

# CURSOR

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

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## MEETINGS - WHERE & WHEN

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**MAIN MEETING:** Tuesday 7th July 1987 in the *Bardon Prof. Dev. Ctr. 390 Simpsons Rd. Bardon*. Entrance through Car Park in Garwoola St. Doors open 7pm (library), Meeting starts at 8pm sharp. Library closes at 9.30pm.

\*\*\*\*\* A Closer Look at Super Script on the C-64 and C-128 \*\*\*\*\*

**WORKSHOP:** Sunday 19th July 1987 (1pm - 5pm) in the *Guidance Officers Training Ctr., Bayswater St. Hilton*. 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 5th July 1987 (1pm - 5pm) in the *Playground & Recr. Assn. H.Q. Bldg., Love St., Spring Hill*. \*\*\* Talks on **AMIGA BASIC** and "C" \*\*\*  
Amiga Library open from 1.30pm - 2.30pm. Bring your own computer equipment to copy our Public Domain Disks! - 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 Primary School. (Rediand Education Centre.) Ph. David Adams - 396 8501 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 (1pm - 5pm) in the Strathpine High School. (rear entrance). Ph. Bruce Wylie - 359 9779 a.h.

**SHERWOOD** meets on the 2nd Friday of the month (7.30pm) in the Graceville State School. Ph. Leigh Winsor - 379 2405 a.h. or Philip Parkin - 818 1172 a.h.

**THE GAP** meets on the 3rd Wednesday of the month (7.30pm) in the Gap State School. Ph. Julianne Fallien - 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.

**SUNSHINE COAST** meets regularly. For meeting times, dates and places: Ph. Harvey Riddle - 071 / 42 1036 or 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. 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. 806 2424 a.h.) for details.

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## EDITOR'S NOTES

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From this month "CURSOR" is appearing in two editions, namely the one you are reading now and the new Amiga Edition. We, as the Management Committee, feel that this action will be in the best interest of both diverse groups of members.

To be able to implement this policy I have to devote a lot more time to the newsletters, and from now on will rigorously enforce the deadline for newsletter material, which is the **FIRST TUESDAY OF THE MONTH**. Any material received after this date will have to wait for the following month's issue, no matter how current or urgent the material may be.

Owners of 8-bit computers (C-64, C-128, Vic-20 etc) will keep on receiving this edition, whereas Amiga owners will automatically receive the Amiga edition.

If you would like to receive the other edition as well, we have to impose a \$6.00 annual charge of \$6.00 to cover our costs. Members who would like to take up this offer should contact our Secretary, Norm Chambers.

Well, we hope that you approve of these changes. By taking this course of action we hope to give both Commodore and Commodore-Amiga users a better deal. In the last resort the quality of this newsletter is in your hands (I seem to have written that before!), so keep those articles and letters coming in!

### Prices

When some months ago I published a Commodore pricelist I did this purely as a guide. The simple fact is that Commodore pricing is all over the place. As an example some two months ago my son bought a C-64 Family Pack for \$349.00 (RRP \$499.00) from a Brisbane Commodore dealer and some days ago one of our members purchased a 1541C drive for \$328.00 (RRP \$399.00), so it pays to shop around.

Here's an interesting comparison in prices between a C-64 package and the new Amiga 500 package:

C-64 Computer	\$ 300.00	A 500 Computer	\$1000.00
1541 Drive	\$ 300.00	(built-in drive)	
Monitor	\$ 400.00	Monitor	\$ 600.00
Printer	\$ 500.00	Printer	\$ 500.00
	-----		-----
TOTAL	\$1500.00	TOTAL	\$2100.00

For the purpose of this exercise I have rounded the prices down to give a more realistic picture. In the case of the A 500 we may well find that after some months it will sell for less than the quoted \$1000.00. But even based on the above prices there's only a difference of \$600.00. Makes you think, doesn't it?

In the July issue of Compute!'s Gazette the president of Berkeley's Softworks, designers of GEOS, said that the real power of GEOS can only be seen with Commodore's RAM expansion module. If this expansion module ever becomes available in Australia it will probably cost about \$300.00. So, to turn your C64 into a 'WIMP' computer like an Amiga or Macintosh will now cost you a total of \$1800.00! Surely a case of trying to squash a quart into a pint pot?

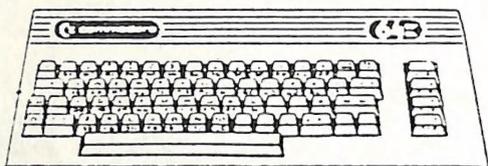
Ralph De Vries

# commodore COMPUTER

## PARCOM PTY. LTD.

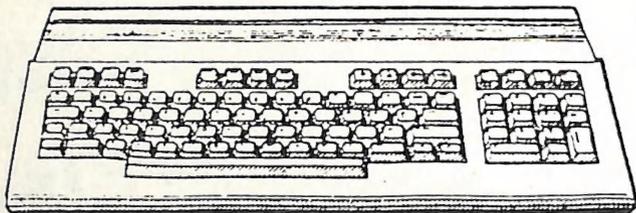
WHITES HILL SHOPPING VILLAGE  
SAMUEL STREET - CAMP HILL - 4152  
Ph. (07) - 395 2211

363 BAYSWATER ROAD  
GARBUIT - TOWNSVILLE - 4814  
Ph. (077) - 794 800



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ALL WORK CARRIES OUR 90-DAY WARRANTY!  
SEE US FOR EFFICIENT AND COURTEOUS SERVICE!  
SPECIAL RATES FOR USER GROUP MEMBERS!

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## R A N D O M   B I T S

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### MAIN MEETING (2nd June)

Our regular attendance was down a fair bit at this meeting... even the library staff were dozing off at times! Perhaps the 'state of origin' match had something to do with it, or was it because no particular topic had been announced for this meeting? Anyway for once the management committee had ample opportunity to say their bit, but even they got through their 'business' fairly quickly. Jon Kalkman took care of the Beginners Section, and the evening ended with our Expert Panel consisting of Phil Guerney, Greg Shea and Jim Vick answering members' programming- and other questions. Most members had gone home by 9.45 pm.

### LIBRARY PROBLEMS

It is very much appreciated if members who have library material in their possession try to return this material to the library, even if they are unable to attend the meeting. However lately some members have given this library material to committee members or sub-group coordinators, who in turn are expected to return the material to the library. Now, if these people accidentally forget to return this material to the librarian, as has happened on several occasions recently, this means that for a period of another month these books / magazines / software are not available to other members.

We therefore request of members who are unable to attend a meeting to return the borrowed articles to **The Librarian, 49 Morialta Street, Mansfield, 4122.**

Your cooperation in this matter would be very much appreciated.

### NAUGHTY NAUGHTY!

The other day we saw one of our Lindsay Whipp's cartoons in a NZ newsletter without any form of acknowledgement at all. We love to see our material being used by other newsletters, but it's surely not too much to ask that they acknowledge both author (or artist in this case) and source of the material.

### DOWN AGAIN!!!

Lester Bennett has done it again! 5.25" Disks are now down to \$12.00 per 10 (no library box). Soon we'll be giving them away!

### A PLUG

This is an unashamed commercial! Our member Dennis Cheshire who is known by quite a few of our members for doing 'fixes' to TV's, Monitors and Videos in his spare time, has now decided to go it alone and start his own servicing business. If you have TV or Video problems you can contact Dennis on 395 0153. [End of Commercial!]

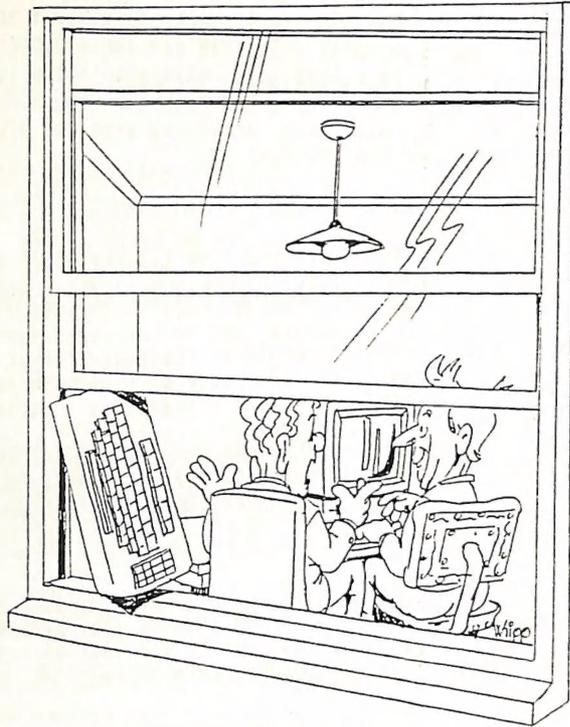
### BAD BUSINESS

It was reported by one of our Sub-Groups that a quantity of some 30 disks of members' software have disappeared. If this should turn out to be a case of theft the Group has no alternative but to expel the culprit(s). Let us hope that it is only a case of a genuine mistake on somebody's part, and that the mysterious disappearance can be cleared up quickly.

