

CURSOR

Registered by Australia Post
Publication No. QBG 3958

Vol.5 No.2 - SEPTEMBER 1988

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

MENU

Meetings - Where and When.....	2
Goods & Services.....	2
Editor's Notes.....	5
Random Bits.....	6
Norm Chambers - The Real Story.....	7
CCUG(Q) Inc. Profit & Loss Account....	9
CCUG(Q) Inc. Balance Sheet 1987-88...10	
Public Domain Library.....	11
Dearly C-loved.....	13
Multi Columns in Pocket Writer II...14	
Computer Additions.....	15
Bytes.....	17
C-128 Screen Clock.....	19
Programming by Numbers.....	21
Mailbox.....	24
Directory.....	27

MEETINGS WHERE & WHEN

MAIN MEETING Tuesday 6th September 1988, in the Bardon Professional Development Centre, 390 Simpsons Road, Bardon. Entrance is through the Centre's Car Park in Carwoola Street. The library opens at 7 pm. and the Meeting starts at 8 pm. sharp and finishes at 10 pm.

Philip Parkin will demonstrate *BASIC 8 & WRITE STUFF*

C-64/128 WORKSHOP (MEMBERS ONLY): Sunday 11th September (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.

CAPALABA: 3rd Saturday of the month (1pm - 5pm) in the Capalaba State Primary School (Redland Education Centre). Ph. David Adams - 396 8501 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 : \$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 (40 disks) - \$15.00 ea (+ \$5.00 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)

"B.B.S. 64 INSTRUCTION BOOK": \$3.00 (+\$1.00 Postage)

"C-128 MEMORY MAP": \$2.00 (+\$1.00 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)
AMIGA PRINTER CABLE (A500 / A2000): \$25.00 (+ \$1.00 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)
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)

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 Phillip 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

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.

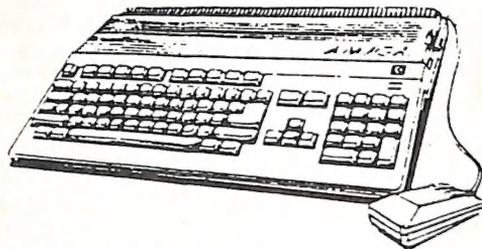
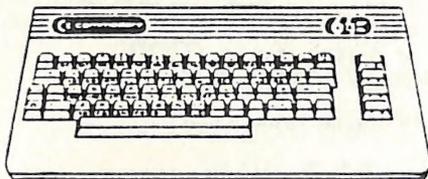
WHITES HILL SHOPPING VILLAGE
SAMUEL STREET, CAMP HILL, 4152. Ph. (07) 395 2211

NORTH SIDE: 1 CLIFFORD STREET, STAFFORD, 4053. Ph. (07) 857 6311

TOWNSVILLE: 363 BAYSWATER ROAD, GARBUTT, 4914. 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

ASSOCIATE EDITOR

Two of our members applied for the position of associate editor of this edition. The choice was a difficult one; one was the voice of youth and the other the voice of experience. However in this instance youth won out, because my new associate editor, Reuben Phillips, owns an Amiga which is what I use to produce this newsletter - it's called 'file compatibility'!

Hopefully my other applicant, none other than "Merlin" Maclurkin, will go on writing choice bits of prose for this edition, as that is his forte.

MORE CONVERTS

Two of the latest converts to the Amiga cause are our very own Gary MacMinn (he is one of those two chaps fitting reset switches and turbo roms at our Milton workshop - at my request he has written an article in this issue to explain exactly what all those bits and pieces do), and the other one is Paul Blair, our Canberra contact. Of course Paul has a legitimate excuse; as publisher of the Australian editions of the *TRANSACTOR* magazines he has to know what goes in the Amiga edition! You will find another Paul Blair article in this issue.

OTHER CONTRIBUTIONS

One of the exchange newsletters which we receive comes from the Commodore Long Island Club in the USA. In there I found an interesting article on generating columns with the Pocket Writer II word processor and a rather irreverent article called *Dearly C-Loved*; I hope that you approve! George Harris of Maclean (he is one of those packet radio fiends) picked up some interesting information on colour printer developments in Japan. Read all about it in the "Random Bits" column.

