : oa-Q find : rtn oa-1
bell>! — Quit macro activity tidily when job is completed

      * — SSValues2WP
      * — Macro Table contains 311 bytes on 20 Dec 90
```

Online Update

CompuServe

The price war is hotting up in the telecommunications war. With reduced charges having just been announced from CompuServe, BT and Telecom Gold are looking even more expensive then ever. The major announcement that will interest Apple2000 members and especially those who may still be using Telecom Gold after the demise of The Force, is that a Fax may be sent for around 45p by CompuServe. This compares very favourably with the 44p that Telecom Gold charges.

The major reason that has put many people off joining CompuServe so far has been the high cost of going online. The cost has now dropped from a flat rate of $22 an hour to a minimum of $12.80 for those calling through London at offpeak times. Those outside London will be charged $17 an hour. The prices rise during peak periods of course but are still lower than they were before. At current exchange rates these will be around £7.94 and £10.15 an hour respectively, this includes your local call charge of £1.20 per hour.

If you dial the London number directly, you will pay £11.54 at trunk and £10.34 at b1 trunk rates per hour offpeak, so it will always be cheaper to use DialPlus than call London direct.

GEnie

CompuServe is the biggest online system that interests Apple users. It has many areas within MAUG of specific interest to us. However, there is another online system in the States that has special areas for Apple users. GEnie is a branch of the General Electric company and the online service is now available for UK users. The GE Services network that is used from the UK is in fact the one also used by AppleLink.

Online charges to GEnie are charged in two price bands. Peak periods (Mon-Fri 8 am to 6 pm Eastern Standard Time) are charged at $20 and offpeak (all other times) at $8. The offpeak charge is therefore cheaper than CompuServe.

These however are the online charges only. You have to access GEnie in the first place. So far they have not installed a similar access to CompuServe so it will be necessary to have your own PSS or DialPlus account and call the NUA '334219601282'. This is a UK NUA so only the £1.65 an hour PSS charge will apply. The total charges for GEnie therefore work out at around £7.06 an hour offpeak.

Enter XJM11797,CENTRAL at the U#= prompt when you reach GEnie and follow instructions.

See you all online!

Reduction in CompuServe Charges

Compuserve have recently made several important changes that particularly effect UK members; we want to make sure that you are aware of these changes so that you can take full advantage of the new access methods and the reduced rates:

❑ DIRECT ACCESS TO COMPUSERVE IN LONDON

CompuServe has introduced direct access in London on 071 490 8881 providing reliable access at very attractive rates (see below).

GO EUROLOGON at any ! prompt for more information.

❑ FASTER, CHEAPER ACCESS VIA BT DIALPLUS NETWORK

CompuServe has introduced access over British Telecom's new "PSS Dialplus" network which provides local dial access for 95% of the UK. People who are currently using the AT&T Istel network are strongly encouraged to start using Dialplus. GO EUROLOGON at any ! prompt for more information.

❑ REDUCTION IN COMMUNICATION SURCHARGES

CompuServe has made a significant reduction in communication surcharges for daytime access and at the same time introduced dramatic reductions for evening access. Rates are now:

PRIME TIME (08:00 19:00)
BT Dialplus.....$8.00/hr
CompuServe (London)..... $8.00/hr

NON-PRIME TIME (19:00 08:00)
BT Dialplus..... $4.50/hr
CompuServe (London)..... $0.30/hr

COMPUSERVE ONLINE CHARGE
Any time of the day $12.50/hr

❑ FAX ANYWHERE IN EUROPE FOR LESS THAN 50p!

The cost of sending messages from CompuServe Mail to FAX machines has been reduced. You can now send a FAX anywhere within Europe for $0.90 (about 45p).... and FAXes to US destinations are even cheaper! GO MAIL at any ! prompt and then HELP FAX for further information.

There is no joining charge for Apple2000 members. Just quote your membership number when you call.

CompuServe Customer Services (UK)

9.00am - 9.00pm (Monday-Friday)
Freephone 0800 289 458, or from outside the UK (0)272 255111

1600k Rules OK

Dave Ward fits the Applied Engineering High Density Disk Drive to his Apple IIgs

Recently Applied Engineering of Texas introduced a platinum coloured 800K 3.5" disk drive for the Apple IIgs etc. with the threat that they would soon provide a 1600K, high density, drive that would work on the Apple IIgs. That threat has now been executed and I have had a drive for a few weeks to try out.

The Package

The drive arrives in a large well padded box together with a single 800K support disk and a small manual, 10 pages to be exact. The drive is the same size as the Apple drive and matches the colour of the Apple IIgs. The main differences appear to be that the door has a dust flap and the light and eject button are on the bottom right-hand of the front panel.

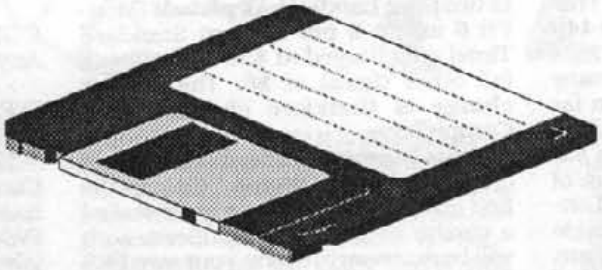
The AE HD drive has a male DB19 connector on a flying lead and a female socket at the back to allow daisy chaining. The drive is claimed, by Applied Engineering, to read 400K, 800K diskettes on both Apple // computers, with an appropriate interface card and Macintosh computers and also 1600K diskettes on an Apple IIgs and 1440K diskettes on the Macintoshes. On an Apple IIgs the drive may be connected directly to the machine or daisy-chained to another 3.5" disk drive.

Installation:

The installation of the drive is easy to fix (see box, though) as one simply switches off the machine and then plugs the DB19 connector into the back of the Apple IIgs. Having done this the drive will be recognised as an 800K drive. To allow it to read/write 1600K, high density, diskettes you will need to replace the Apple 3.5 disk driver (AppleDisk3.5 file) in the DRIVERS folder in the SYSTEM folder with the AE Driver (AEHDDisk3.5 file) on the support diskette. The AppleDisk3.5 file must be removed from the DRIVERS folder otherwise it will take precedence over the AEHDDisk3.5 file and only 800K diskettes may be used. If you don't like copying over files there is a copy of the Installer on the support diskette. Booting up after installation of the driver allowed me to access high density diskettes.

Using the AE HD drive:

I found that if the AE HD drive was connected directly to the Apple IIgs I could read and write high density (1600K) diskettes without difficulty. The drive appears to recognise such diskettes by the other rectangular hole, referred to by AE as the bonus hole, on the side opposite to the write-enable hole. With 800K diskettes the drive functions normally; you can boot from the drive and read/write 800K diskettes. If I connected the drive to my Apple 3.5" drive by daisy-chaining I found that it would only recognise 800K diskettes. The AE manual infers that such a configuration should also recognise 1600K (high density) diskettes, too.



On all the 3.5" drives that I have seen there is a little red light to indicate when the drive is reading or writing. Applied Engineering have taken this one step further by arranging that the light glow red when writing and green when the drive is reading! It is quite a surprise to see how much reading goes on whilst writing!

All the modern copy programs and utilities recognised the high density diskettes and would format, read and write them; 3200 blocks are formatted on such diskettes with the usual 7 borrowed by the system leaving 3193 blocks for your files! I tried ProSel-16, Finder and Copy][plus version 8.4.

To enable the drives to recognise and use 1600K diskettes GS/OS must have been booted with the AEHDDisk3.5 driver file in the DRIVERS folder in the SYSTEM folder. Therefore you cannot boot a high density 1600K diskette. ProDOS 8 applications will be able to read the high density diskettes if you fire up ProDOS 8 applications from GS/OS. It is good practice to do this anyway since the GS/OS drivers for 3.5" diskettes are faster that their ProDOS 8 counterparts.

Diskette considerations:

AE recommend, in the manual, that only genuine HD 3.5" diskettes should be used as they are of different composition. The do not recommend that another hole be formed in the other side of a normal DSDD 3.5" diskette. The argument is similar to that between 1981 & 1986 on the use of both sides of 5.25" diskettes; I've used such 'flippies' for years without problems. I suspect that using DSDD 3.5" diskettes for 1600K should be OK but it is early days, yet. Perhaps Macintosh users can give us some guidance one way or the other. These arguments were aired in a recent issue of Apple2000 magazine.

Possible limitations:

Since one can't boot a 1600K diskette directly from the AE HD drive and to use 1600K diskettes GS/OS and the AE driver are necessary must be present it would be very difficult to use a single drive without a lot of disk swapping and frustration. Hard disk owners will have no problem since they can boot from the hard disk and then get the full benefit of the 1600K drive. Other users will need some other form of drive to hold the System freeing the AE HD drive. One way is to have an AE RAM Keeper and sufficient RAM on the IIgs memory card (as least 2 megabytes) another is a Cirtech plusDisk in slot 1-7. The system files can be copied to the battery backed RAM disk and booted from there. Another alternative is to have an normal RAM card in one

of the slots or sufficient RAM on the Apple IIgs memory card; 2 megabytes will be enough for now. One would then boot an 800K diskette from the AE HD drive and then copy over the system to the RAM disk and boot again from there. Some cards supply software to do this automatically on boot up or you could use ProSel-16 or the Installer, from the system.tools disk, to do this for you. This operation would take some 2-3 minutes each time you boot but that time would soon be recovered. These methods would allow the full benefit of the 1600K drives to be felt.

Problems:

The whole disk or volume copiers will only copy 800K diskettes on the AE HD drive, I half expected that they wouldn't copy the 1600K diskettes.

As I expected the drive will only work with 800K diskette when using the ProSel Backup/Restore feature.

The only problem that I found with the AE HD drive that I could laid on the doorstep of Applied Engineering was that I could not get the drive to function as a 1600K drive if it was daisy-chained to an Apple 3.5" drive. Since this occurred on two different Apple IIgs computers it appears to be reproducible.

Conclusions

Applied Engineering should be congratulated for producing a high density 3.5" drive for the Apple IIgs computer, which will also work on the Macintosh and at a reasonable price. They have done something that Apple Computer Inc. should have done ages ago; how long have the Macintosh family had such drives? All they (Apple Computer Inc.) have done is to make the Apple IIgs less competitive in areas where the Macintosh does not compete.

The AE HD disk drive used in this review was supplied by Alan Finn of ClockTower.

Dave Ward

info

Product : AE HD Disk Drive
Manufacturer : A. Engineering
Available from :
ClockTower
PO Box 1417
London
N8 9PW
081-341 9023
Price : £273.70 inc VAT

Value :
Performance :
Documentation :

Footnote:

I had some trouble in using the drive with my Apple IIgs which I don't feel should be blamed upon the drive nor due to 'pilot error' on my part. In fact the drive would not work on my machine however I tried to connect it. Trying it onto another machine the drive worked almost perfectly. So I tried it again on my machine with the same result as before. Having more time on this occasion I did what I tell others: strip the machine and then connect the drive. When I did this it worked almost perfectly. What is so strange is that on replacing all the other peripherals the drive still worked and is still working whilst I write this review! This is quite a common occurrence and one would be advised to persevere before returning any device. The reason why I refer above to the drive working almost perfectly is that the manual states that it will work connected directly to the Apple IIgs or daisy-chained to another 3.5" drive. I found on all occasions that I tried daisy-chaining the AE HD drive to my Apple 3.5" drive that it would only recognise 800K diskettes. To get the 1600K diskettes to be recognised the AE HD drive must be connected directly to the Apple IIgs.

As above but with 14" EGA colour monitor.

ImageWriter Print Head Cleaner £9.95*
Simple uninked ribbon for ImageWriter I, II, 15", Apple DMP etc, complete with 150ml of alcohol-based cleaning fluid. Simply snap off the cartridge cover, and add fluid to the ribbon, then swtich the printer to self-test. Ribbon reloads cost £3.95, and replacement 150ml bottles of fluid cost £1.95. (Many other printers catered for, please ask for availability & price).

NEW PRICES

TimeOut SuperFonts w/Paint £61.53/50.03*

pfs: File/Report Bundle £89.00*
128K database for //ecGS 5.25"

pfs: Write £89.00*
128K //ecGS 5.25" word processor

RAMworks 512 Expander £179.00*
512K add-on accessory board for all RAMworks cards with expansion connector, (w/512K installed).

RAMworks 2 MEG Plus £229.00*
2Mb add-on accessory board for all RAMworks cards with expansion connector, (w/1Mb installed).

Apple Mouse //e £139.95*
The genuine article, Apple's own Mouse //, together with MouseCard //, and MousePaint.

C-820 Mouse £39.95
Replacement mouse, ideal for //c or Laser-128.

Record Master £49.95*
Useful database that even works on the][+.

GEOS £69.95*
Brilliant WIMP system for 128K //s. Graphical Environment Operating System from GeoWorks (formerly Berkeley Softworks), includes GeoWrite, GeoSpell, GeoPaint

Magic Window //e £49.95*
Now our lowest-priced full-feature //ec word processor - just went down £50. (][+ version still available @ £39.95* - remember, on a][+ you don't need any extra hardware - no LCAs or 80-column cards needed, although they are supported if you have them).

1Mb RAM Upgrade £59.95
Set of 8x510000 type DRAMs to upgrade any 4/6Mb IIGS RAMcard, or plusRAM-16 etc.

Conserver £89.00
Attractive unit which sits between your IIGS monitor & system box, providing fan, mains surge suppression, one/two 3.5" drive housing, and a single front switch to control all your peripherals.

Design your own home:

Architecture v1.3 £69.95*
Great 768K GS CAD system which builds on a general-purpose foundation, but provides commands & art specifically for architecture. Also available for 64K IIs @ £49.95*.

Silpheed £24.99
The most popular arcade action game for the IIGS.

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The only fully-compatible standard peripheral slot 1Mb RAMcard in existence. Price is for zero-K, so add £24.95 per 256K required. Includes AppleWorks enhancement software for //e, and patch software to let you run AppleWorks on the][+. Comes with RAMdisk software for ProDOS, DOS 3.3, Pascal, & CP/AM. Includes partitioning software that lets you run DOS 3.3, ProDOS, CP/AM, and Pascal programs on the one card, switching from one o/s to another at will.

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UDC £68.25/60.00*
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Fujitsu 3.5 Drive w/UDC £257.25/229.00*

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ProSel 16 v8.58

Dave Ward reviews not so much a program as a way of life from the master programmer of all

ProSel began as a Program Selector, to make life easier for Glen Bredon, ProSel's author. ProSel then worked under the ProDOS 8 operating system, for the Apple //e, Apple //c and the Apple][plus, but by and by many file manipulation and other utilities had been added. By early 1989 Glen Bredon had begun to re-write the program for the Apple IIgs working under GS/OS - ProSel-16. I first reviewed ProSel-16 version 4.50 in the August 1989 edition of Apple 2000 magazine with an update of version 7.90 a few issues later. Since then ProSel-16 has matured and although the version we review here will not be the last it would appear that no major changes will be necessary.

ProSel-16 is, to many users, just a program launcher running on the Apple IIgs under GS/OS. That is only partially true but from a ProSel screen one can launch all GS/OS launchable files and for that matter almost all the ProDOS 8 files, too. The ProSel-16 screen is, however, like an iceberg with only a small percentage of it, the screen being visible. Beneath lies a myriad of useful utilities such as: extensive file manipulation and copying routines, an Appointment calendar, a fully featured reverse polish calculator and an excellent hard disk backup feature .... but more of all that later.

Obtaining ProSel

Up until recently one could only obtain ProSel, legally, direct from Glen Bredon but now all that has changed. ProSel-16 is supplied on a 3.5" 800K diskette with the manual stored in a specially compressed text file that can be output to your printer. This diskette is copyable but is craftily protected so that only the genuine copy holder can obtain free upgrades from bulletin boards such as TABBS.

When you boot the diskette the following, typical, ProSel screen appears after the GS/OS is loaded into memory [See Figure 1].

Examination of the screen will show that each line is divided into three equal fields. These fields may contain application names, pure text or even mouse characters to produce nice looking screens, in many colours, too. The highlighted application name can be executed by simply pressing Return or clicking the mouse button. Other application names can be highlighted by using the four cursor keys or just typing the first character in the field. Fields with just text can be made so that the above will not highlight them. The mouse can also be used for moving around the screen but most users will find the keyboard method quicker and easier. It is possible to have fields in the bottom four lines but these are best left for the useful information that they provide.

ProSel-16 now uses the super-resolution 640 by 200 graphics mode which allows better looking screens but tends to appear a little more sluggish. You may still specify, if you wish, to use the text screen.

Printing the Manual

The manual when printed requires 71 pages and includes a table of contents at the front and an index at the back. Over the two years or so whilst ProSel-16 has been maturing the manual has improved likewise. It describes in detail all the features of ProSel-16 up to the version you purchased. The manual also gives a virtual tutorial on GS/OS prefixes; reading it will improve ones understanding of GS/OS as well as ProSel.

The bottom line shows the legend 'ESC for main menu'. If you press ESCape key you will see the following screen which lists the extensive facilities that ProSel-16 now offers [See Figure 2].

Looking at the Options

Let us take a look at most of these options but not necessarily in order:

HELP:

Pressing Return here produces the screen seen in Figure 3.

These help screens are stored in small text files in a special location (see Show Prefixes below). You could if you wish add your own or emend those already provided.

SHOW PREFIXES:

GS/OS allows one to have up to 33 Prefixes. A Prefix is a shorthand notation for the pathname for a particular folder or subdirectory on a disk. Some of these Prefixes are owned by GS/OS but the remaining 31 can be altered by the user; of these 31 Prefixes ProSel reserves a few for its own use, you can use these if you wish but ProSel will be easier to use if you respect them. You could for instance define Prefix 9 to hold the pathname of the folder where you store AppleWorks data files:
/HARD.DISK/WORDPROCESSORS/APPLEWORKS/AWDATA/

It would be painful to type this out every time when you could simple use 9/ instead!! ProSel uses Prefix:

5/ = folder where Appointment Calendar data is stored and other types of data files that ProSel produces.
6/ = folder where Command files are stored.
7/ = Help files are stored in the folder defined by this Prefix.
31/= folder that contains pictures for the slideshow.

Folders, often called subdirectories or even directories, are special files the are 'repositories' for other files and folders, to keep catalogue listings free small and clear.

EDITOR:

This is a very important feature which allows one to edit or create new application screens. There are, in fact, two editors; one which allows the relatively easy production of application names and another called the design editor that is used for producing those flashy screen areas. The main editor has two options for producing those application screens; Automatic or Manual. The Automatic mode is so efficient that many users will not ever need to use the manual mode. Even if you don't want to be bothered with the Manual mode when you've got a few spare minutes use the editor to examine one of those application names you produced automatically. An application name is only part of the specification, see the example in Figure 4.

Notice that the Screen for the Manual mode of the Editor is divided into 4 parts. For most users, including myself, the first field is the one which will be most often emended. This is because the name chosen by ProSel-16 in automatic mode may not be the entry that I wish to use. ProSel-16 chooses the name of the file one wishes to execute. In this example you are looking at the application for Merlin 16 +, when I ProSel-16 created this entry, automatically, it chose Merlin.Sys16; I preferred Merlin 16 + so I changed it.

The second entry starts with a ? which is short-hand for the name of my disk /SAM/ this short-hand is useful in case I wish to change the name of my hard disk and re-boot. The full Prefix is, therefore, /SAM/MERLIN16/ which is the folder that con-

tains all the Merlin 16 + files.

The third entry is the name of the startup or launching file for Merlin 16 + ; MERLIN.SYS16.

The last entry is not needed in this case.

These application specifications can be quite complex but the automatic mode of the Editor creates them, just like that! Magic!

There are also a lot of special application specifications that cannot be created automatically but these are well described in the manual and should not be too difficult to make. For instance one can make a specification to backup, automatically, parts or all of your hard disk. All you have to do is to put in the 3.5" diskettes. I use a specification to use the Shell's Copy command to automatically copy a number of files from hard disk to a 3.5" diskette.

UTILITIES:

The two screens shown in Figures 5 and 6 show all the facilities available.

Unlike the Finder which uses windows and the mouse to locate particular files or groups of files, ProSel Utilities allows one to produce a 'tree' and then use the arrow keys to move around until the correct folder or subdirectory is found.

BACKUP/RESTORE:

This module is a fully featured hard disk backup routine that would alone probably cost as much as the ProSel package itself! Backing up ones data files cannot be over stressed and should be done as often as possible to enable easy recovery. I keep a ten circle of backup diskettes for each days backup. If I happen to do more that one backup on a particular day then the number increases. DiskBackup/Restore is relatively quick and easy to do. The system allows one to set up a title on a ProSel screen that will do the job automatically, all you have to do is place the 3.5" diskette into the drive ProSel does the rest. If you choose the Backup/Restore from the main menu you get something like the screen below:

```
ProSel-16 Backup/Restore

B-Backup
R-Restore
D-Directory
S-Selective recovery
U-Update from backup
E-Existing files restore
N-Non-existing files restore
C-Clear backup bits

Which mode?
```

Backup allows one to restore from a particular directory, even a whole disk, or a series of files specified in a textfile called a script file. The backup is by file so that the feature of selective recovery can work and indeed the name of each file being read into memory is shown on the screen. When 400K (half a 3.5" disk) or 800K is read, you specify, it is then written to disk. The routine compresses files that have little data in them and also stores the information on the disk with error correction. One of the directories that I backup quite often contains two large random access text files that are over 3 megabytes in size but actually only contain 400K of data These plus another 61 files (300K) in that directory are stored on a single 3.5" diskette in about 3 minutes! Copying those files by normal means takes much longer than this, and would need almost seven 3.5" diskettes, even if large files could be split over more than one diskette!! Restoring takes a little longer but I haven't had to use that routine in anger, yet! The error correction mentioned above is something to wonder at particularly because Glen Bredon claims that if a number of blocks on the backup diskette are totally unreadable you will still get your data back. Using a very small magnet I managed, with difficulty to damage about 2 blocks on a backup diskette and still recovered the

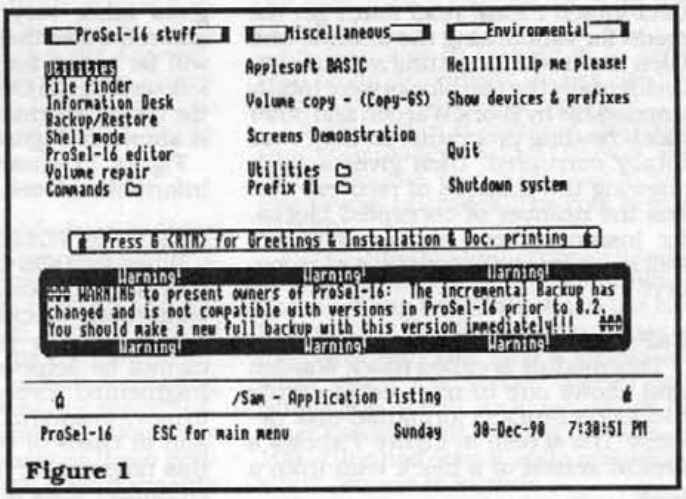

Figure 1

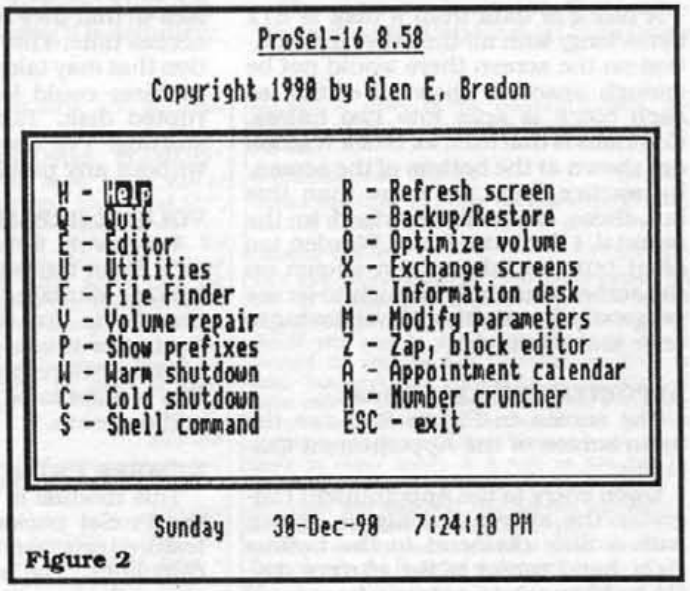

Figure 2

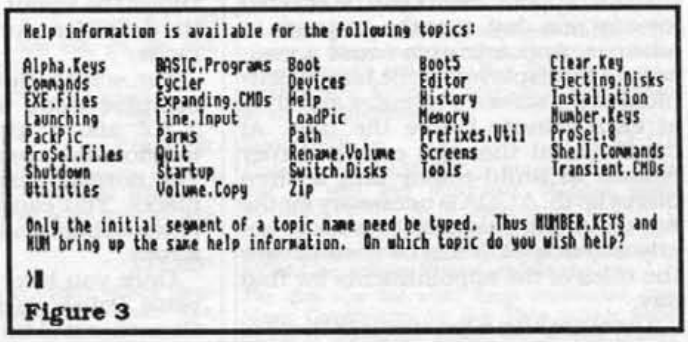

Figure 3

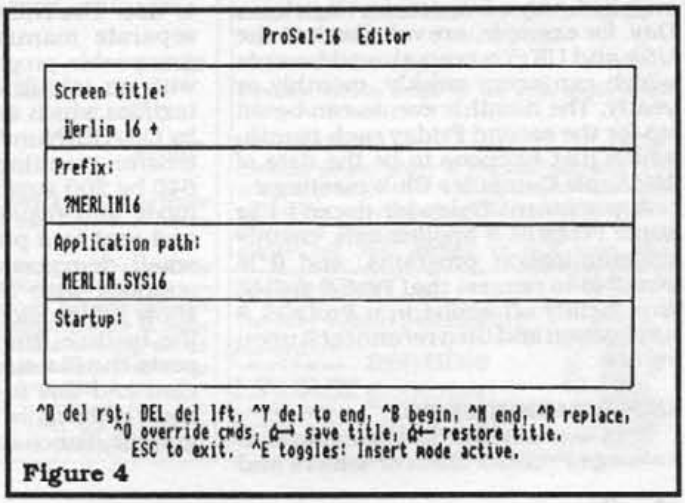

Figure 4

data intact! Please read that I get the credit for vandalising the diskette and Glen the credit for getting me out of it. Incidentally the two blocks were totally unreadable by Block Warden and other block reading programs, so they were totally corrupted. Glen gives a table showing the chances of recovery versus the number of corrupted blocks, for instance three corrupted blocks still leave you a 99% chance of recovery!

ZAP:

This module is called Block Warden and allows one to read, edit or write blocks on ProDOS formatted disk devices. The screen in Figure 7 shows a typical screen of a block read from a disk.

A block of data from a disk is 512 bytes long, with all the other information on the screen there would not be enough space to show all of this so each block is split into two halves. Commands that exist for Block Warden are shown at the bottom of the screen. In practice there are more than this but these are well described in the manual. I don't use Block Warden too often but the information shown on the screen is usually enough to let me get good use out of it, without having to refer to the manual.

APPOINTMENT CALENDAR:

The screen in Figure 8 shows the main screen of the Appointment Calendar.

Upon entry to the Appointment Calendar the current month is shown with a little diamond in the bottom right-hand corner of the current day. Up to 30 appointments can be entered for any one day, months or years in advance. Appointments cause a message to be displayed at the bottom left-hand of the screen 9 minutes and then at each minute before the time. At appointment time the screen border flashes in multi-colour and a siren blares forth. A CDA is necessary for the Appointment Calendar to work properly and this CDA can be used to view the titles of the appointments for that day.

There are also a list of events that are supplied, only a few of these, Christmas Day, for example, are valid both in the USA and UK. You can also add events which can occur weekly, monthly or yearly. The monthly events can be set up for the second Friday each month, which just happens to be the date of MidApple Computer Club meetings!

Appointment Calendar doesn't like some ProDOS 8 applications, mainly communication programs, and it is possible to request that ProSel switch this facility off whilst in a ProDOS 8 application and then reconnect it upon return.

INFORMATION DESK:

This is a valuable little routine that catalogs ProDOS disks or folders and gives other very useful information about the files therein. Upon entry you will be asked for the device number followed by the Output mode and then the type of information. A typical screen is shown in Figure 9.

Figure 11 shows an example of an Information Desk screen.

OPTIMIZE VOLUME:

When ProDOS or GS/OS stores files it tries to store those files as a string of contiguous blocks to increase access speed. After a while, however, this cannot be achieved and files become fragmented. Every time the head has to move to another track time is wasted and in cases of very fragmented files this time can be noticeable. What the Optimizer does is to rearrange all the files so that they require the minimum access time. This is a complex operation that may take a lot of time and any problem could lead to a totally corrupted disk. Take a backup before starting. I've used this occasionally without any problems.

VOLUME REPAIR:

Very rarely, fortunately, it is possible for a file or the catalog entry of a file to become damaged. Volume repair attempts to fix these. As with the Optimizer it is a good idea to have a backup before proceeding. I've found this routine to be very effective on the odd occasion.