## NEW PRINTERS?

We have seen some references to a new Commodore printer, the model MPS2000. It appears to be a colour (dot-matrix?) printer, but at this stage we are unable to get any more details.

We also believe that CBM showed several Oki printers at the March computer show held in Sydney. Again we are surprised that Commodore has kept this fact so quiet up till now - another case of Vapour Ware?



"YOUR NEW COMPUTER IS GREAT, FRED!..... AND YOU SAY YOU USE  
YOUR OLD ONE FOR COMPUTER - CONTROLLED VENTILATION?...."

## PRINTER BUG

Some time ago our President Greg Perry reported a rather disturbing bug in Commodore's MPS 1200 printer. When doing program listings it is not unusual that a whole bunch of lines mysteriously disappear, i.e. they are not listed at all. Greg has brought this fact to the attention of Commodore's technical people, who hopefully will take some action.

Equally disturbing is the fact that we were recently contacted by Sundown Computer Centre who reported that one of their clients had similar problems with the Citizen 120D printer. Does this point to a bug in the printer(s), rather than the interface? If you are contemplating buying a printer, and the listings of programs is important to you, it may be prudent to take these facts in consideration.

## GOODS & SERVICES

PUBLIC DOMAIN DISKS (C-64 & C-128) - \$3.00 ea (+ \$2.00 Postage for up to 5 Disks)  
PUBLIC DOMAIN TAPES (C-64) - \$2.00 ea (+ \$1.00 Postage Per Order)  
BLANK DISKS 5,25" (DS/DD) - \$12.00 per 10 (+ \$2.00 Postage) - [No Libr. Case]  
MULTI-COLOURED DISKS 5,25" (SS/DD) - \$18.00 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" - \$6.00 ea (+ \$2.00 Postage for up to 5 Disks)  
BLANK DISKS FOR AMIGA 3,5" - \$40.00 per 10 (+ \$2.00 Postage) - [No Libr. Case]  
DISK BOXES for 3,5" disks: *Temporarily Unavailable*  
"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  
AMIGA SPECIAL PRINTER CABLE - \$25.00  
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 John Van Staveren on 372 3651 (after hours)

### COMPUTER ADDITIONS

by Anthony Thyssen during Milton Workshop Meetings. If this is not suitable contact Anthony on 371 1233 to arrange installation at his Taringa premises.

### SERVICES OFFERED

RESET BUTTONS: \$6.00  
RESET RE-ENABLE: \$6.00  
[Tap reset switch while pushing this button to reset a protected program.]  
DEVICE NUMBER CHANGE: \$6.00  
C-64/128 COMPUTER SELECTION SWITCH: \$6.00  
TURBO ROM INSTALLATION: C-64 with Socket or C-128 \$6.00  
C-64 without Socket or C-128D \$10.00  
WRITE PROTECT SWITCHES: \$6.00  
WRITE ENABLE SWITCHES: \$6.00

### The Following Items To Order Only:

SERIAL SWITCHING BOX: \$14.00  
SERIAL PORT DOUBLER: \$14.00  
EXPANSION PORT PLUG: \$10.00  
CAPACITANCE METER BOARDS: \$14.00  
RAM CARTRIDGE - 8 KByte: \$40.00, 16 KByte: \$55.00

by Terry Steer

After many months we have finally put together another tape of public domain programs called Tape 4 and, for those who wanted tapes 1 to 3, we have made some of those as well. Tapes are still \$2.00 each and \$1.00 (total) postage if ordering by mail. We hope to start compiling some more tapes in the near future. We would also like an indication of how many tape users we have out there who are interested in public domain tapes and also if there is a demand for blank tapes as this will determine how many tapes we can bulk purchase and at what price. We are currently purchasing reasonable quality tapes (C60's) for under \$1.50. Is anyone out there purchasing good tapes at a better price?

Could all those interested in tapes, either public domain or blank cassettes contact me on 808 2424, if possible or see me at the main meeting at the public domain disk sales desk.

### TAPE 1 - GAMES

SIDE A:

000 DEMONS OF OSIRIS :: An arcade type game. From COMPUTE Jan 84.  
 010 DEMON :: Loaded by DEMONS OF OSIRIS.  
 030 OIL TYCOON :: Use joystick drill for oil.  
 075 CAVES OF ICE :: Game from compute magazine Sept.83.  
 110 DIAMOND DROP :: Game from Compute Sept. 83.  
 145 U-BOAT :: Game from Compute Nov.83  
 180 PATHWAY :: Game for up to 4 players from Compute Nov.83.  
 215 COLOURBOT :: Game from Compute Jan.84.  
 240 MINE FIELD :: Game.  
 270 GOBLIN :: Game from Compute July 83.  
 285 HAWKMEN/OF/D :: Game from Compute June 83 called Hawkmen of Dindrin.  
 310 BOWLING CHAMP :: Ten pin bowling game for 1 to 3 players.  
 330 HARDHAT CLIMBER :: Game similar to Donky Kong type games.  
 350 DOMINATION :: 2 player game.  
 370 SYMBOL CODE :: Mastermind type of game from RUN magazine Jan.84.  
 395 BREAKOUT :: GAME (sometimes called BRICKOUT)  
 405 CANYONS OF ZELAS :: A lunar lander type of game.

SIDE B:

000 PLANETFALL :: A buy and sell space game for several players.  
 130 LIGHT CYCLES :: A 2 player game.  
 180 MONOPOLE :: The game of monopoly for 2 players.  
 305 SUPERSPRITE :: Game from Compute.  
 340 MIND BOGGLE :: A Compute Gazzete game.  
 360 CASTLE DUNGEON :: Adventure style game.  
 390 FRANTIC FISHERMAN :: Compute Gazzete Game.  
 430 TREK :: Computes Gazzete game.

## TAPE 2 - UTILITIES

### SIDE A:

000 SPEEDSCRIPT 3.0 : The latest version of this word processor.  
050 SPEED INSTRUCTIONS : The complete instructions for speedscript.  
200 TAPE COPIER : Use to copy tape programs from one to another.  
210 WEDGE \$7000 : Load ,1,1 then sys 28672 to start.  
235 WEDGE \$C000 : Load ,1,1 then sys 49152 to start.  
265 MICROMON \$C000 : A machine code monitor, load ,1,1 then sys 49152:  
290 MONITOR \$C000 : Another monitor,load,1,1 sys 49152 to start.  
315 MONITOR \$8000 : Another monitor,load,1,1 sys 32768 to start.  
335 FUNCTION KEYS : A program that programs your function keys.  
350 DATA BASE 1 : A DATA BASE program that will save to tape.  
395 MLX : Use this to enter programs from Compute Magazine.  
410 DISASSEMBLER : A machine code disassembler.  
425 ASSEMBLER : A machine code assembler.

### SIDE B:

000 GAZETTE PROOFREADER : Use for entering Compute Gazette games.  
015 M.C SAVE : Saves machine code programs.  
030 SPRITE CLOCK : A large clock in sprites.  
070 WRD PROC.PETSPD : A simple word processor that's been Pet Speeded.  
165 MUSIC MASTER : Turns your keyboard inot a piano or organ.  
205 3D GRAPH : Draws a 3-d graph from figures you input.  
225 SOUND DEMO : A demo of different sounds.  
250 SPRITE EDITOR : Draw sprites.  
270 REACTION TIME : Tests your reaction time.  
280 PLOT & DRAWTO : Load and run before loading spiralizer.  
310 SPIRALIZER : Draws Hi-res. Try these inputs 7 - 50 - 18.  
320 SPEED TYPE : Test your typing.  
340 TEST CARD : Displays coloured bars and gives other demos.  
390 TAPE LABELS : Prints tape labels to a printer.  
405 SOUND EFFECTS : Self explanatory.

## TAPE 3 - EDUCATIONAL

### SIDE A:

000 SPELLING CRITTER : Spelling quiz.  
035 SHAPE MATCH : Shape recognition program.  
075 ROBOT MATH : Maths program.  
105 FAST ADD : Maths quiz that displays large characters.  
130 WORD GUESS : Guess the word.  
165 TEACH ENGLISH : An adventure game using simple English.  
185 VOCAB BUILDER : Word quiz.  
215 LETTER ATTACK : Type in the falling letters.  
230 MYSTERY SPELL : Guess the word.  
280 MUNCHMATH : Maths quiz.  
300 INTRO TO BASIC : Self explanatory.

[Continued on the following page]

SIDE B:

000 TURTLE GRAPHICS : What it says it is.  
060 INTRO TO 6502 : An intro to the 6502 chip and its operation commands.  
220 INTRO TO SID : An intro to the sound chip.  
250 FIRST AID : Gives first aid answers for various ailments.  
310 TYPING : Another typing aid.  
335 SOLAR SYSTEM : A tutorial on the solar system.  
370 MATH DUNGEON : An adventure type program.  
415 ALPHA ANX/64 : A game using the alphabet.

