CURSOR

NEWSLETTER of the COMMODORE COMPUTER USERS GROUP (QLD) INC.

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CLUB ROOMS: Bardon Prof. Dev. Cnt. - 390 Simpsons Road and Carwoola Street - Bardon

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MEETINGS - WHERE & WHEN

MAIN MEETING: Tuesday **10th** March 1987 in the Bardon Prof. Dev. Ctr. 390 Simpsons Rd. Bardon. Entrance through car park in Carwoola St. Doors open 7pm (library), Meeting starts at 8pm sharp. *A Demo by Cockroach Software of their "GRAPHICS PIRATE"*

WORKSHOP: Sunday 15th March 1987 (1pm - 5pm) in the Guidance Officers Training Ctr., Bayswater St. Milton. Bring your programming- or hardware problems, as well as your own computer equipment! Opportunity to copy our Public Domain Disks.
PLEASE NOTE: Workshop Meetings are for MEMBERS ONLY! Ph. Colin Shipley - 38 2511 a.h.

AMIGA MEETING: Sunday 29th March 1987 (1pm - 5pm) in the Guidance Officers Training Ctr, Bayswater St. Milton. *Disks and File Organization on the Amiga.*
Bring your own computer equipment! - Ph. Steve McNamee - 262 1127 a.h.

REGIONAL MEETINGS

CANNON HILL meets on the 4th Saturday of the month (12noon - 12pm) in the Cannon Hill State School. Ph. Barry Wilson - 399 6204 a.h. or Ron Jarvis - 399 6981 a.h.
CAPALABA meets on the 3rd Saturday of the month (1pm - 5pm) in the Capalaba State High School. Ph. Ray Clark - *** **** a.h.
KENMORE meets on the 1st Sunday of the month (1pm - 5pm) in the Kenmore State School Library. Ph. Peter Reeve - 378 2665 a.h. or Keith Hadland - 378 6698 a.h.
KINGSTON meets on the 2nd Friday of the month (7pm - 10pm) in the Kingston State School. Ph. Peter Harker - 800 4929 a.h.
PINE RIVERS meets on the 2nd Sunday of the month in the Strathpine High School. (rear entrance). Ph. Bruce Wylie - 359 9779 a.h.
SHERWOOD meets on the 2nd & 4th 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.
THE GAP meets on the 3rd Wednesday of the month (7.30pm) in the Gap State School. Ph. Julianne Fallen - 300 2982 a.h.
WAVELL HEIGHTS meets on the 2nd Tuesday of the month in the Wavell Heights High School (library), Brae St. Ph. Rob Adamson - 266 8353 a.h.

CALOUNDRA meets monthly in various locations. For meeting times and dates:
Ph. Vic Mobbs - 071 / 94 1330
MARYBOROUGH/HERVEY BAY meets on the 4th Monday of the month (7pm - 10 pm) in the Sunbury State School, Alice St. Ph. Terry Baade - 071 / 21 2271 (w) or 071/21 5059 a.h.

SPECIAL INTEREST GROUPS

PRIMARY EDUCATION SUB-GROUP meets on the 3rd Tuesday of the month (7.30pm) in the Aspley State School. Ph. Bill Weeks - 208 8620 (work) or 341 2823 a.h.
PROGRAMMING SUB-GROUP meets during the Main Meeting in our Club Rooms.
Ph. Jim Vick - 345 1878 a.h. or Tom Kelly - 277 9900 a.h.
CP/M SUB-GROUP meets during the Main Meeting in our Club Rooms.
Ph. Regan Russell - 848 1353 a.h. or Steinar Johansen - 207 3065 a.h.

PLEASE NOTE: COPYING OF COMMERCIAL SOFTWARE IS ***NOT ALLOWED*** AT ANY OF OUR MEETINGS!!!

Do you want to form a Sub-Group in your District?
Contact our Sub-Group Coordinator, **Terry Steer** (Ph. 808 2424 a.h.) for details.

EDITOR'S NOTES

Our apologies for the late delivery of the February issue of "Cursor". A move to new premises by our printers, coupled with annual holidays, caused the delay. It is hoped that with this (March) issue we will be back to normal again.

In this issue we are pleased to print another article by the Commodore Sage from Canberra, Paul Blair (Disk Logger Revisited). For the benefit of our many new members I should explain that Paul has had for many years now a love/hate relationship with Commodore and their products, in particular their disk drives! Some of the fruits of his labours can be found in his series of articles "Starting with Disk Drives", which we published in booklet form, and is required reading for all new owners of 1541 disk drives. Currently Paul is engaged in unravelling the secrets of 1571 drives, and no doubt we will sooner or later see his investigations in print. If Commodore do go ahead with their plans for releasing a 3,5" disk drive for the C-64 and C-128 Paul will no doubt have at least another year's work in front of him! What a pity he does not own an Amiga with 3,5", 5,25" and hard disk drives - that would really keep him quiet!

Talking about disk drives brings us to the article 'Problems with the 1571' by Greg Perry. Yes, that's right, Mr. President himself! At long last he has put his fingers to the keyboard and written an article for a change! Welcome back Greg.

Also in this issue are Jim Vick's reviews of 'Pocket Planner' and 'Pocket Filer', the companion programs to 'Pocket Writer', which was reviewed in last month's issue, as well as reviews of 'Freeze Frame MkIII' by Murray Smith and the 'Citizen 120-D' printer by Lindsay Whipp and the undersigned. This printer was made available to us by *Sundown Computer Centre* with our thanks.

A substantial portion of this newsletter was produced with the Citizen 120D printer, and having the ability to produce Near Letter Quality in Condensed mode most certainly improves the appearance of the newsletter. Regrettably my wife is not so happy about the situation, because four printers within twelve months is definitely above average and has put rather a strain on the budget.

If you are new to printers I can recommend the 'Dot-Matrix Printer Basics' article which I have 'borrowed' from the Canadian T.P.U.G. magazine.

Lindsay Whipp also writes in this issue about the 'Monitoring of Family Responsibilities'. If you wonder what has happened to Lindsay's cartoons this month, I can assure you that they will be back soon. During his holidays he has been busy 'painting' his house. We think that he prefers the other kind of painting!

Phil Guerney's 64 000 Byte Question takes the form of a cross word puzzle this month. As poor Phil has been tearing his hair out over the last couple of months trying to find a quiz format that will attract some answers, we sincerely hope that this time you will all make a real effort to send in a solution.

For the Amiga users I have 'borrowed' an article, giving the lowdown on the new 'Kickstart/Workbench' Version 1.2. The official release date for this package is now mid February, but don't hold your breath if there are some further delays!

As mentioned in "Random Bits" our Technical Coordinator Roger Haigh had to resign from this position because of pressure of work. Over the years that I have known Roger, I have always found him willing to give assistance whenever he could, and he will be sorely missed. Best of luck in your new job Roger!

To those members who only read the Editor's Notes: PLEASE NOTE that our March Main Meeting will be held on the **2nd Tuesday of the month, i.e. 10th March 1987!**

Ralph De Vries

commodore COMPUTER

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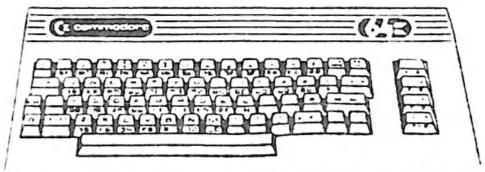

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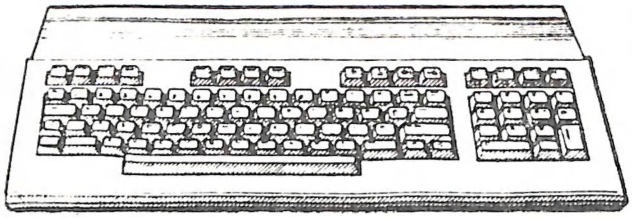

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RANDOM BITS

AMIGA MEETING (25th Jan.)

We don't know if it was due to the long weekend, the hot weather, or because the February newsletter had not been received, but whatever the reason, attendance was down quite considerably. Even the librarian was absent - something which upset quite a few members. Despite these little setbacks several new members joined up, and we will soon have reached the magic number of 50 Amiga members.

Plans are well in hand for a series of lectures and demos during 1987.

MAIN MEETING (3rd Feb.)

An auspicious start to the new year. The library was particularly well attended and very hot indeed! (Not due to Maurie's temper I hasten to add - it was the weather!). In the air-conditioned auditorium the President welcomed all and sundry, and after the usual wise words of Secretary and Editor, our 'Resident Cartoonist', Lindsay Whipp gave a demo of the Citizen 120D printer (courtesy Sundown Computer Centre), which attracted a great deal of attention. After a short break Jon Kalkman chaired a meeting of our panel of 'experts', which consisted of Phil Guerney, Bernard Speight and Anthony Thyssen, who answered a wide range of questions posed by members.

Ken Charters (minus beard) frantically waved a slimline disk drive around and also talked about a golf competition played on computers, while Anthony Thyssen waved an 8K RAM cartridge in the air. No doubt we will hear more from these gents in a future issue of this newsletter.

TECHNICAL COORDINATOR

Some of you may have noticed in the February issue of this newsletter that on the directory page there was a blank space against the position of Technical Coordinator.

For some years now this position has been filled by Roger Haigh who during his term in office has made a considerable impact on the well-being of our group. Some years ago of course he designed and manufactured one of the very first reasonably priced modems for our group. As a consequence of this the group established its own Bulletin Board System, and indirectly it has also contributed in lowering the cost of commercial modems. Equally important Roger has been able to assist many members with hardware modifications and by offering advice with the purchase of 'electronic bits and pieces'.

For all this and more Roger deserves the sincere thanks of all our members, and we wish him well in his new profession as lecturer at the Seven Hills Technical College.

INFORMATION

Our committee members are mostly always available for advise to members both old and new. If you have recently joined and need advice, but don't know whom to turn to, it is advisable to ring in the first instance our Secretary, Norm Chambers (341 5651 a.h.) or our Newsletter editor Ralph De Vries (300 3477) who, if they cannot assist you, may be able to point you in the right direction.

A GOOD EXAMPLE!

We noticed that the A.C.T. Newsletter has changed from A4 size to 'our' A5 size. Glad to see that you fellows down there have seen the light at last!

SERVICE CONTRACTS

Don's Computer Repair Centre are now offering service contracts on all Commodore computers and peripherals. Particularly where computers are used in a business situation a service contract can be of great benefit. Contact Don for details.

URGENTLY NEEDED

Gradually a fair selection of new Amiga software is coming on the Australian market. Amongst other items we have noted "Superbase Personal", "DeLuxe Paint 2", "DeLuxe Music Construction Set", "Dynamic CAD", "Printmaster Plus" etc.

Particularly in the case of the so-called 'Application Programs' we would like to see some reviews by members who use these programs professionally, but reviews of Amiga games are welcome too! So, spend half an hour or so by writing down your impressions of some of this new software, and we don't expect only glowing reviews. If you find that it is an overpriced pile of garbage, your fellow members will thank you for your honest opinions.

DID YOU REMEMBER?

Last month we requested of those members who have changed over to the Amiga to advise our Secretary Norm Chambers of this change, as in the future we intend to issue from time to time a separate Amiga supplement. If we don't have this information you will obviously not receive this supplement. Norm would also like to hear from all other members who change from one model to another model Commodore computer, so that we can have up-to-date information at our finger tips.

And members still forget to advise our Secretary of changes of address!

REDCLIFFE SUB-GROUP

This group has gone into recess (temporarily we hope), because of staffing- and premises problems. If members from the Redcliffe Peninsula have any suggestion to offer for a revival, our Sub-Group coordinator would like to hear from you.

