

CURSOR

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

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MEETINGS WHERE & WHEN

MAIN MEETING Tuesday 1st November 1988, in the Bardon Professional Development Centre, 390 Simpsons Road, Bardon. Entrance is through the Centre's Car Park in Carwoola Street. Library: 7pm - 8pm and 9pm - 9.30pm. Shop: 7pm - 8pm. Main Meeting times: 8pm - 10pm.

John Van Staveren & Gordon Keir: ASPECTS OF SUPERBASE

C-64/128 WORKSHOP (MEMBERS ONLY): Sunday 13th November (1pm - 5pm) in the Guidance Officers Training Centre, Bayswater St. Milton. Bring your own computer equipment. Public Domain Disks available for copying. Ph. Colin Shipley - 366 2511 a.h.

REGIONAL MEETINGS

CANNON HILL: Last Saturday of the month (12 noon - 12 midnight) in the Cannon Hill State School. Ph. Don Friswell - 343 1735 a.h.

KINGSTON: 1st Friday of the month (7pm - 10pm) in the Kingston State School.

Ph. Peter Martin - 290 1537 a.h.

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

Ph. Barry Bean - 269 7390 a.h.

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

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

WAVELL HEIGHTS: 2nd Tuesday of the month (7.15pm - 9.45pm) in the Wavell State High School, Childers St. Entrance. Ph. Cor Geels - 263 2839

SUNSHINE COAST meets regularly. For meeting times, dates, places:

Ph. Harvey Riddle - 071 / 421 036 or Ph. Vic Mobbs - 071 / 941 330

MARYBOROUGH/HERVEY BAY: 4th Monday of the month (7pm - 10pm) in the Sunbury State School, Alice St. Ph. Terry Baade - 071 / 215 059 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 - 3412823 a.h.

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

Copying of Commercial Software is NOT allowed at our Meetings!

GOODS & SERVICES

{THESE ITEMS AVAILABLE AT OUR MAIN MEETING OR BY MAIL}

PUBLIC DOMAIN DISKS (C-64/128): \$3.00 ea (+ \$2.00 Postage up to 5 Disks)

PUBLIC DOMAIN TAPES (C-64): \$2.00 ea (+ \$1.00 Postage Per Order)

BLANK DISKS 5,25" (DS/DD): \$10.00 per 10 (+ \$2.00 Postage)

PUBLIC DOMAIN DISKS for AMIGA (by Mail only): \$5.00 ea (+ \$2.00 Post. - up to 5 Disks)

BLANK DISKS 3,5" (DS/DD): \$30.00 per 10 (+ \$2.00 Postage)

DISK BOXES for 3,5" disks (80 disks) - \$20.00 ea (+ \$5.00 Postage)

1541 DISK DRIVE COVERS: \$10.00 ea (+ \$1.00 Postage)

"PUBLIC DOMAIN INSTRUCTION BOOK" (C64): \$5.00 (+ \$1.00 Postage)

"STARTING WITH DISK DRIVES" (1541) : \$2.00 (+ \$1.00 Postage)

"C-128 MEMORY MAP": \$2.00 (+ \$1.00 Postage)

"MACRO ASSEMBLER BOOK": \$5.00 (+ \$1.00 Postage)

"64 SOUND & GRAPHICS" (by G.Perry): \$10.00 (+ \$2.00 Postage)

"AMIGA DOS SUMMARY": \$3.00 (+ \$1.00 Postage)

"AMIGA BEGINNERS GUIDE" (CLI etc.): \$3.00 (+ \$1.00 Postage)

"AMIGA EDITION of CURSOR": \$10.00 annually (to financial members only.)
 TURBO-ROM for C64 or C128: Members Price: \$40.00 (+ \$2.00 Postage), or Customised Version
 (Choice of Screen Colours + Your Name on Screen): \$45.00 (+ \$2.00 Postage)
 USER PORT PLUG (EDGE CONNECTOR): \$8.00 (+ \$1.00 Postage)
 USER PORT PLUG BACKSHELL: \$3.00 (+ \$1.00 Postage)
 USER PORT to CENTRONICS CABLE: \$35.00 (+ \$1.00 Postage)
 36-PIN CENTRONICS MALE PLUG w. BACKSHELL \$10.00 (+\$1.00 Postage)
 ADDRESS LABELS (23 x 89 mm): \$14.00 per 1000 (+ \$2.00 Postage)
 DISK NOTCHERS (for 5,25" disks): \$8.00 (+ \$1.00 Postage)
 RIBBONS for MPS-1000, GX/LX-80 PRINTERS: \$9.00 (+ \$1.00 Postage)
 RIBBONS for MPS-1200/50, Citizen 120-D PRINTERS: \$12.00 (+ \$1 Postage)
 RIBBONS for RITEMAN C or F PRINTERS: \$15.00 (+ \$1.00 Postage)
 RIBBONS for DPS-1101 PRINTER: \$4.00 (+ \$1.00 Postage)

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

The Group has FOR HIRE (to Members only) a 1526 (MPS 802) Commodore Printer
 For details contact John Van Staveren on 372 3651 (a.h)

COMPUTER ADDITIONS/MODIFICATIONS

are being carried out at our Milton Workshop Meeting by Gary MacMinn, (Ph. 848 2271 a.h.)
 and Philip Van Der Vliet (Ph. 848 5753 a.h.)

SERVICES OFFERED:

RESET BUTTONS...\$6.00 --- DEVICE NUMBER CHANGE...\$6.00
 RESET RE-ENABLE...\$6.00 --- C-64/128 COMPUTER SELECTION SWITCH...\$6.00
 40/80 COLUMN SELECTION SWITCH: for C-128...\$10.00 - for C-128D...\$15.00
 TURBO ROM INSTALLATION: C-64 with Socket or C-128...\$6.00
 TURBO ROM INSTALLATION: C-64 without Socket or C-128D...\$10.00
 WRITE PROTECT SWITCHES...\$6.00 --- WRITE ENABLE SWITCHES...\$6.00

The Following Items made up to Special Order Only:

SERIAL SWITCHING BOX...\$14.00 --- SERIAL PORT DOUBLER...\$14.00
 EXPANSION PORT PLUG...\$7.00 --- CAPACITANCE METER BOARDS...\$14.00
 64K VIDEO RAM UPGRADE: for C-128...\$40.00, for C-128D...\$45.00

C. C. U. G. (Q.) INC. MEMBERSHIP FEES

ANNUAL SUBSCRIPTION (PLUS \$10.00 JOINING FEE):

Ordinary* Membership...\$25.00 - Country/Associate Membership...\$15.00
 Student/Pensioner Membership...\$15.00 - Family/Business Membership...\$35.00

(*Within the B'ne Metropolitan Phone District)

Direct all membership enquiries to:

*The Secretary, C.C.U.G. (Q) Inc.
 P.O. Box 274, Springwood, Q'ld, 4127*

PARCOM PTY. LTD.

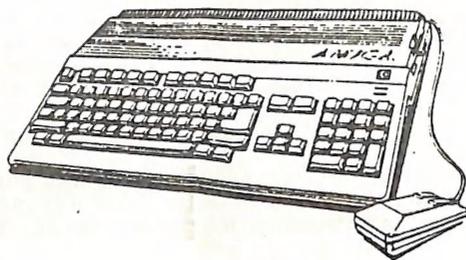
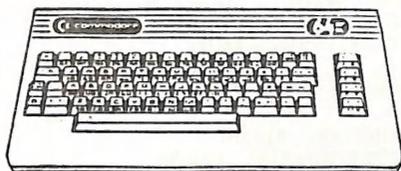
WHITES HILL SHOPPING VILLAGE
SAMUEL STREET, CAMP HILL, 4152. Ph. (07) 395 2211

NORTH SIDE: 1 CLIFFORD STREET, STAFFORD, 4053. Ph. (07) 057 6311

TOWNSVILLE: 363 BAYSWATER ROAD, GARBUTT, 4814. Ph. (077) 794 800

AUTHORISED INDEPENDENT COMMODORE SERVICE CENTRES

- * Professional Repairs and Product Support
- * All Work Carries Our 90 - Day Warranty
- * See Us For Efficient And Courteous Service
- * Fast Turnaround



NOW AVAILABLE: Amiga Disk Drive Alignments - \$50.00

Replacement Circuit Board Service:

For C-64 - \$89.00 + Your Old Board

For Vic 20 - \$69.00 + Your Old Board

(all boards must be in serviceable condition)

Special Rates for Users Group Members!

