

CURSOR

Newsletter of the
COMMODORE
COMPUTER
USERS
GROUP
@LD Inc.

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Our Next Main Meeting will take place on Tuesday,
5th February 1991, at 8 pm (Libraries & Sales at 7 pm)
at the Bardon Professional Development Centre

COMMODORE COMPUTER USERS GROUP (QLD) INC

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Tom Yallowley	Ph. 251 5845
ASSISTANT SYSOP:	
Ron Lewis	Ph. 341 3715

Our BBS is part of the Fido Network (Node No. 3: 640/304), and can be accessed by our members at 300, 1200/75, 1200, 2400 bps and 9600 bps, using 8 data bits, 1 stop bit and no parity.

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That's all Folks!

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MEETINGS

MAIN MEETING

Our next Main Meeting is held on Tuesday 5th of February at the Bardon Professional Development Centre, 390 Simpsons Road, Bardon, starting at 8 pm. Library: 7pm - 8pm & 9pm - 9.30pm. Sales: 7pm - 8pm. Entrance through the Centre's Carpark in Carwoola Street. Parking is not allowed in Centre's grounds! Details of this month's topic can be found in the relevant section of this newsletter.

WORKSHOP MEETING

The Amiga Workshop is held on Sunday 10th of February (1pm - 4pm) in the Ithaca RSL Hall, cnr. Nash and Elizabeth St, Rosalie. Bring your current membership card, as this workshop is strictly for members only! (i.e. no friends or relatives.) Disk & Accessory Sales: 1pm - 3pm. Bring your own Amiga equipment. This meeting is our LEARNING meeting, devoted to Programming, Software and Hardware problems. We also have a HELP support group for beginners.

For more information ring 300 3477.

REGIONAL MEETINGS

CANNON HILL: Last Saturday of the month (Noon - 10pm) in the Cannon Hill State School.

Ph. Don Friswell - 343 1735 a.h.

KINGSTON: 2nd Saturday of the month (1pm - 12pm) in the Kingston High School.

Phone Alan Hill - 290 0264 a.h.

PINE RIVERS: 1st Sunday of the month (1pm - 5pm) in the Strathpine State High School.

Ph. Barry Bean - 269 7390 a.h.

SHERWOOD: 2nd Friday of the month (7.30pm) in the Graceville State School.

Ph. Leigh Winsor - 379 2405 a.h. or Philip Parkin - 818 1172 a.h.

WINDSOR: 2nd Tuesday of the month (7.30pm) at 70 Swan Tce, Windsor.

Ph. Rod Watson - 857 6131 a.h.

PLUS/4 SUPPORT: - Clarence Stock is support coordinator for Plus/4 owners. Ph. 397 8894 a.h

**PLEASE NOTE: Copying of
COMMERCIAL SOFTWARE is an
ILLEGAL activity and is NOT
ALLOWED at our Meetings!**

GOODS & SERVICES

(At Main Meeting or by Mail)

AMIGA SPECIFIC:

Public Domain Disks 3,5" Mail Order: \$4.00 ea (+ \$2.00 Packing & Postage for up to 5 Disks)

Commercial Library Catalogue Disk 3,5": \$4.00 (+ \$2.00 P & P)

5,25" Blank Disks: \$8.00 per 10 (+ \$2.00 P & P)

3,5" Disks: \$15.00 per 10 (+ \$2.00 P & P)

3,5" Disk Boxes (80 disks): \$20.00 (+ \$5.00 P & P)

3,5" Disk Labels (68x68mm) 4 sheets (= 48 labels): \$1.00 (+ \$2.00 P & P)

Amiga Dos Summary: \$3.00 (+ \$1.00 P & P)

Micro Switch Replacement Kit for Amiga Mouse

\$15.00 (+ \$1.00 P & P)

C64/128 SPECIFIC:

Public Domain Disks 5,25": \$3.00 ea (+ \$2.00 P & P up to 5 Disks)

Public Domain Cassette Tapes (C-64): \$2.00 ea (+ \$1.00 P & P Per Order)

Commercial Library Catalogue Disk 5,25": \$3.00 (+ \$2.00 P & P)

5,25" Blank Disks: \$8.00 per 10 (+ \$2.00 P & P)

1541 'Drive & Disks Testing' Disk: \$2.00

(+ \$2.00 P & P)

Public Domain Instruction Book (C64): \$5.00

(+ \$1.00 P & P)

Starting With Disk Drives: \$2.00 (+ \$1.00 P & P)

C-128 Memory Map: \$2.00 (+ \$1.00 P & P)

Macro Assembler Book: \$5.00 (+ \$1.00 P & P)

64 Sound & Graphics (by G.Perry): \$5.00

(+ \$2.00 P & P)

The Write Stuff (64 Word Processor), with Manual:

\$18.00 - BB Speller (for C64 Write Stuff): \$12.00

BB Talker (for C64 Write Stuff): \$12.00

(The above three items each: \$3.00 P. & P.)

The Write Stuff (128 Word Processor), with Manual:

\$30.00 - BB Speller (128 Version): \$12.00

(+ \$3.00 P.& P. for the above 2)

GENERAL:

Back Issues of CURSOR: \$1.50 each

Address Labels (23 x 89 mm): \$14.00 per 1000

(+ \$2.00 P & P)

Ribbons for MPS-1000, GX/LX-80 Printers: \$7.00

(+ \$1.00 P & P)

Ribbons for MPS-1200/1250, Citizen 120-D

Printers: \$10.00 (+ \$1 P & P)

Ribbons for Riteman C or F Printers: \$12.00

(+ \$1.00 P & P)

MAILING ADDRESS

Please address all LETTERS which are not related to CURSOR, but including orders to:

C.C.U.G.(Q)
P.O. Box 274
Springwood Qld 4127.

(Make Cheques payable to: C.C.U.G. (Q) Inc.)

Please address PARCELS to:

C.C.U.G.(Q)
32 Bulwara St.
Shailer Park Qld 4128

When you are changing your address, please advise our Secretary of the address change and not the Editor of CURSOR or our SYSOP!

MEMBERSHIP FEES ETC.

JOINING FEE: \$10.00
ANNUAL MEMBERSHIP FEES:
Ordinary Membership*: \$25.00
Country /Associate Membership: \$15.00
Pensioner Membership: \$15.00
Family /Business Membership: \$35.00.

(*Within the Brisbane Metropolitan Telephone District)

Library Fee: \$5.00

LENDING LIBRARY

It is a condition of use of our Book, Magazine & Software Lending Library that materials can only be borrowed for a period of 1 Month. If unable to attend the next meeting, members can either mail the borrowed material to:

Phil Guerny
29 Moorfields Street
FIG TREE POCKET QLD 4069

or they may leave this material with their nearest Management Committee member (but please ring first!). By following these simple rules, you assist your fellow members who may want to borrow the books or software which you are returning.

YOUR NEWSLETTER

CURSOR appears 11 times annually and is dependant on members' contributions for its content. Address all Newsletter Mail (this includes advertisements for the Bytes column) to:

The Editor, "CURSOR"
P O Box 384
ASHGROVE QLD 4060

*Deadline for the next (MAR) Issue is:
FRIDAY 1st FEBRUARY!*

Short articles (less than a page) and adverts for the BYTES column can be submitted in written or printed form, but we prefer to receive your articles on disk. Please use minimum or no formatting in your articles. Do not indent paragraphs and use a single space after a comma, semicolon or full stop. If a specific page layout is required, include a printout in the desired format. Disks will be returned promptly and we pay return postage.

C64/128 Specific:

Supply your articles on a (1541) 5,25" disk in the following format (in order of preference): SEQ ASCII file, SEQ PET ASCII file, The Write Stuff, SuperScript, EasyScript, PaperClip/PocketWriter files saved with the SEQ save option, SpeedScript files saved with the SS converter program, option 2, (SEQ Standard ASCII file). Sorry, but we are unable to read or convert 1570/1571 formatted disks, nor are we able to convert GeoWrite, Font-Master or Bank Street Writer Files.

AMIGA Specific:

Supply your articles on 3,5" disk in the form of an ASCII file or a WordPerfect file with minimum formatting.

Alternatively, if you own a modem, you can upload your articles, news, gossip, etc. to the Group's BBS (Ph.808 7694, or 808 8823: CURSOR File Area).

PARCOM PTY LTD

Whites Hill Shopping Village
Samuel Street, Camp Hill, 4152, Ph (07) 395 2211

NORTH SIDE: 1 Clifford Street, Stafford, 4053
Ph (07) 857 6311

AUTHORISED INDEPENDENT COMMODORE SERVICE CENTRES

- Professional Repairs and Product Support
- All Work carries our 90-day Warranty
- Fast, Efficient and Courteous Service

RECONDITIONED MODULE EXCHANGE SERVICE ALSO AVAILABLE:

C64, 64C, 1541II PCB	\$ 99.00
AMIGA 500 PCB	\$129.00
AMIGA INT. DRIVE	\$200.00
AMIGA MOUSE	\$ 50.00
AMIGA 500 PSU	\$ 75.00

ALL MODULES MUST BE COMPLETE AND IN SERVICEABLE CONDITION
FULL TWO MONTHS WARRANTY ON ALL MODULES EXCHANGED

Special Rates on Labour Charges for Users Group Members!

CURSORY NOTES

ABOUT THE FRONT COVER

Surprised about finding a picture of Mozart on the front cover of a computer magazine? Well, apart from being different, there are three reasons:

- a) - It's one of my first digitizing efforts.
- b) - 1991 is the bi-centenary year of Mozart's death.
- c) - I like Mozart's music.

I solemnly promise not to put any more pictures of composers on the front cover for the remainder of 1991!

GRAPHICS

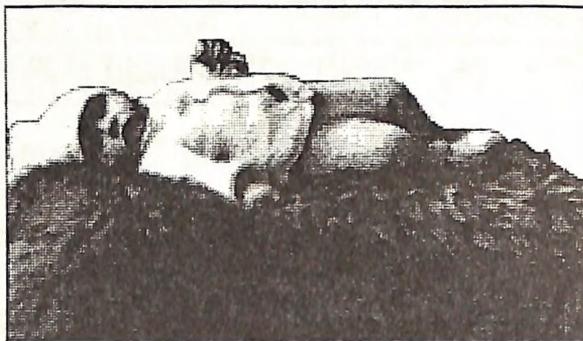
Yes, there are lots of pictures in this issue. Not only have I been experimenting with Digi-View, but we also have pictures from some of our members. As well I have picked out some Clip Art from the seven disks which we received from the Amiga Users Group of Western Australia, and I found some interesting pictures on one the latest Fish Disks by Bob McKain.

A real problem with some of this material is that it looks brilliant in colour but, by the time it's translated into black and white, it does not look so good any more. In practice this means that one has to modify these pictures substantially to get an acceptable b & w printout, and even then the result is often only barely acceptable. There's still plenty of room for improvement in this area.

For the benefit of our country members I've reproduced on this page a fairly recent picture of the undersigned - no longer do you have to wonder what your editor looks like, although it has to be admitted that he has gained some weight recently!

ATTENTION C64/128 OWNERS

Leigh Winsor has announced that he wants to step down as C64/128 Coordinator, to be able to devote more time to his Amiga.



Although, Leigh has announced his intention to step down some months ago, nobody as yet has come forward to take over the role of coordinator. Perhaps our 8 bit computer owners are thinking that Leigh didn't really mean what he said, but we know that he is deadly serious and will quit as coordinator in the near future.

If nobody does come forward to take over the role of C64/128 coordinator, the Management Committee has no other option but to cease specific meetings for 8 bit computer owners. We feel sure that there are quite a few experienced C64 or C128 users out there who can successfully carry on where Leigh has left off, hence the solution is in your own hands.

Last, but not least, remember your New Year resolution: "I must write at least one article for Cursor this year".

Ralph De Vries

COMPUTER CONSUMER WATCH

EPSON WARRANTEE

In our last issue, I described the problems I had with an Epson LQ-550 warrantee repair (the repair agent wanted to charge me \$85, because they couldn't find a fault with the printer - this is Epson warrantee policy).

I lodged a claim with the Consumer Affairs Bureau, who, after some weeks, notified me that they weren't empowered to make a binding determination in a matter of this nature, and advised me to seek legal advice, or lodge a claim with the Small Claims Tribunal.

I followed the latter course, and on the 10th December 1990, my case was heard. It was attended by the manager of Edcom Computers Pty. Ltd., as the respondent and myself as the claimant, in front of an arbitrator. I had also asked Robert Googe to come along, in case I needed expert testimonial from a computer technician.

After hearing from both parties, Robert was called in to enlighten the magistrate on certain

technical points relating to guarantee repairs and printer problems in particular. Shortly afterwards the arbitrator made his final decision (binding on both parties) and found in my favour. The following day I collected my printer, free of charge.

By standing up for a principle, I feel amply justified in my actions. The losers in this case are both Epson and their Agents, Edcom Computers Pty. Ltd. In the case of the latter, they not only lost on the \$85 repair charge, but their manager lost two hours of his valuable time by having to attend the hearing, and he will also suffer from the negative effect of having his company name listed in the Small Claims Tribunal report in the daily press.

As for Epson, could anyone recommend the products of a company which refuses to honour the terms of their warrantee?

Editor

-ooOoo-

YOU WROTE...

I sincerely hope you and the readers of CURSOR may be able to assist me.

As I mentioned in my letter (Dec issue 'YOU WROTE' column) I use Doodle! quite a bit to communicate via its large text. Now for my query: When I first used the program, I read the manual on page one (GETTING STARTED): "Joystick or Trackball? - Doodle! works very well with a joystick. Doodle! works even better with a trackball."

Yesterday I bought a Illustrated Computer Dictionary (circa 1983) at a garage sale. On page 164 is shown a Trackball with its descriptive text, and my memory was prompted. Hence my

question: "Are these units still available, and from whom can I buy one?"

Perhaps a reader may know where I can buy one, or know of a second-hand unit in good condition that's for sale.

*Fred Hawley
35 Currawong Street
Bathurst, N.S.W. 2795*

*Can anybody out there help Fred?
If so, drop him a line.*

LIBRARY NEWS

by Phil Guerney

AMIGA SOFTWARE

At very long last we have a working copy of X-CAD Designer for the Amiga. The original copy we received was NTSC-only in a nasty way. When it loaded it opened a little, apparently empty, window and then unloaded itself from memory. After watching this happen a couple of times I managed to grab the little window's sizing box and, before it disappeared, expanded the window to see the previously hidden lines saying something like "This is not an NTSC Amiga so I will not run!". This action on the part of the developer is not due to any technical reason as it is easy to write software on the Amiga that detects which video system is in use and to adapt to it. It is most likely to stop differently priced versions from Europe or the USA from working in the other market. Anyway, we wrote to the UK office who very kindly replaced the disk with a PAL version free of charge. Unfortunately, the disk they sent was faulty with read errors on many tracks. Back to the UK with a request for another replacement. That was September. The "Air Mail" package with the replacement turned up in late December. As the package was posted in the UK in September, I think the "aircraft" it came over on made splashing noises.

This 2D design and draughting package is of great interest to many members. This is a perfect example of the type of program that is otherwise near impossible to "try before you buy" and is the justification of our commercial library. X-Cad Designer is very powerful with commands like "fillet" (join two objects with a curve, usually giving a rounded corner effect), "draw a circle tangent to a line", "draw line perpendicular to a line", flexible cross-hatching and text options, draw to given dimensions (in a choice of units) and add dimensions to drawing, trim entities at intersections, stretch, repli-

cate while rotating, and all on up to 256 layers with different colours according to the layer. It is however not particularly easy to use, with three ways to carry out many commands (pick list, menu or command line) but only one way (the command line) for others. I'd be interested in the views of potential CAD program purchasers on whether they would go for this one. Lastly, it is protected by a dongle - PLEASE return the dongle as it can be almost impossible to get a replacement dongle from distributors.

We have also bought four of the "Gold Disk Type" packages of scalable AGFA Compu-graphic outline fonts. These are the four "sampler" disks, rather than any of the 36 separate single typeface disks, which means that the typefaces are in Roman font only and not also in italic, bold and so on. The packs go as follows: "Publisher Series" - Garamond Antiqua, Futura Book II, Antique Olive; "Designer Series" - CG Bodoni Book, Microstyle Extended, Park Avenue; "Decorative Series" - Brush, Cooper Black, Letraset Revue Shadow; and the "Video Series" - Futura II Bold, Clarendon, Dom Casual. You don't actually load these fonts into your fonts: directory and go. You first have to install the font(s) of choice onto another disk (floppy or hard). If you are going to use Professional Page or Pagesetter (both Gold Disk programs) than that is all. But if you are using Professional Draw, or want to create a font to download to a Postscript printer, or even just to use as an Amiga font (for use in Notepad or any other program which uses the Fonts: directory) then you have to run a CreateFont program. If it is an Amiga font you are after, then you have to select the point size and the dots-per-inch resolution in the horizontal and vertical directions according to your output device (do you want it to look better on the screen, and if so which screen mode, or on a printer?). You could easily build up a vast number of fonts files (and it would take a while as CreateFont

is slow) but the final output was very good with no sign of jaggies on my nine-pin printer when I chose the right parameters - but terrible looking when I made the wrong choices!

C64/128 SOFTWARE

Software, especially NEW software, for the 8-bit machines is drying up. No arguments. One of the larger US mail-order houses, Briwall, has said in its latest newsletter to customers that they will continue to support the 64 and 128. This means finding sources for the titles (directly from the publisher/author if other distributors have gone) and listing programs from smaller companies. However they list only seven new non-game programs since their last catalogue several months ago. Out of interest, these were: Pocket Writer 3 (C64 version); Word Writer 5 (C64); IPaint (C128); Bible Search (C64); Big Blue Reader V3.1 (both); FasTrac/128 (C128) and Maverick V5. Notably, only two of these programs are totally new as opposed to upgrades. We already have three of these - do I just run out and buy the others because they are new? Or do I continue to buy more of the older good ones we are missing. Let me know, because if 8-bit members say nothing to me, I will not be buying anything! Reading further, I think we will get Word Writer 5. It now contains 10 fonts in 27 sizes, 85,000 word spell-checker, integrated thesaurus and outliner, 80-column preview, 150 graphics in built-in library and the ability to crop/flip/invert GEOS and Doodle pictures. All for \$US40. If only software was priced like this years ago (or even now when it comes to the Amiga); when will the publishers learn?

MAGAZINES

Subscribing to computer magazines is risky. I'm sure many members have lost some money this way. The club has seen several titles expire before our subscriptions did! Once, we even took advantage to subscribe to Ahoy for two years to "save" a few dollars, only to get just three more issues.

Quite a few more titles have gone recently, although we haven't lost much more money because other magazines have usually taken over the subscription lists. Transactor for the Amiga (Australian edition) even sent a refund cheque, but the Canadian version went to the UK then disappeared. You have probably read elsewhere how Compute! and Compute!'s Gazette and Compute!'s Amiga Forum all now come out in one cover. Amigo Times went to Info. Earlier, Commodore Magazine was absorbed in RUN and the Amigan Apprentice and Journeyman sadly went with the passing of its editor.