TAPE 4 - MAINLY GAMES

SIDE A:

006 INSTRUCTIONS : Load and run for how to use games on this tape etc.  
044 WHIRLY BIRD : A shoot'em up arcade type game.  
080 QUIX : A well known arcade style game.  
135 MONSTER PANIC : Run from monsters dig holes to kill them etc.  
200 SUPER TREK : Quite a good startrek program.  
290 DAM BUSTERS : A simple game.  
320 DUNGEON : A simple game.  
355 ATOM HANDBALL : A brickout game, quite good.  
370 ODIN : A shoot'em up game.  
390 SLITHER : A simple game.

SIDE B:

005 STARSCANNER : A shoot'em up game.  
085 ARTILLERY : Two player game. An old one cleaned up a bit.  
170 BIORYTHM : A biorythm program of course.  
180 DOCTOR WHO : Plays the Doctor Who theme. Quite a good rendition.  
220 FAME : An adventure type of game.  
300 SUPER MIND : A master mind game.  
335 SPACE NIM : A thinking type game for one.  
355 CENTRIPOD : A shoot'em up game.  
400 INVADERS : A simple space invaders game.  
420 POKES : Pokes that alter the game invaders.

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I M P O R T A N T   A N N O U N C E M E N T   ! ! !

Soon it will be Membership Renewal time again, so start saving up now!

It would be very much appreciated if you could remit your membership dues by MAIL, rather than paying them at our next meeting. Past experience has shown that there's usually a huge bank-up of members trying to pay their dues, causing long delays.

Many thanks for your cooperation!

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## DESIGN AND HISTORY OF THE C-64

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by Robin Harvey

In 1985, the IEEE published in their Spectrum publication an article describing the design history of the Commodore 64 computer. It presents an interesting insight into how such a project starts in the first place and the various modifications that have to be made during development and indeed during production. The article is candid and details some of the design problems associated with the C64's history.

It all started in January 1981 when a group of designers working at MOS Technology (owned by Commodore) set out to design a graphic and sound chip to sell to the video game industry. Nine months later the design was complete and Jack Tramiel, the Commodore boss, decided that the chips should be incorporated into a computer with 64K of memory. The design process took less than three months and they were then able to build five prototype computers, incorporating the new chips, and display them at the Consumer Electronics Show at Las Vegas in January 1982. They were the first Commodore 64 computers and they became the stars of the show with their remarkable price tag of \$595. Thus in one year, what set out to be a chip-marketing exercise turned into a full-blooded computer product that was to set the world on fire.

By August 1982 the C64 was in full production and has run unabated more or less ever since. What is interesting is that the production cost of the C64 was set at \$135 and then designed to that price rather than to a specification and then seeing what it would cost.

The transition from prototype to full production did not go smoothly despite the short timescale. Certain modifications to the prototypes were made but often created as many problems as they solved and, in retrospect, the designers wondered whether they should have foregone the modifications and gone into full production even earlier. Some problems were nevertheless ignored until well into production including the re-routing of the sound output printed circuit track which was too close to the video track giving an annoying 15,750Hz whine on the sound output. This applied to US machines but it is not clear whether this problem manifested itself on UK machines.

The decision to use an RF modulator costing \$3 on the C64 gives an interesting insight into production engineering. One school of thought says that it's a cut-down in quality on the originally specified one costing about \$6.50, while others say that it's a vast improvement over the one used on the VIC 20 which only cost 50 cents!

It's perhaps not too surprising to note that even manufacture caused problems, with the United States production plants using component automated insertion techniques but the Japanese plant not. The problem is that each technique requires a different printed circuit board layout and different components. In the end the Japanese operation was transferred to Hong Kong where an automated plant was used.

Some early owners of C64s may remember the so called 'sparkle' problem which caused small spots of light to appear on the display screen. Originally the video chip attracted all the blame for this unwanted feature, but at the end of the day a ROM chip was discovered to be the culprit. As well over 3 million of these were already in use in arcade games etc, it was hard to recognise this as the cause. In the C64, the system bus is shared between the 6510 processor and the video circuitry and when control was switched between them, voltage spikes were occasionally generated. These were due to a special pre-charging circuit in the ROM designed to make it work faster. The spike was detected as an address and consequently fed the video chip with wrong data. What really did the damage from the user's view, was that this sparkle affected the sprite collision sensing and caused the movement of objects on the screen to go wild.

One interesting effect that literally came to light during production, was due to the enthusiasm of some production workers who decided that whilst testing the C64, it would be easier to turn a potentiometer fully clockwise rather than adjust it properly. The result was that some machines were delivered with very garish colour displays and virtually no contrast between black and white.

A lot of comments were being made by reviewers and the general public about C64 quality control, with testing in the factory having clearly been limited. The reason for this was that while the machine as an individual entity was tested, its control over peripherals, like disk drives, was not. Therefore a broken PC track caused by over-zealous use of a power screwdriver, would not show up if the tracks were associated with external peripherals.

Perhaps the greatest criticism of the C64 was the crude BASIC and its lack of commands to handle the sound and graphic features, but any enhancements over and above what was actually provided would have placed extra demands for ROM space that would have exceeded the price they were working to. A more interesting explanation is that 'Mr Commodore', Jack Tramiel, was a hardware man and anything he could not hold, touch or feel was not worth spending money on. Another early casualty was a plan to re-package the C64 in a new less stubby case, but the idea

prevailing at the time was that as the machine was selling well, why change it?

There are many characteristics of the C64 that have attracted praise and indeed criticism but the most prolific gripes have without doubt been the slowness of the associated 1541 disk drive. The reason is historical. When the VIC20 came out with its disk drive, it was based on the disk operating system developed for the PET, changed from parallel to serial operation for reasons of economy. Because the serial interface portion of the VIC 6522 interface controller did not work, a different approach was used where the 6502 processor sent out a bit at a time under software control. Under ideal circumstances, a byte at a time would be sent to the peripheral controller. Now, when the C64 came along, the part of the interface controller was made to work and it could have resulted in a fast disk drive. Incredibly, it was decreed that the C64 had to remain compatible with the VIC20 disk drive and so the VIC compromise remained, but to compound the agony, the disk drive was slowed down even further so that the processor in the C64 could catch the disk drive interrupt signals. So it all stemmed from the original VIC20 6522 interface controller not working correctly and an insistence that the 1541 remain compatible with the VIC20 system. At the end of the day it wasn't anyway.

The deficiency in the disk drive performance has given rise to another growth industry; making so-called disk turbo modifications. One from Epyx, for example, will enhance the normal C64-to-disk transfer rate of about 512 bytes per second to 2.5 Kbytes per second.

The article provides an interesting peep into manufacturing costs, with the original C64 estimated as costing about \$135 to make and retailing at \$595. Today the retail price is about \$149 with production costs thought to be between \$35 and \$50.

Even now there are thought to be some problems with the C64, resulting mainly from the cost-cutting exercises. Dissipation of heat from the 6567 video chip remains a problem, perhaps due to its change from ceramic to plastic. Apparently the chip can lock-up when a program switches to graphics mode. Another problem is that some C64s have faulty horizontal scrolling of bit-mapped screens. A recent reviewer commented on the flash-bulb feature in the swimming event of Summer Games. It's not a feature but faulty horizontal scrolling!

Nevertheless the C64 has been a phenomenal success world-wide and no doubt kept Commodore going for a few years in a fiercely competitive market. Let's hope that Commodore can maintain the initiative.

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This article from "ICPUG" Newsletter.

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## C U R S O R Y   N O T E S

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by Phil Guerney

Here I am, writing my fourth "Cursory Notes" column for Cursor. Ever since the time some years ago when I first read the column in BYTE by Jerry Pournelle called "Computing at Chaos Manor" I have thought that it would be great fun to do this. For those not familiar with BYTE, it is that inch-thick computing magazine from America that has maintained its size and quality while all around it have shrunk or disappeared. Each issue usually has a swag of articles following a particular theme, other reviews and several swags of ads that can make it hard to find the stories. Then there's always that chatty column by Pournelle, who has some dozen computers around his house with pet names like Lucy van Felt, Big Kat, Zeke and Adeline, writes science fiction novels, tours the USA and Europe giving lectures and seeing computer shows and, most of all, gets sent every conceivable bit of software that is written in the hope he may write something good about it in his influential column. When it came to the time he needed to clear up for renovations to the house, he wrote about having to put the hundreds of disks that he'd received up to a year before in a bin with a powerful permanent magnet to erase them before handing them over to a school. The manuals needed a truck to take them away. Now I haven't noticed any fat envelopes in the letter box recently. So listen hear you writers and distributors of software - if you want to maximize your chances of a favourable mention of your C64 program in Cursor, just send a copy to Phil Guerney, c/o CCUGQ Inc. Then I really will feel like Pournelle!

