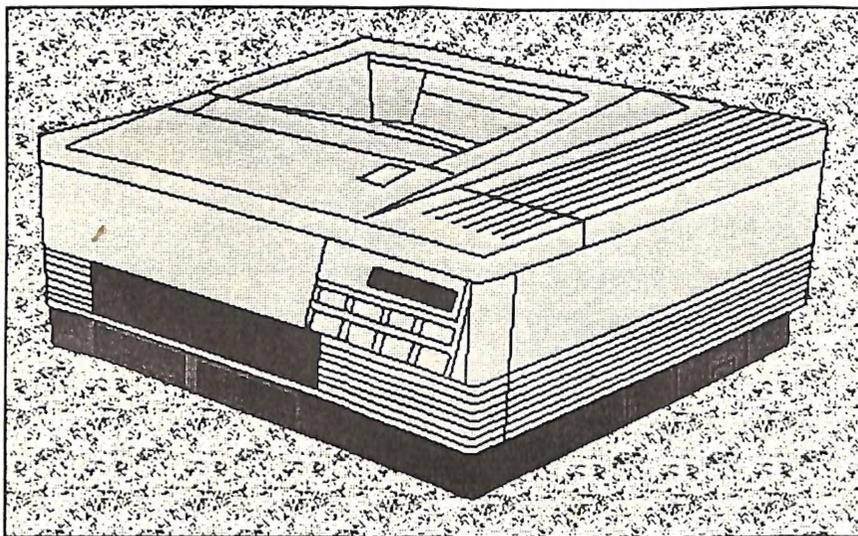


CURSOR

Newsletter of the
**COMMODORE
COMPUTER
USERS
GROUP
QLD Inc.**

Registered by Australia Post
Publication No. QBG 3958

VOL.7 No.5 DECEMBER 1990



Review of the HEWLETT PACKARD LaserJet III

Our Next Main Meeting will take place on Tuesday,
4th December 1990, at 8 pm (Libraries & Sales at 7 pm)
at the Bardon Professional Development Centre

COMMODORE COMPUTER USERS GROUP (QLD) INC

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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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Commercial Advertising Rate:
\$30.00 per full page, per issue.
This rate is for camera-ready A-5 pages.

Published by:
Commodore Computer Users Group (Qld) Inc.,
P O Box 274, Springfield Qld 4127

Printed by:
Townsend Printing,
P O Box 654, Woodridge Qld 4114.

MEETINGS

MAIN MEETING

Our next Main Meeting is held on Tuesday 4th of December 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 9th of December (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 - 12pm) 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.
REDCLIFFE: 3rd Sunday of the month (1pm - 5pm) in the Masonic Hall, Sutton St.
Ph. Dennis Underwood - 266 8991 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)
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up to 5 Disks)
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Macro Assembler Book: \$5.00 (+ \$1.00 P & P)
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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
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(+ \$1.00 P & P)

MAILING ADDRESS

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

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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 SYOP!

MEMBERSHIP FEES ETC.

JOINING FEE: \$10.00
ANNUAL MEMBERSHIP FEES:
Ordinary Membership*: \$25.00
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(*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 Guerney
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 (FEB) Issue is:
FRIDAY 28th DECEMBER!*

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 **SUSPENDED** you can upload your articles, news, gossip, etc. to the Group's BBS on Tel. 808 7694, or 808 8823: CURSOR File Area.

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CURSORY NOTES

By the time you read this, it will be late November, and that means that it is that time of the year again; time for your annual donation to Father Christmas and his cohorts.

Those with a bit of spare cash might be contemplating the upgrade path from a C64 to an Amiga 500, and some 500 and 1000 owners might even think of upgrading to a 2000. If you have a lot of spare cash you might even be thinking of trading up to a 3000! And then, of course, there are all those other bits and pieces that hang off computers, and we haven't even mentioned software. No, you won't have any problems getting rid of your spare cash again this year - after all, there are still those other members of the family to consider; you know... the ones who aren't interested in computers!

This year we have seen the Amiga become the 'senior partner' in our group, as now some 55 - 60% of our members are Amiga owners. After a period of some recrimination between 8 bit and Amiga owners, things have settled down somewhat, and we now try to live harmoniously together. Our recent survey of members has produced some interesting statistics. Read all about it in Phil Guerney's article.

The arrival of the Amiga 3000 means that Commodore has well and truly moved into the professional market. Inevitably some of our more well-to-do members will be purchasing these miracle machines, but for most of us they will remain on the perpetual wish list, even if the price drops by several thousand dollars. Although we, as a Group, don't distinguish between amateur and professional users, the fact is that probably 90% of our members are amateurs, and these

are the people we have to cater for; a point easily forgotten by some of our more progressive members.

Still, it's nice to drool over this high-tech gear occasionally!

And what about 1991? To be honest, I've never been very good at forecasting and, what with the Gulf Crisis, I feel that at present discretion is the better part of valour, so no crystal ball gazing on my part.

On page 2 of this issue you can read that our BBS has now been expanded with a second phone line. We have recently installed an Amiga to run our board, which no doubt will generate lots of questions. In our next newsletter we hope to have some answers for you.

This is your last newsletter for 1990. Older members know that Cursor appears 11 times annually, to give the undersigned a bit of a break. Your next newsletter will be the Feb. '91 issue which should reach you sometime late in January. Closing date for articles for this issue is Friday, 28th Dec. Start writing now and let's make it a bumper issue!

There is no Main Meeting in January, but there will be an Amiga Workshop on Sunday the 13th January at Rosalie. To find out if your suburban workshop meets during the holiday period, contact your local coordinator.

On behalf of the Management Committee I would like to wish you all a Merry and Safe Christmas and a Very Happy New Year.

Ralph De Vries

COMPUTER CONSUMER WATCH

PRINTER WARRANTEE REPAIRS and PRINTER REPAIR CHARGES

If you are unfortunate enough to need repairs to your printer while it's still under warrantee, beware!

Somewhere amongst the warrantee conditions it's either spelled out (or implied) that no guarantee repairs will be carried out unless the printer is equipped with approved accessories or add-ons. This means that, if you have either a re-inked or re-fitted ribbon in your printer, you will be told politely that your printer will not be repaired under warrantee.

This policy is adhered to by both Epson and Star, and presumably other printer manufacturers as well.

So, whatever you do, if your printer needs repairs under warrantee, shove the original ribbon back in the printer, even if it's worn out. You will save yourself a lot of money.

By the way, if you buy a printer or any other equipment for that matter, insist on getting a copy of the warrantee conditions. Most retailers will tell you that your receipt is proof of warrantee. This may well be so, but you, the end user, need to know the exact conditions of your warrantee.

And did you know that the minimum repair charge for an Epson printer is \$85? Makes you think twice about buying an Epson printer doesn't it?

—

EPSON WARRANTEE

Early November 1989 I purchased for my son an Epson LQ-550 printer. Since that time he has used this printer successfully in a limited way - he is still using the original ribbon supplied with the printer.

However in September 1990 he started to experience problems. When the power was switched on the printhead would not return to the left side of the carriage. It appeared to be 'stuck' on the centre of the carriage rail and made knocking noises. In addition, although there was no paper in the printer, the 'paper out' LED did not light up; in fact everything was well and truly inoperational.

It's a well known fact that printer problems can have a variety of causes, not necessarily all printer related; items such as printer cables, parallel connections, even software are a potential problem source. However no software was involved, so I had to eliminate both printer cable and the parallel port.

Next I took the LQ550 to my own computer room, connected it to my A2000 with my own cables and, sure enough, the printer still refused to work.

I now rang my supplier and asked him what the next step was. He advised me to take it to his supply source, Edcom Computer P/L at 394 Montague Road, West End, as they were an official Epson approved repair centre.

On Tuesday, 25th September I took the printer in and explained my problem to a lady attendant. She asked me to unpack the printer and proceeded to check out if there was an original Epson ribbon in the printer (which there was), and she ex-

plained to me that "if there was a re-inked ribbon in the printer, I would have voided my warrantee". Next she called a technician who switched the printer on and, sure enough, it fired up quite normally. Here was a predicament - remember I had eliminated both cables and computer connections. Perhaps the simple fact of physically moving the printer in my car had re-seated a chip or changed the position of a soldering joint which may have made a bad contact. Now, I could have taken the printer straight home again, but what if it started to play up once more? I discussed my predicament with the technician, explaining to him what steps I had taken to locate the source of the problem. I felt it was best for him to check the printer out, just in case, to which he agreed (no mention was made at this stage of charges).

On the following afternoon I got a phone call from my supplier, who had been advised by Edcom that no fault could be found with my printer, hence I was up for an \$85.00 repair charge! Not surprisingly I was none too happy with that development, so the next day (Thursday) I went to Edcom and asked to see the technician. He explained to me that it was Epson's policy not to re-imburse Edcom if no repairs were carried out. The manager now joined in and we went over the same ground again. We checked out the printer, which appeared to work fine. I insisted that my only cause of action was to take the printer in for warrantee repair, as I had eliminated all other possible causes. He equally insisted that he had to charge me, as Epson would not reimburse them for warrantee repairs where no fault was found.

I told the manager that we had now reached a stalemate position and that he left me no other course open than to approach the Consumer Affairs Bureau, which I did the same day. After explain-

ing the situation to them, they promised to send me a complaint form.

I also contacted the Brisbane branch of Epson and explained the situation to a gentleman who, I believe, was either the manager or sales manager. He commiserated with my lot, but was adamant that it was company policy to charge for warrantee repairs where no fault was found with the equipment. In fact, he told me that, if I had taken the printer to 3M, the official Epson Repair Agent, they would probably have charged me \$95!

As an extra precaution, when I came home, I connected my own Epson LQ-850 printer to my son's computer, and it performed without a hitch - sufficient proof that both computer and cable are in good working order!

On the following Monday I received the appropriate complaint forms from the Consumer Affairs Bureau, which I filled in promptly. Receipt of my complaint has been acknowledged, and now it's a matter of waiting for the outcome.

HOW NOT TO SELL A VIDEO CAMERA

In October I decided that it was time to buy a Black & White Video Camera for digitising. One dealer advertised two models in their newsletter at \$599.

On Wednesday 10th Oct. 1990 I paid a visit to this dealer, and asked the salesman what it would cost me to purchase the Brand X Video Camera, plus the Digi-View software. When he quoted me somewhere in the vicinity of \$1100, I practically fainted. When I pointed out to him that they advertised the camera for \$599, his reply was: "yes, but that is through our mail order department - we have considerably higher overheads, and our price is \$799" (!).

My thoughts were "some overheads!" Needless to say I did not purchase the camera there. Amiga owners will find in Amiga Monitor where I finally did purchase a black & white video camera for less than \$500.

PELHAM

To end on a more positive note; my son asked me to order 2 Meg of RAM chips for his A590 hard disk drive. I phoned Pelham in Sydney (new phone no. 02 - 980 6988) on Monday, charged it to my bankcard, and the following morning the chips were delivered before 9 am! Biggest surprise was the price - only \$145.08 for 2 Meg. Good people to deal with.

—

This is the first issue of Computer Consumer Watch, an occasional column which we would like to run for you, the computer consumer. This column won't be used as a witchhunt against repair services, retailers or computer products, but solely to assist you, the reader, in deciding if a product is worthy of your attention. On the previous page I mentioned the Epson minimum repair charge of \$85. A similar amount is charged by NEC.

When I mentioned this fact to a Commodore Service Agent, he threw up his hands in horror, because he charges less than half the above amount!

If you have any other horror stories about excessive minimum repair charges for other brands of printers (or any other computer equipment for that matter), let us know and we will publish these facts for the benefit of other members.

But there are other aspects of computer equipment that need attention. Have you ever compared prices of tractor fed paper?

They fluctuate wildly. And why does a ribbon cartridge for one brand of printer cost \$15 and for another brand \$30? No doubt, you can come up with similar examples - don't just brood over them, but send them in, but remember, no slander; we don't want to end up in a court of law!

My story about video cameras touches also upon the subject of pricing. Again we aren't in the business of slandering retailers, but there's nothing to stop us from recommending cheaper supply sources of computers and peripherals.

I commend the idea of a Computer Consumer Watch column to other users groups. If they also publish a similar column, we can exchange information for the benefit of all computer users.

Editor

-ooOoo-

HEARD THIS ONE?

The Cray computer is REALLY powerful!
Did you know it can manage an infinite DO loop in 4.2 seconds?!!!

—

Q: How many IBM types does it take to change a light bulb?

A: 100. Ten to do it, and 90 to write document number GC7500439-0001, Multitasking Incandescent Source System Facility, of which 10% of the pages state only "This page intentionally left blank", and 20% of the definitions are of the form "A consists of sequences of non-blank characters separated by blanks".

Denis Wright

YOU WROTE...

Some comments on the Sep. Cursor...

Fred Turnidge told us that he is doing a survey on copy programs for the C128 - a good idea. My own experience has been that commercial programs are far superior to those which are in Public Domain. I have found that both Maverick and Fast Hack'em are very good (I actually use Maverick to copy whole CP/M disks, which is not the usual way to copy CP/M, with excellent results). At just over one minute per 360k disk (double sided) it's fast and certainly better than the CP/M program Nsweep, which takes about 15 - 20 minutes to do the same job. Nsweep is good for individual files however, and far superior to the usual CP/M copy program, Pip.

Returning to the subject of Basic 7 copy programs, I will be interested to hear how Fred goes with the Big Blue Reader - I found it slow (and it failed to do some of the jobs it was supposed to do). Most people seem happy with BBR however, so it must be me, or maybe it doesn't like JiffyDos, which is fitted to my 128.

Renumber programs: I would think that Doug Maclurkin would have something on his 128 Pub. Dom. disks, but failing that I can recommend a commercial program called Micro Detective, which will do a renumber with bells and whistles (it also has many other impressive features, such as Find, Merge, Bi-directional Scrolling etc, plus an excellent Trace module and an Error Detection system. Available in two versions (64 & 128) and costs about \$70. I obtained mine from Skyles Electric Works, 231-E South Whisman Rd, Mountain View, CA 94041, USA.

Phil Guernsey: His article 'Sticking with the 64' made interesting reading and though I enjoyed it I would have to disagree with one

aspect. Phil infers that the 64/128 is basically a hobby machine that can only handle 'smallish' programs, and therefore is of little use for business or commercial purposes. I don't entirely accept that premise because, quite apart from many documented cases of commercial use of the 64, the size of the programs depend, in part at least, with the programmer, not with the capacity of the 64/128 memory. Ralph covered this nicely on page 20, (Economy). Certainly faster and more 'up to date' microprocessors would probably do the job better, but may not, for the purpose intended, be as cost effective. As I have stated before, I still use my so-called 'dinosaur', a 32k Pet, for one specific business purpose, where it runs a 100k program quite nicely, using merge techniques. When it was released, the 64 jumped light years ahead of the Pet with its sound and graphics, and of course the Amiga's ability in this area defies description. It all depends on what a user wants, we don't all need a Rolls Royce - for some a bicycle takes us where we wish to go.

Phil made a good point using the word 'LUST' - I 'lust' after anything that will make my 128 go faster and become more efficient in data and word processing. For this reason, and those outlined by Jon Kelman on page 31, I probably should go for an IBM clone, but I prefer the 128, because I like Basic 7 and hope to have time to do some heavy programming 'one day'. Besides, there is no way I could talk my wife into having 3 computers in the house!

Errol Rayner

I too love, explore and use WORDS.

I read with great interest several articles in Cursor Oct '90 namely Words; also

Printshop and Epyx Fast Load Cartridge reviews by Lindsay Vardy. I bought my Epyx Fast Load when I bought my first 64 eight years ago. These informative articles prompted me to write these lines.

Seeing that October 8th till 14th hosts the Annual Stroke Awareness Week, I thought it was an appropriate time to tell Cursor readers how my C64 and the use of a word processor, together with several aged programs, has kept my brain ticking over thus keeping my usually downcast spirits looking upwards.

I have nearly finished my course with T.A.F.E. namely Short Story Writing (in fact I'm submitting six stories north in October to a competition being held by A Writers World at Surfers Paradise). All these stories have been written using TWS.

I'm badly aphasic (as the Macquarie Dictionary has it: APHASIA n., loss or impairment of the faculty of symbolic formulation and of speech due to a lesion of the central nervous system), following my second stroke. My affected right hand refuses to write, so, in order to communicate effectively with my friends and elderly neighbours, I print out messages in large letters which are easy to read by using my favourite program "Doodle". Using this great but now aged program I can draw diagrams, plans etc.

Thus TWS and Doodle, Print Shop and Print Shop Companion (could Lindsay do a review on "Doodle" please?) are my most widely used programs. I have not got the patience for most games.

An aside; my good friend Fred (TWS) Turnidge lives near Bathurst at Eglinton (10/15 Kms away) and he often drops in and has helped me a great deal with TWS and other programs.

Fred Hawley (Bathurst)

Last year the local BBS survived (?) for months on an input of badly spelled messages which included such phrases as 'CRAPPLES' and 'COMMODORE SUX' etc etc. Real high tech stuff and no one was any the wiser at the end about what people did with their computers or what were their good and bad points. But these were just school kids filling in time until they started their homework.

It seems sections of our Group are in the midst of a more mature version of the above pointless situation. However the motives are, I hope, to protect the 'obsolete' 8-bitters and not to score personal points.