We now need to get some of the new specialist Commodore magazines as we are getting very few magazines in the mail box lately. Do we subscribe and risk losing more? I think we have to as the savings are significant, especially for the US magazines. And it relieves the burden on me of having to find a newsagent that has the title in stock every month.

I have bought over the counter a couple of editions of Graf/X "The complete Amiga Graphics Resource" which, although a bit thin, is full of good articles and light on the advertising. Foreign surface subscription of \$US30 for one-year (six issues) has been sent.

English magazines tend to be very games-oriented (and therefore of short-lived interest to library members), but I have bought locally Amiga Computing and Amiga Format, both of which come with disks attached. They are 50-70% games reviews, but there are some good tutorial and semi-technical pages too. (I know this sounds like saying I buy Penthouse but only read the articles!) The September Amiga Format cost \$8.95 with disk, but the October one was priced at \$10. The 12-issue subscription is 85 pounds which is a lot. At this stage, I have only sent a subscription to Amiga Computing as at 50 pounds, airmail (no surface mail option) with disk it was much better value. Comments on subscriptions welcome.

1990 MEMBERSHIP SURVEY - PART 2

by Phil Guerney

There was a survey form along with the membership renewal notice you received in July last year. About half of you completed and returned that form by the end of October and I wrote about most of the results in the December Cursor. Here now are some more details on specific C64/128 answers, about the printers you own and some other (fascinating?) statistics.

C64 EQUIPMENT

There were 110 usable responses about C64 set-ups.

Only one C64 owner did not have a disk drive (and I suspect that has changed by now!). All the rest owned just one drive except for the eleven who owned two. No one with a C64 seemed to have found any need to own more than two drives. The disk drives were almost all 1541s, with just seven people using a 1570 or 1571 with a C64 for some reason. Two C64 people said that they owned a 1581 (the 3.5" drive that Commodore have never released in Australia). Most C64 owners (74) also owned "Datassettes" (tape drives) which reflects on the age of these set-ups - now new C64 owners mostly buy their computer with a disk drive in the package.

Those great little 1520 printer/plotters were owned by seven of these respondents. But no one had bought the 1764 64K memory expansion unit, nor a Quick Brown Box battery-backed RAM. The Koala Pad was owned by four people.

The Cockroach ROM (which gives improved disk operating speeds and other features, and was locally developed) has been very popular with 30 owners (27%). Along with one JiffyDOS owner, two DolphinDOS owners and four who added in either the Epyx or Mach V

fast-loader cartridges to the list, and you have a clear indictment of the shocking DOS which Commodore gave to the C64 drive.

Mice were added to the C64 repertoire more recently and three 1350 (pseudo-joystick) and six 1351 (real proportional mouse) units were reported. Modems were owned by 28 people (25%). Only one-third of the C64 respondents used a monitor, the rest worked with TV sets.

C128 EQUIPMENT

There were 44 usable responses from C128 and C128D owners.

Most C128 owners had one 1571 disk drive (with the "portable" C128D coming with one built-in). However ten people had two drives and four had three. These extra drives included four of the 3.5" 1581 units. I am sure that figure would have been much larger if Commodore supported them in Australia.

Memory expansions are out there, despite being hard to get. Two 1751, one 1750 and one GeoRAM unit were reported. One quarter of the C128/D owners had mice (mostly the "true" 1351 kind).

Only 19 of the 44 replies indicated that they knew how much video RAM was in their machine. For those who did not know, the C128 model has a separate memory bank for the 80-column mode video memory and a 16K chip was originally used for this purpose. In later models, Commodore actually found it was cheaper to put in a 64K chip instead. You can do much more with a 64K video RAM than with just 16K and a lot of the recent C128 software requires the larger video RAM. Upgrades are possible. Now to the survey - nine said 64K and ten said 16K. So it looks like it is around a 50/50 split.

Modems were owned by 36% of C128/D owners. Monitors were almost universal so that the 80-column mode was accessible, however some replies indicated that the 80-column monitor was only monochrome. Commodore designed the 80-column mode to be only two colour, but the BASIC 8 writers and others have managed to produce multi-colour code for this mode, so a colour RGB monitor is now recommended for a C128.

PRINTERS

There were 220 survey forms which gave the type of printer owned. And there were 72 different models of 25 different makes listed!

Not surprisingly, Commodore branded printers were the most common with 66 people (30%) owning them. Epson and Star printers were close behind with 50 (23%) and 47 (21%) respectively reported. Next came Citizen with 15 owners (7%) before a whole lot with just 1-6 examples coming up.

Most of us could only afford the cheaper models within each brand of course, but there were some 24-pin printers (for example, 9 out of the 50 Epson models were in the LQ range) and even an HP Deskjet. But no laser printers!

Of individual models, the commonest was the Star NX1000/C with 26 owners. Next came the CBM MPS 1250 with 19 and the Epson GX 80 with 17. At the other end, there were 38 people (17%) who owned a printer which no-one else owned. I suppose that figure would go down as the number of responses went up, but it is common for people to try to get help with printer problems and owning a printer different to anyone else certainly makes it more difficult.

I asked people to say whether they would recommend their printer to other buyers, but 55 people (25%) were not prepared to offer an opinion either way. Overall, 21% of those who ventured an opinion would not recommend their printer to others. However this op-

probrium was not spread evenly. Not one of the 47 Star printers or the 15 Citizen printers were given the thumbs down, and quite a few members wrote a large capital-lettered YES! about the Star NX1000C. At the other end, 7 out of the 24 CBM 8XX series owners said NO (which is quite a high no vote as generally people are not willing to say they made a bad buy), and all three of the CBM 15XX series owners voted NO! Within the Epson range, the no votes were concentrated in the ranks of the older MX, RX and EX series. Another uniformly despised printer was the Okimate 20 (3 no votes out of 3).

SOFTWARE OWNERSHIP

When I asked for the number of programs owned, I obviously meant owned and not evaluation copies or whatever. Despite that, some people wrote down "100+" for the number of games, which would work out at \$2,000-\$4,000 or more depending on the price paid. I do not believe any one would be prepared to spend so much on game software, so I excluded such replies from the averages I quote below.

Many people did not respond to this question at all. I see no reason to assume that meant "zero" owned, so these replies are also ignored here. That left around 100 forms which actually gave a number (including zero) in each of the four categories. The results are summarised below.

Category	Replies	Number Owned
Amiga Games	117	7
Amiga Applications	126	6
C64 Games	98	15
C64 Applications	108	7

These numbers seem sensible, even pessimistic. When a dealer next sneers that you belong to a "club of pirates" let them know that a survey found that the average member OWNS 15-20 software packages. Our membership would be responsible for several thousand sales per year.

FINDING OUT ABOUT THE CCUG

Almost everyone answered this one, thank you. Despite whatever advertising we have done, or publicity we have been seeking, it turns out that exactly half of you found out about the CCUG from a friend. Only 15% were in my category and first saw the monthly ad in the Courier-Mail. Another 16% found out from a retail store, presumably the one where they bought their computer. Other sources were: magazines (5%) (I guess this means the listing of user groups in Aust. Comm. & Amiga Rev.); Commodore itself (2%); the BBS (3%); our Computer Expo stand (1%) (not continued in the last few years); and through Greg Perry's TAFE courses and what must have been his very successful visit as a recruiting exercise (although it was probably not meant to be that) to the Toowoomba CCUG which several members from out that way mentioned.

My reading of these numbers is that our fairly expensive monthly announcement of our next meeting in the Courier-Mail Weekend Shopper columns is not good value. If we get 300 new members in a year, then only an average of four per meeting come from that ad. On

the other hand, we have not been very systematic about ensuring that stores always have our leaflets to hand out, yet references from stores were equally effective as the newspaper ad. Further discussion of this will occur within the committee, but we may call for volunteers to keep members' local dealers and K-Marts/Targets stocked with information leaflets and to make staff aware of our existence.

AND FURTHER ...

I realise now that the only question left out of the discussion so far was the one on the amount of business use your computers get. There is no time for me to work on that one before the deadline for this Cursor, so there will end up being one more brief part to this series.

Next year, if we do ask any more questions, the list will be much shorter. But remember, if you want to contribute ideas for meetings/workshops, or library acquisitions, or PD programs for the collection or whatever, then please contact the relevant committee member at any time of the year.

BYTES

FOR SALE

Amiga 1081 Colour Monitor - \$250

Digitising Outfit:
National WV1410 B&W Video Camera +
Digiview Gold 4.0 Software + 2 Fluorescent
Lightfittings - as new - \$500 the lot.

Contact Ralph De Vries on (07) 300 3477

**There's space here
for your
computer related advert**

**Free to all financial members
of the CCUGQ!**

8 BITS & PIECES

NOVEMBER MEETING

Tony May's Repair and Maintenance Demo at the November Meeting was an expected virtuoso performance and popular success. Since it is difficult for ordinary non-technical types to absorb such a torrent of information, we have decided to publish edited versions of portions of his talk. Even without the diagrams and his presenter's flair, I am sure it is valuable to have a record of this kind of information. For the present I have managed to transcribe his briefer and racier rundown on the 128 and 1571 drive. For the new year, it would be a challenging project for our 64 members to reconstruct the diagrams and illustrations of 64/1541 section of his talk and use Paperclip publisher or Geopublish or whatever, to produce a pamphlet. Many of us have toyed with the Desk Top programs but never done nothing remotely practical. This might settle the question whether Desktop Publishing on the 64 is an ornate toy or a useful tool.

OBJECTIVE FOR 1991

For the new year, we will try to make use of the group structure to involve more of our people in actively participating in the club demos. I don't think it is sensible to expect that the main focus of 8 bit club activity should be the continuous re-presentation of popular software, vast though that may be. Of course, there are new members, for whom well-known material is new, and old members who are pleased with a stimulus to extend the range of their interests, but in addition to the discovery phase, I hope to see group activity that shows our members productively using their machines.

Leigh Winsor

TRACK & SECTOR EDITORS

This article in the Dec. '90 issue of *Cursor* was incomplete, because Fred Turnidge had certain

printer problems which caused the loss of the @ sign between the { } brackets.

Whenever you see a pair of brackets like these in the listing: { }, replace it with {@}.

1581 OWNERS

A special newsletter has been set up for owners of 1581 disk drives. (The 3,5" disk drive for 128 (64) owners, which was never officially released in Oz.)

It's called *1581 USER*, and comes out every two months. Annual sub (6 issues) is \$18.00. Subscription address is:

1581 USER
P O Box 323
Maddington, WA, 6109.



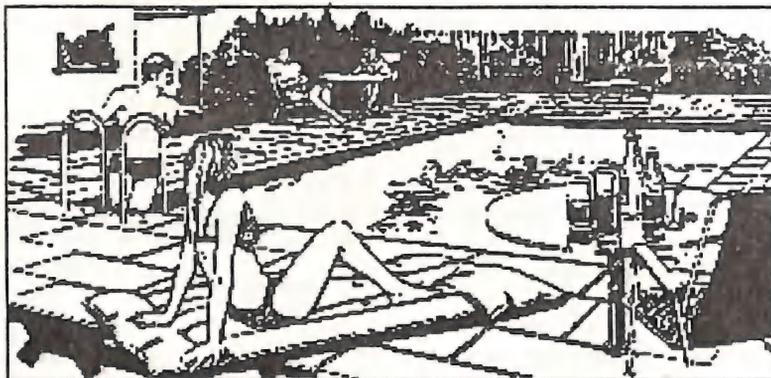
Welcome, 1991!

HELP! COLUMN

This is the HELP! column for users of C-64, C-128 and other 8-Bit computers. If you would like to share your experience in the fields of programming, software, hardware etc. with your fellow members, submit your name with your area of expertise to the editor. Remember: the more names, the more knowledge can be disseminated amongst our members.

NAME:	HELP OFFERED WITH:	PHONE:
Terry Baade	Contact for M'borough/Hervey Bay Members	(071) 215 059
Eddie Brook	Amateur Radio Fax & Weather Programs	349 4394
Kerry De Baar	Basic, Assembly Language	379 5617
Cor Geels	SuperScript, WriteStuff, PaperClip, GEOS	263 2839
Cor Geels	C-64 Newcomers, Printers & Interfacing	263 2839
Doreen Horne	Programming Problems & Disk Corruption	398 7441
Matthew James	Basic, Logo, GEOS, WriteStuff, Games Tips	300 5443
Ivor Laggan	GEOS	273 4212
Doug MacLurkin	MicroSwift Spreadsheet, Basic	350 4034
Vic Mobbs	Contact for Sunshine Coast Members	(071) 941 330
Vic Mobbs	Superscript/Superbase 128	(071) 941 330
George Nelson	EasyScript, HAM Radio	848 2456
Angus Norrie	Simon's Basic	371 2945
Craig Rawlins	Pascal, C, Machine Language, Modula-2	379 8957
Ron Rich	H'ware Interfacing for Amat. Radio Prgms	355 2623
Fred Turnidge	Family Roots (genealogy), Write Stuff	(063) 371 124
Denis Wright	Easy/SuperScript, CBM & Epson Printers	(067) 751 793
Denis Wright	C64 <-> Non-Commodore File Transfer	(067) 751 793

Please be considerate - these are after hours numbers, so only ring our members between the hours of 6pm and 9pm during week nights. Thank you!



TONY MAY ON THE C-128 AND 1571

The following is my imperfect attempt to transcribe a portion of T.M.'s talk at the November 90 demo for the 8 bitters. The 128 section, where Tony speaks with feeling on this "bloody brilliant machine with a few absolute bastard faults" was briefer, racier, less technically intricate than its preceding 64/41 section, and in part refers back for comparison to the 64/1541 material; but because it has less of the technical gory details, it more easily stands alone without the accompanying illustrations. It contains information on ROM upgrades that all 128 users and plastic case 128D users should note.

P.S. Somewhere in the 64 section of his talk is a piece of general advice for those with more enthusiasm than skill, which I'll add to the 128 section: don't desolder chips unless you are sure you know what you are doing. As Tony graphically put it; "The more amateurs attempt to desolder chips the sooner I'll be driving a Porsche." (L.W.)

TONY MAY ON THE 128/1571: A VIEW FROM THE REPAIRSHOP

BUGS IN 1571

As you are probably aware there are numerous bugs in 128D with the plastic case. In the 1571 drive you can upgrade by changing one ROM. If you have a 128D Metal case versions, don't worry - everything is O.K. In the plastic case versions, there is one rom to change.

A brief list of the bugs in the un-upgraded versions: not closing files properly, BASIC load list delete bugs, SEARCH command bug, RS232 bug, CHAR command bug, RENUMBER bug, DELETE command bug, PLAY command bug, BASIC error command bug, power up, power down bug. In one of the other ROMs in the unit there is a bug with DOPEN, maths package graphic commands, CAPS lock Q, function keys, RS-232, and so on.

It is a relatively simple matter to upgrade the ROMs: all are socketed and cost about \$11.00 each

UPGRADE to 64K VIDEO RAM

The Metal Case 128D CR (chip reduced) has 64 K of video RAM, (which is useful for 80 column graphics with such programs as BASIC 8). The old plastic case 128D has 16K of video RAM. You can upgrade from 16K to 64K video RAM, but don't it yourself. If you want to find out what is involved, there is an article in Compute about 2 or 3 years ago on how to do it. We've done a couple of them - it's a bit messy - but we can do it. It involves about an hours labour, and it would set you back about \$40.00

THE 128 ITSELF: COMPONENTS AND THEIR FAILURE

The 128 is a much more complex machine than the 64. The 128D is a brilliant machine-it really is! It's three computers in the one box, with 3 processors all sharing the one bus and the same data. It's bloody amazing, considering it was laid down in the mid 80s. Technically it is quite an amazing machine. I know Amigas can do more things, but from a technician's or an engineer's point of view, I find the machine quite amazing. By the same token, seeing it is so amazing, it can have some absolute bastard faults in it. Only very rarely do I get 64s with faults I can't fix (e.g where its been hit by lightning or things like that); whereas I've had in my career about ten 128s I just haven't been able to fix. The main reason is that we have all these different rotten processors in there... we have the Z80, 6510 and the 8502!

O.k what does this mean? The z80 runs all your CP/M, (Control Programs for Micro-processors) which is not a bad system -it's more or less how MS-DOS originated though

Microsoft wouldn't say that. Now the Z80, is a very finicky processor. It wasn't invented by Commodore, but by Zilog. The Z80 is like a typical [difficult] woman - she always wants to be first! When you first turn on your 128, the Z80 comes up first, it says, "Hello! I'm here!" and keeps the 6510 and 8502 (the Commodore processors) completely off the bus. In other words, "go away!" It even interrogates the disk drive, if there is one attached, to see if there is CP/M disk in there. You know when you turn on your 128, it goes - YEERRH--YEEHRR!! and carries on. (By the way the ROM upgrade fixes a lot of that grinding and headbanging). It then interrogates the disk drive and says "ah ha! there is a CP/M disk in there, yes, all the kernal routines of 64/128 are shut down", and starts loading CP/M. It's conscious of two different processors - actually three. You've got a lot of what are called transplanted buses, shared buses and so forth - if you get a fault in one of these small data latches, multiplexers, or buses, it will take bloody hours to fix the thing!

However the 128 has good reliability - it really has. The most common chip faults in 128s are RAM faults. What you find in 128 RAM faults is that it will come up missing memory, or it won't show missing memory at all - it's quite tricky, the 128 - but in 64 mode you may find that some programs you were able to load, won't load. And that is because part of your memory is missing in 64 mode only. The 128 switches banks all round the place, but that's a different story. O.k., that's the Z80 which starts up first.

Next door to the Z80 is the 8502, which is really a derivative of the 6502 and 6510. The 8502 is what makes the 128 able to address 128K of memory. Buried inside the 8502 is a 6510 the 64 processor (quite brilliant - you've got two processors inside one little chip!). O.k., hanging on all this are address buses and translator buses, buffers. Down the bottom of the schematic we have our ROMS, 128k of RAM, which is 8 chips, or 4 chips depending on whether you have a plastic or metal case;

you have a modulator to give you output on a TV screen, VIC chip - there are two VIC chips in the 128. One is your 40 column, the other is 80 column. The 80 column has the higher failure rate and they are fairly dear - I think \$40 to \$50. If it fails, what will happen is that you will lose 80 columns - everything else works hunky-dory - but you'll lose 80 columns. That's a sure sign that you've lost your 80 column VIC chip. The 40 column VIC chip has fairly good reliability. When it fails you have a blank screen. The 40 column VIC does a lot of your clock dividing, and important things with timing and so forth: if it fails, that goes bad.

Also you have a PLA - similar to the 64 but a bigger PLA. The 128 is a bigger machine so there are more functions in there. This PLA decides, like a copper on an intersection, which chip is coming next, and who can wait.

Something different in the 128 is the MMU - the Memory Management Unit. MMUs are common in larger machines, like PCs, Amigas (inside the Agnes chip), Ataris and Amstrads. Most higher-end machines have got to have some sort of MMU. What MMUs do is efficiently manage your memory - the best way to shuffle things around and keep track of things. The MMU is highly reliable on the 128, we have very little trouble with it.