I did receive something as a result of last month's column and that was an agrieved message from Wayne Herring who is the Secretary of the Bay Commodore Users Group who own the Commodore Connection on Viatel. I had said this was an example of the poor value for money of Viatel because there was very little material to be had on paying, as I did, \$2 for a month's access. Wayne defended the service on the grounds that he doesn't have the time to update it enough (which I don't think is an excuse if we are asked to pay for it) and that lack of for sale ads and game questions is a result of the members' slackness, not his. He pointed out a wrong impression I gave that the quiz, 'For Sale' ads and game questions were only available if you paid. They are actually available to anyone. Joining gives you the privilege of accessing frames such as programming hints which look like the sort of thing you see in the "Magic" section of RUN magazine. Several of the hint sections were empty when I first joined but as I saw when I checked last night they now all have something there - BUT, and note this, you are asked to pay another 1c per frame to view them! Why bother? Wayne emphasises that for country Commodore users it is very expensive to use city bulletin boards on STD rates and Viatel charges no more for users in Thargomindah as in Brisbane or Melbourne. I have to agree with that. (I wonder if there are any Viatel subscribers in Thargomindah with Commodores??). Finally Wayne tells me that telesoftware is planned for later in the year, which emphasizes my main point which was that Viatel held great promise but was not delivering much value at this stage in its development.

Last month I also dared to suggest that Greg Perry's GP-Term communications program as provided with Netcomm 64/128 modems or directly from him, was not up to scratch when accessing dial-up mainframes which worked best if the software emulated a terminal like the DEC VT-52. Well already GP-Term V3.0 is available which does this and now there is absolutely no reason for anyone to turn to any other comms program! (Alright Greg, you can let go now!)

Well that was mostly going over old ground but it had to be done. Next month I won't mention Viatel or GP-Term. Regards.

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## ANNUAL GENERAL MEETING

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To be held in our Clubrooms at the Bardon Professional Development Centre,  
390 Simpsons Road, Bardon on Tuesday 4th August 1987 at 8 pm.

Following are some excerpts from the Articles of Association:

The business to be transacted at every Annual General Meeting shall be:

- (a) the receiving of the Management Committee report and the statement of income and expenditure, assets and liabilities and mortgages, charges and securities affecting the property of the Association for the preceding financial year;
- (b) the receiving of the auditor's report upon the books and accounts for the preceding financial year;
- (c) the election of members of the Management Committee; and
- (d) the appointment of an auditor...

### MEMBERSHIP/OF/MANAGEMENT/COMMITTEE

- (1) The Management Committee of the Association shall consist of a President, Secretary, Treasurer, all of whom shall be members of the Association, and such number of other members as the members of the Association at any general meeting may from time to time elect or appoint.
- (2) At the annual general meeting of the Association, all the members of the Management for the time being shall retire from office, but shall be eligible upon nomination for re-election.
- (3) The election of officers and other members of the Management Committee shall take place in the following manner:-
  - (a) Any two members of the Association shall be at liberty to nominate any other member to serve as an officer or other member of the Management Committee;
  - (b) The nomination, which shall be in writing and signed by the member and his proposer and seconder, shall be lodged with the secretary at least fourteen days before the annual general meeting at which the election is to take place;

### VOTING

- (4) (a) every ordinary, country, student, pensioner, or life member present shall be entitled to one vote.
- (b) every family member present shall be entitled to a maximum of two votes.
- (c) every business member present shall be entitled to a maximum of two votes.
- (d) associate and honorary members shall not be entitled to a vote.
- (5) voting shall be by a show of hands or a division of the members.
- (6) a member may vote in person or by proxy or attorney...

This is an extract of the official articles of association, but for the benefit of our members here is a precis of the above in plain English:  
After the reading of the President's- and Treasurer's reports there will be an election of officers for positions on the Management Committee.  
These positions are:

President - Secretary - Treasurer - Technical Coordinator  
Sub-Group Coordinator - Chief Librarian - Newsletter Editor

On the reverse side of this page you will find a nomination form, to be signed by the member and his proposer and seconder (all to be financial members). This form has to be in the possession of the secretary no later than Monday 20th July 1987.  
You will also find on the same page a proxy form to be used by members who are unable to attend but still would like to make their vote count at the Annual General Meeting

COMMODORE COMPUTER USERS GROUP (QLD) INC.

P.O. Box 274 - Springwood - Q'ld - 4127

ANNUAL GENERAL MEETING - 4th AUGUST 1987  
Election of Management Committee Members for 1987 - 1988

**NOMINATION FORM**

POSITIONS VACANT: PRESIDENT - SECRETARY - TREASURER - TECHNICAL COORDINATOR  
SUB-GROUP COORDINATOR - CHIEF LIBRARIAN - NEWSLETTER EDITOR

I hereby nominate .....

for the position of .....

Proposed by: .....

Seconded by: .....

Signature of Nominee: .....

This form to be in the possession of the Secretary no later than Monday 20th July 1987.

=====  
Separate Here > < Separate Here  
=====

**PROXY FORM**

COMMODORE COMPUTER USERS GROUP (QLD) INC.

I, ..... of .....

being a member of the above named association,

hereby appoint ..... of .....

or failing him, ..... of .....

as my proxy to vote on my behalf at the Annual General Meeting of the Association, to be held on the 4th day of August 1987, and at any adjournment thereof.

Signed this ..... day of ..... 1987

Signature: .....

This form is to be used \*in favour of / \* against the resolution.

\*Strike out whichever is not desired.  
(Unless otherwise instructed, the proxy may vote as he thinks fit.)

by Wayne Schafer

Thanks to Denis Cheshire for the article on monitors in CURSOR (May 87), following my recent request for same. The information was very useful. I finally settled on a Commodore 1201 monitor with amber screen. It was a compromise between costs and my existing setup. I had a second hand colour TV as a monitor and have retained it for games (mainly for my son) and I use the 1201 monitor for extended programming sessions because it is easier on my eyes. The colour TV cost \$100 second hand and the new amber monitor about \$200. (A second hand amber monitor would have reduced my costs even further.) My total all up cost for monitor and TV is \$300. Still less costly than a good colour monitor and I have the capability of watching television on the colour set when "Inspector Gadget" takes priority on the set in the family room. Both monitor and TV are permanently plugged into my C64 as they use different outlets. In fact I can run both sets at the same time. If I am programming on the amber monitor and need to check colour graphics I just switch on the TV and there it is on the colour set. For my purposes this combination works very well and may be worth consideration by other members. My Brother M-1109 printer has a very small footprint (read: does not hog desk space). It sits neatly on top of my colour TV. One reason for this setup is that I am not sure of my future direction in computing but suspect that I will eventually purchase a 16 bit machine and this arrangement is a temporary solution to my screen output requirements. Other members probably are in a similar position.

#### About Disk Drives

I was recently using a disk that was close to full and kept getting a read error and 'drive not ready' error when trying to load any program or write to disk. This really threw me as I was experimenting with a disk protection scheme and I believed that the drive was stuck in half track mode. I tried all the usual tricks to unlock the drive without success. [For the benefit of members who may not know, a drive can lock in half track mode (between tracks), or the read/write head can jam when accessing the outer tracks of a disk which is almost full. The drive can usually be freed by sending a command to format a disk without a disk in the drive. This will reset the head to the correct position.]

Alas nothing worked. In desperation I phoned Paul Blair who advised me to do what I had already done. He seemed to confirm what I already suspected... a drive out of alignment or something more serious. My 1541 drive has never given an ounce of trouble and I found it difficult to understand how such misbehaviour could develop so quickly. I dismantled the drive and with the case separated I inserted a disk and tried to load a program. The disk didn't revolve. I quickly found my problem. Beneath the drive is a rubber drive belt which connects the drive motor to a turntable which causes the disk to revolve. I easily replaced the drive belt and I have no further problems.

If members are faced with a similar problem being unable to use the drive for any function which requires the disk to spin you should check the drive belt by turning the drive upside down and check that it is operating correctly. It could save the cost of repairs, but more importantly, if you have a lot of 'unsaved' material in computer memory, this home repair will allow you to save this material in memory.

(A useful tip, but remember rubber belts do s t r e t c h, and if this is the cause of it slipping off, you can bet your bottom dollar that the problem will occur again. (Editor))

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## MORE ABOUT THE BULLETIN BOARD

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by Jim Vick

As Greg Perry conveyed to you last month, our Bulletin Board is up and running, not without a few problems, but they are being brought under control one at a time by the unstinting efforts of Greg and Colin Canfield our new Sysop. For those who are familiar with Bulletin Boards you may skip the next paragraph, as what I am going to say will be old hat to you, but for those who know nothing of Bulletin Boards maybe an explanation is in order.