NUMBER CRUNCHER:

This module is a recent addition to the ProSel package and is a highly featured programmable 'Reverse Polish' calculator. The screen in Figure 10 shows the layout of the calculator and the definitions for the keyboard in that mode.

The screen shows the calculator in complex mode where each 'register' X,Y,Z and T and the 144 memory locations have real and complex parts!! The normal mode is accurate to 18 places. You can also switch between Hexadecimal and Decimal with a keystroke.

Once you have got used to the 'Reverse Polish' technique the Number Cruncher will be very easy and quick to use. The Number Cruncher has a separate manual and is fully programmable, programs can be developed with an inbuilt editor and stored as textfiles which are only limited in size by GS/OS! Number Cruncher has extensive graphing facilities using the 640 by 200 super resolution graphics mode and results may be formatted and sent to a printer, too. Almost 80 small demonstration programs are supplied with Number Cruncher to show off the more esoteric features of the module. Number Cruncher supports the Floating Point Engine (FPE) card and this is necessary for seeing some of the more complex plotting and graphic demonstrations.

SHELL:

This is an area of ProSel-16 that most users will never need to know about or use. It is present for two reasons. The first is that if ProSel-16 is ever in a position that it cannot read a screen file it will automatically invoke the Shell. From the Shell one can get to the Utilities by typing UTIL so that the necessary repairs may be made.

The second reason is that some users like command line processors like the Shell. The Shell is somewhat like Applesoft BASIC which leaves a blank screen with a prompt and flashing cursor waiting for some command to be entered. To aid memory one of the Commands is HELP which when typed shows the screen listed earlier in this article. Choosing COMMANDS from this list shows many of the Commands available. Commands are of two types:

1) Most available currently are 'internal' that is part of ProSel-16, such as COPY etc.

2) Others are EXE files stored in the folder referred to by the 6/ Prefix. You could add your own commands here if the necessary EXE files were written following Apple's rules for such files.

MODIFY PARAMETERS:

ProSel-16 has many features that are user adjustable and this is done through the modify parameters routine. Things such as to which slot you will print data on your printer and the codes necessary. The Appointment Calendar can be disabled for instance. You can setup prefixes that become the default when ProSel-16 is booted up. Also the colours of the screen, border, text, secondary colour and the inverse colour can be defined for the screens and many of the modules. There are many many other parameters that allow one to that allow one to customise ProSel-16; they are all clearly described.

EXCHANGE SCREENS:

ProSel-16 can have up to nine screens of which one may be permanent, the Exchange screens options allows one to switch to one of the others if you have any. The screen you have chosen remains permanent until you use Exchange screens to change it. The screens can be created and edited with the Editor.

There is another type of screen that can be created and edited by the Editor but these are temporary and the screen reverts back to the permanent one immediately after use. You can have as many of these screens as you like!

All screens allow one to use special keys that are described in the manual some of these are listed below, (Open-Apple key = OA-):

OA-TAB This toggles between the graphics and text versions.

OA-* Produces an Apple IIgs Desktop window, after loading the tools, which allows access to NDAs.

OA-A This invokes the Appointment Calendar directly or shows the main menu with the Appointment Calendar highlighted, depending upon the state of one of the parameters. All the other items in the main menu work in the same way; for instance OA-E goes to the Editor.

Number keys:

Keyboard - causes a listing of all the executable files and folders on the device number to be listed on the screen. Executable programs can be chosen in the same way as applications on a screen. Choosing folders produces a screen showing all the executable files and folders therein....

Key pad - Similar to the keyboard option only this time the screen for the folder pointed to by the Prefix number is shown. For example 6 on the key pad would show all the Shell external Command files, which can be executed.

Screen Blank: Originally ProSel-16 had a parameter to allow one to blank the screen after a certain period of time. That is still present but an optional slide show has been added which is controlled by another parameter. The pictures for the slide show should be stored in the prefix 31/. Very recently Glen Bredon has added a kinetic art show that draws random coloured lines all over then screen in pretty patterns. If you opt to have all three the slide show starts at the time you specify for the screen blank and then when that has finished the kinetic art show starts up. All these three routines stop 'screen burn'.

Bugs and other problems:

ProSel-16 has very few bugs and if they occur they are usually squashed within a few days as Glen Bredon posts updates at regular intervals on bulletin boards such as CompuServe. The only bug I have found with version 8.58 is that Block Warden (ZAP) will not allow one to examine files with only a single character name!

As far as I am aware ProSel-16 Backup/Restore will not work with AMR 3.5" drives but is fine with both Apple 3.5" drives and with all AE 3.5" drives with 800K diskettes.

If you want to use the Appointment Calendar with SoftSwitch marketed by Roger Wagner Publishing the Appointment Calendar CDA must be before the SoftSwitch CDA.

Some people wish to compare ProSel with the Finder to claim that one is better than the other. I don't do that. Both products are excellent and virtually bug-free. What ProSel-16 does is to give those Apple IIgs users who like the keyboard method of accessing information rather that the mouse to have an excellent alternative. The Finder comes "free" with your Apple IIgs and updates are free, too. That might be one reason why Apple IIgs computers cost so much? ProSel-16 on the other hand costs $60.00 but has many extra goodies to attract purchasers. If you like these goodies such as Backup/Restore and the Appointment Calendar but prefer the Finder then you can launch the Finder from ProSel-16 and then quit back to use those utilities!

Updates:

Updates can be made from bulletin boards such as CompuServe and TABBS. You can download the revision file but you will need an original version of ProSel-16, which is only read to decode the file you download. There is usually a text file indicating the changes that have been made, too. It is not unusual to find a revision every 10 days or so and most of these revisions have quite large enhancements together with any bug fixes. Although ProSel-16 is still evolving it is definitely not ever a beta version as bugs are extremely rare.

Another way to update is to send your original disk back to Glen Bredon with $10.00 + $5.00 for postage.

An even more convenient way is to send your diskette to Ken Dawson, our Beagle Buddie, who is licensed to provide ProSel upgrades. The cost here is £10.00.

I keep thinking that ProSel-16 must be near full maturity but Glen Bredon keeps adding new features; in the last few months the Number Cruncher, a huge module, and now a kinetic art show when the screen blanks and numerous small enhancements to other modules. In the first few days of 1991 Glen has done it again and added a text processor module.

The signs are, however, that maturity is close as Alan Finn of ClockTower

Lowest-ever pricing for an 800K 3.5" drive/card combo for //e or ||+.

Chinook CT-20c Hard Drive £549.95*

The only hard drive for the Apple //c. 20.5Mb of 68ms access ProDOS storage. Size 7x3x8.625", weighs <5lbs, and connects directly to the //c external drive port, (NOTE: //c must have the UniDisk 3.5/SmartPort upgrade ROM - to find out if you have it, order our "DOS Starter Disk" @ £4.00*, which will check & report if you have). A good buy if you ever intend changing to a IIGS, Mac, or IBM-PC, as the drive unit is industry-standard SCSI, and low-cost interface adaptors are available to use this drive on those or other SCSI-equipped computers.

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Master Works £75.00*

Bridget Software's bundle of Record Master (database), Letter Master (WP), and Graph Master (bar, line, pie & X-Y charts with mathematical functions). RM needs 48K, LM //ecGS, and GM 64K.

Apple IIGS System Software 5.0.2 £40.25

Updated system disks plus manual,

Apple IIGS System Software 5.0.3 £9.00*

(Disks only, no manual).

Much faster ImageWriter driver, a real ImageWriter LQ driver, and the usual bug fixes and feature enhancements.

Reasonably safe resource editing is now possible after an annoying bug in the Resource Manager was squashed. A clever enhancement is in the Standard File dialog that DeskTop applications use to select files; at the volume level, instead of using the tab key or disk button to step to each disk in agonising sequence, there is now a 'volumes' button that brings up a list of all disk volumes on line. You then open the volume of interest and proceed to locate your file. For those of you with "slow" volumes or many on-line volumes at once, this selection process is much more convenient than the old way.

BackGammon GS-12 £4.50*

Games for IIGS including backgammon, Othello, and Sub Battle. Also has a Mean-18 golf course.

Games GS-16 £4.50*

This disk contains several ProDOS-16 games, the best of which is a shareware program called "Bounce-It". It was written by John Tierney, and should you wish to use the program, you should forward the required $10 shareware fee direct to John. Bounce-It was inspired by an old Apple][game called "Little Brick Out", but the author has taken full advantage of the sound and graphics advancements in the IIGS. In Bounce-It you try to break as many bricks in a wall as you can by bouncing a ball towards them.

Agincourt and Medieval War are two war simulation games written by Douglas Whatley. You have infantry, cavalry, and archers at your command. Can you win the Battle of Agincourt?

Graphics GS-15 £4.50*

Contains twenty-two different Super Hi-Res (SHR) pictures. They include MAx Headroom, Creep-Show, Einstein, and Mount Fuji. The pictures are in uncompressed format. A program is also provided to view the graphics.

Sound GS-14 £4.50*

Contains "Sound.Studio", a program that allows you to play and manipulate digitized sound. SOUND.STUDIO is a stand-alone ProDOS-16 program written by Paul James with TML Pascal. Also included are 11 binary sound files including MGM Lion, scream, Freezel, and Game Over.

The disk also has eight songs constructed using Music Construction Set GS. They include Polish music, a Beethoven sonata, and several Beetles' songs. Music Construction Set GS is required to play these songs.

Music Studio Songs GS-13 £4.50*

Contains various songs for use with Music Studio GS by Activision.

Utilities GS-11 £4.50*

Contains several utility & graphics programs. TUF is a utility which will read and display most types of textfiles including AppleWorks and IIGS word processing files. FONTVIEW allows the user to display and print samples of $C8 fonts. BLU

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Figure 5

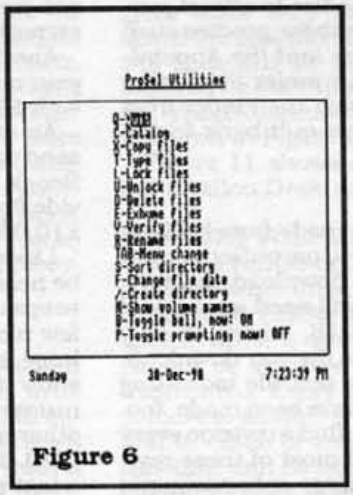


Figure 6

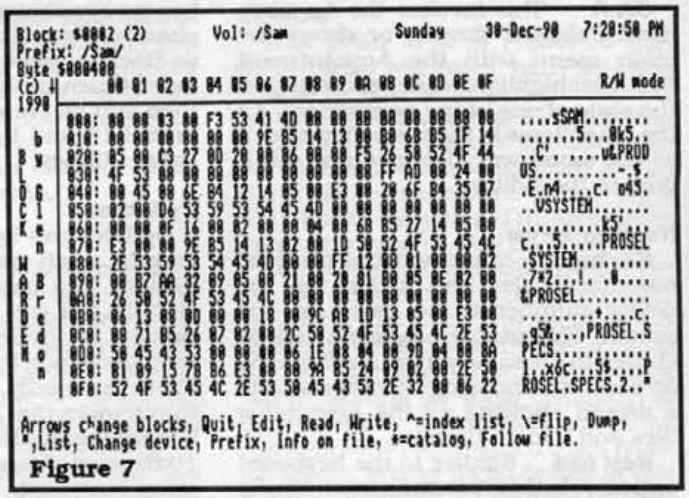


Figure 7

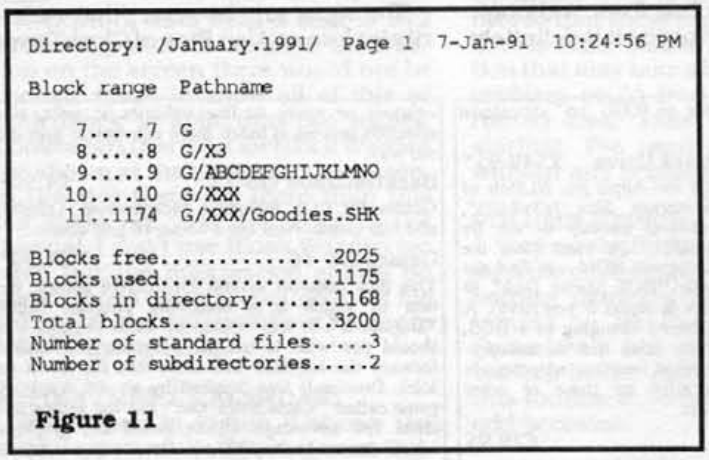


Figure 11

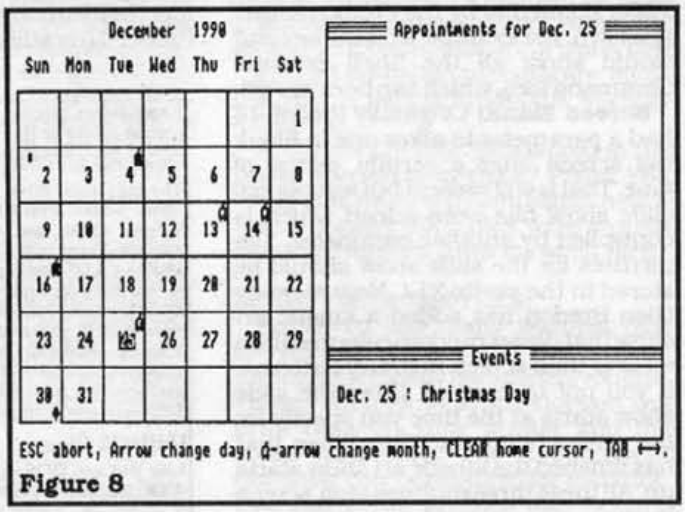


Figure 8

tells me that ProSel-16 will soon be issued as a package with a professional manual that befits such a professional program.

Conclusions

As a sophisticated program launcher ProSel-16 is not bad value and provides users with a keyboard/'text' based launcher as an alternative to the Finder with windows and mouse interface. Considering all those extras the price looks very good value, indeed. The Backup/Restore feature is probably worth $60.00 just by itself.

ProSel-16 is written by:
Professor Glen E Bredon
521 State Road
Princeton NJ 08540

ProSel-16 may be purchased directly from Glen for $60.00 plus $5.00 or from:

ClockTower
PO Box 1417
London N8 9PP
Price: 3.5" disk with textfile manual £42.00
Printed spiral-bound manual £ 5.00 approximately.

A2 Central
PO Box 11250
Overland Park
Kansas 66207
USA
Price: $60.00 with free surface shipping. Shipping by airmail may cost more.

Dave Ward

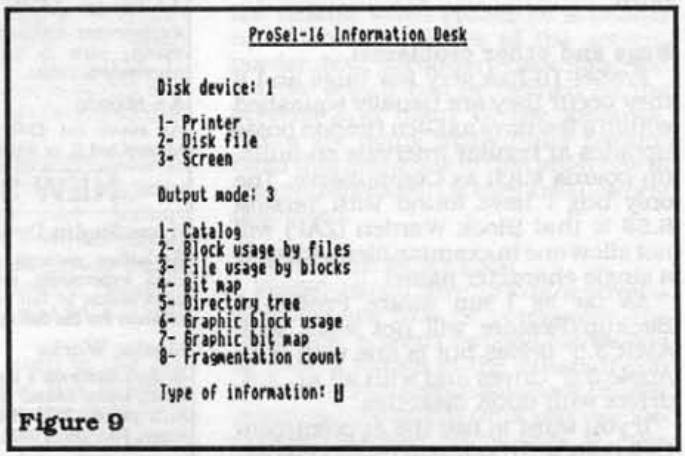


Figure 9

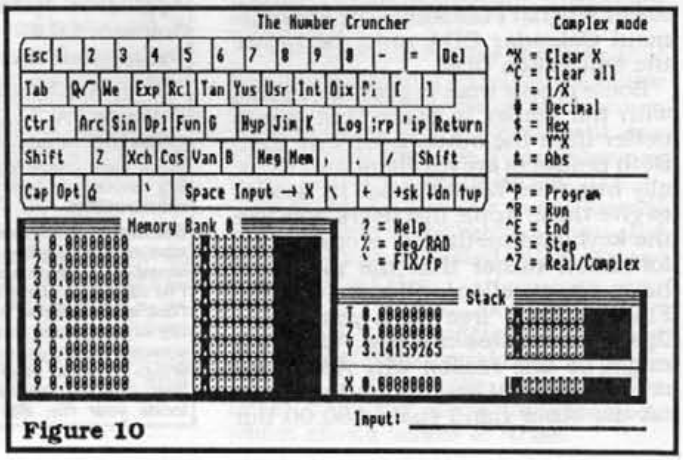


Figure 10

The Nibbler Speaks

❑ The problem with writing articles and things for Apple2000 is the long lead time that we have before you, the members, see the results of our (and your) labours. The December issue had been put to bed before we trooped off to man the stand at the MacUser show last November. Here we are in mid January writing for the February magazine about those events. You will all recall it was the tenth birthday of Apple2000 (neé BASUG) last November. Happily the birthday coincided with the show itself. The committee celebrated with a bottle of champagne and a magnificent cake baked by Mike Dawson. Just so you do not all feel left out we reproduce two of the photographs that Mike took to remember the occasion!

❑ I suppose the most expected news of the last month has been that Cirtech have stopped work on the Duet card. This was not unexpected as it would have been unrealistic to carry on with the production of such a card when the price of Mac's has fallen as far as they have.

The LC is now available from stock and with the new production lines at the Cork factory coming on stream five months early, we should see the Classic available again off the shelf very shortly.

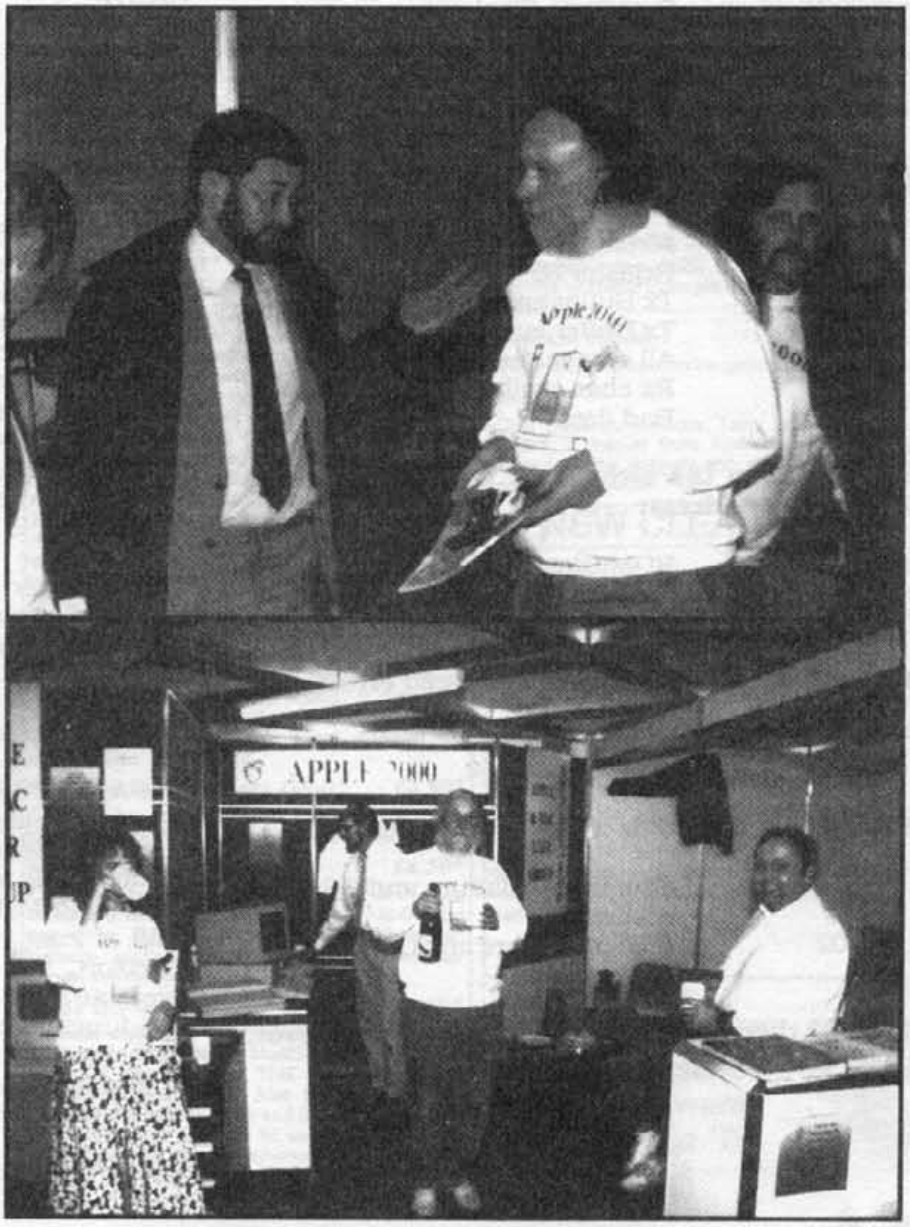
❑ You will see details on page 29 of the new CompuServe charges. Members of Apple2000 may join CompuServe by phoning 0800-289-378 and quoting their Apple2000 membership number. This will give them a free joining pack. If you are already a member, and know of someone who wants to join, you can get yourself $25 of free credit. Information is available online, or ask CompuServe in Bristol for Member Recommendation Program application forms.

If you are a Macintosh user and already on CompuServe, or wish to join the system, you should ask for a copy of CompuServe Information Manager for the Mac(CIM). This is the painless and quickest way of calling up Compuserve. File downloads are automatic and very fast. We shall be bringing you a full review in due course, but you can get a copy now. Cost is around $20 plus shipping either when you join or later on. CIM can also be used as a communications program, but lacks file transfer protocols for ordinary Bulletin Board systems.

❑ Speaking of comms and systems, you may well know already of PSS or the Packet Switch Stream network. This is the means whereby you can join the data network and call systems world wide. In fact you will use this system when you call CompuServe or Telecom Gold. Calling a specific system usually means a generic password that will only access a single system. You can however get your own password and call anything you like.

Until recently PSS was available only at speeds of up to 1200/1200 baud. PSS has now been expanded and simplified. The new name is Dialplus. If you have already got a PSS account you should get it converted without delay into a Dialplus account. The online charges are the same and there will be no charge for conversion. However the benefits are very great. You can call through Dialplus at speeds up to 2400/2400 baud and with MNP error correction.

To join Dialplus, if you do not already have an account, will cost you £60. The annual rental of your access number costs another £60. Charges within the UK are reasonable at £1.50 an hour cheap rate. Beware of calling anything



Apple IIGS: System Diagnostic Errors

Here's the currently available, though incomplete, list, with explanations, of error codes generated by the Apple IIGS when running system diagnostics for the Apple II Family (V1.0B1). (Press Control-Open-Apple-Option Reset to start the self-diagnostics test).

Apple IIGS error codes have the form AABBCCDD.

Test number results for AA

Error Code (AA)	*Test*
"RM"/01	Checksum
02	RAM Moving Inversions
03	Softswitch
04	RAM Address
05	FPI Speed
06	Serial I/O
07	Real Time Clock
08	Battery RAM
09	Front Desk Bus
0A	Shadowing
0B	Interrupts

If AA=06 then the error is for the serial test:

BB	*Meaning*
01	Register R/W
04	Tx Buffer empty status
05	Tx Buffer empty failure
06	All sent status fail
07	Rx char available
08	Bad data

If AA=03 then the error is for the RAM test and BBCC= the Address:

AA=01	ROM Checksum
BB=	Failed checksum
DD=1	Bad RAM

If AA=05 then there has been a Speed error:

BB=1	speed stuck slow
BB=2	speed stuck fast

If AA=08 then there is a Battery RAM error:

BB=01	address test failure and CC= bad address
BB=02	memory failure and CC = pattern, DD = Address

If AA=02 then there has been a Softswitches error:

BB=	Statereg bit
CC=	Read softswitch address

If AA=04 then there has been a Front Desk Bus error:

BBCC=	Bad checksum found
DD=01	FDB toolcode encountered a fatal error and no checksum computed

If AA=04 then there has been a Ram Adddress error:

BB=	failed bank No
CC=	failed bit

If AA=06 then there has been a Clock Test error with BBCCDD=not used:

DD=01	a fatal error occcurred after the test to within a second

If AA=0A then a problem with shadow register functionality:

AA=0B	Mega II and VGC capability of generating interrupts.
BB=01	VBL interrupt timeout
BB=02	VBL IRQ status fail
BB=03	1/4 SEC interrupt
BB=04	1/4 SEC interrupt
BB=05	–
BB=06	VGC IRQ
BB=07	SCAN Line

The Apple IIGS is designed to be used with the vast majority of Apple IIe hardware and software. However, there are some design differences that will cause some products to be incompatible with the Apple IIGS.

Some CP/M cards designed for the Apple IIe use non-Apple conventions on the I/O Select and Device Select lines in the expansion I/O slots. These cards are not compatible with an Apple IIGS.

There are several CP/M card that work on the Apple IIGS. Please note, though, that they MUST be run only when the Apple IIGS is in normal speed mode.

Manufacturer	*Card*
Applied Engineering	Z80
Advanced Logic Systems	Z Engine
MicroSoft	SoftCard
MicroSoft	CATS
Digital Research	any of the GoldCard series

The Apple IIGS is designed to be used with the vast majority of Apple IIe hardware and software. However, there are some design differences that will cause some products to be incompatible with the Apple IIGS.

When a RAM disk or ROM disk is used with ProDOS 8 and at least two disk drives are connected to the SmartPort, the IIGS maps the second (and third) drives into slot 2. This function will conflict with those multi-function cards manufactured for the Apple IIe which normally reside in slot 2. Since phantom slots are used by both the multi-function card and ProDOS 1.2, the two cannot be used in the same machine.

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continued from page 37

outside the UK, the charges in this case are made as a volume charge of around 0.7 pence per segment of data. This may not sound very much but a segment is only 64 characters or around a line of data. There are 24 lines to a standard screen and it does not take long to scroll in a screen of data which would cost about 17 pence. If you start to download a file at 2400 baud from CompuServe for instance, you will be passing 864,000 characters an hour. This is 13,500 segments. There are also segments going the other way as the download program acknowledges the transfer. It can cost over £90 an hour to be online if you start a download!

This massive cost of calling places like CompuServe through PSS is why I was so excited last year when CompuServe came to the UK. With the reduction in charges £10.15 an hour is quite a difference!

❑ Ken Dawson reports that he now has updates for Report Writer, TextTools and Telecomm. You should ring Ken for further details on 051-424-8974.

❑ If you are repairing a Mac or building one from scratch, you may well be having difficulties in getting hold of the necessary parts. We have been sent details courtesy of Jose Accino in Spain of a firm in California who specialise in such things. We have a HyperCard stack of their catalog sitting on TABBS. We shall also put this stack into the library in due course.

In the meantime for those of you without modems you can contact them through:

Micromat Computer Systems
7075 Redwood Boulevard
Bay #4
Novatao
CA 94947
USA
Tel: 0101-415-898-6227

❑ One of our members, Paul Warwick, has had an unfortunate experience and we relate the story told to us by Paul in good faith and without prejudice. We trust there are no other Malcolm Harveys' in Reading who might be confused for the particular man in this story.

About a year ago Paul sold a secondhand hard drive to a Malcolm Harvey of Reading. The hard drive was dispatched and a cheque received. All seemed to be well until Mr. Harvey complained the drive was not suitable for his needs. Paul had already cashed the cheque so agreed to send a new cheque back to him while Mr. Harvey agreed to return the drive. Paul never got the drive, and all solicitors letters were ignored. To cut a long story short, Paul has had judgment made against Mr. Harvey in the small claims court.

When the bailiffs went in to Mr. Harvey's house, they could find nothing to appropriate and were told Mr. Harvey had no money and was almost bankrupt. Paul was about to write the whole thing off as an expensive and bad experience when the Police informed him that they had reason to call on Mr. Harvey and found he had plenty money and lots of computers in his house. It appears that Mr. Harvey had been in the habit of buying things without paying for them. Paul is still trying to get his money back. If you are approached by this man have nothing to do with him.

❑ Late news just in from CompuServe sets the UK price of CIM for the Mac at £12.50 plus £3 Post and Packing. This must be an absolute snip at that price!

The Nibbler

compresses and uncompresses files for modem transmission. There are other utility programs on the disk.

SHRCONVERT GS-10 **£4.50***

Contains two versions of SHRCONVERT. v1.1 can convert Apple II Hi-Res & Double Hi-Res; Apple IIGS PIC, PaintWorks, Pack Byte and Eagle; Atari-ST PI1, PI2 & PI3; Commodore-64 Doodle, KoalaPaint and Print Shop; Macintosh Screen Maker and MacPaint; and Amiga IFF & RLE format graphic files to Apple IIGS PIC, PaintWorks, Pack Byte or Eagle format graphics.

v2.0 supports a number of other formats including Apple Preferred format. V1.1 is public domain, while v2 is shareware, and the author requests a licence fee from whomsoever tries the program and decides to continue using it. Both versions of SHRCONVERT require a mouse, and v2 requires 512K & ProDOS-16 v1.3 or higher.