We have two 6526s, just as in the 64, that talk to your disk drive, keyboard or joystick. Again like the 64, failure shows the same symptoms - keyboard going wacky, or something goes wrong with joystick. The extra keys that are on a 128 that are not on a C-64, are scanned by the VIC chip. You can have weird faults where all your 64 keys are working, but you go to 128 mode you'll lose your function keys, your numeric pad - that's the VIC chip. Because the 6526 can only scan so many keys, Commodore, as an afterthought whacked it in with the VIC chip 6581.

The SID chip is the same as in the C64.

1571 DRIVE

The 1570: Are there any poor people with a 1570? - No. How lucky! it is an absolute nightmare. It was what Commodore brought out before the 1571, because they did not have a double sided disk drive- so they brought out an interim unit which was a 1541 with bits of 1571 in it. Its got wires all over the place. If you see one second hand -well goodluck!

1571s mate with the 128, so they must have some way of doing MFM. Modified Frequency Modulation is a way of storing information on disk. CP/M uses MFM. Commodore 64s use their own unique method of putting information on disk called GCR -Group Coded Recording. As to Commodore's GCR -I'd say it is interesting. It's a very, very reliable way of storing information on a disk- strange but very reliable, but I won't go into details. But it's good. You can almost destroy a disk before you lose stuff with Commodore GCR.

CP/M needs MFM which is the same basic recording principle as that used in disks used in PCs. The consequence is that you've got to use a Western Digital chip. Western Digital are a high company that more or less dominates the disk drive game. Western Digital are the people who control Hard disks and so forth...they are a de facto standard like IBM. The Western Digital chip is called WD1770. If your drive works fine in Commodore 128 mode, and C64 mode, but wont work with CP/M mode, and its not the actual computer itself, then dollars to donuts it will be the 1770, your MFM chip. Again, it's soldered in.

POWER-UP/DOWN PROTECTION:

For some reason 1571s are prone to this fault: if you turn on the disk drive and you have disk in there, you must have a way of protecting the disk - of stopping little blotches of magnetism going onto the disk. When you first turn on the unit, remember that reset is low, and remember what I said before: if the processors are not woken up the reset of the

circuit is alive but the processor has not woken up. The processor is the Boss - so if the Boss is asleep the rest of the circuit can do what ever it feels like. So, when you first switch on, the rest of the circuit may decide to say, "Hey! let's put an erase down with the head"; and if you have a disk in there and that part of power up protection doesn't work, it will leave a splat on your disk. 1571s are really prone to this. If power-up is defective it won't show itself in any way - in other words your drive will work perfectly until one day when you have your prize disk in there with hours of labour on it, you'll turn on your unit on with latch down, and your disk will be stuffed! What has happened is the power up section has gone defective. Rule of thumb: never leave your disk in there when you turn your drive on or off your 1571. The Powerup Power-down protection has a circuit which takes away the 12 volts to your erase head and says." Aah aah!- You don't get any juice until the processor tells me." The failure rate on this is fairly high. It is one of the more common problems in 1571.

You have a CIA bus interface, but it is the 6526 in the 1571 because they run at higher speed and have a better way of handling the data. In the 1541, it is the 6522. Problems with it show as device not present, or your machine will work in slow mode -in other words work in 64 mode- but not 128 mode. And in that case, its usually the 6526.

Lastly, the thing that separates a 1571 from a 1541 is a thing that is called gate array. It's several chips in a package which Commodore devised themselves to make things work faster and function better. Inside the gate array there's all sorts of things like data separation, clock dividers, detectors, write control... The gate array allows the 1571 to work faster than the 1541.

BREAK-OFF HEADS

The most common fault with the 1571 is the heads themselves -they don't wear out but

they break off. There is nothing really you can do the try and save the heads. Just the constant up-down of the latch makes the little piece of metal weaker and weaker until finally it breaks off. The only piece of advice I have is: don't lift your latch with a clunk but bring it up slowly.

CLEANING THE HEADS

On the 1541 it is easy to do and you can't hurt anything. The 1541 is built so robustly that I don't think anything will hurt them, bar a drop.

The 1571 is a different kettle of fish. I don't recommend you try and clean the heads - or if you do, be very careful. You've got an upper and lower head and they must be in exactly in relation to each other--if they are misaligned you are in all sorts of trouble; in fact it probably will mean a replacement of the head. While I'm talking of 1571, I said the 1541 head is indestructible the same is true for 1571 - that's true, the head is, but the way Commodore mounted the thing isn't! The heads are bloody dear, and they do break. The lower

head is fixed but the upper head moves when you take a disk out. What we have found over the years is that as the heads come together as disk is inserted and door closed, this constant up-down movement wears out the crappy piece of tin they put in there, and it breaks off. There is nothing electronically wrong with the head, but they break off. If anyone can figure out or engineer a repair for this problem, they will make a bloody fortune! The heads are about \$117 and you can't do it yourself. It's a pain to do, and difficult, and labour intensive to fit, It's one of these jobs I love to hate! The drive must re-aligned, and to do it properly takes a good two hours.

As far as availability of the 1571 parts - we have no problem - all parts are still available at the moment, and the same is true for the 128. As far as the future of the 1571 and 128, I can't see any problem. The 128Ds were rather recently released in the States, only about 3 or 4 years ago, whereas they have been around for 5 years in Australia. So there is a fair base of spares available. As far as serviceability goes, they are a good machine to work on - until we get a fault around one of the three processors!

AN AUSTRALIAN SPELLING DICTIONARY FOR TWS

by Leigh Winsor

When we received our stock of the *Write Stuff 64 and 128* spelling checkers, we discovered that its spelling-checker dictionary followed American conventions of spelling. Thus <colour> was <color>, <centre> was <center>, <behaviour> was <behavior>, and so on. The variant US spellings are a small number of mostly common words that seem to stand out in spite of the large amount of American text we live with. Whether the differences really matter much is a matter of opinion, and in some cases at least, the American variants have simplicity and etymology on their side. But, since *Superscript*, the best of TWS's rivals, can supply a British dic-

tionary, and the *TWS Manual* makes promising reference to foreign language versions, we thought it was worth a try to obtain a British/Australian spelling dictionary. I even dared to ask for a French dictionary, but no such luck.

Mr Eric Lee, president of Busy Bee wrote and suggested that we should make our own modified dictionary. The procedure seemed simple enough: compile a list of the differences between British and American spelling, save it as a dictionary User File, use the merge utility on the TWS v2 disk to delete the corresponding American spellings, merge the list of British spellings, and recompress the dictionaries. (TWS has a two stage checking sys-

tem with a twenty-thousand small or frequent word dictionary and a sixty-thousand large word dictionary, which requires choosing to which dictionary the word belongs.) Now, all we needed was a volunteer.

Perhaps it all seemed so trivial that no one bothered to volunteer; but, since I had recklessly committed us to producing one, it became apparent that if we were ever to see the dictionary I had better do it myself.

PRELIMINARY OBSERVATIONS ON CHANGING SPELLING-CHECKER DICTIONARIES

A bad job in modifying a spelling-checker dictionary is worse than leaving it as it is: if a spelling checker accepts inconsistent spellings within a document, or if it does not distinguish spellings which are unacceptable as variants, then it gives the user a false sense of assurance, while it passes over errors. For example: I am writing this using Amiga Transcript with Transpell spelling checker, which produced its (apparent) British Spelling version with numerous inconsistencies. It grafted a small list of British spellings into its word list without always attending to related compounds of the word, or removing the US alternate spelling. A Transcript menu has <centre> but the dictionary lists only <center>. (There is another spelling mistake in a main menu which its users may have noticed). Another menu has <color>, but the dictionary lists <colourless> etc.

But from my examination of Transpell, I was able to learn some useful things: that one would have to find not only a list of specimen words but also of their compounds; that suffixes could be picked out mechanically from a dictionary, but prefixes were a more open-ended search. The British and American different practice with hyphens, (multicolor>, <multi-colour>, meant that our spell checker would operate differently on the lists.

So our first and most important pragmatic rule was: if revisions are not done consistently and systematically, the revised dictionary is likely to be less useful than if it is left untouched.

Next we needed to find who could tell us what are standards for Australian Spelling, and we needed to find some means of making a comprehensive list.

AUSTRALIAN SPELLING STANDARD

"Since 1981 the lexicon of Australian English has been fully accounted for in the Macquarie Dictionary, with its headwords list of 88,000 words...the forms of the Dictionary's headwords serve as normative advice on spelling, and there is no doubt the Dictionary is very frequently referred to for this purpose....Dictionaries are in a position to influence orthography directly, and not just subliminally, like the newspapers.

The role of the Macquarie Dictionary in standardizing orthography is likely to increase as this decade evolves. It will become the reference for all matters not explicitly covered in the new (fourth) edition of the Australian Government Style Manual." (Peters and Delbridge, p.132)

One would hardly expect an unfavourable verdict on Macquarie from its editor-in-chief (A. Delbridge), but, in the absence of dissent, we should accept it. But our practical problem was that, unless we could capture all of the 88,000 headwords on disk, it is no help in compiling our difference list. Even if we were fortunate enough to have the 88,000 words on disk, we would still have to discard about 10,000 words, (how would one decide which ones?), and divide the remainder into a short and long word dictionary. What we needed instead was, if not a difference list, at least a description of the features of Australian spelling from which a list could be generated. Here I rely on a table from Brian Taylor's article in *Australian English*, (Taylor, p.230).

{continued}

AMERICAN BRITISH SPELLING VARIATIONS

1	final	<re>	versus <er>	centre	center
2	final	<our>	versus <or>	flavour	flavor
3	final	<amme>	versus <am>	programme	program
4	final	<ogue>	versus <og>	catalogue	catalog
5	final	<ise>	versus <ize>	advertise	advertize
6	digraph	<ae>	versus <e>	foetus	fetus
7	consonant doubling in the final unstressed syllable of verbs before <ing> <ed> and <er>			travelling	traveling
				travelled	traveled
				traveller	traveler
8	Isolated items :			cheque	check
				defence	defense(n)
				practice	practise(n)
				tyre	tire
				grey	gray

VARIATIONS IN AUSTRALIAN SPELLING

Taylor notes we tend to follow US usage on type 3 <program> and some type 6 <medieval> spellings. Our Newspapers, especially the tabloids, tend to follow US spelling. The ALP uses US spelling in its name and its documents - (its only remaining principle?).

Victorian State Schools, since the 1970s, use <or> instead of <our>. In our own computerspeak, we tend to be immersed in American jargon, so that anything but <disk>, <program>, , <analog> look very odd. On Type 5, Macquarie along with the Oxford allows a small list of <ise> words of French derivation, with the remainder sharing the US <ize> endings. There appears to be variations within US spelling on consonant doubling, which I haven't investigated: TWS dictionary seems to follow British spelling on a number of these type 7 variations.

With this, we have sufficient information to generate a list, a version of which I include for correction or additions. If our users find that there are omissions or flaws, I would be grate-

ful if they would make them known to us. Since we are not experts in such matters, it is best to proceed cautiously, but the upshot should be that Write Stuff Users will be able either to have a revised dictionary, or select from a User word list the revisions they feel most comfortable with.

REFERENCES:

BOOKS

"Oxford guide to the English Language", Oxford University Press, 1984
(Section on word formation compiled by E.S.C. Weiner)
"Australian English, the language of a New Society", Ed. by Peter Collins and David Blair. University of Queensland Press, 1989.

ARTICLES (in Collins and Blair)

"Standardization in Australian English", by P.Peters and A. Delbridge, P127-136.
"American, British, and foreign influences on Australian English since World War II" by Brian Taylor. P225-259

{continued}

WORD-LIST OF BRITISH AMERICAN SPELLING DIFFERENCES

Type 1 (re er)

centre center
related words (incentre epicentre central
centring centred)

acre acer
acreage acerage
wiseacre wiseacer

calibre caliber
related words (calibrate calibration
recalibrate)

fibre fiber
(fibrous fibred)

macabre macaber

manoeuvre manoeuver
related words (manoeuvring, ed ,able)

litre liter
related words (kilo, milli)

lustre luster

massacre massacrer
related words (massacring ed)

meagre meager

mediocre mediocer
(mediocrity)

metre meter
(kilo, milli,centi metred)

mitre miter

ogre oger
reconoitre reconoiter
sabre saber
spectre specter
(al, ed)

theatre theater
(theatric)

TYPE 2 (our or)

arbour arbor
armour armor
behaviour behavior
(behavioural behaviourist)
clamour clamor
colour color
demeanour demeanor
(misdemeanour)
favour favor
(able, unfavourable, ed, ing)
flavour flavor
glamour glamor
honour dishonour honor(honorary
honorable)
harbour harbor
humour humor

labour labor
neighbour neighbor
(neighbourhood)
odour odor
rigour rigor
rumour rumor
saviour savior
tumour tumor
vapour vapor
valour valor
vigour vigor
(note: -our + -ous = -orous)

TYPE 3 (gramme gram)

program, gram, kilogram... (No change
needed: follow US spelling)

Type 4 (ogue og)

analogue analog
Catalogue catalog
decatalogue decalog
dialogue dialog
demagogue demagog
ideologue ideolog
travelogue travelog
monologue monolog
pedagogue pedagog

TYPE 5 (ise ise)

analyse analyze
paralyse paralyze

(List of common words below take <ise>
in US and British Spelling, the rest
either <ise> or <ize> , Macquarie
preferring <ize>. No alteration
required.)

advise
advertise advertize
apprise
arise
comprise
demise
despise
devise
disguise
improvise
prise (lever) prize
surprise
supervise
televise
surmise

TYPE 6 (di-graph)

Caesar Cesar
foetus fetus
aesthetics esthetics
aetiology etiology*
aerobic aerial
aegis
aeon
ethology
gynaecology gynecology
diaorrhoea diaorrhea
Oedipus

paediatric	pediatric
paedagogue	pedagogue
aether	ether*
aetherial	etherial*
dianoetic	dianoetic
(* US preferred)	

TYPE 7 (double consonant)

appalling	(appall)	
cancelling	canceling, canceled	
enrolled	enroll	
equalled	equaled	
traveller	traveler	
travelling	traveling	
travelled	traveled	
jeweller	jeweler	
wilful	willful, wilful	
kidnapped	kidnaped	
marvelous	marvellous	
worshipped	worshipped*	
woollen	woolen	
levelling	leveling	
skilful *(1)	skillful	skilful
panellist	panelist	
stencilled	stenciled	
focussed	focused	

TYPE 8 (exceptions)

aeroplane	airplane
aluminium	aluminum
cheque	check
chequer	checker
*disc	disk
kerb	curb
furore	furor
moustache	mustache
pyjamas	pajamas
gaol	jail

vise (tool)	vice
sulphur	sulfur
sanitorium	sanitarium
smoulder	smolder
cosy	cozy
licence (n)	license
prophecy (n)	prophecy
device (n)	devise
defence (n)	defense
offence (n)	offense
pretence (n)	pretense
practice (n)	practise
sceptic	skeptic (2)
mould	mold
*fount	font
tyre	tire
tyro	tyro
syivan	silvan
syphon	siphon
cypher	cipher
gypsy	gipsy
pygmy	pigmy
grey	gray

*US spelling preferred

NOTES

1. (Proper Names retain their original spelling conventions: e.g. Pearl Harbor but Sydney Harbour, arbour, but Arbor Day. Behaviorism (the American doctrine), Technicolor, Dialog Box, Color Computer etc.
2. Cases where the two forms may be acceptable variants
3. Word endings of related words can be located from the TWS dictionary.

BASIC TROUBLE SHOOTING

by Fred Turnidge

Many magazines include check programs, such as 'Proofreader', 'MLX', 'Perfect Typist' etc which make it easy to enter published programs. However sometimes such programs are not available and as a result when you come to run the program it will not work. Here are some ideas on an approach to finding out why a basic program will not run. I hope that it will help you solve some problems.

I found the program below in a family history magazine, typed it up and saved a copy. The purpose is to reduce surnames to a phonetic

form to make comparison easier. When I ran it, it would not work; sound familiar! My input was TURNIDGE and the output was EEEEEEEEE. Inspection showed that the number of letters was the same as the input and the output the same as the last letter. I tried another name and a similar pattern resulted.

The first step was to check my version against the original. I did this from the screen. No apparent mistakes so the next step was to try to understand what the program was doing.

Lines 110-140 were a bit deep, it seemed to allow for both upper and lower case input, so I

moved on. I had not come across INSTR before so out came the 128 System Guide. Now Z\$ was one of the letters in the input and INSTR reports the position of Z\$ in the string in quotes; in line 210 if Z\$=E then INSTR=2 and if Z\$ is not present in the string then INSTR=0. I understood that where an 'IF' statement does not specify equal to something it implies IF=0. So I changed line 210 to read

```
210 IF INSTR("AEIOUYW",Z$) <0 THENY$=Y$+"U":
GOTO280
```

This made no change to the output. The 128 has a built-in trace function so I typed TRON return and ran the program again. This told me nothing.

Next I broke the program up into the loops which are located between FOR and NEXT ie lines 110-140, 180-280 and 280-320. In order to see what was happening within the loops, I then added :PRINTD\$ to the end of line 130, :PRINTY\$ to the end of line 270 and ran the program again. Now it was possible to print to the screen values for the strings and it was apparent that the first 2 loops were doing the right thing, so the problem must be in the third loop.

I checked later copies of the magazine but no one else seemed to have reported having problems. This time I listed the program to the printer and sat down in a quiet corner and compared it again with the original in the magazine, paying particular attention to lines 280-320. Sure enough I had mistyped line 290 which should have been

```
290 Z$=MID$(X$,X,1):IFZ$<>MID$(X$,X+1,1)THENY$=
Y$+Z$
```

This correction made, I ran the program again and it worked.

If the program stops you can press the STOP key and the last line number will be displayed. This can sometimes give a starting point for the problem.

My point in this article is that you may not be able to understand all that is going on in Basic but if you use a broad approach to a problem, you are often lucky with the result.