How to best describe a Bulletin Board... I guess it could be described in many ways, but the way I choose to think of it is as another service that the Users Group provides to its members, something similar to the Book Library, the Disk Library, or any of the other services that the Users Group makes available, and as such it is freely available for members to use. The three main uses that the Bulletin Board System has to offer are:

(a) - the downloading and uploading of programs, [down-loading meaning that you receive a copy of a program that is stored on disk at the Bulletin Board and uploading meaning that you send a program (public domain only) to be stored so that other members may be able to take a copy for themselves],

(b) - the leaving and receiving of Electronic Mail (Email), [this can take a number of forms, i.e. private mail that only the person for whom it is intended can read, and public mail that anyone can read - this mail can be stored in the General Mail Board or in any of the eleven special mail Boards such as the Buy-Sell-Swap mail Board or any of the special Boards for particular interest groups],

(c) - the third major use that the Board has to offer is the Magazine and Bulletin section where program reviews, articles out of books and Cursor articles such as this can be stored - these can be brought up directly on the screen of your monitor and read like a newspaper or stored in the computers memory and either printed or saved to disk and in time we hope to get Cursor put up each month so that it is available to read as soon as it is put together.

Now that we are all clear on what a Bulletin Board has to offer the question is "how is the Bulletin Board going?". Very well at the moment, with about forty members making regular calls, leaving messages to friends or general interest messages that all users can read and comment on if they wish, the General Mail Board being up to mail number 140 or thereabouts, and the other Mail Boards having lesser numbers. In the Download Section we have about fifteen programs in the C64 section, about ten in the C128 section, with the others yet to have programs posted to them but this will come in due course. The Magazine articles are starting to trickle in and in time we will build a useful Reference Library of information available to members.

A couple of notes on the Board... At the present time on one of the Mail Boards Sysop Feedback is not working - this is creating a few problems with uploading programs or articles to the Board. At the end of the process you are prompted to leave a message saying what the program does and what type of computer it will run on - now unfortunately all these explanations are getting lost because of this problem with Sysop Feedback, and we are put in the position of having to go through the

directory of the hard disk each time we log on to see if any new programs have been uploaded. (the hard disk has a memory capacity of 7.5 megabytes or about 30,000 blocks of available memory so you can imagine it takes a bit of time to list the directory) - if a program has been uploaded we then have to try to work out from the name what it might be, so that it can be posted to the correct area. To help us in this regard could you please leave a message on the General Mail Board to the Sysop, telling us about the program; in this way we can keep track of what is being uploaded. Hopefully Greg Perry will be able to fix the problem shortly, but Greg also has a living to earn and cannot devote all his time to fixing the Bulletin Board so we must be patient.

The only other problem with the Board is that we need more members to avail themselves of the facilities. If the Board is to continue to grow we need people to be active and use the Bulletin Board. so if you do have a modem, log on and have a look around, read the Message Boards - remember these can be looked on as a forum of members' ideas, and if someone puts up a Public Message he/she is saying: "This is what I think. Who agrees or disagrees with me?". This can provoke some interesting comments. The facilities are available to take programs from the Bulletin Board for your own use, but we would ask that, if you have a program or article that may be of interest to someone else, you spend a bit of time and upload it to the Board. Again, if we don't get any Uploads our selection of available software is going to be pretty limited and not of much use.

I think that for the time we have been 'on line' we are in a pretty good position, but let's not let this club facility founder due to apathy. So log on, have a look around and leave a message - you might find it fun. Look upon on it as a computerized C.B. radio that can store the messages until they can be read.

To finish off on on a personal note: As is custom, most people accessing the Board use a 'Nom de Plume' or 'Handle', so that one never really knows (except in a few cases) who they are leaving messages to. Now I think this is an anti-social act, and would prefer that real names be used. After all, we go to club meetings and use our correct names so why not on the Bulletin Board? This is something that the committee is looking at and may be made a condition of access in the near future.

---oo0oo---

I can only but fully concur with the sentiments expressed in the last paragraph of Jim's article on the use of 'handles'. Although guilty of the offence in question (I go under the name 'Runner'), I have asked the SYSOP to change my handle back to my own name after reading some rather childish abusive messages on one of the mail boards.

As our is essentially a BBS for members' use there's no earthly reasons for the use of these nick names, unless people want to use these nick names to be able to say things which they wouldn't be game to say when using their real name.

At all times I want to know who it is that I am talking/writing to. To a large extent one's replies are governed by one's knowledge of the other party. As an example, it is no use to give a highly technical reply to somebody who is incapable of understanding you on this level. By knowing the person you are contacting these mistakes can be avoided.

On another level, I would not publish an anonymous letter in this newsletter. And is a 'handle' not another form of an anonymous message?

Perhaps, by the time you read this, this matter will have resolved itself. In the meantime do as I have done, and ask the sysop to change your handle back to your own name.

Editor

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## GAMES CORNER

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by Jamie Ogden

### MINI REVIEW

#### HIGHLANDER (Ocean)

I didn't know how to rate this. In a way it was good, and then it wasn't. Your quest is to become a master swordsman and defeat the mighty Kurgen in the contest for immortality. There's some very impressive music with the title page and start up screen, but otherwise only average sound effects and graphics. It is basically a combat game in which most people lose interest after a week or two. Very simple game with many controls. If you've got the dough and you're into this sort of butchery, then go for it! [Submitted for review by Chandlers - Maryborough]

IDEA	GRAPHICS	SOUND	VALUE	HOOKABILITY	OVERALL
79	82	90	50	62	78

### CHEATS CORNER

Never fear, I'm here again. Thanks to all you wonderful people out there who sent in their goodies for everyone to share. That's the spirit guys! Anyway that's enough of me babbling on, so let's get started.

#### SORCERY

Ben Linton-Smith, your wish has come true. It's a coincidence that the game you have requested 'cheats' for is one of the ones I have conquered. This should help you matey!

- 1) THE WOODS: Go through the door on the left hand side.
- 2) THE WOODS: Go through the bottom left door.
- 3) THE WOODS: Pick the club up from the left hand side of the screen. Exit through the top left door.
- 4) WASTELANDS: When you enter the room there appears to be a face on what looks like a piece of wood. Stand on it and it will disappear. Exit through bottom left door.
- 5) OUTSIDE THE CASTLE: Go through the top left door.
- 6) THE CASTLE: Get sword then exit through the bottom left hand door.
- 7) OUTSIDE THE CASTLE: Swap sword for the gold on the other side of the tree. Go back through top left door.
- 8) ABOVE THE CLOUDS: Swap the gold for the key and return through the bottom right hand door to room 7. Swap the key for the sword and kill the monk at the bottom of screen. Get key again and go through the left hand door.
- 9) BY THE RIVER: Go across the screen and land on top of the left hand door. Now you have to go through the door without touching the water, or you'll drown.
- 10) BY THE RIVER: Push the joystick straight up or you'll drown. Go to the log with a face on it and it should disappear. Go through the door to the left.
- 11) DUNGEON: Go through the left hand door.
- 12) DARK DUNGEON: Go about three-quarters of the way across the room. Go down and land on the cauldron (this replenishes your energy and gives you a potion). Go back through the top right hand door into room 11, then go up and through the top left hand door into room 13.
- 13) THE WILDS: Go through the bottom left door.

- 14) THE SWAMP: Push the joystick straight up to avoid drowning and get the candle. Go through bottom right door into room 13, the same way as you did in room 9. Go through the top right hand door into 11, and through bottom left hand door into 12 again. (Because you have the candle you can now see.) Exchange the candle for the key and go to room 11. Go through top left hand door into 13, across and through bottom left hand door into 14. Go straight up or you'll drown. Go through top left door.
- 15) NEAR STONEHENGE: Go to face on log, go down and get poison. Go up and through the top left door.
- 16) NEAR STONEHENGE: Avoid the water and swap the poison for the wad. Keep the fire-button pressed to kill the ghost. Take the poison and go through the left hand door.
- 17) AT STONEHENGE: Land on the middle table and give yourself a pat on the back for completing the game.

MINER 2049'ER

Load normally, but when game starts keep the fire button down for a few seconds and it will go to the next level. Keep the button down through the levels until you get to the level you want. That AI cheat mode from Paul Barrett from Brissy. Thanks buddy!

LEADERBOARD EXEC

Well, this one is a mystery. Bradley Maier from Brisbane sent this one in without instructions - SYS 4000. If you think you know how to use it then go for your life.

TRAF

Yet another one from Ben Linton-Smith. He says that when you type in "demo" when you come first on the high score table you are treated to a kind of light snow with brilliant sound effects.

Well, all good things come to an end sometimes, but I'll see you again next month for sure. Keep sending those cheats and requests in, 'cause everyone helps. Until next month. HAPPY HACKING.

Jamie Ogden, 493 Alice Street, Maryborough, Q., 4650

**BYTES**

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**FOR SALE**

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**C-128D COMPUTER** - recently serviced c/w 180 odd Disks of GAMES, UTILITIES and WORD PROCESSORS. Cost \$1600.00 - Sell \$1050.00

Contact Jim Fang on (03) 878 9125 after 4pm.