FILE CONVERSION

For quite some time now I have had ongoing problems with the conversion of C64/128 word processor files to the Amiga which I use to produce our newsletters. Not only are there problems between the different disk formats, but also problems converting Commodore ASCII files to standard ASCII files which the Amiga employs. To convert files I used a 40 track 5.25" Amiga drive (model 1020) which is not normally sold in Australia. An Amiga program called *Disk-2-Disk* re-programmed this drive to read 1541/71 files and then converted them to Amiga format. However the drive started to play up and refused to recognise the conversion program. The drive has now been fitted with a new drive mechanism but still refuses to recognise the conversion program.

We are now trying to obtain the *64 Emulator V.2*. This program and associated serial interface cable will actually re-program the Amiga as a C-64! I'll be able to connect a 1541 drive to my Amiga and then transfer files to one of my 3.5" Amiga drives. I have seen the earlier version of this program in action, and although the C-64 mode does seem to work, it is hardly suitable to play 64 type games on it - they run at a fraction of the speed of a real 64! By all accounts several major improvements have been made to the program, but it's unlikely that it will ever really emulate a C-64 completely. Still, the fact that it works at all is in itself quite an achievement. If and when I receive the program I'll be only too pleased to show it off at one of our main meetings and really put it through its paces.

WELCOME

To Mike Williams, our new Secretary, and Allan Horne who has now become officially the Chief Librarian of our group. It's great to have you on board!

Ralph De Vries

RANDOM BITS

AUGUST MAIN MEETING

Annual General Meeting

Norm Chambers opened the proceedings of the evening by inviting the President, Greg Perry to present his annual report for the financial year 1987 - 1988.

Greg pointed out once more that the continuing growth of our group (current membership 847) is largely due to the untiring efforts of a few dozen members who give up so much of their spare time to devote to the welfare of our group. He specifically mentioned the contributions made by Doreen and Allan Horne who do such a magnificent job in keeping our lending library in such great shape, and the largely unsung efforts of Greg Shea, our technical coordinator and sysop, and Bruce Wylie, the meeting coordinator of the Amiga S.I.G, who not only provided his computer equipment for a substantial part of the year, but also looked after Amiga disk- and accessory sales. These and all the other unnamed workers deserve the gratitude of all our members. He followed this up by expressing his thanks to Norm Chambers, the retiring secretary, for the tremendous job that he has done during his term in office. The steady growth in membership during the last four years can to a large extent be contributed to his personal efforts (applause from the floor).

Next it was the turn of our Treasurer, John Van Staveren, to present the audited financial report. He pointed out that during the last twelve months there has been a steady increase in the income of our group, but expenditure has increased rather more dramatically over this same period. If it wasn't for the substantially increased sales of disks, hardware and software the group's financial picture would look a lot less healthy. A copy of the group's Balance Sheet can be found in this issue of Cursor.

Following the reading of the annual reports our senior member Lex Hinckley took the chair to conduct the election of members of the management committee for the new financial year. There being only one nomination for each position the following members were elected:

President: Greg Perry, *Secretary:* Mike Williams, *Treasurer:* John Van Staveren
Technical Coordinator: Greg Shea, *Sub-Group Coordinator:* Terry Steer
Chief Librarian: Allan Horne, *Newsletter Editor:* Ralph De Vries

The first task of our newly reappointed President was to nominate both Norm Chambers and Lester Bennett, our former treasurer, for Life Membership for services rendered to our group. These nominations were greeted with unanimous applause from the floor.

After the appointment of Mr. K. M. Pedersen as auditor of for the new financial year the President closed the official part of the evening.

THE ERROR CHANNEL

For the remaining part of the evening Colin Shipley, the coordinator of our Milton Workshop, gave a talk about the whys and wherefores of channel 15, the so-called error channel. This talk was very well received by the attentive audience. The meeting closed at 10 pm.