NOTE: there is an error in this program. Read the text!

```
5 REM FAMILY TREE MAGAZINE JUNE 1990 P 12
10 PRINT"ENTER TEXT FOR CONVERSION OR
RETURN TO QUIT"
20 INPUTA$
30 IFA$=""THEN80
40 GOSUB100:PRINT"PHONETIC EQUIVALENT IS"
50 PRINTY$
60 PRINT"-----"
70 GOTO10
80 END
90 REM PHONETIC CONVERSION-- INCOMING A$
RETURNED AS Y$
100 IFA$=""THENY$=A$:RETURN
110 X$=A$:FORX=1TOLEN(X$):G$=MID$(X$,E,1)
120 D$=CHR$(-(ASC(G$)>96)*(ASC(G$)AND223)+
(ASC(G$)<97)*(ASC(G$)))
130 MID$(X$,E,1)=D$
140 NEXT:Y$=""
160 X=INSTR(X$,"MC")
170 IFX<>0THENX$=LEFT$(X$,X)+"A"+MID$(X$,X+1):
GOTO160
180 FORX=1TOLEN(X$):Z$=MID$(X$,X,1)
190 IFZ$="H"THEN280
200 IFINSTR("...;",Z$)THENY$=Y$+" ".GOTO280
210 IFINSTR("AEIOUYW",Z$)THENY$=Y$+"U":
GOTO280
220 IFINSTR("BFPV",Z$)THENY$=Y$+"B":GOTO280
230 IFINSTR("DT",Z$)THENY$=Y$+"D":GOTO280
240 IFINSTR("CE/CI/CY",MID$(X$,X,2))THEN
Y$=Y$+"S":X=X+1:GOTO280
250 IFINSTR("SZX",Z$)THENY$=Y$+"S":GOTO280
260 IFINSTR("CGJKQ",Z$)THENY$=Y$+"J":GOTO280
270 Y$=Y$+Z$
280 NEXT:X$=Y$:Y$="" :FORX=1TOLEN(X$)
290 X$=MID$(X$,X,1):IFZ$<>MID$(X$,X+1,1)THENY$=
Y$+Z$
300 IFZ$="U"ANDX=LEN(X$)THENY$=MID$(Y$,1,LEN
(Y$)-1)
310 IFZ$="U"ANDMID$(X$,X+1,1)=" "THENY$=MID$
(Y$,1,LEN(Y$)-1)
320 NEXT:RETURN
```

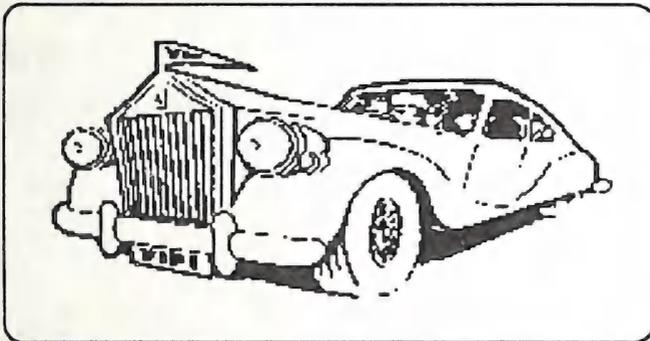
-ooOoo-

CCUGQ PUBLIC DOMAIN DISK #52:
ICPUG EDUCATION - 04

BIG MATH - Addition, subtraction, multiplication and division for young children
HANG MATH - Guess the missing digits in a multiplication problem.
MAGIC SQUARE-64 - Light up squares - quite a problem.
NUMBER MATCH - Basic maths for very young children.
MATHS MAZE - Travel through a maze solving maths problems to advance.
COPS-64 - Save the town from crime by playing cops and robbers. Test your skill at mental subtraction.
ARROW FRACTS - Judge the size of a fraction.
BOHR ATOM - Physics program. A tutorial involving hydrogen energy levels.
BOYLE'S LAW - Physics. All about the effects of varying pressures on a contained volume of gas.
LAZER - Answer maths questions speedily to save a wall.
BUNGALOW - Architecture. Design a bungalow.
NICHE - An educational game relating to the ecological variables of a given organism, its habitat, living space and role in the ecosystem.
REACTOR - Control a nuclear reactor. An interesting program with detailed explanations and the probability of causing a meltdown.
TYPING PRACTICE - Learn to position fingers and test speed.

CCUGQ PUBLIC DOMAIN DISK #53:
ICPUG UTILITIES - 19

SUPERUTILITY 4.1 - 36 different options for operating on disks and files.
VIP DISK MANAGER - Copy, rename, erase, validate, ASCII conversion, combine, print, split and view files.
MEGA COPIER - File copier for 1 or 2 drives.
BLOCK COPY - Will repair or copy a sector onto the same or another disk.
FIND FILES - For 1541/1571/1581. Find start and ending addresses, calculate file length and display tracks and sectors used.
SORT2 SUPERSORTER II - disk cataloguer which states it will handle over 2000 filenames.
DIRECTORY MASTER for C64/C128. - Creates menu from directory. Instructions for use in the program.
DIR.MASTER 64 - Compiled version of the above.
DDDD - DECKERS DYNAMIC DISK DISPLAYER. Catalogue up to 700 items. Instructions in program. Directory Option 6 appears to 'freeze' the program.



TWS - LAZARUS Mk II

by Doreen Horne

It's all very well describing solutions which include machine code monitors, but what happens if you don't have one in your arsenal, you've written a long document and then TWS suddenly 'freezes'. It doesn't happen often I should think but there have been a couple of reports.

Thank you Angus Norrie for suggesting 'data' and here is the ultimate solution provided your typing is accurate.

It is a complete overkill as it will save the whole text area, some 21503 bytes, a disk file of 85 blocks, but the space beyond your text can be adjusted when the file is loaded back into THE WRITE STUFF.

As said before, when the 'freeze' happens don't switch off. Use your reset switch or RUN STOP/RESTORE to get back the default screen and the cursor, put a spare disk into your drive, and then type in the following short program:

```
10FORI=4096TO4096+33:READA:B=B+A:POKE
I,A: NEXT
20 IFB<>3814THENPRINT"DATA ERROR":END
25 IFB=3814THENPRINT"OK - NOW WRITING
TO DISK"
30 DATA 120,169,54,133,1,160,0,185
31 DATA 0,124,153,0,28,200,208,247
32 DATA 238,9,16,238,12,16,173,9
33 DATA 16,201,208,208,234,169,55,133
34 DATA 1,96
40 SYS 4096
50 OPEN4,8,4,"-NAME,P,W"
55 PRINT#4,CHR$(0)CHR$(124);
60 FORX=7168TO28671
70 PRINT#4,CHR$(PEEK(X));:NEXT
80 CLOSE4
```

The drive takes several minutes to write the 85 blocks and please note that the semi-colons in lines 55 and 70 are essential to prevent disaster.

When you load this newly saved file back into THE WRITE STUFF, scroll to the end of your text. If the screen turns black and empty use the RUN STOP key and then cursor up once more. The end of your text will reappear and the cursor should then be positioned immediately below it. At that stage if you use CTRL(COMMAND)- you will find 0 bytes free.

Select EDIT mode, choose CLEAR TEXT, BELOW CURSOR, and the end of the file should then be properly adjusted and CTRL(COMMAND)- should give an accurate number of bytes free.

You are now ready to save the file or continue typing.



I Hate School!



T. M. N. T.
by Tom McRae

AMIGANET

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- * Networking software included.
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AMIGA MONITOR

NOVEMBER MEETING

At this meeting Lindsay Whipp and Steve Hovelroud gave our members the low-down on *Amos*, the new Basic-like programming language for the Amiga.

This language is optimised for programming computer games and has a wealth of commands and routines for this purpose. However, as our intrepid guides pointed out, *Amos* has both its strong points as well as its weaker ones, and is a product which needs care and attention. Fortunately, the UK publishers of the language, as well as their Australian distributors, Pactronics, appear to be supporting the product quite well, with regular upgrades, newsletters, etc.

Future developments are eagerly awaited by many budding games programmers.

DECEMBER MEETING

Those members who decided to stay home because of the rain missed out on a treat.

Lindsay Whipp, who last month demonstrated *AMOS* and the game he is writing with this language, actually showed us his new game (called 'Revaulting' !!) in action, because last month we'd forgotten to bring a joystick along. It's amazing what a difference such a minor accessory makes! With the joystick in place, Lindsay gave an impressive demo of *Amos's* (and Lindsay's) capabilities.

After the official meeting intro by our President, Greg Perry, it was his turn again to demonstrate, with our old friend Peter Wharton of the Seven Hills College of Art, aspects of multi-media (or interactive video) on the Amiga.

This time Greg had brought his A2000, a monitor with a Touch Screen attached and a

Sony Video Disc player, as well as a Rendale Genlock.

He showed us first the operation of the Touch Screen, for which he had programmed the driver software. Next he loaded up an interesting graphics demo, prepared by students of the Seven Hills College, which gave us useful information about the Lamington National Park, by means of maps and digitised photographs, and using the touch screen - a very creditable effort indeed on the part of the students at the Art College.

After this Greg loaded up a video disc from a Western Australian based mining company, which gave the user the opportunity to interact with the disc, as it basically was an educational game to teach the user about oil exploration and drilling. This was followed by another Western Australian produced video disc about one of their national parks. Both computer graphics and video disc images could be freely intermixed by the end user.

The last disc which Greg had brought along was an Italian tourist promotional disc about Italy (naturally!). This contained some 54000 still frames and was quite an eye opener. He loaded up *AmigaVision* and showed us how easy it was to create a small script (or scenario) to access parts of this disc - interesting stuff!

It was now Peter Wharton's turn to load up another video disc, as well as *DPaint III* by means of the Genlock. He now showed us how to outline part of the video image, using *DPaint*, and turn this into an *Anim Brush*. He did this with about half a dozen still frames of the video disc and saved each outline out as an *Anim Brush*. He then 'played back' these *Anim Brushes*, thus producing a quick animation sequence.

It is only through actual demonstrations like this, that one realises the real capabilities of the

Amiga as a desktop video tool. Although items like genlocks and video disc players are probably way beyond the means of our average member, it has to be pointed out that, to do the same thing on a Macintosh or PC, one would have to spend probably four times as much money. As such it was a valuable demonstration of the Amiga's capabilities.

FEBRUARY MEETING

Ralph De Vries will demonstrate some aspects of PageStream, the DTP Package.

FEBRUARY WORKSHOP

This will be devoted to technical and programming problems. We will also be there to assist any new Amiga owners with both hardware or software problems, *but do bring your equipment and programs along*, as it's usually a lot easier to explain what a problem is or may be, if we (and you) see it on your own equipment.

Remember, this is your meeting, and we are there to help you.

AMIGA 1500

Strange things are happening in the Commodore world. In the U.K. only, Commodore have released an Amiga 1500. This is not the A1500, advertised by a British company (Checkmate) who remodel the Amiga 500 into a new case with a separate keyboard and call it A1500. No, Commodore UK's Amiga 1500 is really a 2000 with two floppies, 1 Meg of memory and half a dozen software packages thrown in, and the whole deal sells for *750.00.

AMIGADOS V.2.0 - A WARNING

If and when Commodore release Kickstart / Workbench 2.0 you will probably rush out and buy this package; I know I will. But, ho!!! Have you seen the listing in recent issues of *Amiga World* and other magazines of software which is compatible with V 2.0 of the Operat-

ing System? It's by no means a long list, and this infers that a lot of existing software will either not work at all, or, at best, will only work partially.

Hence, until all the facts are known, it probably will pay us to stick with 1.3, unless somebody comes up with a switchable 1.3/2.0 hack.

US MAGAZINES

At long last the group's copies of the revamped *Compute* magazine have arrived. As most of you will have read, the *Compute* group of magazines has changed ownership, and the new owners have made quite a few changes.

Our group subscribed to *Compute's Gazette* (2 copies), *Amiga Resource* and *Compute!* magazines. We received 4 copies of the new *Compute* (minus the exclamation mark), two of which had a 40 page C64/128 insert (like the old *Gazette*), one which had a 46 page PC insert, as well as a 48 page Amiga insert (this was the replacement for the *Amiga Resource* magazine, but why the PC insert?), and our last copy had the PC, C64/128, Amiga, and Macintosh inserts (this was the replacement for the original *Compute!* magazine). Confused? So are we!

All of a sudden, the American Amiga Magazine publishers have discovered a need for a more 'technical' magazine for the Amiga, along the lines of the now defunct *Amiga Transactor* magazine. It started with *info* mag, which carries a small amount of material by two former *Transactor* editors, and now both *Amiga World* and *Amazing Computing* have promised us some form of programmers type magazine for 1991. We shall see...

COMMODORE FINANCIAL REPORT

Some interesting points from CBM's annual report covering the period July '89 to June '90... Of Commodore's total revenue, Europe supplied 75% (up from 69% the previous year),

North America (US and Canada) 18% (down from 24%), and Australia and the Far East 7% (also slightly down). The biggest European markets are West Germany, followed by Great Britain (now third largest sales base, after West Germany and the USA), and there have been significant increases in France and the Benelux countries as well.

A500 sales increased by 25% with 550 000 units sold. Sales of the C64 are down by 45% to some 700 000 units, but this means that by now close on to 11 million C64s have been sold world wide.

CDTV will now not be seen till some time in 1991, so it may well be beaten to the post by CDI (Compact Disk Interactive - to be released by the large electronics conglomerates such as Sony and Philips etc.), which is also rumoured to be released this year. Any bets on the eventual winner?

AMIGA '90

More than 65000 visitors came to Cologne between 8 - 11 November '90 to *Amiga '90*, where some 160 exhibitors had their Amiga wares on display. There were bargains galore, as is usual at these large trade displays. How about \$60 for 512K memory expansion or \$400 for a 2 Meg memory card for the 2000! As well as looking at all the new goods on display, there were lectures and master classes on most aspects of the Amiga.

One in particular that stood out was the formation of GRAFEXA. This stands for GRAphics EXtensions for the Amiga, and is concerned with setting standards for higher resolutions in future graphic expansion systems. The theme of Grafexa will be taken up at the forthcoming European developers conference in Milan (Feb '91). Four of these graphic extension systems were shown in proto type; these included the *Firecracker* board by Impulse, the *Colorburst* board by MAST, the *Visiona* board by XPert, and the *Harlequin* board by a German company called

HS&Y. The German company Intelligent Memory, who distributes amongst other things the Impulse products, has another interesting new product, called the *Colorbox*. This is, as regards features, somewhere between a Genlock and the Video Toaster, and has too many features to list them all here. Price in Germany is about DM 2000 (at current exchange rates about \$1900).

AmigaVision demonstrations attracted a great deal of attention, as well as Show Maker from Gold Disk. However, as Show Maker is quite an expensive package, it appears that AmigaVision may well turn out to be the winner in the fields of Multi Media presentations, particularly as a rumoured new version of AmigaVision is released in the near future.

In the music field several new Midi sequencers and editors were shown, as well as several new sound samplers. But when can we expect new music packages for non-midi owners? Deluxe Music Construction Set and Sonix are showing their age, and need updating as regards entering and printing of music. It's sad to admit, but the Atari has a much better range of music software available.

Most of the hardware consisted of memory expansion systems and hard drives - there were just too many to mention them all here, and quite a few of the European systems will never be seen on the Australian market.

There were also several new competitors in the area of Flicker Fixers. We can expect a considerable drop in prices of these units when they come on stream in 1991.

The use of modems in Germany has been a dicey business for quite some time. Up till very recently the only type of modems that was legal, were the Acoustic Couplers. However German Telecom has now relented and does allow the use of, what we consider, 'normal' modems, but only at 300 baud rate. Obviously Telecom in Germany is trying to get rich quickly!

TOP TWENTY GAMES IN GERMANY

- 1 - Pirates!
- 2 - Populous
- 3 - F-16 Falcon
- 4 - Rock'n'Roll
- 5 - Battle of Britain
- 6 - Kick Off
- 7 - Sim City
- 8 - Indiana Jones
- 9 - North & South

- 10 - 688 Sub Attack
- 11 - Great Courts Tennis
- 12 - Loom
- 13 - Champions of Krynn
- 14 - It came from the Desert
- 15 - Dungeon Master
- 16 - Rainbow Islands
- 17 - Stunt Car Racer
- 18 - Indianapolis 500
- 19 - Legend of Fearghail
- 20 - Operation Stealth

HELP! COLUMN

This is the HELP! column for users of Amiga computers. If you would like to share your experience in the fields of programming, software, hardware etc. with your fellow members, submit your name with your area of expertise to the editor. Remember: the more names, the more knowledge can be disseminated amongst our members.

NAME:	HELP OFFERED WITH:	PHONE NO:
Dave Apelt	Vector Graphics	366 4761
Ellen Appleby	Using Amigas in Education	369 4629
Tim Brattberg	Assembly - AmigaBasic - Solid Vector Graphics	399 1973
Bob Devries	OS9 Operating System	372 7816
Ralph De Vries	Printers - WordPerfect - PageStream	300 3477
Robert Googe	Video & Audio Digitising	288 8863
Steve Hovelroud	Audio Digitising	298 5128
Gary Lloyd	C Programming (Beginners)	269 7818
Paul O'Brien	Amateur Radio Communication	397 4102
Brendan Pratt	Modems, Telecommunications, Sidecar	(075) 463 317
Grant Robinson	AmigaBasic	359 4315
John Van Staveren	Easy Ledgers Accounting Program	372 3651
David Walton	Bridgeboard (IBM)	(071) 834 742
Mike Williams	AmigaBasic (Beginners), Sound	209 9084
Rod Williams	Monitors & Video Interfacing	260 6237

Please be considerate - these are after hours numbers, so only ring our members between the hours of 6pm and 9pm during week nights.

DESKTOP PUBLISHING - PART 5

by Ralph De Vries

So far in this series I've concentrated on showing how to get the best output out of our HP LaserJet printer. The last issue of our newsletter has proved by and large that we are able to get first rate output at a reasonable price.

I would like to define 'reasonable' in this context as a total package costing somewhere between \$6000 to \$10000. It's a well known fact that, up till quite recently, one would have had to spend \$20000 or more to get similar results.

But where does that leave those Amiga owners whose budget is far more restricted? Fear not; provided that you own a 1 Meg Amiga with two disk drives and a 9- or 24 pin dot matrix printer, you are now able to get results which will be admired by all your friends and relatives!

As I've pointed out in my previous articles, the only way to get first rate printed output is through the use of the Compugraphic Outline Fonts technique. These scalable fonts give you printed output which is better than anything we've had before. However, Compugraphic fonts (on disk) are BIG! Some of them take up half a disk (i.e. 400 000 bytes).

To be able to use a DTP package which employs CG (Compugraphic) fonts, you only have the choice of three packages at present: Professional Page V. 1.3, PageStream V. 2.0, and PageSetter II. Because of memory requirements, forget about Professional Page and PageStream - yes, I know that the manufacturers state that they will work on a 1 Meg computer, but they are really kidding. Both programs come on three disks, and you would really need three drives to run them, because the disk swapping will drive you insane. Worse though, is that you are going to have memory problems from day one. So forget those two (at least till you can afford more

memory and a hard disk drive) and buy a copy of PageSetter II.

PAGESETTER II

I've recently taken a look at the Group's copy of PageSetter II. The package comes on two disks with a 116 page (new) manual. Current price is about \$175. For those of you who have used earlier versions of PageSetter, the package will look quite familiar. I did not install in on my hard drive, because I felt that this package will mainly be bought by owners of 1 Meg Amigas (it will not run in 512K) with 2 floppy drives.

The program is about 300000 bytes long, so it takes a while to load, although nowhere near as long as its bigger brothers Pro Page and PageStream. It boots up in medium-resolution mode, but this can be changed to high-res if desired. Other parameters such as your normal page size, as well as the preferred measuring system can also be specified in the icon's info file. The program comes with about half dozen bit-mapped fonts, as well as two Compugraphic fonts. Interestingly, there's both a bit-mapped as well as a Compugraphic Times font. Why? Perhaps new owners of PageSetter might like to create a page using both forms of the Times font in, say, a range of sizes starting at 6 points and going up to 24 points or larger - I can guarantee you that you will always use the Compugraphic fonts after that test!