EDITOR'S NOTES

OUR BBS

It is no secret that I have never been a great lover of tele communications by modem in general and our own BBS in particular.... too many hassles with all the technical aspects of the system. The Punter BBS system was the last straw with its convoluted menu system - I just gave up on the whole thing.

But now something rather marvelous has happened. Because of ongoing problems with the group's BBS system which was based on a C-64 in conjunction with both floppy and hard drives, the decision was made to upgrade to a PC based system, complete with a 40 meg. hard drive. As terminal software we are using the *OPUS* system which is recognised as a default standard. Well, to cut a long story short, I am now using our board regularly because it's a cinch! I use a Netcomm Smartmodem in conjunction with GP Term, and it's a real joy to log on. The menu system of *OPUS* is simple enough for a child to understand (and there's a big Help File which you can download or print out), and you can now also leave both messages and articles for CURSOR in the designated areas. I hope lots of you will be using it. But this brings me to the crux of this story. Where are the C64 and C128 users of our board? Currently it is largely dominated by Amiga users, but our BBS is for *all* members. So how about it folks? This is your board as well, and it's fun to use!

ARTICLES

Jim Vick has some wise words to say about *OPUS* (see above) and there are articles by our 'regulars', the Phillips brothers, 'Doc' Maclurkin, Gary MacMinn and the Hornes. Do have a look at Denis Wright's article on pages 7 - 11. Looks good, doesn't it? Well, it's all Denis's work, and he has cheated a bit because he used a laser printer on a Mac! However I have decided to forgive him for this once, because it looks so good!

After my pleading in last month's issue, Cor Geels has decided to write a Beginners Section. Isn't it amazing that a man who already holds the position as sub-group coordinator (Wavell Heights), is now prepared to do even more for our group? Thank, Cor.

Ralph De Vries

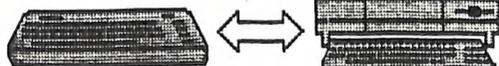
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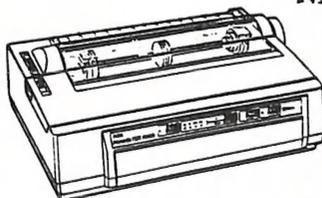
WordPerfect 4.1



NEC



THE 64 EMULATOR 2



P2200 PINWRITER

RANDOM BITS

OCTOBER MAIN MEETING

This meeting was unusual, in that two simultaneous talks/demos took place. In the main auditorium Greg Shea and Jim Vick demonstrated the new *Opus* BBS on the overhead projection system, and accessing the system via a C-64 - important, as some 64/128 users were under the impression that the new system couldn't be accessed by them.

Angus Norrie gave an equally well attended talk in Room S2, where he demonstrated his many graphic routines. To judge by the applause the talk was a great success.

We were also pleased to welcome two visitors; Bruce McGovern of the Townsville Commodore Group and our senior member Carl Holzberger who resides in Broken Hill. We hope that these gents enjoyed their short stay with us.

MAIN MEETING: SHOP HOURS

Please note that sales of disks and accessories will only be conducted between 7pm and 8pm during our Main Meeting. This is done to allow Leigh Winsor and Doug Maclurkin to attend the main meeting. Please assist by obtaining your supplies during this period.

CAPALABA SUB-GROUP

Because of a lack of attendance it has been decided to close down the Capalaba sub-group. Members who attended this particular sub-group will be made very welcome in the Cannon Hill or Kingston sub-groups.

APPEAL TO MEMBERS

About a year ago, I purchased Paperclip II for the C128 and have found it to be a very good wordprocessor. Included with this package is a spelling checker and I have spent many hours trying to figure out how the words are stored in the files supplied so I can use the dictionary for other purposes. I have finally run out of ideas and would like to ask anyone who knows the format of these files, or even has some ideas which may be helpful, to write to me at the address below and share your ideas. Please help; I'm desperate!

Gary MacMinn, 25 Prior St, Tarragindi 4121, Brisbane.

WRITE STUFF 128

The 'userware' word processor *The Write Stuff* is now available in a 128 version from:-
South Australian Commodore Users Group, P.O. Box 427, North Adelaide, 5006.
Their price is \$20.00 + \$2.00 postage.

1571 DISK DRIVE - GOOD NEWS

Bruce Bimrose, a member from Cairns, brought some good news. He wrote to Commodore re the availability of the 1571 disk drive. In their reply CBM advised him that the 1571 drive is NOT DISCONTINUED in Australia, but is still imported in small quantities. If you want one of these drives it is advisable to order it from your dealer and you may have to wait some time before the order is filled. Now, how about the 1581 drive, mr. Commodore?

NEW REPAIR SERVICE

Tony May, formerly of Pro Digital Services, can now be found in a newly established company, South East Queensland Computer Repairs. His address is 32 Brisbane Street, Bundamba, and his phone number is 816 1588.

TALKING TO OTHER COMPUTERS (without a modem!)

by Denis Wright

If anyone were to ask me what was the most important piece of computer equipment I had bought in the last twelve months, I'd have to say, an RS 232 interface. The evidence is right here in front of you. This article has been written on my C-64, using Superscript. What makes it look so good (even if it makes no sense!) is the fact that it has been printed on a laser printer. So have I been able to hook up the old Commodore to a laser? Well, no, not directly. That's where the RS 232 interface comes in.

This article will be of interest to you if you have access to a laser printer, perhaps at work, but can't use it because you have nothing more than a C-64 or 128 at home. Maybe the laser printer is connected to an IBM or Mac. How can you take advantage of the superb printing qualities of the laser without buying a very expensive computer that's compatible with it?

If I tell the story as it happened to me then it might help. My university has a wide range of computer equipment, from an incredibly powerful mainframe computer to Wang terminals and PCs, IBMs, and Mac SEs. When I had the opportunity to buy computers for staff of the Department to use, I decided on Macintosh SEs, because we already had these nifty computers connected to a laser printer elsewhere in the Faculty. I must admit I didn't know anything at all about the Mac when I made this decision; if the laser had been connected to some other system we would have gone that way.

The Mac is so easy to learn, especially if you're familiar with GEOS on the Commodore, that you could pick it up within half an hour (mind you, to learn to use it properly takes a good bit longer!) It was marvellous to see the results that could be achieved in word-processing using it and the laser printer. But it raised a big problem for me. I have a C-64 at work and a duplicate system at home. What was I to do? I could go on using the C-64 for some tasks and use the Mac for others, or else part with my old equipment and wait in the queue with everyone else to get on the Macs at work.

Buy a Mac? Have you seen the prices?! Mac equipment is very expensive, and besides, I'd invested years on the C-64 developing programs,

creating filing systems and techniques that made the C-64 a great piece of research and writing equipment. You don't just toss that in without a second thought.

What I wanted, essentially, was to be able to transfer my sequential files created with Superscript (SS) or Easyscript (ES) to the Mac. No formatting, just straight text files. The answer had to be, of course, to get the C-64 talking to the Mac, and that's where the RS 232 interface comes in.

An RS 232 interface is simply a unit and cable that connects the C-64 to another computer capable of reading ASCII files - which means just about any other computer. But the word 'simply' is a misnomer - it's not at all simple to do this if you don't know where to start. Here I must acknowledge an enormous debt to my good friend Peter Gadsby, whose technical knowledge made it possible to complete this quest, to Paul Blair, who put me on to Geoffrey Hunter (a very obliging and knowledgeable man who had done this sort of thing with a Toshiba laptop and the C-64), and to Greg Perry, who has an excellent terminal program and gave good advice when things weren't working.

Problems: firstly, the C-64 doesn't use ASCII - it uses PET ASCII. That's no big deal, because a good terminal program, (or even ES and SS in the right mode), will do the conversion of PET ASCII files for you.

Secondly, the output voltage of the C-64 is incompatible with most other computers; that's where the RS 232 interface does its main job. And that's why the unit always includes dry cell batteries to get the required 12 volts.

Thirdly, these interfaces are as scarce as hens' teeth and about \$130 to buy off the shelf if you can find one - and you still are up for the cost of the cable connection to the other computer.