Pyware Music Writer

The most user friendly & powerful //ecGS music software available. The system offers extensive use of the Ensoniq sound chip, a wide variety of symbols, complete control of symbol placement, automatic barring, automatic stem changing during transposition, automated error checking & more... The program provides fast input & editing and supports copy, cut, paste, invert & transpose. It uses a Macintosh style interface with pull-down menus & icons. It supports Apple ImageWriter or LaserWriter printers, & can print any part, range of parts, or score formats. MIDI in and out are also supported. Three levels of the Music Writer are available for the IIGS, and two only for the //e & //c.

PyWare Music Writer LE **£119.00***

For IIGS only, designed for the beginning music student or music hobbyist. It is limited to 3 staves and is great for single part writing. It contains a basic music theory guide along with the manual so you may learn basic music theory, notation and composition.

Mean-18 Golf Courses GS-02 **£4.50***

This disk has six new courses, and you must own a copy of Mean-18 by Accolade to use them.

Mac.to.GS Transfer GS-03 **£4.50***

Converts MacPaint pictures to IIGS SHR, and includes 3 SHR slide show programs. GS-03 also has seven DAs which include a clock reader, memory usage displayer, disk information displayer, and delayed SHR screen saver.

Fonts GS-04/05/06 **each £4.50***

Contains eight $C8 type fonts for use with most IIGS programs, such as MultiScribe GS, BeagleWrite GS, GraphicWriter, TML Pascal, Top Draw, BeagleDraw, and others. Also may be used with TimeOut SuperFonts on //e and //c, as well as IIGS. These $C8 fonts may also be used with Publish-It! after conversion using an appropriate utility. (5.25" copy of these fonts costs £4.00*).

Pirates! **£29.95**

256K IIGS game from MicroProse, - does not work with ROM 03.

The Immortal **£29.95**

New Electronic Arts game for 1Mb IIGS with joystick. An action game based loosely on the dungeon & dragons theme.

Pipe Dream **£29.95**

Lucasfilm 512K IIGS fast-action strategy game.

QuestMaster:
The Prism of Heheutotol **£29.95**

768K GS fantasy role playing game from Miles Computing.

Hostage: Rescue Mission **£24.99**

Mindscape's new 512K IIGS game in which you attempt to rescue hostages from an embassy held by terrorists.

Captain Blood **£29.95**

512K IIGS science fiction game from Mindscape.

Rastan **£24.99**

1Mb IIGS game from Taito in which you are Rastan, a warrior from Medieval times who goes around killing dragons and other monsters. Great graphics & music.

NEW CLEARANCES

MacPuter // **£99.95***

Complete accounting system for 128K //ecGS. Provides sales, purchases, and general ledgers; cashbook; management accounts; invoicing; cash flow; VAT returns, and backup. Runs on 5.25 or 3.5" systems. (Was £224.25).

MacPuter Pro **£149.95***

As MacPuter // but with the addition of stock control and invoicing from stock. Requires a Pascal-compatible hard disk or 3.5" drive. (Was £454.25).

Laser-128 Combo **£399.95***

Exceptional value! One only, brand-new, 1Mb //c compatible computer, complete with mono monitor, and 1Mb RAM installed. Absolutely perfect for AppleWorks

MGA SoftCat AD FOUR
Tel: 0797-226601 [fax: 226721]
prices include VAT
*-prices include p&p
& where two prices shown, the lower price is for Apple 2000 members ONLY
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sensible software since '79

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WORD PROCESSING

WP APPLICATIONS

MacWrite II (powerful yet straightforward WP) £155.00
Microsoft Word 4 (feature and function laden WP) £189.00
MindWrite Express (develop in outliner then use integral WP) £155.00
Nisus 3.0 (hot WP with graphics, GREPS, macro language) £220.00
Taste (new low cost entrant to a crowded WP market) £95.00
Vantage (full featured DA especially good at converting DB files) £57.00
WordPerfect (mac version of famous PC WP) £195.00
Write Now 2.2 (very fast straightforward WP a doddle to use) £115.00

WP UTILITIES & AIDS

Acta Advantage (stand alone and DA outliner) £95.00
Correct Grammar (straightforward quick grammar checker) £55.00
End Note (bibliography database essential for factual writing) £95.00
End Note Plus (new and much faster version) £150.00
Expressionist 2 (create accurate equations from this DA) £85.00
Grammatik (comprehensive detailed grammar checker) £79.00
Inside Information (brainstorming tool associates words/ideas) £79.00
MathType (sophisticated intuitive equation constructor) £125.00
Thunder 7 (competent spelling checker even works in Quark) £65.00
Wordfinder (ubiquitous Thesaurus) £39.00

DATABASES

RELATIONAL

4th Dimension (King Kong) £495.00
Double Helix II (easier relational DB for starter programmers) £350.00
FileForce (much easier to use DB solutions upgradable to 4D) £255.00
Foxbase+Mac 2 (fast DB with great interface reads dBase) £390.00
Omnis 3 Plus (ancient DB still works is cheap has many apps) £175.00
Omnis 5 (now much faster and more Mac-like interface) £425.00

FLAT

DAtabase (flat file DA for quick convenient access to data) £75.00
FileMaker Pro (the best flat file DB ever - everyone needs it) £195.00
Panorama (flat file DB, very powerful and very quick) £225.00

DEDICATED

C.A.T. 3.0 (salesman's dream includes contacts activities time) £325.00
DynoDex (remarkable tool for managing printing contacts) £65.00
QuickDex (if you don't have it you aren't living - DA rolodex) £35.00

BUSINESS

SPREADSHEETS

Microsoft Excel (market leading spreadsheet for the Mac) £189.00
WingZ (amazing spreadsheet includes charting and script) £245.00

SPREADSHEET BASED SOLUTIONS

101 Macros for Excel (shows off Excel's macro language) £49.00
Business Plan Toolkit (Excel budgeting and forecasting) £69.00
Sales & Marketing Toolkit (comprehensive forecasting) £110.00

BUSINESS GRAPHS & CHARTS

Cricket Graph (original colour graphing tool for the Mac) £120.00
DeltaGraph (powerful flexible graphing tool) £105.00
KaleidaGraph (highly rated DS graphing package) £149.00
Wall Street Investor (portfolio management analysis charting) £395.00

SIMULATORS

Extend (powerful simulator with inbuilt language) £320.00
iThink (powerful straightforward simulator from Stella folk) £325.00

INTEGRATED SOFTWARE

Desk (WP DB Spreadsheet Comms Paint Draw Secretary) £250.00
Microsoft Works 2 (WP DB Comms Draw Spreadsheet) £159.00
Microsoft Office (Excel Word PowerPoint File -bundle) £425.00
RagTime 3 (business DTP with integrated live spreadsheet) £350.00

PROJECT MANAGEMENT

KeyPlan (develop in outliner then zap you are in critical path) £250.00
MacProject II (powerful yet straightforward and flexible) £325.00
MacSchedule (less heavyweight project scheduling) £140.00

ACCOUNTING

Access Classic accounts (cashbook for home, small biz) £175.00
Access Bookeeper (complete trading accounts, upgradeable) £445.00
MacMoney 3 UK (unbeatable home accounts and small biz) £75.00
Invoicelt UK (invoicing add on for MacMoney) £65.00
Ritz (powerful and comprehensive accts for smaller business) £340.00
Path (best complete accounts package for the non accs literate) £345.00

PRESENTATION

Cricket Presents (established presentation software) £275.00
More III (extensive outliner/text/presentation capability) £295.00
Persuasion 2.0 (high end presentations with outliner) £365.00
PowerPoint (powerful intuitive easy presentations) £189.00
Visual Business No.5 (incorporates graphics/presentations) £299.00

£35.00
These are 80 nanosecond simms which will work in all current Macs including si and Classic.
SIMMs £35.00 per Mb.
Mac IIFX £200.00 for 4Mb.
Macintosh Portable Call.
MEMORY

GRAPHICS

PAINT & DRAW

Canvas 2 (high end draw/paint package very good at layers) £195.00
Desk Paint 3.0 (very good DA paint and draw package) £125.00
MacDraw II (easy to use yet powerful draw package) £275.00
MacPaint II (a classic in its time now includes colour) £89.00
MacCheese (super cheap 32 bit colour paint tool) £69.00
MasterPaint (paint program with unique texture tools) £57.00
MasterColour (as above but in colour) £115.00
Pixel Paint 2.0 (powerful colour paint program) £235.00
Pixel Paint Professional (32 bit, the rest as above) £375.00
SuperPaint (classic paint and draw software) £120.00
Studio 1 (unique animating paint package) £75.00
Studio 8 (full featured high end colour paint program) £255.00
Studio 32 (32 bit version of the above) £415.00
UltraPaint (knockout colour paint and draw program) £140.00

DARKROOM & RETOUCHING

ColourStudio (powerful retouching with good paint tools) £795.00
Digital Darkroom (monochrome photo retouching) £250.00
Image Studio (monochrome photo retouching) £240.00
PhotoShop (current king of the photo retouching packages) £695.00

CAD & MODELLING

Claris CAD 2.0 (straightforward powerful CAD) £555.00
Dreams (good value CAD with many high end features) £249.00
MacRenderman (the best rendering tool for 3D images) £545.00
MiniCad (maxi CAD performance) £495.00
Model Shop (3D solid object modelling tool) £375.00
StrataVision 3D (24 bit photo realistic rendering) £295.00
Swivel 3D (best tool at modelling objects with moving parts) £295.00
Swivel 3D Pro (now supports 24 bit colour) £375.00
Super 3D ver. 2 (flexible colour 3D tool) £299.00

POSTSCRIPT GRAPHICS

Freehand (postscript drawing with text manipulation) £365.00
Illustrator 3.0 (power PostScript with new text/layout ability) £375.00
Streamline (best PostScript auto tracing tool) £299.00

CLIP ART

Publishers Resource (10MB set of UK origin PostScript art) £150.00
MapArt EPSF (world maps in PostScript format) £95.00
MapArt Paint (world maps in MacPaint format) £45.00
PostScript Maps UK (Counties roads towns, London postal) £95.00
PostScript Maps Europe (Cities rivers countries) £95.00
Comic People (extra people and backgrounds for Comic Strip) £29.00
WetPaint (best bitmap art available - 1000's of images) ..... each £49.00
"Classic Clip Art", "Animal Kingdom", "Printers Helper", "Old Earth Almanac", "Industrial Revolution", "For Publishing", "Special Occasions", "Island Life", "All the People".

DESKTOP PUBLISHING

DTP APPLICATIONS

Comic Strip Factory (unique comic publishing tool) £49.00
DesignStudio (high end DTP program) £495.00
FrameMaker (pro publishing also on UNIX and NEXT) £750.00
Multi Ad Creator (specialised DTP for laying out adverts) £675.00
PageMaker 4.0 (one of the two heavy hitters) £495.00
Personal Press (new baby brother for PageMaker) £195.00
Publish It (powerful DTP package on a budget) £250.00
Publish It Easy (surprisingly good DTP on a real budget) £125.00
Quark Xpress 3.0 (the other of the two heavy hitters) £495.00
Quark Xtras (goodies that add to Xpress' features) £69.00
Ready,Set,Go 4.5 (full featured forerunner of Design Studio) £245.00
SmartForms Designer (best tool for developing forms) £275.00

DTP AIDS & FONT MANIPULATION

The Curator (collates/displays images/graphics on hard disk) £90.00
DTP Advisor (information on the ins and outs of DTP) £59.00
LetraStudio (powerful headline font manipulation software) £385.00
Pre Print (colour separates your PageMaker output) £365.00
Smart Art 1,2,3,4 (PostScript FX (needs PS printer)) ..... each £99.00
SuperGlue 2 (transfer, view and paste incompatible documents) £85.00
TypeStyler (manipulates PostScript fonts into Headline fonts) £155.00
TypeAlign (draw a wiggly line and type text needs ATM) £79.00

FONTS

TYPEFACES

Adobe Fonts ..... call
ATM Plus Pack (Adobe versions of rest of the Laser fonts) £130.00
Adobe Type Manager (THE essential DTP program) £69.00
Adobe Type Set (collection of Headline fonts) £79.00
Fraction Fonts (a Serif and San Serif font for any fraction) £45.00
Fluent Fonts (collection of bit mapped fonts) £35.00
Fluent Laser Fonts (79 excellent Ps fonts) £130.00
Monotype Fonts (much of the famous library is now on the Mac) ..... call
Network Font (design your own Networks with Netfonts) £75.00
Technical Fonts (science, electrical and Logifonts) £95.00
World Class Fonts (great bitmap collections) ..... each £49.00
"The Originals", "The Stylish", "The Giants" and "The Triples" great for non PostScript printers.

FONT FOUNDRIES & UTILITIES

Adobe Type Reunion (if you use Adobe fonts you need it) £45.00
Art Importer (turn your PostScript art into a PostScript font) £95.00
FontStudio (fab full featured font foundry from Letraset) £450.00
Fontastic Plus 2 (classic bit map font foundry) £65.00
Fontographer 3 (most widely used PostScript font foundry) £295.00
MacKern (kern your sets of fonts) £69.00
Metamorphosis (converts Type 3 to 1 and creates outlines) £95.00

MULTIMEDIA

HARDWARE

ColourSpace II (8 bit NuBus PAL & RGB card) £1795.00
ColourSpace FX (special effects in conjunction with above) £2650.00
Neotech Image Grabber (manipulate video images) £1150.00
VideoLogic DVA4000 Kit (new multimedia card & software) £1895.00

SOFTWARE

FilmMaker (high end multimedia animation package) £695.00
MacroMind Director (key multimedia tool) £535.00
MediaMaker (edit it all into a story for recording onto video) £475.00
MediaTracks (record, edit and playback screen sequences) £185.00

PC COMPATIBILITY

Access PC (read PC files direct from floppy) £79.00
DOS Mounter (same as above) £69.00
DOS ReaDA (DA that allows Mac to read and write to PC disks) £29.00
LapLink 3.0 (powerful serial link translates between Mac/PC) £120.00
MacLink Plus (popular Mac/PC link with100's translators) £135.00
MacLink Plus Translators (as above without the cables) £125.00
Soft PC Mac OS (amazing 8086 CGA emulation for big Macs) £250.00
Soft PC 286 with EGA (add on to Soft PC above) £135.00
Tops Flashcard (LocalTalk card for PC works with Tops DOS) £110.00
Tops DOS 3.0 (PC version of Tops for Apple networks) £125.00

COMMUNICATIONS

COMMS SOFTWARE

MicroPhone 3.0 (acclaimed comms pack with user icons) £210.00
Vicom Connect (famous UK package easy to use yet powerful) £140.00
Vicom Multiterm (a bigger brother) £225.00
Versaterm Pro (classic terminal emulation Mac to mainframe) £180.00

COMMS HARDWARE

TelePort Modem (a new price level for 2400 modem) £150.00
TelePort Fax software (turns above into 9600 out only fax) ..... £call
WS3000 Modem (old faithful 1200 BAUD modem) £235.00
WS3000 V22 BIS (old faithful 2400 BAUD modem) £295.00
Courier HST 9600 baud (fast modem at good price) £595.00
Tricom Tornado 9600 (unique fast accelerates up to 40 000) £895.00

NETWORK SOFTWARE

Carbon Copy Twin Pack (remote access and file sharing) £220.00
DataClub (new pretender to Tops crown starts as 3 pack) ..... from £169.00
In/Out (maintain movements of staff in organisation) £210.00
Flash (another network file sharer - must be a flash flood) £145.00
Microsoft Mail Server (classic powerful E-Mail) £185.00
Microsoft Mail 10 User (works with above) £395.00
QuickMail 2.2 10 User (powerful flexible extendable E-Mail) £325.00
TopMail Unlimited User (simple budget E-Mail works a treat) £95.00
Timbuktu 3.0 (remote access software for networks) £85.00
Timbuktu Remote (remote access software for modems) £120.00
TOPS 3.0 (classic file sharing software without dedicated Mac) £145.00

HARDWARE

INPUT DEVICES

Cordless Mouse (look Ma no tail ....) £89.00
Infra Red Mouse (very reliable, no moving parts) £69.00
Joystick MacPlus £45.00
Joystick Mac SE or II £59.00
Kurta Graphics Tablet ..... from £295.00
Wacom Graphics Tablet (pressure sensitive) ..... from £550.00
MacRecorder II (classic cult sound digitiser with software) £165.00
Voice Digitiser (as above without sound edit software) £95.00
VoiceLink (new sound digitiser voice annotation, messaging) £175.00
Voice Navigator II (most sophisticated voice recognition yet) £495.00

MAC TO TAKE AWAY

Agenda 32K (pocket size free form database excellent Mac link) £155.00
DIP Pocket PC (pocket size DOS PC with QWERTY WP spread) £160.00
Outbound (turn your Plus or SE into a portable) ..... from £1750.00
Psion 400 (full size keyboard and screen GUI with mousepad) £645.00
Z88 MacLite (classic in its time great Mac link WP spread) £295.00

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Many games do not work on the Ci, FX, Classic, Si, LC and Portable

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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.

MacLine

MacChat

Norah Arnold looks at the latest Macintosh developments and product news.

Record entries for Young Software Designer Awards 1991
Blyth Software has already received a record number of entries for its 1991 Young Software Designer Awards. The aim of the awards is to recognise and promote excellence in software design and to date over 90 students from universities and colleges up and down the country have registered their entry with Blyth Software. Response to the competition has been such that the Company is also inaugurating a special Open Category.

"We are delighted with the level and quality of applications so far," said Mr. David Seaman, Blyth Software's Managing Director.

"Strictly speaking the awards are for people in full-time education, but since we are getting entries from non-students - including some from as far afield as Africa - we felt the right thing to do was to include a new Open Category in the awards."

The imagination and scope of the applications is also astonishing, ranging from a stock control system used in the building of narrowboats to a genealogical database and from a surgeon's medical records system to a Scout troop management system.

Judging takes place at the end of March, 1991, so there is still plenty of time for people to enter, and the presentation of the awards will be held at the Oxford Schools' Science and Technology Centre at Oxford University on 16th April 1991.

Memorial Award
This year Blyth Software is also presenting a Bursary Memorial Award in memory of Paul Wright, the founder and former chairman of the Company who died in September this year.

The Bursary is worth £2,300 and will be used to give the winner the opportunity of carrying out a years post-graduate research or other academic work at the end of his or her degree course. It will go to the student whose application has most capacity for future development.

Once again the awards are being jointly sponsored by Tulip Computers UK, whose prize of a Tulip 386sx is for the "best presented application" and AppleCentre (West London) who prize is a Macintosh Plus for the "most original application".

Blyth Software, based at Mitford House near Saxmundham, Suffolk, is a developer and international vendor of single and multi-user Omnis database software for the Apple Macintosh and IBM range of personal computers.

For further information please contact:

Blyth Software Limited
Debbie Charman
(0728) 603011

APPLE announces "PLUG & PLAY" Ethernet product family
Apple Computer UK Ltd have announced a family of products that brings traditional Apple™ Macintosh™ simplicity to high-speed, industry standard Ethernet. With their ease of use and low cost, the new "plug and play" networking products will equip a much broader range of Macintosh users with the capabilities and benefits of Ethernet.

"These products mark an important milestone for Apple's networking strategy," said Steve Everhard, Apple UK networking and communications marketing manager. "We have simplified the use of Ethernet and increased network reliability. We are also offering new affordable options, and as a result, Apple has become the first vendor to make the value of Ethernet readily available to mainstream users."

The new product family includes the Apple Ethernet LC Card for the Macintosh LC computer and the Apple Ethernet NB Card for Nubus™-based Macintosh II computers. The Apple Ethernet LC Card provides an affordable high-speed networking solution for the low-cost Macintosh LC computer. The Apple Ethernet NB Card is an intelligent Nubus card for the Macintosh II family of computers, including the new Macintosh IIsi computer. Third-party companies will be providing compatible solutions for other Macintosh computers, such as the Macintosh Classic.

To complement the cards, Apple is introducing the Apple Ethernet Cabling System which includes three media adapters to connect the cards to any industry standard Ethernet media. The Apple Ethernet Thin Coax Transceiver supports thin coaxial cable (10BASE2) and provides a completely user installable network. The Apple Ethernet Twisted Pair Transceiver is designed to connect to a network using unshielded twisted pair cabling (telephone wire). It supports any IEEE 802.3 10BASE-T compatible hub. The Apple Ethernet AUI Adapter connects to any media type that uses the standard Attachment Unit Interface (AUI) such as thick coax and fibre-optic cables.

The Apple Ethernet Thin Coax Transceiver is self-terminating. It contains a built-in circuit that automatically terminates the end of the network without the need for a user-supplied terminator. In addition, Apple's Ethernet Thin Coax Cables are also self-terminating. A network built using these cables eliminates the disruption that occurs if a user adds or removes a computer from the network and leaves the coax cable disconnected. Traditionally this situation requires a lengthy search for the problem using expensive network analysers. With Apple's self-terminating thin coaxial cables, the network is left neatly

divided into two fully operational networks, thus making it easy to locate the disconnection.

The new Apple Ethernet products are compliant with the IEEE 802.3 standards and can be used in any existing Ethernet environment including those running AppleTalk, DECnet, or TCP/IP and are compatible with all existing applications programs such as electronic mail and databases.

The Apple Ethernet LC Card, priced at £112, will begin shipping immediately. The Apple Ethernet NB Card, priced at £227, will begin shipping in May 1991. The Apple Ethernet Thin Coax Transceiver, priced at £98, will begin shipping immediately. The Apple Ethernet AUI Adapter, priced at £98, will begin shipping in June 1991. The Apple Ethernet Twisted Pair Transceiver, priced at £98, will begin shipping in May 1991.

Edinburgh University's CALL Centre

Do you work with learners who have difficulties with writing, reading, drawing, person to person communication? Do you need to know more about how new technology may be able to help these learners? Do you need to understand more fully the processes involved in assessing such learners...to see if and how new technology may be helpful..? If the answer to any of these questions is yes, you may be interested to hear that for the last 18 months, Edinburgh University's CALL Centre has been developing a Hypercard based training and information resource - "Microtechnology and Disabled Learners" - which will become available in the late Spring of 1991 and which will help you to address your training needs in this area.

The resource will be free of charge (apart from postage/packing, media costs/handling charge). During its eleven year existence, the CALL (Communication Aids for Language and Learners) Centre's multidisciplinary team has worked with over 500 learners of all ages providing assessment, training and onward support. The development of this new training and information resource will enable it to share what it has learned with a wider community. For more information, contact us on our AppleLink address CALL.Centre

Phil Odor, Liz Sutherland, Amy Joss, Emma Scriven.

AT&T and Apple Announce a Specification for Accessing AppleTalk from UNIX UNIFORUM

AT&T Computer Systems and Apple Computer, Inc. have announced they have developed a specification that will standardize the access of AppleTalk® networking protocols from AT&T's UNIX® System V Release 4 operating system. Using the specification, software developers will be able to create AppleTalk networking application programs that run on UNIX systems and perform file sharing, printer sharing, electronic mail, or client-server applications. Application programs written according to the new specification can easily be ported by a developer from one vendor's UNIX system to another vendor's UNIX system.

According to Randy Battat, Apple's vice president of worldwide product marketing, "This AppleTalk specification is important to both Macintosh users, as well as users and vendors of UNIX systems. The specification will promote the development of AppleTalk application programs, which will allow Apple's customers to access information on UNIX systems in the same consistent manner in which they access information on servers in other environments."

AT&T has already implemented the AppleTalk application programming interfaces (APIs) described in the new specification in its StarGROUP® Server for Macintosh Clients, which is part of AT&T's StarGROUP LAN Manager Server system. The StarGROUP Server for Macintosh Clients will begin shipping in February, 1991.

Bill O'Shea, AT&T Computer Systems', vice president of systems marketing and development said, "We worked with Apple to develop these APIs because they are another essential step toward meeting the customer's need for interoperability. Our commitment to open, standards-based networked computing, gives the customer freedom on the desktop." O'Shea continued, "For example, by using our StarGROUP LAN Manager Server, a Macintosh user can transparently share files, peripherals and mail with other computer users running DOS, UNIX, or OS/2 operating systems – without sacrificing their personal preference for Macintosh."

Apple will implement the AppleTalk APIs in their next release of the Portable AppleTalk source code, which Apple licenses to developers under the AppleTalk Licensing Program. Existing AppleTalk source code licensees will automatically receive the updated source code. The AppleTalk Licensing Program, established in June, 1990, is part of Apple's goal to extend AppleTalk to all major computing environments. The AppleTalk Licensing Program makes it easier for mainframe and minicomputer manufacturers, as well as networking companies, to offer a comprehensive set of network services that are compatible with the millions of Macintosh personal computers networked today.

Pacer Software, Inc. is an AppleTalk networking software developer that has completed ports of the AppleTalk protocols to several UNIX systems including those from Hewlett-Packard, Digital Equipment Corp., Sun Microsystems, and Santa Cruz Operations. Pacer's first release of the new UNIX System V Release 4 AppleTalk APIs will be offered on the NCR System 3000. Pacer also develops and licenses AppleShare-compatible file and print servers for UNIX systems.

Garth Conboy, president of Pacer Software, stated, "We are committed to the new APIs because they make it so much easier for networking applications to be supported across various UNIX platforms. Our current System V Release 4 development incorporates these APIs and will result in common portable AppleTalk software that will be available from both Pacer and Apple." AT&T and Apple will continue to work together on enhancing the APIs described in the specification while ensuring their consistency. The AppleTalk specification will be distributed by both companies beginning in second quarter of 1991.

For more information contact: Brooke Cohan Apple Computer, Inc. (408) 974-3019 Curtis Panasuk Regis McKenna Inc. (408) 974-3886 Don Ferenci AT&T Computer Systems 201) 898-3748

Apple at BETT'91

Apple Computer UK at the British Education Training and Technology Exhibition at the Barbican.

Apple Exhibits at BETT'91

Visitors to the Apple Computer UK stand at BETT '91 were offered a variety of exciting experiences on their tour around the stand. The opportunity to explore Planet Earth, manage a nature reserve, be resident at Honeypot Lane or act out Shakespeare's Twelfth Night were all possibilities.

With sales of the Apple™ Macintosh™ Classic and LC personal computers surpassing all expectations, the education price of the new machines is allowing many schools and colleges to experience the advantages of the Macintosh.

"Educationalists have been unanimous in their positive response to the new Macintosh Classic, LC and IIsi computers," commented schools marketing manager, Martyn Lowry at the show. "Together with the steady progress of the Apple Schools' Initiative and the Renaissance Project which involve many UK educationalists and students, we continue to strengthen our links with the education community throughout the UK."

This year's Apple stand focuses on use of the Macintosh in three key areas: in administration, learning and teacher productivity. A strong range of administration solutions which are affordable and easy to use are profiled on stand, designed to ease the growing administration requirements placed on schools.

The wide selection of dedicated hardware and software systems and tools include an aid for National Curriculum testing and assessment which removes the need for manual entry of information into a computer. The 'Desktop Optical Mark Reader' from Omtech* enables the user to scan information into the Macintosh, and is already being successfully tested in the CATS evaluation project in Essex for Key Stage III of the National Curriculum.

Other strong administration solutions include MacSchool*, an integrated school administration package featuring a student information system encompassing attendance, marks and reports, and a timetabling package called MacSyllabus*.

Apple's continuing commitment to compact disc technology is shown in the launch of two new curriculum modules for Ecodisc CD-ROM* - the 'real life' simulation on compact disc of a wildlife sanctuary in Devon. The latest modules, developed by educationalists, are community politics and environmental science and are available from ESM*.

Further advances continue to be made by Apple's collaborative multimedia venture, the Renaissance Project*. Innovative new CD ROM studies to be released to education next month are demonstrated on stand. Specifically, the completed 'Planet Earth - Gaia Library'* project, a CD ROM based ecological guide and set of resources to Gaia theory, and the Shakespeare Disc*, an ambitious guide on Twelfth Night and Shakespeare's world for English studies. The Renaissance team includes leading educationalists who joined forces with Apple in late 1989 to research and develop multimedia tools for learning and training.

Connectivity remains a key priority for Apple education users. Last week new 'plug and play' Ethernet networking products were released - allowing education users to set up simple and affordable networks, building on their existing hardware investment and Macintosh base.

A strong set of applications for primary school use will be demonstrated on stand, including Honeypot*, a stimulating computer program developed by RESOURCE to support teachers in meeting the demands of the National Curriculum. Honeypot is a set of software and booklets for use across all areas of primary technology. Logo Writer* for the Macintosh will also be displayed on stand.

Apple's schools marketing manager, Martyn Lowry, commenting at the start of the show said: "Apple enters 1991 with more administration and networking solutions, more software to deal with student and educator needs at all levels, and an entry level price of £490 (excluding VAT) for educationalists with the Macintosh Classic."

"We believe the strengths of the Macintosh platform for educationalists is now indisputable," he added.