Come on fellas - does it matter who owns what and how expensive it was? What is important, is whether you have shelled out your hard earned cash for something that does what you want. Never mind what the other bloke has. Try to learn from his experience.

I don't think that a serious split will occur in the Group but, before it goes any further, just look at Cursor about 15 months ago and give due credit to those who have pulled it out of the dumps to become a professional publication deserving great credit for those involved in its production.

I recently purchased a copy of 'Computer Genealogy' by Andereck and Pence. On page 15 I read: "The important thing to remember about computer obsolescence is this: In a practical sense your computer is never obsolete so long it will efficiently and effectively perform the work you want done." What is so interesting about this relevant observation? The book was published in 1985 - a very long time ago in computer history.

Fred Turnidge (Duramana NSW)

LIBRARY NEWS

by Phil Guerney

A very short article this time because all my efforts went into the analysis of the 1990 Membership Survey which should appear elsewhere in this Cursor. Luckily, there is not much to report.

The Amiga library has grown by one commercial program with the arrival of GFA Basic V3.5. I thought this was great for a week but then I bought AMOS and now I haven't looked at GFA again despite the package being a foot to my left. Interpreted programs run much faster than in AmigaBASIC but the syntax is very different and the manual can be hard to fathom.

The compiled versions run even faster, although a simple program I wrote, which ran perfectly under the interpreter, crashed the Amiga when the compiled version was run. About the only thing which would bring me to use GFA over AMOS is for programs requiring more than the limited precision of real numbers in AMOS. The editor in GFA Basic is cute in the way it even looks after proper indenting of your code as you write.

I have taken note of comments at the October meeting about the way the library is run. Some changes will have been implemented at the November meeting, for example Library Helpers will all be identified as such with badges.

Finally, I did receive a response from Electronic Arts (ECP) about the cracked copy of Populous we received. They still did not offer an explanation of how we received a broken disk, which I also strongly suspect was the source of an infestation of the Lamer virus I had just after that time. My suggestion that it

could look like ECP may have been bypassing the official copyright holder was silly because they are owned by Electronic Arts themselves. ECP went on to say that they receive beta test versions and sample manuals for new products on a weekly basis. And guess what - the official copy-protected version of Populous they sent me has a line in the start-up sequence about being a beta test version. My comment on the poor quality of the packaging and manuals of many ECP products was recognised and they now claim that most products are imported directly in the original packaging. That's good.

I had one volunteer for the job of preparing a C64 library catalogue disk in 1541 format and this should be available after the November meeting.

-ooOoo-

THEY ARE HERE NOW!

Yes, the 1991 C.C.U.G.Q. Calendar is now available!

For \$1.50 you can pick up your copy at the Main Meeting or Rosalie Workshop, as well as at selected sub-groups.

If this is inconvenient, you can send a cheque for \$3.00 to:

The Secretary
C.C.U.G.Q.
P.O. Box 274
Springwood Qld 4127,

and your calendar will be posted well before X-mas.

1990 MEMBERSHIP SURVEY

by Phil Guerny

About half the people who returned membership renewal notices this year also completed and returned the survey form that was included in the July 1990 Cursor. Thank you very much. On the one hand you kept me busy for a while collating the numbers, but you also provided a lot of information and opinions which will be valuable when making plans for the future of the club.

I can't cover all the results this time but here is a summary of the main findings of the survey. The number of usable survey forms was 286 (although many people left much of the form blank) which is a good sample from about 700 people. We can expect a bias towards "more enthusiastic" members in those who returned forms, but that is not a bad thing because they are the people who we want to help most.

WHICH COMPUTER?

There were two ways of looking at the so-called division between 16-bit and 8-bit computer users. One way was to make the assumption that those people who own an Amiga AND an 8-bit machine are really "16-bit" users. By this method, the proportion of respondents who were "16-bit" users was 66%.

The second method of counting was simply to add up all the computers owned by everybody. The 286 respondents owned a total of 399 Commodore computers (not counting PC-clones) making an average of 1.4 Commodore computers per member. The following table lists the breakdown of computer types. Our average member must be a person who sells computers as much as one who buys them, if the very low number of VIC20's

and PET's still owned is a guide. I still have my VIC20, but it seems most longer-term members have disposed of their first machines.

Model	Number	Percentage
Amiga 2500	1	0.2%
Amiga 2000	23	5.8%
Amiga 1000	40	10.0%
Amiga 500	105	26.3%
Commodore 128D	27	6.8%
Commodore 128	25	6.3%
Commodore 64	148	37.1%
Commodore Plus4	12	3.0%
Commodore 16	2	0.5%
Commodore VIC20	11	2.8%
Commodore PET	5	1.3%

Almost all respondents used their computers almost every day, with many crossing out the "almost"!

EXTRA EQUIPMENT

Modems: more people had modems than I would have guessed. This is how it turned out:

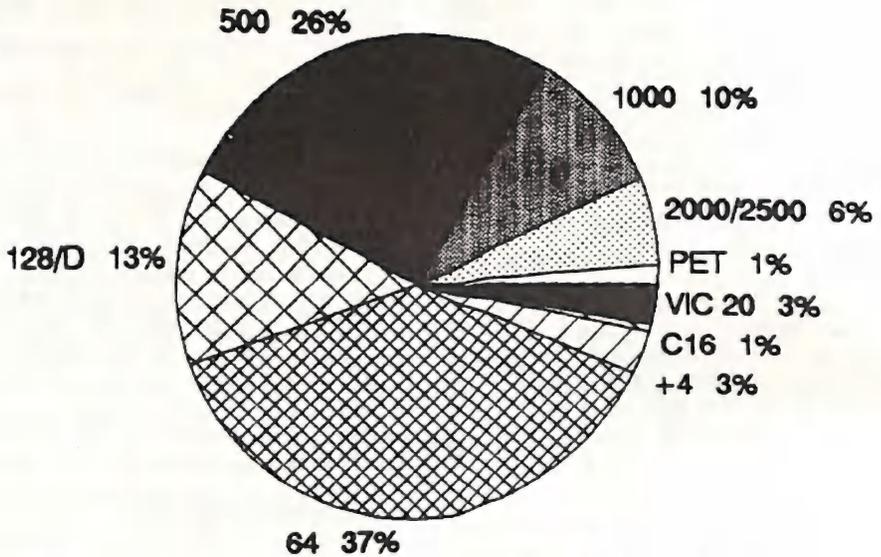
Computer Type	% Owning Modems
Amiga	39.0%
C128/D	36.4%
C64	25.5%

Monitors: Most C64 people (61%) only used TV sets rather than composite monitors. However only 10% of our Amiga owners used a TV, the rest owning RGB monitors except for 8% who used multisync monitors.

I have not had time to analyse the rest of the C64 and C128 responses on accessory equipment in more detail yet. I'll finish that off for the January issue of Cursor.

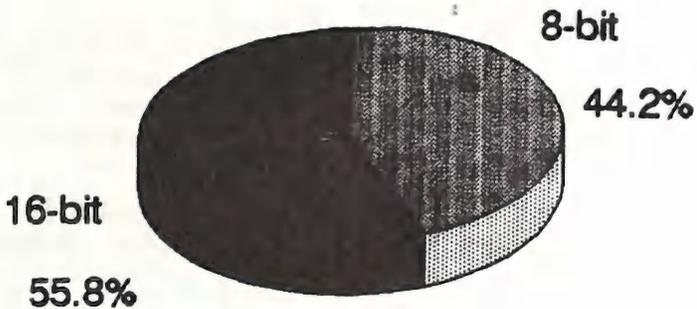
The rest of this section will deal just with the Amigas.

CCUG (Old) Inc
1990 Membership Survey
ALL COMPUTERS OWNED



ALL Computers Owned by ALL Respondents
(399 Computers Owned by 286 Members)

1990 Membership Survey
THE GREAT DIVIDE



Main Computer Owned

Amiga Memory: Few members with 500's (6%) only had 0.5 MB. Most (72%) had bought 0.5MB expansions with the rest (22%) owning 2-3 MB. Six out of the 21 respondents with 500's fitted with more than 1 MB did not own hard disks so they must have bought one of the memory expansion boards around.

Members with 1000's have been less willing to expand memory with 30% at 0.5 MB (not surprisingly, no 1000's only had their original 0.25 MB!).

However Amiga 1000 owners who had bought extra memory past 0.5 MB did not stop at 1 MB, with most going to 2-3 MB and two people had 1000's with more than 3MB. Of our 23 Amiga 2000 respondents, only five had just 1 MB with 14 in the 3-5MB range. Two 2000 owners claimed 9MB.

Amiga floppy drives: 27% of our Amiga 500 owners spend ages swapping disks because they only have one 3.5" drive. All the rest had two drives except for two people who owned three. Of the Amiga 1000 owners, 20% still had one 3.5" drive, 73% had two and two people had three of them. There were a few Amiga 2000 owners with just one 3.5" drive but all of these machines also had hard drives. One Amiga 2000 owner had four 3.5" floppy drives.

Amiga hard drives: Proportionally, hard drive ownership grew as people moved from 500's (19%) to 1000's (29%) and to 2000's (83%). I guess one of the reasons to buy a 2000 over a 500 is the ease of fitting a hard drive and indeed only 4 out of 23 Amiga 2000 owners were without them.

Capacities of the drives also increased with the cost of the computer. Most of the Amiga 500 owners with hard disks had 20 MB drives (79%) while only one

disks, and only one out of 19 Amiga 2000 people with hard disks, were just 20 MB.

The most popular hard disks for owners of 1000's and 2000's were in the range 40-80 MB but four members said they had big 120-140 MB jobs.

PROGRAMMERS

Some years ago, people who bought computers for the home HAD to program because you couldn't buy much in the way of commercial programs. It is different now with 32% of people saying that they do not program at all, not even to the extent of "playing around" with the BASIC that comes free with their machine. Of the people who did some programming, most of course stuck to BASIC and, especially the 8-bit owners, machine language.

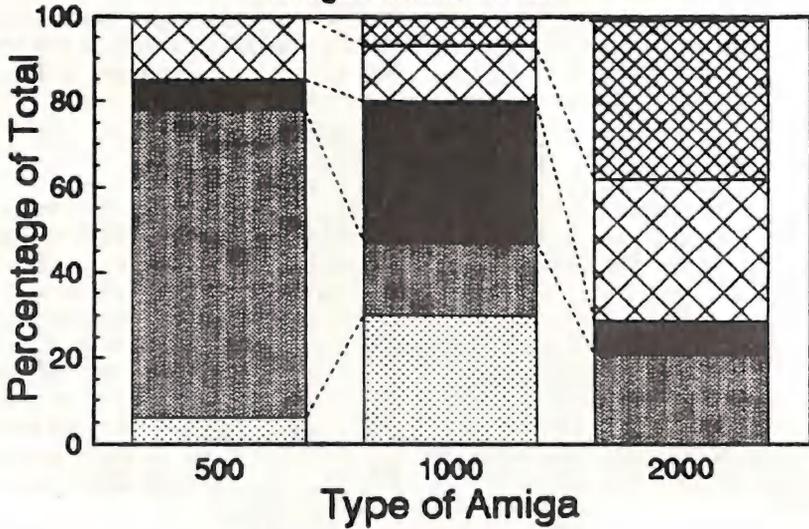
But 35% of the members who did some programming also tried using other languages, especially Logo and Pascal. You may have thought my list of languages on the form was comprehensive but quite a few more were written in, most commonly Fortran for which there are compilers available for both the C64 and Amiga.

BEST GAMES AND APPLICATIONS

Both the "best ever" game and application questions were frequently left blank which surprised me as I thought people who enjoyed using computers enough to join our group would also have strong opinions on what were the best programs.

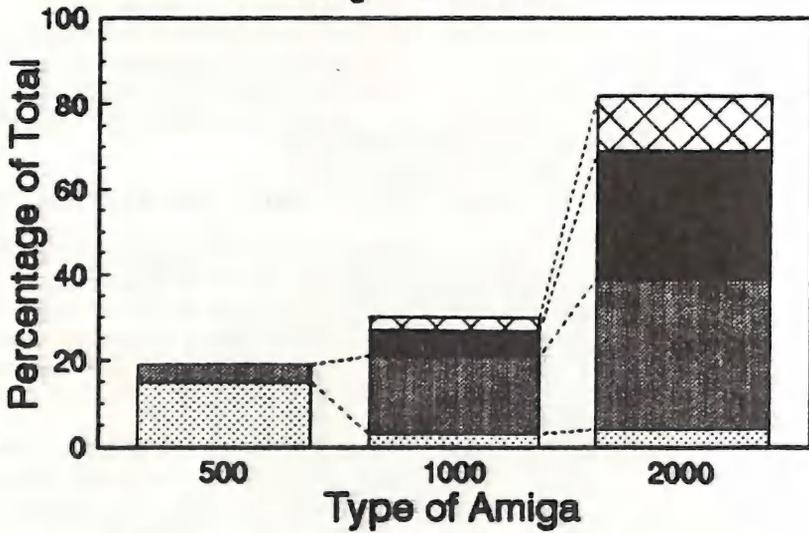
The most clear-cut area was the best Amiga application with 38 votes (37%) for Deluxe Paint III. The next favourites, at just 5% of the vote each, were Digiview and Diskmaster. Following were Superbase and Lattice C. Greg Perry can take heart that GPterm came next (3 votes

**1990 Membership Survey
Amiga RAM Installed**



0.5
 1
 2
 3
 >3 (MB)

Amiga Hard Disks



20 MB
 40 MB
 80 MB
 >80 MB

out of 104 responses and his own form left this question blank!)

C64/128 best application programs were Superbase (8 votes), GEOS (6), The Write Stuff (6 votes) and Superscript and Mini Office at 4 votes each. Honourable mentions to Sky Travel and Swiftcalc 128.

No one game stood out much for either computer. On the Amiga, Falcon took 6 votes with 4 votes each for Flight Simulator II, Shadow of the Beast and Sim City. Three votes were given for each of Interceptor, Shanghai and It Came From the Desert.

On the C64/128, Impossible Mission took 6 votes, Flight Simulator II had 4 votes then 11 games each received two votes and a whole host of others got one vote each. The two vote ones were Beachhead; Boulderdash; Carmen SanDiego; Defender of the Crown; Elite; Grand Prix; Gunship; Leaderboard; Pirates; Summer Games and Ultima.

FAVOURITE WORD PROCESSORS

Eleven different word processors were used by Amiga respondents, although I should drop at least one of these (Ed) because it doesn't fit the category! Word Perfect had 33% of the vote, Kind Words 20% and Textcraft 16%. Following were Transcript and Scribble at 8% each, Excellence and Prowrite at 4% each and 1-3 votes each for LPD Writer, Pen Pal and Notepad.

EasyScript (27%) and SuperScript (21%) dominated the C64/128 word processor scene although The Write Stuff came up strongly at 18%. This left less than 10 votes each for GEOS, Mini Office, Paperclip, Pocket Writer, Tasword and Write Now.

YEARS OF HOME COMPUTER OWNERSHIP

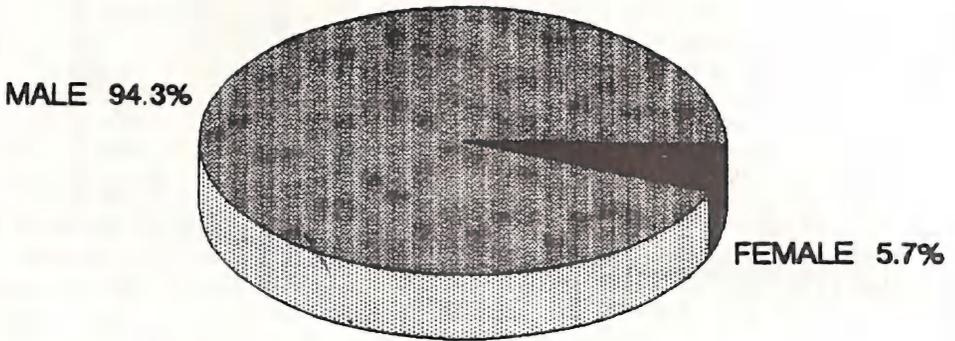
We have owned home computers for a long time, on average 5.4 years. I don't know how this relates to the average term of club membership, but I suspect that we usually only find out about the club a few years after struggling to make the most of our expensive toys on our own.

Some people have been in the game for a very long time with three people claiming 15 years and another 10 people in the 10-14 years range. Let's see now. In 1975, that's 15 years ago, the Altair 880 could be bought, but it is more likely that these early people had the then new KIM-1, which was a board with a 6502 and 1K RAM with a 6-character LED readout, but most appropriately was a Commodore product! (although I didn't put it on the list of Commodore computers and no one volunteered the fact that they still had one). I remember looking at one in an electronics shop and, although my desire to own one was high, my funds as a post-graduate uni student were low. Only 10.5% of respondents have owned a home computer for less than two years.