The good news is that these interfaces can be bought in kit form, for far less than the exorbitant ready-made unit. They are also relatively easy to put together, so I believe. That's fine if you are a dab hand with a soldering iron and multimeter, but I'm not, so I got someone to do it for me. The Mac end of the cable must be made of pure gold - at least they charge as if it were instead of an insignificant (but vital) little connector - round \$40.00.

To cut a long story short, I at last got my interface, and then the real experimentation began. Firstly, I got hold of a communications program for the Mac (MacTerminal, if you're interested), connected the two computers

together, and set the Mac to receive my sequential file. I was told by Geoffrey Hunter that you could transmit the files from ES or SS by simply choosing the RS 232 option from within these programs, selecting the right parameters, and sending the output as if it were to the printer. Well, I've only just succeeded in doing that with SS - I must have been doing something wrong when I first started, because SS invariably locked up irretrievably when I first tried to send the data. Using ES, ASCII text came through all right, but line feeds didn't happen, meaning that each new line coming in simply overwrote the previous one, and no matter what I did, I couldn't solve this problem. I've no doubt there *is* a solution; I just didn't find it.

What turned out to be the best bet was to load up a terminal program for the C-64, and use its options to transmit the file in the way I wanted. Greg Perry's *GP Term* is ideal for this task, but there are some others that do the job too. *Term 64* will work, but is painfully slow - upping the baud rate doesn't seem to make any difference; it just pecks away at slow typing speed converting the characters to true ASCII one by one. *VIP Terminal* works a lot better and will push the text through at true baud rate up to 2400, which is about as fast as anyone could want.

Getting the text across is half the battle, but there are a few problems. Nearly all of these can be solved with the right sort of preparation of text files to be sent. It's easy if you write these files knowing that they are going to be formatted on another computer; not quite so easy if they are already formatted for printing. Here are the steps the way it works for me when using a terminal program on the C-64:

1. Type the text on your C64 in using ES or SS, with as little formatting as possible. Don't attempt to use ES or SS commands. Remember, all you're interested in basically is to get the text across, and ES or SS formatting commands will only get in the way.

2. You can hit the RETURN key whenever you like to help you read the text as you type the document in SS or ES. All of these will be eliminated using global Search & Replace once you get the text across to the other computer, so they don't matter at this stage.

3. When you want to put in a RETURN - at the end of a paragraph, for example - that will be recognised by the other computer, use a symbol such as the asterisk [*] or the slash [/] or the equal [=] sign. Put two of them if you want to mark the end of the paragraph and a line space between paragraphs.

That's it! Now, what about the other end, where the file's received?

Here I have to make generalisations based solely on the Mac with its WYSIWYG system. If it doesn't work on another sort of computer, you'll have to fiddle with it yourself. It's mainly a matter of setting the right parameters as requested by the program, and sending the file across.

When the textfile comes up on the screen on the Mac in the terminal program, it looks pretty good - almost like it did when you sent it. But if you put that same file in a word-processor like Microsoft Word, it looks awful. There are spurious RETURNS at the end of every screen line or somewhere in the middle. It would take you as long to edit these out manually as it would to type it all in again, so forget that. Here are the steps to make it right again:

1. Globally search for all RETURNS, and delete them, using the wp's Search & Replace routine. Now your document looks like one gigantic paragraph from start to finish. That's where your embedding of symbols (see Step 3 above) for desired RETURNS comes in.
2. Globally search for the symbol you used, and replace it with a RETURN your computer understands. (On the Mac, you have to use ^p). Then, lo and behold, your document formats itself just the way you intended it to.
3. Save it, and add any special formatting such as italics, underlining, etc.

I found that spaces between words occasionally dropped out while the text was being transferred in the terminal program, but that gets picked up in the inevitable proofreading on the other end. Oddly enough, lowering the baud rate didn't seem to make any difference, though I thought it would. Otherwise, it came across just fine. There were no other problems at all. Incidentally, I saved battery life by turning its switch on just before transferring my documents, and turning it off immediately afterwards. That means only a few minutes at a time actually using the battery. They don't last forever, but mine's still going strong after more than three months.

Since I started writing the article, I've experimented more with sending the file with Superscript. My aim was to simply connect up the two computers and send the file, without having to get out of SS and load up the terminal program (although, of course, the RS 232 interface would have to

be connected before you started, because it's not smart to plug in to live computers). It's interesting doing it this way, but there are some traps. What I did was to set up a macro command and put it in my defaults file, so that when I hit my pre-defined key, off the file went to the Mac. If you are interested, the sequence is *X = /pir571/pp - you can try that with or without an RS232 interface by putting a short file on the screen, and hitting F1/p/i/r/5/7/1/F1/p/p. Turn up the volume on your monitor, and you'll hear the computer trying to send off your file.

The trap (which can be turned into an advantage) is that what you are doing is sending the file with printing commands *in*, not out. Consequently, unless you set the left margin at 1, you'll get extra spaces across the RS 232 interface at the beginning of every text line (because the default value of your left margin setting in SS is 3.) But, it is possible to format a document on the C-64 using all SS formatting commands, 'print' it via the RS 232 interface, and have it come up on the receiving computer screen more or less formatted. I should warn you though, that it is only satisfactory under certain conditions done this way, and it makes far more sense to format on the receiving computer once the file is transferred.

Two days ago, I got a call from a desperate author who had typed in a 300 page manuscript on the C64, found she had to get it on to a Mac in order to get in published, and didn't know what to do about it. Rather than try to explain the process and loan the cable to someone who was bemused and terrified by the prospect of trying to do the conversion of the files herself, I agreed to have a go at the job. She had used Easyscript, with minimal formatting, so it wasn't too hard (just tedious!) I used the Search & Replace routine in ES to search for all RETURNS and replace them with a symbol, and refiled each part. Then it was just a matter of carrying out the instructions above. It worked very well.

I'd be interested to hear if anyone else has useful tips in transferring data files in this way. Perhaps it might be also be a good idea if Ralph were to comment on how he would like diskfiles formatted (un-formatted!?) for publication in *Cursor*.

This might just enable some of you agonising about upgrading your equipment (read last month's *Cursor*, for example) to keep your 8 bit machine, buy a relatively inexpensive cable, and let the old C-64/128 do the hard work. Maybe you *can* have your cake and eat it too!

THE NEW BULLETIN BOARD

by Jim Vick

To the members of the Users Group that missed the main last meeting, our new Bulletin Board is now up and running, and at this stage with nearly a month behind us has been without major incidents apart from teething problems normal with a system such as this.

Most of the credit for the trouble free start can be attributed to the three people who did most of the work during the setting up stages. Our Amiga Coordinator Steve McNamee who has spent many hours putting the whole thing together and making sure we had it all right, our President Greg Perry for the time he put into getting all the gear together and helping set it up, and of course our Sysop Greg Shea who has the responsibility for keeping the system going and doing the day to day chores that the BBS requires.

Now to the System itself. The software we are using is called Opus and is a program that is used worldwide to run the majority of Bulletin boards that are in existence. The computer is an IBM clone with twin floppies and a 42 Meg hard disk drive.

Now before you cry *shame!* or whatever, the simple facts are that there is no suitable software for either the 64/128 computers or the Amiga that suited our needs.

I know that this will raise a certain amount of controversy because we have had several systems written specifically for the 64 but they all have the common problem with reliability and we felt that, as we were running a service for the CCUGQ, it should be reliable and also give the members the best access to the world, without the sysop spending vast amounts of time keeping the thing running.

A little bit about the program;- it supports all speeds up to 2400 baud and is capable of going a lot faster with a high speed modem. The program is fully menu driven and very simple to use with all commands accessed via a single character entry.

The advantages of Opus over other BBS programs is that it is virtually the default standard system and as such there are thousands of Bulletin Boards worldwide all similar and all capable of being hooked together to allow the transfer of information quickly to any part of the globe via a system called netmail. What this means is that if I wished to send a message to a friend in Melbourne (or anywhere else in the world) I would access the local Bulletin Board and leave the message. That night all the messages to be transferred from our BBS are automatically sent to a central BBS for the area. The one that we access is "Brisbug" the local IBM users group BBS. This central computer then packets up all the available mail and sends it via a high speed modem to the central area for the destination mail. The same process is then repeated in reverse to break the packets of mail up and distribute them to the area. The advantage of this system is that it only costs the user at each end a local phone call and a small service charge to send his mail any distance and normally it should be received next day. The normal procedure is to send a couple of dollars to the User group and this goes into your account at the BBS so that you have credit to send messages whenever you wish. The other advantage is the echomail system which links a large number of Bulletin Boards together so that a message I send tonight can be read by people Australia wide the next day, and a query sent out can have a dozen replies by the next night. This echomail system also has special interest areas so that if your only interest is in C programming then there is a special area for people to talk about it.