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GOODS & SERVICES

PUBLIC DOMAIN DISKS (C-64 & C-128) - $6.00 ea (Postage Paid)
PUBLIC DOMAIN TAPES (C-64) - $2.00 ea (+ $1.00 Postage Per Order)
BLANK DISKS 5,25" (ss/dd) - $18.00 per box of 10 (+ $2.00 Postage)
MULTI-COLOURED DISKS 5,25" (ss/dd) - $20.00 per box of 10 (+ $2.00 Postage)
COLOURED DISKS 5,25" (ds/dd) - $22.00 per box of 10 (+ $2.00 Postage)
DISK BOXES (hold 90 5,25" disks) - $20.00 ea (+ $5.00 Postage)
PUBLIC DOMAIN DISKS FOR AMIGA 3,5" - $10.00 ea (Postage Paid)
BLANK DISKS FOR AMIGA 3,5" - $50.00 per box of 10 (+ $2.00 Postage)
DISK BOXES (hold 90 3,5" disks) - $18.00 ea (+ $5.00 Postage)
"PUBLIC DOMAIN BOOK" (for C-64) - $5.00 ea (+ $1.00 Postage)
"STARTING WITH DISK DRIVES" (for 1541 owners) - $2.00 ea (+ $1.00 Postage)
"C-128 MEMORY MAP" - $2.00 ea (+ $1.00 Postage)
"AMIGA DOS SUMMARY" - $3.00 ea (+ $1.00 Postage)
TURBO-ROM for C-64 or C-128: Members Price - $40.00
Customised Version (Your choice of Screen Colours + Your Name on Screen): $45.00
USER PORT PLUG (with Key Way) - $8.00 (+ $1.00 Postage)
USER PORT PLUG BACKSHELL - $3.00 (+ $1.00 Postage)
USER PORT to CENTRONICS CABLE - $35.00 (+ $1.00 Postage)
ADDRESS LABELS (23 x 89 mm) - $14.00 per 1000
RIBBONS for MPS-1000, GX-80, LX-80 PRINTERS - $8.00 ea (+ $1.00 Postage)

ADDRESS all orders to P.O. Box 274 - Springwood - QLD - 4127
Cheques to be made out to: C.C.U.G. (Q) Inc.

UPGRADE CHARACTER EPROM for 801/1525 Printers. - (Gives descenders on p,g,q,y and j.)
(Also requires exchange of ROM chip.) - Supplied & Fitted $30.00
UPGRADE EPROM to convert 1526 Printer to 802 Printer - $20.00
Contact Lester Bennett on 800 1243 before 8pm on weekdays for more details.

Available for Hire to Members only: 1526 Commodore Printer
For details contact Roger Haigh on 399 8037 (after hours)

EQUIPMENT MODIFICATIONS

by Anthony Thyssen during Milton Workshop and Graceville Sub-Group meetings.
For further details contact Anthony Thyssen on 371 1233 (a.h.)

SERVICES OFFERED

RESET SWITCHES: Plug-in $6.00
Built-in $6.00
[On some 64's the plug-in switch does not work. In this case you may return it for a refund or exchange.]

RESET RESTORER : Plug-in $4.00
Built-in $6.00
[Tap reset switch while pushing this button. This will reset any protected memory program.]

DEVICE NUMBER CHANGE: Printer/Plotter 4-6 $6.00 - Disk Drive 8-9 $6.00
TURBO ROM INSTALLED: C-64 with Socket or C-128 $6.00
C-64 without Socket or C-128D $10.00
WRITE PROTECT SWITCHES (Price to be finalised)
64/128 SELECT BUTTON $6.00 (Plug-in or Built-in)
SERIAL SWITCHING BOX (Order Only) $14.00
SERIAL PORT DOUBLER (Order Only) $14.00

REVIEWS

FREEZE FRAME Mk. III

by Murray Smith

Just recently I was offered the opportunity of upgrading my Freeze Frame Mk.II. For a mere $17.00 you can return your old but faithful Freeze Frame for the new improved version - FREEZE FRAME Mk.III

I waved a tearful goodbye to my close friend and sat back and waited in anticipation for the new generation! A few days later I received my brand spanking new Freeze Frame Mk.III. In appearance there's little difference except for colour, which is now blue. I plugged it into my C-64's memory expansion port and switched on. The opening frame lists the following functions:

(M) - Configure memory - meaning the memory will be configured in such a way that Freeze Frame can distinguish which areas of memory are being used when the save is made.

(R) - Normal Reset - if this is used the memory will go unaltered, therefore the whole memory will be saved. This would be used for programs which check for configured memory.

(S) - Subsequent Parts - this procedure will allow you to transfer the extra parts of some tape-based multi staged programs to disk. You will have the choice of using 'fast or normal speed loaders' as well as being able to choose whether the parts are 'selective or consecutive'.

There are three other functions I should mention - these are:

(D) - Directory - besides getting a catalogue of your disk you can also delete files while it is in this mode.

(F) - Format - speaks for itself.

(C) - File copy - you can copy files up to 248 blocks long. The files will be displayed individually and you will be required to press Y or N.

The big question is if programs backed up with Freeze Frame Mk.III acually load any faster. The answer to that is a definite yes. I'd say there would be about an 80% increase in speed. A backup of Easy Script loaded in appr. 27 seconds; faster than F.F. Mk.II and heaps faster than the original version of Easy Script. Also there has been some reduction in bytes used in copying the programs.

So, if you have a few extra bucks laying around, give it a try. If you have Freeze Frame Mk.II, I'd say pay the $17.00 and upgrade.

(Murray's review of Freeze Frame Mk.II appeared in the July'86 issue of CURSOR.)

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POCKET PLANNER 128/64

by Jim Vick

A spreadsheet review from the series 'Pocket Planner', 'Pocket Filer' and 'Pocket Writer'

All three programs share the same general format for menu layouts and commands where applicable, which is great, as swapping from one program to another is certainly simplified, and as is now common, the three programs share the same file structure and can interchange and use data from one program to another.

These programs are somewhat unusual in that the disk contains two different programs, one for the C-64 in 40 col mode and one for the C-128 in either 40 or 80 col mode and making use of the greater memory of the C-128. Incidentally in 128 mode you can toggle backwards and forwards from 40 to 80 cols. with a key press. Both the 64 and 128 programs are very similar; in fact the 40 col 128 program looks exactly the same as the 64 version and both programs share the very extensive 'Help' files which can be called up at any time.

As with all spreadsheets it has some very good points and some not so good ones. The program makes extensive use of a six-line message box across the top of the screen which is accessed via the Commodore key, which in theory should tell you all the commands to run the program, but you still have to refer to the manual in a number of cases. All commands are executed by a key press, with for some commands up to three keys needing to be pressed at the same time, which I found a little bit awkward. The format for entering a formula is rather unusual, in that you first enter it as a label in a cell and then convert it to a formula by pressing the F1 key, which isn't too bad once you get used to it, except that the manual makes no reference to it and the only way to find this information is via the Help screen. I found in a number of cases that sometimes the information was in the manual and in other cases it was to be found in the Help files. The other thing that I found a bit of a nuisance was, that when entering data into a cell, the only way the program would accept the data was by hitting the return or cursor down keys, which meant if entering a row of figures an extra key stroke was required for each entry, as it was not possible to cursor sideways in the enter mode.

Despite these grumbles the program does all the things a good spread sheet should, and once you get to the stage where you can remember the commands without referring to the instructions, things move along fairly easily.

Some of the better functions available from an extensive range of options which the program offers include:

A) - The ability to easily print a range of graphs both to the screen and the printer in several different formats.

B) - When printing spreadsheets the program has a sideways option built in that does not require special files or the loading of a special program, as the last spread sheet which I reviewed required.

C) - A wide variety of printers are supported, both Commodore and Non- Commodore.

D) - You can overlay one spread sheet from the disk over the top of another at a position you can dictate by the cursor position - the only thing to watch being that the cells the overlay will occupy must be vacant, otherwise the information in the cells will be lost.

E) - The program has an extremely good window function, which allows you to have as many windows on the screen as you wish - in fact every cell can be set up as a window. I had ten windows set up at one stage and found it quite fascinating to be able to step from window to window and have full use of the spread sheet via every window.

F) - The spread sheet can be used to enter text in exactly the same way as a word processor with all the standard word processor features, and allows you to load documents from the companion 'Pocket Writer' program and include the files in a spread sheet as an 80 column report.

To sum up, a program that offers a number of features not normally found in spread sheets, and although the spread sheet itself is a little bit more difficult to use than some, it is certainly worth a look for someone who is wishing to start out and wants as many options as is possible at a reasonable price (R.R.P. under $90.00)

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POCKET FILER 128/64

by Jim Vick

A database review from the series 'Pocket Planner', 'Pocket Filer' and 'Pocket Writer'.

After doing the previous review for Pocket Planner I certainly appreciated the fact that this program was one of the same series, as I was able to load Pocket Filer and be up and running without the minor problems I had experienced with Pocket Planner.

It couldn't be easier to set up a database and be using it. To start off you select the CREATE option from the start-up menu which consists of CREATE, ENTER/EDIT, REPORT and FILE UTILITIES options. This presents you with a blank screen which you fill out exactly as you wish, by simply typing in headings and then specifying the length of the field with markers. Each field can be formatted in various ways, such as an Alpha field, a Numeric field, a Date field etc, and you can set such criteria as wether the field must be filled in or can be left blank and, if it must be filled in, how many characters of what type are required. Each record can occupy a screen of 160 by 160 characters, and you can fill in this area in any way you choose and scroll around it, similar to a spread sheet. While you are in the designing stage you can set various levels of password protection. This system allows you to set a master password which is used to encode all data saved to disk. Up to 7 different levels of protection can be set to restrict or allow access to any of the various options available.

After you are satisfied that the layout is to your liking the next step is to save it to disk as a template that can be recalled at any time it is needed. You then go back to the main menu and select the ENTER/EDIT option, which prompts you to reload the template from disk. Once loaded you'll find that it looks a lot different to the layout you saved, with each field entry area a solid block and you are restricted in the way you are able to move around. In the start-up position the cursor is in the first field area and you can only move to the next field after fulfilling all the restrictions you have imposed on each field. After stepping through the layout you have designed and inserting the data the record is saved to disk and the screen is again a blank template ready to accept more information.

Once the information is in the database you can then start to manipulate it in various ways, some of the options being: sorting in any way you require, searching by single or multiple field, altering or deleting a record, adding new records and creating up to 9 different indexes with each index using different fields as key fields and with each index sorted or set up in a different way. In this way it is possible to have very fast access to your information, displayed in various formats.

The next step in using the database is to get hardcopy of the stored information, so back to the main menu and select the REPORT option, which presents you with a screen similar to the CREATE option, and on this screen you decide what the report is to look like and what information from the database is going to be used. At this time it is possible to set up math functions so that numeric data stored in the data can be manipulated in various ways, such as totalling values from a number of records, calculating averages, maximums, minimums, using all the logical functions, if then, and or, greater than, less than etc. Once this information has been calculated, as well as printed out, it is possible to write it back to disk and alter information in individual records, and in this way update information automatically.

The FILE/UTILITIES option allows you to do all the usual things such as back up a disk with one or two drives, format a disk etc, and a special option which allows you to restructure an existing format to suit a different purpose.

To sum up, a program that I would put in the extremely useful class, and well worth considering if you are in the market for an easy to use filing system.

--ooOoo--

CITIZENSHIP REVIEWED

by LINDSAY WHIPP

The Citizen Watch Company was hardly the sort of firm I'd expect to find producing computer gear, but Lo and Behold!... Ralph De Vries turned up the other day with a printer called the Citizen 120D. He said "Put it through it's paces and write about your impressions."