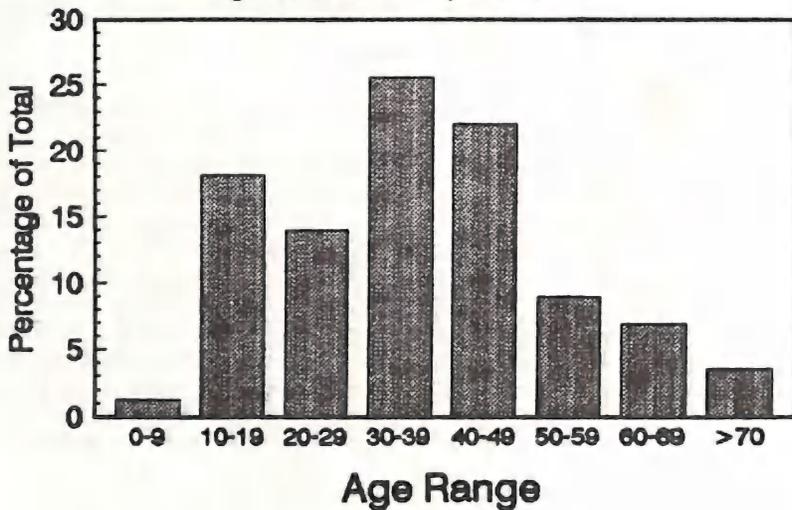
SEX

Only six out of the 286 returns skipped the optional "sex" question (well, not really skipped, most put in something like "yes, please!" which I guess makes them male but it is wise not to presume too much?). Just 16 of the 280 responses indicated that the main computer user of the household was female which comes in just under the 6% mark. I thought that a few more females would have been out there who do not want to, or can not, go to meetings. It seems not. I do not really understand why, but vive le difference!

CCUG (Old) Inc
1990 Membership Survey
SEX OF MAIN COMPUTER USER



CCUG (Old) Inc
1990 Membership Survey
Age of Main Computer User



AGE

I asked for the age of the main computer user of the household, not of the member. So a lot of kids gained a mention, even some under 10. Overall, 19.3% were under 20 years old and 10.4% over 60 years old. Almost half (47.5%) of the main computer users fell into the 20-year wide bracket from 30-50 years old. Home computing definitely seems to be a hobby for the "young-middle-aged".

TO COME

The answers to a few more interesting questions remain to be analysed and the next instalment will have to wait for the February 1991 Cursor. One particularly interesting area was the types of printers owned, and which ones were recommended. The variety of printers owned was enormous and opinions on the worth of some brands were made very clear. The strongest opinions seemed to be universal condemnation for the CBM 802 and high acclaim for the Star NX 1000 series. Full details next time.

BYTES

FOR SALE

SENDATA 300 baud modem for C-64/128 with G.P.Term, VT52 emulation, push-button telephone. In excellent condition. Price: \$125.

Contact Peter Gadsby on (067) 721360.

Epson LQ-850 High Speed (Draft:220 cps, LQ:73 cps) 24-Pin Printer. Has LQ-860 Upgrade ROM. Ideal for business use. New Price is \$900 - \$1000, Will sacrifice - \$500.

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STOLEN

One of our members, who lives in Oxley, was recently burgled. Amongst items stolen were an Amiga 500 with 1 Meg of memory (Serial No. 007485), a 1011 Disk Drive (Serial No. 005074), and an A590 Hard Drive (Serial Number unknown).

If any of these items are offered to you, advise your nearest police station.

8 BITS & PIECES

OCTOBER MEETING

Ron Rich's 'Hands on Introduction to Modems' in October worked well.

With two monitors and modems and the PD program *Term 64*, users experimented sending sequential files from one terminal to the other cross the room. When things were not working, they were able to remedy the deficiencies of the program by shouting instructions across the room. Using *Front 25*, they also sent a program file (but very slowly!).

For additional hands-on realism, the group accessed the Oracle (8464019), a BBS which displays the State Library of Queensland Library book catalogue.

Using Greg Perry's *GP-Term 64* (kindly supplied by its author, who also kindly lent a Pocket Modem 123 and provided assistance in setting the appropriate parameters), our users were able to discover 32 Commodore 64 books in the library - not a particularly large or judicious selection (no Raeto-West); and while there was a G.J. Perry, it was not the author of *Sound and Graphics for the 64*.

The most encouraging aspect of the demo was the fact that users got out of their chairs and came and put their fingers on the keyboards and their noses up to the screens.

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1. Errol Rayner and QBB
2. Doug Maclurkin trials his videobasic course

3. A look at Laser Basic, and TWS compu-libs Public Domain disk

Demo Notes:

Errol Rayner will show off his two Quick Brown Boxes (64k and 256K) for the 64/128. The idea behind the device is to add extra memory, programs which can be permanently stored as battery backed-up RAM in the Box, and a Memory Manager to control instant start-up and program selection.

Errol's Demo will outline the uses and limitations of the Box in detail. There are, as always, a few tiny flies in the ointment - such as 50 cycle boot program which doesn't like fast loaders, incompatibility with the syntax of the Cockroach Turbo-ROM etc.

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Unfortunately the C-64 native BASIC 2 does not enable the non-machine language user to effectively use the full range of its graphics and sound features. There are many extensions which attempt to remedy this defect, some Public Domain. The nicest replacement BASIC that I know of is Laser BASIC (Basic Lightning), which is an extended graphics BASIC which also comes with a Laser Compiler. Like all the good programs it has been round for years, but a brief demo will remind us of what it can do. If we get time we will also look at The Write Stuff Compulibs mail merge (A TWS Public Domain disk)

CATALOGUE IN TWS FORMAT

The indefatigable Fred Turnidge has adapted the 64/128 Public Domain Catalogue Disk to Write Stuff format so that it can be read, searched and printed with the BB File Reader (which is a PD utility designed specifically for such purposes). Doug Maclurkin is attempting to secure further improvements to formatting and linking, which should make it a useful additional option for the Catalogue.

MORE DEMONSTRATORS!

We need new people to volunteer for 64/128 demos if we are going to be able to offer fresh material through next year.

Volunteering behaviour is much more important than expertise: if people volunteer themselves for something there is generally a good chance that they will make themselves acquire the necessary knowledge. If you would like to see future demos on such topics as spread-sheets,

BASIC and machine language, Superbase, interfacing, small problem solving uses, graphics, animation, desk top publishing, word processing, games, utilities, exotic languages, simulations, or whatever, then now is the time to start preparing. The Club is information rich, with lots of resources, choices and challenges which are there to be taken up.

(While we are calling for new blood (or is it fresh blood?) for the Demos, I'll take the opportunity to advertise for a replacement for the 64/128 Coordinator. It's time to try an injection of new ideas and energy into the job.)

Leigh Winsor

FROM A USA NETWORK

The show in Valley Forge, PA, which was a World of Commodore show last year, proved somewhat disappointing in its 1990 incarnation. Some major exhibitors were noticeably absent, including Commodore itself.

Interestingly, there were a surprising number of 8-bit developers and sellers present. Anyone who thinks the C-64 and 128 are dead units should have witnessed this show. By the looks of things, 8-bit users need not have any worries finding new software or hardware for years to come. And lest ye wonder, yes, the 8-bit products were selling well.

There were hard drives and expansion systems at decent prices, and 128D's were everywhere.

(supplied by Denis Wright)

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 NO:
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	358 4442
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!

*The C.C.U.G.Q. Calendars are available now!
\$1.50 collected or \$3.00 by mail!*

ONE OF THE GOOD ONES: WEDGE-64

by Denis Wright

One of the first programs C-64 users are offered when they buy their computer is the little wedge that is supplied on tape or disk with the computer. It's a primitive program, and there are much better ones that can make life a lot easier for you, whether you are an experienced programmer or a beginner who's looking for a more friendly environment than the C-64 offers at startup. If you muck around with BASIC on the C-64 and don't use a wedge of any sort, let me ask you this:

Have you inserted lines in a program and found then you have to renumber the lines to make enough room to add more?

Have you ever wanted to list a directory in the middle of writing a program and have had to save, list the directory, and then reopen your program to do it?

Have you ever wanted to delete a range of lines in a program at one sweep, not blank them out one by one?

Have you ever lost a text string in a long program and had to search for ages to locate it?

Have you ever defined a variable and then found your program was bugged, but you couldn't remember all the variables you used?

Have you ever had two programs you want to merge but had to do it the slow way?

I could go on and on with these questions, but if you answered "Yes!" to any of them, then you need WEDGE-64, a great old program written in 1983 by Darcy Mason and Alan Wunsche (where are they now, I wonder?). The beauty of it is, it's very easy to learn and pretty well bug free, and it can make your life as an

amateur programmer much less of a misery by taking the drudgery out, while you keep the intuitive brilliance in.

What's it do? I've already given you an idea with the above questions. It solves all those problems and more - some you didn't even know you had!

What you do is to load it up into one of four memory locations. There's a little menu a friend of mine wrote for it that gives you the choice of where to place it, and kicks it off properly. Which one you use depends on what memory locations you're using in your program. If you don't know what I'm talking about, then just choose number 1 on the loader, and see what happens when you start fiddling with it. It will tell you when it's successfully loaded.

Test it by typing `>$`

It will list the directory of the current drive. If you had any program sitting listed in memory (not running), you would still have it there - the directory listing won't overwrite it. Voila! No more tedious `LOAD"$",8` - Just `>$`

If you use it to list the directory on screen, you can load any program on the disk just by scrolling back up to the program, and typing `>/` where the number of blocks is. No need to add the ,8 - just `>/` and it will load the program. Similarly, if you don't scroll back up the directory listing but just type `>/"p"` (you don't even have to close the inverted commas) it will load the first program starting with "p" on your disk. You get the idea.

Here are some of the commands and how you use them. You'll need these if you decide to use this program, and in telling

you about each, I can give you the best idea of what the program is capable of.

- >adjust displays all screen colours so you can adjust them.
- >auto prints out the next line number in a given increment. Consequently, if you want automatic numbering by 10s, just type >auto 10
Every time you want to write a new line, just press return and it will give you the next one in sequence.
- >cold resets computer. No magic about this one - works just like sys 64738, so isn't a genuine reset of all pointers. Still, it fakes it OK.
- >colour sets border, screen and cursor colours. The syntax is
>colour {border colour no.}.{background colour no.}.{cursor colour no}
0-255 is the range (e.g., >colour 1.2.0 gives you a white border, a red background, and a black cursor.)
- >del {begin line no.}-{end line no}
deletes that range of lines, (e.g., >del 200-250 deletes lines 200-250 inclusive).
- >ds gives you the disk status.
- >help provides a command summary
- >hex (\$) {number}
will give the decimal equivalent of a hex number and vice versa.
- >hunt this is one of its most useful functions. e.g., >HUNT

'REM' will turn up instances of BASIC command REM in a program in memory. BASIC commands (e.g., FOR, GOTO, etc) searched for should be enclosed by single inverted commas. You can specify the line range if you like.

>HUNT "BOY" will hunt for occurrences of the word "boy". Note that it's enclosed in double quotation marks. All strings intended as text are hunted this way.

>look the other terrifically useful command. Load a BASIC program, run it for a while, interrupt it (hit STOP) and then give the command >LOOK-Magic! Up come all the variables in your program, together with whatever was the last value for each variable. Makes debugging much easier.

>mem this one's a bit complicated. It displays the hex value of nominated memory locations.
>mem 500.1000 displays the contents of these locations.
>mem 0600- will start displaying memory from \$0600 onwards until stopped with the STOP key.

>merge {filename}
another great command. It doesn't only append, it merges any BASIC program on disk with what is in memory. If some of the lines in both programs have the same number, the one in memory is overwritten. I used to have various "building block" programs that I merged as required to do specific tasks. Sometimes I had a framework

program into which I merged variables filed separately. It made things simpler, clearer, and more satisfying.

n {filename}

sets a filename and places the cursor on it. >n displays the last filename used and puts the cursor on it. Very useful for repeated access to a particular file.

> off

turns the wedge off - needs the appropriate SYS command to re-enable.

> renum {start line no.}.{increment}

turns your untidy line numbering into harmonious bliss! (Example: > renum 20.5 starts line numbering at 20 and increments it by 5 to the end of your program. You can specify an ending point for renumbering too, so if you only want part renumbered, no problem.)

> save {filename}

saves to disk without ,8. This

isn't much of a saving, but if you use the syntax >save {filename}.1000.2001 it will save whatever is in memory between those locations - very useful for saving machine code.

> send {disk command}

shorthand for those tedious basic commands, e.g., send "uj" closes the error channel on the drive.

> start "filename"

works as a load address finder (dec and hex) for a given file. Saves all those calculations.

> \$

brings up a current disk directory. Great!

If you want a copy and can't wait till it's on a library disk, send a self-addressed blank, formatted disk to me with return postage on it and I'll get a copy to you virtually overnight. My address is

Dr D Wright
History Department
University of New England
ARMIDALE NSW 2351.

THE PUBLIC DOMAIN

by Leigh Winsor

Fred Turnidge asks for someone to clarify the meaning of the term "Public Domain" in connection with TWS file Reader. Although the term is frequently in use in situations where we all know what it means in practical use, it seems to be an exotic legal term which computer users have picked from American contexts. (There are substantial differences between American and Australian copyright - US copyright requires registration for 26 years and if not re-registered "falls into

the Public Domain". Australian works are copyright by virtue of being published. It would seem Australian law protects US copyright but not necessarily the reverse.)

Our Public Domain disks for example contain many programs which bear a copyright symbol, generally with a note specifying conditions for the use of the material. The retention of the author's copyright is in these cases a way of ensuring that the programs are able to be freely distributed in a community of interest without being appropriated and sold for

profit. Perhaps more accurate, to say that PD means for us "freely distributable" or in some cases "freely distributable but not for commercial gain". Understanding what claims mean does not require us to believe that they necessarily have much substance. Our PD library, for example, contains lots of such things such as file readers copied from the User's Guide syntax with the addition of some aspiring author's name and copyright symbol and an original contribution of a few typing errors.

I suspect there is a quite a bit of inaccurate and confused talk about, concerning copyright and public domain; but that is a matter best left for clarification to those with special legal knowledge.

Beyond the legalities of our term "Public Domain" there are fundamental philosophical issues of what can be captured and sold as a commodity, and in what cases the growth of knowledge is best facilitated by making information available as a public resource, or as private property for sale.

SPELLING CHECKING, ANYONE?

by Leigh Winsor

Spell checkers do not check usage, or punctuation, capitals, or an indefinite number of textual oddities. But an example of how useful spelling checkers can be, is provided by the TWS reference manual itself. As a manual, TWS is obviously "home made", yet simple, informative, and concise: but it was prepared before the advent of v2 Spelling checker. Doug Maclurkin alerted us to an amazingly long list of spelling errors, of which the following are a collection from the TWS 128 Manual:

accidently 5, 19
abbreviations 5, 23
additonal 13
occurrence 13, 20, 20, 20 (also spelled correctly p20), 21, 27
eatting 16
postition 17
visble invisible 20
releace 28
incompatble 30
inadvertant 34
preceed 36, 41, 42, 42
filp 39
subsitute 39

shoud 40
forth 41
ommits 41
develped 43
felxibility 44
arangment 47

Example of usage error: < if text where formatted as you typed.. > p30

A spelling checker fixes all of this, and there is a great improvement with the v2 Spell Checker booklet. "Preceed" no longer appears, but one "precedes to the next module", p8. To fix things like that you need a spelling checker with a human face. The conclusions I would draw from this is that spelling is not very important in reading for information; as in all perception, one fills in the gaps or completes the pattern.

The Write Stuff manual is certainly child's play after Japanese printer manuals. Much of our concern with spelling has to do with marking social distinctions of a peculiar kind. Mechanised spell checkers will no doubt throw a spanner in the works.

C-64 MACHINE LANGUAGE - PART 11

by Will Erdmann

In my last article for 1990 I am going to introduce two programs which scroll characters across the screen, but before I get that far I would like to say how much I have gained by writing these articles for the last ten months. It seems sharing what I know about machine language has begun to open up new concepts in programming I have not known before.

During the last year I have been able to write the particular program best suited to illustrate a specific aspect or idea that I thought you may find of some use. This has involved about a week or two to write the program and a further week to ten days to elaborate in an article. In this way I have been able to send the article off to Ralph a week and a half or a fortnight before the deadline.

This has worked out ok up to now because the programs were quite simple and easy for me to explain. As you have seen in the August and September issues these have become more complex. As the programs become greater in their complexity so too I will need more time to illustrate and explain how they work. It is because of this anticipated increase in my work load that I will only send articles every second month from now on. I hope this does not come as too much of a shock to any of you.

As the programs have become longer It has come to my attention that I will save a lot of unnecessary inconvenience if I type each line in the follow way :-

```
1000 LDA#$93 instead of :-
1000 A9 93 LDA#$93.
```

I hope this does not lead to any confusion.

The first program for this month moves or scrolls a total of 28 characters across a segment of the screen from right to left. To use the program you must first type M 0F50,0F68 press RETURN and change the hex dump to read the following:-

```
0F50 2A 2A 2A 07 0F 0F 04 20
0F58 0D 0F 12 0E 09 0E 07 20
0F60 01 15 13 14 12 01 0C 09
0F68 01 2A 2A 2A 00 00 00 00
```

Now copy the following program:-

```
1000 LDA #$93
1002 JSR $FFD2
1005 LDX #$00
1007 LDA $0F50,X
100A STA $05E5,X
100D INX
100E CPX #$1C
1010 BNE $1007
1012 JSR $FFE1
1015 BEQ $1006
1017 LDY #$A7
1019 LDX #$00
101B INX
101C BNE $101B
101E DEY
101F BNE $1019
1021 LDX #$00
1023 LDA $05E5,X
1026 PHA
1027 LDA $05E6,X
102A STA $05E5,X
102D INX
102E CPX #$1C
1030 BNE $1027
1032 PLA
1033 STA $0601
1036 JMP $1012
1039 BRK
```

To save program press RETURN until the cursor is on an empty line. Type S"LEFT/SCROLL",08,0F50,1040 and press RETURN.