We also have extensive upload and download areas for users to access for file transfer including a special area where you can leave a program for a friend to pick up directly as a user to user direct transfer.

The board is open to all club members and the more people we have using the system the better, as an active Board provides a good forum to air your ideas. To gain membership to the board all that is required is to log on and fill out the questionnaire from the main menu. This will then be processed to allow you full access. So, if you have a modem give us a ring and be part of the fun!



Since Nobody is writing good material for Cursor, I thought you might like a picture of him (although I am afraid that it is a very old one).

And, indeed, since Nobody is writing more material than Ralph (and can't be blamed for the Ethnic Computer Jokes), some might say that Nobody deserves more credit than Ralph.

LEIGH WINSOR

THE E.T. PROBLEM

In last month's issue of *CURSOR* we published a little programming problem about that Extra Terrestrial Creature, which was submitted by Hugh Gravendijk (see Random Bits Column). Miracle of miracle, we have had 2 (two) solutions - pretty good for an 800 membership!

Herewith a possible solution by the author, Hugh Gravendijk:-

```
100 REM E.T.=EXTRA TERRESTRIAL CREATURE
110 REM E.T. HAS ONLY 6 FINGERS, SO HE COUNTS TO BASE 6.
120 REM WHEN E.T. IS 13 YEARS (BASE 10) OLD
130 REM HE WRITES HIS AGE AS 21 (BASE 6).
140 REM REMARKABLY 21 (REVERSED) + 1=13 (BASE 6).
150 REM E.T.'S EXTRA GALACTIC TELEPHONE NUMBER HAS THE SAME PROPERTY:
160 REM 5 DIGITS TO BASE 6 REVERSED +1 = THE DECIMAL NUMBER (BASE 10).
170 REM COULD YOU FIND THIS NUMBER?
180 REM *****
190 REM *** E.T. ***
200 REM **** BY ****
210 REM ** HUBERT **
220 REM *****
230 REM A,B,C,D,E (DECIMAL)
240 REM P,Q,R,S,T (HEXAGONAL)
250 E=0:T=0
260 E=E+1
270 IFE>9THEND=0+1
280 IFE=10THENE=0
290 IFD>9THEND=C+1
300 IFD=10THEND=0
310 IFC>9THENB=B+1
320 IFC=10THENC=0
330 IFB>9THENA=A+1
340 IFB=10THENB=0
350 IFA>9THEN PRINT "TRY AGAIN":END
360 T=T+1
370 IFT>5THENS=S+1
380 IFT=6THENT=0
390 IFS>5THENR=R+1
400 IFS=6THENS=0
410 IFR>5THENQ=Q+1
420 IFR=6THENR=0
430 IFQ>5THENP=P+1
440 IFQ=6THENQ=0
450 IFF>6THENPRINT"TRY AGAIN":END
460 PRINTTAB(2)X:PRINTTAB(15)Y:PRINTTAB(30)Z
470 X=A*(10000)+B*(1000)+C*(100)+D*(10)+E
480 Y=F*(10000)+G*(1000)+R*(100)+S*(10)+T
490 Z=T*(10000)+S*(1000)+R*(100)+Q*(10)+P
500 IFX=Z+1THENGOTO520
510 GOTO260
520 END
```

The E.T. Problem

Here is another solution to the same problem, submitted by Allan Casperson of Bardonia:-

BASE 10= 0 4 5 2 3
BASE 6 = 3 2 5 4 0

```
1 REM LET BASE 6 NO HAVE DIGITS ABCDE
2 REM THEN BASE 10 NO IS EDCBA+1
3 REM USING PLACE VALUES THE BASE 6
4 REM NO HAS THE VALUE OF A*6↑4 + B*6↑3
5 REM + C*6↑2 + D*6 + E
6 REM THE BASE 10 NO HAS THE VALUE OF
7 REM E*10↑4 + D*10↑3 + C*10↑2 + B*10
8 REM + A + 1
9 REM MULTIPLYING AND ADDING GIVES THE
10 REM EQUATION IN LINE 70 EQUAL TO 0
15 OPEN4,4
20 FORA=0T05
30 FORB=0T05
40 FORC=0T05
50 FORD=0T05
60 FORE=0T05
70 F=9999*E+994*D+64*C-206*B-1235*A+1
80 IFF=0THENPRINT#4,"BASE 10= ";E;D;C;B;A
90 IFF=0THENPRINT#4,"BASE 6 = ";A;B;C;D;E
100 NEXTE
110 NEXTD
120 NEXTC
130 NEXTB
140 NEXTA
150 REM THE ANSWER IS THE NUMBER BASE 6
151 REM OF 32540
152 REM THE VALUE OF THIS IN BASE 10 IS
153 REM 4524 WHICH IS 04523 + 1
160 END
```

PUBLIC DOMAIN DISK LIBRARY

by Doug Maclurkin

September has seen a few additions to the Library. Prominent amongst these are TPUG's for June & July. Also I have unearthed TPUG's for April 85(212) & Feb 87(209). Please keep looking in your personal libraries for more TPUG disks.

Also I have added 14 disks which contain abbreviated documentations of games & other things (213-226). Check the Catalogue disk for details. Many of you will find these very helpful.

The Catalogue disk has been overhauled also. I had to go on to side B in order to accommodate all the new disks. Gratisware6 & gratisware7 list them all. Side B now loads the Word Processor automatically when you power up. Make sure you get your copy.

I make a point of taking about 2 copies of all new disks to the monthly meeting where they can be purchased. I also take 2 printouts of the Catalogue disk which can be examined on the spot and your selection made. Give yourself plenty of time.

Ralph will put as many as possible of the new disks in 'Cursor'. Maybe this will fill his empty pages.

I am still waiting for youse all to submit your own favourite programs so that I can make up a new PD disk. If I get no response this month then I propose each month naming a 'Programmer of the Month' who will be given the honour and opportunity to send us & share with us his or her most loved programs. Shall I start at the top (where I am sure there is a veritable treasure house to be plundered) or the middle (where programs would be getting pretty sparse) or shall I put all the prospective names in a hat?

Don't hold your breath!

DISK # 209 : (C) AAH TPUG FEB87

CALENDER9.6 Note important dates (birthdays, anniversaries, etc.), then print out a calendar. Save this program to another disk before using.

BIBLE MENU Biblical questions with sound and graphics. Fully documented. Every correct answer adds another piece to Noah's Ark.

COLOR SPELL Type in the colours that are shown on the border and spoken. Instructional program for children.

SEQ FILEREADER A handy utility for reading and printing sequential files, particularly DOC files included with some programs.

MEDITATION Good music. Don't be impatient, it takes a while to load.

SWAN SONG Good music. Don't be impatient, it takes a while to load.

SPACE MOVIE Interesting sound and hi-res graphics. Don't be impatient, takes time to load.

VCR INDEX TPUG An indexing system for your VCR tapes. You can add, delete, sort, etc. Save this program to another disk before using.

DISK # 210 : (C)AAX JUNE 88

PRINTBOOTDATA This program will allow you to print the directory of this disk or to print the information found in this box.

DISK HELPER 5.0 This is a disk help system with twenty three utilities with a detailed menu. Apply a write protector to this disk before running.

SONG LIST V9.1 A cataloger to help you organize your music by artist and/or album. Also, you can catalog by format eg. records, CD, cassette, 8-track or DAT.

TAKE AWAY ISLAND This is a program for children to practice their subtractions and have some fun at the same time.

COMPUTER DATE After the computer asks you several questions, it will use the answers to find a date for you. Names and phone numbers are fictitious.

HAIKU FUN You can create poems in HAIKU, a Japanese form of poetry. Instructions are provided and you can make a hard copy of your efforts.

PM A graphic with sound demonstration of the executive toy "swinging spheres".

PLANNER This handy program can help you plan the expenses of your next family trip. Just follow the prompts on the screen.