**C-64 COMPUTER** - Two 1541 Disk Drives - 1650 Modem - Plus Mega heaps of Disk Software (1000 + Programs) - Datasette - Books, etc etc. - \$1100.00 o.n.o.

Contact Craig Upton on (07) 396 9429 (a.h.)

**GRAPHIC ROM CHIP** for 1526/802 Printers. Switches between existing 802 Rev. 07c Mode and Graphic Mode, thus allowing full Graphics Emulation from Printshop, Doodle etc. \$50.00 fitted or posted.

Contact Barry Wilson on (07) 399 6204

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## MAIL BOX

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Another country member, not quite so far as your NSW ones, but just far enough to make attending meetings difficult. I will make a particular effort to attend the next Primary Education Sub-Group meeting and make contact with Bill Weeks again.

I find that CURSOR is required reading for me. One result was the recent purchase of a Citizen 120D printer. I have limped along with an MPS801 and now realise just what I have been missing. The 801 did a good job for me for many years but there's no comparison with the 120D. I appreciate the great help that Lindsay Whipp gave me in understanding the intricacies of the new printer.

Greg Perry has kindly answered a number of my queries over Viatel and I made fleeting contact with Norm via the same medium! I dread the arrival of my Viatel phone bill!!

Greg and yourself certainly keep Commodore up to the mark, but as you'll see from the enclosed page from a recent copy of the 'Australian'. One of the main opposition brands appears to treat its customers with even greater contempt. It sounds as if the lady concerned has never heard of User Groups. I imagine that Apple users in the Sydney area have such groups - not remotely as good as ours, but surely she could have received help from a knowledgeable member.

The affiliated Toowoomba User Group is doing well and we average forty or so members (or interested newcomers) to our monthly meetings.

Keep up the good work Ralph and my best wishes to the hard working committee members.

Alex Robertson - Goombungee

Thanks for your kind words, Alex. We must be doing something right!

Yes, I had read the article in the 'Australian' of 28th April '78. (The article in question is by a lady who purchased \$2200.00 worth of Apple equipment, mainly for word processing purposes, and had all the problems in the world with equipment, software, dealers, Apple itself, etc.)

There's absolutely no guarantee that spending several thousand dollars plus will automatically give you better service than the variety offered by Commodore. In fact I have heard too many stories about Apple and (yes!) even 'Big Blue' itself, to know that Commodore is by no means an exception! It probably comes down to the fact that the average new computer owner is so wrapped in his new purchase that he/she doesn't worry about the guarantee- and servicing aspects of the equipment. Perhaps when computers have really become accepted as part of our life style this may all change.

In the meantime it is, as you mentioned above, up to the Users Groups to keep the so-and-so's on their toes, and to inform our members on how to avoid the worst pitfalls of the computer world.

Another aspect which relates more directly to the Commodore world is the gradual disappearance during the last eighteen months or so of the real "Commodore Computer Dealer". Competition and price cutting are given as the main reasons. However I have often found with some of these ex-Commodore dealers that their staff consisted of a bunch of drop-outs who were unable to answer the most elementary questions on both hardware and software in a sensible manner. So perhaps there are two sides to these arguments after all. (As an afterthought - now that IBM clones are starting to appear in places like K-Mart, will those selfsame dealers give the PC market away as well?)

In the meantime we'll carry on doing the things we seem to be doing reasonably well, namely to advise, to teach and to exchange information for the benefit of Commodore computer owners.

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-21-

We tend to hear only the complaints regarding equipment, software, servicing etc., so I thought I'd add a little balance by sharing a good-news story - regarding Parcom (previously Don's Computer Repairs).

After over 3 year's faultless (though slow) service from my very hard working 1541 drive I decided I'd put it in for a much needed head alignment. A simple matter? Usually so. Maybe I should have left well alone because this signalled the start of a whole series of problems with faults (mostly intermittent), breakdowns and downright stubbornness on the part of the machine. So much so that it has been in for further work/testing/repairs no less than eight times since October 1986.

Where's the good news story? It is in the fact that Don stood by his guarantee through all this time at no cost to me (except for \$48 for replacement of a failed motor). He has at all times been most obliging and whilst like me, he would have liked to commit it to the garbage bin, he has replaced most parts of the machine and invited to bring it back if there's further trouble.

One might be tempted to be critical that the fault was not found earlier, but remember that it was intermittent and often did not show up in the workshop or during the usual testing procedures.

I'm thankful to, not critical of Don and commend him for his service - hard to find in today's business world.

Malcolm Lewis.

I'm very pleased to reproduce Malcolm's letter here. Isn't it a fact of life that we always hear from the dissatisfied customer and never or hardly ever from the satisfied ones. When some years ago we tried to survey our members regarding repairs we were pleasantly surprised by the very small percentage of dissatisfied customers. So, perhaps as far as Queensland is concerned, the repair situation isn't all that bad after all. Take a bow, Don!

Which brings me to a letter received from one of our Victorian members (yes, we've got them all over the place!), Jim Fang, who has his say on repair problems in that state. We quote here some excerpts:

I was wondering if there are any Victorian members who know of a good service centre in Victoria ..... I wasn't very happy with the work done at Maxwells .... My disk drive might have been an extreme circumstance, but I believe for a \$98 standard service charge I should get prompt repairs ..... Maxwells charges \$50.00 per hour for repairs, plus parts ..... It seems you Queenslanders get a far better deal, as I've seen ads in the newsletter such as 'Dons Computer Repair Centre' offering \$50.00 annual service contracts and 90-day warranty on repairs ..... Maxwells warranty is a mere 7 days.

Being a couple of thousand kilometres away from Melbourne we are unable to comment on the repair scene/charges in your fair state. However I have in my possession a CBM price list (March '87) which lists the following 'CommCare' centres in Victoria:

Visioncare - Geelong	]
VisionCare - Mulgrave	] Warranty & Non-Warranty
VisionCare - North Melbourne	] Repairs
Megatron Computer Ind. - Ringwood	]
Hills Industries - Preston	] Non-Warranty only.

Hopefully one of the above will give you the service you are looking for.

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-23-

My 1201 monitor has an annoying low frequency hum when the volume is set to minimum and this hum increases in volume and frequency when the volume is turned up. My television set also suffers a similar problem but not to the same extent. I suspect mains hum is the problem. Can you suggest a solution. Relocation of the various items on my desk seems to make little difference.

Page 6 of the May issue of CURSOR advised that disk prices were coming down. The June issue lists prices on page 7 which don't agree with the May article. Could you please clarify this matter in the next issue.

In my short period of membership I have written to you and had published several articles, most calling for help and some giving practical advice on various matters. I am not an expert (yet) but that has never stopped me from having a go and contributing to "my" club. If we all waited until we are expert enough to contribute we won't need the assistance of CURSOR. Come on members have a go! You will get more out of the effort than you give.

I don't own a modem but see double handling of contributions as a waste of resources. After I type an article you should not have to retype it. I use Easy Script on my C64. If I send items on disk to you is your new Amiga up to receiving sequential files in this format? You could use a modem to load them in to the Amiga from a club member who has a C64 or C128. Please advise in the interests of saving yourself the time of retyping contributions.

Wayne Schafer (Tewantin)

I have had a chat with Denis Cheshire on your 'hum' problem. He found it difficult to diagnose your problem without seeing the unit and suggested several possibilities such as your C-64 (there's a 12V rectifier/capacitor combination that's been known to play up), a screening lead on the video connection may have an open circuit or you may have an earthloop between your monitor / diskdrive / printer. As you can see there are quite a few possibilities which may need investigating. You could ring Dennis on (07) 395 0153 for further consultation.

Yes, you were quite right regarding disk pricing. Mea culpa! You will find that is rectified in this issue. Lester Bennett has just advised me that disk prices have fallen even further, how about that!

No comment necessary on contributions to CURSOR - well put! Yes, now that, thanks to Greg Perry, a modem resides in my premises I am indeed able to receive contributions again on disk from C-64/C-128 owners. Particularly now with two editions of CURSOR I would like to receive all articles either via our BBS or as a Word Processor File on disk. All disks are promptly returned by me.

--o--

Only today I received the June issue of Cursor and your editorial has spurred me into action. This is one C64 user who wants to see Amiga articles remain in THE Cursor. It would appear that the gradual trend is going to be away from 64s just as it has been away from the Vic20 (remember them). The Amiga may even leave the 128 as the beginners micro. As I see it, it would be extremely sensible for the percentage content in the magazine to move with the percentage ownership even if it one day leaves the 64/128 with 10%.

If those who upgrade to Amiga are forced into a new club or even magazine, those of us who remain the 'old guard' will find ourselves losing out. Losing out of the technical skill of those who upgrade, and many of the club's executive will probably

be lost as well. We will find ourselves in a greatly disadvantaged position. To insulate the 'old guard' from the Amiga and its users is a little, no, a lot like the ostrich burying his head in the sand.