To scroll in the opposite direction you will just need to make the following changes to the program you have just written. Look at the following and make the necessary changes.

```

1000 LDA #S93
1002 JSR $FFD2
1005 LDX #S00
1007 LDA $0F50,X
100A STA $05E8,X
100D INX
100E CPX #S16
1010 BNE $1007
1012 JSR $FFE1
1015 BEQ $1006
1017 LDY #SA7
1019 LDX #S00
101B INX
101C BNE $101B
101E DEY
101F BNE $1019
1021 LDX #S16
1023 LDA $05E8,X
1026 PHA
1027 LDA $05E7,X
102A STA $05E8,X
102D DEX
102E BNE $1027
1030 PLA
1031 STA $05E8
1034 JMP $1012
1037 BRK

```

MYSTERY PROGRAM

```

1000 JSR $1030
1003 LDA #S07
1005 STA $D401
1008 LDA #S10
100A STA $D40F
100D LDA #S15
100F STA $D404
1012 INC $C000
1015 BNE $1012
1017 DEC $C001
101A BNE $1012
101C DEC $C001
101F BNE $101C
1021 LDA #S14
1023 STA $D404
1026 JSR $1030
1029 JMP $1000
102C BRK
102D BRK
102E BRK
102F BRK
1030 LDX #S00
1032 LDA #S00
1034 STA $D400,X
1037 INX
1038 BNE $1034
103A LDA #S0F
103C STA $D418
103F LDA #S0C
1041 STA $D405
1044 LDA #S09
1046 STA $D406
1049 RTS
104A BRK

```

To save program type `S"RIGHTAUSTSCRL",08,0F50,1040` and press RETURN.

And now because I will not be writing anything until the March issue here is something you can all have fun with during the holidays. Before you start copying it I wonder if any of you can guess what it will do? All three programs this month introduce to you different concepts I have not had the time to explain yet. I will explain these programs and last month's program in your March issue next year.

If you have any programming suggestions or improvements that you would like me to make or perhaps you find something difficult to follow? Maybe you are a good graphics designer? Why not drop me a line by writing to:

Will Erdmann, Western Avenue,
 Montville QLD 4560
 or phone:
 (074) 429 226 (10am-8pm Mon - Fri, or
 10am-1pm & 4pm-7pm Sat - Sun)

TRACK & SECTOR EDITORS

by Fred Turnidge

LARGE SEQUENTIAL FILES

A genealogy program is an example of a specialised data base in which each person is allocated a unique ID or reference number and personal details are filled in on a screen format. From this information the program can construct alphabetical name indices, descendants charts and pedigree charts. As each item has to be retrieved from the personal sheets, this takes time and must be repeated each time a construction is required. As well as allowing output to the screen or printer, some programs also allow output to a disk file. This means that the information can be loaded into a word processor and a number of copies made as quickly as the printer can take the data; also editing to allow for additions, deletions and say layout can be made using straight typing, cut and paste or search and replace.

The only drawback is that the sequential files produced are often much longer than can be loaded into a word processor. Typically the maximum file size for the 64 is about 60 blocks while for the 128 it is about 230.

In the Oct '90 *Cursor* I presented one method for breaking up long files into smaller ones. Since then I have learnt a lot about direct disk commands and produced programs which will do part of the job but then decided to see what could be done with a disk track/sector editor. So here goes with an example. I know it looks complicated but stick with it. Remember that this is a worked example and in your case the track, sector and block information will differ.

There are many good T/S editors but not all do every step. Also some are written only in hex and have no ASCII 'translations', so by all means try them out but make sure you practise first on a disk, the contents of which are not important.

I have chosen *Disk Doctor* which is in public domain. It has a window which shows a translation of the byte under the cursor and is very user friendly. There are many versions about so you may have to scratch around to get a more recent one. Input to the T/S editors are only in the range of 0 to 255. There is an excellent article 'The Commodore Character Set' in *Compute* Nov 1983 pages 251, 254 and 258 which gives all the information needed to carry out hex/decimal conversions and understand what the characters are.

Where a particular key is to be pressed I have shown it in square brackets thus { } means press the key.

1. First make at least one backup of the disk containing your long file.
2. Load *Disk Doctor*
3. Insert your disk and call up 18/1 to view the directory: if you can't see the file it may be necessary to {J} to get the next directory sector. Let's say our file is called 'NAMEINDEX'.
4. Move the cursor right to the start of the file information. It will start with 81 and in a window you will see 'type:seq'. Move one step right and the starting track will be displayed say 19. Then right again for the sector say 12. So our file starts at track 19 sector 12. Keep moving to the right past the file name and eventually information will appear in the window giving 'file size: ', the number of blocks in the file say 425.

5. Suppose you are using TWS on a 128. The maximum block size is about 240 so let's break the file into 2, the first part having 210 blocks and the second 215. It is always a good idea to allow some spare blocks for additions.

6. Now move the cursor back to the beginning of the file entry and place it over the track ie 19. Now {J} and the screen will show the contents of the whole first block 19/12.

7. Make sure the cursor is at the start of the block {home} and then {C}. The screen will now show the contents of each block and at the bottom there is a counter. (Note in the case of *Disk Doctor* the number displayed at the bottom of the screen in this step is one less than the true block number ie when it stops at 209 you are looking at block 210.) When this counter reaches 209, {no scroll} to pause the screen. Note the track and sector, say 32/1, at the top of the screen and write it down. This is the last block of the new file. {no scroll} and repeat immediately to stop at the next block 210. Write down the track and sector for this block, say 32/7. This is the first block of the second file. Press any key to return to the menu.

8. Now it is necessary to change the last block of the first new file to show that it is the last block. {S} call up 32/1, {home} if the cursor is not at the start of the block. { } and type 0 for the new value {return} and then {R} to write this information back to the disk. Make sure any write protect is off because *Disk Doctor* does not appear to give any warning that write protect is on.

9. {S} call up 18/1 or whatever directory block the original file was on. It is a good idea to change the filename so move the cursor until it is over the N {T} and type NAMEINDEX1 {return} {R}.

10. The number of blocks must be changed so move the cursor right until the first position of 'file size' is reached { } and type 210 {return} {R}.

11. The next step is to create the entry

for the second file. Move the cursor right until no more file entries are found. This may be on 18/1, 18/4 or 18/7. Keep moving right until 'type.del' appears in the window. At this position { } type 81 {return} {R} to show it is a sequential file, then { } type 32 {return} { } type 7 {return} {R} to show the starting track and sector now {T} type NAMEINDEX2 {return} {R}. There are 16 spaces allowed for a filename and if the one you chose is less than that you must fill the remaining spaces with 'shifted spaces'. To do this { } type 160 {return} {R} and repeat. Move the cursor right until over the first 'file.size' { } type 215 {return} {R}.

12. Finally it is necessary to validate the disk so that the changes made in the block sizes are recorded in BAM.

13. If you now call up the directory you should see that there is a file called NAMEINDEX1 of 210 blocks and one called NAMEINDEX2 of 215 blocks.

The next step is to process the two files into the word processor. With TWS load it up and insert the disk you have been working on, {CTRL} {\$} to call up the directory {shift} hold it down and cursor up to NAMEINDEX1 {return}. When it loads {PET ASCII} then strip out extra returns. The file should now be ready for editing. In my case % is used to separate ID, surname, given name and married name so I do a search and replace to strip out % and replace it with a space.

Depending on your word processor, it may be necessary to modify the file name and type. For instance I would rename the files '-nameindex1' and '-nameindex2' to suit TWS. You can either do this in the word processor or with the T/S editor in steps 9 and 11 above.

GENERAL APPLICATIONS

Well we jumped in at the deep end with a particular job for the editor. I now

propose to take a general look and you will no doubt come to the conclusion that with a T/S editor installed, you can throw away most of your other disk utility programs.

Load the editor and insert a disk you want to work on.

Call up 18/0 which is the first sector of the directory track.

Byte 0,1 give the location of the next sector which is always 18/1.

Byte 2 is a character which is A or 65 and denotes that the disk is in CBM format.

Lock Disk by changing this to any other value, remember { } type 34 {return} {R}; once this is done the drive can read the disk but not write to it, so you can't save or delete. There is a way, other than re-formatting to change the byte back to 65 but it is beyond the scope of this article.

Byte 3 indicates whether the disk is single sided \$00 or double sided \$80.

Bytes 4 to 143 and 221 to 255 in 1571 mode are what is called BAM or block availability map. This tells the drive which blocks are available for saving new files to. If you scan it with *Disk Doctor* you will see in the window what each byte represents. although the bytes appear on the screen by they convey a lot of information.

Bytes 144 to 159 show the disk name which must not exceed 16 characters.

Change Disk Name by placing the cursor over the first byte {T} type new name {return} {R} then { } type 160 {return} {R} until the name is made up to 16 characters.

Bytes 160,161 are shifted spaces and nothing seems to happen if you change these.

Bytes 162,163 are the disk ID. While you can change this I see no purpose and no change is made to the complicated disk format use of the original ID so it is better to leave it alone.

There is not much else of interest here except that bytes 171 to 255 (171 to 220 in 1571 mode) are not used and you could type in your name and address for instance but don't go past 220 if in 1571.

Now {S} call up 18/1 which gives all the information about the first 8 files. Subsequent file information will be found on 18/4, 18/7 etc.

Each file entry is allocated 30 bytes.

Byte 0 gives information about the file type and its condition.

\$80 deleted	\$c0 deleted locked
\$81 sequential	\$c1 sequential locked
\$82 program	\$c2 program locked
\$83 usr	\$c3 usr locked
\$84 relative	\$c4 relative locked

A locked file is one which can be read but not written to and is indicated in the directory by < beside the file name.

Lock File byte 0 { } type c2 {return} {R} in the case of a program file. (Note 1571 drive cannot load a locked file.)

Unlock File 18/1 first byte { } type 82 {return} {R} or another value from above table to suit file type.

Scratch File byte 0 { } type 80 {return} {R}. **Unscratch File** if you have not loaded a new program you can usually recover the file by replacing the 80 with 81, 82 etc.

Bytes 1,2 show the track and sector of the first file block and a reason for changing this has been discussed above.

Bytes 3 to 18 contain the file name. **Change File Name** see 11. above.

Bytes 19 to 21 relate to relative files.

Bytes 22 to 25 are not used.

Bytes 26,27 show the track and sector of a replacement file i.e. save. (see below)

Bytes 28,29 show the number of blocks occupied by the file.

There are a number of tricks which can be done with the editor and you will find these in many books and magazines. These include looping directories - just point the last block back to the first, disk and file names longer than 16 characters

by using 'tokens' in the name, preventing listing etc. These can be good fun but if everyone reads this article then they too will know how to fix it.

CORRUPTED FILES

Have you ever worked long hours on a file and then when you reloaded it found part, usually at the end, missing? I have never discovered reasons for this happening but there is a feeling of real despair when it does. Of course you should always observe a shut-down procedure when you are finished with the computer. If a program asks if you are finished or asks you to press Q to quit, then do so. Some programs have to save part of the information you typed in or may want to validate. Don't forget to save the file! If you just turn everything off you may be surprised when you load up again.

When you do a save, the Commodore system normally saves the file and then scratches the original version by changing the pointers to a new location. Thus you must have free blocks available on the disk at least equal to the length of the file, otherwise you will find an * next to the file name or receive a disk full message. If there is a power cut or blip in the middle of the save, at least you still have the old version.

Now in the case of TWS when you save a file, the program deletes the first version and then saves the new one. I have never checked but in this case the original may be overwritten, while in the save/delete situation, your original is intact if you can only find where, provided you have not saved another file. When you ask for a file to be scratched, some programs appear to do more than just change the value of byte 0 and BAM. I can only assume this by the time taken which seems longer for a large file.

With that background in mind what can be done? If the file is a text file then it is easy to read but if a program file, unless you are very skilled it is probably better to load the backup- you do have a backup don't you?

Load the editor and then go to the start of the file and {C}. When you get to the end of what is left, note the track and sector, how many blocks there are and either print out the last block or note the last couple of sentences. According to the good books bytes 26,27 are supposed to indicate the track/sector of a replacement file but I have never found any information at this location. Proceed to search by sector and or track up and down from the last block. The drive usually jumps by 4 for instance 23/1 23/4 23/7 etc. Hopefully you will recognise some text near that in the last block. {home} on that sector and {C} writing down the progression of locations until it stops. By doing this a number of times you will end up with a string of locations which complete the file. Now you can go back to the last good block and alter byte 0,1 to point to the next track.

A decision must be made whether it is worth all this trouble. You will have to take into account the number of blocks missing and what kind of text it was. With straight copy typing you may still have the original but with creative writing one gets in a mood and the words flow making it very difficult to recapture them later. You will find great satisfaction when you successfully recover a file.

FURTHER READING:

Disk Drive User's Guide (remember that little book that came in the box with your drive!)

Starting with Disk Drives by Paul Blair (available from CCUGQ)

The Anatomy of the 1541 by English and Szczepanowski.

Here is some 'primitive' information which may be of use to beginners:

Each disk is laid out with a number of concentric circles. these are called tracks and are numbered 1 to 35. In the case of the 1541 only one side is used, the bottom as the disk lies in the drive. In the 1571 both sides are utilised, there are two heads one writing to the bottom of the disk and the other to the top, so there are 70 tracks, 36 to 70 on the second side.

The tracks are further subdivided into sectors or blocks and because the tracks get shorter as they approach the centre of the disk, there are less sectors.

For the 64:

track	sectors	total
1 to 17	21	357
18 to 24	19	133
19 to 30	18	108
31 to 35	17	85
		—
Total		683

In addition the 128 has:

track	sectors	total
36 to 52	21	357
53 to 59	19	133
60 to 65	18	108
66 to 70	17	85
		—
Total		1366

Some space is reserved, for instance all track 18 which is used for the directory, so that the net number of blocks available is less.

When you format a disk, there are 664 or 1328 blocks available.

When information is written to the disk, as a file, it is stored in bytes. In the case of text from a word processor, each character takes up one byte so the words 'disk drive' would consume 10 bytes, 1 for the space.

In the case of program files, commands such as 'print', 'gosub', 'input' are represented by 'tokens' each one taking up 1 byte. Each block can store 254 bytes of information or 254 characters.

The whole disk can store $664 \times 254 = 168656$ bytes or characters or 337312 on the 1571.

When you call up a directory, the screen will show the following-

Top line - 0 = drive 0, a carryover from the early Commodore 2 drive systems, disk name, disk id, 2a = Commodore DOS used.

rest of table - blocks used in file, filename, type of program.

last line - number of blocks free which is 664 less the sum of the blocks already used.

Your word processor can only handle files up to a certain number of blocks otherwise it will crash. You can get an idea of how big your file is getting by-

1. Saving it regularly, calling up the directory, which does not affect the file in memory and checking how many blocks you are up to or
2. There is probably a command which shows the number of words or bytes used or free, remember divide bytes by 254 to get the number of blocks.

If you resave a file, save, there must be free blocks at least equal to the size of the file because in most cases it is saved first, then the previous version is scratched.

LAZARUS FOR TWS

by Doreen Horne

It can happen when using any word processor. Imagine typing away, then suddenly having the cursor disappear and the screen lock up. Do you have to lose all the work you've done and start again? The answer is no, and a solution for users of *The Write Stuff* follows but first an outline of how this word processor stores your text.

The text is stored in screen codes in an area of memory starting at 31744 and ending at 53247 (21503 bytes). As each screen contains 23 lines and 40 columns, these 21503 bytes can accommodate text for some 23 continuous screens, ie. about 520 lines of 40 characters each.

What needs to be done depends on how much typing you've done. If less than 9216 bytes (40960 minus 31744) then the short basic program below should resurrect the text for you, but once you exceed those 9216 bytes the text is stored below BASIC ROM and then overflows into the RAM area beyond that. In this event you will need to use a machine language monitor to locate the text and save it to a new file to load back into *The Write Stuff*.

The snag is having to judge the length in bytes of your text. In the worst case if it possibly exceeds 17000 bytes it is going to be partly in the area beyond 49152, where the machine language monitor will have to operate. So dealing with the worst first, when the lock-up occurs **Do not switch off. Use run stop/restore or your Reset switch to get back to the default screen and your cursor.**

If your text is likely to exceed 17000 bytes, type in the basic program below to save to a new file on a spare disk the text

in memory between 49152 and 53247 - change line 10 accordingly. This file will need to be appended to the one below when you get back to *The Write Stuff*.

To continue, load a machine language monitor, which must use the area 49152 (\$C000) onwards (there are suitable ones in the public domain). When activated switch out BASIC ROM by changing the value at \$0001 from \$37 to \$36. Next save the whole area from \$7C00 to \$BFFF (31744 to 49151), or as much of it as you need, to a new file also on the spare disk. Don't forget to call it "-new name" (without that minus sign *The Write Stuff* won't load it).

To recover a short text file up to 9216 bytes (70 characters to a line and 55 lines to a page equals 3850 bytes per printed page) type in and run the following:-

```
5 OPEN#4,8,4,"-NAME,P,W":REM:don't
  forget the minus sign
7 PRINT#4,CHR$(0)CHR$(124)::REM:
  that semi-colon is important
10 FORX=31744TO?????:REM: any fi-
  gure up to 40960 or as above
12 PRINT#4,CHR$(PEEK(X))::NEXT:
  REM:mind that semi-colon too
14 CLOSE#4
```

Any over-estimation in the length of the text can be adjusted when the file is loaded back into *The Write Stuff* once again.