For further information on Apple Computer, Apple products and projects, please contact: Zoë Smith/ Fiona Rice or Judith Coley/ Martyn Lowry Apple Computer UK Ltd Tel: 071-402 3355 Tel: 081-862 3028

For further information on other products mentioned:

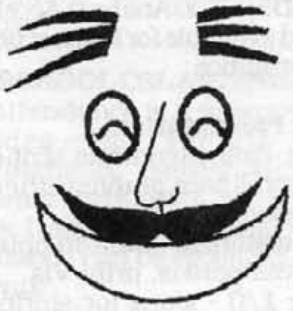
- Renaissance: Shakespeare disc (Graham Howard, Coventry Polytechnic, tel: 0203 631313 ext 8525)
- Planet Earth Gaia Library disc (c/o David Riddle, King's College tel: 071 733 2166),
- MacSchool (AppleCentre Kidderminster, tel: 0562-822222)
- Omtech (Doug Kennedy at Callhaven, tel: 071-410 9191)
- Resource (Tony Kiddle, tel: 0302 340331)
- ESM (tel: 0223 65445)
- Logo Writer (Mike Doyle, tel: 0756 794601)

The P.O.E.M.

Desktop embroidery on the Apple Computer UK stand at the BETT Exhibition at the Barbican.

MacSolutions (U.K.) Limited announces The P.O.E.M. The first desktop embroidery machine!

The P.O.E.M. or Personal Original Embroidery Machine, developed by Aisin Seiki Limited of Japan brings both design and output of original material to the desktop for the first time.



Whether the design is created in MacEmbroidery, the HyperCard based interface for the P.O.E.M., or taken from a disk of P.O.E.M. Clips, high quality clip art designed for the P.O.E.M., the finished embroidery is always of professional standard. Be sure to ask for your free demo disk!

The P.O.E.M. has major implications for the educational market, where it offers a very viable choice for use within the CAD/CAM requirement of the National Curriculum.

The P.O.E.M. was shown in Europe for the first time at BETT on the Apple stand, B44A, and retails for £750.

An innovative peripheral for your Mac.

Embroider your favorite designs on a T-shirt or dress'? No way, you say? You can! Because thanks to this new POEM system and your Mac, you can be the first on your block to do MacEmbroidery. Original embroidery as only you can do. As easy as using a printer. All with the latest in Macintosh peripherals.

MacEmbroidery works with a HyperCard base, so your design can be drawn with bit map images. MacEmbroidery transforms the bitmapped image into high-resolution, picture-perfect embroidery.

The Macintosh display lets you do actual-size embroidery with the POEM machine: what you edit with the display corresponds exactly to the actual embroidered result.

And you can use your other Mac software designs, too.

Your other Mac graphics can be readily run for MacEmbroidery designs as well or copy your images with scanning software. Bring in your pictures through the Clipboard for the best MacEmbroidery possibilities today.

How is it done?

1. Draw your design or scan your image in the embroidery frame on the screen.

2. Edit your image. In zoom mode, you can make small corrections to your drawing.

3. To embroider with multiple colours and stitch patterns, create multiple layers.

4. Transform your drawing data to embroidery data.

5. Simulate the embroidery process on screen.

6. Choose your favorite colour red thread and set it in the POEM machine. Install the embroidery frame, and you are ready to embroider.

7. Your own personal image is being embroidered.

8. Cut away unnecessary threads. With this, your image turns into your personal embroidery.

If you have any questions, please do not hesitate to contact:

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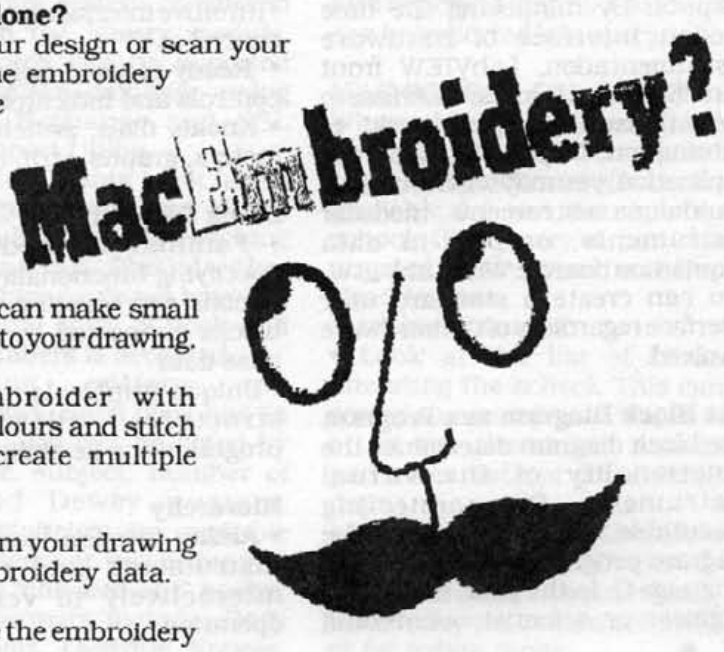

LabVIEW® 2

The complete instrumentation software system on the Apple Computer UK stand at the BETT Exhibition.

Featuring LabVIEW® 2
The Concept: Using familiar tools...

The Virtual Instrument as a Software Module
A virtual instrument is simply a software module packaged graphically to have the look and feel of a physical instrument. Engineers and scientists, accustomed to the instrumentation of a typical work bench, can interact with the software panel of a LabVIEW virtual instrument as if it was a physical instrument. Similarly, LabVIEW's block diagram method of programming the functionality of a virtual instrument appeals to the technical mind adept with flow charts.

The Front Panel as a User Interface
A front panel (with its knobs, slides, switches, graphs, and strip charts) serves as an interactive interface for supplying inputs and observing outputs. By mimicking the time proven interface of hardware instrumentation, LabVIEW front panels create a familiar interface to the otherwise cryptic world of automation. Depending upon the application, you may wish to control standalone instruments, modular instruments, or plug-in data acquisition boards. With LabVIEW, you can create a standard user interface regardless of the hardware involved.

The Block Diagram as a Program
The block diagram determines the functionality of the virtual instrument. By connecting executable blocks, you *draw* the diagram program in the graphical language G. In the past, the typical engineer or scientist, who could quickly construct a block diagram of the application, inevitably faced the task of converting those ideas into cryptic code. Often, he or she was forced to consult a computer programmer who might take weeks to complete the task. Afterward, it was difficult to maintain or modify the code to meet long-term application needs. With LabVIEW, the block diagram is the program. And as a pictorial representation, the block diagram is self-documenting and therefore easy to modify and maintain.

Overview
- The only complete graphical programming language for data acquisition and instrument control applications
- Virtual instruments (VIs) rather than text-based programs
- Integrated environment for data acquisition, analysis, and presentation

Front Panel
- Intuitive interface for interactive control of VI
- Ready-to-use, easy-to-modify controls and indicators
- Knobs, dials, switches, slides, meters, graphs, strip charts

Block Diagram
- Familiar methodology for specifying functionality of VI
- Icons representing executable blocks connected by wires that pass data
- Unique graphical programming structures allowing full programming flexibility

Hierarchy
- Ability to open icons as sub-instruments and run them interactively to verify their operation
- Ability to use VIs as new icons for larger application
- Building blocks that are easy to design, modify, combine, and interchange

Data Acquisition
- Hardware support- IEEE-4X8, RS-232, RS-422, and modular instruments (VXI and CAMAC), as well as plug-in A/D, D/A, and digital 1/0 boards
- Includes all LabDriver functions for controlling National Instruments data acquisition boards
- Complete data acquisition examples
- Instrument driver library representing over 150 instruments from 25 manufacturers

Data Analysis
- Digital signal processing - time and frequency series routines, digital filters
- Analysis libraries - array arithmetic, complex number operations, statistical evaluations
- NB-DSP2300 Analysis Accelerator Board available for highest possible performance

Data Presentation
- User-defined controls, strip charts with scroll bars, graphs with cursors and zoom
- Data storage - built-in options to log front panels, print VIs
- File 1/0 - icons for storing and retrieving data from ASCII, binary, spreadsheet formats

For more information:
National Instruments UK
(06) 355-23545

LabVIEW 2

Instrument Control
Data Acquisition
Data Analysis
Signal Generation
GPIB VXI
Digital Statistics
RS-232 Analog
DSP
Engineering Science
Mechanics Aerospace
Medicine Education
Manufacturing
Electronics Life Sciences
Design Machine Control
Calibration Basic Research
Process Control Simulation
Test and Measurement

Mac School™

A school administration system on the Apple Computer UK stand at the BETT Exhibition at the Barbican.

MAC SCHOOL™ is an integrated school administration system for schools of all types and sizes. It can handle all of a school's student record management needs and is designed to run on the Macintosh™ Plus, SE, SE/30 or Mac II/IIcx/IIx/IIci. The system is multi-user over AppleTalk™ utilising Tops™ or AppleShare™. Mac School modules are available either individually or as a complete system.

MAC SCHOOL CSL ATTENDANCE
CSL Attendance is a program that provides the reports that administrators require and also efficiently highlights attendance trends. Daily, half-daily and period attendance can be recorded for all students.

An unlimited number of students and user-defined codes can be tracked over a full school year. Present, late and absent values can be assigned for each attendance code.

Attendance data may be entered by individual teachers over the AppleTalk network on a Macintosh or a IIGS™. The data may also be read from teachers' disks or scanned from pre-printed sheets. Alternatively. data may be entered in directly at the main office.

An autodialer may be used with a smart modem so that selected parent or guardian phone numbers can be auto-dialed. Letters can also be automatically generated according to your attendance criteria.

All attendance histories and disciplinary action records for individual students are summarised and may be used for Report Cards and Records of Achievement. Attendance and enrolment reports are comprehensive and are generated by period. half-day or day. Reports include:

•Today's Attendance detailing absent students.

• Exception Reports for user-defined parameters such as individuals or ranges of students by attendance code or frequency of code and date range. Choice of five different formats.

• Individual Student's Attendance showing individual or class attendance by date range.

• Statistical Summary detailed by division, class, and/or entire school is available in list or matrix format.

MAC SCHOOL CSL LIBRARY
CSL Library allows a school to track up to 30,000 books and up to 4,000 borrowers on a 20 megabyte hard drive. Greater numbers of books can be accommodated on larger disk drives.

Student information can be downloaded from the main administration system or entered directly into the library module. MARC Records can be imported from BiblioFile's database using Apple File Exchange and CSL Library's Import Utility.

The system prints book labels and catalogue cards. and allows the use of a light pen for checking books in and out. Should either books or library cards not have bar codes, manual entry of book and student numbers is accepted.

Reporting options are comprehensive. Each book has its own record and can be listed by title, author. subject, number of copies and Dewey number. Borrowing statistics are available by student, teacher. % overdue and by the most "checked-out" books.

Report formats include: Daily Status Report. Overdue Notices, Statistical Summary and Year-End stock. Reports can also be designed to meet each librarian's special requirements using the Report Manager.

MAC SCHOOL CSL MARKS
CSL Marks is a markbook program for individual teachers that produces comprehensive reports. Student names can be downloaded by class from the Mac School system in the office or entered directly by individual teachers. Student results may be entered over the AppleTalk network or read from the teacher's disk at the main office. Results may also be sent to the main office to be optically scanned or manually entered. There are 41 user-defined letter or numeric grades.

Reports and sorting options by name or final percentage are comprehensive and include:

• Task Statistics listing all tests. class averages,standard deviations. weights, and % of total mark.

• Spreadsheet Reports detailing tasks, student names or i.D. 's and letter or numeric grades.

• Student Reports detailing specific student performance and comparisons to the class average.

There is a built-in report generation feature that allows reports to be formatted to suit individual school requirements. The user can set the form of all reports and the criteria on which they are printed. A word processor is included with full mail merge features so that custom letters can be produced. Custom reports can also be sent to disk files so that data can be imported into spreadsheets.

MAC SCHOOL CSL QUERY
When a Mac School system is fully implemented, there is a considerable amount of information available for use throughout the school. CSL Query is particularly targeted at the Head and Deputy Head teacher.

It enables them to:

• Look at the list of students attending the school. This can be sorted in a number of ways.

• List the attendance data for a particular date or for a range of days.

• Look at a student's timetable for any day in the school year.

• Check a student's attendance for the whole year or for a selected day or for a date range.

• Look at a student's marks from several different aspects.
• In the event of an emergency. there is a special "emergency window" that displays phone numbers and the exact whereabouts in the school of the student concerned.
• Find a teacher's program for a day and then check a list of "free" teachers for each of the periods during a day.

This module will be enhanced in the coming months so that a school can comprehensively analyse all of it's data. It will be of considerable use in the increasing management tasks faced by school administrators.

MAC SCHOOL CSL REPORT CARDS

CSL Report Cards summarises the information from CSL Attendance and CSL Marks (including teacher comments). Complete student details and academic histories are maintained. Records of Achievement, failing lists. class rankings and mailing labels can be printed when required. Disciplinary action is recorded and school defined letters to parents can be generated automatically.

CSL Report Cards will store up to 8 sets of report card grades per year, and mid-term report cards can be printed at any time.

A school message can be printed on all report cards. and a principal's comment can be added to individual report cards along with teacher's comments.

The unique CSL Report Manager allows the school to both set the format of the report card to conform to LEA requirements and to select which information is printed. The school logo or special graphics can be included and pre-printed forms can also be used. Comprehensive summaries can be produced including:
• Course statistics showing average grades. standard deviations. averages by teacher and course high and low marks.
• Teacher summaries detailing the results of all their students.
• School summaries list all course information and summarise them into one school total.

MAC SCHOOL CSL SCHEDULING

CSL Scheduling will timetable a maximum of 4000 students in up to eight terms at one time. Multi-term courses are taken into account. There may be up to 500 courses and 1500 classes with no limit to the number of academic levels allowed.

There may be a maximum of 42 periods per day and 14 days per cycle. The user can also define for each course how many times per cycle it must be taught, which rooms it can be taught in, and when it cannot be taught. Teachers' rooms and course preferences can also be set.

Each course is either required or optional for each level. This eases much of the work in entering individual student course requests. Course requests may be manually entered or optically scanned. Students not meeting the course requirements of their academic level are immediately apparent and may be individually corrected.

MAC SCHOOL CSL SCANNING

Student attendance, grades and timetabling course requests can be "scanned" into the system with CSL Scanning. A mark sensing scanner is required and special pre-printed forms are available from Mac School.

CSL IMMUNISATION

This module looks after needs and records of student immunisation .

FUND ACCOUNTING MODULES

The Fund Accounting modules are designed to work at both LEA and individual school level. The modules will include:
• Budget Builder
• Purchase order processing
• Accounts
• Cash flow forecasting
• Asset Management
• General Ledger
• Bank reconciliation
• Personnel database
• Student accounts
• Activity accounting
• Stock control
• Cash management

PASSWORD PROTECTION

All modules have varying levels of password protection. This allows the headteacher, for example, to set the "Master" password so that only she/he may initiate a year end routine or a timetabling run. "View only" passwords are also available.

MAC SCHOOL CSL ASCII TRANSFER

This module facilitates the input and transfer of information to and from Mac School. ASCII Transfer creates an ASCII file that allows the transfer of user selected fields to/from an LEA mainframe or minicomputer. It can also be used to pick up data from other School computers such as a BBC or an IBM™ compatible.

LEA MODULE

LEA's will be able to:
• Perform analysis on the database of each individual school in their area.
• Compare the results of that analysis between the schools.
• Produce LEA wide statistics.
• Move students between schools.
• Set "standard" codes for all participating schools.

EASE OF USE

Mac School is easy to use and makes full use of all of the features of the Macintosh. The data entry screens that in many systems are so intimidating, are self explanatory in Mac School. Each student's details only typed in once and the appropriate data is thereafter available to each module. All of the modules require at least one megabyte of memory except CSL Marks which requires at least 512K. The Apple IIe and IIGS versions of CSL Marks require at least 128K.

Looking Ahead

Mac School has always been, and intends to continue being a dynamic program.
Most of its features have been as the result of direct requests of its users. As education administration requirements are continuously changing, it is the policy of Mac School to monitor these changes and respond accordingly.
The performance of Mac School itself is always being examined and aspects such as speed and ease of use are continually being upgraded.

MacSchool™ is distributed in the UK by
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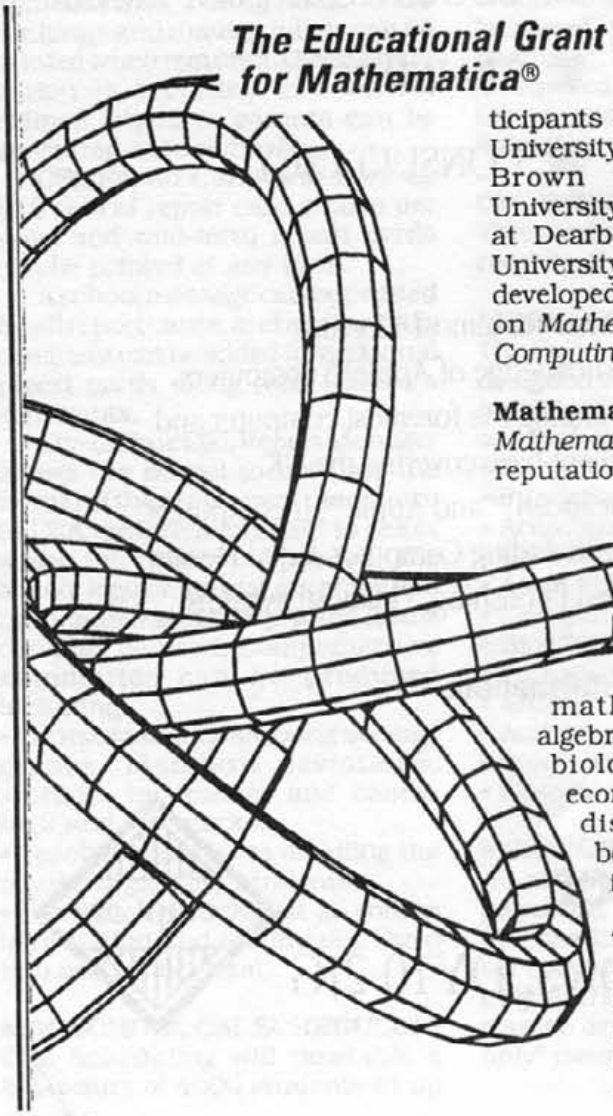
Mathematica®

Wolfram Research (UK) on the Apple Computer UK stand at the BETT Exhibition.

The Educational Grant Program for Mathematica®



Goals of the program
The program is intended to support the academic community in its efforts to enhance the quality of education. Grants are offered to colleges and universities that establish teaching laboratories based on Mathematica. For every license that the institution purchases, Wolfram Research will match that purchase with the grant of a free license. In addition, the cost of Mathematica to the institution will be reduced based on our educational volume discount. Because of the matching grant program, the savings can be substantial.

Participants in the program
Many colleges and universities have already taken advantage of our Educational Grant Program and have Mathematica-based teaching laboratories in place. Among the many participants in this program are the University of California at Berkeley, Brown University, Cornell University, University of Michigan at Dearborn, and Arizona State University. Brown University has developed a course based entirely on *Mathematica— Introduction to Computing in the Sciences.*

Mathematica in the classroom
Mathematica is quickly gaining a reputation within academia as a revolutionary tool for teaching any course that requires mathematics. Calculus, algebra, chemistry, engineering, biology, physics, and economics are among the disciplines that have benefited from *Mathematica* in the classroom.

This powerful yet easy-to-use software package eliminates the tedious portions of mathematics, science, and engineering calculations—so students can do coursework more efficiently. This means that students concentrate on learning, and have more time to delve deeply into conceptual problems.

Use of software
Because this grant is intended to support the teaching of mathematics, the software provided may not be used for research purposes. A limited number of copies of *Mathematica*, however, may be used for the purpose of preparing and testing course material. The classroom or laboratory in which *Mathematica* will be used must be a single area with at least 10 computers running *Mathematica.*

Terms of grant
Grant proposals must be based on a minimum of five licenses purchased by the institution. Matching software will be shipped along with the purchase when the transaction for the purchase is completed. You will receive the current version of the software, including all the materials normally contained in an educational package. For information on upgrades, check with the Educational Grant Program Administrator at Wolfram Research.

Proposal information
Proposals must be supported by the following documentation:
- Course outline
- Curriculum vitae of course developers, lecturers, and other appropriate persons
- Copies of other grant applications, pending and current
- Evidence of support from the institution
- Other supporting documentation

We'd like to know how *Mathematica* will enhance the quality of education at your institution, how *Mathematica* will be integrated into courses, and whether *Mathematica*-based work will be published or presented at conferences or other appropriate forums.
For further information or to request a grant application form, contact the Educational Grant Program Administrator.
Wolfram Research (UK) Ltd.
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Oxon OX13 6TG
Tel. 0235 550440

New version:- MATHEMATICA 2.0

Wolfram Research, Inc. have introduced Mathematica 2.0, a significant enhancement version of its popular system for doing mathematics by computer. Mathematica is the leading software system for numeric, symbolic, and graphical computation, used internationally by professionals in almost every area of scientific and technical computing, on nearly 20 computer platforms. Its underlying, high-level programming language is becoming the language of choice for mathematical programming among technical professionals and students. Mathematica 2.0 boasts additional functions, increased performance, and an enhanced programming language.

"Mathematica has already defined many new directions in technical computing," said Stephen Wolfram, founder and president of Wolfram Research. "Mathematica 2.0 represents the debut of a number of exciting new computing concepts. The language enhancements of this version, for example, provide a new paradigm for high-level programming."

Another innovative feature of Mathematica 2.0, which is available on Macintosh, NeXT, Sony, and Sun platforms, is the addition of sound capabilities that allow users to hear as well as see their mathematical functions.

New and enhanced features

The new features of Mathematica 2.0 can be grouped roughly into four categories: increased functionality, increased performance, enhanced programming capabilities, and platform-specific improvements, most notably sound. In all, the number of functions in Mathematica has increased from 560 to 843 - a gain of 283 functions. The new function most often requested by existing Mathematica customers, and which is now possible with Mathematica 2.0, is the ability to solve numerical differential equations.

The new version makes it easier for users to coordinate with external programs in the areas of text processing, calling functions in an external program from within Mathematica and calling Mathematica from external programs. Also added are: enhanced graphics, for creating publication-quality figures directly in Mathematica; international character sets and messages, for customized text in any language; and linear programming, which allows users to solve optimization problems in operations research and related fields.

Performance has been boosted with a compiler that allows complex numerical expressions to be executed up to 20 times faster than in Mathematica 1.2.

Underlying Mathematica is a powerful programming language that many technical professionals use to customize their own programs. In Mathematica 2.0, this programming language has been enhanced to make the programming process even easier. For example, Wolfram Research has added ways for people to debug their code and to trace easily the steps their programs have taken. Also, Mathematica 2.0 adds file manipulation, for programming many operating system functions directly in Mathematica.

Some of the new features of Mathematica 2.0 work only on certain computer platforms. On Macintosh, NeXT, Sony, and Sun computers, which have built-in sound capabilities, users can now take data and functions and render them in audible form, to hear as well as see the results. Electronic publishing extensions on Macintosh and NeXT platforms allow users to create complete on-line books within Mathematica. Also, users of computers that are not multi-tasking machines, including Macintosh computers and IBM PC compatibles running Microsoft Windows, can take advantage of Mathematica 2.0's concurrent processing feature, in which Mathematica simulates multitasking by performing several tasks at the same time.

Associated with Mathematica 2.0 is the publication of the second edition of Stephen Wolfram's book, Mathematica: A System for Doing Mathematics by Computer, published by Addison-Wesley. The first edition of the book sold 75,000 copies. Please refer to the accompanying press release for details on this and additional books being published in conjunction with the new version of Mathematica.

Price and availability

Mathematica supports a client/server model, with a highly portable kernel to do the number-crunching, plus a number of platform-specific front ends tuned for particular graphical user interfaces (GUIs). Currently, nearly 20 different kernels are available, with front ends for the Macintosh, NeXT and Microsoft Windows GUIs. Mathematica 2.0 will be rolled out on each existing platform in the U.S. and internationally during the first-quarter 1991, as each platform-specific version becomes available.

Prices for Mathematica 2.0 vary depending on the platform on which the program runs. Prices start at $595 for the standard Macintosh version and range up to $30,000 for the CONVEX platform. It will take from 60 to 90 days for Mathematica 2.0 to begin shipping for all the platforms on which it runs. During this transition period, customers can purchase Mathematica Version 1.2 for 25 percent off the normal price and can receive a free upgrade to Mathematica 2.0 when it is available.

Current registered owners of Mathematica 1.2 can upgrade to Mathematica 2.0 for $125 on up, again depending on the platform. These users will be sent information and an invitation from Wolfram Research to upgrade as each platform-specific port is completed.

Wolfram Research distributes Mathematica worldwide through a variety of channels, including directly and through resellers, distributors, retail outlets and hardware vendors such as Digital Equipment Corp., NeXT Computer, Inc., Silicon Graphics, and Hewlett-Packard/Apollo. The company has a sister company, Wolfram Research (U.K.), based in the United Kingdom, and a marketing liaison office in Tokyo.

Wolfram Research, Inc., the developer of Mathematica, is a privately held company based in Champaign, Illinois. Founded in 1987, the company currently has

approximately 120 employees.

Mathematica version 2.0 fact sheet

A brief overview

Mathematica is a system for doing mathematics by computer. It is the leading software system for numeric, symbolic and graphical computation, used internationally by professionals in almost every area of scientific and technical computing and education - from physics and engineering to life sciences and financial analysis. Its built-in programming language is becoming a standard among technical professionals for high-level programming. Mathematica supports a client/server model. Its highly portable kernel, which handles the number crunching, is available for nearly 20 different computer platforms, while a number of platform-specific front ends have been tuned for machines with graphical user interfaces, such as Macintosh, NeXT and Microsoft Windows.

Uses for Mathematica

Mathematica can be used both as an interactive calculation tool and as a programming language. Some general uses include the following:

* as a numeric and symbolic calculator where the user types in questions and Mathematica prints out answers
* as a translator of data and functions into graphical (and sometimes audio) form, including two- and three-dimensional plots and contours in black-and-white or colour;
* as a high-level programming language for creating both large and small programs;
* as a computation server for external programs such as spreadsheets or CAD programs;
* as a tool to create interactive documents mixing text and animated graphics with active formulas; * as a modeling and data analysis environment; and
* as a high-level shell for file, text and data manipulation.

Highlights of Mathematica 2.0

Mathematica 2.0 represents a substantial extension of the Mathematica system. Of the 843 built-in functions in this version, 283 are new. Many of the new features were chosen based on feedback from existing Mathematica customers. The new functions can be divided into four categories: increased functionality, increased performance, enhanced programming capabilities and platform-specific improvements, most notably sound. Increased functionality:

* Differential equations. The ability to solve differential equations numerically is important for a wide variety of practical problems.
* Enhanced graphics. Users can create publication-quality figures with complete labeling, fonts and color.
* Better coordination with external programs. Enhanced features enable users to manipulate text for input or output to other programs, and to call functions in external programs from within Mathematica.
* International character sets and messages. Text in Mathematica can be customized for any language.
* Automatic networking. In student lab settings, for example, computers can be set to use a remote kernel automatically for shared use of Mathematica across a network.
* Linear programming. Lets users solve optimization problems in operations research and related fields. Increased Performance
* Compilation. Allows complex numerical expressions to be executed up to 20 times faster than in Mathematica 1.2. Enhanced Programming Capabilities
* Symbolic execution tracing. This new concept in program analysis lets users see the steps their programs take.
* File manipulation. Users can program many operating system functions directly in Mathematica.
* Lexical variable scoping. Simplifies the establishment of large programs containing many separate modules. Platform-Specific Improvements
* Sound generation. On Macintosh, NeXT, Sony and Sun computers, users can, for the first time, take data and functions and render them in audible form, to hear as well as see the results.
* Electronic publishing extensions. Also, users of Macintosh and NeXT platforms can create complete on-line books within Mathematica.
* Background processing. For systems that are not multitasking, such as Macintosh computers and 386-based Microsoft Windows systems, allows Mathematica to perform several tasks at the same time.

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Computer Simulations and Mathematica

by Mysoon Rizk

As spring session classes ended at the University of Illinois at Urbana-Champaign, Professor Richard J. Gaylord, Mathematica enthusiast in the Department of Materials Science and Engineering, finished teaching his new course, "Computer Simulations in Materials Science," and began work with his collaborator William A. Tyndall, a high school mathematics and computer science teacher in New Jersey, on a textbook based on the course, to be published in 1991.

Gaylord and Tyndall revealed the ideas behind the course and textbook at the 1990 Mathematica Conference in Redwood City, CA last January. They said their goal was to introduce students to computer simulation as a research tool, and then to have the students perform their own computer simulations on a variety of topics, including random walk, percolation, kinetic growth, and cellular automata. Their decision to use Mathematica as the programming language was based on their own experience with a number of other languages. They say that, "Mathematica is the only language that's fun to use."

After some time, Gaylord is even more convinced that Mathematica was the right choice. Even students who entered the course with programming anxiety quickly became accustomed to using Mathematica. Once they developed a flowchart, "expressing it as a Mathematica program was pretty trivial because Mathematica is conceptually transparent and is intuitive to use." Students therefore wasted less time worrying about how to write programs and had more time to think about the physics of the problems they were researching.

According to Gaylord, there is a need for a book that introduces Mathematica as a programming language for scientists - Gaylord and Tyndall hope their book will meet that need.