COLOUR PRINTERS

Forget that serial or parallel port connection for your printer. To get the state of the art colour printer technology, you may soon be hooking up your computer's video output directly to your printer. Sony has developed a thermal-transfer colour printer that, while designed primarily for broadcasters who want still photos from videos, offers a tantalizing glimpse of where colour printer technology is going. The UP-5000 does have an RS-232C port, but it's

used for picture editing and control, not for carrying data. The printer accepts a wide variety of video inputs, including standard National Television System Committee (NTSC) video and analog RGB, and other standards like differential R-Y, B-Y and S-video. The interface digitizes 8 bits of video and can print 256 variations of each primary colour (magenta, yellow and cyan). That amounts to something like 10 million possible colours per pixel. The printer captures images in an internal buffer and stores up to two frames. You can view the image on a colour monitor and adjust the colour tones under computer control. A full size print from the UP-5000 is 6 x 4.5 inches, and the unit will also do overhead transparencies. It takes 67 seconds for it to do its work on each print using special colour thermal paper, and you can print multiple copies from the frame buffer. Print quality is stunning - virtually indistinguishable from a commercial colour print, not at all like the muted colours from most of today's colour computer printer.

[Submitted by George Harris - VK2KET]

128 PROGRAMS

New programs for the C-128 are very thin on the ground these days. However recently in US magazines we have seen adverts for two interesting 128 programs. They are *Page Illustrator*, a graphics program which works in the 80 column mode and *Page Builder* a 128 desktop publishing program. We hope that, when these programs become available here, we can lay on a demonstration of these programs.

WRITE STUFF DEMO DISK

Since last month, one of our members has received her order of the *WRITE STUFF* from South Australia and has confirmed that the disk includes the Speech Synthesizer S.A.M. on the second side. (Price \$14.00 + \$1.20 Postage.) Since it has Doreen Horn's assessment as novel, useful and inexpensive, it may be of use to add the address:

South Australian Commodore Computer Users Group Inc.
P.O. Box 427, North Adelaide, SA, 5006.

[Leigh Winsor]

NORM CHAMBERS - THE REAL STORY

He's gone and done it.... he's quit! After practically four years 'our' Norm has decided that it was time to pack it in. Of course you've all heard his reason for quitting, haven't you? Val (that's Norm's wife) has threatened him with divorce. Well, that's his story, but we know better don't we? *He has deserted us for an IBM clone!!!* Yes, that's fair dinkum. Here we have spent years trying to teach him all the ins-and-outs of the C-64. After he got stuck into an infinite loop for three days while he was trying to write his first Basic program (he did get out of it at last by switching off the mains power supply), we felt like giving up in desperation. We then tried him on a C-128 with even more disastrous results (he never did figure out the difference between the C64, C128 and CP/M modes), so, as a last resort, we told him that the Amiga was the answer to all his prayers. And than the ungrateful so-and-so goes and buys an IBM clone!

The worst aspect of the 'Chambers Case' is that I am the guy who suggested that he might make a *reasonably* good secretary. After all he had all the right attributes; ex-schoolteacher, now insurance salesman, bald pate and glasses, always wore collar and tie, and he had access to a photo copier at work; you'll have to admit that he *appeared* to be the right choice. Well, how wrong can you be!!!

We all know what a secretary is supposed to do, don't we? Take the minutes at our meetings. But not our Norm; he knew better! He decided that he'd also become the unofficial ambassador

for our group - the gall of the man! In his job as Insurance salesman he did a fair amount of travelling throughout Queensland and Northern New South Wales. So our Norm decided that, rather than sell insurance, he'd tell the natives all about how wonderful the CCUGQ was. From Cairns to Grafton he merrily went on his way flogging the benefits of Commodore Computer Users Group membership rather than do his real job of selling life insurance. Well, you all know the results, don't you? The membership of our group has more than doubled during his term in office, and his wife has been complaining bitterly ever since because he hasn't been getting any bonus payments from his company during the last four years. If ever a woman had to suffer it would have to be Val Chambers.