Well, folks, I'm a bit stymied as to what I can say about this printer. Not because I don't think much of it, but for quite the opposite reason. There's so much I should say but haven't a hope for this, people, has to be *THE COMPLEAT PRINTER!* Sure, there are a couple of points about the design that I don't like, and even one point about it's operation which is a bit suss, but my overall impression is that this has got to be the most impressive piece of equipment capable of being connected to your Commodore.

OK...OK.... I'll just settle down here.

Right, like most feature-laden printers produced of late, the 120D more or less follows the default world-wide standard set down by Epson. Escape codes and so forth are nearly all Epson, but one enormous difference is that the 120D is supplied with a Commodore cartridge. This is a module which plugs into the side of the printer, and acts as an interface. This means that the printer expects to receive CBM "arse-about-face" codes, and not true ASCII, which, of course, all Epson and other printers capable of worthwhile printing performance must be fed to keep them happy.

Commodore printers have never been capable of any features other than reverse or expanded type. No Super/Subscript, no Bold, NLQ, Doublestrike, Compressed, Underlining, Italics, or Proportional print. Consequently, no word processors have Printer Drivers designed to access these features on a Commodore printer. If you use an Epson driver, you'll get all capital letters and graphics symbols. On my Riteman printer, this dilemma was averted by providing two separate Modes - CBM and Plus (read Epson...). In CBM mode it expects CBM codes, but in Plus mode it expects ASCII, and in that mode all the fancy features are available. I've happily used Easy Script for my Riteman, treating it as an Epson, for which a printer driver is supplied, and simply defining the codes for the features that the driver did not cover. Ten codes can be defined at one time, so, in addition to all the codes "built-in" to the driver, I can just about access everything that the printer is capable of doing. Not so for the Citizen 120D.

This policy of providing a CBM interface is a sort of two-edged sword. It means that the 120D can be plugged in and simply treated as, say, an MPS 803. Programs like "Print Shop" or "Sky Travel" will function perfectly. But if you wish to access the fancy features, you'll have to use a word processor that allows "tailoring" of the printer driver. I've created a printer file for Super Script, using an Epson driver base, but modifying ASCII to CBM and adding the features supported by this great printer. Even so, I ran out of channels for codes! Although the printer can backspace, it uses a slightly different code to Epson-normal, so I skipped that. However, all the others are there, and some new ones to me. I've fallen in love with Proportional Print, and the 120D's Vertically Enlarged type is just great!

Sorry, my enthusiasm is showing. This printer is supplied with a very good manual (No "Jinglish") which covers all it's configurations, and a smaller manual covering the Commodore version and outlining where this may vary from, say, the IBM or Epson configurations. This means that by simply unplugging the Commodore cartridge and popping in an Epson or IBM cartridge, this printer can be "updated" to suit just about any computer. Prospective Amiga owners take note! The cartridge plugs in the side of the unit, so the cable is NOT in the path of the paper. However, folks, I've been spoiled. My Riteman printer, which feeds paper from the front (simply), stands over the top of it's own supply of paper, and ejects it out the back, leads me to regard with absolute DESPAIR, the Mickey Mouse tractor feed arrangement on the 120D, which feels as though it's about to collapse, and consumes paper from a weird angle and spits it back out again in the same position as the pile of incoming paper. I know

that is the traditional feed system, but it is so antiquated that it was a genuine disappointment on an otherwise brilliant design. And it means that it's desk "footprint" is huge - you'll need a separate table for the printer and paper supply.

The typefaces supplied with the 120D are Pica (normal) and Elite (smaller), and combinations of these result in eight different "pitches" of print ranging from Elite Compressed, at 20 characters per inch, to Pica Expanded, at 5 Char/inch. Both faces are very nicely formed, and in NLQ (Citizen call this "Correspondence Quality") are the best I've seen. The Italics set are particularly nice, avoiding the common "jaggie" look.

The printer runs relatively quietly, and relatively fast. I think that Citizen must have looked at what other manufacturers have made to date, and designed a printer that does everything relatively well. Except, of course, the paper feed.....grumble, grumble. The Citizen 120D is available for less than the Commodore Barrier of $500, and in my view represents the current best choice of printer for most CBM users. The cost of additional interface cartridges is not known at the time of this writing, but their mere existance marks this printer as positively the most adaptable machine yet offered. Well done, Citizen.

Review machine kindly supplied by Sundown Computers, Chermside.

This is a sample of NLQ Proportional Pica type from the Citizen 120D.

This is a sample of NLQ Proportional Elite type from the Citizen 120D.

This is a sample of Non-proportional Pica type.

This is Expanded type (Pica).

Vertically Expanded is a unique Citizen 120D feature.

Vertical & Horizontal enlargement!

In ascending order, the eight "pitches" of print, which are achieved by varying the combinations of Pica and Elite with Condensed, Enlarged, and Condensed/Enlarged, are:

Elite Compressed - 20 cpi....160 cpl.

Pica Compressed - 17 cpi....136 cpl.

Elite Standard - 12 cpi....96 cpl.

Pica Standard - 10cpi....80 cpl.

Elite Compressed/Enlarged - 10 cpi....80 cpl.

Pica Compressed/Enlarged - 8.5 cpi....68cpl.

Elite Expanded - 6 cpi....48 cpl.

Pica Expanded - 5 cpi....40 cpl.

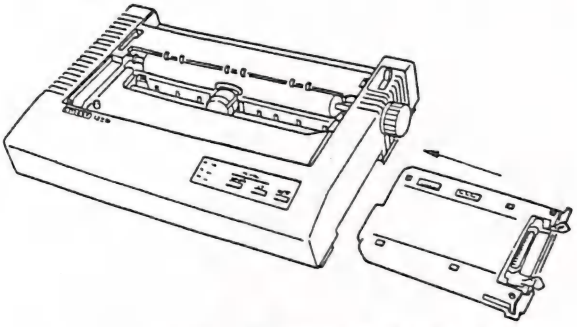
THE CITIZEN 120D and the AMIGA

by Ralph De Vries

My bet is that not many of my fellow members have gone through *FOUR* different printers in 9 months! Last year I was using a DPS-1101 Daisy Wheel printer for our newsletter and for my own private use (graphics etc.) I had purchased the Riteman C+ printer, and I was happy. Now, if late last year I hadn't decided in my infinite wisdom that life wasn't worth living without an Amiga, I probably would still be using those two printers. Not so. The Amiga wouldn't interface with a Commodore Serial port, so after a bit of deliberation I decided on the MPS 1000, because it offered both a Commodore serial port and a Centronics port - two birds killed with one stone. Well, the MPS 1000 joined my household and the Amiga.

Without going into too much detail, Commodore uses a rather unique system of Printer drivers to allow a single set of printer commands to cover a rather wide range of printers. One of these printer drivers is for the MPS 1000. Now, I may be wrong, but I reckon Commodore stuffed this driver up well and proper. If for example I tried to print in Condensed Mode, combined with **BOLD** and <u>Underline</u> the printer jumped back to Pica mode (10 char per inch); several examples can be found in the Feb.'87 newsletter. Now I want to stress that this is NOT a fault of the printer, but rather an error on Commodore's part in implementing the WRONG code for BOLD printing (There are several commands for bold printing on the MPS 1000).

Sometime ago our fellow member Bruce Wylie sent me a print out of his Citizen 120D printer which he had purchased from Sundown Computer Centre. I didn't do anything with it at the time, although it looked quite good. However after taking delivery of the 120-D from Sundown I read the documentation and I became very much intrigued.



THE CITIZEN 120-D INTERFACE CARTRIDGE

The upshot of it was that I ordered one of these printers with the Centronics Interface (same price as with the Commodore Interface, and they do offer a 6-months warranty, which is twice as long as Commodore), which offers both Epson and IBM modes. I connected the printer up to my Amiga in Epson Mode, chose the Epson Printer Driver, and all my troubles were over!

I can endorse every word that Lindsay Whipp has written, except that I find the tractor feed system neither better nor worse than on most other brands of printer. With a suitable printer stand one can utilize the bottom paper feed of the printer, and than it takes up no more space than Lindsay's beloved Riteman! I am absolutely wrapped in the design. Minor features such as printer leads not interfering with the paperflow, easy access to the dipswitches in the plug-in interface etc., all make it an easier printer to use. The printing out of graphics is also better implemented than it was on the MPS 1000. Coupled with a six months guarantee, I can only come to one conclusion; namely that at this point in time I don't know of any better printer under $500.00 for the Amiga. *Highly Recommended.*

Dot-matrix printer basics

by Ranjan Bose

When the Commodore 64 computer was introduced several years ago, buyers had little trouble choosing among peripheral devices such as disk drives and printers. Only one brand name of compatible devices existed — CBM. In the last two years, however, several independents have launched C-64 compatible disk drives and even cassette recorders. While Commodore peripherals used to be less expensive, this is no longer true.

Printers have lagged behind in this respect. Many models of parallel printers existed, but none of them could be easily connected to the C-64. And these printers and the necessary interfaces were expensive. Commodore printers (152x and now the MPS80x series) had limited features and barely acceptable print quality, but carried very attractive price tags. In the last year or so, two things have happened on the printer front. Third party printers have become more affordable and many inexpensive C-64 interfaces have been introduced. The prices of Commodore printers have also gone down by almost 40 per cent, but the price difference between them and a third party dot-matrix printer, with interface, has diminished to the point where buying a Commodore printer should not be the automatic response. Several manufacturers (Epson, Star, Blue Chip, Riteman, among others) have started selling Commodore-ready printers with built-in, user-selectable serial to Centronics-parallel interfaces. Star, for instance, sells the SL-10 model, which costs the same as MPS802 yet also does graphics, italics and NLQ (near letter quality) printing.

Why parallel?

Buying a universal, parallel printer makes sense for other reasons as well. It can be directly hooked up with other computers (like the Amiga), and the depreciation on a parallel printer is far less than on a restricted, Commodore-ready printer. Economics aside, a parallel printer typically offers a vast array of features over those offered on Commodore-ready printers. To name a few: multiple pitches; type styles like bold, emphasized, NLQ, italics, underlining, superscripts and subscripts; page formatting; horizontal and vertical tabulations; international character sets; downloadable characters; word-processing functions like margin setting, left, right (or both) justification, centering and proportional spacing; and dot-addressable graphics from 60 to 240 dots per inch. You may never have occasion to use all the features such a printer offers; however, it is always better to have more features than are necessary at the moment to leave some room for future growth.

Most interfaces will let you use your printer in a 1525 emulation mode that makes available the Commodore graphic characters and reverse field printing. With a Commodore printer you are limited to listing a program in only one way. With interfaces you can usually list a program so that the control and graphic characters are listed as mnemonics, as key presses, as ASCII codes or as graphic characters. Again, the options possibly outnumber your immediate requirements, but they are there should you need them.

Setting up

After you have purchased your dream printer and interface, you will have to connect the serial cable coming out of your interface to your computer's (or disk drive's) serial port. A thin wire ending in an adapter goes either to the Datasette port or joystick port for powering your interface. *All power switches should be off* when you plug in the adapter unless you love blowing up fuses or even microchips! The other connection from the interface goes to the Centronics port on your printer.

The next step is to set the tiny DIP (Dual Inline Package) switches on your interface and/or your printer so that the computer, interface and printer can communicate properly. Use a sturdy toothpick for this manoeuvre. The DIP switches usually control functions like line feeds, printer type, interface mode and device number selection. Since the C-64 usually does not send a line feed with each carriage return to the printer (unless you have opened the file to the printer with a file number greater than 127), and since the printer DIP switches are usually inconvenient to access, you should select the setting that allows only the interface to send line feeds. You will thus avoid overprinting on the same line or unwanted double spacing. The manuals are explicit about these very critical settings and should be closely followed.