Book Review 'Programming in Mathematica' by John Arnold

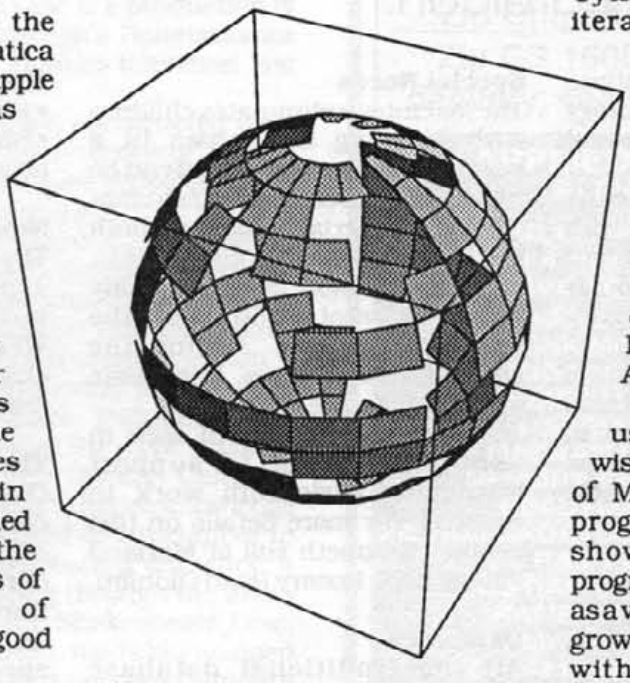
Roman Maeder: **Programming in Mathematica®**, Addison-Wesley, 1990, pp.228, ISBN 0-201-51002-2, @ £29.65.

Roman Maeder was one of the originators of the Mathematica program (see my review in Apple 2000 June 1990 issue), and was responsible for writing the symbolic integration, the factorization, and other parts of the software, and as such, is in a good position to extend the programming details given by Wolfram in his book.

The book under review assumes the reader is familiar with Wolfram's book, but tries to explain in more detail all the many programming features available from within Mathematica and to give extended examples of their use and at the same time, to give examples of what the originators of Mathematica consider to be good programming style.

Programming in Mathematica consists of eleven chapters plus two appendices, with Mathematica packages being developed in a number of the chapters. A package, by the way, is a file containing a sequence of Mathematica commands which can then be used to extend the inbuilt capabilities of Mathematica.

The first chapter starts by assuming very little and gives explanations of standard Mathematica functions and the basic ingredients of a package with examples of what *not* to do. By the end of the chapter a package has been designed, through a series of improvements from the initial first attempt which enables functions of a complex variable to be plotted. The package is extended further later in the book. Although Mathematica has some plotting commands as part of its basic set, the particular command developed provides a capability not immediately available from within Mathematica. In the process of developing the 'first thoughts' package, various extensions are introduced and the reasons for the improvements explained. A complete listing is given in an appendix, this has included in it a number of ideas vital to the production of any Mathematica package. The second chapter deals with the problems concerned with 'contexts', importing another package, how to protect symbols, and gives a skeletal package which can be used as a basis for your own package development.



Chapter 5: Sphere with Random Holes:- Show[Graphics3D[Select [Sphere[][[1]], Random[]>0.5&]]];

Subsequent chapters deal with designing an easy user interface for your package, functional and procedural programming, the evaluation of expressions, simplification and transformation of expressions, numerical computations, how to override built in rules, input and output, with finally some details on notebooks and packages. A final chapter is concerned with the details for the production of the cover picture.

There is a page of exercises, followed by the solutions, and a second appendix giving full listings of some of the packages, the others being given in the text. Each chapter starts with a Mathematica graphic, most of them having the commands necessary to produce it.

Within the text some thirty six packages, some quite short and others more substantial, are developed, these include CylindricalPlot3D, Newton's iteration, RungeKutta for the numerical solution of differential equations, Tensors, VectorCalculus, BookPictures, etc. The areas covered include graphics, algebra, numerical computation, and combinatorics.

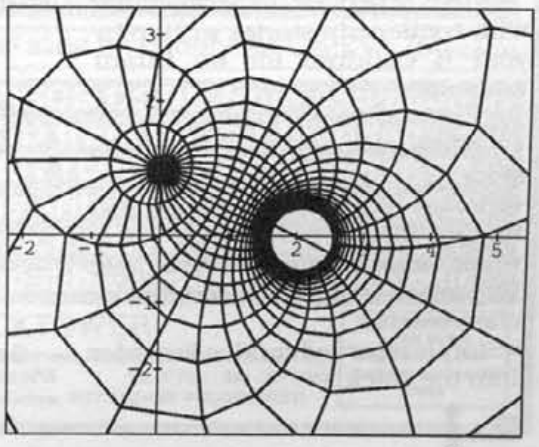
The packages are available on a disk from Wolfram Research, PO Box 114 Abingdon Oxford OX13 6TG.

The book contains a great of useful information for anyone wishing to extend the capabilities of Mathematica, both by giving programming details and by showing examples of good programming practice, and as such as a valuable addition to the steadily growing library of books concerned with, or produced using Mathematica.

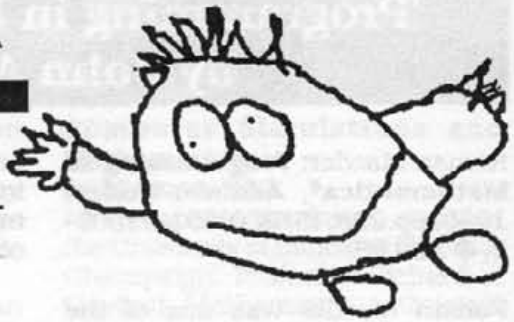
As I have come to expect from books published by Addison-Wesley, the book is extremely well bound and printed .

For anyone using Mathematica this book could prove to be invaluable, and I would strongly recommend its purchase.

Chapter 1: Moebius Transform PolarMap[(2#-I)/(#-1)&,{0.001, 5.001, 0.25}, {0, 2Pi, Pi/15}, Framed->True]



Oldham LEA



Macs in Class at Oldham on the Apple Computer UK stand at the BETT Exhibition at the Barbican.

Oldham LEA is very enthusiastic to develop information technology solutions to individual student needs.

For the past eighteen months the Apple Macintosh together with the framework program Hypercard has been the spring board for exciting work within the primary and special school classroom.

Teachers and students have been producing original material relevant to their own classroom in a way not dreamt of until the freedom and power of the Mac arrived.

Talking Books

Simple talking story stacks with the illustrations and commentary done by either the teacher or the children. These are often used to extend, enhance or supplement the school's reading scheme.

One school is experimenting with comic strip stories written by year 6 children for an infant audience.

- Child draws and writes out the story
- His/her illustrations are scanned into the Mac
- Illustrations dropped into simple Hypercard framework, scripted by class teacher.
- Story is recorded via Mac Recorder into the stack.

Special Needs

The Macintosh stimulates children with learning difficulties in a number of ways. Hypercard can be used to produce teacher/student original material which is both motivating and age appropriate.

The inclusion of high quality sound prompts enhances the learning process. Adding the student's voice gives immediate ownership to the child.

Much work has been done in using Hypercard to support National Curriculum work in Science. For more details on this contact Elizabeth Hill at Marland Fold School, Rosary Road Oldham.

Databases

All the traditional database functions can be performed in Hypercard. However, with the use of a Mac Recorder and/or a scanner extra features dramatically extend the possibilities.

It is a good idea to include picture fields in a database. These may be:

- Drawings produced in Hypercard or art packages
- Children's book work scanned
- Illustrations scanned from books (where copyright permits)
- Scanned photos (of the children or artefacts etc)

Soundsamples may also be included. These may be:

- Help overview or introduction
- Short commentaries on database object

Number work

The addition of sound to stacks to support number work in early years is of obvious benefit.

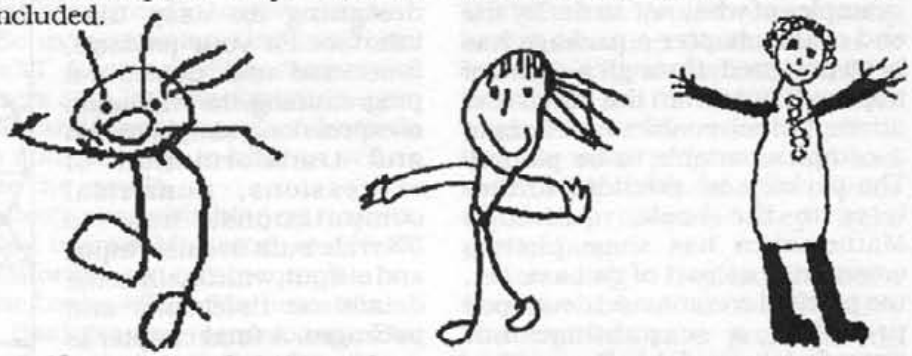
Where the voices are those of the children, ownership of the material means eager fingers at the mouse.

The Future

Oldham LEA will fully support the continued use of the Macintosh in all phases of education. In February our first Mac will be placed into a nursery class and will so complete an Apple presence across the whole spectrum of education in the Borough. Teachers are looking forward to the compilation of their superb material on to a CD-ROM which will be the icing on their multi-media cake!

Contacts in Oldham

Information Technology Team
Mike Humphrey
Marian Faulkner
Curriculum Development Centre
Rosary Road, Fitton Hill
Oldham OL8 2QE
Telephone: 061-627 0565
Fax: 061-627 2328



Self portraits of children from Class 2, Bare Trees Infant School, Oldham, from their HyperCard Stack.

'Twelfth Night' CD ROM

Shakespeare on CD ROM on the Apple

Computer UK stand at the BETT Exhibition.

The Shakespeare Disc

At the core of the Shakespeare Disc is a production of 'Twelfth Night' by Kenneth Branagh's Renaisssance Theatre Company, shown on Thames television last year.

The Disc, a CD rom, has been constructed on a Macintosh and interacts with a video version of 'Twelfth Night' to produce a rich and complex introduction to Shakespeare's work and background.

Using software like HyperCard 2, MacroMind Director 2, Swivel 3D, SoundEdit, Adobe Photoshop, AppleScan and Studio 8, we have created a multimedia opera of sound, animation and text that potentially challenges the boundaries of traditional education.

We have exploited the contemporary philosophies and ideas of Shakespeare's times, including work done on memory and in particular the work of Giulio Camillo and his wooden Memory Theatre. Camillo's Theatre of Memory, originally built to house knowledge of astrology and mythology, is used as a metaphor to encompass the content and structure of our work. It is the perfect model for navigating through the areas of knowledge represented in the Shakespeare Disc. The derivative model, we have used, reads like an open fan of seven rows of seven sections (as does Camillo's Theatre) and acts as a guiding visual symbol for the whole Disc. The use of colour coding makes the model a memory aid and key for unravelling multimedia layers.

The seven main sections on the Disc deal with different aspects of Shakespeare's England and are as follows: The Theatre of Memory, Shakespeare's Life and Times, The Glossary, Twelfth Night, Renaissance Theatre, Elizabethan England and a section of guided tours. These sections open up and reveal sub-divisions as diverse as 'Women in Elizabethan Drama', 'Medievel Devices', An analysis of characters in Twelfth Night, 'Playgoing in Shakespeare's day' and 'An Elizabethan Town'.

Functionality has been organised to take into consideration a multilevelled user. Buttons, 'Hot' text and navigation in general have been evolved so that the scripting is 'enabling'. Complex programming underpins a simple and structured interface.

The Shakespeare Disc will hopefully open up an arena of discussion and controversy, which will give some insight into the possibilities of multimedia in education, where pleasure and learning can fuse into a powerful combination.

Contact:
Graham Howard, Art of Memory Ltd.,
Grafton Mews, High Street,
Chipping Campden, Glos. GL55 6AT
Tel: 0386 841496 Fax: 0386 841505

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BBC BASIC on the Mac?

BBC BASIC for the Macintosh on the Apple Computer UK stand at the BETT Exhibition.

BBC BASIC for the Macintosh
BBC BASIC for the Macintosh has been developed with the dual aim of providing an advanced interactive programming language especially suitable for educational use, with the capability of running a large proportion of the existing educational software originally developed for the BBC Microcomputer.
BBC BASIC for the Macintosh gives you access to the foremost educational programming language in the UK, with the ability to run many programs originally developed for the BBC Microcomputer.

BBC BASIC language interpreter
BBC BASIC supports the full BASIC language, as on Master series computers, and the most significant features of BASIC V supplied with the Acorn Archimedes. It runs programs significantly faster than a BBC Microcomputer, in some cases up to twice as fast.

Emulates BBC screen modes
BBC BASIC emulates BBC Microcomputer graphics and screen modes, including Mode 7 Teletext. It provides grey shades on monochrome Macintosh and colour on a Macintosh II, and you can even load BBC format screen dumps directly to the screen.

BBC Emulator Operating System
BBC BASIC incorporates the BBC Emulator Operating System - BEOS - to give full emulation of the BBC Microcomputer environment on your Macintosh, thereby catering for BASIC and machine-code programs that call BBC Microcomputer routines.
BEOS includes all the standard system commands, calls, and vectors.

Built-in assembler
BBC BASIC provides a built-in assembler and 6502 machine-code interpreter. You can compile and run 6502 assembler programs, or machine code which you have loaded in directly.

Transferring files
BBC BASIC includes a built-in interface to transfer programs to and from a BBC Microcomputer without additional software. The only extra requirement is a cable linking the serial connectors on the two machines.
In addition, a separate File~Mac utility is provided that will transfer several programs and/or data files in a single convenient operation. File Mac preserves the load and execution addresses of machine-code files, so that they can be loaded or run with BBC BASIC's *LOAD or *RUN commands. Even !BOOT files can be transferred, and can then simply be double-clicked to run programs.

BBC BASIC takes advantage of the advanced features of the Macintosh to provide a fast and powerful environment in which to develop, test, and run your BASIC programs.

Powerful program editor
A Macintosh-style interactive editor provides a scrolling view of program listings with convenient cursor or mouse editing. You can work with any font available on your system and you can display keywords highlighted in bold for easy reference.
A preferences page allows specific aspects of the Editor and emulation to be altered for particular situations, and saved in custom preferences files.

Tracing and debugging
Dynamic tracing and debugging features let you run a program, or step through, highlighting each statement as it is executed, and you can display the values of any variables or expressions.

Help system
A comprehensive Help system gives you instant information on keywords and operators, without interrupting what you are doing.

Toolbox interface
A Macintosh Toolbox interface allows you to define your own menus, dialogue boxes, and scrolling lists using convenient BASIC keywords, and use the standard file dialogues for opening and saving data files.

Package contents
The BBC BASIC package contains:
- One 800K disc containing BBC BASIC, File»Mac, and example programs
- BBC BASIC User Guide
- BEOS Reference Guide
- BBC BASIC Examples booklet

Pricing
BBC BASIC is available for £149.00 plus vat (educational price).
A suitable serial transfer cable is available for £25.00 plus vat.
An upgrade to Version 2 is available to registered owners of Version 1.

For more information:
Human-Computer Interface Limited
25 City Road, Cambridge, CB1 1DP, England.
Telephone: (0223) 314934. Fax: (0223) 462562

View»Mac 3

View»Mac 3
Converts documents between Macintosh and BBC Microcomputer or Acorn Archimedes
View»Mac 3 is the complete answer to converting documents between the Macintosh, and all the main document formats on the BBC Microcomputer, Master 128, Master Compact, or Acorn Archimedes.

Extremely simple to use
View»Mac performs all the file transfer and conversion from the Macintosh via a serial cable, and no other software is required. View»Mac automatically determines the type of the other computer and downloads an appropriate communications program. Once the connection is established you do not need to touch the remote computer.

Transfer in either direction
View»Mac allows files to be transferred in either direction. For example, you could prepare a draft document in View on the BBC Microcomputer, convert it to a MacWrite document on the Macintosh for incorporation into a PageMaker document, and then transfer it back to View on the BBC Microcomputer for revisions.

View»Mac can also be used to transfer files without conversion, or convert the format of files that have already been transferred to the Macintosh, for example by modem.

Conversion options
View»Mac supports all the major BBC Microcomputer and Archimedes document formats. You simply select the format you want from the Convert menu which includes View, View Professional, WordWise, InterWord, Edword, 1st Word Plus, and PipeDream.

Documents can be converted to or from MacWrite format, which can be created or read by most other word processing and page make-up packages on the Macintosh.

Each conversion preserves the styles and formats of the original document, including bold and underline, text alignment, tab settings, headers and footers, and formatting.

The 'No Conversion' option provides a straight transfer with no conversion, for any type of file such as a data file or a program.

How View»Mac works
Click the Drive buttons, on each side of the View»Mac screen on the Macintosh, to select the direction of transfer. You then type a *FX command on the other computer to establish the connection. A catalogue of the DFS, ADFS, or NFS disc is shown on the Macintosh screen, allowing you to see the files or open directories. Finally, just select one or more files, or a complete folder, and they will be transferred and converted in a single operation.

Price
View»Mac 3 costs £69 (educational price) excluding vat. Registered users of View»Mac Version 2 can upgrade to View»Mac 3 for £39 excluding vat.
Serial cables SC2 (for a BBC Microcomputer) or SC3 (for an Acorn Archimedes) are available separately for £25 excluding vat.

Colour Screen»Mac
Converts graphics between Macintosh and BBC Microcomputer or Archimedes
Colour Screen»Mac provides the complete solution to transferring graphics images between the Macintosh and the Acorn Archimedes, BBC Microcomputer, Master 128, or Master Compact.

Colour Screen»Mac can either transfer files to or from a remote computer, via a serial cable, or can convert files already transferred to the Macintosh, such as via an MS-DOS disc.

The image is displayed on the Macintosh screen, in the format you have selected, and you can select the part you want to save and manipulate the colours and size of the image. For monochrome work grey scales or dither patterns can be assigned to each colour to give the best monochrome approximation to the original picture.

Typical applications
- Incorporate BBC Microcomputer or Archimedes screen displays in artwork or documents created on a Macintosh™ or in HyperCard stacks.
- Use Macintosh paint programs and clip art to create graphics for use on the Archimedes or BBC Microcomputer.
- Use a LaserWriter to obtain high-quality screen dumps from an Archimedes or BBC Microcomputer.
- Transfer photographic images to an Archimedes or BBC Microcomputer from a Macintosh-based scanner.
- Colour Screen»Mac supports all of the following graphics formats:

BBC Screen Dump
Screens can be loaded from and saved to modes 0, 1, 2, 4, 5, or 7. You can dynamically adjust the colours assigned to each logical colour in the original dump, to take account of different palette settings.

MacPaint
MacPaint images can be used in HyperCard stacks, or edited with a paint program such as MacPaint. Screen»Mac's Rotate option lets you fit a full-resolution BBC Mode 0 screen onto a MacPaint page.

Archimedes Sprite
Images can be converted to or from sprites in modes 0, 1, 2, 4, 5, 7, and 8 to 28. If the file contains several sprites you can select the one you want from a list of their names.

PICT and Colour PICT
PICT images can be manipulated in drawing and painting programs, and can be placed in other Macintosh applications, such as PageMaker, for subsequent colour printing.

Published by:
Human-Computer Interface Limited
25 City Road, Cambridge, CB1 1DP, England.
Telephone: (0223) 314934.
Fax: (0223) 462562

FormPro

Optical Mark Reading on the Apple Computer UK stand at the BETT Exhibition at the Barbican.

FormPro
Software for designing forms, then scanning the data directly into your computer without the need for typing!

Overview:
OMR (Optical Mark Reading) is the process by which marks made on a paper form can be read into a computer using an OMR scanner, thus saving the time of entering that data by keyboard. The positioning of the fields is critical, and OMR form design has, until now, cost a lot of money. However with FormPro software, the user can design their own OMR forms quickly and easily, and print them out on a laser printer.

The main functions of FormPro are:
OMR form design for most makes of Optical Mark Reader (including DRS, HEI, Scantron, NCS)
OMR form printing
OMR field definition
OMR form scanning
Output of ASCII text data files from OMR scanning.

Operation
The form design window looks like any Macintosh graphics page, with a floating tools palette and standard menu bar.

The user defines the scanner to be used, and the page size, then the clock track is automatically generated and unique form identification marks can be placed.

Text, line graphics, fills and selection methods are all in standard Macintosh format, giving the user total control over the graphics and text created. PICT files may be imported and placed at will. All text is Postscript, and graphics are QuickDraw (object oriented).

The Magic Ingredient
To draw an OMR field, the user simply selects the appropriate tool from the palette, and drags over the general area where the field will appear. They are then presented with a window that allows the user to define how the field will appear, and what the computer will recognise from data entered into that mark field. This may be Alphabetical (A-Z), 0-9, 1-99, binary etc., and there are options for containing the field within a box, including shading and naming the field.

The field may then be moved and resized at will simply by dragging with the mouse, and it will always lock onto the OMR grid for the chosen scanner.

In drawing the field, and saving the form, the software will remember the field settings for when the form is scanned. The form is printed out in the desired quantity on a postscript laserwriter (at the time of writing, only Apple Laserwriters have been tested.

Fields are filled in by a simple pencil line (blue, green or black biro in some cases), and the completed forms are fed through the optical mark reader using the scanning programme within *FormPro*. This is a very simple process, and the collected data can be monitored as it enters.

An ASCII text output file is automatically created. This can be added to as more forms are collected.

Benefits
- OMR forms designed with the same ease as any Macintosh graphics application
- The entire process of form design and field definition is carried out in one operation
- Forms may be designed by the user at will, and tested out to ensure functionality
- Data files can be opened up into any data management application, and transferred to DOS format through Apple File Exchange (shipped with every Macintosh computer).
- Fully scanable OMR forms may be printed out at will on an Apple Laserwriter saving time and money for short runs.

FormPro software operates on any Apple Macintosh computer with 2 Mb RAM and a hard disc. Operating system 6.0.5 or later is recommended.
For further information, please contact:
Douglas Kennedy, Omtech, 74 Rivington St., London EC2A 3AY
Tel. 071-410 9191 Fax. 071-410 9195

STOP PRESS!!

The long-awaited 'Tools for Multimedia 1990' CD-ROM product, part of the Apple (UK) Renaissance Project, collated mainly by King's College London, was shown for the first time in public at the BETT Show.

Included in the 50Mb of mainly HyperCard development stacks and utilities is a full copy of HyperCard 2.0.2 together with a full set of support stacks. Also included are some HC 2 sample stacks including some demonstration material from amongst the work of the Renaissance Groups at Anglia College and Cambridge University.

Most of the rest of the disc is HC1-oriented, but includes all the current Apple HyperCard Toolkits (AppleTalk, Audio, Serial, TCP and Video). If bought with documentation as APDA products, this material alone would cost at least £200.00 !!

This CD-ROM is available through HEAD (HyperCard Educational Applications Development). Cost: £10.00
Contact:
Carole Heppell
HEAD, The Anchorage
George Avenue, Brightlingsea
Essex CO7 0NE

Voice Navigator II ™

Voice control for the Macintosh on the Apple Computer UK stand at the BETT Exhibition.

Voice Navigator II™
The Voice Navigator II allows you to control your Macintosh™ by voice, using spoken commands to do any function you normally perform with your keyboard or mouse. Whether you're selecting menu items or graphic tools, responding to dialog boxes, clicking HyperCard buttons, entering data, or issuing macros, the Voice Navigator II makes your Mac faster and easier to use.

The Voice Navigator II works with any standard Mac application. We provide you with language files containing basic voice commands for popular Mac applications. We also provide you with a desk accessory, Language Maker™ which allows you to create your own voice commands and language files for any application simply by pointing and clicking.

The Voice Navigator II uses state of-the-art voice recognition technology. It recognises any voice, any accent, any language. You "train" the system for your voice simply by saying each voice command. The trainings are stored in voice files enabling separate files to be created and loaded for each individual using the system.

The Voice Navigator II also allows you to record voice or sound. Use it for voice messaging over electronic mail networks, for voice annotation of documents, as well as for voice and sound narration of HyperCard stacks and multimedia presentations. Communicate with your co workers more effectively and efficiently than ever before.

When combined with the outstanding graphics and sound capabilities of the Mac, the Voice Navigator II enables more productive and innovative use of any Macintosh application.

•Use it to control desktop publishing (DTP), graphic design, computer-aided design (CAD), MIDI music, education, and entertainment applications.

•Use it to voice annotate documents and spread sheets, as well as to control word processing and spreadsheet applications.

•Use it to create, narrate, and control multimedia presentations.

•Use it to browse databases, HyperCard stacks, and CD-ROM's as well as to enter data.

•Use it to access your electronic mail system, record and send a message.

•Use it for MultiFinder™ switching, DA access, and as a shortcut through the graphic user inter face for the hundreds of commands that you can easily recall and verbalise.

The Voice Navigator II, with both high performance voice control and voice recording, makes the voice interface a powerful reality for the Macintosh.

Key Features

Prompted Voice Training
You train the Voice Navigator II simply by saying each voice command in response to an on screen prompt.
Recognises any voice, any accent, any language.

Multiple Users
Voice trainings are stored on disk in individual voice files.
You select your voice file via the Mac control panel.

MultiFinder Compatible
Fully compatible with MultiFinder and Finder™
MultiFinder switching can be driven by voice command.

Supports Any Application
Supports any standard Macintosh application software.
Also supports Finder commands including DA access and application launching.

Predefined Languages
Language files containing basic voice commands for popular Macintosh applications are included to minimize your set up time.
Also included is a "clip library" of useful voice commands which can be added to customize a language.

Language Maker DA
Lets you create entirely new language files or modify predefined language files.
Automatically creates voice commands for all menu commands in an application. Point and click capability to record dialog boxes and macros.

Hierarchy of voice commands can be structured differently from the application's menu command hierarchy. Have instant access to frequently used commands via voice.

Voice Control INIT
Running as an INIT, voice control is always available.

Appropriate language file and voice file are loaded by Voice Control automatically when application is launched.

Developer Program
Developer Toolkit with support for C, Pascal, and HyperCard available through the Develop~ Program .

Call for more information and a Developer Application.

VoiceQuest Ltd.
304 Blackfriars Foundry,
156 Blackfriars Road,
London SE1 8EN

Tel: 071-721 7181

Caere Typist

A review of this little hand held scanner

by Mike Dawson

Introduction

There has been little in the computer press regarding this remarkable little hand held scanner. Only a brief review in MacUser has come to light to date to my knowledge. The Typist was being demonstrated at the 1990 MacUser show and anyone who saw it in action could not fail to be impressed. So impressed was I that I bought a unit at the show, it seemed the answer to a long held dream.

For those who may not have heard or read of the Typist a brief description will be necessary. The Typist is a hand held scanner with which is bundled a cut down version of Omnipage, the optical character recognition software. It can read text directly into a wordprocessor or spreadsheet with a claimed input speed of approximately 500 words a minute so it can type faster than my two fingers. It's accuracy is in the order of a claimed 90% but as detailed later this is dependant upon the quality of the text being read.

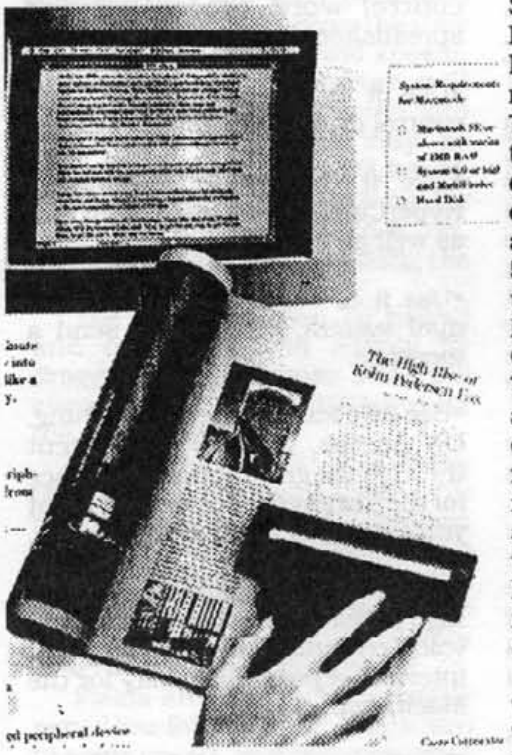
What has not been explained in the press is that the Typist is not only a text reading machine but also a graphics scanner with a 300 dots per inch resolution.

Machine Requirements

The stated machine requirements to enable the Typist to be run on a Macintosh are severe and are as follows :-

a) A Macintosh SE computer or higher with hard disc.
b) The chosen machine must have a RAM memory of 4 M bytes or more.
c) The hard disc must have 2 M bytes of free hard disc space left.
d) The software must be run under Multifinder and system 6.0 or higher.

I telephoned the UK distributor, Computers Unlimited, to ask about the restriction of a Mac SE and above. They said that this restriction was because of the Mac Plus and its non standard SCSI interface. The Typist would work on all Mac's with a standard SCSI interface including the new low cost Mac's and the portable. Apple apparently brought out the Mac Plus with a reduced logic SCSI interface which whilst being quite OK with hard discs could not be used with the Typist scanner.



Review Machine

For your reference as a benchmark my review machine was :-

a) Mac II with 5M Bytes of RAM and Hard Disc (25 Mbytes left)
b) System 6.0.5
c) Finder 6.1.5
d) Multifinder 6.0.5

Unpacking

Upon opening the outer thin card packaging you are presented with the two more boxes. One box contains the Typist scanner and the second the power supply. SCSI interface, manual and software disc.