When he occasionally did come home (between country trips he even found time to annoy our members all over Brisbane as well) he devised an elaborate scheme to make sure that all his pals in the country would wine and dine him on his return visits - he started writing letters to them! Now it is a well known fact that computer users group secretaries *never* answer letters from members, let alone write to them first! But our Norm had to be different! But even that wasn't enough for our chubby friend. He now started running messages for all his pals. One day he would be chasing up printer ribbons, the next day it would be printers, and in no time he was supplying his mates with complete computer outfits. A regular Allan Bond, that secretary of ours! Of course in the end his wife got fed up with him and made him up a camped under the house, right beside his computer and printer. As he suffers greatly from insomnia you could find Norm at 2 or 3 am in front of his 128 writing letters to country members and updating the group's database, just to see how many more new members he could add. (Greg Perry wrote that program for Norm in the hope that this would stop him from writing letters, but we all know now that it was in vain.) In fact you could say that our Norm started to suffer from 'computer club mania'.

Well, the rest of this sorry tale you all know.... his insurance company told him that he was too old for all that country travelling (a nice white lie - we know that he wasn't selling enough insurance), but as they felt sorry for his wife and starving children they decided out of the goodness of their hearts to give him a deskjob. However, after having listened for several years now to Norm's bragging about how he managed to increase the CCUGQ membership during his country trips, they finally got the better of him in a very cunning way! To stop him from getting into anymore mischief he was told that, if he wanted to keep his job, he first had to quit his job as secretary of the CCUGQ. Next they took away his telephone because he is such an inveterate talker, and to really put the boot in, they found him an old unused IBM clone and told him to start programming the thing!

That is really the end of this sad tale. It is easy to forecast what will happen next - not being a programmer he is bound to get stuck into an infinite loop again any day. He will probably try his old trick of throwing the main switch and thus plunge the insurance company's skyscraper into total darkness and confusion - result the golden (or rather tin) handshake for Norm, and than the dole.

We, the remaining members of the Management Committee, felt sorry for this poor unfortunate devil and when Greg Perry suggested that we make him a life member, we all agreed. It means that, even when he is on the dole and his wife and kids have deserted him, he can still come to Bardon once a month and reminisce about the good olden days when he was secretary!

I'll miss you Norm, after all I got you into this and feel partially responsible for your plight. Will you forgive me for publishing the 'real' story.....?

.....now I recently met this nice guy, well dressed, well spoken, sports a beard (a bit of a disadvantage), and is in banking (money, money!), owns a computer as well..... perhaps he would make a worthy successor to Norm Chambers..... how about it Mike?

Ralph De Vries

COMMODORE COMPUTER USERS GROUP (QLD) INC.

PROFIT AND LOSS ACCOUNT - JULY 1987 TO 30 JUNE 1988

1987		1988	
\$		\$	\$
REVENUE			
17,412.19	Membership Fees	18,177.20	
-	Library Fees	2,775.00	
478.22	BBS Membership Fees	5.00	
5.00	Consultancy Fees	10.00	
46.40	Cursor Sales	388.70	
100.00	Printer Hire	120.00	
930.00	Advertising	780.00	
.67	Donations	.50	
503.09	Interest	424.21	
-	Miscellaneous Receipts	84.00	
19,475.57	TOTAL REVENUE	<hr/>	22,764.61
EXPENSES			
501.70	Advertising	555.34	
91.62	Bank Charges	81.35	
104.56	BBS Expenses	780.93	
4,316.08	'CURSOR' Expenses	7,964.27	
5,113.41	Depreciation	9,454.26	
6.20	Freight	45.00	
809.13	General Expenses	430.69	
568.33	Insurances	558.23	
12.80	Legal Fees	13.70	
54.71	M-ship/Affiliation Fees	53.70	
848.15	Postage	743.56	
39.00	Post Box Charges	39.00	
1,358.65	Printing and Stationery	751.19	
585.00	Venue Hire	1,657.70	
66.12	Repairs and Maintenance	391.48	
-	Stamp Duty (State)	.30	
619.06	Telephone	1,487.11	
205.50	Travelling	142.00	
15,300.02	TOTAL EXPENSES	<hr/>	25,149.81
5,214.45	GROSS PROFIT (LOSS) - TRADING ACCOUNT		8,918.09
9,390.00	NET PROFIT		<hr/>
=====			\$ 6,532.89
			=====

COMMODORE COMPUTER USER GROUP (QLD) INC.