Maybe, one day, hopefully, I will move on to an Amiga (distant hope) but in the meantime I want to see how it moves into the market place and how it is received. Out here in the west I depend on the club mag to provide that information.

Fr. Robert Paget (Cunnamulla)

It was very good to hear from you again Robert, and I concur fully with your sentiments. It was only a few weeks ago during the May committee meeting that I brought the subject of the newsletter up. I suggested there and then that the best solution would be a separate Amiga edition of Cursor. As basically there was no great deal of opposition to this plan (except for pointing out to me the increase in work load), we have decided to go ahead as from this issue. Now, I'm fully well aware that I have created a rod for my own back, but I look upon this solution as a purely temporary one. The main reason for this decision I've set out in last month's Editor's Notes. I feel that our Amiga members need a better deal without jeopardizing the interests of the C-64/C-128 members. For these reasons alone I have decided on this (hopefully temporary) course of action.

And what about the future? Well may you ask. Crystal ball gazing is definitely not my forte - I've been caught out before today! However I can, as far as Commodore is concerned, see only a few possible scenarios.

The first one is that the new Amiga 500 will start to sell well (which the A 1000 never did), attract a lot of new software writers who really understand the machine, thus causing an overall drop in prices of both software and hardware - in fact a repeat of the C-64 story. The Amiga 2000 will only have a limited role to play in the market place (retailers will disagree with me!), as I only can see it as a very interesting kind of 'hybrid' (or the world's most expensive IBM clone!). Result of this scenario: "Goodbye 8 Bit machines."

The second scenario is rather different. The Amiga 500 is not a marketing success. It follows that the other models will not sell well either in that case. It has been claimed in some circles that the Amiga is a more advanced design than either the Macintosh or the Atari ST; in fact some commentators have said that it is a design ahead of its time. And believe you me, you've only got to read the real technical Amiga stuff, and you can understand why this claim is made. Now a design which is ahead of its time can be as much of a flop in the market place as a design which is behind the times. If this is the case with the Amiga we'll see it gradually 'sink in the sunset', and "Goodbye, Amiga"!

There are possibly other scenarios, like Commodore being swallowed up by another company or a revolutionary new computer design that wipes everything of our desks, but that sort of crystal ball gazing is far too dangerous!

In the last resort it all comes back to market acceptance and software support. If we look back at the history of the C-64 we can see the dramatic strides that have been made over a period of five years in the development of both software and hardware for this machine. If my first scenario becomes reality (as I think it will) we may see the realisation of the real potential of the Amiga in the next couple of years. You know, I almost scream at times when certain aspects of Amiga software have been so badly implemented (need I mention word processors?), and you KNOW that it could be so much better. In fact, when the software developers really get to grips with the Amiga, we will see a new generation of software undreamed of at present.

And what about our present 8-bit members? Elsewhere in this issue I have done some price comparisons between a C-64 outfit and an A-500 outfit. The average member has invested a sum of between \$1000 to \$2000 over a period of years. Now, particularly if you have scraped this together bit by bit (opposition from wives/husbands), you hate to see this sort of investment go down the gurgler, and you may well resist this to

the bitter end. But make no mistake, the end is in sight! If not the Amiga it may well be another machine, but it is coming! Looking back at the Vic-20's demise it means that you either drop computers altogether (as many have done), or do an upgrade (as many others have done). If you do decide to upgrade it is then mainly a question of when. Do it now and you realize a better price for your equipment, but you pay top price for the new gear. Do it later and the situation may well be reversed.

The remaining group of "8-biters" are the programmers and technical wizards. (No names - no packdrill!). I feel that it is only common sense for them to embrace the new technology, because, if they don't, they will be left hopelessly behind within the next few years and it will be well nigh impossible for them to catch up. The result will be our loss, because it means talent down the drain, and that's a great pity. In this context it was interesting to see that the great Jim Butterfield has his feet in both camps - wise man!

Well Robert, I've raved on a bit but "them are me thoughts on the subject", and they may perhaps help others to see the future a bit more clearly. I still live in hope that our Group will continue to prosper and this will only happen if we keep up with the times - if we don't we will disappear with the PET's and Vic-20's and that would be a great pity indeed.

--o--

A letter along similar lines has just been received from Peter Grimbeek. I quote:

*I have been reading the newsletter for some years now. It is in fact the sole reason I have for maintaining my Commodore Club membership. When I first joined we had just purchased a Vic-20, which never went beyond being a kid's game playing machine, and ended up broken down in a drawer a year or so ago.*

*Why then do I go on reading the newsletter? There are at least three reasons:*

- 1. I do so because I have gone on working with computers - Apple 2E and Tandy's at a primary school. Your discussions on printers, disk drives, modems and particular software packages are sometimes informative.*
- 2. I did a weekend live-in course in Basic programming some years back, so I know just enough to appreciate the articles on programming languages and shortcuts in the newsletter.*
- 3. I don't own a computer in working order, so I read your articles on the relative merits of the various Commodore models, including the Amiga, so that come the day I do consider purchasing a machine, I have some kind of insider knowledge of the merits of these machines. Plus an appreciation of likely developments by Commodore and its aftersales practices etc.*

*For these reasons I also appreciate the way in which the newsletter at present caters for a range of users. I would have to make choices if the newsletter split two or three ways to cater for subsections of users which I would not particularly want to make.*

*Peter Grimbeek*

I think that my reply to Robert Paget's letter covers most of the point raised by you. It has been done purely to give Amiga owners a better newsletter deal and to stifle criticism of current 8-bit users, which would surely increase with an increase in Amiga content. I don't relish the situation myself, because I really have doubled my work load - however this will probably be only a temporary situation.

We will still keep our regular (8-bit) users informed on what's going on in the rest of the Commodore world (and beyond I hope), so that all members obtain a well rounded view of the computer world at large.

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## DISK LIBRARY

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by Bill Bohlen

### Disk 038 128 CLUB FROGS .AC

MENU	Menu and Prg Description
HI-RES HELPER	Graphic Helper from LOADSTAR magazine
STARWARS	Game. Prevent the destruction of a city.
SWS	Loaded by above
SMOKEBUSTERS	Game. Stop tenants from lighting cigs.
UNPACK.128	Loaded by above
SMOKE.SHP	" " "
CLOCK MENU	Analogue clock display
BASIC CLOCK	Loaded by above
ROUND CLOCK	" " "
SOUND LIBRARY	Sound Subroutines for Basic programs
SKIDDERS	Game from Compute's Gazette April 87
LISTFORMAT 128	Makes program listings more readable.
SCREEN MAP	Screen map utility. Compute's Gazette
UNSCRAMBLE	Word Game from Compute's Gazette
SLEEVE MAKER	Prints cassette sleeves.
BUBBLE	Bubble sort subroutine
MODIFIED BUBBLE	" " "
SHELL SORT	Shell sort subroutine
128 CONCERT	A series of songs and tunes on the 128
CARN.O.VENICE	Loaded by above
ENTERTAINER	" " "
PARAGON RAG	" " "
MOZART MELODY	" " "
AIR BY GRETRY	" " "
CRADLE SONG	" " "
RUSSIAN HYMN	" " "
ARABIAN SONG	" " "
MELODY 1	" " "
MELODY 2	" " "
SCARLATTI PIECE	" " "
OH SUSANNA	" " "

\* \* \*

Disks 177 and 178 are now available. They contain demonstrations of the Graphics Pirate Software Package available from Cockroach Software on the Gold Coast. They are both doublesided.

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## COMMODORE AND VIDEO

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by Paul Gunther

When I purchased my trusty COMMODORE 64 I was faced with a dilemma. To purchase a high grade monitor or to buy a colour television set. At the time a colour television was cheaper than a COMMODORE 1702 monitor. After intense thought and evaluation I decided to place my money with a COMMODORE dedicated monitor. To this day I have never regretted my decision. Only a monitor will do justice to the fine displays the C64's excellent video chips can generate.

At the time I bought the monitor I was totally unaware of the fact that the 1702 can be easily connected to a Video Cassette Recorder! Simply take the video and audio out from the VCR and connect to the front inputs on the monitor. VOILA!, instant television. Also a device called a TUNER can be purchased which simply converts RF input to monitor compatible input. The Amiga's 1081 also accepts video input producing an excellent television picture (also the monochrome 1201 works: fancy an amber television??!!)

Now as life progressed, I advanced to a COMMODORE 128. (still retaining the C64). The video chips on-board the C128 have two extra functions over a pure C64 - they handle the extra inputs from the C128's numeric key-pad and contain a register to dictate the C128's 8502 CPU clock speed (1 or 2 MHz). In short a re-designed 40 column chip exists in the C128. Now to the point: It seems that in the manufacturing or design process of the C128 video chip, a slip in quality control has occurred. This results in a poorer quality display on the C128 (faint vertical lines across the screen, colour blurring, uneven colour across a screen of constant colour and a white flicker that some high quality games seem to produce.) Since I own both a monitor and a 'pure' C64 the above results can be easily shown. Other users going from a C64 to a C128 I have talked to seem to echo the same complaint.