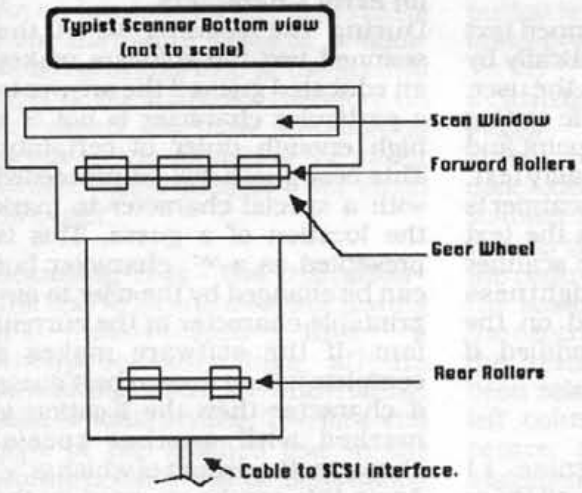
Packing List

[1] Typist Hand Held Scanner
[2] SCSI Interface box
[3] Power Supply
[4] Power lead
[5] 3.5 inch floppy disc (800k format)
[6] Manual
[7] Revision notes (for issue 1.0 of the Typist)

So what is missing from this list ?. I quickly found out when I hurriedly tried to prepare my machine to accept input from the Typist. The glaring omission was the Mac to SCSI interface connecting cable. In order to connect the Typist to your Mac an additional purchase of a 25 pin to 50 pin SCSI cable will have to be undertaken. Not very good for the Mac philosophy of plug in and go. On the other side of the coin if the Typist was to be added to an already existing SCSI chain then a quite different cable would be necessary. So by omitting the interface cable the choice is yours and thereby saving some extra unnecessary expense. However, having to buy the package before finding this out was not a very good experience.

The Manual

The manual is a small ring bound booklet which carries information on the installation, setting up and operation of the Typist. The manual is larger than the information within warrants as it is written for both the Macintosh and IBM computers. The trouble shooting section is confusing, so much so that the release note makes a second attempt at explaining how to locate conflicting Init's and DA's. The manual can best be described as adequate to get you started and operating the Typist. Totally missing is a technical section giving details of



the different characteristics of the hardware and software. Another omission is the explanation of the dithering switch on the scanner head. Although there are four positions the explanation of their use is minimal. The manual only explains that the dithering must be switched off before trying to read text. The other three switch positions are not covered except to say that they represent differing levels of dithering, their application is not explained.

Hardware Description

The major pieces of hardware consists of three units which range in weight from light (SCSI Interface) to heavy (power supply). Generous lengths of cable are provided for both the scanner head to SCSI interface and the power supply. The power supply is a large heavy block which plugs into the mains via a 2 metre lead and comes complete with a 13 amp plug. The low voltage lead from the power supply is 1 metre long and terminated with a standard battery plug which plugs into the back of the SCSI interface box next to the SCSI interface socket. Power indication is on the SCSI interface box only with the power supply being devoid of any lamps or switches. This means that to power off the Typist the mains plug must be pulled out of the wall socket. The scanner itself is a 'T' bar hand held unit with a 5 inch scan head width on a 0.7 metre long cable. Control is effected via a single large push button conveniently located where the hand naturally rests. When power is on the scanner constantly emits a red glow as the LED's are permanently on although at low intensity. Full intensity only comes into play when the scanner actually does the text/graphical scanning.

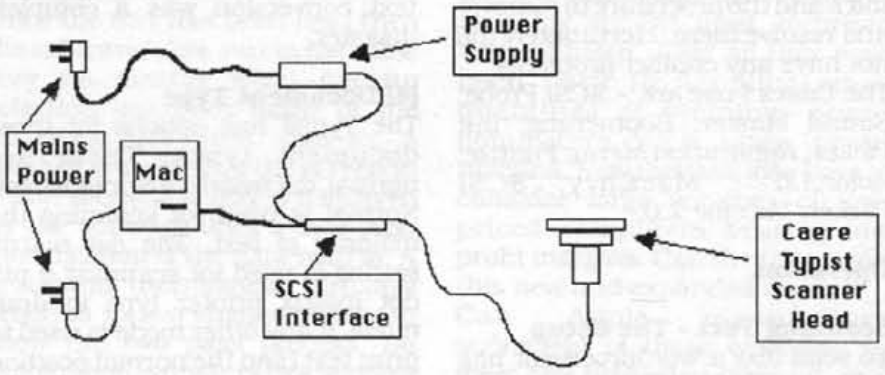
The scanner itself runs upon two sets of hard rubber covered rollers, as in the diagram. The width and spacing of these rollers mean that the likelihood of miss-tracking whilst drawing the scanner down the page is minimised. A gear wheel on the forward roller ensures synchronisation between the scanner's lateral movement and the scanning software. This arrangement does have the drawback of having the scanner falling off the end of a book. Even with thin items such as magazines there must be a work area of approximately 6 inches below the edge of the magazine so that the Typist will not fall off the edge of the desk.

Hardware Set Up

Setting up the hardware side consists of plugging together the different components. An important consideration is the SCSI termination. This was a grey area for me and my first excursion into unknown territory. The advice from dealers was conflicting so I shall detail my experiences hi-lighting the manual's contribution. The correct setting up of the SCSI chain depends upon how many SCSI devices are attached upon it. For full details please refer to your Apple Systems manuals. The Typist does not have any break out SCSI socket on the SCSI interface and must therefore be at the end of the SCSI chain. It also does not have any termination resistors built in, and none are provided.

The Typist manual recommends that the Typist be terminated with a through resistor which plugs in between the Typist SCSI interface box and the SCSI cable coming from the next device in the chain. This is only the case if the Typist is in a SCSI chain and not the only device connected outside of the Macintosh. As I had two other SCSI devices in the chain, an internal hard disc (ID.0) and a removable hard disc (ID.6) I needed the through terminator and an extension cable. All that was then required was to plug the whole shooting match together. This was easy and as the plugs and sockets are either of the male or female variety and thus mistakes cannot be made.

The only other item to the setup is to select the SCSI identification number. Each device, including your Mac, has an identification number from 0 to 7. This is so the Mac (id 7) can talk directly to a device and not have every other device thinking the messages are for it. By convention any internal hard disc is given an id number of 0 (zero). Therefore the Typist can have an id of 1 to 6 inclusive. Selecting the id number is very easy with a rotary switch located upon the rear of the SCSI interface box. This comes set at 6 but can be easily be reset with a screwdriver if this conflicts with another device such as an external hard disc unit.



Software Set Up

This is also pretty straight forward in concept. The floppy disc contains three programmes. One item is a desk accessory (DA) which must be installed into the Apple pull down menu. The manual

states that the Typist DA cannot be used from desk accessory extenders such as Suitcase and so must be in the top 15 of your favourite DA's list. This must be installed using the Font DA mover as usual but with the unusual condition of being done under the finder and not Multifinder. I tried installing the Typist DA under Multifinder and this resulted in a Font/DA Mover crash. After rebuilding my system DA's file I installed the Typist DA under the finder and all was well. The lesson here for me is to read the instructions before commencing to try to get the equipment to work. Still here is a warning for you that all will not be lost if the Typist DA is tried to be installed under Multifinder only the DA section of the system file.

There only remains to copy the start-up document (installer) into the system file together with another file (application). This is also a start-up document as it appears as such under Init picker and can be disabled along with any other Init or Cdev. All is now ready for the reboot of the Mac to force the loading of the start-up document, the installation of the DA and the return of MultiFinder to the operating environment. The manual devotes a section to the possibility of conflicts between the Typist software and other DA's or Init's and the procedure to discover and resolve them. I fortunately did not have any conflict problems.
The Cdevs I use are :- SCSI Probe; Sound Master; Boomerang; Init Picker; Application Menu; Fontize; Kolor 1.0 ; MacEnvy; SCSI Parker; Vaccine 2.0.

Operation

Scanning Text - The Setup

To scan text a wordprocessor has to be open with a document, either empty or in progress before the Typist can be called from the desk accessory. The caveat that a wordprocessor be open is very important. If the Typist is called from the finder and a folder or file is hi-lighted then when text is read into the scanner, text will replace the file/folder name!
So with the wordprocessor file open and Typist DA called a page setup is presented to the user. Here the parameters can be set such as :-

[1] Brightness.
The brightness of the scanned text can be either set automatically by the Typist or manually by the user. I found that the automatic setting was a very good starting point and worked well with good quality text. To set the brightness the scanner is placed diagonally across the text and the scan bar on the scanner pressed once. The brightness setting is then displayed on the screen and can be modified if desired with a scroll bar.

[2] Languages
The Typist will recognise 11 continental languages so all those inflections seen above e's etc. will be recognised. With a number of these switched on the text recognition will slow down as more work is done by the software. The languages catered for are :- Danish; Dutch; English; French; German; Irish/Gaelic; Italian; Norwegian; Portuguese; Spanish; Swedish.

[3] Scan Direction
The Typist needs to be told in which direction you intend to scan the target page. The options are Left, Right, Up, Down or Auto. Auto is supposed to allow the Typist to work out which way up the text is coming into the Mac. I used it once and it read the text in upside down! Needless to say that the resulting text conversion was a complete disaster.

[4] Document Type
The Typist has options for three document types. These are normal, dot matrix or Spreadsheet. Normal is used for scanning the majority of text. The dot matrix setting is used for scanning 9 pin dot matrix printer type in draft mode. If any other mode is used to print text then the normal position should be used. Lastly the spreadsheet option allows the reading in of columns of data into a spreadsheet such as Wings or Excel.

The Typist will not read highly stylised text or handwriting. The software although reading the majority of fonts cannot 'learn' a font as can it's big brother, Omnipage. Therefore the user will be restricted to the present limitations until an upgrade is forthcoming from Caere.

[5] Error Characters
During the reading in of the scanned text the software makes an educated guess if the answer to a particular character is not of a high enough order of certainty. This best guess will be proceeded with a special character to mark the location of a guess. This is presented as a '^' character but can be changed by the user to any printable character in the current font. If the software makes a complete failure to even best guess a character then the location is marked with another special character the default of which is '~'. Again this can be changed by the user.

[6] End Of Line Termination
This is different from the SCSI type of termination and refers to the end of text line printing character. This can be set with a carriage return inserted at either the end of the line or at the end of the paragraph.

[7] Column Recognition
For reading in text from newspapers and magazines it is necessary to tell the Typist which column you are interested in. This can be either set at the left, right or centremost column of the page to be scanned.

[8] Text Overlap
This is a cunning feature which recognises the inevitable occurrence of reading in text twice in one page because of text overlap. Scanning a full width page the scanner must be used to read the page from left to right to capture the top half and then again for the bottom half. This will result in some text having to be read in twice. Setting the Text Overlap to ON will automatically remove the duplicate text.

[9] Scan Marking
The Typist's software will mark the start of a scanned section of text to make it easy to find inside a large document. This piece of text can be set by the user to any short string to identify where the scanned text is located. Please see the later scanned article section later in this review. I scanned a section of Apple Slices and had the Typist mark it for me although the end scan marker I had to do myself.

[10] On Line Help
An on line help facility is available from the setup dialogue window which provides help at the general level of the manual. Therefore do not expect any more illuminating words on the settings of the dither switch. Again adequate but could do better.

Scanning Text - The Operation
The text to be scanned will, during it's conversion into a wordprocessor, lose all its formatting such as underlining, bold or italic styling. The font and style of the finished text in the wordprocessor will be determined by the wordprocessor's settings. As the scanner's LED's emit a red light it should come as no surprise to learn that red coloured text will not be read by the Typist.

General Comments
The success or failure of scanning text depends upon a number of factors. The biggest of these is the quality of the copy to be read in. The contrast between print and background seems to contribute greatly to the success of the copy to be read in to the Macintosh. The size of print that can be read in is a claimed 6 point up to an incredible 72 point. Highly stylised print cannot be read but I have successfully read in italics in a point size of approximately 14 without a single error.
Ensuring that the dithering switch on the scanner head is set to off and the setup has been concluded then the OK button is clicked and you are returned to the wordprocessor. The scanner head is then placed upon the top of the text to be read in. This can be easily achieved by viewing through the red window in the scanner head. A line in the window allows the correct horizontal alignment to be achieved. The scanner head push button is then pressed and the confirmation green led on the head next to the push button comes on to confirm that the Typist is ready to scan. The scanner head is then dragged down the page at a reasonably steady rate whilst observing the restriction of a maximum speed of 2 inches per second. The cursor on the screen changes to a miniature scanner head which flashes to show activity. When the end of the page is reached the scanner push button is released and the software takes over.

Scanning Multiple Column Pages
Once the setup has been concluded as detailed above the scanner head is then placed upon the top of the text to be read in. If the centre column is selected then the scanner head is aligned with the central column in the centre of the head. If the left column has been selected then naturally then left column is aligned near the centre. Similarly for the right alignment. All this setting up is essential as the Typist will ignore any other text than the selected column. So there is not any chance of adjacent text infecting your target.

Scanning Spreadsheets
To scan a spreadsheet is no different than scanning text. The only difference is the set up. This entails selecting the spreadsheet option from the set up dialogue window. All columns covered by the scanner head will be read into the spreadsheet. There is no provision for left or right column selection as for a spreadsheet the correct setting is the 'TABLE' option.

Software Optical Character Recognition.
Once the text has been read then the software takes over in the same way no matter what set up selection has been made or the text/data has been read in. A window is opened on the screen in which sections of text is displayed as the software does a two pass interrogation of the data read in. A horizontal thermometer displays progress in two shades of grey to show the two pass process. No explanation is made of this window in the manual although the demonstrators at the MacUser show said that it was an important indicator of the standard of text capture. Blotchy characters which we would find difficult to read are shown inside of the window as are lines where the text is not horizontal. This window should be regarded as a difficulty indicator to give the operator some idea as to the problem text areas.
The areas where the Typist becomes confused are in like shaped characters i.e.. between a '5' and a 'S' or 'i' and a 'l' will be a possible cause of a failure of the Typist. By observing this displayed text it may be possible to reset the brightness and retry the text importation with a greater degree of success.

When the text deciphering is complete your Mac beeps to alert you and the text is inserted into the document that was open when the Typist was called. If this was a spreadsheet then the data is inserted into the spreadsheet cells. The determining factor of a cell is the spacing of the original.

Scanned Text Examples
Below is a scanned portion of text from the November edition of Apple Slices, page 1 under the heading of "Amazing Prices". Note that the heading "Amazing Prices" being in inverse type was not converted by the Typist even though it was scanned and appeared in the conversion window during the OCR exercise. The guessed characters are proceeded by the character ^ and the missing characters are marked by the character ~. In both of the examples below the automatic brightness setting was used.
//SCAN//
This major change in marketing policy by Apple has taken many of us by surprise. the dealers probably are the most surprised and confused. After all they have been used to handling small quantities of premium priced computers with large profit margins. Now they will also have to consider large volumes of low-priced computers bearing low proht margins. Can they cope with this new and expanded market?
Can Apple manufacture su^mcient of these machines to meet any pro~ected demand, and more importantly can they supply them immediately without a long waiting list. To have to wait for one of these things will probably make a customer choose another computer they can get off the shelf instead. The reputation of the Macintosh goes ahead of itself of course, but in a cut-throat market that is not enough. Many a good computer has not survived because of poor or inefficient

marketing or lack of supply.
At the launch of the three machines, Apple showed us a slide showing a warehouse of large white boxes. These they said represented a large quantity of Classic computers already being shipped to customers as they spoke. They will need to keep that mountain of boxes high at all times.
//END SCAN//
The following section of text was taken from the inside page of November Apple Slices. The cream backing and smaller text causes a greater problem for the Typist as the following text will demonstrate.
//SCAN//
There are a nu~er of
way~ to contact
A~e2000
If you wlsh to order goods or services frr>mApple2000, orifyou~ustwish to leave us a message. please cal'i Irene on 051-928-4142 ~Ansafone durlng the day). Aiternatlvely. you can send us a Fa~c on 051-949-0307; orwrite to us at PO Box 3, Live^lpool. L21 8PY.
Ifyou use comrns, you can leave orders onT~BBS (addressed to the SYSOI~ . or contact us onAppleLink (BASUG.l).
If you are experiencing problems with Appleha~wareorsoR wareDave Ward andTonyDartrun theHot linesandwill try and help you.
We are very interested in the acffvities of loca'i user groups. If you have any information which you would like publicised, John Lee would llke to hear from you.
We reserve the right to publish, without pre^ludice, any advice or comments given to members as a result of letters received, in the.purnals of Apple2000.
A little praise for a few of our authors wouldn'tgo arniss. &nd all comments and contrlbutlons vla the PO bcuc We'd be especial~y Interested to receive any suggestions aboutwhatyouwould like to see in your magazines and news- letters.
//END SCAN//

Scanning Text Into Applications.

I have tried to scan text into Nisus, MacWrite II and Teach Text with complete success. Attempts to read text into HyperCard failed as the text went into the message box and not the field as intended. I assumed that this was because I had the 'Blind Typing' option active. I therefore disabled it and retried to scan a passage of text into a field. The text once again started to go into the message box. Clicking on the field whilst this was going on redirected the text flow to the field. HyperCard therefore seems to lose the cursor in the field whilst the Typist is scanning and doing the optical character recognition.

As for spreadsheets I have tried Excel and Wingz with varying degrees of success due to the quality of the text involved which is the same as for wordprocessors. One mishap was when I tried to scan a table of data into Excel. Not having clicked into the entry bar and thus having a flashing cursor I then scanned the data and watched mystified as Excel went haywire when the data started to be inserted into the spreadsheet. Menu's started to be dropped and the Mac made lots of bong type sounds. Retrying with the same data and the entry box properly primed presented no problems.

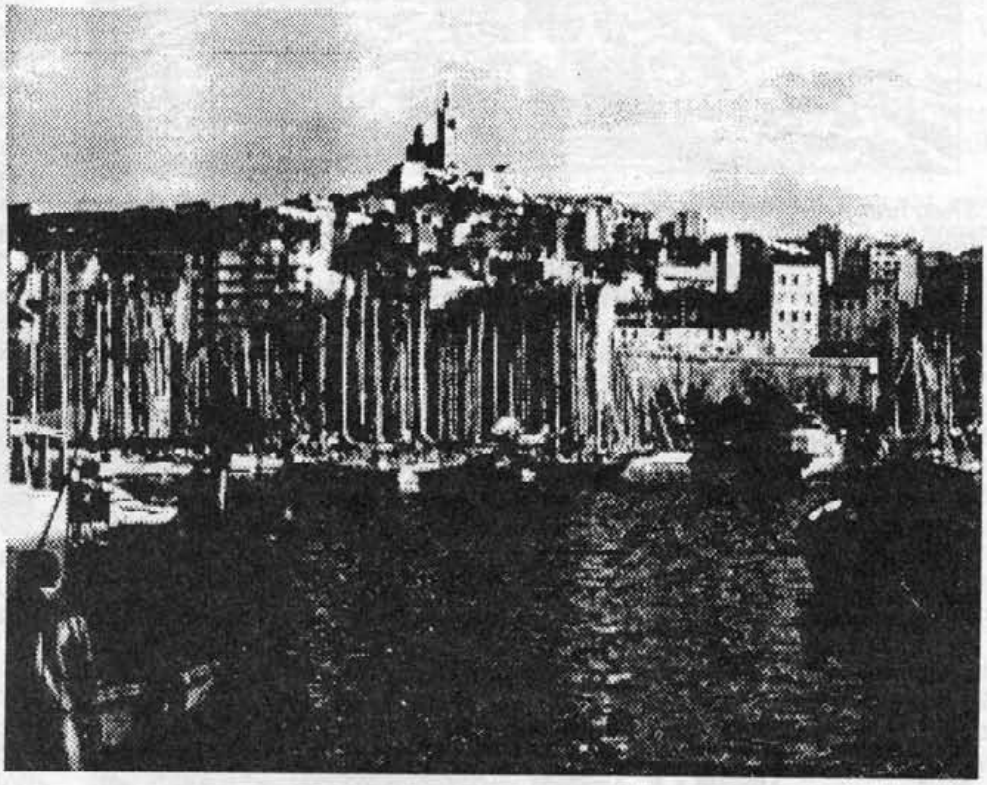
Scanning Images

The scanning area covered by the Typist is 5 inches across by 11 inches down. To open the graphical scanning the Typist is opened from the Apple menu as before. There is no requirement to open the Typist for image grabbing from within an application, it can be done from the Finder. The dithering switch must be set to either no dither (for line art) or some level of dithering up to a maximum setting depending upon one presumes, the complexity of the image. Brightness setting is done exactly as before and then the scanner is ready. Now except for clicking on "OK" to start text reading in the selection screen the mouse is used to click upon the "Image..." button. This clears the screen and opens a screen window as large as the monitor in use allows. The scanner is now available for action.
There remains only to align the scanner on the target, depress the scanner button and then wait for the green LED lamp to light. This signals that the Typist is ready for action and all that remains is to draw the scanner along the paper and watch the captured graphical scene scroll down the screen at the same time. As explained before as long as the scanner button is depressed and the scanner is moved down (or across) the page the scanner will capture to the maximum of its span i.e., 5 inches by 11 inches. After this limit is reached moving the scanner will not capture any more into the computer. Speed of input is not important except for the maximum speed of two inches per second. Exceeding this maximum will result in missed sections of the original and tear like stripes across the screen. Interestingly stopping the scanner (to take in a breath) the computer will stop scanning and this will not affect the scanning as long as the scanner button is not released. This is because there is a gear wheel attached to one of the forward rollers. This synchronises the scanner movement to the computer/scanner operation. This is very good as the speed of movement can be jerky and will not affect the quality of the data captured.
Interestingly if the scan direction is reversed then the Typist carries on scanning as if nothing was wrong and can then give a faithful 'mirror' image.
The Typist has the annoying ability of attracting dust onto its window probably due to static electricity. The results can be seen in a black line being drawn down a page when a image scanned. I found that an air puffer of the type photographers use on lenses is perfect to blow away the dust. The presence of dust can only harm the OCR task so a regular blowing away of dust will be necessary. The window should be treated carefully as the marking of it will degrade the performance of the scanner. The manual states that the window is removable and that Caere will be making available replacements. Computers Unlimited say that they will be doing this for the UK market. The registration documentation is addressed to Computers Unlimited and not the USA based Caere Corp. so upgrades and backup should be available in this country.
Once the image has been successfully captured the time comes to save it. The options presented to the user are either PICT2, TIFF or compressed TIFF.

There are no other options to either scale or crop the image before saving to disc hence the requirement of a minimum of 2 M bytes of hard disk space be kept free. The user must have an additional piece of software with which to manipulate the images after capture. The Typist will not scan directly into paint packages like MacPaint as it will text into wordprocessors. Whether packages such as Digital Darkroom have the necessary software drivers to interface with the Typist I do not know and the manual does not say anything in this area.

Example Image Scan

This is an image I scanned using the Typist. The photograph is one which I took in Marseilles in March 1990 during a business trip. The original automatically set brightness turned out to be far too dark. I modified the setting twice before this acceptable scan was made. The dither switch was set to maximum



After The Scan

Once the text or image or text has been scanned and the Typist is quit the trouble can be just beginning. In a release note (1.0) Caere warn that when using Wingz in conjunction with the Typist the Mac should be rebooted after completion of work and Wingz is quit. This is to avoid a system hang when another application is started. Why this should be is not explained but I tried it and did, in most attempts, meet a system hang when another application was started after quitting Wingz. Another thing I noticed was the seemingly random and startling warning window being thrown up to say I had insufficient memory to launch an application. Upon inspecting the 'about finder' in the Apple menu I found that the Finder had a memory allocation of over 3 M bytes! Hence the low memory warnings. I could find no way of resolving this other than rebooting the system. There is obviously a software bug here but to the credit side I have not encountered a system bomb to date.

Conclusion

The Typist works very well within the constraints of the input material hi-lighted above in the body of the review. The price places it in between the cheaper Scanman and the more expensive flatbed scanners. However to have this level of optical character recognition software bundled in is remarkable. The software in it's big brother form costs more that the Typist hardware/software bundle together. This package can work very well indeed with good clean crisp type but will degrade with sub-standard text such as poor photocopies.

The criticisms that can be levelled against the Typist are the lack of image manipulation before saving to disc. A simple cropping facility would have been welcome. Also the lack of an SCSI interface cable will disappointed other users when they discover that they can't plug in and go. The overall scanning software is flawed as it does not always return memory for the use of other programmes and can give cause to system 'hangs'. Overall I would recommend the Typist as a remarkable device for the price when compared to the current market. I have been very pleased with it and its performance. I await a software update from Caere to remove the annoying software bugs. I hope it's soon.

I've marked down the overall rating to three stars for the disappointing manual, lack of SCSI cable and the flawed software in relation to the Mac operating system. I do feel that these shortcomings are minor compared to the value to productivity that this scanner offers. People should not be put off by these criticisms as the Typist does deliver the goods at a very good price.

info

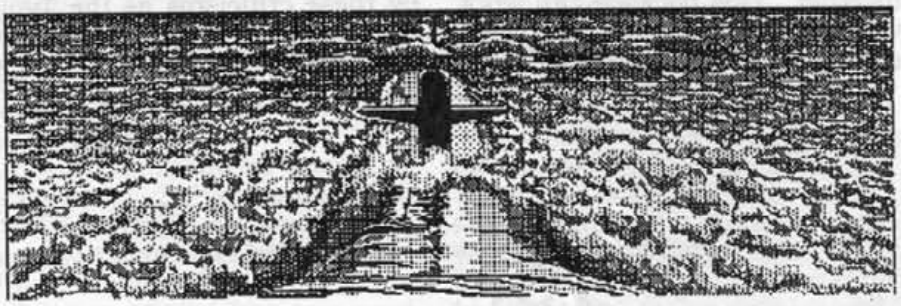
Product : The Typist
Publisher : Caere
Available from :
MacLine

Price : £445.00 + VAT

Value :	★★★★★
Performance :	★★★★
Usability :	★★★★
Overall :	★★★

The Hunt for Red October

A review of the game 'The Hunt for Red October' by Ceri Fisher.



They had been creeping along for a half-hour now. Ryan was chain-smoking at his station, and his palms were sweating as he struggled to maintain his composure. This was not the sort of combat he'd been trained for, being trapped inside a steel pipe unable to see or hear anything.
"He knew that there was a Soviet submarine out there, and he knew what her orders were. If her captain realised who they were - then what ? The two captains, he thought, were amazingly cool..." from the "Hunt for Red October" by Tom Clancy. © 1984 United States Naval Institute.

Here is a game to which I am more than sympathetic - it undermines the mindless Rambo culture of our times with a simple challenge: "Sure, you have weapons, but if you use them, you'll lose !". This is far more authentic and for more situations than just this particular "Ping-ping, bubble-bubble" scenario.

OK, cue world-war-2 sonar noises ("Ping-ping, bubble-bubble"). Skip this paragraph if you've read the book already. You are an admiral in the Soviet navy, at the helm of the secret Red October nuclear submarine. You have no faith even in MS Gorbachev's plans to make the eastern world a better place, so you want out.

You plan to defect using the Red October, which has a supposedly undetectable "Catterpillar" propulsion unit. You make your intentions known to the Americans, and, after receiving orders for your next mission - to put Red October through sea-trials in the Atlantic - you set sail (ha ha).

Before leaving, you, perhaps unwisely, decided to hand in your notice, so now the entire Soviet fleet are out to persuade you not to join the other side. The first one you come across is that old chestnut, the Soviet 'trawler'. ("Yes comrade, we fish with sonar and depth-charges in the Arctic ocean, saves so much messing about with nets.").

This all sounds wonderful, doesn't it ? So, what can go wrong? Well, Red October can have a sea-bed collision ! It could be sunk by the Soviet or American navy; the crew may become suspicious that the exercise orders are not being followed, and may then mutiny (then RO will be boarded by the Soviet navy); the last possibility - but the one which most affected my early attempts, is being hit by a mine !

Whichever happens - or if Red October is finally delivered safely to the Americans - the game ends with a large picture screen showing the outcome, and this is followed by a Newspaper front-page which tries to explain things a little more. ("Ah yes, so the AMERICANS sunk us this time...")

The game has elegantly simple controls arranged in a number of major and minor 'modes' and and full control over heading, depth, and speed.

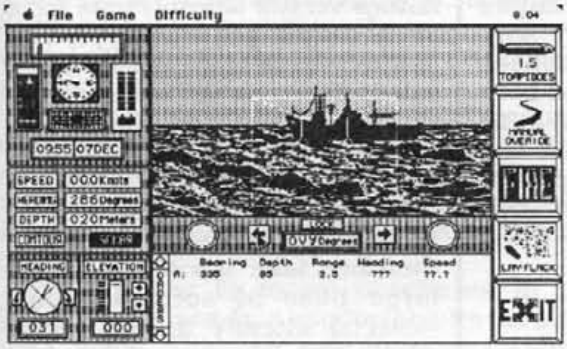
Speed, depth and heading are controlled by double-clicking in the appropriate place (the new setting) on the relevant gauge. This is fine but a little coarse (especially on depth - getting to periscope depth is very

important but very hit-and-miss). The alternative is to use frustratingly slow-acting 'increase-decrease' button-pairs (which smooth-scroll the unit-digits !!).