BALANCE SHEET AS AT 30 JUNE 1988

1987		1988	
\$		\$	\$
	MEMBERS EQUITY		
9,223.65	Opening Equity		18,613.65
9,390.00	Net Profit		6,532.89
<u>18,613.65</u>	TOTAL EQUITY		<u>25,146.54</u>
=====			=====
	REPRESENTED BY		
	CURRENT ASSETS		
10.00	Petty Cash - President	10.00	
60.00	Petty Cash - Editor	50.00	
40.00	Petty Cash - Secretary	40.00	
50.00	Petty Cash - Treasurer	50.00	
10.00	Petty Cash - Disk Librn.	-	
6,988.18	Bank - CTB/Sth. Brisbane	13,154.99	
207.85	Sundry Debtors	81.00	
4,402.00	Stock on Hand	3,507.70	
11,768.03	TOTAL CURRENT ASSETS	<u>16,893.69</u>	
	FIXED ASSETS		
987.04	Book Library	867.94	
219.42	Magazine Library	324.96	
3,069.89	Software Library	3,158.02	
3,157.41	Equipment	4,080.48	
2,549.37	BBS Equipment	1,490.71	
9,983.13	TOTAL FIXED ASSETS	<u>9,922.11</u>	
21,751.16	TOTAL ASSETS		26,815.80
	CURRENT LIABILITIES		
2,190.00	Library Bonds	-	
947.51	Membership in Advance	1,632.76	
-	Cannon Hill Sub Group	36.50	
		<u>1,669.26</u>	
3,137.51	TOTAL LIABILITIES		1,669.26
<u>18,613.65</u>	TOTAL NET ASSETS		<u>\$25,146.54</u>
=====			=====

PUBLIC DOMAIN LIBRARY

DISK NO 043 SUPERBASE PBLAIR ID UZ(PB)

Submitted by Paul Blair - This is the disk referred to in the articles by Paul printed in 'CURSOR' for June & July 1988.

I have included a seq file reader (ex gracia Rex Computeria et Dominus Canberrium)

ss8804-sbrdi.7a
ss8804-sbrdi.7b

sbreader 64 v1.2
sbreader 128 v1.9
sbreader pet v1.0

seq file reader

DISK 206 TPUG (C) AAW MAY 88

AUTOBOOT (autodoc)

By pressing the ? one can learn to use this program with your own disks. By pressing the return key, you will only re-boot this program.

NOTA BENE - An ''' means there is a doc file of instructions.

PRINTBOOTDATA Print the directory of this disk as well as print the information found in this box.

HAZMAT/LPG* This is a simple program written to demo transportation of hazardous wastes: eg liquid petroleum & gas.

DERELICT* This is a fantastic mystery game with instructions and help file. Good luck!
FAIRY EOLAS* An enjoyable picture/music program.

SPELLING BEE* Educational program. You unscramble the letters to make a word.
(STAR)TRADER* A favourite oldie but goldie. Read the sequential file for instructions.

EVENTS2* Is it a calculator or a calendar or a decision maker? Find out for yourself.
AUTODOODLE* Are you going to let your C64 have all the fun?
XESS-REWIND* Interesting demo of moving graphics and sound.

ZZ TOP* This program only dumps to printer. It is a poster of zzttop. It looks neat!
It covers 2 pages of paper, so beware!

D2F* This decimal to fraction convertor also reduces fractions.

DIRECTORY MAGIC* This program will print out sleeves for your disks, or just print the directory. It is fast and easy to use.

FAST GARBAGE Self explanatory program for programmers if you have a BBS. It removes garbage there too!

DEFCON 2* A code breaking program. If you break the code claim your prize at the Sept 88TPUG C64 meetings. Good luck! See seq file for more info.

SPRINT IV* Sequential file reader to read the seq files on this or any other TPUG disk.