Interestingly enough, 40 column chips and the composite video output DIN connectors seem to have gone through some partly undocumented changes. A C64 purchased several years ago will have a 5 pin DIN connector for the video output. A newer model (like the one I purchased in 1985) will have an 8 pin DIN connector thus making my supplied cable incompatible with older models. Friends have often remarked at the clarity and excellent colour saturation that my monitor provides with my 8 pin connector to the C64. Unfortunately I can find no documentation of the mysterious pins 6, 7 and 8 that appear on my C64. Do these hold the key to a good display? Now the C128 has an 8 pin connector, but the manual states that pins 7 and 8 are not connected, pin 6 being 'Chroma signal output'. Given that the C128's display is not as good as the C64 does this mean that COMMODORE has done some short listing with respect to the video hardware at the expense of the display? Do other users notice these problems? Do others users own monitors? Some feedback please!

Please note that I only refer to the C128 in 40 column (composite) mode - the C128 has an excellent 80 column (RGBI) mode. Superb for word-processing, database, programming etc. This 80 column video controller has tremendous and largely untapped potential. For instance, did you know that the 80 column 8563 VDC chip can: produce a 640 by 200 bit-mapped display, produce more than 25 rows on the screen (by adjusting my 1201 monitor I once produced 37 rows of text on the screen : imagine that for a word processor or spread-sheet!), supports a light pen, fine scrolling, interlaced mode and even a block copy command in hardware (simple animation is possible). I wonder how much the new C128 80 column GEOS will exploit these features.

In conclusion, if you want a games only machine buy a straight C64. If you want more serious applications, the C128 will support your needs while remaining 99% C64 compatible. Another plus for the C128 is its ability to simultaneously drive 2 independent monitors (40 and 80 column) (This is supported by the C128 CP/M+ operating system).

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## THE 1571 DOUBLE SIDED DISK DRIVE - THE SAGA CONTINUES

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by Paul Gunther

The purchase of a C128 computer naturally leads to the purchase of a particularly important peripheral - a disk drive. The one recommended for the C128 is the 1571. Lately, there have been several problems fully documented, in previous editions of CURSOR, of bugs that have been uncovered in the drive. This article will look at the good- (yes there are some) and bad points of the 1571. Since you have probably only heard bad news so far I will continue with the same.

The article "1571 DISK DRIVE BUG" appearing in the MAY '87 CURSOR states in paragraph two that "With multiple files open and sectors being allocated on both sides the BAM swapper mechanism would trash BAM side one". The article continues .. "Corruption of the BAM makes the disk unusable." I have been unfortunate enough to provoke this nasty bug on several occasions. However the disk can be saved ... The murdered disk will have a directory looking something like this :

```
0"FFFFFFFFFFFFFFFF"FFFFFFF
10 "NORMAL FILES" PRG
XXX BLOCKS FREE
```

The disk name will be replaced by garbage and the number of blocks free will be inconsistent with the files that appear. It is possible to resurrect the disk by the following procedure:

- 1) Use a utility program that will 'soft unlock' a disk (The trashing of the BAM usually corrupts byte 2 on track 18 sector 0 thus making the disk unwritable by a 1571, 1541 format type disk drive)
- 2) Use a track and sector utility to copy track 18 sector 0 from any good disk onto the damaged disk. This will make the BAM at least 'appear' normal.
- 3) Validate the disk (send the dos command: V0:)
- 4) Use a track and sector editor utility to restore the original disk title.

Your disk is now as good as new. Unless of course you managed to write to the disk while the BAM was bad.

This software error in the drives ROM's can usually be restricted by using the initialize (I0:) command after you place a different disk in the drive.

Particularly the bug strikes when using the excellent database program Superbase 128. This program is a dream to use with the 1571 ... until your database extends to the second side of the disk (which it usually does given half a dozen decent sized files). Your beloved 1571 now enters 'Kamikaze' mode, bent on the destruction of your files.

For example, a report program that I wrote and now wished to archive to disk would seem to deposit itself all over my file definitions. I'd loose my report program and Superbase would now report "file definition invalid" errors when I tried to access my data. I can always re-enter the file, but when the bug killed my 4 screen 80 column 100 field database file layout that I'd taken weeks to develop, I almost had enough. It seems even the makers of Superbase 128 see the problem. They now supply a utility (with SB V2.07) to recover bad databases that get trampled on the 1571.

The Superbase program uses advanced disk access methods that really push the drive to its limits which probably contributes to my bad experiences with Superbase. After many heart breaking losses of data I have come to the conclusion that the second side of the 1571 is suicidal in its use to say the least. You may get away with the casual storage of, say filling a double sided disk with programs that don't write to the disk, but until COMMODORE make available 'debugged' ROM's to replace the 'diseased' ones, I can only say "You were warned!"

If you must compliment your C128 with a fast disk drive, then take a look at the single sided 1570 or wait (recursively) until the 1581 3.5 inch disk drives are released in Australia or I even heard of hard disk drives available for the COMMODORE (If you can afford them!)

After all that beating can you believe the 1571 has some remarkable features that make it most unique and powerful?! Read on. First something productive: As well as being able to read the default COMMODORE standard GCR (Group Coded Recording) disks the engineers of the 1571 decided to allow the drive to accept MFM (Modified Frequency Modulation) disks. (This method uses the small round hole for timing, previously unused in the 1541).

This means that some common CP/M formats are readily readable (supported by the C128's CP/M+ operating system). You can take a disk straight from say a Kaypro CP/M machine and the 1571 will happily read it for you. Also COMMODORE in their infinite wisdom threw a WD 1770 IBM-34 controller into the 1571. Being a student of computing I take great delight in the ability of the 1571 (using a MFM format in CP/M mode) to allow an IBM PC (using a foreign disk program called ALIEN) to read my disk. This means I can type in assignment programs on the C128 then, via the 1571, transfer them to an IBM PC (and visa versa).

The 1571 disk drives' access speed is a welcome change, compared to a slow 1541. However the 1571 has largely unused potential as quoted from the ABACUS BOOK '1571 internals': " The 1571 with a 2Mhz CPU ... can operate at the maximum transfer rate of 500,000 baud ... The fact that these superb capabilities are not used is the fault of the 1571 operating system (ROM's) alone". '500 000 baud' ? Why this simply means that IF the C128, 1571 combination had a decent Disk Operating System (DOS) designed for maximum transfer rates then the C128 could load a 60k program in 1 second ! or about 7 hi-res screens per second! If you have a C128 and 1571 then you already own the hardware to allow these high transfer rates. Pity about the operating system.

UPDATE: The BAM trashing bug has been traced to the C64 Turbo-Rom with 1541 rather than the 1571, i.e. the 1571 article implies that the drive causes the BAM trashing to which a fix was given. This bug resides in the C64 Turbo-Rom as verified by another member, Grant Robinson.

UPDATE 2: Turbo-Rom & 1571 - Do not use the fast format option, i.e. @F:DISKNAME.ID. Cockroach recommend this, as so many DOS versions exist.

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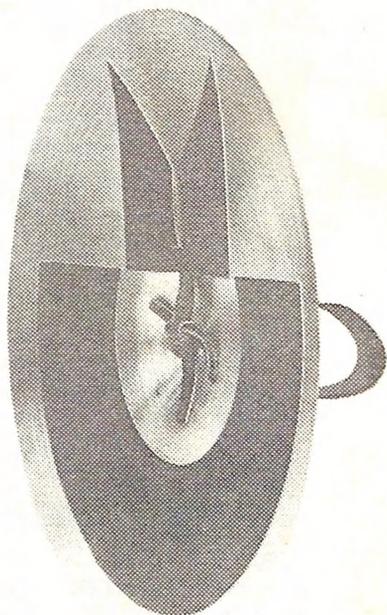
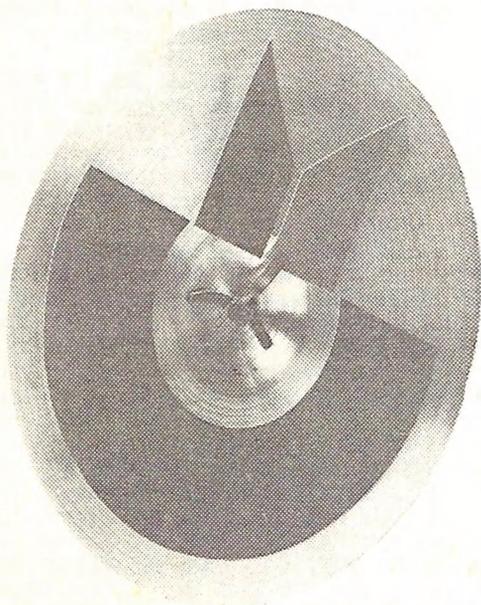
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