I must admit that I did not spend a great deal of time with the program, but I did create an A5 size page, similar to a page of this newsletter. I can assure you that the quality is every bit as good as that produced with PageStream. When using the Compugraphic fonts, the program uses a similar font caching system as Pro Page. Once you have used a Compugraphic font in a certain size, the program creates a cache, which holds information about the size of this particular font. The next time you use

the program with the same type and size of fonts, the data held in the cache speeds up font definition quite considerably.

Because of its more compact size, there are trade-offs in using PageSetter II. Totally lacking are hyphenation routines, which would make it useless for my particular applications. This brings me to a rather annoying bug in the program - when trying to manually enter some hyphens, I suddenly lost all remaining text below the cursor. Pressing the Delete or Back Arrow keys brought the text back, but usually minus the last character under the cursor key. When I tried to re-insert the missing character, the text disappeared again! All rather frustrating, but I'm sure that you can work around this bug. Printing speeds of PageSetter (and Pro Page 1.3) are less than half those of PageStream (7 minutes versus 3 minutes for an A5 size page, using our LaserJet), which is a distinct minus when you try to print out a large document. Yet, despite these restrictions, I would recommend PageSetter because of its superior output, thanks to the Compugraphic outline font technology.

HOW MANY DOTS?

When you start using a DTP program and you are ready to print, you are given the choice at what density to print (normally 1 to 7). An MPS 1000 (9 pin) printer goes from 120 x 72 dots per inch at density 1, to 240 x 216 d.p.i. at densities 6 and 7. An NEC 24 pin printer has a range of 90 x 180 d.p.i. (density 1) to 360 x 360 d.p.i. These figures vary somewhat from printer to printer. More details can be found in the AmigaDOS 1.3 Manual. By the way, you are using Version 1.3 of AmigaDOS, aren't you? Printing under 1.2 is nowhere near as good and flexible, and it's slower as well.

Now, when you have set up a page, I'd suggest that you waste some paper and do a printout at all usable densities. You will notice that at the lowest densities the print quality is decidedly ragged, and it improves as you increase density. You will also notice that print-

ing speeds become progressively slower as you increase the density.

When I used the Group's previous printer (the Epson Inkjet) I normally used a density of 180 x 180 d.p.i., although the printer was capable of printing at 360 x 360 d.p.i. Although text was quite good at the highest density, graphics became quite muddy looking. Hence I used density 4 (180 x 180 d.p.i.), which was a good compromise between quality and speed. As the actual dot size is really too large for 360 x 360 d.p.i., the dots overlap to give that muddy appearance. You may well find the same thing with a 9 pin printer at maximum density. I repeat, experiment and pick the combination that suits you best.

HOW MANY FONTS?

Compugraphic fonts are both large and expensive! One can currently buy disks with three fonts on it for \$90.00 or so. But how many fonts do you really need? For the main text of this newsletter I only use four font:

Garamond for the body text,
Triumvirate (Helvetica) for the headers,
Courier for program listings etc
Avant Garde for Public Domain lists.

As all these fonts can be scaled up and down (and most of them can be bolded, italicised, outlined and shadowed as well), you have plenty of choice. The main rule to obey here is...

K.I.S.S. = Keep It Simple, Stupid.

So don't do silly things like bolding and underlining text at the same time; this looks amateurish. Our main concern is ease of readability, and that goes for both the appearance and the contents.

However some extra fonts are nice when you have to produce adverts, notices, flyers etc. This is where you can let your imagination run riot, although the K.I.S.S. rule still applies.

PROFESSIONAL PAGE VERSION 2.0

This has recently been announced. To version 1.3 have been added several of the features which PageStream users take for granted, such as the tagging of text, headers and footers, page numbering and text rotation. They have also added a spelling checker as well as made substantial improvements to PostScript output, and made the program compatible with AmigaDOS 2.0. All this for a recommended US price of \$395.00. It must be obvious that all these new features make Pro Page 2.0 a package that can only be successfully run on computers which are fully expanded, i.e. by professionals.

VALUE FOR MONEY

Recently I had a visit from a student of the College of Art who had just completed a DTP course, using a Macintosh. She wanted to know how PageStream compared with the DTP program which she used in her course.

I was rather apologetic about the slow speed of screen refresh with Compugraphic fonts, but she told me that the Mac program was also slow! In fact she thought that PageStream had just about all the features that could be found in the Mac program (as well as some that weren't found in the Mac program), but the interesting thing was that the DTP program for the Mac costs \$1250, compared with \$300 - \$350 for PageStream. Makes you think, doesn't it?

STYLE

Earlier on I mentioned that it's overdoing a bit to both bold and underline text at the same time. In the case of an article headline it's usually enough to print it in a larger size than the main body of text. If you also use a different style font, you have the attention of the reader. The articles in Cursor are set up in 9 point text, the headline is set up with a sans serif font in 15 point size. Underlining this headline would be totally superfluous, as you

get the reader's attention by the use of a larger size and the additional use of a different font.

I like to print the author's name in 11 point size and use bolding, just to give it that extra bit of emphasis, because he/she is rather important!

Sub-headings are normally on a line by themselves in standard 9 point size and capitalised. However, some editors prefer to use the same font as used in the heading, but in an intermediate size like 12 points; this looks excellent as well.

Problems start with the emphasis features in the body of the text. To emphasise text you can give it: *e x t r a s p a c e*,

centre it,

CAPITALISE it, bold it,

italicise it, or underline it,

OR COMBINE THE LOT!

Now some of my authors go really over board with emphasis. The trouble is that, once you start shouting too long and too loud, nobody takes any notice any more, so text emphasis should be used sparingly. By and large underlining is out in the body of the text; it looks ugly. It's best used when you have a subheading for a table of figures or columns. Bolding should also be used sparingly in the body of the text. I like the use of italics or the OCCASIONAL use of capitals for emphasis. Italics are very good when you want to emphasise the title of a book, magazine or software package. However, if your article is about a particular book or software package, you don't have to italicise it every time you use it; once will do very nicely, thank you.

None of these are cast iron rules, and all of them can be broken successfully at times. My advice to budding DTPers is to look at lots of publications to get an idea of good and bad layout practices. If you are like me, you'll keep on experimenting to improve the final result.

EUREKA

(That's Greek for 'I've found it', in case you don't know!) Last July I wrote about a graphics bug in PageStream when importing IFF pictures. The original proportions of the picture were lost when you import it into PageStream and could only be (approximately) restored by reducing the height of the picture to 84% of its original size. Yet, on some pictures, particularly those with diagonal lines or black and white clip art, the result was far from satisfactory, and I resorted to printing my pictures out by using DPaint III, and pasting them into the newsletter - very unsatisfactory, as it's very difficult to line them up accurately.

However PageStream V.2.0 has come to the rescue. It does not cure the bug, but they offer a type of solution on page 6.5 and 6.6 of the manual which partly showed the way, although it still took some experimentation on my part to get it really working.

Quoting the PageStream manual: "IFF files don't contain the dot per inch data at which a picture was originated. IFF pictures are imported at screen resolution (68 dpi) and must be compressed for publishing. To import IFF pictures at a specific resolution, delete the IFF ILBM v2.0.0 text in the Type: string gadget in the Choose Type requester, and replace it with dpi=xxx,yyy where xxx and yyy are the horizontal and vertical resolutions."

Now this was as clear as mud. I first entered dpi=640,512, but that produced again a distorted output. However then a light dawned - if I wanted to import graphics pixel for pixel, it meant that I should enter the same value for both horizontal and vertical solutions. Well, that was it, and after some further experimentation I managed to come up with some great looking IFF pics. As an example we'll take a full page (640x512) hi-res picture, which we want to import pixel for pixel, to reproduce at a given size. Here are some of the results I came up with:

dpi=640,640 - Printed dimensions of picture: 25mm x 20mm (a bit too small for everyday use!)

dpi=320,320 - Printed dimensions of picture: 50mm x 40mm

dpi=160,160 - Printed dimensions of picture: 100mm x 80mm

Values of 80,80 will double the size of the previous definition again.

I also tried a setting of dpi=128,128, but this resulted in distorted dimensions again. However, I feel that with the four values given above, anybody can successfully import hi-res IFF pics. Using some of the other screen resolutions will require some adjustments of the dimensions given above.

TAD

Another addition to our software library is The Art Department, known as TAD, an image manipulation package. Although primarily designed for manipulating colour graphics in a wide range of formats, it also has its uses in DTP. As an example, I can load a 640 x 400 hi-res colour picture into this program, convert it to 640 x 512 format, then turn it into a black and white picture and manipulate brightness and contrast to suit my requirements (it's even possible to convert the picture into line art).

Although most of these conversions could be done with earlier packages such as Butcher, Pixmate, Transfer 24, and PhotoLab, TAD has the advantage of being substantially faster when converting images.

This is an excellent piece of software and deserves a full review by somebody who can appreciate the many fine features which this program offers, as I have only explored the features relating to desktop publishing.

PAGESTREAM VERSION 2.0

Well, this new version certainly delivers the goods, but at a price. Up till version 1.8.1, PageStream gave us only an approximation on the screen what the final output should look like - have a look at our Nov. '90 frontcover and you'll see what I mean. However, with the arrival of Version 2.0, we now get an accurately drawn reproduction of the Compugraphic font that we may be using. To draw that on the screen takes a lot of computer processor time, hence screen redrawing has become very slow. Not only is it slow, but after every screen redraw, such as you get when you make some alterations to existing text, the program leaves some 'garbage' from the previous screen. You can get rid of this when you press the Escape U combination, but that means the screen is re-drawn again, which means more time wasted.

No doubt the screen garbage problem will be solved in a future version of the program, but I don't think that much can be done about the about the actual text redrawing on the screen, unless you install a 68020 or 68030 processor board in your Amiga. I'll probably get one of these if and when they're given away with the purchase of a pack of corn flakes.

Fortunately printing speeds, if anything, have improved over earlier versions. Both on the HP Laserjet, and on dot matrix printers, it prints at least twice as fast than with the opposition products. Presumably that is largely due to PageStream's own proprietary printer drivers.

The manual has been improved again, although it still has some hazy spots in it, and the index has grown from 2 to 5,5 pages. I also like the hints and tips that are sprinkled throughout the manual. I hope that one of these days Soft Logik may produce a book with examples of good page layout, as well as lots more tips and tricks for intending DTPers.

There's a lot more to be said about PageStream Version 2.0, but I intend to report on it as I find out about the new features.

All in all, I can safely say that, having tried out both Pro Page and PageSetter, PageStream Version 2.0 is currently my favourite DTP program, because it suits my particular requirements best.

SOME MORE COMPUGRAPHIC FONTS

BRUSH is an interesting display font, if used sparingly.

COOPER BLACK is one of my favourite display fonts.

DOM CASUAL is another Display font, but again mainly suitable for advertising, posters etc.

FUTURA BOOK II is a good sans serif font.

It really stands out in the BOLD version.

MICROSTYLE EXTENDED is not a font for everyday use - it's another display font.

PARK AVENUE is quite elegant, but not very easy to read in small point sizes.

(All the above fonts are in 12 Point size.)

-ooOoo-

AMIGA PUBLIC DOMAIN LIBRARY

Fish Disk #381

SKsh - A ksh-like shell for the Amiga. Some of its features include command substitution, shell functions with parameters, aliases, local variables, local functions, local aliases, powerful control structures and tests, emacs style line editing and history functions, I/O redirection, pipes, large variety of built-in commands, Unix style wildcards, Unix style filename conventions, filename completion, and coexistence with scripts from other shells. Very well documented. Version 1.6, update to v. 1.5 on #370. Includes several important bug fixes and a few minor new features such as command line cut and paste. Binary only. Author: Steve Koren

Fish Disk #382

CrossDOS - A tryware version of a mountable MS-DOS file system for the Amiga. This is a software product that allows you to read and write MS-DOS/PC-DOS and Atari ST formatted disks (Version 2.0 or higher) directly from AmigaDOS. This tryware version is a readonly version, which does not allow any writes to the disk. A fully functional version is available for a very reasonable price from CONSULTRON. This is version 4.00b, update to v. 3.05b on #252. Binary only. Author: CONSULTRON, Leonard Poma

Msh - An Amiga file system handler that handles MS-DOS formatted diskettes. Version 1.30 (Release 1 patch 3). You can use files on such disks in almost exactly the same way as you use files on native AmigaDOS disks. This is a fully functional, read/write version, that supports 8, 9, or 10 sector disks of 80 tracks, and should also work on 40 track drives and hard disks with 12 or 16 bit FAT of any dimension the FAT allows. Update to version 1.5 (Release 1) on #327. Includes source. Author: Olaf Seibert

Fish Disk #383

LHArc - An archive program like Arc and Zoo, with a heavy emphasis maximum compression for minimum archive size, using LZHUF compression. This is version 1.21, update to v. 1.10 on #312. Binary only. Author: Paolo Zibetti

LibraryKiller - A small utility that allows you to remove libraries that aren't used any more. Version 1.0, includes source in assembly. Author: Roger Rschlin

MandelMountains - A program that renders three-dimensional images of blowups of the Mandelbrot set. Includes several example images. This is version 2.1, update to v. 2.0 on #354. The most significant enhancement for this version is that it is two to three times faster due to inclusion of a specially tuned fixed point arithmetic package. Shareware, binary only. Author: Mathias Ortman

Pcopy - An intuition based disk copier for AmigaDOS disks featuring high speed diskcopy with write verify, data recovery from damaged tracks,

full multitasking compatibility, and a user friendly interface. This is version 2.11, update to v. 2.0 or #243, with new data recovery routines and some minor bug fixes. Binary only. Author: Dirk Reisig

Fish Disk #384

Contact - Demo version of a pop-up program for managing personal contacts. Allows you to keep c name and address list along with phone numbers and comments. Can print mailing labels with a couple of mouse clicks (supports PostScript printers) Names and address can be clipped into other programs such as word processors, and Contact can even dial your modem for you. Version 1.0, binary only. Author: Craig Fisher, CMF Software

Elements - Very nice interactive display of the the Periodic Table of Elements. Includes general row and column information, plus a test mode where the program asks specific questions about the selected element or row/column. This is version 2.3, update to v. 2.0 on #368. Binary only, shareware. Author: Paul Thomas Miller

NorthC - A freely redistributable programming package containing all the programs required for developing in C. Based on the Sozobon Ltd C compiler, Charlie Gibb's assembler, the Software Distillery's linker, and portions from other sources. Steve has pulled everything together and added some enhancements in the process. This is version 1.2, update to v. 1.1 on #353. Changes include extra examples, many bug fixes, further documentation and some improvements. The environment is supplied compressed and unpacks to two disks. Partial source is included. Author: Steve Hawtin, Charlie Gibb, Sozobon Ltd, The Software Distillery and many others.

Fish Disk #385

MortCalc - Yet another loan calculator, but this one was written with accuracy in mind. The monthly payments times the number of months should balance the total principal plus interest, to the cent. Version 2.5, freeware, source included. Author: Michel Laliberte

XLispStat - A statistical program based on David Betz' XLisp. It does some of the most advanced dynamic statistical graphics, including brushing, linking, and 3D rotations. Menus and requestors can be created dynamically with simple lisp commands, and treated as lisp objects, so that the program could be used for many other non-statistical purposes, such as interactive expert systems. XLispStat has an ARexx port so that an editor may be used to prepare lisp programs and send them directly to XLispStat to be executed. Commands, as character strings, may also be sent from XLispStat with the lisp command, arexx. All graphics produced may be saved to files in IFF format. This version of XLispStat (v.2.1, release 1) has been ported to the Amiga by James Lindsey, from the Mac version supplied by Luke Tierney. Requires a

numerical coprocessor (M68881/M68882) and an M68020/M68030 processor. This disk contains the executables, manual, and lisp files. The sources can be found on disk 386. Author: David Betz, Luke Tierney, James Lindsey

Fish Disk #386

Statpack - Demo version of a statistics and data manipulation program. Version 3.2, binary only. Author: James Lindsey

XLispStat - A statistical program based on David Betz' XLisp. It does some of the most advanced dynamic statistical graphics, including brushing, linking, and 3D rotations. Menus and requestors can be created dynamically with simple lisp commands, and treated as lisp objects, so that the program could be used for many other non-statistical purposes, such as interactive expert systems. XLispStat has an ARExx port so that an editor may be used to prepare lisp programs and send them directly to XLispStat to be executed. Commands, as character strings, may also be sent from XLispStat with the lisp command, arexx. All graphics produced may be saved to files in IFF format. This version of XLispStat (v.2.1, release 1) has been ported to the Amiga by James Lindsey, from the Mac version supplied by Luke Tierney. Requires a numerical coprocessor (M68881/M68882) and an M68020/M68030 processor. This disk contains the sources. The executables, manual, and lisp files can be found on disk 385. Author: David Betz, Luke Tierney, James Lindsey

Fish Disk #387

BlitterSand - An interesting cellular automata program that gets its roots from a sandpile. Intriguing to watch. Includes assembly source. Author: Mike Creutz

ExtFuncProc - External Function Process. Allows execution of any library function from simple tasks even if these functions require a process environment. For experienced programmers only because there isn't any documentation written yet but only an example. ExtFuncProc is used by GMC. It runs under KS 2.0. Binary only. Author: Goetz Mueller

GMC - A console handler with command line editing and function key support. GMC provides extended command line editing, function key assignment in four levels, extended command line history, online help for functions in the handler, and an iconify function. This is version 9.2, update to v. 4.0 on #291, with many new features, including an output buffer (dump to printer and window), filename completer, script function, undo function, prompt beeper, pathname in window title, close gadget for KS 2.0, etc. Shareware, binary only. Author: Goetz Mueller

H2I - Translates C Include files into assembler include files. Useful for programmers that use both C and assembler code in the same program. Helps to keep the structure definitions consistent. Version 1.1, shareware, binary only. Author: Goetz Mueller

MandAnim - A Mandelbrot Animation program that allows you to easily generate series of lo-res/16-color pictures. Features full mouse and/or keyboard operation, zooms, auto-save, high (cheat) speed, iconization, etc. The generated pictures all remember their positions and settings so they can be re-loaded. Version 1.1, binary only. Author: Ekke Verheul.