Your interface can work in three basic modes (DIP switch selectable or, rarely, software selectable). In the transparent mode, all data will go through the interface unaltered. This is usually used with word processors and graphics programs, and is sometimes the only way to access certain special features of your printer. The second mode is ASCII or text only. Commodore ASCII, or PETSCII (Commodore's quirky version of the otherwise almost universal ASCII code) is converted to true ASCII in this mode. The third mode is the 1525 emulation mode. Your printer essentially becomes a 1525 (except it is usually faster). All non-1525 codes are blocked by the interface. This mode is used with commercial, 1525-compatible programs.

Some interfaces (Xetec, for instance) have yet another mode, which is a combination of transparent, ASCII conversion and 1525 emulation all rolled into one. In this mode you can access all the special features of your printer and at the same time print Commodore graphic characters and print in reverse field. There are also fancy interfaces with huge buffers and multiple fonts. On the other hand, there are also lowly interfaces that support only text. If you are that hard up, you'd are better off buying a Commodore-ready printer or, better still, skip lunches and beer and buy a graphics interface when you have lost some weight. Most newer interfaces have active switches that immediately bring into effect changes made in the DIP settings. Earlier interfaces used to read the settings on power up; changes in the DIP settings could only be instituted before switching the power on.

Once the data signal gets past the interface, it activates the printer to print something or to perform some function. A brief description of the major printer features follows.

Text

Dot-matrix printers usually print in a field of 9 by 9 dots. By selectively printing some of these dots (typically 5 by 7), a character shape is generated. These character shapes are stored as binary

ode in the printer and interface ROM and, in most cases, some of these codes can be replaced or new code added to provide a custom-designed character-set. Printers usually have several character sets for printing regular characters, NLQ characters, italics, international characters, proportionally spaced characters and, sometimes, special graphic characters (usually IBM compatible). By varying the speed of travel of the printhead, the pitch of the characters can be altered to get from 10 to 17 cpi (characters per inch).

The regular characters generate what is known as draft quality printout, with each of the dots forming a character being discernible. The tiny spaces between horizontal dots in a character can be abolished by printing the same column of dots twice while the printhead is travelling at half speed (at regular speed this would produce a double width character). This is known as emphasized print. Since condensed (17 cpi) pitch already has high horizontal dot density, emphasized printing is not permitted (nor necessary) in this pitch. The tiny gaps between vertical dots can be covered by double printing, where a line is printed, the paper moved by a fraction of an inch, and the line printed again. The emphasized and double strike modes can be combined to give a very dark print. These were employed in the pre-NLQ days to improve the appearance of the printout.

Near letter quality printing uses multiple-pass printing and special letter shapes to produce print that in some printers is almost identical to typewritten copy. All these enhanced printing modes cut down the printing speed by 50 to 80 per cent and eat up the ribbon hungrily. Superscripts and subscripts are generated by printing characters so that they are compressed upwards or downwards to half their normal height. These are usually printed in two passes to improve readability.

Formatting

Many parallel printers allow formatting of a printed page. Left, right, top and bottom margins can be set, and form length can be specified in inches or by number of lines. The spacing between lines can be altered in steps of 1/72nd, 1/144th or 1/216th of an inch, depending on the printer. There are facilities for setting up horizontal tabs (as in a typewriter) or even vertical tabs. These help in the printing of tables. Some printers also support justification, centering, microjustification and more.

Graphics

In addition to printing text, most dot matrix printers also allow you to print diagrams and graphic designs. Commodore 1525 printers allow a horizontal density of 60 dots per inch and vertical density of 7 dots per line. Most other printers allow 8 or 9 pin vertical density per line and several horizontal densities ranging from 60 dpi to 240 dpi. Most of these modes are accessed by sending special character string codes following the escape code. On the Commodore 64, pressing **ctrl-[** in quote mode generates this code. You may also send it as **chr$(27)**.

Most printers allow you to use both single sheets or tractor-driven fanfold paper. The printers that push fanfold from behind the platen tend to bundle up and jam paper at times. Alternatively, where the tractor comes after the platen and pulls the paper, you get better flow of paper but you lose the first sheet, a minor inconvenience. Printing speeds vary from 100 to 160 cps (characters per second) for draft mode, and 20 to 40 cps for NLQ mode. Generally speaking, the faster a printer, the noisier it is. On some printers you can select half-speed printing for reduced noise (this feature could save your marriage!).

Most printers use ribbons in easily replaceable cartridges, while a few allow you to use regular typing ribbon spools. The latter method is cheaper, and easily available, but is messy to change. The ribbons themselves are made of either carbon film, which gives crisper images but has a short life (about 1 million characters, or 500 pages of double spaced text), or inked nylon (about 2 to 3 million characters). Some of these can be re-inked several times. Since the ribbon rubs over the printhead and its pins continuously, the ink contains special lubricants to reduce friction-induced wear of the printhead. *Never re-ink a ribbon with ordinary inks.*

The printhead itself has a life expectancy of over 100 million characters. Some printheads are user-replaceable while others are not. Most printers achieve increased print output by using faster line-feeding and bidirectional logic-seeking printing. This enables the printhead to print from left to right and from right to left, starting with whichever edge is closer to its current position. Since printers have so many moving parts, they are potentially prone to breakdowns. Warranties range from 90 days to two years and should be an important factor to consider at the time of purchase.

We felt that many newcomers to printers would like the accompanying article from the pages of the Canadian TPUG magazine. Printers in general and Commodore printers in particular seem to present no end of problems to the newcomer.

Fortunately the trend is now towards more fully featured printers, of which quite a few are 'Commodore Interfaced', which means that to obtain these extra features it is no longer necessary to use a separate (and expensive) interface.

Confirmation of this trend can be found in this issue of Cursor in the review of the 'Citizen 120' printer, which is one of this new generation of printers and offers Commodore interfacing by means of a slip-in cartridge, which can easily be exchanged with a Centronics type cartridge to work with PC or Amiga computers.

This new generation of printers will in most cases support the growing range of Graphics programs like Printshop, Newsroom, GEOS etc, thus offering more and more interesting possibilities for creative Graphic experimentation and design.

--ooOoo--

DISK LOGGER REVISITED

by Paul Blair

Many moons ago, back in the days when a PET with a 12 inch screen [illegible] your erudition (and depleted bank balance) to the world, I found a utility program named DISK LOGGER, written by the redoubtable Butterfield J. It was about then that disks became something other than [illegible] black things that were held (literally) with reverence, and fed to the gaping maw of a disk drive, there to whizz around and return to me my labours of many hours gone by. They became real, with a charm and personality all their own. They had structure, shape and lots of useful things to stare at and think about.

PET days were easy, apart from my appalling lack of knowledge. Most programs loaded into the computer at specific and easily recognized locations. Nevertheless, Jim's program was one of the keys to improvement, and I used it often to track down the contents of disks - especially those that I had mussed up somehow or other!

Each successive Commodore computer model brought its own disk logger program. By now, computers were getting a little more complex, and some idea of how people were stashing things inside them became more critical. The "evaluation copy" fraternity were becoming a force, and needed to know more. Most of the logger programs were rewrites of the original, with a few personal changes brought on by the addition of colour, and so on. Few, if any, changed the program's flow, because it was the sort of program where improvement was not needed.

The Commodore 128 changed that a bit, particularly when lashed up to a 1571 disk drive. New words like "burst" became more frequent in the articles we all read, and the Immers/Neufeld combination convinced us that shoving some machine code into the disk drive could perform minor miracles if done correctly. So what could be made of all that?

The simple answer is - a new Disk Logger (now you can let your breath go!) that is set up to make the most of the C128 and the 1571. Let me explain as we go along.

Fingers ready? Fine..... A few notes to help me sometime in the future when I wonder just what I did.

```
100 REM: C128/1571 DISK LOGGER
110 REM: BASED ON JIM BUTTERFIELD'S ORIGINAL.
120 REM: BURST MODE USED TO LOAD DIRECTORY INTO
130 REM: C128 BETWEEN $3000-$4300. FILE LENGTHS
140 REM: ARE READ INTERNALLY IN THE 1571.
150 REM: 40/80 COLUMN SCREEN, BEST ON 80
160 :
170 REM: PAUL BLAIR *** 22 NOV 86
180 REM: 35 CALDER CRES, HOLDER ACT 2611, AUSTRALIA
190 REM: PUBLIC DOMAIN
200 REM: WRITE ME TO SEE HOW FAR IT TRAVELS
210 :
```

The program uses a bit of machine code to speed things up. The first block (read in at line 300) is my version of a burst read routine, in this case to read in all of the directory on Track 18 to computer memory. This means that we have a lot of the information we need only a PEEK away.

```
220 BU=0:TB=664:S=6143:ZZ$=CHR$(0):P=RGR(2)
```

```
230 Q=78:CL=6:FAST:IFP=0THENQ=39:CL=0:SLOW
240 COLORCL,16:COLOR4,16
250 SQ$="----------------------------------------"
260 SR$="TR SC TYP LEN FILE NAME        DETAILS"
270 BS$=" 1  0 XXX   1 BOOT SECTOR"
280 PRINT"[CLS][BLK]C128/1571 DISK FILE LOG V1D / PAUL BLAIR"
290 PRINTSQ$:FORJ=0TO4:READT$(J):NEXT
300 READA:IFA=-1THEN310:ELSES=S+1:POKES,A:GOTO300
310 INPUT"[DOWN]PRINTER    N[3LEFT]";Z$:Z=3:IFZ$="Y"THENZ=4
320 INPUT"UNIT       8[3LEFT]";U:POKE6161,U
330 INPUT"FILE SIZE  Y[3LEFT]";Z$:IFZ$="Y"THENF=1
340 OPEN4,Z:OPEN15,U,15,"U0L"
```

This is where the directory action really begins. Line 390 gets the disk name and ID, so now we start looking through the part of the directory where program details are stored (Track 18, Sector 1 is the first such sector).

```
350 PRINT"[DOWN]READING DIRECTORY":SYS6144:BANK0:PK=12288:REM $3000
360 IFPEEK(PK+3)=128THENTB=1328:REM 2 SIDES
370 OPEN15,U,15:IFFTHENGOSUB810
380 PRINT"[CLS]";:PRINT#4,"C128 DISK LOG OF-";
390 FORJ=1TO23:A$=CHR$(PEEK(PK+J+143)):PRINT#4,A$;:NEXTJ
400 PRINT#4:PK=PK+256:LT=0
410 PRINT#4,SR$:PRINT#4,SQ$:IFZ=3THENWINDOW0,3,Q,24,1
420 M=M+1:IFM=1THENNT=PEEK(PK):NS=PEEK(PK+1):IFNT=0THENLT=1
430 K=PEEK(PK+2)-128:IFK<1ORK>4THENK=0
```

With the directory held in computer memory, we no longer have to GET our information from disk. We simply look around the stored directory, PEEKing at this and that to get what we want.

```
440 PT=PEEK(PK+3):PS=PEEK(PK+4):T$=STR$(PT):S$=STR$(PS)
450 F$="":FORJ=1TO16:F$=F$+CHR$(PEEK(PK+4+J)):NEXT
460 IFK=4THENN=PEEK(PK+23)
470 L=PEEK(PK+31)*256+PEEK(PK+30)
480 IFM<8THENPK=PK+32:GOTO500
490 M=0:PK=12288+NS*256
500 IFK=0THEN660
510 BU=BU+L:PRINT#4,RIGHT$(" "+T$,2)RIGHT$("  "+S$,3)" ";
520 PRINT#4,T$(K)RIGHT$("  "+STR$(L),4)" "F$" ";
530 IFK=4THENPRINT#4,"L=";MID$(STR$(N),2);
```

Having printed out the starting track and sector, the file type (SEQ, PRG...) and the filename, we can get down to work in earnest. To get the load address of PRG files, we need a couple of bytes off disk. We open the file, and read them in at line 560.