MINI GOLF Play this version of miniture golf with nine holes. Game comes with instructions.

LOADER (wall wars) By loading "loader", you have an action game called Wall Wars. Requires a joy stick in port 2. **BEWARE** - do not use a fast loader.

SID WRITER This program will play music while displaying text messages. Use the HELP prompts for instructions. Enjoy it!

SEQ READ & PRINT A sequential file read and print program.

DISK # 211 : (C)AAJ JULY 88

PRINTBOOTDATA This program permits one to print the directory of the disk as well as print the information found in this box.

C64/EDIT1.4 BOOT You can create a seq. file and edit it. Also, it is a seq. file read and print program. Read doc/file edit1.4 for information. Designed by Ken Cormack.

TO-DO A single-line database to keep track of the list of things to do and to set priorities.

SLIDING TILES This program is a computerized version of the alphabet pocket puzzle invented by Sam Lloyd many years ago.

MEMOWRITER This program is a screen-oriented word processor using the Commodore-64 own built-in editing capabilities. All editing keys work as normal.

SRTDRT This is a good quality game of darts. Make sure your joy-stick is in port #1. After loading the screen becomes blank for a time. Read the seq. file "d.srtprt".

CWISE LISTING (crosswise listing) This program prints the rows and columns of a spreadsheet at right angles to the normal way of printing. Read 3 seq. files accompanying this program.

TIMES.TBLS This is a great program to help children to memorize their multiplication tables.

TRIANGULATION This is a program which will be of interest to high school and college students to practise their geometry.

DISKMATE V1.0 Diskmate is a disk utility program. It validates, formats, hides directories, zeroes out file blocks, reads seq.files and more. Caution:"write protect" your disk.

SEQ READ & PRINT Read and/or print out the seq.files of this, or any other disk.

DISK # 212:TPUG APRIL 85

TI3DOC PRINTER.C This program will print the contents of 'APRIL DOC 80.D'. Classification: DATA This file contains descriptions about the programs on this disk. It should be printed before you attempt to use any of the programs.

DIRECTORY ASSISTANCE V3.0 To load type: LOAD'DA V3.0.WOW',8 This FREWARE program will let you do just about everything you would ever want to do to the directory of a diskette. You can move things, edit things, add comments, add extensions to filenames and so much, much more!

DIRECTORY ASSISTANCE V3.0 INSTRUCTIONS This program contains all the information you would ever want to know about 'DIRECTORY ASSISTANCE V3.0'.

DIPLOMAT'S DILEMMA To load type: LOAD'DILEMMA',8,1 Loads and executes all the files that are needed for you to play the game of 'DIPLOMAT'S DILEMMA'.

DISK COMPARE.C Looks at two disks, one in drive 0 of device 8, the other in drive 0 of device 9, and tell you where the two disks differ.

DISK SEARCH.C This program will search through a diskette and report the track and sector location that your search string appears on. So, if you were searching for the word TPUG on this disk, more than likely it would find it on track 18, sector 0. It might find it in other places too, but it should find it there for sure.

FILE COMPARE.C Compares two files, one on a disk in drive 0 of device 8, and the other on a disk in drive 0 of device 9, and report any differences.

MAP.C This program will tell you the start and finish address of any program file that you have on disk.

PROMPTING DELETE This program will allow you to delete one or several programs from a disk at a time. Just answer the yes or no questions and then all of your unwanted files will be deleted for you.

TPUG.BOOT.C This is a demo put together by a group that call themselves the 'C-TEAM UN-INCORPORATED'. This program loads three other files that are used in the demo. Please also note that the program is UNCOPYRIGHTED. It makes uses of the SID chip extensively, so be sure to have the volume on your monitor turned up. It also uses some sprites and does a mean moon walk! The rest you will have to see for yourself! Enjoy!

GHOUL DOGS.C The Play: Ghoul Dogs is a game unlike any other game. It is played in a rectangular enclosure which you, driving a vehicle in the shape of a cat's head, share with a small pack of frenzied, hideous dog-demons, captured at great expense from the rank jungle planets they infest. Full instructions on disk.

-ooOoo-

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ASHGROVE Q 4060
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COMMERCIAL LIBRARY NOTES

by Allan & Doreen Horne

We are pleased to advise Members that subscriptions have now been arranged for the supply of disks containing the programs published in the following magazines:-

RUN Magazine * bi-monthly disk
COMPUTE!'S GAZETTE * monthly disk
COMMODORE MAGAZINE * monthly LOADSTAR disk
TRANSACTOR Magazine * bi-monthly disk.

When writing these notes, no disks had as then been received from the first three magazines mentioned. As soon as any come to hand they will be noted on the software lists which are displayed at each Main Meeting.

The Commercial Library now has a complete set of TRANSACTOR Magazine disks, presently from the first one issued in 1984 to May 1988. Unfortunately we are unable to obtain the magazines relating to the first two, but have arranged for other missing back-numbers to be despatched to us and hope soon to have the magazine section up-to-date as well. Please consult the displayed lists at the Main Meeting for magazine and related disk numbers. As with other software in the Commercial Library, the magazine disks are protected by copyright.

For users of the C128, a tutorial is on order to help with the many intricacies of BASIC 8. A trial subscription has also been arranged to TWIN CITIES 128 - a bi-monthly magazine for C128 users, which is said to have a special column devoted to BASIC 8 in each issue.

Regular users of the Library will have noted the acquisition of MINI OFFICE 11, PAPERCLIP III, ADVANCED ART STUDIO and now also PAPERCLIP PUBLISHER, the latter mentioned by our Editor in the October issue of the 'Cursor'. Also the generous donation of software in August, amongst which were SUPERSCRIPT 128 (our second copy), another copy of the ever-in-demand MULTIPLAN, some educational programs, F-15 STRIKE EAGLE and DAM BUSTERS.

To provide some brain exercising entertainment for users of the C64, not just the usual "space shoot 'em ups", the Library now also has STEALTH FIGHTER (an F-19 Stealth Fighter Simulation program), OGRE (a strategy wargame with a juggernaut tank), BATTLE CRUISER (battles in the Atlantic, World Wars 1 and 2), WAR IN THE SOUTH PACIFIC, LORDS OF CONQUEST and for some diplomatic manoeuvring, THE ARMAGEDDON MAN.

A really welcome addition to our software collection is the disk compiled by Group Member, Cor Geels, named CURSOR ARTICLES. If you have ever said to yourself "I know I read about it in the 'Cursor', but which one?" then this is for you. The disk is an index to all articles appearing in our 'Cursor' newsletters since 1983 and, in the book section of the Library, we have bound collections of the 'Cursor' since 1984, mostly on an annual basis, for borrowing by those Members who have joined more recently. This disk, CURSOR ARTICLES, is available in our Public Domain Library as well, and for those who are unable to borrow it from the Commercial Library, it can be copied at a Sub-Group Meeting or obtained by post (see Goods & Services Section of a recent 'Cursor') or purchased from our Public Domain Librarian at a Main Meeting (please phone him in advance - telephone number on inside back cover of a current 'Cursor'). Cor Geels has kindly undertaken to update the disk from time to time.

Also of interest are the PUBLIC DOMAIN Catalogue Disks which can now be borrowed from the Commercial Library. Instructions for using the disks and obtaining the software are enclosed in the envelopes. Please note that there now are C64 programs on both sides of the

disk and owners of previous Public Domain Catalogue disks should note that we have been informed by the publishers that TRANSACTOR Magazine disks are no longer considered to be in the Public Domain.

We have a collection of back-issue COMPUTE! GAZETTE Magazines for sale at \$1.00 per magazine. Please see Allan at the November Main Meeting.

Regrettably, two of our disks, THE WAY OF THE TIGER and POCKET WRITER V2.00 have been corrupted whilst in the possession of borrowers. In each case there is evidence that the WRITE-PROTECT labels have been removed from the disks and then replaced. Will would-be copiers please note that disks which do not copy with a WRITE-PROTECT label in place are not likely to copy with the label removed. All that may be achieved is the corruption of the User Group's property. PLEASE DO NOT REMOVE WRITE-PROTECT LABELS and please note that with very few exceptions, all software in the commercial library is protected by copyright.