--oOo--

LITTLE BROWN BOXES

by Errol Rayner

More correctly known as the 'Quick Brown Box', this unit is a remarkably useful cartridge which expands the available memory of the C64 and C128, (with some limitations) and has a memory recall almost as long as Jumbo the elephant. It is now possible to *add up to 256k of memory to either machine*. Even better, whole programs (either basic or machine code) may be stored in the QBB, ready for instant use. And it does not lose its memory when switched off, unlike the Commodore Ram Expansion Unit.

PHYSICAL DESCRIPTION

Each QBB comes as a cartridge which plugs into the cartridge port of your 8 bit machine. It may also be fitted to an expansion board, which allows additional QBB's, the Commodore REU, and some other cartridges, to be available at the same time (in the case of the REU), or at the touch of a switch (in the case of some cartridges). It looks much like a conventional cartridge (the 64k unit is 9 cm long, while the 256k module is 12 cm long). QBB's are fitted with a reset button, and there is a slide switch to select either 64 or 128 mode.

MEMORY

The QBB is available with five memory capacities, eg. 16k, 32k, 64k, 128k, and 256k. There is also a special 64k QBB (QBB-B) which may be used with an existing 64k QBB, to obtain 128k of additional, continuous memory. Internally, the QBB is divided into 16k banks of battery backed CMOS memory, and because it is RAM, the user is able to add, remove and refresh programs at will. Programs are also protected against accidental

erasure, though it is a simple matter to erase or modify them. One big feature of the QBB is the fact that its memory is non-volatile, that is, programs installed in the QBB are not lost when the computer is switched off. This is achieved by using a lithium battery and programs may be stored in the QBB for up to ten years. Another plus is the speed at which the QBB works, as programs stored in the QBB come on-line almost the moment they are called.

WOULD YOU BELIEVE ONE MEG?

Well, not really. However, if your C64 (or 128) was fitted with a switchable expansion board it is conceivable that four 256k QBB's would provide one meg of memory, though I would have to point out that this would not be continuous memory, but simply manually switchable between any QBB modules fitted to the board. To clarify that, the maximum memory available at any one time is limited to the maximum storage in any one cartridge (max. 256k), plus the normal memory available in your computer (with the C64, 39k), less a small operating overhead (about 8k). With the exception of the QBB-B mentioned earlier, no two QBB's may be switched on at the same time.

REU COMPATIBILITY

The QBB is compatible with Commodore REU modules and both may be switched on at the same time, though programs designed to run in the REU may not work in the QBB.

COST OF QBB MODULES:

(in \$US) 64k QBB = \$US 89.00
128k QBB = \$US149.00
256k QBB = \$US199.00

Several utility disks are also available (and well worth obtaining). The cost varies between six and ten dollars. Readers will note that the prices are in \$US. I strongly recommend that orders are sent direct to the USA as the local price for a 64k QBB was \$190.00 (\$US154.00) when I last enquired. How about that for inflation? It really is quite easy to bring items over from the USA, as long as you remember that they use 120V 60Hz power! (don't order electric motors, power supplies etc.). I sent my order direct to the manufacturer after they had promptly replied to a list of queries. All I had to do was to specify the items required and supply my Visa Card number (and expiry date). My order came back in less than three weeks, with a generous discount and a freight charge lower than quoted. The order consisted of two QBB's (64k & 256k), a four slot extender board, and several disks. The total cost to me in Australian dollars was \$383.00 (the exchange rate was .81).

MORE ON THE LITTLE BOX WITH THE BIG MEMORY

Simply put, connecting a QBB is a little like having another disk drive, though the QBB is much faster than any drive. Whatever programs are in the QBB are instantly available, the moment the computer is switched on, which is just like a normal cartridge, but with the advantage that you may alter part or all of the contents at any time. Just like a disk drive, programs are stored in the QBB and when required are loaded into the computer's main memory to run. They do not run in the QBB itself, which means that programs longer than the main

memory can not be used, though this may be overcome by using the program chaining techniques of the QBB. In other words, a program of 200k, broken up into separate modules, could be stored in the QBB and run, provided that no one module used more memory than that of your computer. The QBB also has an Autostart feature, which means that any program installed in the QBB, desired colours, your name etc., can be selected to appear every time you press reset (I use Autostart to preset my colours and configure my Function keys). The QBB will accept Basic, machine code and CP/M (with a special disk), although you can not load seq. files or 'protected' programs. There are even ways around the seq. file restriction - on the QBB utility disk is a very good, though simple, data base program (which is in Basic, so it can be altered) using DATA statements. Now before you pooh-pooh that, let me say that I normally use REL. files for my data and I was quite impressed with the speed of this program. One feature which may appeal to club members is the ability of QBB and The Write Stuff to work together (it needs a special QBB/TWS loader which I did not order). If a 256k QBB is used, TWS dictionary may also be added to the system, making an extremely fast and powerful word processor. When programs are stored in the QBB, there is none of this waiting for disks to load - the program is there at the touch of a button (to load any program from the QBB you just press *ID; ID being a two character identifier). A single keystroke allows you to see the QBB menu at any time and items may be added, deleted or changed as required. Any changes to programs stored in the QBB require the use of the QBB Manager (normally the first program put into the QBB). It is also possible to change the total contents of the QBB for another previously saved Box, using a special Loader program (strangely enough, a complete QBB box is stored as a seq. file

on disk). Another feature is the RAM DISK, which allows you to store a program that you have been working on directly to the QBB, for work at a later date. And, as you would expect, this temp. program stays in the QBB even though the power has been turned off. I have found this feature to be quite handy, as you don't have to find a disk to save your temp. program to, and then forget which disk it was stored on, etc. It is also possible to store and run multi-stage programs in and from the QBB, particularly if the loader is in Basic. Multi-load programs which are written completely in machine code do present problems however as it may not be possible to alter instructions directing the program to look on the disk drive for the next stage (instead of the QBB). It is even possible to PARTITION the QBB into several sections.

CP/M

If CP/M is your cup of tea, you will love the QBB! It treats QBB just like another disk drive, but so much faster. A restriction with CP/M is that the maximum QBB size is 64k (the QDisk, which installs and loads CP/M, has not been written for the larger QBB's.) Unfortunately you still have to use your CP/M boot disk.

PROBLEMS

Yes, there are a few. Some machine code programs are hard to install in the QBB, as you sometimes need to know start and sys addresses, as well as which Banks to use, however trial and error often get you out of trouble, if you lack knowledge of machine code (as in my case). Protected programs can not be used, though some, such as Word Writer, may be partly installed (the WW disk is still needed) to speed things up considerably (WW normally takes 1-2 min. to load on my C128,

but with QBB assisting this is reduced to 1-2 sec.). Sequential files can not be used, though there are ways around this, to some extent. The really bad news is that the Cockroach Rom will not work while the QBB is active (they both use the same identifier- *). Another problem, though not serious, is that if you wish to load whole QBB's, the normal QBB loader should not be used (it requires a 60 Hz system). The Brown Box people provide a universal loader to be used instead of the normal one (when the supply is 50 Hz), which is no problem on a C128, but a little slow on a C64.

IN CONCLUSION

An excellent product, particularly helpful to Basic and machine code programmers and users of The Write Stuff (and Word Writer). The manual is comprehensive and user friendly (as is the QBB). The manufacturer is helpful and prompt. Also available is a utility disk, an improved version of the standard QBB Manager, and QDisk, a utility for CP/M (all of which I recommend) and an extender board, if needed. Also available but untested, is a disk which allows installation of TWS into the QBB, and which allows the user to 'save as the article is being typed'.

If you want to find out more about the Quick Brown Box, or want to order one or more, then the address to write to is:

BROWN BOXES, INC.
26 CONCORD ROAD, BEDFORD
MA 01730 USA

-ooOoo-

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AMIGA MONITOR

As editor I like to keep my finger on the pulse of the latest developments in the Commodore world. Lately this has not been easy, as my information supply sources have either dried up or have become prohibitively expensive. I'm referring here to airmail supplies of overseas magazines; prices of which are really over the top. A possible source of news and information is the BBS network, but the current nodes of both national and international networks are full of useless messages of the 'my computer is better than yours' type, or 'when is Commodore coming out with the Amiga 4000 with a 10 million colour palette, running at 100 MHz?'. Hopefully, with the installation of our new Amiga-based BBS, we will be able to access some more useful networks (but read on).

In the mean time I've been able to pick up some useful tid-bits of information from the German *Amiga Magazin's* October issue:

AMIGA SOFTWARE

In an interview with Helmut Jost, Chief Executive of Commodore in Germany, *Amiga Magazin* asked him "when can we expect some high end (business) software for the Amiga?". Jost replied: "Negotiations with several major software houses are in progress. The majority of these negotiations have been completed, so that in the near future - within a year that is - several software packages will reach the market place. Amongst others there will be several products from Lotus and Microsoft."

Although rumours about an Amiga release of *Lotus 1-2-3* and Microsoft's *Word* and *Excel* have been circulating for some time, this is the first time that I've seen these rumours confirmed by a senior Commodore Executive.

When talking about the forthcoming release of AmigaDOS V.2.0, he said that Commodore (in Germany only???) had no intention of supplying V.2.0 on the A500.

REVIEWS

In the same magazine there appeared a review of the Citizen 124D printer (24 pin), which was very favourable, with the exception of the printed output of graphics, which showed signs of 'banding'. If you are contemplating this printer and you intend to print a lot of graphics, you'd better look elsewhere.

Also reviewed was the Paragon BBS Software Version 2.07 - the new BBS software (Oz distributor is our member, Brendan Pratt), which will be used on our Bulletin Board. Generally speaking the review was very favourable, although the lack of a full screen editor was regretted. They felt though, that newer versions (Version 2.10 is currently in beta testing stage) will be even better.

A NICE GESTURE

Recently I did a review of PageStream V.1.8 for Megadisc No.18 (available from our Amiga Sales desk). Some days after this issue appeared I received in the mail a disk from Western Australia from John

Varcoe, another PageStream user. The disk contained an upgrade (V. 1.8.2), which John had obtained directly from Soft Logik in the USA, and which again killed off some bugs in the program. In a further letter John even told me who to contact at Soft Logik for more information. That sort of gesture restores your faith in the human race. Many thanks, John!

DENIS WRIGHT



Dr Denis Wright

Long time readers of our C64/128 section know that Denis Wright has been one of our most consistent contributors over the years. Although his C-64 is not used as often as it used to be (he has defected to MS-DOS and Macs), Denis still contributes to this newsletter with words of wisdom. As he is now well and truly 'into modems' at New England University, he

has access to quite a few of the uni networks. Now, it's a well known fact that quite a few of these University types have Amigas and they like to let their fellow students know what they are doing, so Denis couldn't help noticing all those Amiga messages.

Reasoned Denis: "there is that hapless newsletter editor of ours, who is always on the lookout for news, so how about me downloading those Amiga files, and post them on to him?"

Now, you will have to admit that this is a very sound bit of reasoning, so I wrote to him: "Thank you Denis, great idea, yes, yes, yes, gimme..."

Anyway here are a few things I picked up via Denis Wright:

BYTE MAGAZINE

In a message to a complainant who felt that Byte's coverage of the Amiga 3000 was pretty mean, one of their technical editors replied in great detail why their coverage only ran to three pages (the 3000 submitted for review was a pre-release version, which was still pretty flakey). However the important new was that Byte will change their editorial policy in 1991, and we can expect substantial better coverage of the Amiga. And about time too!

A-3000UX

At the AUUG '90 (Australian UNIX User Group) conference and exhibition, Commodore displayed a A3000UX. This was an A3000 with 8Mb of memory, 100Mb harddisk, UNIX System V Release

4, TCP/IP, Ethernet, TIGA 8 bit display card, and the X Windowing System. Also on display was a standard 150Mb tape drive hanging off the SCSI port. The demonstrator was Johann George from the Technology Section.

As per new Commodore policy, Johann was reticent about new hardware and software, and about how development in the UNIX area will affect Amiga OS. He was also unwilling to comment on any new chipset or graphic programming interface with regards to Amiga OS. However, he did say that Commodore was doing work on improving the graphic display ability of the Amiga. Johann was also quite willing to speak about UNIX development work, and mentioned some of the effort in cramming Release 4 into 60 - 70 Mb of disk space.

To add a human dimension to the legendary exploits of Dave Haynie, Johann mentioned that Dave hardly sleeps and frequently bunks under his favorite computer.

The A3000UX had the OpenLook interface on the X Windowing System running on a 19 inch NEC 4D monitor driven by the Tiga 1000 x 800 (?) graphic board. Disk access speed was poor because of a hard disk crash previously. Graphic display consisted on xterm (VT100 X terminal emulator), ico (X's bouncing ball demo), clock, and a graphical version of a 15 square puzzle. The updating speed the windows was passable, faster than a Sun 3/60 but slower than a SparcStation. A cute feature is the ability to have several login consoles, reminiscent of a terminal switching feature on DECNet.

AmigaVision was on display, and I had a brief demonstration of how simple it was to create a short presentation.

It wasn't the best demonstration of a computer I had seen, but to be fair, none of the vendors at the exhibition were showing anything spectacular. Most of them had X running with ico and xterm. It was so boring that I was tempted to ask the demonstrators of the company that supplied the monitors! IBM had its R6000 workstation, DEC with DECstations, Sun with Sparcs, Oh, The endless monotony of workstation after workstation!

Your intrepid reporter, Kam Hung Soh (supplied by Denis Wright)

OCTOBER MEETING

Greg Perry opened the meeting by proposing that the Group honour our former Treasurer, John Van Staveren, by offering him a life membership for services rendered to the C.C.U.G.Q. The proposal was seconded by the undersigned and adopted unanimously by the members present.

After a short word of thanks by John Van Staveren, Greg tabled a letter, purportedly written by him and Mike Williams, which made it appear, as if our Group condones software piracy. As this letter has been circulated amongst certain retailers and wholesalers, Greg has taken the necessary legal action to stop the further spread of this malicious document.

Phil Guerney then took over the microphone to briefly discuss the survey form which was included some months ago in Cursor. As we promised a year's

free membership to a lucky member who had completed the survey form, John Mahoney was asked to draw a name out of the hat, and the winner of the draw was Rosemary Withers of Eagleby. Congratulations, Rosemary!

We were pleased to welcome John Mahoney of United Computers in Bundamba who put the newly released Amiga 3000 through its paces. After a short intro John handed the mike over to Greg Perry who discussed quite a few features of AmigaDOS 2.0, which is one half of the A3000's operating system (the other half being 1.3, both being loaded in from disk - this will change in the near future, once Kickstart V.2.0 is finally released in ROM format). It became quite clear that most of us will have to go back to school to learn the many new features which V. 2.0 offers. On the other hand, the general consensus was that the new look and feel really means that Amy is growing up.

Our thanks go to Royce Jones of United Computers, Bundamba, for 'lending' us John Mahoney and the A3000.

DECEMBER MEETING

For our last meeting of the year we hope to present a demo of *Interactive Video* on the Amiga, using Touch Screens, Laser Discs, etc. (Tuesday 4th December)

Our guides for this demonstration will be Greg Perry and Peter Wharton. See you there!

FURTHER PRICE REDUCTIONS

The mouse-switch kit (announced in last month's Cursor) has been reduced to

\$15.00, as we were able to negotiate a better price for a bulk buy.

Amiga 3,5" Public Domain Disks by Mail have now been reduced to \$4.00 per disk. Postage & Packaging are held at \$2.00 for up to 5 disks.

Of course, as most of you will know, you can copy Public Domain disks free of charge on your own disks at our bi-monthly P.D. Workshop.

GP-TERM VERSION 4.5

GP Software have released Version 4.5 of GP Term. Already one of Australia's best Amiga Communication Packages, the new version boasts a host of new and improved features (yes, it will work under AmigaDOS 2.0).

For upgrade details contact Greg Perry on (07) 366 3295.

SUPERBASE

If you are wondering why Paul Blair's latest contribution to the Superbase saga is printed in a different format and type-style than the rest of this newsletter, wonder no more. Paul supplied his latest article in printed format, rather than on disk, and the task of re-typing it all, was too much to contemplate, hence the different format. Many thanks, Paul!

BLACK & WHITE VIDEO CAMERAS

If you want to digitise with DigiView, it's recommended that you buy a black & white camera. DigiView recommend the Panasonic WV 1410, but an alternative is the Hitachi HV 720 camera.

I purchased a WV 1410 camera without lens for \$375 from: GEC Video Systems P.O. Box 62, Herston 4029. The contact person is Ray Pearce. You can ring him on (07) 252 3801.

The Hitachi camera is available from AWA Electronic Services in West End. They quoted me \$432 for the camera body only.

Lenses for these cameras start at about \$100, although in some cases you may be able to use (wide angle) lenses from a 35 mm SLR camera by means of an adapter ring.

.info

Is the new name for the old INFO magazine, which is now an Amiga only magazine. Although the Sept. issue had only some 80 odd pages, it does now include some contributions from former Transactor editors, Nick Sullivan and Chris Zamara, as well as our old friend Jim Butterfield; and in general has a nice mix of articles. If the magazine manages to attract more advertisers and hence grow in size, it may well become THE Amiga magazine originating from the States.