If the file is a REL file, then line 600 goes off and figures the total number of records. Otherwise, we use the little program put into the disk drive at line 370 to do some work. Line 620 sends the computer off to a program that executes 99% in the disk drive, grabbing each successive sector in turn and counting the number of bytes it reads. Until it has done its job, there is no communication with the computer, so the fastest possible read is done with the minimum possible delay. It's pretty quick.

```
540 IFK=2ORF=1THENOPEN2,U,4,"0:"+F$+","+T$(K)
550 A=0:IFK<>2THENSA=0:GOTO580
560 GET#2,A$,B$:A=ASC(A$+ZZ$):B=ASC(B$+ZZ$)
570 SA=256*B+A:PRINT#4,HEX$(SA);
580 IFF=0GOTO650
```

```
590 IFK<>4GOTO620
600 S1=INT(L/120)+1:S2=254*(L-S1):A=INT(S2/N)
610 PRINT#4,", "MID$(STR$(A),2)" RECORDS";:GOTO650
620 GOSUB840
630 IFK<>2THENPRINT#4,"BYTES="A;:SL=SL+A:GOTO650
640 FL=A-SA+1:VC=VC+FL:PRINT#4," "HEX$(A);
650 CLOSE2:PRINT#4
660 IFLT=1ANDM=0THEN680:ELSEGOTO420
670 :
```

When all active directory sectors have been analysed and printed for you, the action shifts to here. Because our little bit of machine code has stirred the disk drive up a bit, let's re-initialize the disk.

There are two more items that we must check. At line 680, we read in what the disk drive figures is the count of "blocks free", so we can check our count (stored in the variable BU) against the Block Allocation Map (BAM) on disk, calculated here in line 700 as DB. Next, is there a boot sector on the disk? It would be useful to know and record. With the BAM in computer memory, we need only check one byte (line 700) to see if Track 1 Sector 0 is allocated. If it isn't, then no boot sector. If it is, then we need to check for the ID of "CBM" in the first three bytes of Track 1 Sector 0, which tells us we have a boot sector.

```
680 PRINT#15,"I0":PRINT#15,"M-R"CHR$(250)CHR$(2)CHR$(3)
690 GET#15,A$,B$,C$:A=ASC(A$+ZZ$):C=ASC(C$+ZZ$)
700 DB=A+256*C:IFPEEK(12293)AND1THEN740
710 OPEN2,U,2,"#":PRINT#15,"U1";2;0;1;0
720 GET#2,A$,B$,C$:IFA$+B$+C$<>"CBM"THEN740
730 PRINT#4,BS$:CLOSE2:BU=BU+1
740 PRINT#4,SQ$:PRINT#4,"BLOCKS ON DISK ="TB
750 PRINT#4,"BLOCKS FREE    ="TB-BU
760 IFDB=TB-BUTHEN780:REM ALL CHECKS OK
770 PRINT#4,"BLOCK COUNT ERROR - CHECK DISK"
780 IFFTHENPRINT#4,"PRG="VC"  SEQ="SL
790 PRINT#4,SQ$:CLOSE4:DCLEARONU(U):PRINT"[2HOME]":END
800 :
```

The next few lines are pure utility. Lines 810-820 show another way of writing a program down to the disk drive for internal operation by line 850. Line 840 tells the disk drive which track and sector to start work from. Lines 860 on get back the file data, and convert it to either an end address, or file length.

```
810 OPEN6,U,6,"#0":PRINT#15,"B-P"6;0
820 FORA=1TO56:READW:PRINT#6,CHR$(W);:NEXT:CLOSE6:RETURN
830 :
840 PRINT#15,"M-W"CHR$(59)CHR$(0)CHR$(2)CHR$(PT)CHR$(PS)
850 PRINT#15,"M-E"CHR$(0)CHR$(3)
860 PRINT#15,"M-R"CHR$(136)CHR$(0)CHR$(3):GET#15,AA$,BB$,CC$
870 AA=ASC(AA$+ZZ$):BB=ASC(BB$+ZZ$):CC=ASC(CC$+ZZ$)
880 SY=252:IFK=1ORK=3THENSY=254
890 X=0:AA=BB*256+AA:IFAA=0THEN900:ELSEX=SY+(AA-1)*254
900 VV=0:IFK=1ORK=3THENVV=-1
910 A=X+CC-2+SA-VV :RETURN
920 :
```

Last, but not least, the DATA we need for our machine code routines - firstly the file types, then the directory burst read, and finally the code to go into the 1571 disk drive.

```
930 DATA "XXX","SEQ","PRG","USR","REL"
```

```
940 :
950 REM: BURST READ DIRECTORY, STORE AT $3000
960 DATA 162,  0,142,  0,255
970 DATA 169,  0,133,251,169, 48,133,252,169, 15,168,162
980 DATA   8, 32,186,255,169,  0, 32,189,255, 32,192,255
990 DATA 169,  0,133,250,173, 28, 10, 41,191,141, 28, 10
1000 DATA 162, 15, 32,201,255,162,  0,160,  7,189,157, 24
1010 DATA  32,210,255,232,136,208,246, 32,204,255, 44, 28
1020 DATA  10, 80, 76,120, 44, 13,220,174,162, 24,173,  0
1030 DATA 221, 73, 16,141,  0,221,169,  8, 44, 13,220,240
1040 DATA 251,173,  0,221, 73, 16,141,  0,221,173, 12,220
1050 DATA 133,250, 41, 15,201,  2,176, 41,160,  0,169,  8
1060 DATA  44, 13,220,240,251,173,  0,221, 73, 16,141,  0
1070 DATA 221,173, 12,220,145,251,200,208,233,202,240, 10
1080 DATA 230,252,206,162, 24,238,161, 24, 76, 29, 24, 24
1090 DATA  36, 56,169, 15, 32,195,255, 96, 85, 48,  0, 18
1100 DATA   0, 19, 18, -1
1110 :
1120 REM: DISK RAM PROGRAM
1130 DATA 169,  0,133,136,133,137,133,138,165, 59,133, 12
1140 DATA 165, 60,133, 13,169,128,133,  3,165,  3,201,128
1150 DATA 240,250,173,  0,  6,240, 17, 24,230,136,208,  2
1160 DATA 230,137,133, 59,173,  1,  6,133, 60, 76,  8,  3
1170 DATA 173,  1,  6,133,138, 76,148,193
```

There you have it. A new version of a Golden Oldie that will help your disk management along nicely. Maybe you can think of other things to add (a BAM map could be added easily, but don't forget you will need to read Track 53 Sector 0 for double-sided disks). The main thing is for you to find it useful!

(C) Paul Blair 1986

--ooOoo--

FAMILY RESPONSIBILITIES MONITORED

by Lindsay Whipp

Even those of you who don't watch the soapies on TV will realise that none of us can escape the all-pervading influence of family and/or social responsibilities, the very stuff of which so much is made by the writers of those potted catalogues of human miseries and surrogate aspirations. This means you - you'd better believe it!

Anyway, our esteemed Secretary, Norm Chambers, gleans from his data-base of members' statistics that still a large percentage (about 70%) of our members use the now positively venerable C-64, and that a further 70% of them use TV sets instead of monitors. Even a sizeable slice of the C-128 users still employ a portable TV, despite the fact that the C-128 offers RGB output, a distinct improvement over the Composite Video output of the C-64. Family responsibilities.....I'm sure of it.

I remember when I bought my C-64, I looked at monitors and I looked at TV's. No contest, thinks I. The composite monitor is visibly clearer and, especially since programs such as "GEOS" employ Hi-Res screens continually, the extra $150 or so seemed not important.

"No contest!", says I.

"No deal!", says spouse.

"Aw Shucks.", says I.

And folks, that's how they get you. These family budgeteers deliberately stoop to such low tricks as using reason and logic against you, when all you really want is to pursue a harmless hobby with some degree of integrity.

"A monitor is dead money to the family. But a second TV can always be used. This is supposed to be a hobby, not an obsession."

I mean, I ask you, does that sound like a reasoned, logical argument?

Well, yes, I'll admit it does. Or, at least, I did at the time. So a large number of you out there, whether in Wandin Valley or not, settle for acceptable, but irritatingly inferior, picture quality. Like me. It wouldn't be so hard to take if you didn't know that monitors deliver so much better quality.

In short, you give in to your indocrination. Family responsibility comes first --- and all that.

Well, for some time now, I've been pursuing a conviction that TV sets could be converted into part-time monitors, and finally I've found a firm who has agreed to the modification for the simple reason that one of the staff has a C-64 and he'd come to the same conclusion.

I've had my set modified and am amazed. Comparing the modification with a Commodore composite monitor, I have to admit it's not QUITE as clear and sharp, but it's damned close, and certainly a big improvement on the RF-modified picture obtained by using the TV-aerial type of input with which most of you will be familiar. On my set, which is a Rank Arena 13" portable 'Monitor-Style' set, I got what is probably about a 25-30% improvement in clarity, and an almost total elimination of colour-smearing and flicker.

No further improvement is possible because the set is now delivering an image to the maximum resolution of the video matrix and this, of course, is not as fine as that found on monitors in general. Every set would present different modification requirements because there is very little standardisation among manufacturers. Mine, for instance, is a "live chassis" set, and a separate, isolated, transformer was required to power the small circuit-board "driver" which is mounted inside the set, with only a cable socket and a switch (monitor on/off) visible from the outside.

However, Down Under Electronics, who made the modifications, believe that an average charge of $120 would cover the cost of the modification to most TV sets, and about $150 for an RGB conversion for C-128 owners. I know that's about the price difference between a TV and a monitor, but your family responsibilities will be assuaged by the knowledge that you still have a second TV. Remember, though, that you can't exceed the resolution of the matrix built into your set - you'll never get proper monitor quality out of a receiver maximised for television reception.

Down Under recommend that you contact them with the make and model number of your set as a first move, so that they can order the necessary circuit diagrams (expect about a week's wait), and, when these are available, the actual modification should take only a few days. They realise that a computer without a monitor is not real nifty.

So, basically, I still think that my spouse was wrong. My family responsibilities would have been better discharged if I'd insisted not only on a monitor for the computer, but getting rid of the other TV set as well! The most inane computer game ever written is both more entertaining and of better picture quality than any of the banal drivel broadcast on the TV airwaves. And this from someone who makes a living from TV production.....

So, failing this ideal scenario, a modified TV allows me to have my cake and eat it, too. I don't have to watch TV.....

Down Under Electronics are located at 46 Days Road, Grange. Phone 356 1180.

--ooOoo--

THE 64 000 BYTE QUESTION

by Phil Guerney

Answers to the February 1987 Questions

No winner to announce as the Christmas break meant that winners were announced in February's issue. The February quiz winner will be given in the April issue and so on through the year.

1. Commodore advertising appearing in US magazines in 1982 gave the introductory price of the C-64 at $US595.

2. The P-Series of computers that Commodore were announcing in 1982/3 sounded too good to be true. They were basically a C-64 with 128K RAM, expandable to 896K, with the same colour and sound as the C-64. (See Compute! March 1983, p.30)

3. The enormous number of PET's sold in the USA in 1978, according to the Australian Distributor's 1979 literature, was 2,500. Of these, 80% were said to have been sold to business and schools. Compare that to the 7,000,000+ C-64's sold around the world so far (that robs me of a future quiz question, but it's so staggering I couldn't help putting it in).