MandelBlitz - Very fast Mandelbrot plotter with lots of handy functions such as color cycling, zoom, special palette control, file requestors and more. Version 1.0, binary only. Author: Nico Francois

Menu - A fast-access menu system configurable via a script file that allows the user run selected programs. Version 2.0, binary only. Author: Stefan Mrnhag

NTSC-PAL - Two programs that give A500/A2000 owners with the new ECS 1Mb Agnus installed the ability to boot into either a NTSC or PAL environment. *Very* useful for both NTSC and PAL owners alike. Version 1.1, includes assembly source. Author: Nico Francois

Wreq - Replace pop-up requestors with line-oriented requestors (similar to those found in an MS-DOS environment) that can be easily handled from the keyboard. If there is no interactive console for the process, the requester won't appear. Includes assembly source. Author: Tuomo Mickelsson

Fish Disk #388

Calc - A shell style, command-line calculator. Calc does not have a fancy keypad display as many other calculator programs do. Instead, it is capable of taking its input from a file, the keyboard, or a command line and outputting its results to a file or the screen. It can also apply a single equation to all of the values stored in a file (or files). It handles all common mathematical expressions, can optionally predefine physical constants and store variables. Version 2.0, binary only. Author: Bill Dimm

DClock - A Dumb Clock utility that displays the date and time in the Workbench screen title bar. This is version 1.27, an update to disk #325. Many more useful enhancements/bug fixes, including an ARExx interface. Includes source. Author: Olaf Barthel

DIEd - A full-screen ANSI editor including an animation utility. Provides PAL and NTSC compatibility. Many useful features such as horizontal and vertical block cut/pasting operations, line/block/screen centering, save defaults and more. Version 2.4, binary only. Author: P-E Raue

Free - Display how much free space (bytes or blocks) you have on any or all of your mounted disk volumes. Runs from CLI only. Based on Free by Tom Smythe on Fish Disk 66, but totally rewritten and enhanced. Version 1.01, includes source. Author: Daniel Jay Barrett

KeyMapEd - Allows you to change the KeyMaps used with SetMap. This is a full featured editor providing support for normal, string and dead keys. The keyboard represented is from an A3000-

/A2000/A500 but it is fully compatible with A1000 keyboards. This is version 1.11, update to v. 1.02 on #193, binary only. Author: Tim Friest

SnoopDos - A utility for monitoring AmigaDOS calls. In particular, it allows you to see what libraries, devices, fonts, environment variables or startup files a program is looking for. Very useful when you're trying to install a new application. Version 1.0, includes source in C. Author: Eddy Carroll

Fish Disk #389

Klick - Another screen hack, specifically for A500/A2000 owners. I don't want to spoil any surprises but reportedly causes some machines to crash. Binary only. Author: Tony Solomon, Paul Fortin

Plot - A 3-D function plotting program with provisions for coordinate translation on both axes, parametric equations, and standardized notation of the pow function (x^y -- which now works as specified.). This is version 5.1, update to v. 4.1 on #175, with some enhancements and bug fixes. Binary only. Author: Terry Gintz

PolySys - An extended version of the OL-system (string rewriting) described in The Science of Fractal Images (edited by Pietgen and Saupe). The basic algorithm has been expanded and modified extensively, and looping commands similar to those found in other Turtle graphics systems (Logo, etc) have been added. Support for three-dimensional drawing, with perspective, is also included. Version 1.0, binary only. Author: Terry Gintz

Retab - Useful command-line tab-to-space and space-to-tab expansion utility. Several command-line options to specify size/settings and the ability to protect material enclosed by delimiters (quotes, brackets, carats, etc.) from expansion. Version 1.03, binary only. Author: Paul Klink

ZPlot - Graphs formulas based on 4-D complex number planes. ZPlot currently supports the Mandelbrot set, Julia sets, and Phoenix curves, with over 500 mapping variations. The math functions supported include $\sin(z)$, $\sinh(z)$, z^z , e^z , z^n , \sqrt{z} , $\cos(z)$, $\cosh(z)$, $\tan(z)$, $\tanh(z)$, $\log(z)$, $\ln(z)$ and n^z . Version 1.3d, binary only. Author: Terry Gintz

Fish Disk #390

Flip - Allows you to quickly and easily switch between various screens. Can close screens, pull them up, and activate windows. Has the unique feature of sorting screens in a way that all title bars are visible at one time. This is version 2.0, binary only. Author: Lars Eggert

ReadmeMaster - A nifty little database for finding those programs that you know exist somewhere (???) in the AmigaLibDisk library. Maintains a keyword dictionary of the Contents' descriptions that allows searching by disk number, program title, author's name, or some other descriptive word. Currently supports disks 1-360, an update to the version on disk number 163. Binary only. Author: Harold Morash

SetClock - A utility to set or read the hardware clock on a Spirit Technology memory expansion board. Works in a manner similar to the SetClock utility which is supplied by Commodore with Amigas that have hardware clocks as standard equipment. Includes source in PC/Pascal and assembler. Author: Willi Kusche

SM - Small utility to center the display. Recoded version of ScreenShift by Anson Mah (Disk 88), only half the size. Includes source. Author: Anson Mah, Lat-tice V5.04 recoding by Oliver Wagner

Fish Disk #391

Curses - A link library containing many of the terminal independant standard curses functions. Designed primarily for those interested in porting unix screen based programs to the Amiga. Version 1.10, binary only. Author: Simon John Raybould

Eco - An ECHO replacement which allows many escape sequences for colors, text styles, cursor positioning, system variables, and much more. Has PURE bit set and can be made resident. Version 3.40, includes source. Author: Dario de Judicibus

FractalLab - Investigate the realm of fractals and allow your imagination to run wild. Virtually an unlimited number of these self-similar curves can be created with FractalLab. Includes several interesting samples. Version 1.0, binary only. Author: Terry Gintz

ListPlot - A 2D plotting program built around the PLPLOT plotting library. Its principle advantage is that it supports a variety of graphics devices. By default, output is sent to a window on the Amiga's screen. Through command line options, the graph can be sent to any preferences printer with graphics capability, stored as an IFF file, stored in HPGL format, stored in Aegis Draw format, or stored as an Encapsulated Postscript File. A variety of line styles and colors are available. Includes source. Author: Frederick R. Bartram and Anthony M. Richardson

Fish Disk #392

BTNTape - A Better Than Nothing SCSI tape device handler. It provides flat file access to a SCSI tape drive from application programs using simple DOS calls to Read() and Write(). It can also be used with the Amiga TAR utility for disk backups. Files may span multiple tape volumes and may start at any tape block. This handler requires a SCSI-direct compatible hard disk driver. Version 1.0, includes source. Author: Robert Rethemeyer

CPlot - Graphs linear functions in two dimensions, similar to a Mandelbrot plot. You start with a linear function like $10\sin(x^{**2}+y^{**2})$ and CPlot treats each point on the screen as an X-Y coordinate, color-scaling it according to its magnitude for a preset range of inputs. Includes some very nice sample creations. Version 1.0, binary only. Author: Terry Gintz

Pmode - Very simple command line utility to send escape sequences to the printer to change print

styles. Specifically tested a NEC P6 Plus, but it should work with many printers. Included source should make it easy to add/modify escape sequences. Author: Dario de Giudibus

SetNoClick - Very simple program to set the NOCLICK flag in the public section of a trackdisk unit. Only works with version 36 and up of trackdisk.device. Includes source. Author: Marc Boucher

Spades - Amiga'ized version of the popular card game. This is a single player version, where you play one hand and the computer plays your partner and also your two opponents. Version 1.1, includes source. Author: Greg Stelmack

Fish Disk #393

FileIO - The dissidents file requester. This is version 1.9, an update to version 1.6 on disk 348. Binary only. Author: Jeff Glatt, Dissidents Software

FontConvert - A printer font conversion program to convert standard Amiga fonts into a form suitable for downloading to a printer that supports user defined printer fonts. Version 1.0, includes source. Author: Olaf 'Olsen' Barthel

FuncLib - A program that allows you to add or remove rexx function libraries. Author: Jeff Glatt, Dissidents Software

ILBMlib - A shared library (libm.library) to read/write IFF files, derived from the EA IFF code, along with various enhancements. Version 0.3, a partial update to version on disk 348. Author: Jeff Glatt, Dissidents Software

LibTool - A program that allows you to develop C or assembly code, and then quickly turn it into a shared library. Also generates all support files for your library including Pragma files (both Manx and Lattice), bmap files, include files, C interface glue files. Can be used to make a device, too. Author: Jeff Glatt, Dissidents Software

PrintSpool - A small print spooling shared library that provides an easy way to print graphics and text for any application. It can print ascii text of any length or dump any part or all of a rastport. Takes care of opening the printer.device and manages its own resources. Version 0.1, binary only, with source code examples. Author: Jeff Glatt, Dissidents Software

RexIntuition - This is a ARexx function library that allows you to open windows/screens from an ARexx script, attach menus, gadgets, (file) requesters, load and save ILBM picture files, auto-requesters, print text and graphic dumps, and completely interact with the user in an intuition environment. Adds all of those Amiga features that ARexx lacks. Author: Jeff Glatt, Dissidents Software

RexLib - A shared library that can be easily used by any C or assembly programmer to add an ARexx interface to his programs. Handles all of the messy details including message creation/deletion and

error handling. Author: Jeff Glatt, Dissidents Software

Fish Disk #394

Aniptrs3 - Some more animated pointers to choose from to liven up your display environment. Other pointers from Bob are on disks 332 and 364. Binary only. Author: Bob McKain, pointer animation program by Tim Kemp

'Liner - A shareware outliner whose function is to create outlines for notes or export to other programs. 'Liner can save an outline as ASCII text, and is clipboard compatible. Enhancements over the previous version include support for ARexx, Workbench, overscanned screens, more than one line of text per outline number, a preferences file, and search/replace. Version 2.00, an upgrade to version 1.32 on disk 285. Includes C source. Author: Dave Schreiber

Pics - Some miscellaneous pictures with a cartoon theme. Author: Bob McKain

PrintImage - A simple program that provides an easy way to print IFF ILBM images. Version 1.0, includes source. Author: Olaf 'Olsen' Barthel

Fish Disk #395

DragonCave - A nicely done Sokoban like game for the Amiga. Features include sound effects, two or three dimensional graphics, 100 levels (50 of which can be customized with the built-in editor), undo of up to 1000 preceding steps, transparent copying of data files to ram; for reduced load times, both English and German versions, and more. Version 1.00, binary only. Author: Hartmut Stein and Michael Berling

Fish Disk #396

ColorCatch - A utility that lets you grab colors from a screen and save them as an executable file. Version 1.0, includes source in assembler. Author: Preben Nielsen

NewLook - A program that changes the system gadgets in all the screens and windows. Version 1.0, includes source in assembler. Author: Preben Nielsen

PBar - An editor to change the pattern in the windows drag bar and save the pattern as an executable file with an icon looking like the pattern. Version 1.0, includes source in assembler. Author: Preben Nielsen

PCalender - A little calender program which lets you look through years and months using the arrow-keys. Version 1.0, includes source in assembler. Author: Preben Nielsen

PClock - A little clock program which shows the time and the available CHIP and FAST memory. Version 1.0, includes source in assembler. Author: Preben Nielsen



PFler - A very good and small file requester to link onto your own programs. Version 1.0, includes source in assembler. Author: Preben Nielsen

Resident - A resident startup module for Aztec C. Version 1.0, includes source. Author: Olaf Barthel

RoadRoute - Trip planner program to find best road route between any two points of travel. Features include the user customization of CITIES and ROADS files to suit travel interests and provision for very large city menus and itineraries. Also includes RoadScan, a checker for RoadRoute files (CITIES and ROADS). Very large files may contain goofs (cities with no roads, the same road entered twice, etc.), or oddities (direct road not as fast as multi-point). These are pointed out, together with areas where users might wish to make economies in the data base. Version 1.6, an update to version 1.5 on disk 358, includes source. Author: Jim Butterfield

TurboTopaz - Two Text speed up programs like FastFonts. Allows replacement of the Topaz-80 font from both CLI and WorkBench. Includes a program to measure to speed of Text speed up programs. Version 1.0, includes source in assembler. Author: Preben Nielsen

Fish Disk #397

DKBTrace - A complete ray tracer that supports arbitrary quadric surfaces (spheres, ellipsoids, cones, cylinders, planes, etc.), constructive solid geometry, and various shading models (reflection, refraction, marble, wood, and many others). It also has special case code to handle spheres, planes, triangles, and smooth triangles. By using these special primitives, the rendering can be done much more quickly than by using the more general quads. This is version 2.0 and includes source in C. Author: David Buck

Fish Disk #398

DClock - A Dumb Clock utility that displays the date and time in the Workbench screen title bar. Includes an ARexx interface. This is version 1.29, an update to version 1.27 on disk 388. Includes source. Author: Olaf Barthel

Formatter - A faster and more user friendly floppy disk formatter that is also an example of how to format Amiga file systems in general and get AmigaDOS to accept them. Formatting without verify takes about 50 seconds, with verify takes about 100 seconds. Version 2.7, includes source. Author: Olaf Barthel

GMC - A console handler with command line editing and function key support. GMC provides extended command line editing, function key assignment in four levels, extended command line history, online help for functions in the handler, and an iconify function. Also includes an output buffer (dump to printer and window), filename completer, script function, undo function, prompt beeper, pathname in window title, close gadget for KS 2.0, etc. This is version 9.6, an update to version 9.2 on disk 387. Shareware, binary only. Author: Goetz Mueller

HunkFunk - A program to disassemble any given AmigaDOS hunk file, which includes executables, linker libraries, linker object files, overlaid files, etc. Written as an exercise by the author to learn a few things about AmigaDOS hunk structures. Includes source. Author: Olaf Barthel

KeyMacro - A keyboard macro program, configurable via a text file, that also supports hotkey program execution. You can map up to eight functions to each key, including keys such as cursor keys, the return key, etc. Version 1.6, update to version 1.4 on disk 354. Incl.source. Author: Olaf Barthel

Fish Disk #399

AutoCLI - A 'PopCLI' type replacement that works with WorkBench 2.0. Also fixes the problem with PopCLI crashing the machine if used on a PAL Amiga to open a CLI window with a vertical size greater than 200 lines. Other features include an optional Function-key press with the qualifier to execute an S:script file. Version 1.6, binary only. Author: Nic Wilson

CCLib - An implementation of the standard C runtime library, with a few extra goodies thrown in. Supports a large number of functions including stream I/O, low-level I/O, string, memory, linked list, sorting, time, process control and more. Version 3.0, includes source and several utility programs. Author: Robert W. Albrecht

PrettyWindows - Three different C routines to add various borders inside of windows. Includes source and a demo. Author: Thom Robertson

TrackDisplay - A simple program that continuously monitors and displays the current track for each floppy disk. Includes source. Author: Olaf Barthel

Fish Disk #400

DriveWars - DriveWars is a Shareware shoot'em up game that pits you, df0: or df1:, against a computer virus that is about to destroy all U.S. records of Iraq's positions during operation Desert Shield. In version 1.0, you must fly df0: through the computers and destroy all contaminated chips and disks. Author: Joe Angel

ParNet - The Software Distillery's NET: file system using Matt Dillon's parallel port code. Using a special DB25 cable, two Amigas can be connected via the parallel port. One Amiga can mount the other as a device and read/write the files as if they were local. Version 2.4, binary only. Author: Doug Walker, John Toebes, Matt Dillon

ReqLib - A runtime, reentrant library designed to make it easier for programmers to use powerful, easy to use requesters, for communicating with users. Includes such functions as a color requester, file requester, message display requester and many functions to make the creation of gadgets for your own custom requesters easier. Binary only. Author: Colin Fox and Bruce Dawson

SetCPU - A program designed to allow the user to detect and modify various parameters related to

32 bit CPUs. Includes commands to enable or disable the text/data caches, switch on or off the '030 burst cache line fill request, use the MMU to run a ROM image from 32-bit memory, and to report various parameters when called from a script. This is version 1.60, an update to version 1.5 on disk 223. Includes source. Author: Dave Haynie

SF2 - File search utility. Default searching starts from the root directory of the specified device and descends down into its subdirectories. Searching includes looking into archive files generated by various compression utilities. Archive files ending with a .ARC, .LHZ, .ZIP and .ZOO are currently supported. Lots of command line options. Requires ARP 1.3 (rev. 39.1). Version 2.0, binary only, shareware. Author: Andrea Suatoni

Fish Disk # 401

CrcLists - Complete CRC check files for disks 001-400 using the brk program. These were made directly from my master disks. This is an update to the lists on disk 293. Author: Fred Fish

HappySong - A song created using the freely distributable program MED V.2.10. Player program included. Author: Alex Van Starrex

Fish Disk # 402

ADoc - A freely redistributable help utility for the Amiga. Allows you to have permanent help on any subject you want. Major feature is automatic searching of the word on which you clicked. Includes a 50 Kb help file (French only) on all Intuition and Dos function calls. This is version 3.10, binary only. Author: Denis GOUNELLE

APrt - A freely redistributable printing utility for the Amiga. Major features are full Intuition interface, preview function, page selection, margins setup, line numbering, and more. This is version 2.62, binary only, French and English versions. Author: Denis GOUNELLE.

Pcopy - An Intuition based disk copier for AmigaDOS disks featuring high speed diskcopy with write verify; data recovery from damaged tracks, full multitasking compatibility, and a user friendly interface. This is version 2.12, an update to version 2.11 on disk 383, with new data recovery routines and some bug fixes. Binary only. Author: Dirk Reisig

PLW - Phone-Line-Watcher. For users of Hayes compatible modems. Monitors the serial port and records all incoming calls. Allows a remote user to login, receive and leave a message, and transfer files via Zmodem in either direction. Two level DOS access, disabled DOS requestors and more. This is version 3.0, an update to version 2.8 on disk 372. New features include the ability to define external programs as menu options that can be executed by the remote user. Shareware, binary only. Author: Christian Fries

PrintStudio - Very nice Intuition based general purpose print utility that prints text with a variety of options. Prints several graphic formats with yet more options. Print any part of a picture, print screens

and windows, save screens and windows as IFF files, modify color palettes, change printing parameters and lots more! This is version 1.25, an update to version 1.2 on disk 366. Shareware, binary only. Author: Andreas Krebs

StdFile - A module that can be linked with any Intuition based program to provide a standard file requestor similar to the one in AmigaDOS 2.0. Even if you use the standard requestor under 2.0, it is useful to have one available for use if you need to run on pre-2.0 systems. Includes source. Author: Jeff Lydiatt and Peter da Silva

Fish Disk # 403

FixDisk - A program to recover as much as possible from a defective disk. It can sometimes recover damaged (unreadable) tracks, check file integrity, check the directory structure, undelete files, copy or show files, fix corrupted directory pointers, etc. Full intuition interface. This is version 1.2, update to v..0 on disk 223. . Author: Werner Guenther

KawaiEditor - A Kawai K4 editor (apparently some kind of midi based music synthesizer). Version 1.0, shareware, binary only. Author: Jan Saucke

NiftyTerm - NiftyTerm is an h19/VT102/VT52 emulator for the Amiga. It was originally designed to be used with DNet, but it has been expanded so that it may be used as a normal terminal emulator. Niftyterm was designed to be a good emulation of these terminals, as well as being fairly small and fast. Version 1.0, binary only, source available from authors. Author: Christopher Newman, Todd Williamson

PokerDemo - Demo version of some Solitaire card games from UnSane Creations. Includes Accordion, Calculation, Poker Solitaire, and SeaHaven Towers. Binary only. Author: Steve Francis

RexxHostLib - This is a shared library package to simplify the ARexx host creation/management procedure. Rexx-message parsing is also included making it possible to control ARexx from programs such as AmigaBASIC (can you imagine AmigaBASIC controlling AmigaTeX?). This is version 36.14, an update to version 34.12 on disk 355. Differences include a few bug fixes and new functions. Includes source. Author: Olaf Barthel

Fish Disk # 404

LHArc - An archive program like Arc and Zoo, with a heavy emphasis maximum compression for minimum archive size, using LZHUF compression. This is version 1.30, an update to version 1.21 on disk 383. Binary only. Author: Paolo Zibetti

NGTC - Release One of a trivia game based on Star Trek: The Next Generation TV series. Contains over 500 questions on Season One of the series with over 50 audio/video clues. This disk contains the game module and part 1 of the Trivia Database. You MUST have disk 405 which contains the rest of the Trivia Database and the required player program. Created with The Director. Binary only. Author: Gregory Epley

Fish Disk # 405

GIFMachine - A program that will convert CompuServe GIF image files into IFF SHAM and 24bit IIBMs. It offers a number of extra options like dithering, horizontal and vertical flip, as well as automatic border removal. Requires KickStart version 2.0 or greater to run. Version 2.104, includes source. Author: Christopher Wichura

NGTC - Release One of a trivia game based on Star Trek: The Next Generation TV series. Contains over 500 questions on Season One of the series with over 50 audio/video clues. This disk contains part 2 of the Trivia Database and the Projector player. You MUST have disk 404 which contains the rest of the Trivia Database and the game module. Created with The Director. Binary only. Author: Gregory Epley

Fish Disk # 406

ATCopy - A program to copy files from the Amiga side of a system equipped with a PC/AT bridgeboard, to the PC side, using wildcards. Copies directly through the shared memory. Supports CLI and WorkBench usage. Version 2.0, shareware, binary only. Author: Peter Vorwerk

DirWork - A fast small simple efficient shareware DirUtility that gets directories off floppies in about half the normal time. Configurable options and buttons, as well as all the usual features. This is Version 1.12, an update to the one on disk 328. Binary only. Author: Chris Hames

DMS - DISK-Masher is a utility that allows users to compress and archive entire floppy disks. Offers four different types of compression, extended virus checking of boot blocks, and data encryption. Requires at least 512K of memory. This is version 1.01, binary only. Author: SDS Software

GnuAwk - GNU awk is the GNU Project's implementation of the AWK programming language. It conforms to the definition and description of the language in The AWK Programming Language, by Aho, Kernighan, and Weinberger, with the additional features defined in the System V Release 4 version of UNIX awk. Version 2.10 beta, includes source. Author: Paul Rubin, Jay Fenlason, Arnold Robbins, et al.