That's all, and to those Members who take care of the Library material and make an effort to get it back when they cannot attend a Meeting, our thanks. Happily you are in the majority otherwise it would be difficult to make the Library material available to all Members on a monthly basis.

-ooOoo-

GAMES COLUMN

by Reuben Phillips

Good morning fellow humans, welcome to what could be the thinnest games column yet, this decidedly local edition can be attributed to:- A. a temporary lack of exciting software, B. a chronic lack of tips, C. a two inch thick layer of fungus that spontaneously sprang up all over the keyboard and threatened to take over the world, D. creeping insanity.

Reviews (out of four asterisks)

*** PAC-LAND (Quicksilver)

Ah for the life of a little round yellow thing that eats dots ... this is the conversion of the arcade coin-op. It's hard to say whether it's an accurate copy, not having played the arcade version, but as a game in its own right it is a lot of fun. Here's the scenario, guide PAC-MAN (the above mentioned little round yellow thing), sporting a spiffing new trilby hat and looking suspiciously like a graduate from the Mr. Men school of Charm, through Pac-Land and rescue the poor fairy who has managed to lose herself somewhere in the horizontally scrolling landscape. Simple... now try doing it. Whereas PAC-MAN had to settle for a new hat, the four ghosts (Myrtle, Luigi, Noddy and Mr. Plod - not their real names) have upwardly-mobilised to cars and planes. Luckily there are still powerpills to be had (... gives me the strength of twenty atom bombs for a period of twenty se...) that give you the upperhand in ghost gobbling. Platform freaks freak, and then settle down and think about getting this game.

** THRUST II (Firebird)

Remember THRUST, the beautifully simple Asteroids-like graphics, the cleancut planet designs and the fantastic kinematics holding it all together, now open your eyes and say 'Oh Dear', they've changed all the best bits and come up with a dud. The graphics are murky and jerky, and the motion of the ship and pod is unrealistic and unconvincing. For those of you who don't remember/have never played/have only recently been born, the object is to descend into the planet, pick up the pods and successfully navigate your way out. The actual plot doesn't

bear repeating, as it is excessively silly. If you have THRUST, don't bother, if you don't, get THRUST instead.

Send your comments, tips, herbal tea etc. to:

11 Coultis St. Sunnybank, Q, 4109, and have a nice day!

-ooOoo-

PROGRAMMING BY NUMBERS

A Quick Introduction to Machine Language on the '64

by Dan Phillips

Although BASIC is fine for writing simple programs of few lines, it's much too inadequate for programs requiring any sort of speed. Machine language, or "machine code", is the only language the computer directly understands. The program that executes BASIC programs, the "BASIC Interpreter" is actually a machine language program!

A Commodore 64, as its name implies, has 64 kilobytes of memory. Each kilobyte is divided up into 1024 bytes, so a Commodore 64 has 65536 bytes of memory (64 times 1024). Each byte can hold a number from 0 to 255. Each of these bytes follow one after each other in memory - rather like a row of houses in a street - and, like houses, each byte has a number, or "address". The first byte has address 0, the second has address 1, and so on until address 65535.

Some of these regions of memory have been set aside for special purposes. The video chip uses addresses 53248 to 53294; these can be thought of as a control panel with a set of knobs and switches. Location 53281 for example, holds the screen colour.

Other sections of memory are set aside for your own programs or data.

A machine language command, or "instruction", is just a number held in one of these addresses. For instance, the number 96 represents the "RTS" instruction (which stands for "ReTurn from Subroutine", and is very similar to the BASIC "RETURN" command). Machine code programs are just sequences of instructions (which are just numbers) following after each other in memory. Some instructions have one or two bytes of data following the instruction. The "JMP" instruction (similar to the BASIC "GOTO" command), short for "JUMP" is number 76 and is followed by two bytes specifying the address to jump to.

The central processing unit (the "brain" of the computer), fetches the first instruction in a program, executes it, then goes on to the next instruction.

Machine language instructions are much more primitive than those of a language such as BASIC, that is, they perform simpler functions. A routine to print a message to the screen in machine language requires several instructions; whereas BASIC only needs one. Because of this, one might think that machine code would take up more memory than BASIC, but in fact it is just the opposite. Machine language is smaller, and it's many times faster. What more could you ask for?

This has only been a very, very brief look at machine code on the 64. Hopefully though, you will have gained at least a vague idea of what it is all about. The subject is far too involved to deal with adequately in one article - in fact, one could write a book about it - and (not surprisingly) many people have. Which is probably the best way to get started, get hold of a book, and a lot of perseverance ...

80 COLUMN VIDEO RAM UPGRADE FOR C/128 & C/128D

by Gary MacMinn

At the September Main Meeting, a demo of BASIC 8 (an 80 column hi-res language extension) was given by Phillip Parkin, and as a result, the question of video RAM in the C128/C128D was raised. For those who don't know what I'm talking about, read on.

The 8563 video chip (separate from the VIC chip) doesn't use any of the system's normal 128K of RAM. Instead, it has its own memory dedicated solely to the 80 column display. When the C128 was first released, Commodore installed 16K of RAM for the 80 column chip to work with as these chips were the cheapest at the time. The 8563 chip however had sixteen address lines (A0-A15) making it capable of addressing 64K of memory. In the later machines, 64K RAM chips have been installed as their cost has recently dropped. This means there are two types of C128/C128D around; the 16K and the 64K video RAM versions.

"What does all this matter?" you may well ask. If you only use the 80 column screen with commercial software like wordprocessors or for listing programs, the amount of RAM won't concern you. However if you use this chip in its hi-res graphics mode (BASIC 8 or RUN's Ultra Hi-Res utility), you will have found that, with 16K you can only have the text screen OR the bit-mapped screen active, but not both. A 640 x 200 bit-mapped screen uses 16000 bytes, leaving 384 bytes free. This screen is only in two colours (foreground and background) as there is no memory left for the attributes (colours, flashing, and underlining flags) or the character definitions. If you have one of the later models with the 64K RAM, there will be room for a couple of full (16) colour bit-mapped screens, and a few text screens as well as the character definitions. The larger memory would also give programs such as the Transactor RAM Disk utility more space to work with.

The simplest way to see what size memory your machine has is to read the 8563 register containing the flag which tells the chip what type of RAM is installed. Bit 4 of register 28 is the bit we are interested in. The following routine will check the amount of video RAM for you.

```
10 SYS 52698,,28 : REM Read the register
20 IF (PEEK(6) AND 16)=0 THEN PRINT"16K VIDEO RAM":ELSE PRINT
"64K VIDEO RAM"
```

Line 10 reads the register using a ROM routine and returns the contents in the accumulator. Line 20 reads the accumulator through a temporary location in zero page, masks bit 4 and tests it. A zero indicates 16K RAM while a one indicates 64K.

If you find you have 64K, then you have no worries with any of the hi-res utilities. If however you find you have 16K, then there is a modification that can be done to your computer to upgrade it to 64K. This involves replacing the 16K RAM chips with 64K chips. This change is fairly simple, but, if you decide to do it yourself, BE CAREFUL. The RAM chips are in a metal shield with the video chip right next to them, and the printed circuit board is double sided. These chips aren't cheap. If you don't have the experience to do this, then don't do it.

There is a minor problem with this change. When the 8563 is initialised, it will be set up to address the normal 16K chips. As the two RAM's are addressed differently, this will result in the 80 column display containing a lot of rubbish. There are two ways to correct this problem. The simplest is to change the pointer at the start of your program and reinitialise the character definitions. The following lines will do this:

```
10 SYS 52698,,28: REM Read the initial value in register 28
20 SYS 52684,(PEEK(6) OR 16),28: REM Set bit 4, store in register 28
30 SYS 52748: REM Reinitialise character definitions
```

The more permanent method is to replace the kernal ROM with one modified to set up the video chip to address 64K.

As of the next workshop, this chip replacement will be a regular service available to members. The cost for the change will be \$40 for a C128 and \$45 for a C128D. The replacement Kernal will also be made but only on request. As these chips are fairly expensive, we do not keep any in stock. We would ask anyone who would like their machine converted to contact Phillip or myself no later than the Wednesday before a workshop so we have time to buy the chips. If you would like it done outside the workshop, please give us a few days notice. If you have any questions, see me at the main meeting, one of the workshops, or drop me a line at this address:-

Gary MacMinn, 25 Prior St, Tarragindi, 4121, Brisbane, Qld.