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

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 4

by Ralph De Vries

In this issue we take a closer look at the group's laser printer, the HP Laserjet III. If you are really interested in low-cost laser printers, try to get hold of the July '90 issue of *Byte* magazine which has a very good overview of the majority of low cost laser printers currently available on the US market. You will be pleased to know that, out of 18 HP compatible lasers, their final recommendation is the Laserjet III (it's also featured on the front cover). However there's one major difference in the definition of low-cost between the USA and Australia. In Oz the range of HP products can by no stretch of the imagination be described as low-cost! In the USA you can buy the Laserjet III for about US\$2000, but in Australia you can expect to pay roughly double that amount.

How does a laser printer work? The following description I found in the aforementioned *Byte* article, so here goes:

"The laser printer engine emulates photo copier technology. But where copiers use a bright light, laser printers use a low-power, solid-state laser.

A multisided, rotating mirror reflects the laser beam to project an image onto an electrically charged, photosensitive drum (also called an optical photo coupler, or OPC). As it sweeps across the rotating drum, the laser beam rapidly flickers on and off to print the individual dots of the 300-dot-per-inch image. The charged drum attracts the toner to the areas that have been painted by the light beam.

As a page of paper passes through the printer, it also receives an electrical charge. When the paper rolls against the

drum, the toner image is transferred to the paper. The paper then passes through the fuser assembly, and it's there that heat and pressure melt the toner to make a permanent image on the paper. The paper then passes through the output rollers and lands in the output tray."

The major difference between brands of laser printers is the 'engine'. The two most popular engines are the Canon engine and the TEC engine. Other manufacturers of laser engines include Sharp and Ricoh. The Canon engine is used in the Canon, HP, Brother, NEC and Star laser printers. The main difference is that the Canon engine combines the Optical Photo Coupler and the Toner cartridge in one unit (and this means that it is more expensive). The TEC engine requires a separate toner cartridge after every 1500 pages (messy to replace) and an Optical Photo Coupler after every 10000 pages. The Canon cartridge lasts for about 3500 - 4000 pages. It can be refilled with toner, but this refilling operation is rather risky, as the OPC is not replaced; a maximum of three refills are possible, but as the OPC gradually deteriorates, it's probably safer to replace the whole unit. In the *Byte* tests, it was found that the output of all the laser printers was good, with the exception of the Ricoh engine, which looked decidedly more 'furry'.

Physically the Canon based laser printers are pretty huge. Our Laserjet III weighs in at 25 kilograms! It sits on its own table and does not get moved (that's the main reason for not showing it off at our Main Meetings). In front is the paper tray which holds 200 sheets of A4 paper; it also has a slot for manual feeding of paper. To use different sizes of paper or envelopes, you need to purchase different trays (you also have to program the

printer for different sizes, or toner goes into places where it does not belong). A good quality photo copy paper is the ideal variety of paper to use; about \$6.50 for 500 sheets, which is probably slightly cheaper than tractor fed computer paper. Problems can arise with preprinted letter heads, as in some cases the heat produced by the laser's fusion process can melt the ink on your letter head! The same goes for the glue on certain types of envelopes and labels. Laser printers are also ideal for the production of overhead transparencies, but again it's important to purchase the right type of transparency material, or you could end up with a heap a burnt plastic.

Laser printers come with a series of built in fonts, and this is where it gets tricky, as the manufacturers have a sneaky way of increasing the numbers of fonts, by designating **BOLD**, *ITALICS* and **BOLD ITALICS** varieties of the same font (as well as portrait and landscape orientation) as separate fonts! Most lower cost laser printers have between 2 to 6 resident fonts or (a better name) type faces. The Laserjet III comes with 4 typefaces - they are the Line Printer (16.66 pitch only) and Courier (10 and 12 pitch, or 12 and 10 points in DTP parlance, in either medium, bold and italic), as well as the CG Times and Universal Fonts, which can be used in medium, bold, italic and bold italic. However the latter two are scalable fonts, and these can be set up to print in any size between 1 point and 999.75 point! All laser printers are also capable of printing vertically (portrait) or horizontally (landscape) on the page. The landscape feature is handy for printing out spread sheets with a small font size.

To get a wider variety of fonts you can go several ways. All laser printers have a cartridge slot to take font cartridges. Font cartridges come in all sizes (and prices); some give you just one or two extra type

faces, and others offer many more. Expect to fork out quite a few dollars for these. The second, and cheaper, way is to buy the so called 'Soft Fonts', which are type faces supplied on disk (mostly MS-DOS format, but there are some Amiga font disks around as well). The disadvantage of these is that they eat up the printer's memory in large gulps; no problem if you have lots of memory, but decidedly not recommended if your laser printer comes with the standard 512K or 1 Meg of memory. Printer RAM brings us to the third option, which is to use a desktop publishing package which generates bit-mapped fonts, such as I'm using here. However to generate bit-mapped fonts really means that we are printing graphics, and graphics are memory hungry, so your standard laser memory of 512K or 1 Megabyte is just not enough to print graphics or, in practical terms, for the use a DTP package. Hence, our Laserjet is equipped with a total of 3 Megabytes of memory, which appears to be quite satisfactory.

In the IBM world, HP compatible laser printers are quite popular, and quite a few word processing packages fully support these printers. Although, at this point in time, only a few HP compatible lasers have the scalable fonts built in (the Canon LBP8 is another one), several MS-DOS word processors support these scalable fonts. On the Amiga there are none at present - a sad state of affairs. This means that, to get the best out of the Laserjet, we have to use desktop publishing packages. But DTP software is not renowned for speed. To dash off a quick letter, one normally would use a word processor, but at this point in time, I can only use the printer's Courier font, as my word processor does not want to know about the scalable fonts. This is not a reflection on the printer, but purely one on the current state of Amiga software.

HP compatible laser printers use Hewlett Packard's, Printer Control Language (PCL). To use this language, printer manufacturers don't have to pay HP a license fee, unlike Adobe who charges quite substantial fees for their PostScript implementation. The Laserjet III has the latest version of this language, PCL 5. This new version of this language not only supports the scaling of fonts, but also has the capability of negative, angled, shadowed and mirrored font printing. Letter and objects can also be filled with patterns or grey scales. In addition PCL 5 can access the HP GL2 plotter language for faster printing of vector graphics.

All these capabilities make this language virtually as powerful as PostScript (at a fraction of the cost), and would be the ideal platform for the development of high class Amiga software to give us first rate flexible printing capabilities. What we really need are the equivalent of the WordPerfect 5.1 or MicroSoft's Word 5.0 for Amy. These word processors support the Tagged Font Metrics Tables (TFM) which come with each Compugraphic scalable font and which hold all the relevant information about each font, such as the width tables, height tables, kerning tables, symbol sets etc. and how they vary with size.

One more aspect where the Laserjet III shines, is in the so called Resolution Enhancement feature, which reduces the effect of the 'jaggies'. By adjusting the size and position of dots in relation to other dots, this gives the impression of smoother circles and angles. Although not very obvious, the difference can be seen when the printed page is magnified, as this feature can also be turned off. Needless to say, it's normally turned on.

Having used the Laserjet now for four months, I can safely say that I'm impressed and frustrated. Impressed with the

printer's capabilities and frustrated with the lack of good software to tap all of the printer's features. However, I'm reasonably confident that the software situation may well change within the next twelve months or so.

Given the right software (such as the DTP packages and word processors which support the Compugraphic scalable fonts), the present combination is capable of giving results which come very close to those achieved by a PostScript laser printer. Potentially the results could be totally indistinguishable from PostScript, at roughly half the price. I sincerely hope that this potential will soon be realised.

—

This issue of our newsletter has been set up with PageStream Version 2.0, which I have just received. It's too early to give a full assessment of this package, but here are some first impressions:

Printed output from the scalable fonts is superb; *it's even readable in 6 Point size!*
I have seen the output on a 9 pin printer, and this is also better than ever.

Printing speeds have been improved by about 50% - this leaves Professional Page way back at the starting gate.

Screen refresh rate is considerably slower than the earlier version - not good.

Program size, as well as the Compugraphic fonts are huge, which means that this program really needs a minimum of 2 Megabytes to run.

Compugraphic Fonts from Pro Page will work in this version of PageStream.

The index has been expanded - hurrray!

printer for different sizes, or toner goes into places where it does not belong). A good quality photo copy paper is the ideal variety of paper to use; about \$6.50 for 500 sheets, which is probably slightly cheaper than tractor fed computer paper. Problems can arise with preprinted letter heads, as in some cases the heat produced by the laser's fusion process can melt the ink on your letter head! The same goes for the glue on certain types of envelopes and labels. Laser printers are also ideal for the production of overhead transparencies, but again it's important to purchase the right type of transparency material, or you could end up with a heap of burnt plastic.

Laser printers come with a series of built in fonts, and this is where it gets tricky, as the manufacturers have a sneaky way of increasing the numbers of fonts, by designating **BOLD**, *ITALICS* and **BOLD ITALICS** varieties of the same font (as well as portrait and landscape orientation) as separate fonts! Most lower cost laser printers have between 2 to 6 resident fonts or (a better name) type faces. The Laserjet III comes with 4 typefaces - they are the Line Printer (16.66 pitch only) and Courier (10 and 12 pitch, or 12 and 10 points in DTP parlance, in either medium, bold and italic), as well as the CG Times and Universal Fonts, which can be used in medium, bold, italic and bold italic. However the latter two are scalable fonts, and these can be set up to print in any size between 1 point and 999.75 point! All laser printers are also capable of printing vertically (portrait) or horizontally (landscape) on the page. The landscape feature is handy for printing out spread sheets with a small font size.

To get a wider variety of fonts you can go several ways. All laser printers have a cartridge slot to take font cartridges. Font cartridges come in all sizes (and prices); some give you just one or two extra type

faces, and others offer many more. Expect to fork out quite a few dollars for these. The second, and cheaper, way is to buy the so called 'Soft Fonts', which are type faces supplied on disk (mostly MS-DOS format, but there are some Amiga font disks around as well). The disadvantage of these is that they eat up the printer's memory in large gulps; no problem if you have lots of memory, but decidedly not recommended if your laser printer comes with the standard 512K or 1 Meg of memory. Printer RAM brings us to the third option, which is to use a desktop publishing package which generates bit-mapped fonts, such as I'm using here. However to generate bit-mapped fonts really means that we are printing graphics, and graphics are memory hungry, so your standard laser memory of 512K or 1 Megabyte is just not enough to print graphics or, in practical terms, for the use a DTP package. Hence, our Laserjet is equipped with a total of 3 Megabytes of memory, which appears to be quite satisfactory.

In the IBM world, HP compatible laser printers are quite popular, and quite a few word processing packages fully support these printers. Although, at this point in time, only a few HP compatible lasers have the scalable fonts built in (the Canon LBP8 is another one), several MS-DOS word processors support these scalable fonts. On the Amiga there are none at present - a sad state of affairs. This means that, to get the best out of the Laserjet, we have to use desktop publishing packages. But DTP software is not renowned for speed. To dash off a quick letter, one normally would use a word processor, but at this point in time, I can only use the printer's Courier font, as my word processor does not want to know about the scalable fonts. This is not a reflection on the printer, but purely one on the current state of Amiga software.

HP compatible laser printers use Hewlett Packard's, Printer Control Language (PCL). To use this language, printer manufacturers don't have to pay HP a license fee, unlike Adobe who charges quite substantial fees for their PostScript implementation. The Laserjet III has the latest version of this language, PCL 5. This new version of this language not only supports the scaling of fonts, but also has the capability of negative, angled, shadowed and mirrored font printing. Letter and objects can also be filled with patterns or grey scales. In addition PCL 5 can access the HP GL2 plotter language for faster printing of vector graphics.

All these capabilities make this language virtually as powerful as PostScript (at a fraction of the cost), and would be the ideal platform for the development of high class Amiga software to give us first rate flexible printing capabilities. What we really need are the equivalent of the WordPerfect 5.1 or MicroSoft's Word 5.0 for Amy. These word processors support the Tagged Font Metrics Tables (TFM) which come with each Compugraphic scalable font and which hold all the relevant information about each font, such as the width tables, height tables, kerning tables, symbol sets etc. and how they vary with size.

One more aspect where the Laserjet III shines, is in the so called Resolution Enhancement feature, which reduces the effect of the 'jaggies'. By adjusting the size and position of dots in relation to other dots, this gives the impression of smoother circles and angles. Although not very obvious, the difference can be seen when the printed page is magnified, as this feature can also be turned off. Needless to say, it's normally turned on.

Having used the Laserjet now for four months, I can safely say that I'm impressed and frustrated. Impressed with the

printer's capabilities and frustrated with the lack of good software to tap all of the printer's features. However, I'm reasonably confident that the software situation may well change within the next twelve months or so.

Given the right software (such as the DTP packages and word processors which support the Compugraphic scalable fonts), the present combination is capable of giving results which come very close to those achieved by a PostScript laser printer. Potentially the results could be totally indistinguishable from PostScript, at roughly half the price. I sincerely hope that this potential will soon be realised.

—

This issue of our newsletter has been set up with PageStream Version 2.0, which I have just received. It's too early to give a full assessment of this package, but here are some first impressions:

Printed output from the scalable fonts is superb; it's even readable in 6 Point size! I have seen the output on a 9 pin printer, and this is also better than ever.

Printing speeds have been improved by about 50% - this leaves Professional Page way back at the starting gate.

Screen refresh rate is considerably slower than the earlier version - not good.

Program size, as well as the Compugraphic fonts are huge, which means that this program really needs a minimum of 2 Megabytes to run.

Compugraphic Fonts from Pro Page will work in this version of PageStream.

The index has been expanded - hurray!

REVIEW: VIDI-RGB

by Paul O'Brien

Vidi-RGB is an electronic filter which takes a colour video signal and separates it into the three primary colours (Red, Green and Blue), allowing each to be digitised thus replacing the conventional filter sets normally required for Digi-View and the Rombo Frame Grabber.

The Rombo Vidi-RGB is a black box 90mm wide, 38mm high and 110mm long with two adjusters, a power socket and a video input on the rear of the case. The front panel has a male D-25 pin, a video out cord and a cord with a female D-9 pin attached.

I have been using the colour splitter with Digi-View 4 and was able to achieve quite good results after only a short period to become familiar with the difficulties of digitising in colour. I had previously only digitised in black & white, mainly due to the lengthy procedures required to produce colour pictures with colour wheels or filter sets.

Digitising with the Vidi-RGB is quite simple; just hook-up a colour camera to the input. The input is of a high resistance to allow it to be also connected to a monitor and, if this feature is not required, a load resistor should be placed across the input. The video out cord should be plugged into your digitiser.

The colour can be selected in two ways, depending on the digitiser and software being used. When using the Rombo frame grabber and their Vidi-Chrome software you can manually toggle the output between colour (red, green, blue) and black and white by pressing the button on top of the Vidi-RGB unit.

Automatic colour selection (via the D-9 plugged into the second joystick port) is only possible with the Vidi-Chrome software which can be purchased separately.

The colour being sent out is indicated by an L.E.D. next to the button.

With Digi-View only the manual selector can be used (until someone works out how to make Vidi-RGB emulate a Digi-Droid) which is not a real problem, as owning an electronic colour splitter speeds up the whole process considerably.

The results obtained with this combination are at least as good as pictures done with photo quality filters. The limiting factor seeming to be the picture or object to be digitised. The D-25 has all decoded video outputs available as well as numerous other signals present (maybe a chroma-keyer add-on for genlocks in the future?).

Well worth the \$249 R.R.P. if you are into digitising but are annoyed by the constant changing of filters required by the 'conventional' method.

-ooOoo-

THE SUPER* PAGE

by Paul Blair

When the Amiga versions of SUPERBASE (SB) were released, there was considerable criticism of the manuals that came in the packages. With more and more use, that criticism has been reinforced - simply, they are at times downright confusing. Hopefully, the forthcoming upgrades will include a rewrite of the documentation, and not just another supplement that has to be cross-referenced with existing material.

The worst sections of the manuals cover the REPORT functions - scattered across 3 books and a READ_ME, in bits and as a section or two. This is a great pity, because the designers of SB have provided a very powerful facility (and easy to use, if only they had told us so!) After all, what use is a very powerful database if it takes the user a fortnight to plod through the manuals before producing effective reports?

The manuals provided with SB4-Windows (for the IBM) have obviously recognised that people have difficulty understanding REPORT, and include a better explanation.

So, at the risk of maybe doing it worse than the original Amiga manuals, let me try to show you what SB can do.

The Report Function

The SB report functions are designed in such a way that the user can select information from a database, and present it to best possible effect. The principal feature is based on the "group" concept, where data with common attributes may be gathered together in a report for the utmost clarity of output.

The REPORT function allows you to

1. SELECT whatever information you need from your file, in any order, either en masse or with some special considerations in mind, e.g., data before or after a certain date
2. GROUP your information together - e.g., birthdays in March, bills due in November, with maybe a different set of headings
3. Sub-group information together - e.g., birthdays in March by day of week
4. Tally up or count information from the groups or sub-groups at the end of each group (AFTER GROUP)
5. Decide what headings and footings you want on your pages

6. Set up a front page to your report (BEFORE REPORT are the keywords)

7. Produce tallies etc for the entire report (AFTER REPORT)

Doing It

There are two methods of producing reports in SB Pro. The first is via the Database Management Language (or SB program), where you have to think out what you want, and write the program. You do need to have some experience with SB's DML for this, and a great deal of patience to wade through the manuals.