The North Atlantic map also displays Soviet and American fleet positions when updated by the 'ESM' option - passive radio intelligence-gathering.

The major modes are: a North Atlantic map view, a very impressive and lifelike periscope view - ships bobbing about on a realistic seascape night and day and a sonar (and/or sea-bed 'contour' map) positions view. When these last two are superimposed, it allows one to sneak with great effect into the most suitable hiding places amongst the mountains and ravines of the sea-bottom.

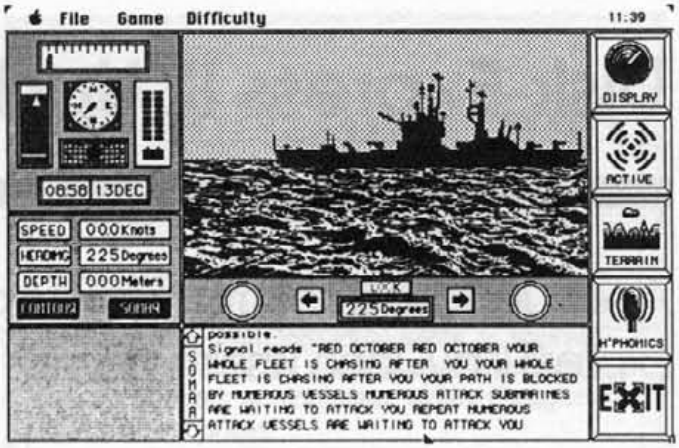
The minor modes are for weapons systems (torpedo-tubes fore and aft, laying flack to mislead enemy fire); sonar (active and passive, and a superb 'terrain' or sideways view of the sea-bed at your choice of scale); changing engine chracteristics (nuclear or diesel, Catterpillar or propellor), and periscope options.



I soon discovered the ocean is a noisy place, and it is very important not to make much noise oneself. So the less 'ping-ping' (active sonar), the better - the less 'bubble-bubble' of RO's hull rupturing.

Additionally, there is a collection of named ship 'silhouettes' to help identification from the periscope, and a hydrophonics option in the sonar mode, which shows a sound spectrum of any selected ship and allows this to be visually matched against those in a library of ship's names and their sonic 'signatures'.

Changing from one mode to another is via the column of icons to the right of the main screen, and it is very smooth and well-arranged.



Once off the continental shelf, sub-marine life might seem rather dull - so there is a speed-up control (using the date and time display) which makes things happen faster (when nothing much is happening).

In some ways, this is a rôle-playing game, and I'm not going into much more detail because too many clues above those the manual provides (and it does give good background information), would spoil the game for those who want to get it.

However, I must point out the following problems:- no DA's allowed; no volume control (just on and off); the documentation doesn't mention the Macintosh, so I had to work out how the controls worked for a Mac - trivial except for speeding up the game action which is an OPTION mouse-click (OPTION !! Why ??).

The Mac implementation also lacks an indicator for how much noise RO is making - the other versions (all lesser machines) do have this; no continuous authentic engine sound; the sonar terrain view gets turned off when the 'Save position' file operation is used, and its visibility isn't remembered when a position is re-loaded; other characteristics are also forgotten during some operations - which is a nuisance because if ESM gets turned off one has to surface or get to periscope depth to turn it back on again.

Also, there were a few misfeatures which annoyed me:-

the information window for 'commentary messages' has truly pathetic scrolling, and the sonar information window (toggle between the two) doesn't scroll at all - so no more than 5-6 ships can ever be studied in it; a slow and unpredicatble response to turning the 'scope left or right; no visual indication of range in either the Atlantic or the Sonar map displays (only for ships in the sonar information window) so you can't know for sure how far away the MINES are; it crashed sometimes (Restart id = 02) and there were occasional display bugs (small areas not refreshed properly);

So, in conclusion, I would say this is a fine game which everyone - peaceniks and all - should be able to enjoy. I hope the publishers fix the manual for a start - suppressing all mention of other (cheaper) machines should help Mac users feel they have got quite a lot for their money: I can't imagine the Commodore 64 version costing £30 ! It would be too much to expect them to fix the other bugs. Pity.

And it's not copy-protected - but you don't want to spend 2 years in prison, do you ?

Thanks to "The Software ToolWorks" in California, and "Grand Slam Entertainments" in the UK, for getting this review copy to me.

info

Product : The Hunt for Red October

Publisher :

Available from : MacLine

Price : £ 24.00 + VAT

Value : ●●●

Performance : ●●●●

Documentation : ●●●

Disk Express II: Update

A sequel to last month's review of Disk Express II by John Kishimoto.

DiskExpress II: Update

Since my review of DiskExpress II, I have come across a number of features which should be noted.

DiskExpress access times

The object of a disk optimizer is to reduce disk access times, head movement, and consequential wear of the hard disk. Unfortunately, the verification process takes a considerable period of time, resulting in continuous head movement. I suspect that owners of large drives would have to undergo verification processes that could last an hour or two.

The time it takes for DiskExpress to analyse and optimize, depends on the number of programs accessed or modified over the monitoring period. If, like me, you jump from application to application without any particular pattern, the optimizing process becomes ridiculously tedious. A typical optimizing routine including verification has often taken 2 to 3 hours a day. Not a serious problem for those who keep their computers on all day, but a pain for those who use their machines for the odd hour. The optimizing process, in my case, is also probably the prime source of hard disk wear (through its continuous time consuming accesses).

Terminating the program, while optimizing, will not cause any damage. However, restarting the process will re-invoke the time consuming verification routine. Bypassing the verification process will result in considerable improvement in optimizing times. However the consequences of ignoring this process is still unclear.

DiskExpress Crash

In the months I've had DiskExpress, it has crashed only once. The exact cause was not traced, though I suspect some form of mains failure. Rebooting the Finder brought up a flashing icon in the menu bar. On examining the DiskExpress Cdev in the control panel, a dialog window appeared, indicating which program was being accessed when the failure occurred. A quick directory scan using the supplied DiskCheck program showed that it had been damaged and the drive had to be reformatted. This experience has indicated that a) Backups are essential and b) A crash while running DiskExpress is fairly benign.

Recommendation

DiskExpress is a well written program and seems to be quite robust. However, the need for such a program should be carefully considered. If you use only one or two programs on a regular basis, then DiskExpress would be of benefit to you. On the other hand, deleting that old unused file could result in a depressingly long optimizing process, while the program attempts to fill the resulting gap. It is possible that partitioning and separating data from programs could reduce these times.

In my case, DiskExpress II will be used perhaps once a month. The program will, unfortunately, normally remain switched off. Although I also have SUM II, the prioritized optimizing process of DiskExpress remains my preferred method.

Serius Business™

Serius Corporation have announced the introduction of a powerful new multidimensional spreadsheet application for the Macintosh® called Serius Business™.

In a conventional spreadsheet, the user may for example enter sales figures categorized in columns by product name, and in rows by the names of salespersons or departments. Six month's worth of monthly sales figures would require six different worksheets. To create a worksheet which summarizes those six months is no easy task, and frequently requires re-entering data from those worksheets. That's why multidimensionality is so beneficial. In Serius Business, the user could designate months as a third dimension. So, the user may choose to look not only at product names versus salespersons for a given month, but also at product names versus months for a given salesperson, or at salespersons versus months for a given product name.

Serius Business was developed using Serius's object programming technology. Serius Business can therefore take advantage of the large base of software tools (objects) already in the Serius Object Library. Serius Business will be marketed in a number of variations, each with a unique set of features. The basic version will include Serius's multi-user Database Object, allowing users in workgroups to call up spreadsheets stored in a database on a remote server simply by typing in a name or a topic. Another version will also include online communications, provided by the Serius Communications Objects, allowing the user to receive data directly from a corporate mainframe or information service into his spreadsheets. A third variation will add the Serius Workstation Object, providing online e-mail, and allowing ranges of cells to be authored and edited by different users on a LocalTalk connection alone. Retail price in the USA is $395.00. Call: (801) 272-7788/(800) 876-6847

Canadian Macintosh Prices
John Kishimoto

UK residents have often complained about the high prices Apple UK have placed on their equipment. This is no longer the case. The following retail prices apply to British Columbia. ($2.2Cdn = £1.0)

Classic 1/F	$1349	£613
Classic 2/40	$1999	£909
LC 2/F	$2799	£1272
LC 2/40	$3499	£1590
IIsi 2/40	$5277	£2399
IIsi 5/80	$6397	£2908
SE/30 1/F	$4210	£1914
SE/30 1/40	$4717	£2144
SE/30 4/80	$6397	£2908
IIci 4/F	$8357	£3799
IIci 1/40	$7910	£3595
IIci 4/80	$9337	£4244
IIfx 4/F	$12825	£5830
IIfx 4/80	$14125	£6420
IIfx 4/160	$15695	£7134
12" Mono Display	$419	£190
12" RGB Display	$839	£381
13" H.Res RGB	$1579	£718
Portrait Display	$1649	£749
Two Page Mono	$3224	£1465

It is interesting to note that the LC & RGB monitor combination is significantly more expensive in Canada than both the UK and US (US retail price is approx. US$3000).

As might be expected, the best selling Apple computer at the moment is the Classic 2/40. Due to the demand (and low profit margins) discounts are nearly impossible to obtain. University students, however, can buy the 2/40 for around $1500 Cdn (around £700).

VAT applies to many purchases in the UK. Throughout Canada, a provincial sales tax is levied on most items. This can vary from nil to about 13% depending on the province. In addition, the GST (a more pervasive form of VAT), is due to come into effect in January. This is expected to raise prices by an additional 7% in all provinces.

No Mac Bargains in British Columbia

As in the UK, prices, of both Mac and Apple II items, are high compared to the US. For example:

a) A 2Mb upgrade (installed) using 1Mb 80ns SIMMS costs about $300 (£136). The equivalent with US sourced SIMMS would cost around $200 (£90).

b) MacLink Plus can be purchased from the US for $138 (£63). From a local dealer, the same item costs $200 (£90).

An interesting effect of the free trade agreement between Canada and the US, is the elimination of import duties. As a result, hardware is only subject to 13.5% federal sales tax (soon to drop to 7% with the GST) and software is free of (federal) tax. Therefore, despite the local dealer's protestations of lack of support etc., many Apple users shop by mail from the US (using MacZone, MacWarehouse etc.). More often than not, it's also quicker than placing an order with a local dealer.

Proximity to (and free trade with) the US doesn't necessarily mean cheaper local prices.

A solution for everyone . . .

We offer the full range of Apple II and Macintosh 512K, Plus, SE and II computers, accessories and software from individual items to sophisticated systems for the latest applications in desk top publishing or computer aided design at competitive prices.

Whatever your interests as a newcomer, enthusiast, professional, small business or large public company, we can provide new and used equipment, with excellent service, reliability and after-sales maintenance, training and support.

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Chameleon Systems

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Formerly Chameleon Software, est 1986

Stock clearance sale now on. Many items are drastically reduced and everything (Apple II & Mac) must go!! Send SAE for list, now!

Video films, all top titles only £7.70 each or less (inc P&P and VAT) send SAE for list. eg. Rain Man, Nightmare on Elm Street, 11days 11 nights, 2010, Police Academy, National Geographic, Scanners, Dirty Harry, also music videos, etc. 200 titles in stock over 500 titles available.

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Claris ships FileMaker Pro

Claris Corporation announced that FileMaker™ Pro, the powerful next generation of the leading Macintosh database manager, is now shipping and is available at authorised Claris™ dealers. With more than 100 new features, FileMaker Pro adds powerful solutions for flexible, graphics-rich formatting and report generation, and includes important new workgroup and multiuser features. Performance has been increased by more than 30% over FileMaker II, on average. FileMaker has achieved a clear lead in its market because of its combination of power and ease of use. FileMaker Pro provides power usually associated with far more difficult-to-use applications-generating products, such as multifile look-ups for relating information, without requiring users to become programmers.

Claris demonstrated FileMaker Pro publicly for the first time at the MacWorld Expo, San Francisco.

Graphics Tools and Colour for Professional Reports

FileMaker Pro provides unrivalled tools for quickly formatting data into professional-quality layouts and reports. Using features from Claris MacDraw II and Claris CAD, database reports and forms can be designed with great precision. For quick, precise placement of text and data within forms and other layouts, FileMaker Pro offers customisable gridlines and auto-alignment. The user can also create and place fields by entering their dimensions and exact location. The new "Zoom" feature allows users to view and edit layouts at up to 400%. Displayed and printed reports can now be enhanced with colour. For example, red can highlight negative values or overdue accounts.

Buttons And Scripts Simplify Data Management

Other innovative features include Buttons and enhancements to Scripts, which can automate any of the program's commands. Experienced FileMaker Pro users will use Scripts to automate repetitive tasks, and create Scripts and Buttons which other users can use to navigate the database. For example, creating a month-end report to find subsets within thousands of customer records, and printing out several different summaries, can be done by clicking on a Script.

FileMaker Pro Scripts have several advantages over less flexible macro programming languages: they are easier to create and edit because of the simple choose-from-list approach. Scripts also allow users to build in "pauses" to provide customisable "ad hoc" searches and sorts. And Scripts can also call other Scripts.

Anything can be a Button in FileMaker Pro. Graphics created with the program's extensive drawing tools, or imported from other graphics applications – such as MacDraw II – or text can all be Buttons. Users can define Buttons to select any of the menu commands, or to run a Script of any complexity. For instance, a corporate user could design a screen with a dozen graphical Buttons for inexperienced users.

"One of the challenges in adding increased functionality to an application is to still preserve a simple and intuitive user interface," said Judy Gibbons, Applications Marketing Manager, Apple Computer UK. "Claris have done an outstanding job in achieving this with FileMaker Pro. It has a wide range of very powerful new features but preserves its well-established ease of use and remains true to the intuitive nature of the Macintosh."

Major New Workgroup Improvements

With its elegant implementation of multiuser and network capabilities, FileMaker Pro vividly illustrates the advantage of the Macintosh in workgroup situations. Workgroups of all sizes can share FileMaker Pro databases. Each copy of FileMaker Pro is "network ready," enabling Macintoshes to share data without a file server. Complete workgroup administration features are now offered, accessible via a graphical workgroup-security feature. By clicking on appropriate boxes, a workgroup administrator can add users to the workgroup, assign groups and passwords, and define password privileges. For instance, certain passwords might allow users to see only certain fields, or view and print, but not edit, layouts.

FileMaker Pro is the third Claris application to incorporate Claris XTND architecture (after MacWrite II 1.1 and Claris CAD 2.0), for greater flexibility in reading and writing other file formats. Currently, FileMaker Pro can import graphics based on TIFF, PICT, Encapsulated PostScript (EPSF), and bit-mapped formats. With Claris XTND, other file-format translators can be added. Exchanging data between FileMaker Pro and other products, such as spreadsheets and other database managers, is simple. FileMaker Pro reads and writes tab-delineated, WKS, SYLK, .DBF, DIF, comma-separated, BASIC and Merge file formats. An innovative feature allows the user to determine in advance if importing data from, for example, a spreadsheet will put the right data in the right field and, if necessary, restructure the file for correct import.

FileMaker Pro is also optimised for sharing data within the emerging client-server world. New tools such as the Claris query technology will make it easy to download corporate data from servers to the desktop, for analysis and formatting using the strengths of the Macintosh.

FileMaker Pro and the Claris Family

FileMaker Pro is an optimal solution for Database Publishing, combining the timely value of large amounts of corporate data with professional-quality graphical reporting, for catalogues, directories and other frequently published documents.

In addition to Claris XTND, FileMaker Pro includes many features that work the same across the synergistic Claris family of applications. These include the spelling checker, dictionaries, and a HyperCard-based Help system which can be customised and shared by Claris products; customised Help is especially important to corporate customers wanting to offer their users tailored Help information. Many drawing and graphics tools now work exactly the same way (including same menu location and keyboard equivalents) among different Claris products. So once a user has learned a Claris application like FileMaker Pro, it is increasingly easy to be proficient with MacDraw II, MacWrite II, Claris CAD and SmartForm.

Pricing and Availability

The suggested retail price of FileMaker Pro is £225, the same as FileMaker II. Registered owners of earlier versions of FileMaker can upgrade for £75. People who purchase FileMaker II between the time FileMaker Pro was announced 2 April, 1990 and the time the product shipped will receive a free upgrade to FileMaker Pro. FileMaker Pro and upgrades will be available from authorised Claris dealers or Frontline Distribution, Intec 1, Wade Road, Basingstoke, Hants RG24 ONE. Tel: 0256.463344.

Further information: Steve Johnson, Claris International, Inc. Tel: 01.756.0101 Fax: 01.573.4477

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Claris MacDraw Pro

Claris MacDraw Pro
Product Fact Sheet

Product Description:
MacDraw™ Pro software is the newest generation of the Macintosh graphics software standard for designing, illustrating publishing and presenting.

With more than 100 new features, MacDraw Pro offers breakthrough colour support, unparalleled file exchange capabilities and superior content control for text and graphics.

Key Enhancements:
Extensive Colour Support
• Takes full advantage of 32-bit colour QuickDraw.
• Automatic colour approximation (dithering) allows users to display up to 2,000 colours on a 256 colour (8-bit) card.
• Multiple palettes open simultaneously to enable users to easily group complementary colours.
• Pantone~ Colour Matching System support provides access to industry standard colours.
• Displays millions of colours simultaneously on colour Macintosh systems.
• Excels in mixed colour and monochrome environments with features like "named colours," which allow users to easily select colours, even on monochrome monitors.
• Eyedropper tool allows users to quickly match colours in documents and extract specific colours from imported images.

File Exchange Capabilities
• ClarisTM XTND architecture allows users to easily open, work with and save documents in a variety of industry standard file formats such as PICT, Colour PICT2, CGM, MacDraw 11 and EPSF, with translators supplied by Claris and third parties.

Enhanced Content Control
• Standard word processor ruler features in each text block allow users to position text precisely with left, right, centre and decimal tabs, leading (line spacing), tracking (letter spacing), and paragraph spacing control.
• Superscript and subscript allow users to create scientific notations and add common symbols to text.
• An enhanced polygon and new bezigon tool allow users to create and edit curves easily without bezier tangency controls, and access full bezier curvature when needed.
• Three editable gradient types offer professional shading effects to add depth and highlights to graphics. Up to four colours can be chosen for each gradient.
• Text and graphics can be precisely rescaled by percentage to fit any area.
• Full featured palette control with floating or"tear-off" palettes and a Finder-like interface for quick development of palettes.
• More options available while drawing for more precise positioning of objects, such as the ability to zoom while drawing; duplicate while dragging; activate or deactivate grid snap while drawing; and edit points while drawing polygon and bezigon objects.
• Precision zooming from 3 to 3,200 percent, in 1 percent increments, allows users to maximise screen space.
• Precision free hand tool for quick creation of freehand shapes with adjustable smoothing levels.
• Enhanced keyboard support for quicker navigation through dialog boxes.
• Enhanced library feature with separate library files for easier identification, and addition or removal of objects directly in library window for easier maintenance.

Improved Slide Presentation Functionality
• Improved layer/slide support allows users to copy and paste multiple slides or layers from one document to another for easier document and presentation management.
• Reorder slides or layers by dragging to quickly organise drawings and presentations.
• Semi-modal dialog box allows users to view changes before approving them.
• Full onscreen presentation capability provides additional flexibility in delivering presentations with support for remote control devices and screen blanking.

(MacDraw Pro continued)

Target Customers:
Business Professionals will use MacDraw Pro for creating business presentations, free-form business charts, casual scaled designs, simple desktop publishing projects and enhancing graphics created by other applications or purchased separately.

Graphic Designers and Illustrators will use MacDraw Pro for on-time deadline and informational graphics and illustrative graphics with the ability to work in full colour, work with more precise curve tools and directly save as Encapsulated PostScript (EPSF) files.

Engineers and Architects will use MacDraw Pro for basic drafting, conceptual design, floor plans, architectural renderings and a number of other tasks that require drawing in scale.

In-Package Support Materials:
- Users Guide
- Colour Guide
- Getting Started guide
- Guided Tour and Sample files
- Context-sensitive, customisable HyperHelp system
- Pantone Colour Matching System palettes

System Requirements and Compatibility:
- Macintosh Plus, SE family, II family, LC or portable computer.
- Hard disk drive
- System 6.0.5 or higher
- 32-bit QuickDraw required for colour

Price and Availability
- £325 RRP
- Buy MacDraw II between 1 December 1990 and when MacDraw Pro ships in Q2 1991 and receive a free upgrade to MacDraw Pro
- Beginning in January 1991 MacDraw II packages will include a free copy of MacPaint 2.0, a £95 value.
- MacDraw Pro will begin shipping during the second quarter of 1991

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PYRO!™ 4.0

From Fifth Generation Systems

PYRO!™ 4.0
Fifth Generation Systems, announced Pyro! 4.0 some months ago, the successor to the popular screen saving utility for the Macintosh. Major features include use of external display modules, optional password protection, a host of user configuration options, and complete support for multiple monitors and color displays.

According to Kim Bellue, Director of Marketing for Fifth Generation Systems, "The original Pyro! was a real success and established the market for a screen saver that provides an entertaining display when the user is not interacting with the Macintosh. Pyro! 4.0 builds on that success with a variety of display modules, including ones which the user can customize with a picture such as a company logo, or a scrolling message. And we're excited about the unlimited possibilities for future modules, which can be written by independent programmers!"

In addition to the fireworks and clock displays which were part of the original Pyro!, Pyro! 4.0 allows the user to choose among Aquarium, Blocks, Dimwit™ – a Macintosh II screen dimmer – , Doughnuts, Fireworks Too, Kaleidoscope, Marquee, Restless Picture, Slinky, and Stars. All of the chosen modules are used in rotation from one screen save to the next so the user can enjoy variety without having to re-open the Control Panel. The product includes complete programming specifications and examples for programmers who wish to create new display modules. Pyro! 4.0's optional password protection assures privacy of the underlying screen contents and prevents access to the Macintosh's disks and network connections, even across restarts.

While not a substitute for a complete disk security product such as Fifth Generation's DiskLock™, Pyro 4.0's password feature will be especially appreciated by corporate customers.

The basic function of Pyro! 4.0 is to extend the life of Macintosh screens, avoiding phosphor burn-in by providing an ever-changing display which is entertaining or soothing. With Pyro! 4.0, the user can choose both the conditions which will cause screen-saving to start and the actions or events which will cause the screen to "wake." Users of 512KE, Plus, SE, and SE/30 models can elect to have Pyro! 4.0 hide the "safe to switch off" alert that appears upon Shut Down. On all models other than the Portable, the Special menu of Finder 6.1.4 or later gains a Sleep command which will start Pyro! 4.0 screen-saving. Building on the experience gained with the original Pyro!, the programmers of Pyro! 4.0 have redesigned the internals of the software so that it is completely non-interfering with the activities of applications or other processes running "underneath" a screen-save display.

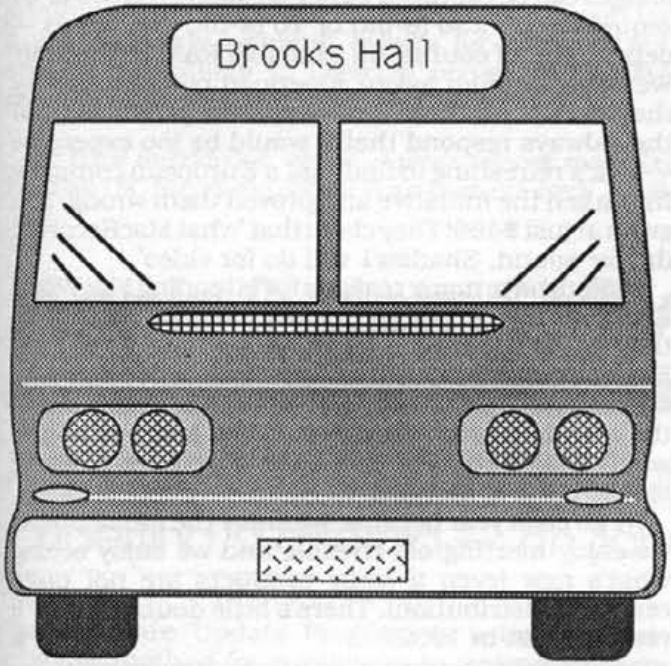
Incorporated in 1985, Fifth Generation Systems is a leading developer of microcomputer hardware and software specializing in utility products for backup, data transfer, and peripheral sharing. Current products include Fastback II, DiskLock, PowerStation, Suitcase II, Fastback Tape, Fastback Plus, Mace Utilities, Mace Vaccine, Brooklyn Bridge, and The Logical Connection.
Price: $39.95.
System requirements: Macintosh 512KE, Plus, SE, SE/30, II, IIx, IIci, Portable; System version 4.1 or higher.

MACHEADS INVADE!!

A report on the MacWorld Expo from Dave and Irene Flaxman

"MacHeads Invade!!' was the greeting above the main entrance to The Moscone Centre when the 1991 round of MacWorld expos began with the San Francisco Expo in January. Presumably, the change of date in 1990 did not have the desired effect on attendance figures so we are back to "business as usual".

The expo was again split between the Moscone Convention Centre and Brooks & Civic Halls — with shuttle bus services between the centres, to make it easy for attendees to cover the whole expo.



The entrance fees were $25 for the exhibits only, or $80 for the exhibits and seminars. The fees allowed access for all four days of the expo — Thursday 10th Jan. to Sunday 13th Jan. The level of fees does not deter attendance, as the queues for entry were very lengthy — firstly, to pay the fees (cash only, of course), and then a second queue to register. The registration process involved the entry of name & address details into a computer database and the issue of an individualised badge — but, for some reason, they didn't use Apple computers for this process (unlike the Paris Expo organisers).

The main auditorium at Brooks & Civic was filled for John Sculley's keynote speech on the Friday. Traditionally, this has been an enlightening and entertaining speech, with some insight into what can be expected in the future. We were disappointed, as were many others, that this year's speech was not in the old vein. This is the second time I have sat through John's speech to find that he really didn't have anything to say — as one of our friends said, "I object to having him waste my time like that."

The basic topics of his speech were "We've introduced three new machines. They're cheaper than our others. They're much better than IBM." It took fifty minutes to say that — and there was nothing new there!

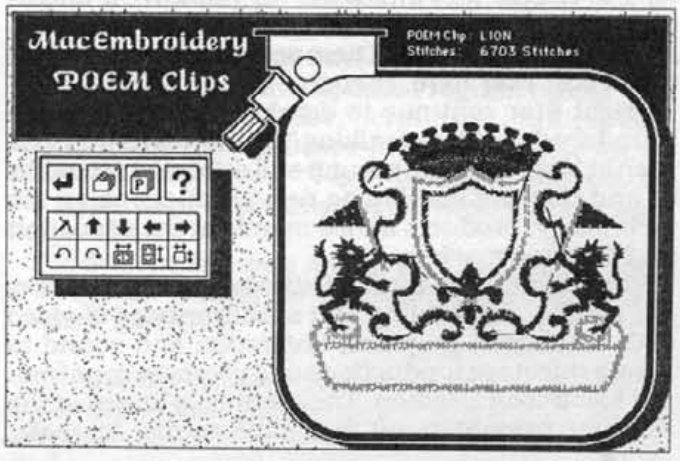
One thing which was missing was the HyperCard guide to the Expo. We have come to expect this, as it has been a feature of the expos over the past few years. None had been produced for San Francisco, so visitors had to queue up at an enquiry desk if they needed assistance. This seems a backward step, particularly when we are constantly being told how Apple are advancing.

The expo was packed with visitors and there was no shortage of exhibitors. The atmosphere has changed, though, as evidenced by the lack of 'freebies' — at previous expos, exhibitors would be giving away pens, bags, badges, bugs, etc. but everyone seems to have cut back on their promotional budgets this year. Many of the smaller companies were missing, too — presumably because the associated costs are becoming prohibitive.

There were plenty of upgrades to products, but there were few really new products which caught my eye. Multimedia played a strong part in the seminar program, but there was not the same emphasis on the topic this year (last year, there was a separate exhibition area set aside specifically for the subject). Nevertheless, this continues to arouse interest in the visitors, and exhibitors like The Voyager Company were busy for the whole four days, with their new interactive video offerings (the Works of Michelangelo and a Tour of Vienna).

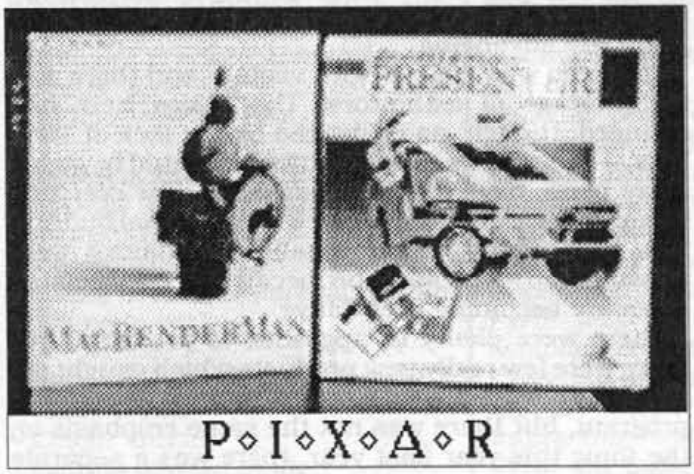
A colour scanner from LaCie engendered a great deal of interest, particularly as the expo price was set at around $1500. It gave very impressive results, too. I still think of this as being a farily limited market, but I did rather wish that I could find that much spare cash.