-ooOoo-

BYTES

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Punch

Superbase Demo

John van Staveren
and
Gordon Kier

"Aspects of Superbase"



Merry Andrew

REPORT ON THE HEALTH OF THE IMMORTAL 64

by Douglas Maclurkin (in clinic)

For men may come and men may go
But I go on for ever. (Tennyson)

I am more than pleased to announce that the patient is alive and well and after a brief period of depression is now re-establishing itself on a firmer foundation than ever before. In spite of all gloomy predictions by doomsday seers it refuses to die. Like all computers it has had a few internal problems but these colics have all been purged and no further cathartics will be needed. It has overcome all the ROMbles in its belly and now REMains the longest lasting, most popular, with the most software, computer in the world.

Every magazine including the last Cursor attests to the booming and consistent sales throughout every enlightened country on the globe.

WHY?—

In the fifties there was Rock 'n Roll. The sixties celebrated the Beatles, Hippies, 'love 'n peace man' and the 'pill'. In the seventies, we settled down, worked hard and caught up. (Don't you remember?). The eighties saw the advent of micros and eventually the Commodore 64. Well, it looks as if the 64 will see us well into the nineties if not into and beyond 2000 as Commodore abandon their efforts to kill it and accept the fact that they have spawned an immortal that bids fair to go on forever.

It matters not how strait the gait
How charged with punishments the scroll
It is the master of its fate,
It is the Captain of its Soul.

Slowly the realisation is dawning that the 64 is here to stay. It has such an enormous amount of Software covering almost every conceivable subject that none of us other than the impatient and the intolerant could wish for more; and it is still being produced by software houses! It has satisfactory sound and good graphics with colours to please most connoisseurs. Above all and in my opinion it's most outstanding quality is it's simple language. Basic 2.0 is so easy to learn and once having been mastered there is the thrill of being able to communicate with it and program it. After all isn't that the reason why you bought a computer in the first place? Any ten year old child can sit at the keyboard and follow the prompts but you want to be able to get into it with the minimum of learning and feel the adrenaline flow whilst you program it, make it respond to your commands and put yourself in that hallowed circle who can boast that they can really work a computer.

It used to be said that if you were an adult Australian and couldn't swim or drive a car then you were nothing. Today if you can't programme a computer then you're not with it, man. Basic 2.0 makes it so easy!

Further, when you own a 64 you join an enormous worldwide family with whom you can communicate and share your joys and gain their help.

If you progress to an Amiga or an IBM don't abandon your 64. It will always be in the race and someday when you can't find a program that has been made for your new machine, I guarantee you will find one in the 64 mode.

De gustibus non est disputandum.

COMPUTER NOVICE GUIDE

by Cor Geels

I fully agree that the MAIL BOX on page 15 of our last CURSOR looked very pale indeed, which is strange for a club with so many members of different walks of life, and ages from the very young to the very old (almost). You don't ask for members' life stories, and you expect contributions in the field of our familiar Commodore computers.

I have written a few words now and then, but as for computer knowledge I am only an amateur. I had hoped that somebody would have followed up on my remark in the March '88 issue of CURSOR that our Club, for the benefit of 'NOVICES', does need a 'GRADE 1' teacher. Somebody using simpler language than the instruction books, and very simple exercises.

I have been involved with a few beginners, through referral by Norm Chambers and others. Also the Hypermarket and the local Super K Mart refer people sometimes, and if I can, I'll help, because I remember the trauma I experienced when I started and did not know about our Club, nor anybody who owned a computer.

There is no doubt in my mind that a lot of newcomers to computing just can't get off the ground, and give up because it overwhelms them. They need that GRADE 1 teacher for 'HANDS-ON' bravado and instant understanding and results.

I don't want to sound presumptuous but because several people I have nudged along have started looking at their computer as something different than their personal 'Arcade Machine', and thanked me for that, I am willing to contribute some very simple programs on a regular basis, to test the water, so to speak. No doubt if some feedback shows that the need and the appreciation is there, some better qualified kind soul will show up in due course to steer the ship. I don't assume that every computer owner wants to become a programmer, just as not every car driver wants to be a mechanic, but to understand a little bit about how it works has its advantages.

In computing it sometimes helps to put an extra REMARK in a program, to slow things down a bit, or to see if something reaches a certain point in the program. Everybody can understand these and similar procedures once they have been explained, and trying to explain and make a NOVICE feel that he/she is not afloat or lost is my aim. I promise you'll get a couple of pages per month for a section called: NOVICE'S GUIDE, if interest is evident.

NOVICE'S GUIDE INTRODUCTION

Now that you have switched on you should see on the screen what your COMMODORE COMPUTER has in store for you. (38911 BYTES FREE, or 38911 character spaces at your fingertips, for you to play with.)

Also you see a blinking square, which is called the CURSOR. (CRSR for short)

This is a very active and important busy-body, and often a friend in need. If you press a key on your keyboard, that key character will print on the spot where the cursor is on the screen. The cursor will move one spot to the right, or, if at the end of your screen, he will move one row down to the first column.

You can change the colour of the cursor by holding down the CONTROL key (CTRL for short) or the COMMODORE key (C= for short) and pressing any key from 1 to 8. CTRL7 will make the cursor disappear, C=7 will bring it back.

If you hold down the RUN/STOP key and strike the RESTORE key the screen will return to the start-up colours.

You can run the cursor all over the screen by holding down one of the CRSR keys, down or to the right, or in the opposite direction if the shift key is held down at the same time. All the keys with 2 characters on the ^@Utop^@u surface print the uppermost character only if the shift key is held down at the same time.

To CLEAR the screen completely and have the cursor in the top left corner (HOME position), hold down SHIFT and press the CLR/HOME key.

NOVICE'S GUIDE # 1

LINE NUMBERS and STRINGS.

Note: REM statements in programs are for PEOPLE only, mostly to explain something. The computer does not take any notice of them.

To design a program which the computer can understand and act upon there must be order in that program. We use line numbers like 10, 20 etc. leaving the gaps in case they are needed later on. When the program is RUN eventually, the computer carries out the instructions in order of the line numbers.

It helps to understand the workings of a computer if one thinks of a computer firstly as a number-cruncher, looking for numerical values all the time.

If you type: PRINT 6 + 9 and press RETURN the answer shows on the screen. The symbol * (asterisk) is used by the computer for multiplication and the / for division.

If you type: PRINT A, or any other letter and press RETURN you will not see that letter on your screen, but a 0 (ZERO) instead. That is because the computer is programmed to expect a value to be given to a letter, and show that value if asked. (PRINT).

So if we start with a statement: A = 5 and then type: PRINT A the screen will show 5. Therefore if we then type: B = 40 and then instruct the computer to PRINT A*B the screen will show 200. (5 x 40).

If we had given the statements A=5 and B=40 a LINENUMBER in front, like:

```
10 A=5
20 B=40
```

we would have had a PROGRAM that we can save, and call up whenever required. As soon as you give a different value to a letter in use in your program, that new value is the one the computer will work with, like A=8 will now give 320. (8 x 40). We call the letters in use that way: NUMERIC VARIABLES, because we can vary the value at will.

If we want to see one or more LETTERS printed on the screen we must make STRINGS of them. (actually STRING VARIABLES, because we can change the contents of the strings as required. Try PRINT "A" and Press RETURN. (or try PRINT "APPLES").

Type the following program exactly as you see it, including all the symbols.

The use of quotes in this way puts you in QUOTE MODE and if you have made a typing mistake whilst in that mode you might get some funny characters on your screen. More about that later. For now, just bring the cursor down and out into the open and type the line correctly, using the same line number, thus replacing the faulty line. Press RETURN after every line.

```
10 REM ***LINE NUMBERS***
20 REM *WORDS,SYMBOLS OR SENTENCES ARE CALLED STRINGS*
30 REM *STRINGS MUST ALWAYS BE SHOWN INSIDE QUOTES*
40 REM **REMEMBER: STRINGS MUST HAVE "PEGS"***
50 PRINT "WALLS"
60 PRINT "PLUS"
70 PRINT "ROOF"
80 PRINT "="
90 PRINT "SHELTER"
```

Save the program on tape or disk, type RUN and press RETURN. The only response on the screen will be the strings from lines 50 to 90, underneath one another. 10 to 40 were all REM statements, and therefore did not cause any reaction.

```
WALLS
PLUS
ROOF
=
SHELTER
```

Now LIST that program again on your screen, place the cursor on the 5 of line 50 and make that a 9 and press RETURN. The cursor will jump on the 6 of 60. Overtyping that with 8 and RETURN.