The second is through the report writer in the Forms Editor, which in fact writes a SB program for you, using the information you supply. While you still have to think out what you want to produce, the Forms Editor makes achievement easy by allowing you to lay out the fields in graphical form on the screen, so you can visualize what you are designing. This is much easier than laying out lines and columns on a sheet of paper and working out your own "@" (like PRINT AT, if you are not familiar with the command) statements. There seems to be some confusion about use of the report writer, which I will come back to later.

Lets have a go at writing a DML program to produce a report. Suppose we have a file where we keep track of business expenses. The sort of things we would set up in the file could include details of when we paid who for what, and how much. To make life easier come tax time, we want to group expenditure together based on some pattern, such as all out phone bills in one group, mailing, gas, electricity, wages, and so on. In order to do this, we add to our file design a two character field (name it "code"). In this field we enter "10" for phone bills, "11" for mailing fees, "12" for gas... and so on. All "10" records can be processed as a group. So can the "11" family, and so on. This is only my suggestion, you may have other ideas.

These are our "groups". If we want to know how much our phone costs, we have only to GROUP those records where code = "10" and add up the cost fields. Then we also want to know our overall expenses by adding together all our GROUPS. OK so far?

Select

Step 1 is where we select the information we want to print out. The first design decision is to identify which fields we want, so we make up a line like this:

```
@1;xdate:@14;payee:@40;service:@70;amt_paid
```

So we have chosen 4 fields - xdate, payee, service and amt_paid. This ties in with our previous decision a couple of paras above. The "@" numbers define where on the screen or printer the columns are to be placed.

The next line is our "filter" - where we set up a way of being selective about the records we want. If this is to be our phone bill report, we make a line like:

where code = "10"

Now to put that into SBese. We need to wrap some keywords around our practical lines, so they look like this (I call routines like these "action blocks"):

```
SELECT @1;xdate:@14;payee:@40;service:@70;amt_paid
  WHERE code = "10"
END SELECT
```

We could also insert another line into the action block to define the order we want - data in ascending or descending dates, for example. In that case we would pop in before the last line:

```
ORDER xdate ASCENDING
```

That action group will select only our phone bills. If we want to get ALL groups, bundled together as groups and one group after another, we would do this:

```
SELECT @..... (as above)
  ORDER code ASCENDING
END SELECT
```

No WHERE this time. We want all groups without applying any filter.

Groups

Definition: a group is any batch of data sharing some common feature - it may be a date (as in an invoice program) or our previous example of phone bills, where "code" is used to define a family of data.

Now lets do the GROUPS and work out what we want before and after them. Let's start with BEFORE GROUP - the things that we want to happen before any group, or when we change from one group to the next.

We think we want a column heading and a line across the page. So our lines become:

```
? @1;"DATE";@14;"PAID TO";@40;"SERVICE RECEIVED";@70;"AMOUNT"
? @1;"=====
```

That last line is meant to be enough equal signs to draw a line across 77 columns. I usually set up `xx$ = REPLICATE ("=",77)` to overcome repetition, then my line becomes:

```
? @1;xx$
```

SB isn't a mind reader. We need to tell it which field you want to define the group - in our case, CODE. And if we want to total up some numbers, we need to flag this so that SB can add them up for us on the fly. In our case, "code" is the group field, and we want to tally up amt_paid.

Again, we need some SBese to make an action block:

```
GROUP code, amt_paid
  BEFORE GROUP code
  ? @1;"DATE";@14;"PAID TO";@40;"SERVICE RECEIVED";@70;"AMOUNT"
  ? @1;xx$
END GROUP
```

Now, after the group we need a total. See if you can nut this out:

```
AFTER GROUP code
  ? @1;xx$
  ? @40;"SUB-TOTAL";@70; SUM amt_paid
  ? @1;xx$
END GROUP
```

The two END GROUPs are a bit confusing, aren't they.

SUM is one of the report features available. There are others - COUNT, MIN, MAX, MEAN, VAR and SD. See the Manual Supplement for further details. You can also SUMMARIZE, which leaves out the intermediate details, and gives you the bottom line only.

That takes care of all the GROUP work we need. There are some extra things you can do if you like, and I will mention them after we work our way through this example.

I will diverge for a moment to look at all the semi-colons in the programs lines we have written. Away back in the early days of computers, it was necessary to put a ";" between things, because Basic wasn't too flash at working them out. Later versions could actually discern variable names from numerals et al, so we (er, some of us) got lazy and left them out of our programs.

Well, SB strikes back.. It prefers (but does not always demand) semi-colons. So, after wasting hours trying to work out when you do and don't need them, I have derived a Golden Rule. It says - "put them in".

Headings and Footings

Now we can turn to the total document - the global view! We can set up a heading and/or footing for each page, to tell the reader what the page contains, and/or the time and date it was printed. It needs another action block, so think about this:

```
HEADING
  ? @30 "MANGLES AND BANGLES PTY LTD"
  ? @30;"Summary of Expenses Paid"
  ? @1;xx$
END HEADING
```

The 3 "?" lines will now print at the head of each page, giving it a tidy (and useful) appearance.

Footing requires a slightly different syntax. In it, we need to specify how many lines are to be used, so we could say:

```
FOOTING 2 (notice the 2? You must tell "footing" how many lines are needed)
? xx$
? "Page ";PG
END FOOTING
```

Reports

We have now done most of the "core" of the report. All that remains is to put it all into a report framework - what we want before and after the main information.

All reports require a one line starter:

```
REPORT
```

You really have to search the manuals to find out about the BEFORE and AFTER REPORT functions (see page 7-7 of Vol 2!). They act like the BEFORE and AFTER GROUP commands, except that they operate on the total report, not just one or some groups. Having learned that, if we want something before the body of the report, or want to flag that we want to add up some fields we do this:

```
BEFORE REPORT amt_paid
```

What do we want? Perhaps a front cover? OK, set up your design along the lines of a HEADING, and do an EJECT to page on to the body of the report.

The AFTER REPORT section is probably more useful - totals, counts, summaries and so on can be made, along the lines of the AFTER GROUP, but this time, relating to the entire report.

Just as with the GROUP commands, you need to add field names if you want to count, sum, summarize or total across the entire report.

A few refinements now. Except for the REPORT and SELECT lines, any other lines can be added or left out as your need dictate. If you don't want GROUPS, don't have them, and you can leave out the BEFORE and AFTER GROUP set-ups. The same thing goes for BEFORE and AFTER REPORT.

You can group in levels. You might want your phone bills (level 1) grouped by months (level 2). In that case you set up two GROUP lines, one for each level.

When setting up GROUPS, SB will sort things for you. If you do have an index on the field, things seem to run a tad faster. But an index is not essential.

You can GOSUB. Suppose you have a whole bunch of reports to do, and they will all have a common main heading. OK, no problems. We put the GOSUB into the action block like this:

```
HEADING
  GOSUB TopPage
END HEADING
```

and then set up our common heading, so:

```
TopPage:
..... define here the lines you want
RETURN
```

By the way, don't forget that labels *are* case-sensitive!

I commented earlier on about some confusion with the report writer. At the start of Chapter 7, Volume 2, the SB manual indicates that you can only access the report menu when you are working on an existing ordinary form. So some users have given up, thinking that they can't use the function without designing another screen form.

The confusion is this - the manual is not talking about a screen form. A report is a form too, as they point out. So if you want to use the report writer, you either have to use an existing form, or create a new one. After that, you are off and running.

Well, there you have it. REPORT (with QUERY) is the practical end of SB. It enables you to draw together in moments highly functional chronicle from your database. Data, per se, is of no value if it has no form. Maybe this note will help you to achieve better results for your efforts.

LATE EXTRA

As I write this, beta test copies of the Amiga upgrade are being circulated. Allowing a few months for users to dig in and test the proposed product, that would put the upgrade onto the market around Christmas time, give or take a month. I understand that, in the event, the Amiga version will be as nearly identical as possible to the IBM version. As a (sometimes confused) user of both products, you can imagine my relief. Now all we want is a way of transferring stuff back and forth....

There is one simple way that I know of. If you want to IMPORT/EXPORT material between Amiga and IBM versions of SB, use the dBASE 3 option. Why? Well, if you do this, you don't have to set up a new file on the IMPORTing computer. The dB3 EXPORT function writes all the file set-up data into the EXPORTed file, and the IMPORTing process recreates an identical file for you.

The new Precision Software agent in Australia is:

```
Info Magic Australia Pty Ltd
5 Skyline Place
Frenchs Forest NSW 2086
Fax 02 975 1350
```

(c) 1990 Paul Blair

MY AMIGA SAGA

by Stephen Hack

This is the story of a newcomer to the world of the home computer. The story starts some years ago with the purchase of a second-hand Sinclair ZX 81 computer.

The ZX 81 was, as most of you will know, a very small 8 bit computer with 1k of ram, (expandable to a massive 16K), and a membrane keyboard, it used a standard cassette recorder to hold programs and this in itself caused many errors. Even with all the disadvantage caused by its small size, small memory and cassette recorder it served as a good introduction to this fascinating field of ours. My particular machine seemed very prone to re-setting itself, normally after typing in a long program and just before saving it. This fault eventually became worse until total failure occurred. At this point the ZX 81 was put on the shelf and forgotten, thoughts turned to a Commodore 64.

Time passed and there always seemed to be other things to spend money on (like food !!!) and it was not until November last year, with my son at school, that it was decided to move with the times and get into "Computers".

Having kept up with the development of computers I decided that the C-64 was perhaps a little dated, (my apologies to the C 64 users), and that the Amiga was the way to go, so stuffing my overflowing cheque book in my pocket I went looking for the best bargain I could find. With Christmas fast approaching there were plenty of discounts around and a good deal was struck with a large, local department store. Sometime later with the cheque book considerably lighter I left with an AMIGA 500 starter pack and 1084 monitor.

Once home the fun really began, unpacking was like Christmas! Things went together and all was well. The workbench was inserted and several hours were spent "playing", up till now no thought was given to backing up the workbench and the clock was accidentally DELETED; still never mind.

So off to the store to buy a packet of disks. Once home the instructions regarding copying were read and executed, the appropriate requesters were answered and the master disk inserted, the drive whirred and whirred and whirred but nothing happened! Eventually I ejected the disk and tried again, this time however I immediately got a read/write error when the disk was inserted (obviously didn't like being ejected whilst running).

So back to the store. here we copied their master workbench and I returned home; trying again the exact same thing happened with the drive, but on ejecting the disk the read/write error didn't occur. (Actually the workbench copier still doesn't work - any suggestions?). Back to the store where a commercial copier was purchased, which still works faultlessly.

Having copied all the disks which came with the starter pack I discovered that all the games had some kind of a fault, some minor, others major, most of which gave read/write errors. By now I decided there was a problem and so I rang Commodore in Sydney. They were most helpful and decided that it would be best if I returned all the disks to them. This was done and the waiting began, Christmas interfered about now but after two weeks I rang again. They couldn't find any record of my disks but said they would immediately dispatch to me a replacement set.

Several more days wait before they arrived. Back to the study and many late nights were enjoyed. I thought that at last I would get down to some serious computing but I was a little premature, as late one night the left mouse button decided to fail. Back to the shop; they suggested I take it to the local service agent, this was done the next day and the following day I was able to pick it up. To date I haven't had any further problems. Back to the study. About this time I was still getting the occasional "GURU" and read/write error so up to the service agents who checked it over. They couldn't find anything wrong but since then I haven't had a single Read/write error (they must have done something right).

Back to the story. I was rapidly coming to the conclusion that swapping disks wasn't a great idea so I cast my eyes over the range of available extension drives, until I settled on the 1010 drive, on special at another major store. Well as any one with an Amiga knows, the addition of a second drive moves the machine into a completely different class altogether. Copying becomes a breeze and saving work is easy.

About now it became apparent that some kind of printer was necessary to enable hard copy to be printed. This is where I made a major error. In deciding that colour would be nice, I purchased a Commodore MCS 820 (Okimate 20) from yet another major department store. I should have realised that worse was to come when I opened the "sealed package" to discover no printer cable. Returning to the store, a cable was provided and the printer connected to the computer. I must admit that I was happy with the printer at this point, the output was OK on thermal "fax" paper and my son enjoyed the colour pictures it produced. My new found joy was short lived however, when after about one month an unprinted line ap-

peared on the paper. Being a good operator I read the instruction manual which said to clean the head, this did not however have any effect. So off to the service agents again who tested the printer and informed me that the head had failed and I would have to buy one (\$90.00), as they only have a one week warranty. Needless to say I was not impressed so I wrote to Commodore who informed me they are "Consumable" (A \$90.00 consumable in a \$300.00 printer??). However under the circumstances they would provide me with a new one free of charge - this arrived and was fitted and things returned to normal.

Well much midnight oil was burnt as I came to understand the workings of a modern computer, but once again it became obvious that I should dig into the rear pocket, as I explained to my wife "I just had to have more memory". So off to the local dealers to purchase a 512K ram expansion from Power Peripherals. This was fitted, the clock set and no problems with this to date.

About this time I purchased some Public domain disks which included a number of anti virus disks. Imagine my surprise when on trying the first anti virus program it flashed on the screen that I had the *Lamer Exterminator* virus on the disk I had tried. Trying all my disks revealed nearly all of them had the virus. Out instructions and replace all the boot blocks on the affected disks, another problem solved. Phew !!!!!, this computing can be brain teasing stuff.

Well as you can see things are looking good. I've now got an AMIGA, extra memory, two drives and a printer. Just when I'm getting to grips with using it all when, you guessed it, the !#\$%&! printer head has failed again, at nine months. This time I'm stuck, refusing to spend the money to buy another head, so I will have to save

my pennies until I can afford one of those fancy dot matrix printers.

The saga ends with me joining the club in October and thoroughly enjoying the meeting especially the Amiga 3000 demo. Well we can all dream, can't we?

At times of reflection I often wonder if others have had as much trouble or am I just lucky?

A POSTSCRIPT

Having written this article I decided it would be worth writing to Commodore

one last time, to express my thoughts on the MCS 820. Well, it has proved to be the correct decision as Commodore have given me a good trade in for it on a Star NX-1000CL colour printer.

I would like to thank both the staff of Commodore in Sydney for all their assistance, and the technicians at Parcom at Whites Hill for the expert repairs and answers to my endless questions.

-ooOoo-

AMIGA PUBLIC DOMAIN LIBRARY

Fish Disk # 371

Fractals - A Fractal generator that generates many different types of fractals based on the iteration of complex-valued formulas. The program can generate the Mandelbrot and Julia sets, as well as the sets of more unusual formulas such as $\lambda \cos(Z)$ and Newton-R. Version 2.1, includes source and some sample creations. Author: Ronnie Johansson.

LockDevice - A package to protect filing devices from being accidentally formatted. Can be used with any filing device and file system. Version 1.0, includes source. Author: Olaf Barthel

Port2 - Sample C program showing how to control a mouse connected to the second mouse/joystick port. Executable creates a second mouse pointer that is controlled by a mouse plugged into port 2. Version 1.0, includes source. Author: Olaf Barthel

PPLib - A shared, runtime library to aid in the development of programs that need to decrunch files crunched with PowerPacker. Version 34.1 (release 1.1), binary only. Author: Nico Francols

PPMore - A more replacement program that reads normal ascii text files as well as files crunched with PowerPacker. The crunched files can result in considerable disk space savings. V 1.7, update to disk 334. Author: Nico Francols

PPShow - A show program for normal IFF ILBM files or ILBM files crunched with PowerPacker. The decrunching is done automatically as the file is read. Version 1.2, update to version on disk number 334, binary only. Author: Nico Francols

PPType - A print program that will print normal ascii files or files crunched with PowerPacker. Several nice features such as page headers and numbers, adjustable tab sizes, page info taken from preferences and more. Version 1.1, binary only. Author: Nico Francols

Fish Disk # 372

Magnetic Pages - A software package that allows you to create and display a disk-based magazine. The magazine produced is of a similar format to that of a traditional paper magazine. You can combine text and graphics on a single page, branch to different sections by clicking on icons and play sound and music. Features a full intuition driven interface. Version 1.0, shareware, binary only. Author: Mark Gladding.

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. Greatly enhanced version of initial release on disk 363. Version 2.8, binary only. Author: Christian Fries

Remapicon - A utility to remap icons to be exchanged between Kickstart 2.0 and Kickstart 1.2/1.3 Workbench environments. The icon images are remapped to reflect the different colour palette used by the Workbench releases. Version 1.0, includes source. Author: Olaf Barthel

Fish Disk # 373

Multiplot - An intuitive data plotting program featuring flexible input options, arbitrary text addition,

automatic scaling, zoom and slide with clipping at boundaries, a range of output file formats and publication quality printed output. Workbench printers are supported via transparent use of the PLT device. This is version XLNc, an update to the version on disk 333. Includes many new features, a nicer user interface, and low memory options allowing it to be used in half megabyte machines. Includes source. Authors: Alan Baxter, Tim Mooney, Rich Champeaux, Jim Miller

Fish Disk # 374

IPDevice - Pipes for Power People. A pipe-like DOS device that passes data immediately rather than waiting until a buffer is full. It also allows multiple writers to a single channel, maintained connections, and piped connections to a Shell. Binary only. Author: Pete Goodeve

Mat - A comprehensive String-Search/Pattern-Match Utility for both text files and directories. A powerful command line syntax allows automatic file editing, construction of command scripts, and so on. Example Shell scripts are included. Binary only (a much enhanced version of the original on Disk #102). Author: Pete Goodeve.