4. November 1982 prices were: Vic20 ($299); 1540 ($669); 1515 ($479); 16K expander ($129); Prog. Ref. Guide ($22); Joystick ($18); Super Expander ($69); Sargon & Gorf ($39.95 ea.). Total $1764.90!

5. Those games that Commodore revamped up from the Vic20 to the C-64 were Seawolf, Rat Race, Gorf, Avenger, Omega Race, Clowns, Super (Jupiter) Lander and Speed Maths.

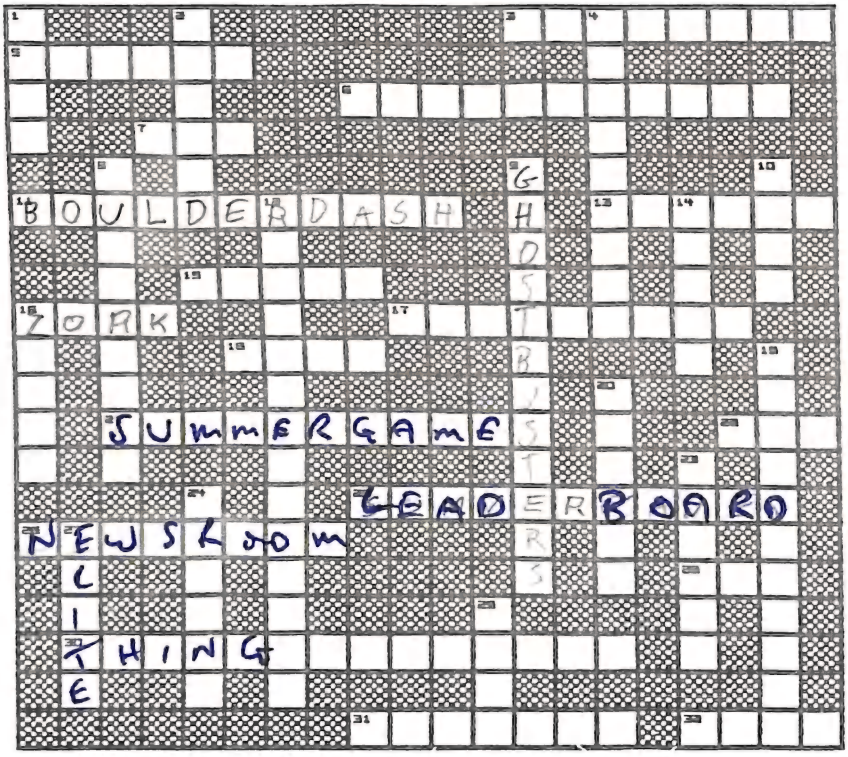
6. The answers to the question of the greatest rip-offs in software, books and accessories will have to wait until next month when I should have received the hundreds of replies I'm expecting from you!

MARCH 1987 QUESTIONS

This month the clues are a little more obscure than usual. But the answers to the crossword on the following page are just the names of popular computer programs.

Most of them are games programs, but then most of the big selling (and big copied) programs are games aren't they?

---ooOoo---



ACROSS CLUES

3. Jim Butterfield's monitor
5. Halo, Alamo, Advancing Wall, Chess and Cornered. Whichever, you'll need much training first.
6. A guide
7. Terminal program written in GPascal
11. Magic walls, butterflies and falling rocks...
13. Not quite the FA cup
15. Oranges or electrical?
16. The Great Underground Empire
17. Lupin salt rearranged for a financial analysis
18. Uses a turtle
21. Joystick wiggling can build up a sweat
22. Faster than 1-Down but same scenery
23. Power and snap and little white balls
26. Photos, banners, panels and pages
28. Mr and Mrs Man had a power pill popping kid called?
30. Infuriatingly bouncy
31. GI's brother is not quite so infuriatingly bouncy
32. I don't know what this program is but it fitted! Starts with G

DOWN CLUES

1. Fly a Piper PA-28-181 Archer II (abbreviation)
2. His playground is a hit with 6 year olds (first name only)
4. Greeting cards, letterheads and more
8. Look! Up in the sky! Is it a bird? Is it a plane? No it's a filing program!
9. He slimed me...
10. Mac64?
12. Stop the nuclear war.
14. A Common Algorithmic Language
16. Lots of leaping with a sword
19. Not super, not even easy but nevertheless a fast writer
20. She gets ready for Ken
23. The busiest bargain in the west
24. Lumber, oil, ore, coal, and Casey Jones
27. 3D space wars
29. Eat those apples quickly, there's lots more on the next screen

PROBLEMS WITH THE 1571

by Greg Perry (c)

Are you the proud owner of a C-128D or C-128 and 1571 drive? Nice aren't they. The 1571 is definitely one of the best single disk drives that Commodore have produced in recent years. Immunisation at birth seems to have banished the old 1541 mis-alignment virus. It also runs significantly cooler than the old 1541, is quiter and more intelligent than previous Commodore drives, with the ability to read and write a wide variety of different (even non-Commodore) formats.

Unfortunately, the magic 'burst mode' commands have proved to be difficult to use for 'normal' programming and are less useful than we had expected. However the fast loading of programs and files is a boon.

But beware - Commodore engineers have ensured that there are still a few little bugs crawling around inside the Disk Operating System of the 1571.

Myths.

There have been suggestions at the group's meetings that there are different versions of the 1571. As far as I can ascertain this is incorrect. Although there have been some changes to the 1571 electrical specifications for the circuit boards (i.e. 1571 vs 128D) the actual ROM code is DOS Version 3.0 revision 2 (?). Commodore have not released any other version in production drives. The ROMS in the 1571 and 128D are interchangeable.

A Minor Problem - Software Copy Protection.

The first problem surfaces with some 1541 disk protection systems on the latest 1541 software. This is not the fault of the 1571 but rather the result of indifferent programming on the part of the software producers. Many copy protection systems for the 1541 rely on extra tracks outside the normal 1-35 range, nominally tracks 36 and 37. (Flight Simulator and Elite are two examples.)

These tracks are actually created on the inside of the disk, closest to the hub of the drive. Even with the 1541 (especially the later ones) this may cause problems. It is relatively easy for someone with knowledge of the Disk Operating System ROMS to write code to create, read and write such extra tracks, but care is required.

Although the 1541 part of the 1571 DOS is generally compatible with that of the original 1541, accessing tracks past 35 must be done with some skill, since not all of the older code will work correctly. In the worst cases (most?) the drive will end up in Commodore Heaven with the head being driven into unknown territory on the very inside of the disk. Once this happens, the user may find that even after turning the drive off and on again, it will refuse to load anything - even a directory.

If this problem occurs it is necessary to force the drive to bring the head back to the normal range. Fortunately this can be done without pain by INITIALIZING the drive WITHOUT the disk as follows:-

1. Open the drive door.
2. Turn the drive off for a few seconds and back on again.
3. Enter: **OPEN 15,8,15,"I0"** and press return.

The drive will rattle a bit and then stop with the error light flashing. (As it should because there is no disk in!) All should now be OK. You now should be able to load directories and programs normally.

A Major Bug - Side Two of the 1571.

Major problems with the 1571 appear when we start using the second side of the disk. (Incidentally, is it really the backside of the disk, and is the backside on the top or on the bottom?) Some overseas magazines have even gone so far as to suggest that the user should never use side 2 by ensuring that a 1571 disk is never

more than half full. This is not actually true. Apart from the speed problems, side 2 can be used safely within certain guidelines.

The first minor annoyance occurs when the disk is at least half full and the file or program has to be saved on the second side. Unlike the handy speed increase on side one, when writing to side two, the 1571 speed drops to about 1/3 - 1/2 of that of the 1541! The problem is caused by what we feel is the organisation of the sectors on a 1571 disk. The Block Allocation Map (BAM) which keeps account of which sectors are used is split between side one and two. Unlike side one where the BAM is in memory all the time, when writing to side two the drive has to keep reading the BAM from the disk on side two to find out the location of the next free sector. This does slow down the process of saving a file dramatically. Still, saving onto side two does work reliably when ONLY A SINGLE FILE is in use, such as saving a program or text from a word processor.

Data Corruption.

For the last 6 to 12 months or so a number of us have been finding that certain programs cause problems when used on the 1571. When using any of the Basic compilers or Assemblers for the C-128 (and even for the C-64 when used with a 1571 in double sided mode) we often found that, although the compilation appeared normal, when the compiled program was subsequently loaded into the computer a large chunk, up to 25K at times, was missing. For example, a compiled program which according to the directory was 150 blocks long was loaded into memory and only occupied 12K, equivalent to 50 disk blocks. We had LOST 100 disk blocks somewhere!

This caused great problems with our recently completed GP TERM communication program for the C-64. This machine code program of 56K was written using an assembler system for the C-128. Containing 11000+ lines of code, the source file and assembled program simply wouldn't fit onto a single side of a 1541!

Other programs also cause problems. For example, in our club data base program, we store the records of up to 1500 members in a relative file. To create a selective mailing list we read the members' name and address from the file and write them back to a sequential file which we can use with the Superscript Mail-Merge facility. Only problem is that we end up with garbled data!

We have tracked the problem to using side two of the 1571 disk. When we made sure that both source- and compiled programs stayed on side one of a disk, or used a second drive to hold the compiled or assembled program we had no problems!

The bug can be succinctly defined as follows:-

Data corruption WILL occur whenever one relative and one sequential file, OR three sequential files are open at once, and the new file is being written to side two.

Let's demonstrate the problem.

Take a new disk out of the box and FORMAT it (For example, **HEADER "TEST", 122**). Then enter and run the following program on the C-128 and watch what happens.

The program first creates a RELative file containing 716 blocks (lines 150 - 170) so as to ensure that side 1 is completely filled. It then writes a few records to the relative file (lines 200 - 240). The disk is now set up to demonstrate the bug.

By all normal logic of Commodore disk files we should be able to read some of these records from the relative file and write them into a new SEQuential file. It just happens that the new file will be set up on side 2!

If you are not familiar with the use of RELative files don't worry - I'm not trying to pull the wool over your eyes! This process works fine on a 1541 or on side one of the 1571, and is used extensively in data base programs to produce a mailing list file of names & addresses. (As done in the Group's Membership Program.)

```
100 REM DEMONSTRATION OF 1571 BUG
110 REM (C) GREG PERRY BRISBANE FEB 87
120:
130 REM CREATE RELATIVE FILE TO FILL SIDE 1
140 REM AND PRE-EXPAND FILE
150 DOPEN#2,"MAIN FILE",L254: GOSUB 510
151 PRINT "[CLR] PLEASE WAIT: CREATING RELATIVE FILE"
152 PRINT "NOW'S THE TIME FOR A CUP OF TEA!"
160 RN=710: GOSUB 470: REM POSITION RECORD
170 PRINT#2, "END RECORD"
180:
190 REM WRITE SOME RECORDS TO FILE
200 FOR RN = 1 TO 40
210 PRINT "WRITING REL RECORD #";RN
220 GOSUB 470: REM POSITION RECORD
230 PRINT#2, "THIS IS RECORD #";RN
240 NEXT:DCLOSE
250:
260 REM *** DEMONSTRATION OF ERROR ***
270:
280 DOPEN#3, "BAD FILE SIDE 2",W
290 IF DS=63 THEN DCLOSE: SCRATCH "BAD*": GOSUB 150: GOTO 280
300 DOPEN#2,"MAIN FILE"
310 FOR RN = 1 TO 40
320 PRINT "READING RECORD #";RN;
330 GOSUB 470: REM POSITION RECORD
340 INPUT#2, A$: PRINT A$
350 PRINT#3,"THIS IS A COPY OF RECORD ";RN;"= ";A$
360 NEXT:DCLOSE
370:
380 REM *** NOW READ BACK THE MESS WE CREATED! ***
390:
400 DOPEN#2, "BAD FILE SIDE 2"
410 I=0: DO UNTIL ST<>0 :I=I+1
420 INPUT#2,A$: PRINT I,A$
440 LOOP: DCLOSE: END
450:
460 REM POSITION TO RELATIVE FILE
461 REM POSITION TO RELATIVE FILE TWICE!
470 RECORD#2, (RN): GOSUB 510
480 RECORD#2, (RN)
490:
500 REM CHECK DISK ERROR
510 IF DS<20 OR DS=50 THEN RETURN
520 PRINT "DISK ERROR ";DS$
530 DCLOSE: END
```

If you RUN this program you will notice that the data read back from the disk is corrupted after the 20th set of data. Note also that a large part of the data in the middle is missing!