If you press RETURN again the cursor will go down on the 8 of 80. Make that a 6 and RETURN, and finally make the 9 into a 5 and RETURN.

If you don't press RETURN after an entry or a change your computer does not register that fact.

LIST again and you'll see the new order. PRINT the result on your screen by RUN.

If you did save the program in its first state then it is still on your tape or disk as such. The changed version is only on your screen and will be forgotten as soon as switched off, unless of course that program is saved also.

But you must call it differently, like "SHELTER 2" or so, because your storage system does not know what to do with programs of the same name.

Now to the test: Type the first program again but this time leave the quotemarks ("pegs") out. If then you RUN the program you should see:

```
0
0
0
?SYNTAX ERROR IN 80
READY
```

Leaving the quotes out made the computer think that the letters meant NUMERIC VARIABLES and as he could not find a given value he gave the answers to 50, 60 and 70 as 0 but then came upon the = sign and as that was not a STRING VARIABLE nor a NUMERIC VARIABLE he just asked if you had made a mistake.

That stopped him from looking further down to line 90.

Now type: NEW and press RETURN, to clear the computer's memory.

Your computer is helpful and will very often draw your attention to a mistake.

Let us finish this episode with a short program which uses both NUMERIC and STRING VARIABLES.

To make it clearer in a print-out we use the letter X to SHOW that the program is about multiplication:

```
10 A = 12
20 Z = 10
30 PRINT A "X" Z "="
40 PRINT A*Z
```

(On lines 10 and 20 we gave a value to A and Z.

Line 30 instructs to show on the screen value A, string X, value Z, and the = sign, again as a string.

Line 40 instructs the computer to do the multiplication A*Z.

If we RUN this little program we'll see only the PRINT instructions carried to the screen:

```
12 X 10 =
120
```

Do read this a few times and experiment by making a few similar little programs. Better still, expand on this and make some a bit longer.

But gradually we'll move along together, although there will be nothing additional for another month.

THE 64 EMULATOR II

by Dan and Reub Phillips

The 64 Emulator 2 from Readysoft makes your Amiga attempt to imitate a Commodore 64 - allowing you to load up and run Commodore 64 software on the Amiga as if it were actually a C64, thereby gaining access to the vast amount of C64 software, or allowing '64 owners to upgrade to an Amiga and not lose their entire software library.

The 64 Emulator 2 is a software package - there is no support hardware (apart from an optional cable which connects C64 peripherals to the the Amiga) such as plug in boards or any such thing, so the Emulator could best be described as a software-simulator.

The package can be purchased with or without a serial interface cable. This cable connects from the parallel port of the Amiga to a Commodore 64 disk drive and/or printer. Two different cables are available, one for the Amiga 500/2000 and one for the Amiga 1000. This is because the parallel ports of the machines are physically different.

The cable isn't absolutely necessary however, as Amiga disk drives can be configured to emulate C64 disk drives, and normal Amiga printers can be used. Using a 64 disk drive will increase compatability though. With C64 printers, only ones which plug into the serial port (the round one) can be used, since there is no user port present (the same goes for modems).

If an Amiga drive is configured to emulate a C64 drive, a file is created on the disk in the specified drive. The file holds the same storage as a standard '64 disk and responds in the same manner as a C64 drive. Multiple amounts of these "disks" can be created on an Amiga disk. The 5 $\frac{1}{4}$ " Amiga drive (1020) can be used to read directly (but not write to) 1541 disks and similarly, the 3 $\frac{1}{2}$ " Amiga 1010 can read 1581 disks. Or, alternatively, drives can behave in normal AmigaDos fashion. The Emulator also supports some Hard drives and the RAM disk (at least 1 Meg of memory is required though).

The 64 Emulator supports any standard Amiga modem connected to the serial port. The Emulator will not work with any C64 modems designed to plug into the user port. As an added bonus, baud rates of 2400, 4800, 7200, 9600, & 19200 which are not supported by a normal '64 are supported here.

The two control ports can be configured to allow the use of joysticks, the Amiga mouse, or a light pen. The Amiga mouse can act as a 1350 digital mouse, a 1351 proportional mouse, or a set of paddles.

If you have at least 1 Meg of memory, the Emulator can simulate the 64 1764 RAM Expander.

One of the striking differences noticed upon loading the Emulator, is that the border doesn't extend around the screen - only the top and bottom borders are present, the side borders are the same colour as the main screen. This is supposedly because generating a border completely around the screen would slow the program down too much. Which brings us to a very pertinent point - speed.

The 64 Emulator 2 is slow, about two to five times slower in fact. Because of these speed problems, the Emulator can't cope adequately with raster interrupts (split screens). Most games end up as shuddering, flickering, ghosts of their former selves; wordprocessors become sluggish, and BASIC programs become unbearable.

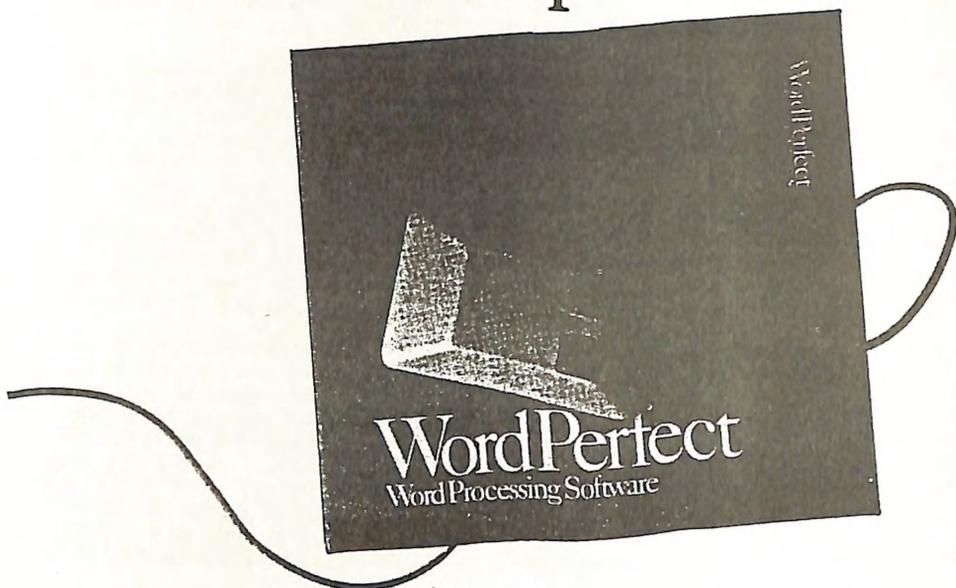
It is not often that sound comes out right either. All sorts of strange noises issue forth.

The 64 Emulator 2 seems to be compatible with most programs (although it doesn't like most fast loaders); that is, they run.... how well they run is another matter.

Also included on the disk is a very useful "transfer" program which is used to transfer files back and forth between '64 and Amiga disks. As well, is a program which allows a C64 serial printer to be used directly from Amiga software.

If the Emulator ran faster, it might be worthwhile. But as it stands, it's quite inadequate as a straight substitute for a Commodore 64, although it does have some potential uses.

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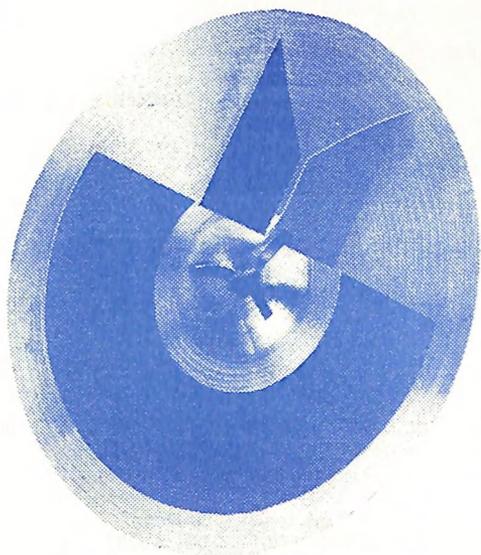
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