DISK NO 207 C128 & CP/M LISTS

This disk contains a listing of the tpug library for the c-128, you will find a listing of basic (native mode) and cp/m libraries! Files beginning with (y) are basic programs. Files beginning with (z) are cp/m programs. Some of the files are program (prg) files which can be loaded and listed for viewing on the screen or by using the program < list-all > which is a handy utility for listing to the screen or printer and this program has several options which are valuable for programmers, experienced or beginners!

The rest of the programs are sequential (seq) files, which are read by the enclosed sequential file reader < file reader (wp) > to the screen or printer. Also if you have a word processor

such as 'pocket writer' which has a sequential file option you may use this program to view, edit, and print these files!

To make things easier for the reader of this program, it is easier to print the directory listing of this disk to a printer for a hard copy of the program types. Then you will be able to determine file type sequential or program to determine which program 'list-all' or 'file reader (wp)' to use to read the files on this disk.

This disk will be updated as the disks enter our library. When the need arises this disk may be notched a second time to make use of the reverse side of this disk, but the disk directory will not show the contents of the second side.

In other words this disk will become what is commonly called a 'flippy' disk formatted on both sides so that both sides of the disk can be used to contain files.

DISK 208 TPUG BUSINESS 1c ID B1

Interest.C	do various investment calculations.
Bookkeeping.C	assists in summarizing cheques and cash payments from a business.
Lump sum.C	analyse what will happen to your investment over a period of years.
Bond yield.C	calculate bond values such as current yield, yield to maturity and more.
Fica tax.C	a f.I.C.A. Estimator.
Stock option.C	compute the value theoretically of a European type put or call option using the valuation formulas of Black and Scholes.
Stock list.C	keep track of your stocks.
Loan.C	compute loan amount, payments and number of payments.
Ireg cash flow.C	an aid in the analysis of uneven cash flow.
Investment.C	which is better? The bank or that investment...
Inventory.C	keep track of inventory.
Growth calc.C	calculate compound annual growth.
Decision maker.C	got a tough decision to make? Look no further.
Financial calc.C	do financial calculations.
Portfollo.C	keep track of your stock holdings.
Mortgage.C	calculate your mortgage payments.
Mort sched.C	see your mortgage payment schedule.
Mort calc.C	see what your monthly payment will be.
Mortgage.Z	calculate anything to do with your mortgage.
Memoranda.C	(disk) keep track of important dates and appointments.
Invoicer.C	make up invoices to send to all your clients. (Disk)
dates.C	keep track of dates and appointments.
Mileage.C	see how fuel efficient your car is.
Marks.C	teachers, keep track of your students marks. (Tape)
growth rate.C	see how much you've been growing.
Day of week.C	from the date, find out what day of the week that something happened.
Calender.C	generate a calender for any month since the birth of Christ.
Typing test.C	test your typing accuracy and speed.
Sprcashrol.C	calculate price/volume or cash flow.
Apartment.C	is buying that apartment building worth it?
Cops base tape.C	presently this program is set up to keep track of policemen but it can be easily modified to keep track of whatever you want simply by changing the data statements in the program. (Tape).
Cops base disk.C	presently this program is set up to keep track of policemen but it can be easily modified to keep track of whatever you want simply by changing the data statements in the program. (Disk).

PLEASE NOTE: Disk No.204 (Cursor - July '88, Page 10) should be DISK No. 205 !!!

Doug MacLurkin - P.D. Disk Librarian

DEARLY C-LOVED

Dearly C-loved, we are assembled here together because PC-ing is believing. We are here to console each other; ASCII and you shall receive. Yea we say that there is life worth debugging. Data, data, everywhere, but not a thought to think - that is the problem.....

Friends, perhaps you know someone out there with a terminal illness, some poor hacker with bloodshot eyes, in data distress, who's been attacked by the evil one, GLITCH, and his wicked helper, Missingstuffinfiles. Even if your data has been blown to HAL, there's not a thing we can do to bring it back. But we can solace you in your hour of need.....

And that is why the Giver Of Data, G.O.D. has downloaded to me, from the heavenly host mainframe, the Keyboard Prayer for the Data Distressed. Now let us make the sign of the monitor (a square traced in the air, if you would like to try it at home), bow our heads and pray responsively.....