As another test, view the directory of the disk and note the number of blocks free. (Hint: the total of blocks free and allocated must add up to 1328!) Now VALIDATE or COLLECT the disk and view the directory again and recalculate the total blocks. Strange isn't it, we have now created a disk with more blocks than we started with!

What's actually happened? If one checks the disk with a track and sector program (such as Paul Blair's "128/80 Disk Util") one finds that our new sequential file is not in fact 9 blocks long as indicated, but in fact contains only 6 blocks!

In various tests it can be established that the actual number of blocks USED by a sequential file created in such a manner will be between 5 and 7, IRRESPECTIVE of what the directory says! (In one of my commercial programs we created a SEQ file og 186 blocks, containing the names and addresses of 800 clients. The only problem was that in reality it only contained 6 blocks of garbled data. I had a bit of explaining to do, I can tell you!)

For a bit of fun, try to COPY the bad file, using COPY "BAD FILE SIDE 2" to "ANOTHER BAD ONE", and see what happens.

The Solution to Side 2 Problems.

Why does this happen you may well ask. I don't know. I have a fairly good idea, but I'm not going to tell you just yet. Stay tuned to the next issue. If anyone has any suggestions as to what causes the problem please send us your answer.

A Few Hints

A. The problem only occurs when either one RELative file and one SEQuential file, Or three SEQuential files are open at once, and the new file is on side 2.

B. Corruption of data occurs after roughly 1016 bytes have been written to the new file.

C. The resulting file actually contains only 5 - 7 blocks, irrespective of the amount of data written.

D. Immediately after the creation of the file the total block count (free and allocated blocks) is correct at 1328, but after a COLLECT or VALIDATE 'extra' blocks appear.

I'll be interested in your suggestions.

Avoiding the Problem.

Impossible! As far as I am aware there's no way to prevent the problem occurring. However, in the example provided in the above program, it is possible to successfully create the new sequential file on side 2 in a different manner with no corruption. This can be done by opening the RELative file and reading into the computer's memory as much as you need, closing the RELative file, opening the SEQuential file and writing the new information. If more data is needed than can be contained in the computer's memory, one needs to perform this task several times and use the APPEND command to add each new batch of data to the end of the SEQuential file.
With compilers or assemblers the only solution is to ensure that the compiled or assembled file stays on side one, or use two disk drives with the binary file going to the second drive.

People have suggested that there are some other problems with the 1571, but I have not personally found any other major problems. If you can document any, I would be very interested in hearing about them.

We have informed Commodore Australia about the above problems and they are looking into it. However, since all the development is done overseas, we will have to bide our time. There are rumours of revision ROMS for the 1571, but we have not received any specific information at the time of writing.

---ooOoo---

AMIGA COLUMN

KICKSTART / WORKBENCH V. 1.2

It's been a long time in coming, but Commodore-Amiga's release of the upgrade to Version 1.1 of the operating system is a reality.

Commodore was scheduled to ship what is called as "Amiga Enhancer Software" in mid February, available through authorized Amiga dealers for $25.00

The package contains three disks: Kickstart 1.2, Workbench 1.2, and a new Extras disk 1.2 including a revised Amiga Basic, several software tools, and PC utilities. The enclosed documentation updates "Introduction to Amiga", "The AmigaDOS Manual", "AmigaDOS ROM Kernel Reference Manual, and the "Intuition Reference Manual". It includes "Introduction to PC Utilities" which we'll get into later in this article.

Here is a listing of most of the major changes of Version 1.2:

(1) In Workbench, when you drag an icon you'll see an actual copy of the icon move under your pointer.

(2) Gadgets and Requestors are now automatically selected. You don't have to click inside the box before typing text into a string gadget.

(3) When you format a disk, the drive light stays on until the initialization has been completed.

(4) An icon for the RAM disk is created by any command which touches the RAM disk. A "Dir RAM:" from CLI or in the "Startup-sequence" does the trick. At this point, you can access the RAM disk from Workbench, but the icon for it will remain until you power-off or re-boot.

(5) There is a new "Expansion" drawer on the Workbench. Icons of driver files for add-on devices can be dragged into this drawer. Upon re-booting the system, these add-ons will be automatically configured and operational.

(6) Your Amiga can now recognize and use a 5.25 inch disk drive, using the new "Mount" and "Diskchange" commands in conjuction with a Mountlist file.

(7) Printer support is now added for these printers: Apple ImageWriter II, Okidata Microline 92, 192, and 292. Instructions are provided.

(8) Preferences now includes drag bars and front/back gadgets.

(9) In Preferences you can set "Interlace" as the default operating mode, doubling the number of available screen lines. It let's you display 2 complete program screens at the same time, one below the other.

(10) Preferences has a Change Serial gadget, replacing the old Baud Rate gadget. Available serial settings are: Baud Rate, Buffer Size, Read Bits, Write Bits, Stop Bits, Parity, and Handshaking method.

(11) When adding a custom written driver for a non-supported printer, the new entry will appear in the Preferences printer list.

(12) A new version of Notepad supporting numerous features and options works from Workbench and CLI. It's greatly improved.

(13) The Amiga now supports about a dozen keyboards for a variety of languages via the SetMap tool. Support is available for Dvorak keyboards.

(14) Formerly residing in the "C" directory, "Say" has been moved to the "System" directory and will now work from CLI and Workbench.

(15) "Diskcopy" and "Format" have also been moved from the "C" directory to the "System" directory.
(16) "GraphicDump" has been added to Workbench letting you dump the front most screen to your graphics printer after a 10 second pause.
(17) "AddBuffers" adds sector caches for chosen disk drives speeding disk access speed. Example: AddBuffers df0: 25
(18) Another CLI command, "ChangeTaskPri" lets you raise or lower the priority of the current CLI task. Example: ChangeTaskPri -5
(19) "DiskChange" reads the info from a mounted 5.25 inch drive after a disk change has been made. These drives don't do this automatically.
(20) "DiskDoctor" fixes a corrupted or unreadable disk. The desired disk drive should be typed after the command.
(21) The "Mount" command installs a new device such as a 5.25 inch drive. The example "Mountlist" text file in the "devs" directory may be edited to mount a device as you desire.
(22) "Path" is a new command letting you add directories of your choice to be auto-searched when you run a command or program from CLI. Example: Path ADD SYS:system
(23) "SetDate" changes the timestamp of a previously saved file. Example: SetDate df1:datafile 25-Dec-86 10:00:00
(24) A new version of AmigaBasic is included on the new "Extras" disk. This one is fully compatible with Kickstart/Workbench 1.2.
(25) Moving on to the "Tools" drawer on the "Extras" disk, you'll find several programs with documentation on-disk. "Fed" is a font editor giving you the power to create personalized fonts in low or medium screen resolution.
(26) A fully enhanced, menu driven version of MicroEMACS can be used as a word processor or text editor. The multitude of commands can be used with the mouse or from your keyboard.
(27) "IconMerge" combines 2 icons into a 2-part single icon.
(28) "PrintFiles" lets you print text files by single-clicking it's icon then, while depressing the SHIFT key, double-clicking the icon of a text file. Four more tools are in the directory.
(29) The "PC Utilities" drawer on the "Extras" disk is a surprise. PC Format formats a 5.25 inch drive's disk as a 360K PC-DOS disk while in native Amiga mode without the aid of Transformer or Sidecar.
(30) "PCCopy" and "ToPCCopy" do what's implied. In Amiga mode, you can copy files to or from 5.25 inch PC-DOS disks, provided you have a 5.25 inch disk drive. In native Amiga mode, I downloaded SPEEDY3.EXE from an Amiga BBS. This program speeds up the screen display and operation of Transformer, the software IBM-PC emulator which does not seem to run under 1.2. The problem? SPEEDY3.EXE is a PC/MS-DOS program. An Amiga running Transformer can't run it from an AmigaDOS disk. "ToPCCopy" let me move the program to a PC-DOS 5.25 inch disk. Problem solved.

There you have it, a quick tour of the major additions/features of the "Amiga Enhancer Software" known as 1.2. At $25.00 this is a bargain. The manual contains plenty of information for programmers too.
No Amiga owner should be without this package. Buy it!

--ooo--

If the commercial release is available on time we hope to demonstrate 1.2 at our next Amiga Meeting (22nd February).

MAIL BOX

Some time ago our secretary Norm Chambers received a letter from our member Harry Carter of Browns Plains, who disagreed with the opinions expressed in a previous news letter re U.K. computer magazines. Without quoting his letter in full Harry wrote that I (yes Harry, it was yours truly who wrote those notes) wasn't quite fair to English computer magazines. He felt that, despite their excessive coverage of games and their dot-matrix program listings, the magazine that he purchases ("Your Commodore") offers him some good programs and utilities which, as he said, were better than similar ones in American magazines. Generally he found that the programs which he did type in had few mistakes in them, whereas Compute! and Compute!'s Gazette often publish pages with rectification of errors.

Well Harry, you've certainly thrown a difficult one at me! We are here in the area of value judgement and taste, and all that I can do is to try to clarify my position.

First and foremost I am NOT anti-British! Five years ago the only information that we could obtain in print about matters related to Commodore were mainly from the U.K. The basis of these articles were laid by those people in the U.K. who formed ICPUG (Independent Commodore Pet Users Group, now renamed as Independent Commodore Products Users Group). Two of the most well known members were (and are) Mike Todd and Raeto C. West (yes, the one of the big Commodore reference books). Their newsletter is at present probably one of the very best around.

With the arrival of the VIC-20 and the C-64 the emphasis in both book- and magazine production shifted to the USA and this situation is still with us today.

In trying to give an overview of the current magazine market my views are obviously coloured by my personal views and experiences. It is a fact that the three major English magazines are all very similar and games orientated. It is also a fact that the majority of their program listings are standard dot-matrix (i.e. 801 type) listings. Up till recently they even didn't translate Commodore's meaningless graphics characters with more meaningful descriptions such as those which can be found in Greg Perry's 'Nice Lister' program. Have you ever tried to type in a program which employs lots of these graphics characters which are very often wellnigh impossible to read? I have, and this makes me appreciate all the more the listing conventions employed by certain American magazines.

You also mentioned the fact that, despite the fact that the Americans employ check-sum programs, they still have mistakes in them. Absolutely true! But, I have found on quite a few occasions that I have been able to deduct what the program line had to be, precisely because of the check-sum system.

So, I intend to stick with my opinions, namely that the UK magazines are fine if your main interest is games or if you are an owner of a C-16/Plus-4. Generally I still find the US magazines better produced with a better mix of articles and certainly easier program listings. However (!), even here I reach the stage where I find that 'Compute!'s Gazette', 'Run' and 'Ahoy!' basically cover the same material ad infinitum and I'm getting rather bored with the lot of them! This probably means that I'm getting stale, but when I read in the Feb.87 Gazette again for the umpteenth time a listing of dot-matrix printers and their features, I'm not really interested anymore, although there are probably lots of new Commodore users out there who have been waiting anxiously for just such an article!