PopArt - Intuition based image data generator and animator. Includes source. Author: Philip

SoftSpan - BBS program. Intuitive, command-line based menu system with message bases, uploads, downloads, file credit system, extensive help system, etc. Version 1.1, an update to disk 343, includes bug fixes and some enhancements. Binary only. Author: Mark Wolfskehl

Fish Disk # 375

BI - A brush to C code image converter. This is version 1.3, an update to version 1.0 on disk number 184. Contains bug fixes and support for AmigaBasic. Binary only. Author: Terry Gintz

CardMaker - A programmer's aid for creating card image data that can be used in any card game that uses the standard 52 card deck. This is version 2.1, an update to version 1.0 on disk number 184. Contains bug fixes and support for AmigaBasic. Binary only. Author: Terry Gintz

ParM - Parameterable Menu. ParM allows you to build menus to run programs in either the CLI or Workbench environment. ParM can have its own little window, or attach menus to the CLI window you are running it from. Version 1.1, includes source. Author: Sylvain Rougier, Pierre Carrette

TextPlus - A word processor for the Amiga, with both German and English versions. TextPlus enables you to write letters, books, programs etc. in a very easy and comfortable way. Version 2.2, an update to version 2.0 on disk number 359. Now includes full source. Author: Martin Steppler

Fish Disk # 376

AztecArp - An Arp package fixed to work with the 5.0 release of the Aztec 'C' compiler. The original

Manx support files were incomplete, contained bugs, and had the wrong linker format. This is an update to the version on disk number 353, fixing a couple of bugs and adding some new useful features. Includes source. Author: Olaf Barthel

Matrix - Solves systems of linear equations. Includes both PAL and NTSC versions. Version 1.00, includes source. Author: Rudiger Dreier

Plotter - A two-dimensional mathematical function plotting program. Includes both PAL and NTSC versions. Version 3.71, Author: Rudiger Dreier

ToolLibrary - A shared library for the Amiga. Contains some mathematical (evaluation of strings) and Intuition (menus, requester) functions. Version 2.06. Author: Rudiger Dreier.

Fish Disk # 377

AnsiRead2 - Bridges the gap between IBM and Amiga ANSI by displaying IBM ANSI text and graphic animations (as usually captured from bulletin boards) in their full intended colors and motion. Includes several samples. Version 0.2, binary only, shareware. Author: Glenn Kauffman

Formatter - A disk formatting program with an intuition interface which supports write verification, disk installation, fast formatting and automatic start. Formats a 3.5 disk in a multitasking environment in about 1:36 minutes (with verify turned on). Version 2.4a, includes source. Author: Olaf Barthel

Icon2C - A simple tool to turn any Workbench icon file into 'C' sourcecode, similar to the program of the same name by Carolyn Schepner on disk number 56. This version has an arp interface and offers support for Kickstart 2.0 icons. Version 1.2. Includes source. Author: Olaf Barthel

IE - An icon editor which can create and modify icons up to 640x200 pixels in size (also dual render). It can set stack size, position of icon (also free-floating), default tool, 10 tool types and control over opened window. It can also generate the C source code behind the icon for program inclusion. Now reads/writes IFF files and handles 4 or 8 colour icons. Version 2.0, update to version on disk number 342, source available from author. Author: Peter Klem

IntuitionEd - Intuition based utility that creates C source code for screen, window, border and text structures. IntuitionEd can also write the code for several functions required for the opening and closing of these structures. The code can then be compiled by either Manx and Lattice. Shareware donation to the author will receive an enhanced version capable of writing gadget structures as well. Version 1.0, binary only, several samples included. Author: Niels Thorwirth

PowerLOGO - An experimental programming language based on Lisp and LOGO. It is versatile, highly interactive, organizes programs as collections of procedures, and includes lists as first-class data objects. Version 1.00, binary only. Author: Gary Teachout

Fish Disk # 378

Adapt - CLI utility that converts special German characters in files imported from MS-DOS systems into the right Amiga codes. Can easily be changed to work with other languages. Version 2.2, includes source. Author: Lars Eggerf

ANSIMaster - ANSI editor that provides the full IBM font set and color capability. Very useful for the design of custom ANSI screens/graphics for telecommunications. Version 1.0, binary only. Authors: James Davis and Joe Rattz, Jr.

DevRen - A DEvIce RENamer, originally designed to allow the renaming of an external drive on an A2000 (always recognized as DF2:) to be DF1: However, works with any mounted device such as RAD: RAM: RAW: CON: etc, as long as the original and renamed version have the same character length. Version 1.5, includes source. Author: Stefan Rosewig

JoyLib - Both a linktime version and a shared library of Joystick routines featuring a technique which proves to be extremely fast on 68010 or higher processors, and still faster than most of the other routines on standard processors. Includes source for library in Assembler and the demonstration program in C. Author: Oliver Wagner

MachIII - A mouse accelerator program that also includes hotkeys, the features of sun mouse, click-to-front, popcli, title bar clock with a bbs online charge accumulator, Arexx support and much more. This is version 3.0, an update to version 2.6 on disk 254. Binary only. Author: Brian Moats and Polyglot software

MuchMore - Another program like more, less, pg, etc. This one uses its own screen to show the text using a slow scroll. Includes built-in help, commands to search for text, and commands to print the text. Works with PAL or NTSC, in normal or overscan modes. Supports 4 color text in bold, italic, underlined, or inverse fonts. Version 2.7, this is an update to version 2.5 from disk 253. Includes source in Oberon and assembly code. Author: Fridtjof Siebert

MuchMorePoPa - Extended version of MuchMore V2.7. Displays texts that have been packed with PowerPacker. Version 2.7, includes source in Oberon and assembly code. Author: Fridtjof Siebert

Observer - Working example for a Lattice LSR-program. Opens a small window and displays volume names of all inserted disks (DF0: through DF3:). Includes source in Lattice C. Author: Oliver Wagner

TheGuru - A program to bring the Guru back into Kickstart 2.0, for those who will miss it, (well sorta anyway!). Version 1.0, binary only. Author: Nico Frans

Fish Disk # 379

Append - CLI utility that allows you to directly append one or more files to another without having to use the roundabout methods necessary with the

AmigaDOS join command. Version 1.0, includes source. Author: Oliver Enseling

FileEncrypt - Another intuition based file encryptor to enable you to scramble your highly secret, hard earned source code and prevent your co-workers from taking credit for it! Includes (unscrambled) source. Author: Lorenz Wiest

LLSort - Replacement for the AmigaDOS SORT command. Pure bit set and may be made resident. Features COLSTART and FIELDS parameters and sorts in either ascending / descending order. Also sorts with or without case sensitivity. Binary only. Author: Les Leist

TheA64Package - A comprehensive emulator/utility package to assist Commodore 64 users in upgrading to the Amiga. According to the author, this package compares to or surpasses the commercially available packages of the same nature. Many of the utilities require a hardware interface that allow the Amiga to access C64 peripherals such as disk drives and printers. The hardware interface is free with a shareware donation to the author. Version 1.00, binary only. Author: Cliff Dugan, Questronix

Xnum - A useful CLI conversion utility that takes a decimal, binary, octal or hex number as input and displays the number in all four formats. Binary only. Author: Oliver Enseling

Yawn! - A small WorkBench sliding block puzzle to keep your mind and fingers busy while your compiler is busy crunching away on your highly secret, hard earned source code that you hopefully remembered to unscramble first! Features selectable size from 4x4 to 7x7 and European, Hindi or Arabic numerals. Includes source. Author: Lorenz Wiest

Fish Disk # 380

Oberon - A freely distributable demo version of a powerful Oberon compiler. Oberon is a modern, object oriented language developed by Prof. Dr. Niklaus Wirth of ETH Zurich in Switzerland as a successor to Modula-2. This single pass compiler creates standard Amiga object files, uses a large variety of optimizations to create fast code, supports writing of reentrant programs, allows you to call code from other languages like C and Assembler, etc. The package includes the compiler, an editor, a link utility, a program to display compilation errors and some demo programs. Version 1.16, binary only. Author: Fridtjof Siebert

-ooOoo-

SCSI TAPE ARCHIVING

by Robert Googe

Just recently Greg Perry and I have been playing around with the SCSI bus on the A590 and 2091 interfaces for the A500 and A2000 respectively. We had been trying to get a streaming tape drive to work correctly using the full 50 Way SCSI bus at first, and then later using a DB25 to 50 way SCSI adaptor. I must point out here that Greg did most of the leg work in sorting out the software compatibility side of things, and we generally used his system, fitted with a 2091, to experiment with.

The story starts with Brendan Pratt, who was in search for a faster way to backup the hard disks on his Sidecar Express BBS computer (an Amiga 2000) which has hundreds of megabytes in hard disk storage capacity.

Currently the most cost effective way to do this is to use a Streaming Tape Drive. This is a piece of hardware that plugs into the Amiga via a SCSI port and allows you to backup 60 to 150 megabytes of hard disk in one hit! (A much better alternative to floppy based backups).

Brendan decided to purchase the Great Valley Products TapeStore system; this comes with its own SCSI interface, software and (I think) Tape Drive. It is basically designed to use the 150MB Wangtek Streaming Tape Drive (Streaming tape drives commonly come in two sizes - 60MB and 150MB). The main area of interest here was the TapeStore software itself. According to the Australian distributor of Great Valley Products, Melbourne based Power Peripherals, the software should work with the standard scsi.device drivers on the Commodore A590/2091 interfaces.

The big problem with archiving a hard disk is the amount of time taken and the method employed in doing the back up. Using QuarterBack or other disk based back-up utilities is just bearable on a 20 or 40 Megabyte hard disk system and involves getting a whole stack of floppy disks (about 11-12 per 10MB of filled hard disk) together, and sitting down with your computer and nursing it all through the backup. This is about an hour on my 20MB 590 including the time taken to muck around with disks and labels etc. When you have 80MB, 150MB or even larger sized hard disk systems, this method becomes impractical.

A Streaming Tape on the other hand can back-up my 90% full 20MB drive in about ten minutes from start to finish. The tapes are reasonably cheap at around \$50 to \$60 for 60MB cartridges (considering \$15 for nine megabytes worth of 3.5" floppy disks) and a little more for the higher rated 150MB cartridges. SCSI Tape drives are around \$1000 (bare drive) to \$1300 (drive, case and power supply).

Fortunately we happened to have access to a 60MB SCSI Tape unit, and decided to give it a go. The first step was to change the drives SCSI identity to device two; later we found this was not essential as the TapeStore software can be configured to look at any SCSI device number. The tape drive was then hooked up to a 2091 SCSI bus (initially done with 50 way ribbon cable), a power lead connected and the whole system was fired up. The next step is fairly simple - did the machine come up with the SCSI bus intact - yes! So we then loaded the TapeStore software and, using Info from the Workbench menu, changed its default driver to scsi.device.

On running the Tapestore software you are greeted with a standard GUI (Graphical User Interface) screen of point-and-click buttons or pull-down-and-select menus. The easiest way to see if the system worked was to tell the tape to rewind - which it did (amazingly, first time around!).

This software enables you to select from any storage device mounted on the system to be the source (when backing up) or destination (when restoring), so we decided to backup a floppy disk. The Tapestore program allocates a buffer of a pre-determined size (64k to 1024k), depending on the amount of memory you have available. Select the largest possible buffer size. Selecting a 1024k (1M) buffer means that a standard floppy is read in one hit into memory, then written to the tape. Reading a full floppy into the buffer takes about a minute, but it is written to tape in a matter of seconds. This worked very well, and we were able to successfully backup and restore a floppy disk!

The next trick was to backup one of Greg's hard disks, which was also successful; we did not try to restore to a hard disk but we can't see any problems in doing so. I also constructed a DB25 to 50 way cable so that I could plug into the short-form SCSI connector on the back of the 590/2091 which work well - the connections are tabled below. If you are using a 590 and wish to try this set-up you should also use an external power supply (+5V and +12V) as a tape drive is fairly hungry on power. For 2000 owners, your power supply should handle a tape drive all right (providing you've only got a few hard disks in the system).

To purchase the software, you may have to contact the Australian distributor, Power Peripherals, or GVP directly to arrange it.

PROBLEMS

We did try using the Tapestore software on a 2090 SCSI interface (using the `hddisk.device` as the driver) but were unsuccessful. It appears the driver software will only acknowledge SCSI hard disks. I do not know how this would work on other third party SCSI interfaces such as Tiny Tiger, Supra, etc.

We also thought that this would be ideal for doing incremental copies of floppy disks, such as the Fred Fish collection, so that on one 60MB streaming tape you could have 60-70 of the latest Fish disks! This does work on a disk-by-disk basis but the software tends to bog down if you try to restore single files from multiple directory images on the tape and you get a visit from the GURU. This isn't too bad as the software was probably not designed for this job. It's a great way to store a collection of art or sound samples too!

Tapestore also has an option of disk image backup, for making exact copies of disks, track by track. I could not get this option to work at all on my system.

These problems may in part be due to the Tapestore software being written specifically for the GVP SCSI drivers and may disappear on a system running a GVP interface.

I must point out here though that you cannot access the tape drive as you would any other device on the system. The tape drive cannot be mounted on the system to act as an AmigaDOS storage device, as you would a hard disk as `dh0:`, for example. The operating system just doesn't support this type of storage media for immediate access (yet) and you have to run all operations through software designed to do the job of backing up.

SYSTEM, C, UTILITY, OR TOOL?

by Ralph De Vries

Having now had a good look at Version 2.0 of AmigaDOS (the release version is going to be Version 2.02), I can only describe it in one word - overwhelming. You get positively assaulted by all those windows, drawers and icons. It'll take most of us quite some time to get the hang of all the new features which it contains.

Now, we all know that Workbench is there because without it the Amiga would be a lot less useful than your average Spanish girlfriend (to most users that is). Although the Workbench environment always gave you the opportunity to customise it, the new version will allow you to run riot. Now you can have three different font sizes on your workbench screen at once, plus all sorts of pretty backgrounds as well. If you so desire, you can now even create your own personalised background pattern! Also, if you feel so inclined, you can start up in overscan mode and have a screen blanker or mouse accelerator installed, all as part of the system. It's a real riot.

However, once the novelty has worn off, we'd better get our acts together and bring some order to our Workbenches.

Have you ever wondered why certain files (tools) are in the Systems directory, while others may reside in the C directory, or in the Utilities- or Tool directory? And the more you start to think about it, the more messy it becomes!

Why, for example, does Commodore put the text file reader 'More' in the Utilities Directory? A lot of our members feel that the right place for a text file reader or a picture viewing utility is in the C direc-

tory. Neither program belongs in the System Directory, because Amy will function perfectly well without them. Nor are they 'commands' in the normal sense of the word, so does that mean that they don't really belong in the C Directory, ...or do they? If they don't belong to either category, does that then make them Utilities or Tools? Now, what, in heaven's name, is the difference between a Tool or a Utility? Questions, questions....

Frankly speaking, I'm totally confused by the nomenclature. Yes, I know it does not really matter, after all most of us will still be doing our own thing, yet I'm sure that on odd occasions you have double-clicked on a 'read-me' icon, to be told that the system cannot find the file reader. This is often due to the fact that the read-me file expects another file reader, but equally often because the file reader is in the wrong directory (drawer). Ditto, ditto, for graphics viewers.

So, what *are* the guide lines? Are there, amongst those hundreds of pages of the Amiga Technical Reference Manuals, some rules as to what belongs where? Has anybody out there got the definitive answers?

-ooOoo-

POSTSCRIPT

5th Nov.: Well, here it is - a 64 page issue of *Cursor* - the largest one up till now!

After this effort I'm taking a break for a few weeks, and get better acquainted with Digi-View and my video camera. This means, hopefully, lots more pics in future issues of this newsletter. Ciao!

Ed.

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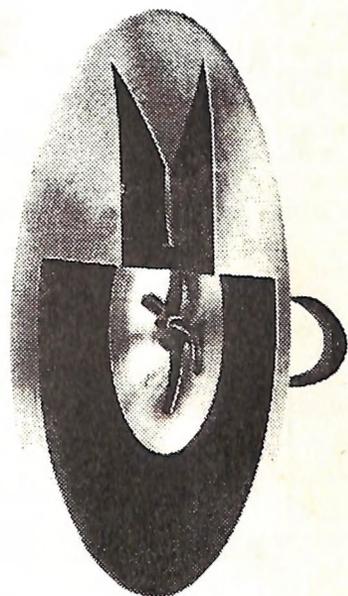
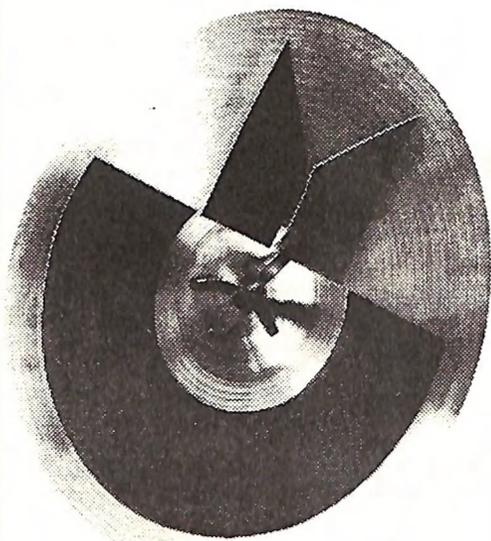
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