..... Forgive us our I/O errors as we forgive those whose logic circuits are faulty. Lead us not into frustration and deliver us from power surges. For thine is the algorithm, the application and the solution, looping for ever and ever. RETURN! As I hold aloft my Binary Bible, translated from the ancient COBOL, and read from the first book SYSGEN 1:1 "In the beginning, the Giver Of Data generated silicon and carbon, and the system was without architecture. and un-initialized, and randomness was upon the arrangement of the matrix"

And now some announcements:

For the Cathode-lics in the audience, CHIP (the Church of Heuristic Information Processing; the first user-friendly church) is opening a new high school, Our Lady of Perpetual Upgrades (we don't have Nuns, we have Mulls), and a new Junior high, PC Jr..

This Thursday, the BAR-CODE MITZVAH for the Petersons will be held.

For the school kids, I have two quotes, one from the Ten Commands, "Thou shalt not pirate software", and the second from the twenty third PROMS, "Yea, though I commute to the Valley each day, I fear no evil, for my Amiga is running. You prepare me for the desk space in the office of my competitors.....".

For the Bootists, the mantra of the week is "OHMS, EPROM, RAM, ROM".

For the CPMoslems, this week we will be reading from the Core-RAM.

Now let us open our hymnals and sign Hymn 1101101, "Amazing Space, how sweet it is to have a disk like thee. My files were lost, but now they're found. There's room in my PC."

That about ends today's lecture, friends, but I want you all to remember, "There's no need to abandon hope, all ye who press enter; in the end everything will be right justified..."

Now let us sing, "RETURN.... RETURN.... RETURN.... Return.... return.... retu..... "

(Reprinted from Syntax Error, Newsletter of the Commodore Long Island Club, - Author Unknown.)

MULTICOLUMNS ON POCKET WRITER II

CAN POCKET WRITER II DO MULTI COLUMNS ??

(yes)

"I just gotta find a better way to get this stuff into two column format", I said to myself as I fed the paper into my printer for a second pass. Working as a video script writer I had learned to create two column documents in my own way.

Pocket Writer II allows the writer to have two documents resident in the program buffer at the same time. With the margins in one document set at 0,30; and in the second document set at 40,75; two passes through the printer produced an acceptable document. But, there just had to be a better way, a way to produce two columns in just one pass through the printer.

Many days of working and playing with Pocket Writer II, and many hours of searching, reading and re-reading the instruction manual had not revealed the information I needed to produce WYSIWYG (what you see is what you get) two column documents.

FLASH ! the idea light light over my head came on. Why don't you write to the manufacturer and find out if they can do it (two columns on the screen).

I sat down at my COMMODORE 128 and word

processed up a letter to Digital Solutions Inc. and ask the, now very important, question: Can Pocket Writer do two column format?

About six weeks later I received a nice letter from Digital Solutions Inc. Enclosed with the letter was a copy of an information sheet David Stuller had sent to Digital Solutions. For the benefit of PEEK & POKE readers, I would like to paraphrase the information sheet.

Load Pocket Writer II and turn on the return arrows using <CTRL><RETURN>. With the left margin set at the default (1), and the right margin set where you want it (75), pour your soul, your lifes blood, or that Christmas epistle into the word processor. Do not use text enhancement (underlining, double space, etc.) right now.

After painstakingly entering your masterpiece and saving it to disk you are ready to re-format into two columns. (Always save a finished product.) Hit the home key twice to get to the top of the first page, then turn Justify 'on' and set the right margin to 30 or 32 (play with it!).

As the text is scrolled, look for

wide spaces between words (caused by justification) and hyphenate words to even the lines.

Press <CTRL>a. The command line prompts; "Switch to SEQ file? N". Press the Y and the <RETURN>. Each line now has a return at the end.

Press <CTRL>a again. The command line now prompts; "Switch to TEXT file? N". Press the Y and the <RETURN>.

Return to the top of the first page and change the right margin to 75 (again, adjust to your liking). The 30 character wide (narrow) column is still there when you return to the edit mode.