Now, if it was a new Amiga magazine ..... that would be really something!

Editor

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FOR SALE

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VIC-20 COMPUTER CLASSIC GAMES (on tape): Sorcerer & the Princess - Vic Resque - Alien Attack - Fantazia - Snackman. Original Cost $100.00 --- Best Offer.

Contact Vic Mobbs on 071 / 941 330

VIC-20 MEMORY EXPANDER made to order: 8K - $50, 16K - $70, 24K - $90, 32K - $100
ANALOGUE JOYSTICK (Koala Pad Type) - $32.00
VIC-20 4-SLOT EXPANSION BOARD - $50.00 --- **VIC-20 3K SUPER EXPANDER** - $30.00
VIC-20 CARTRIDGE GAMES x 3 - $10.00 ea.

Contact Barry Wilson on 399 6204 a.h.

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"BYTES" - these small computer-related adverts are ***FREE*** to all financial members!

---ooOoo---

GAMES CORNER

by Jamie Ogden

MINI REVIEW

KNIGHT GAMES

Having your head knocked off by a mace and getting the living daylights beaten out of you is not exactly what I would call an athletic sport. This means that your joystick is safe from being destroyed as in most games like this. The backdrops are very impressive and the detailed characters are superb. There are some catchy little tunes to it and some very good sound effects. It's not all that hard, and I would say after playing it for a month it would end up in the drawer and gather dust. I was a little bit disappointed not to see any blood and gore, but who likes that stuff anyway!

IDEA	GRAPHICS	SOUND	HOOKABILITY	VALUE	OVERALL
92	97	82	72	61	90

HINTS & TIPS

Yes, Once again I have decided to enlighten you mortals with the power of the poke ... cough ... ough! There are a few beauties this month, including THRUST and THINGY ... oh ... By the way if you have any trouble with any cheats in this column than write me a letter to let me know. So, let's get started.

THRUST

This little ... um ... er ... thingumebob really works! Yep, hold down F7 + F5 at the same time and your ship will fly so slowly that the tricky passages will be a piece of cake! Beauty mate!

DEATHWAKE

The ol' password in the high score table is gettin' to be a bore, but here's yet another one. Type ITS MY BIRTHDAY and you are invulnerable in this game.

GYROSCOPE

Load the game and hit ye ol' reset button. Kazam! Now, type in these pokes ....
POKE 46687,76 - POKE 46688,105 - POKE 46689,182 , followed by SYS 2067.
Now you have unlimited lives. Wow! Gee Whizz! Flabbergasting stuff.

MUTANT MONTY

You would think people would get sick of this t...h. Yuk! Anyway here are some cheats for it:
POKE 21647,173 (infinite lives) - POKE 18547, (1 - 100) (to change the speed of the game) - SYS 22039 (restart the game).
By the way, to make any improvements to this game, ... just don't load it!

THING ON A SPRING

Without a cheat mode I don't think anyone could possibly get through this game. I can't even get through it with the cheat mode! Anyway, if you hold down *T, H, I, N, G, INST/DEL, and ← (top left corner of keyboard)* the border changes colour.... Yes, bravo, isn't that fantastic. By the way, it also gives you unlimited oil! See ya!

ATTENTION

If anyone has found a cheat mode for GREEN BERET, I would love to hear from you. And of course any other cheats / or shortcuts for other games would be equally welcome. I am still waiting for all the 'cheaters' from Brisbane with their 'short cuts' to success. Please forward any Pokes, Cheats, Shortcuts etc. to:
HINTS & TIPS, c/- Jamie Ogden, 493 Alice Street, Maryborough, Q, 4650.
I will of course acknowledge all contributions by members. Happy Hacking!

DISK LIBRARY

by Bill Bohlen

Disk 036 C.C.U.G.(Q)INC ,UU

MENU	Menu with program instructions
DISK LABEL	Print labels for disk jackets
EMERG.LANDING	Helicopter pilot needs a break
PAC-BOY	Pac-man's son. Game
FISH-AHOI	Game
3D-FOUR WINS	Connect 4 in 3 dimensions
WILD WATERS	Guide canoe through raging torrents.
PULL-DOWN MENU	Menu subroutine for Basic programs.
FRUSTRATION	Mastermind on the C-64.
BATTLESHIP	Destroy as many planes and subs as possible.
MEMO	Desk Calendar to keep appointments.
TOTAL MUSIC	Music program from RUN magazine.
MAG PRODUCTION	From RUN. Prg to produce newsletter
MAG READER	" " To read what's produced by above
MAG PRINTER	" " To print " " " "
DISK KEEPER	Disk Utility from RUN magazine

Also available are now the following disks:

DISK NO. 174 - TPUG November 1986
DISK NO. 175 - TPUG December 1986
DISK NO. 176 - TPUG January 1987

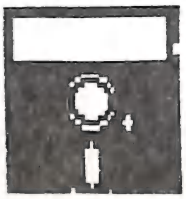
****

German Word Processor

While in Switzerland a few weeks ago, I was able to pick up a copy of MASTERTEXT, a word processor which emulates a German typewriter and lets you print out the German alphabet including all their special characters like 'umlauts' and the German 'double s' character. It can print out with any Commodore printer (including the 802) and the Epson GX-80.

As far as I am aware, it is in public domain, so if anyone would like a copy, please contact Bill Bohlen on 208 3729.

---ooOoo---



comment

by Ralph De Vries

OBSOLETE: Fallen into disuse or no longer in use (Maquarie Dictionary).

Obsolescence is definitely part and parcel of the computer world. In the Commodore world we only have to think of the PET's and the VIC-20's as very good examples of obsolete computers. But what does it really mean, this term "obsolete"?

Now that micro computers have been with us for some eight years or so, certain patterns are starting to emerge. The first and main cause of obsolescence is advances in technology. As an example, the VIC-20 was superseded by the C-64 which offered more memory, better sound- and graphics facilities etc., at a relatively lower price.

The second cause partly relates to technology, but has really far more to do with marketing, timing, pricing and advertising. The classic Commodore example of this is the PLUS/4. In some respects it was/is a better computer than the C-64 (a better Basic, improved design etc.), but it lacked graphics- and sound facilities, which meant that it was incompatible with the very popular C-64. For Commodore the result was a marketing disaster and contributed partly to their financial problems.

The third cause really relates to the second one; namely how the market place perceives the product or, in simple terms, how much software support the computer in question gets.

All this was brought home to me again by an article in the Feb '87 issue of "Compute!". Apparently rumors persist in the USA that Commodore is going to downplay or even drop the C-128 after X-mas 1986. Sales and profits are supposedly not up to scratch, hence the possible disappearance of this very fine 8-bit machine. Now I stress that this is only a rumour. After all, we are only talking about the USA, and Commodore aren't saying how well the C-128 and C-128D are doing in the rest of the world.

However, it is a fact that, apart from word processors, spread sheets and data base programs, there is virtually no software support for the C-128. Apparently the world's software manufacturers have decided in their infinite wisdom that the C-128 doesn't merit the release of software specifically written for this machine, hence the so-called C-64/C-128 compatible packages, which really means C-64 software which will also run on the C-128. So, if you are not interested in the above mentioned application programs you may as well stick with the C-64!

Which brings us to the Amiga. Currently the Amiga sold is the Model 1000, normally sold in the 512K configuration. By now it is a well known fact that Commodore are to release in 1987 a Model 2500, a super Amiga with many expansion possibilities (but with the same 68000 processor chip), and an 'el cheapo' Amiga (Model 500?), which may come with 512 or 1024K on board, and have the operating system in ROM rather than load it into RAM, as is done in the Model 1000.

The 'cheap' Amiga probably won't be seen till much later in 1987, but could well be priced so competitively that it will kill off the C-128. This was my own reasoning for buying an Amiga and disposing of my C-128.

Have I made the right decision? I don't know. I'm satisfied that the Amiga is a better computer than either the Macintosh or Atari ST, but will the software developers agree with me? Commodore seem to be only interested in making the Amiga IBM compatible, thus turning it into the world's most expensive PC clone. It should be fully explored for its own very positive features, e.g. multi-tasking, open architecture, graphics and sound; all features where it scores over the opposition.

Only by doing this successfully can the term *obsolete* be avoided for some years.

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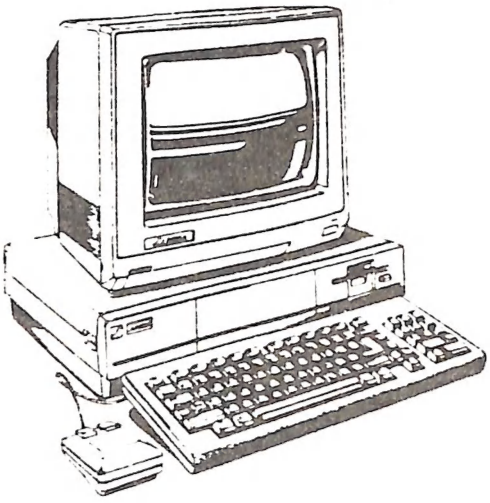

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Greg Perry can be reached only between 10 am and 4 pm, and Maurice Hawkyard can be contacted between 9 am and 5 pm.

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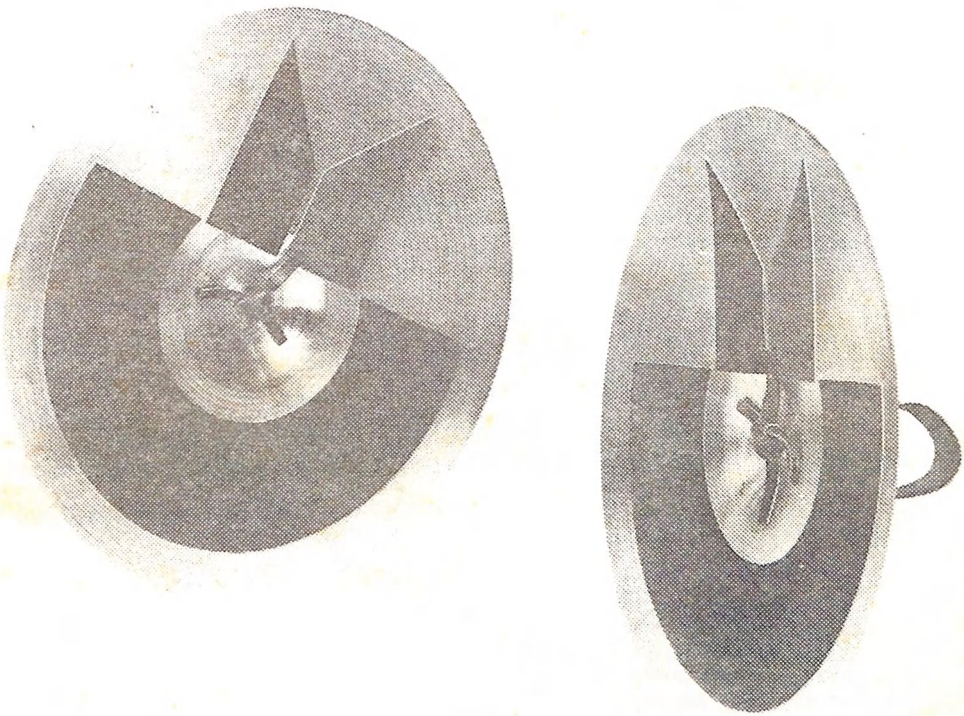

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