GnuGrep - The grep program from the GNU project. Replaces grep fgrep, egrep, and bmgrep. This is an update to version 1.5 on disk 295 and now handles AmigaDOS style wildcard specifications. Includes source. Author: Many (see README file)

MadBlanker - A cute screen blanker that bounces a transparent rectangle around on the screen, like a theater spotlight, with configurable options which include size and whether or not you want the rectangle to change size. Version 2.0, includes source. Author: K. Mardam-Bey

Fish Disk # 407

DMouse - A versatile screen & mouse blanker, auto window activator, mouse accelerator, popcli, pop window to front, push window to back, etc, widget.

This is DMouse version 1.24, an update to version 1.20 on disk 258. Includes source. Author: Matt Dillon

Flex - Flex is a replacement for the UNIX lex (lexical analyzer generator) program that is faster than lex, and freely redistributable. This is version 2.3, an update to the version on disk 156. Includes source. Authors: Jef Poskanzer, Vern Paxson, William Loftus, et al.

WonderSound - Wondersound is an additive harmonic instrument design tool with a separate envelope design window and 16 relative harmonic strength and phase angle controls. Version 1.4, binary only. Author: Jeffrey Harrington

Fish Disk # 408

DCmd - A utility that monitors a CLI's console IO and copies it to a user specified file. The console IO is unaffected by this monitoring. Version 1.00, includes source. Author: Matthew Dillon

KickDate - Saves and retrieves the current system date stamp to the first sector of the kickstart disk. This is handy for A1000 users with autobooting hard drives, since it can save the system time across system resets and power cycles. Version 1.0, includes source. Author: Joe Parkka

MoniDie - A cute little screen hack. Be sure to turn up the sound. Binary only, source available from author. Author: David Donley

Post - An excellent PostScript interpreter for the Amiga which supports the full Adobe language and type 1 PostScript fonts. Includes Charter font in Roman, Italic, Bold, and Bold-Italic, and Courier font in Roman, Roman-Oblique, Bold, and Bold-Oblique. Requires Arp library V39+ and ConMan V1.3+. Version 1.3, includes source in C. Author: Adrian Aylward

Fish Disk # 409

Trek - An excellent shareware Star Trek game. The object of the game is to stay alive, healthy, and maintain the Enterprise in good condition. As Captain of the ship, you must go on missions where you show your common sense and level headedness. An overly cautious Captain will lose his ship as well as a careless or irrational Captain. This distribution unpacks into two almost full disks. Version 1.0, binary only. Author: Tobias Richter

Fish Disk # 410

MechFight - A role playing game where you explore a world, buy or find items, and fight against robots and aliens. During the game you are asked to perform certain tasks. This is version 1.0, binary only. Author: Florian Marquardt

Vit - VLT is both a VT100 emulator and a Tektronix (4014 plus subset of 4105) emulator, currently in use at SLAC (Stanford Linear Accelerator Center). Although the VT100 part was originally based on Dave Wecker et al.'s VT100, many enhancements were made. Features include use of ARP, an ARexx

port, XMODEM 1K/CRC and Kermit protocols, support for additional serial ports, external file transfer protocols (XPR), a chat mode, and scroll-back/review/history buffer. It comes in two versions, one with Tektronix emulation, and one without. The Tektronix emulation allows saving IFF files, PostScript files, and printing bitmaps to the printer. This is version 4.846, an update to version 4.428 on disk 308. Binary only. Author: Willy Langeveld

TBAG Disk of the Month #45

Blob	(Demo)
Rocks.Pic	(Picture)
EditSteppy	(Utility)
Roger.Pic	(Picture)
FastBlit	(Utility)
Steppy	(Utility)
IsToday	(Utility)
TextPaint	(Utility)
PlayMaster	(Utility)
ViewDir	(Utility)
ReDate	(Utility)
WellTrix	(Game)

TBAG Disk of the Month #46

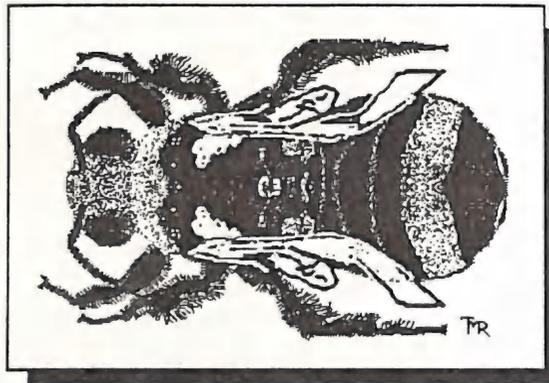
CrayonPaint	(Utility)
Perricone I	(Picture)
Fractals	(Utility)
ResumeMaker	(Utility)
KeyMapEd	(Utility)
State!	(Utility)
Mips	(Utility)
Woodward	(Utility)
Osk	(Utility)

TBAG Disk of the Month #47

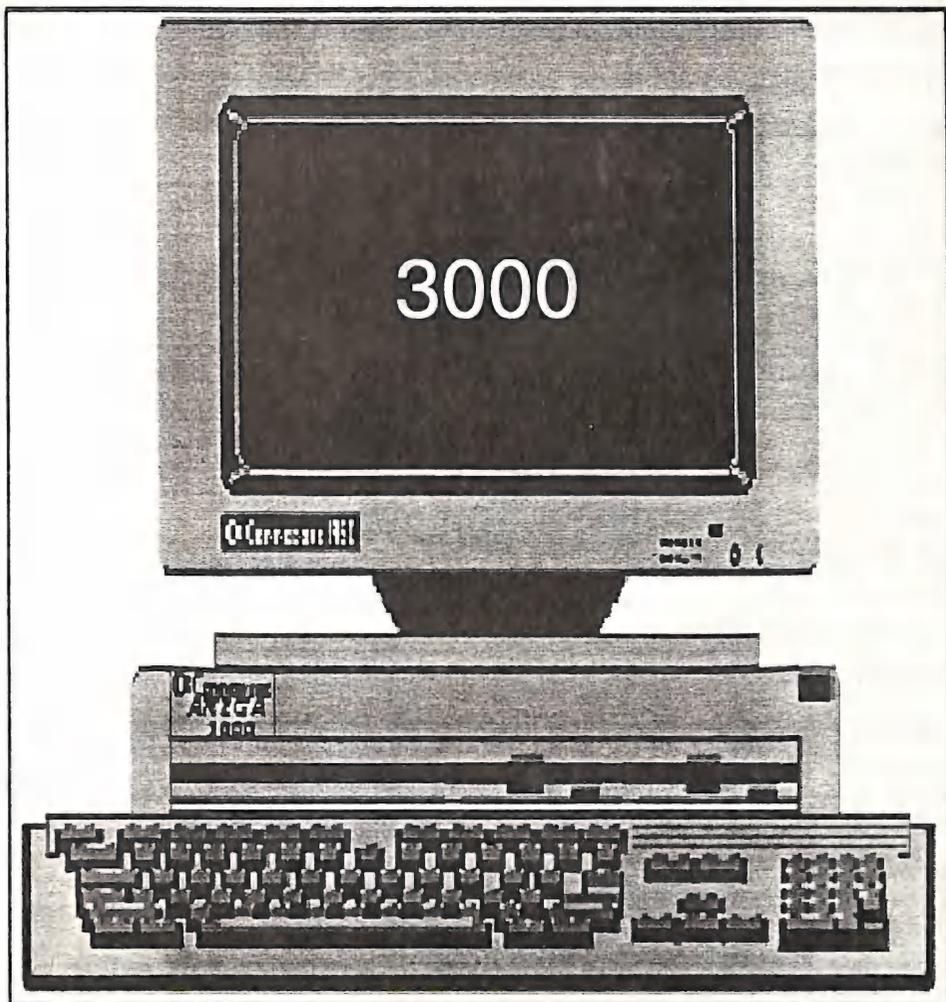
Batman	(Picture)
InfilTracker	(Utility)
BlitterSand	(Demo)
Magnetic Fields	(Music)
Chop Sul	(Music)
NDebt	(Utility)
DayInTheMaze	(Demo)
PAU	(Utility)
FileMaster 1.2	(Utility)
Raps	(Game)
Flying Clock	(Utility)
ShowCards 1.4	(Utility)

TBAG Disk of the Month #48

DAnim	(Utility)
MoveSSP	(Utility)
DFC 4	(Utility)
NewLoadWB	(Utility)
DIEd 2.4	(Utility)
SnoopDas	(Utility)
Enigmas	(Game)
SysInfo	(Utility)
FFormat	(Utility)
TextCalc	(Utility)
LZ	(Utility)
Tiny	(Game)
Mines	(Game)



BEE by Tom McRae (DPaint in Hi-Res Mode)



Dream Machine

ELIMINATING FLICKER AND CHOOSING A MONITOR

by Rod Williams

With the release of the new A3000 a number of A500/A2000 owners may be wondering how they can get similar results from their machines. There have been a number of articles which examine either the new chip set, the A3000 or Monitors, but most of them seem to look at it from only one angle, and thus only confuse the matter. Choosing a monitor is a very important decision, because no matter what graphics hardware you have with your Amiga, it eventually has to be displayed on the monitor you choose. So it should be done carefully taking note of each of their specifications, features, quirks etc. A good way to start is with a glossary of terms and specifications. I will describe some monitors below - these are only a sample; there are enough monitors available to make your choice a very difficult one.

MONITOR SPECIFICATIONS:

Dot Pitch: This figure usually quoted in millimetres describes the size of displayable dots on the monitor, the lower this figure is, the better.

Max Resolution: This figure gives Max. Horiz. x Max. Vert. resolution, it is commonly misquoted, sometimes manufactures do not even bother to supply a figure for it. But in general the higher the values the better, e.g.

1024 x 768 is 'better' than 800 x 600 (Although dot pitch is a far more important figure to consider).

Display Area: There is rarely a figure given for this (if it is given it is not usually very accurate), but it needs some consideration. In the IBM world it is quite usual to see a black or blank area at the top or bottom of the screen, but to Amiga owners this comes as a bit of shock. Most monitors can be adjusted to fill the screen vertically, but Horizontally some monitors do not provide an adjustment range large enough to do this. If this worries you, test the monitor before you buy it, or ask someone who is already using one with the Amiga.

Horizontal Scan. Frequency: For fixed frequency monitors this is given as one frequency value, and must match that of the computer output you are trying to display. For Multisync monitors this is given as two values that specify the frequency range that the monitor will synchronise to; the smaller the low value, and the larger the high value, the more versatile the monitor is (the frequency will be in the range of KHz).

EXAMPLE OF MONITOR SPECIFICATIONS:

MONITOR	TYPE	DOT PIT	MAX RES	HOR FREQ	VERT FREQ
Comm. 1081	Fixed	0.39mm		15.6Khz	50Hz
Comm. 1084S	Fixed	0.41mm		15.6Khz	50Hz
Comm. 1950	Multisync	0.31mm		15.5-38Khz	50-80Hz
NEC 2A	Multisync	0.31mm	800x600	31.5-35Khz	56, 60, 70Hz
NEC 3D	Multisync	0.28mm	1024x768	15.5-38Khz	50-90Hz
ECI VGA	Fixed	0.31mm	800x600	31.5Khz	60/70Hz
Panasonic TX-1448ETZ	Multisync	0.29mm	810x670	15.5-36Khz	50-100Hz

Vertical Scan Frequency: For fixed frequency monitors this is given as only one value, and again must match that of that of the display output. For Multisync monitors the specifications are given as two values, and as before the larger the difference between the high and low values the more versatile the monitor is (the frequency will be in the range of Hz)

AMIGA VIDEO TERMINOLOGY:

The ECS (Enhanced chipset): is a fairly exciting development in the Amiga world, the upgrade involves a change in the Fat Agnus, and the Denise custom chips.

ECS for the A500/A2000 consists of a 8372A 1M Obese Agnus, and a 8373 Super-Denise.

For the A3000 ECS consists of 8372B 2M Obese Agnus, and a 8373 Super-Denise.

The new Agnus (Super/Obese) provides access to 1M of chip Ram, rather than the 512K most users are used to. It also enhances the blitter such that it can now do 32K x 32K Blits, rather than 1K x 1K, it also combines both PAL and NTSC versions in one chip. A number of Users would have already have changed this chip, or bought their machines with it already fitted (Rev 6A 500s or Rev 6+ 2000s). (If you don't already know what Agnus Chip you have, a program called "SysInfo" is available on Megadisk 17 which gives quite a lot of useful information about your system, including what Agnus Chip is fitted.) The new Denise (Super) supports all of the standard Amiga video modes plus the following new modes:

"Superhires" 1280 x 256 (4 colour),
"Superhires" 1280 x 512 Interlaced (4 colour),
"Productivity" 640 x 512 Non-interlaced (4 colour),
"Productivity" 640 x 960 Interlaced (4 colour).
It also provides some features that Genlock users will appreciate (when software is upgraded to support it), such as being able to change which colour the Genlock replaces, this allows for the generation of Chromakey

type effects. Previously it always replaced the background colour (colour 0), it also has some other enhancements that won't effect most users. It should also be noted that a new Agnus must be present before Super-Denise can be fitted. As yet Super-Denise is not official released, AmigaDos V2 will be required to make use of the new modes anyway.

A VDE (Video display enhancer): is a device which is designed to eliminate the gaps between scan lines, from a standard Amiga video output. These gaps are not that obvious when using a 1084 monitor or equivalent, but when the same output is viewed on a higher resolution monitor, such as the Commodore 1950, the problem becomes quite visible. Having this feature is a significant advantage for any video setup (compare the standard Amiga output with that of a IBM VGA output and you will see the advantage of eliminating these gaps).

A de-interlacer (or scan doubler as it is also called): is designed to remove the flicker from the standard Amiga video modes (i.e. 640 x 512 or 320 x 512 interlaced modes) with no loss of colours.

THE A3000

The A3000 has the new ECS, a VDE and a de-interlacer all as standard, the only video modes which is still interlaced is the "SuperHires" Interlaced 1280 x 512 mode. The A3000 has the most flexible video setup, it has the standard Amiga video port, plus a fixed frequency output (31.5Khz) from the VDE and de-interlacer on a separate port. This output only requires a fixed high frequency monitor (sometimes know as a VGA style monitor).

IMPACT FOR THE A500/A2000

Installing the ECS (when available) will provide all the benefits the ECS gives to the A3000, with the exception of a 1M Agnus rather than a 2M Agnus. To fully utilise the ECS on a A500/A2000 requires the purchase

of a large scan range multisync monitor, such as the NEC 3D or Commodore 1950. All modes except the new "Productivity" modes will be output at the standard horizontal frequency of 15.6 KHz, when "Productivity" mode is selected the horizontal output frequency changes to 31.5 KHz. So the monitor connected to the system must detect this change and synchronise to it, to display these new flicker free "productivity" modes. All standard Interlace modes will still flicker as normal. Some people may see monitors such as the NEC 2A advertised as Multisync monitors, these are unsuitable for use for the A500/A2000 with ECS because they will not synchronise to frequencies as low as the standard 15.6 KHz (This is used in all video modes, except "Productivity" modes).

EXTRA A2000 OPTIONS

A2000 owners also have to consider the addition of a "Flicker-Fixer" such as the AGA 2000 from MicroWay or the equivalent card which is rumoured to have just been released by Commodore (the A2320 card), this is said to contain the "Amber" custom video chip found in the A3000. (How long it will be before the device is available here is another question, the price is US \$249, the AGA200 is US \$375).

What are the features / disadvantages of such a device: The AGA 2000 is a combined VDE/De-interlacer in a card which plugs into the A2000 video slot. It de-interlaces all interlace video modes with no loss of colours, and eliminates the gap between scan lines for all modes. It also provides a separate video port at fixed horizontal frequency of 31.5 KHz, the normal unmodified video output is still available on the standard port. Only a fixed high frequency monitor is required to use this new video output port, but a multisync monitor provides more versatility.

Disadvantages of a Flicker-fixer: due to the fact that the card uses ram to buffer the video signal, fast moving objects may have a lagging image behind the object. For example when

the mouse pointer is moved quickly a blur or double image may be seen behind it, this can also be noticed on some graphics demos with fast moving objects. This effect can also be seen on the A3000 but the effect is hardly noticeable. Also due to the fact that the AGA2000 has only 256K of de-interlacing RAM, maximum overscan is not supported, it supports a maximum of 704 x 400. So programs which display outside that area will have a portion of their screen outside "chopped" off.

Utilities such as "morerows" or "pprefs" are handy when setting up / scaling a screen (i.e making workbench bigger than the standard 640 x 256, i.e 704 x 280, this gives a bit more area to use for windows etc.) "Pprefs" also has the added advantage that it allow you to move the whole screen around more than the standard AmigaDos 1.3 preferences. Amigados V2 provides this overscan feature as standard, with the added advantage that the machine does not have to be rebooted for the changes to take effect.