The POEM (Personal Original Embroidery Machine) from Aisin also generated a great deal of interest. We first commented on this some two years ago, and we've been eagerly chasing news of the product since then. It was unfortunate that the



manufacturers did not appear to warn their distributors that they should be prepared to field enquiries generated by MacWorld — our attempts to see one of these machines after the expo were quite a fiasco, as the only authorised dealer in California had allowed a salesman to take home the only POEM system they had in stock.

The Video Toaster demonstration was popular, slotting into the multimedia market — this product allows the mixing of live video with special effects, text, etc. The demonstration was very impressive, as evidenced by the constant crowds around the stand, but further enquiries showed that the system was not based on the Macintosh — it was based on the Amiga, and the Mac could simply be used as an input source.



Pixar's MacRenderman was also a big hit with the visitors. This 3D graphics and animation tool was very impressive, and the Tin Toy video demonstrated the possibilities admirably. The developers specialise in creating computer graphics for commercial film productions, so it is hardly surprising that the product is of excellent quality now that it has been ported to the Macintosh — no doubt we'll see further developments from them in the future.

Broderbund introduced a new paint program called Kid Pix. This was, in fact, a highlight of John Sculley's keynote speech! It is not due for release until March, but it promises to be an instant hit with children of all ages. Each tool has an associated sound (e.g. the pencil scratches, the mover sounds like a truck). It's colourful, too, and has lots of special tools guaranteed to endear it to children — if you have a microphone, you can even record a message with the file. All for around $50, too! There was no indication what it will cost over here, though.

Bright Star continue to develop InterFace, which introduced the idea of talking "agents". This was first seen at last year's expo, but it still attracted attention — and they are developing new products using the technology, products aimed mainly at the education and training markets.

MacroMind introduced MediaMaker, which allows the editing, assembling and synchronising of video with Macintosh graphics, animation and sound to create videotape productions and presentations from the Macintosh Desktop. The product is aimed at the desktop presentations and multimedia markets, claiming to make it easier, quicker and cheaper to create quality productions.

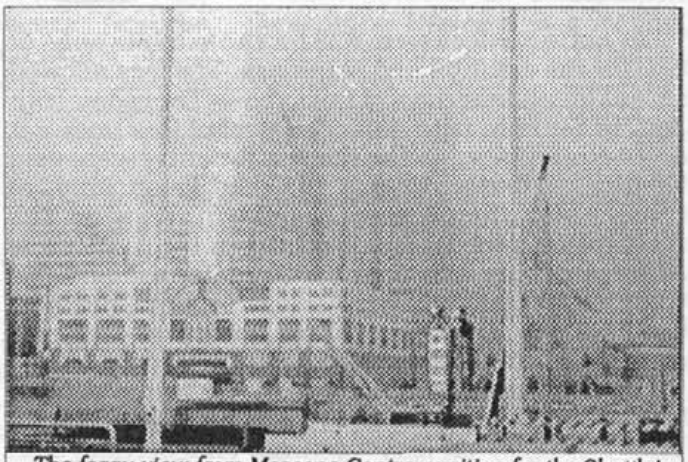
MicroSpot were showing a new driver for the ImageWriter, allowing colour output. They have introduced similar products before, along with their plotter software — but they keep on developing new offerings, and it's always nice to meet up with an British representative on their stand!

We couldn't avoid noticing the sample outputs from PosterWorks. This program allows users to compose and print layouts up to a size of 100 square feet on any PostScript device (by printing in 'tiles', of course). EPS and TIFF format files can be imported, then separate elements can be assembled on an oversized electronic pasteboard. Users can size, crop and position low-resolution models of each element to speed up processing, then automatically link to the high-resolution originals when the poster is previewed or printed. The US retail price is $295, but we don't have a UK price.

A new video card for the Mac II family has been developed in Germany, and it was nice to find a "foreign" product at an American expo. The Shadow1 DigiCorder board is dual-standard — PAL/SECAM and NTSC — so that it can be used in both the American and the European environments. Video images can be captured either as single frames or as sequences, in 256 (8-bit) or 16 (4-bit) grey levels — dependant, of course, on available RAM in the Mac. We have so often asked American companies why they do not produce dual-standard products, and they always respond that it would be too expensive — so it's refreshing to find that a European company has taken the initiative and proved them wrong. It is sellin at just $499! They claim that 'what MacRecorder did for sound, Shadow1 will do for video'.

Visitors have many reasons for attending MacWorld Expo, and we certainly consider San Francisco to be the best of the bunch (of those we have attended). Few visitors can resist the lure of cut-price software and consumables which can be bought from some of the stands (particularly during the last few hours, when dealers realise that they may have to carry stocks back to storage).

We go each year because we enjoy the atmosphere, we enjoy meeting old friends, and we enjoy seeing what's new (even if some products are not quite ready for distribution). There's little doubt that we'll return again in 1992.



The foggy view from Moscone Centre, waiting for the Shuttle!

Launch of DesignStudio 2.0 DesignStudio Separator

Letraset release news of major upgrade and new product

Letraset's first launch of 1991 is a major upgrade of its award-winning page layout program, DesignStudio.

DesignStudio 2.0 along with DesignStudio Separator, the first product for the Macintosh that will separate all elements on a page, will be available in the UK from Spring 1991.

DesignStudio Separator produces full-page 32-bit colour separations of DesignStudio 2.0 documents on PostScript colour imagesetters. It will separate all elements, including imported colour TIFF, RIFF, PICT2, EPS 5 and EPS files, in addition to text and graphics created in DesignStudio 2.0.

DesignStudio 2.0 has many enhancements, making the program more powerful, these include: support for Aldus Open Pre-press Interface; faster printing of TIFF, RIFF and PICT; advanced support for QuickDraw-only printers; drivers for more output devices; the ability to override previously applied styles; and improved control over page views.

We have reproduced, above, a press release made by Letraset UK. No pricing details have been advised.

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Apple System Software Update Program

Apple release news of this program

Cupertino, California — 7th January 1991

The Software Update Program is a timely, cost-effective method for customers to upgrade system software on many Macintosh personal computers for one price. The System Software and HyperCard subscription entitles customers to all software upgrades of these products for one year.

Apple's newest version of its Macintosh system software, System 7.0, is expected to be released sometime in the first half of calendar 1991. Customers who purchase the Software Update Program now, will be assured by Apple that they will receive product shipment within days of the introduction, offering customers an easy and convenient way to receive new releases. The full 12-month subscription gives customers an easy, accurate way to budget for Apple software updates. Complete documentation is included with each major upgrade describing all enhancements, ensuring users get each upgrade's full benefits

HyperCard 2.0 is also bundled with the System Software subscription. This is the same version of HyperCard that Apple ships with each Macintosh, so customers can be assured they have the most current version of the software .

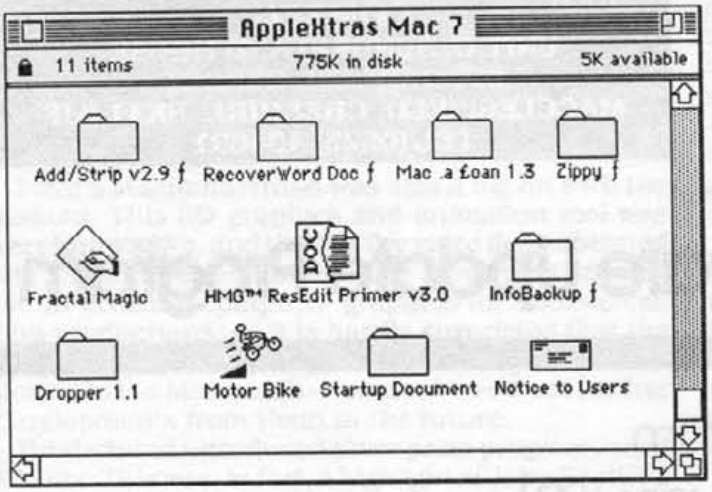
The System Software Update Program comes with a "Right-to-Copy" license, permitting multiple copies of the system software in an entire site for no additional payments. "Right-to-Copy" licenses for the HyperCard application are available from Claris Corporation.

The System Software and HyperCard subscription is available worldwide through Apple Authorized Dealers for $160.

We have reproduced, above, a product update from Apple Cupertino. We contacted Apple (UK), to ask about availability and price here — but we could not elicit a comment from them.

AppleXtras Mac 7

Mac a £oan 1.3
Mac a £oan will generate a standard amortization schedule using approximate time and ordinary simple interest. (Banking standard) Uses command-shift-4 to print the screen (LaserWriter users command-shift-3 to save a screen snapshot in a paint file format for further manipulation).



You must enter the amount of the loan as well as the desired interest rate plus the length of the loan in years.

Dropper v 1.1
Dropper is a game in which rectangles drop from the top of the window, and your goal is to stack and line them up. Line them up vertically, horizontally, and diagonally. When you line up the correct amount (4,5 or 6, depending on the level you are on) the cubes vanish and your score increases. A drop can result in two or more lines vanishing at once, you'll get a bonus if you can do that. It's relatively easy to go through Dropper making only vertical stacks, but you'll never get an impressive score that way. Challenge yourself, go for horizontal and diagonals, and go for the multiple line bonuses! The stage value also changes the speed at which the cubes drop, the higher the stage the faster the drop. At even higher levels, some cubes will already be in place on the playing field when you start a level.

Add/Strip™ (version 2.9) by Jon Wind
Author's comments:- Add/Strip was originally written to facilitate our desktop publishing area's productivity. They use Quark XPress to produce many of our company's publications. The copy is written on Wangs, CPTs, and DOS-based machines. These text files are then sent to the Macs for page layout. Unfortunately, these files are seldom formatted properly for their particular needs.
A/S has been designed to automatically perform much of the work of cleaning up TEXT files destined for import to page layout, word processing, database, or spreadsheet programs, as well as export from these programs to a DOS-based or mainframe computer, in a fraction of the time ordinarily needed to manually reformat using a word processor.

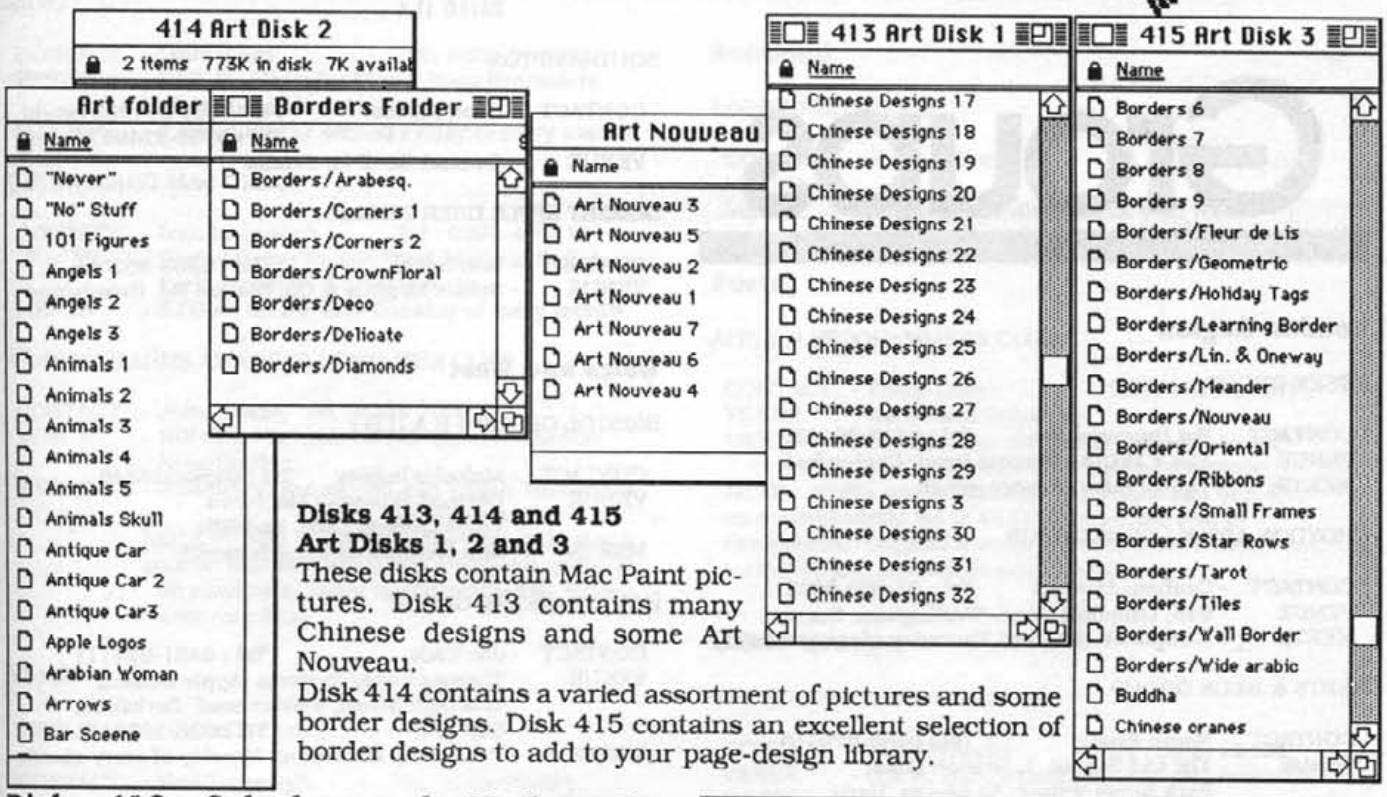
RecoverWordDoc v1.2
This utility quickly extracts the readable ASCII text from a corrupted MS-WORD document. This is program is shareware, and the price is $5.
If you have a MS-WORD document that you need to recover, run RecoverWordDoc. After the introductory window comes up, click in the window to make it go away.
Next select "Recover..." from the File menu, and then choose the file to be recovered. RecoverWordDoc will create an ASCII output file by appending ".RCVR" to the input file name. If you want to recover several files, just repeat this step until you're done.

Zippy, the Talking Head, version 2.0 by Chuck Shotton.
Zippy is a program, similar to the infamous Talking Moose DA. Zippy hangs out in the background of your Mac, waiting to enlighten you with his random words of wisdom. Zippy should run on all Macs with 128k ROMs and sufficient memory, and has been tested on Mac Plus, Mac SE, and Mac II computers. Zippy 2.0 is shareware.
Version 2.0 adds two dialogs for modifying Zippy's voice and vocabulary. You can add up to 64 new phrases to Zippy, configure the sound of his voice, and choose to use color or black and white face pictures.

InfoBackup
Most of you will know the 'Get Info' or 'Cmd-I' feature of the Finder. Among other things, it allows you to put a 'sticky note' to a file, which might e.g. contain a brief description of the file, a modification history, some tips to remember when using a program, etc. People who regularly use this feature, will have noticed that the comments get lost if the desktop file has been rebuilt. This program gives you a way round this situation so that the comments can be saved.

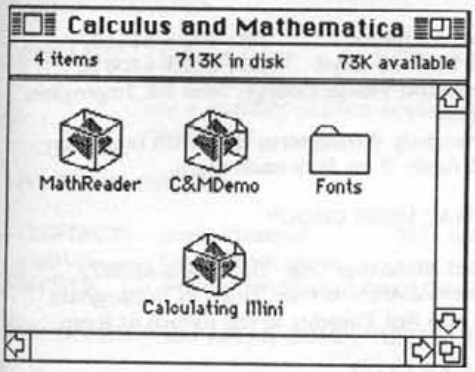
Motor Bike
This is a game which gives you control over the speed, acceleration, etc. of a motor bike on screen. You have to learn how to do wheelies in order to jump over obstacles. Not easy - but obsessive!

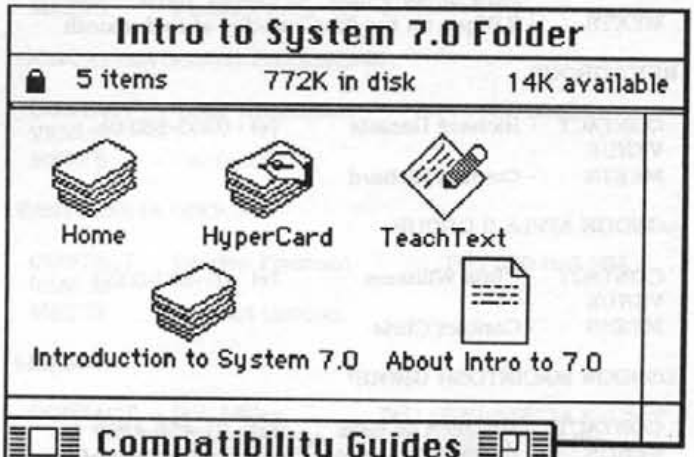
Mac Library

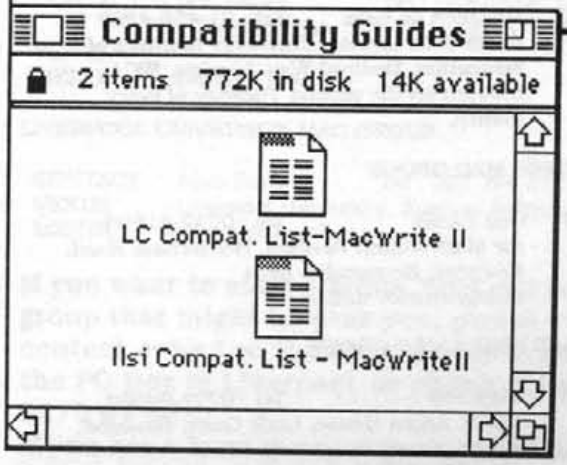


Disks 413, 414 and 415
Art Disks 1, 2 and 3
These disks contain Mac Paint pictures. Disk 413 contains many Chinese designs and some Art Nouveau.
Disk 414 contains a varied assortment of pictures and some border designs. Disk 415 contains an excellent selection of border designs to add to your page-design library.

Disk 416 Calculus and Mathematica Demonstration Notebook.
Comments by the authors, Brown, Porter and Uhl.
The demonstration consists of cuts from the electronic course Calculus&Mathematica, samples of actual student work and some paragraphs on Calculus&Mathematica in the classroom. Calculus &Mathematica is written in the belief that calculations set up the theory and that calculations via Mathematica can propel the student far deeper into maths than traditional students can go. There are several computer algebra systems that can perform the calculations typically needed in a calculus course. But currently only Mathematica provides the feature called a "notebook". Mathematica Notebooks constitute a new medium of communication that combines the advantages of a standard word processor, the advantages of an enormously powerful easy-to-use computer algebra system and superb graphic capabilities. With Mathematica notebooks, calculations and plots can be done in context with virtually no need for a printed supplement.







Disk 417 System 7.0 Information Stack and Macintosh LC and Macintosh IIsi Compatibility Guides
A disk provided by Apple Computer Inc.

User Groups

London Region

ESSEX GROUP

CONTACT - Pat Bermingham Tel : [illegible]
VENUE - The Y.M.C.A., Victoria Road, Chelmsford
MEETS - Third Friday of every month

CROYDON APPLE USERS GROUP

CONTACT - Graham Attwood Tel : [illegible]
VENUE - 515, Limpfield Road, Warlingham, Surrey
MEETS - 7.30pm on the third Thursday of every month

HERTS & BEDS GROUP

CONTACT - Norah Arnold Tel : [illegible]
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 : [illegible]
VENUE -
MEETS - Contact Richard

LONDON APPLE II GROUP

CONTACT - Chris Williams Tel : [illegible]
VENUE -
MEETS - Contact Chris

LONDON MACINTOSH GROUP

CONTACT - Maureen de Saxe Tel : [illegible]
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 : [illegible]
VENUE - Sir Mark Collett Pavilion, Heaverham Road, Kemsing, Sevenoaks, Kent
MEETS - Phone Jim for details

SOUTH EAST ESSEX MAC GROUP

CONTACT - Mick Foy Tel : [illegible]
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 : [illegible]
VENUE - Deverill Computers (dealer) Itec House, 34-40 West Street, Poole, Dorset BH15 1LA

SOUTHAMPTON

CONTACT - Geoff Parson Tel : [illegible] (work)
Tel : [illegible] (home)
VENUE - Contact Geoff for details

DORSET APPLE USER GROUP

CONTACT - Ron Hoare Tel : [illegible]
VENUE - Stuart Magnus & Co, Station Rd. Broadstone

Wales and West

BRISTOL GROUP (B.A.U.D)

CONTACT - Malcolm Ingsley Tel : [illegible]
VENUE - Decimal Business Machines Three Queens Lane, Redcliffe
MEETS - first Wednesday of each month

HANTS & BERKS GROUP

CONTACT - Joe Cade Tel : [illegible]
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 : [illegible]
Mac Richard Boyd Tel : [illegible]
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 - David Nicholson Cole Tel : [illegible]
VENUE - School of Architecture, Univ. of Nottingham
MEETS - 1st and 3rd Tuesday of the month at 8 pm

GATEWAY COMPUTER CLUB

CONTACT - Vern Tel : [illegible]
Robin Boyd Tel : [illegible]
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 : [illegible]
VENUE - Shakespeare Pub, Braunstone Lane, Leicester
MEETS - 7.30pm to 10.0pm on the first Wednesday of every month

MIDAPPLE

CONTACT - Dave Ward Tel : [illegible]
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 : [illegible]
VENUE - Spring Grove House, West Midland Safari Park, Bewdley, Worcestershire.
MEETS - 8.00pm on the first Tuesday of every month

WEST MIDLANDS AMATEUR COMPUTER CLUB

CONTACT - John Tracey Tel : [illegible]
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 : [illegible]
VENUE - Michelin Sports Centre
MEETS - 2nd Wednesday of each month

CREW COMPUTER USER CLUB

CONTACT - Paul Edmonds
[illegible]
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 : [illegible]
No active organised group in this area but there are a number of keen Apple users in contact with each other.

LIVERPOOL GROUP

CONTACT - Irene Flaxman Tel : [illegible]
VENUE - Check with Irene
MEETS - Second Monday of every month.

THE NORTH EAST APPLE COMPUTER CLUB

CONTACT - Philip Dixon Tel : [illegible]
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: [illegible]
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 : [illegible], Eves [illegible] daytime
Tel : [illegible] evenings
VENUE -
MEETS - Ring Max

Scotland

EDINBURGH GROUP

CONTACT - Ricky Pollock Tel : [illegible]
VENUE -
MEETS - Meetings monthly, check with Ricky

Postal

APPLE II PROGRAMMERS CLUB

CONTACT - Philip Dixon TEL : [illegible]
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.

Other Groups

ORPINGTON COMPUTER CLUB

CONTACT - Terry Wheeler Tel : [illegible]
VENUE - G.E.A. Hall, Woodhurst Avenue, Petworth
MEETS - Contact Terry

DONCASTER SOUTH YORKSHIRE

CONTACT - Colin Withington Tel : [illegible]
VENUE -
MEETS - Contact Colin

EAST ANGLIA GROUP

CONTACT - Gordon Freeman Tel : [illegible]
VENUE -
MEETS - Contact Gordon

LEEDS

CONTACT - Bob Miller Tel : [illegible]
- T Veluppillai Tel : [illegible]
VENUE -
MEETS - Contact Bob

LIVERPOOL UNIVERSITY MAC GROUP

CONTACT - Alan Boyle Tel : [illegible]
VENUE - Liverpool University, Surface Science Res. Cent.
MEETS - Tuesday lunch times

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 [illegible].

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.

Members' Small Adverts are FREE. Please help us to help you. Send your advertisements to us on a disk, in Mac or Apple II text format. We will return the disk, of course. This saves us time, and avoids errors.

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We reserve the right to edit and or omit them. They are placed in this Magazine in good faith. Apple2000 holds no responsibility over items advertised, and buyers purchase at their own risk.

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

Zedcor Basic 5 (The fastest Basic for the Mac); DeskPaint 2.0; DeskDraw
All three are an unused duplicated order in original packing, complete with manuals..
Listed at £140 ..... **£85 plus £3 p&p**

'Phone John Stanier .....

FOR SALE

Applied Engineering fully populated 1.5 megabyte IIgs memory expansion card ..... **£120 o.n.o.**

'Phone Ewen .....

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APPLE IIGS COLOUR SYSTEM (1.25MB RAM).
Both 3.5" and 5.25" Apple drives. All of keyboard, monitor and mouse are Apple. Includes a few items of software and hardware and all instruction manuals. Low price to ensure sale **(COST OF DELIVERY EXTRA) ..... minimum £625**

'Phone Jonathan .....

FOR SALE

Taxan scanner model TX-300
A4 sheet-feed; 300 dpi line art, half-tone and mixed; with VersaScan Plus software and manuals **£350**

'Phone (evenings) .....

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Ex demonstration hard drives and screens available.
Disks from £150 and **screens from £599**

'Phone .....

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1) PACE Colour Palette Teletext card (for high-res viewdata graphics) **£75**
2) Omnis 2 Program (database, 5.25" disks) £50ono
4) Inmac //e work station (beige steel, designed to sit on top of //e to hold disk drives, monitor, etc) **£15**
5) Micron Xceed 2MB Memory Expansion Kit for Mac II SE/ Plus, as new ..... **reasonable offers considered**
6) Apple //e/IIGS PC Transporter Software ..... **reasonable offers considered**
7) Apple //e DOS 3.3. Software ..... **reasonable offers**
N.B. a) Will consider offers for all the above bought together.
b) Will consider exchange for above items, e.g. IIGS Games.

'Phone Gordon (after 6.30pm Mon-Fri) .....

FOR SALE

Surplus Apple //e cards for sale (all boxed)
5 OFF CP/M Plus System Card ..... **each £40**
8 OFF PlusRam 512K (RAM Card) ..... **each £45**
14 OFF 80 Col. Card ..... **each £15**
4 OFF Champion Printer Interface Card ..... **each £15**
or The Lot **£750**
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'Phone G. W. Smith (Blakell Ambotech Ltd) ..

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Apple //e with Apple //e 80 col. card &Orange printer interface
Apple Duodisk twin floppy drive with controller
Taxan KX-12 mono monitor
ProDos Users' Disk
DOS 3.3 System Master
AppleWriter 2.0
Quick File //
Getting Your Finances in Order (McGraw Hill)
Apple Presents.....Apple
Apple Presents.....AppleWriter 2.0
Quick File // sample files
Manuals for all above and cables

Offers to Richard Byatt .....

FOR SALE

1) Apple II+ 64K (with 16K Language Card) System, Disk II Drive & controller, BMC green monitor, Videx 80 col. card, printer card, numeric keypad & card/cables, games paddles, Apple II ref. manual, DOS manual (all well cared for) **£150**
2) Eicon 8" Disk Drives & controller, 8" version of DOS 3.3 Utility **£30**
3) Sanyo green 12" monitor **£30**
4) 2x Controller Cards ver.4.8 for Symbiotic Hard Disk (they run DOS, CP/M and Pascal) ..... **each £5**
5) Apple II+ Sup'r Terminal Video Card no manual **£5**
6) Apple II HAL Act 650 Card for Winchester Hard Drives with cable and technical manual **£5**
7) Omnis 2 Database (unused, as new) **£60**
8) DB Master 4 (unused,as new) **£60**
9) High Technology Information Master DataBase **£10**
10) Microsoft Multiplan manual for Apple II, IIe **£10**
11) Saturn 32K Ram Board Manual **£3**
12) Aristocard High Speed Serial Interface Manual **£2**
13) 3x Apple 80 column text card Manuals ..... **each £2**

All items plus postage.

'Phone Andrew (evenings Mon-Fri) .....

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ClockTower	21,55		

AppleCentre™ Preston

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The Macintosh LC

with the opportunity for Apple II Emulation

With Holdens prices starting at just £1125 for the basic CPU, the LC provides the bridge that Apple II devotees have been looking for.

Macintosh LC 2/40 Mono System	£1255.00
Macintosh LC 2/40 Colour System	1365.00

CLEARANCE OF APPLE II PRODUCTS

APPLIED ENGINEERING

PC Transporter with 768K (640K PC)	£150.00
Installation Kit for Apple IIGS	15.00
Installation Kit for Apple IIe/II+	15.00
TransDrive 360K Single-Drive	100.00
TransDrive 360K Dual-Drive	150.00
RamFactor 256K	60.00
RamKeeper	50.00
Audio Animator	50.00
Vulcan Internal Hard Disk 100MB inc SCSI	300.00

TIMEOUT SOFTWARE

Timeout Desktools	£10.00
Timeout Macrotools	10.00
Timeout Powerpack	10.00
Timeout Sidespread	10.00
Timeout Spreadtools	10.00
Timeout Thesaurus	10.00

MISCELLANEOUS

Where in Europe is San Diego (128K)	£10.00
De Luxe Paint IIGS	15.00
GraphicWriter IIGS	20.00
Notes & Files IIGS	10.00
Paintworks Gold IIGS	15.00
Visualiser IIGS	15.00
World Tour Golf IIGS	10.00

FEW ONLY!

Apple Colour Monitor GS	£110.00
Apple Colour Monitor GS (Used)	85.00

Prices Subject to VAT

Runner-up

Dealer of the Year Award 1990

MacUser Magazine

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