Choosing the Right Display Setup:

- A3000 owners have the widest choices, they can choose a cheaper fixed frequency monitor, or go for the more versatile multisync monitors which will probably support some of the future video standards.

- A500 owners have only one logical choice to upgrade their video setup, get the ECS and large scan range multisync monitor (C= 1950, NEC 3D etc.)

- A2000 owners have a number of choices:

1. Get the ECS and a large scan range multisync, the same as the A500 choice above.

2. Get a "Flicker-Fixer" type device and get the advantage of a VDE, De-interlacer with no loss of colours in standard Amiga interlace modes. (A fixed frequency monitor could be used here)

3. Get the ECS and "Flicker-Fixer" device and a large scan range multisync. The Flicker-fixer output could be used for all modes except with the "Superhires" and "Productivity" modes. The 640x512 "Productivity" mode is not that useful in this setup anyway because it is a hires non-interlaced display in 4 colours, without the advantage of a VDE. The Flicker-Fixer provides this with a VDE and no loss of colours. A switch box could be easily made to swap between the ECS output (Standard Amiga 23pin video port) and the Flicker-Fixer output (9pin video port) to cater for the new "Superhires" modes (The Flicker-fixer has a Max. horizontal resolution of 704, "Superhires" outputs 1280).

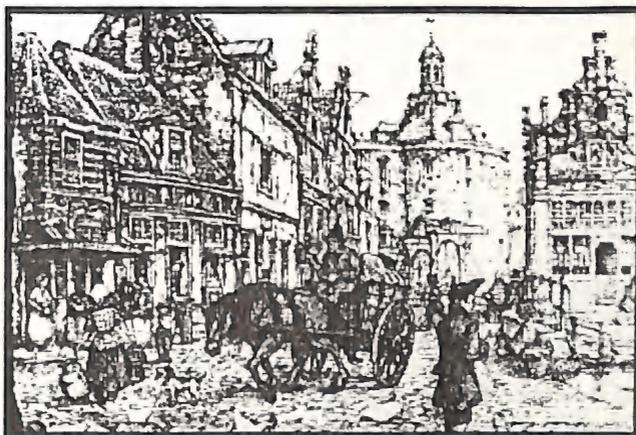
CONCLUSION

There are a number of choices which you will have to make, your decision will depend on what you need, and what you can afford. You may have noticed in this article I failed to

mention the A1000, this is because of the difficulty in upgrading it to these new features. For those A1000 who will be getting a "Phoenix" board (If they finally become "available") your options will be the same as those for A2000 owners.

For A500 owners there is only one real choice, so their main problem will be in choosing the right monitor. For the A2000 choice 3 is definitely the most costly, but it also provides the closest to the A3000s video setup, A2000 owners will get. My system setup consists of an A2000 with an AGA2000 card, and a NEC 3D multisync monitor. I intend to get the new Denise chip when it is available, and then make up a switch box to choose between the video outputs.

I hope this article will help you in making an informed decision, for upgrading your video setup.



*17th Century Dutch City Scape
Digitised from a Calendar Page by A. Pieck,
using Digi-View in Hi-Res mode*

CONNECT THE DOTS

or

You too can become an Amiga Artist!

by Ron
(Picasso)
Lewie

Many a time I've heard the statement "I can't DRAW", followed by: "Why would I want a Drawing Program", and I've been amazed at the sincerity with which this view is expounded. It is true to say that, being a graphic artist or having a natural aptitude, goes a long way towards making a program such as Deluxe Paint work for you, but it is by no means a requirement to achieving success.

There's probably not one of us who at some stage of our lives has not sat down and connected the dots on a kiddies amusement page and gazed at our work, admiring the elephant or such thing that has emerged from the blank page, and is now screaming out to be coloured in. I would suspect that it is at this stage, where the argument starts as to which one of the little monsters gets to ruin your good work and you throw the crayons down in disgust as Johnny fails by 3 cm to stay inside your line work.

Anyway you'll be pleased to know that you can let Johnny scribble all he likes and you can use your *Dot Connecting Skills* on far more serious works of art, far away from the grubby fingers and runny noses of your spouse's offspring, if you make full use of programs like Deluxe Paint. The only requirement to success is idle time; I mean time where you're not likely to be harassed or have half the neighbourhood peering over your shoulder, all gazing at a blank screen and asking "What Is It!"

My way of drawing is not new, but of the people I've told so far, none had tried it on their computers, hence my decision to divulge my secret and share it with the masses. I'm going to discuss Deluxe Paint, (DP) but clearly

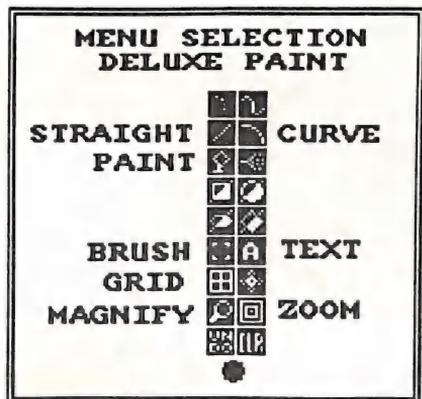
any similar 64/Amiga program can use this simple principle.

The best way to practice is to sneak into Johnnie's room and steal one of his colouring books and find a drawing suitable for reproduction. It matters not that it's been artistically ruined as long as the original outline is clearly visible. I chose a colouring book because it offers uncomplicated detail, but this procedure with practice could reproduce another Mona Lisa without a doubt. Having acquired your picture, proceed to divide it up into 1 centimetre squares (if it is a very detailed picture 5 mm squares may be better) keeping in mind the fact, that if Johnny sees you, you'll be up for another book.

We should now have a picture with a 1 cm grid superimposed over the top, clearly visible. For argument sake we'll say it's 12 cm x 12 cm and we'll now number each line from 1 - 12 both top and bottom. Let's see if we can keep the numbers the same for each line as alternative numbering is quite confusing. Do the same on the sides both left and right and for just a brief second sit back and admire the mess you've made of what was a work of art.

Glory time; switch on the computer and load DP. For the sake of simple explanation choose a Lo-Res Screen (320 x 200/256); this resolution although low, offers square drawing, as a pixel is as long as it is wide (1 x 1). In Medium Res pixels are 1 x 2 and complicate the explanation, so we'll stick to lo-res. Having said that, if you have the memory and require Picasso type results Hi-Res would be better still but will require far more patience. (Ed: better for newsletter reproduction though!)

Now is decision time - we are going to draw a similar grid on the screen as on our original, and it is now that you must decide what size you would like your masterpiece to be. If you would like it about the same size, then I'd suggest a 10 pixel x 10 pixel grid would suffice (produces a slightly smaller version) but you can adjust the size to any algorithm (programmers rhetoric for unexplainable mathematic function) you like; you are only limited by screen size and memory. As our drawing is 12 x 12 that will collate to 120 pixels x 120 pixels or for us more average computerists about half of our viewing area. A pixel by the way has zip to do with fairies and in computer land relates to a single DOT of the viewing area.



By clicking on the GRID icon of DP (the grid icon is located 3/4 of the way down the menu select, and looks like a square with a cross in it) with the RIGHT button, a requester will appear requiring X and Y input, change the default 8 x 8 to your fancy (10 x 10) and then send the requester back to where ever requesters go when not wanted (sad).

Highlight the GRID icon with the left button and then select the straight line drawing tool and the last colour on the table, (16 or 32) if this colour fails to stand out against the background, change its values until it does (you're the boss). Now, with the GRID icon high-

lighted, it should be easy to draw straight lines every 10 pixels both horizontal and vertical. The really experienced will have already only drawn a small sample and then made a brush out of the result and used that to have the whole screen 'gridded' up in under 30 seconds, but as for the rest of us, we do it manually because deep down we really have a complex about letting computers take over our lives (more on that another time). When done, *don't forget to turn off the grid icon* or you will soon be carted off to the funny farm. You see, with the icon highlighted the pointer although still able to travel smoothly over the entire screen only really loves every 10th pixel and therefore ignores anything in between. If you try to draw while this is ON, you will quickly vegetate into a screaming mass of human matter, not fit for habitation.

So with the screen full of squares and little Johnny still chained to the playpen, we continue by placing corresponding *numbers* along the top, bottom and sides. Once again, most of us will do this using the "A" icon and manipulating the cursor into just the right spot and then pressing the correct number on the keyboard, whilst the smarts will just type out 1 - 9 and use these numbers as brushes. Either way the job will get done and a marked resemblance to Johnnie's book (minus the art and Johnnie's scribbles) will be staring you in the face.

The choice must be made now, do I continue with this charade of being a Picasso or should I throw Johnny the keys and revert back to the realities of life, safe in the knowledge that not only can I rule lines on paper I can also make the same mess on a Computer Monitor.

Having thrown Johnny a hindquarter from the fridge, refilled his milk bowl and removed the dead cat from the playpen, it's now time for the serious stuff. Just like in *Connect The Dot* we're going to produce a masterpiece from nothing, but I hear you say "We ain't got no dots" (Well it ain't ain't, it's haven't). The task ahead is a simple one, albeit boring, but

we now choose a likely place to start; generally I start at the top but this is optional. Choose your square by the corresponding numbers and simply copy any line work required. If your body really craves to join dots then this can be satisfied by only placing dots say every 4 pixels and connecting them later. After completing about 4 squares you should be getting an idea of how your proportions are working out. I make a lot of use of the curved line function but this function is tricky requiring a bit of practice.

Curved line: Choose the icon, click left button to start and, keeping the button depressed, move the pointer to the desired end. Release the button and then move the

pointer along and outside of the line until the line takes your desired shape, then click the left button again to complete the process. Don't forget that you've got the Curved Line icon pressed, because it can cause quite a lot of animosity between you and DP if you are only wanting a straight line. Also, as the bend can only originate from one point, often a lot of short bent lines are better than one long one.

If you have a section that is a bit tricky, e.g. the pert lips of Liesha or the front of Dolly Partons blouse, it's often beneficial to take that section as a brush and work on it in magnified form. (Come on! - magnify the front of Dollies blouse,y pervert!) Anyway it's not a requirement to work in normal screen mode and is quite practical to magnify sections, even

for that matter duplicate the screen and using the "J" key switch between screens, comparing (sizing) your efforts as you advance.

In no time at all your picture will take shape and if your've numbered everything correctly it will look very much like Johnnie's before he scribbled all over it. No doubt you have taken the precaution during these stages to save your

progress but just in case Johnny gets loose and rips out the plug, save it again.

I can hear you from here yelling "Oh yeah! What about the lines?" Well there's a ready solution for their demise. When you're ABSOLUTELY sure you don't require their services any longer, simply select the background

colour and the PAINT icon and paint the lines out with one click. It's possible that your artwork has crossed over the lines thus breaking their continuity and this might require you to magnify sections to erase parts of your lines, but heh! that's no sweat. Fill in the gaps left when the grid disappeared with your drawing colour and sit back and admire your work of art. Don't let mum see it until you've safely disposed of Johnnie's colouring book and all the evidence of your success has been safely shuffled back into their relevant drawers. Johnny can easily be pacified by letting him loose on your drawing with the paint can and his only disappointment will be that he can't get the colours to cross the lines (YUK -YUK). But he will delight in reducing it to what looks like the aftermath of Cher-

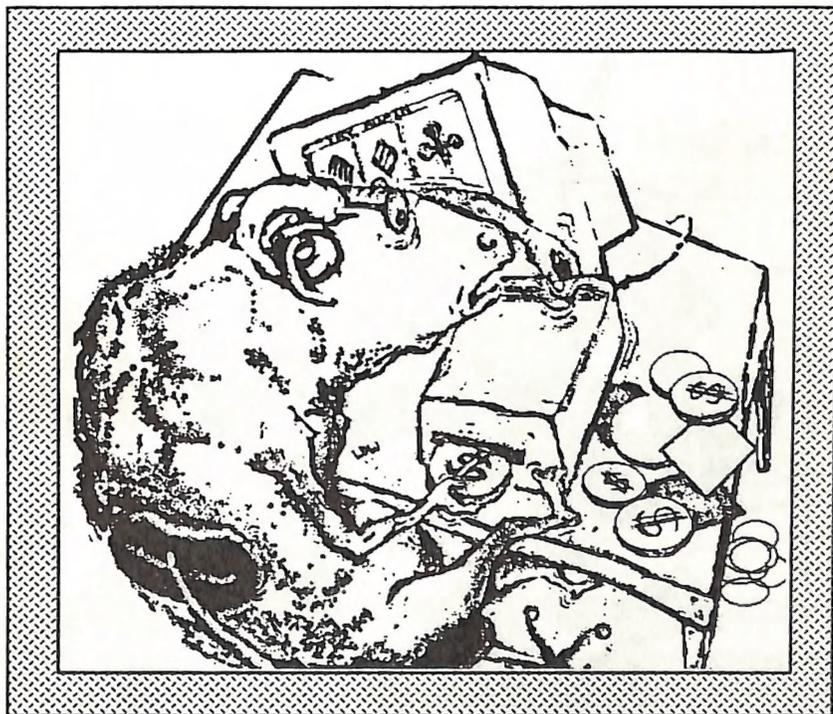


Connect The Dots - Title Screen for a Proposed Game

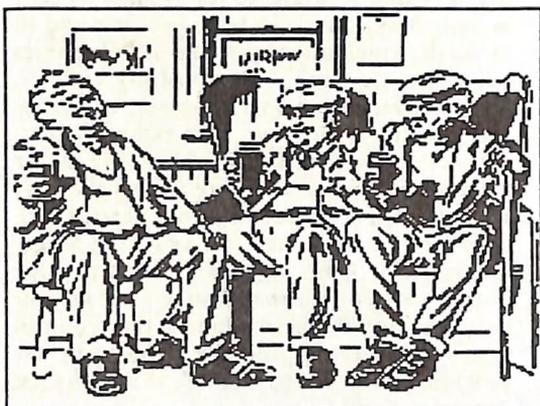
nobyl, so make sure that your saved copy is a good one.

It is true to say that the many people who commented on my artwork in my various games may now be considering tar and feathers, but I've never pretended that I could draw or in fact had any artistic talent. The only original drawing I'd even contemplate would be Dollies Blouse and that's only if she modelled. The point I make is that it's not necessary to be a graphic artist to enjoy or use programs such as DP. If you don't have those skills then don't expect professional results but it is possible to produce work which warrants comment and ensures great satisfaction by using the process described above.

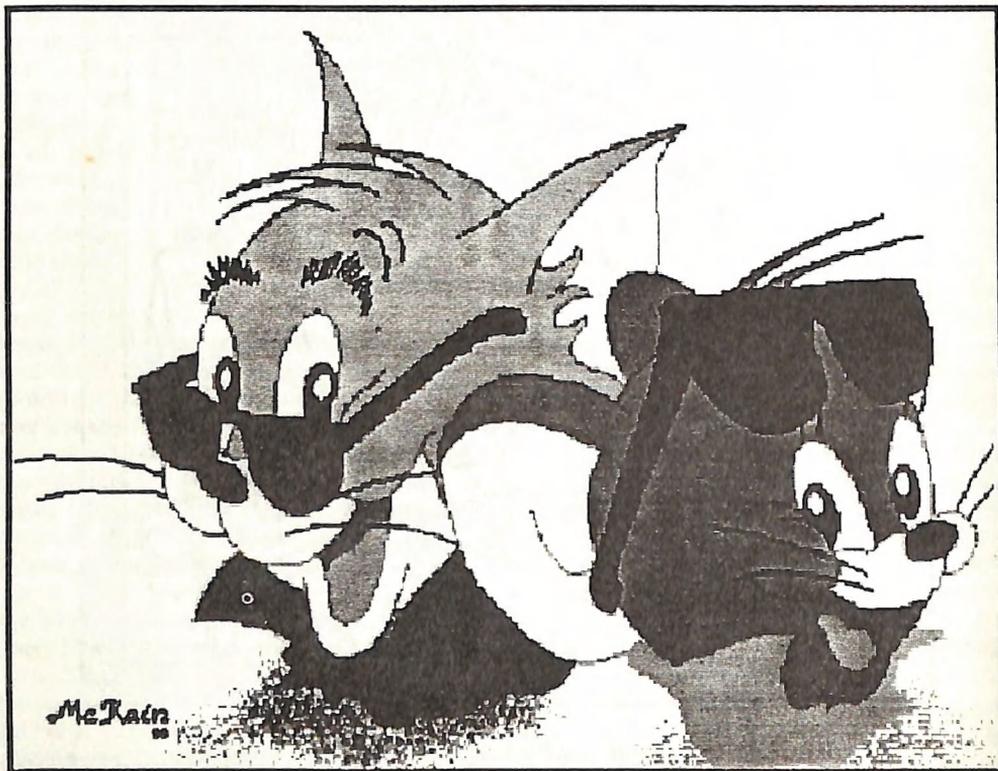
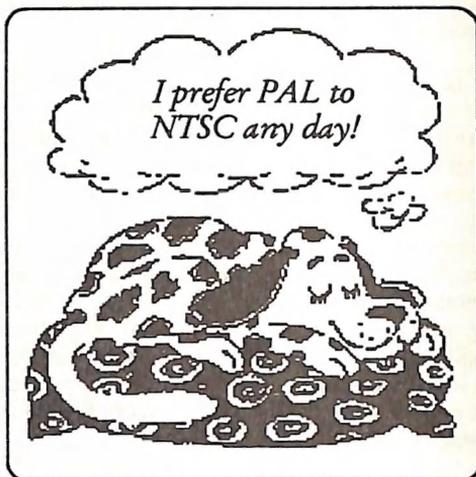
My very first program on the Amiga, written in Basic, was a colouring book program and all of the drawings looked just like little Johnnies old colouring book. I even had my visitors, who'd never seen an art program, contributing, which, by the way, is an expert ploy to conserve your beer stocks. All of the major drawings in *Truckin On* are done this way, with the source art coming from newspapers, 1988 Telephone Book, and Trucking Magazines. There is no need for you to divulge your sources or for that matter your technique; the only important thing is that you can gain considerable pleasure from your art programs this way and after all, that's why we compute, isn't it?



Untitled by Leigh Winsor



Typical C.C.U.G.Q. Committee Meeting



TOM & JERRY by Bob McKain

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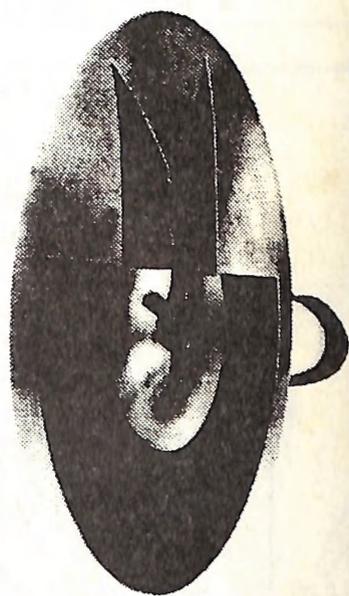
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