Select the text you want moved to the second column. Use <CTRL>r to start highlighting the range of text, and <CTRL>b (block) at the end. Do not highlight the return arrows. Move the cursor to the top of the page, column 40 (adjust as needed), and press <CTRL>m (move).

If all has gone well the selected range of text now appears beside the first column. Now, text enhancements can be made (underlining, double space, bold, etc.). For documents originally longer than one page length,

continue highlighting and moving blocks of text until the document looks the way you want. Make sure the return arrows don't go past column 80, or extra line spaces may be added to your finished product.

Finally delete all of the extra returns at the end of the document and save this re-formatted document using a different file name (protect your work).

When you have created several two column documents and have mastered these techniques, try making multiple columns. Use varying column widths; or try leaving space for graphics, news-letter pictures, and drawings.

Use this in good health.

RONN



(Reprinted from SYNTAX ERROR, Newsletter of the Commodore Long Island Club - USA)

COMPUTER ADDITIONS

by Gary MacMinn

Do you know what a reset re-enable button does? How about a write protect switch? If the answer is no, then, according to our newsletter editor, you're not alone. Here's everything you ever wanted to know (I hope) on these items.

Reset Button (\$6.00)

Have you ever had that brilliant machine language program almost working and then have the computer crash? Even in basic, a wrong number in a poke command can cause hours of work to be lost. The reset button allows you to return to the start-up screen while preserving all the memory from about 2049 to the end. Any code stored in this area will still be there after the reset. Resetting also allows you to use many of the cheat pokes that are published in magazines.

This button is only for the C64 as the C128 already has one built in. A couple of years ago, a plug in reset button was advertised. This plugged into the serial port and did the same job as the current one. However Commodore, in their infinite wisdom, modified the C64 and these no longer work on most of the newer computers, which is why they are no longer advertised.

Reset Re-Enable (\$6.00)

With some programs, mainly games, the reset on its own simply restarts the program. This is because the computer is tricked into thinking there is an auto-starting cartridge plugged into the expansion port (refer to the programmers reference guide for more on cartridges). This button reverses the effect and allow you to return to the normal start-up screen. To use the re-enable, hold the re-enable button down, press and release the reset, and release the re-enable when the screen appears.

Device Number Change (\$6.00)

This service covers a range of devices including the disk drives (device 8/9/10/11), some printers (device 4/5), and the 1520 printer/plotter (device 4/6). The switch allows the device number to be simply altered to suit the application.

C64/C128 Selection Switch (\$6.00)

This switch is for the C128/C128D. It lets you go straight into C64 mode at power up or after a reset without having to hold down the Commodore key.

40/80 Column Select Switch (C128...\$10.00, C-128D...\$15.00)

This switch is also only for the C128/C128D. Normally, the 80 column screen can only be displayed on a monitor (RGBI for color, composite for monochrome) and cannot be displayed on a television. This switch lets a television be used (via the RF connector) to see 80 columns. It also provides 80 column output through the composite video connector.

Turbo ROM Installation (\$6.00 or \$10.00 [see page 3])

This involves fitting the Cockroach Turbo ROM to the various computers. These ROMs can be ordered from the Group Secretary.

Write-Protect / Write-Enable Switches (\$6.00 each)

These switches fit into the disk drives or the C128D. The first (Write-Protect) does not allow any writing to the disk at all, regardless of the condition of the write protect notch on the disk. The Write-Enable does the opposite. It allows data to be written to the disk if the notch is covered, or even if it doesn't exist. This means you can use the reverse side of a disk without cutting a notch out of it. These two functions can also be incorporated into one switch which is a little cheaper.

You may have noticed that the prices for these items are more expensive for the C128D. This is because it is a very big job getting at the insides of this computer as nearly everything has to be removed.

Serial Port Doubler / Switcher (\$14.00 each)

The serial port doubler is used where a serial device only has one socket built into it and therefore ends the chain. The most common case is trying to use two printers (say a dot matrix and 1520 printer/plotter) where both would end the chain. When using this devices, the devices must have different device numbers. If the device numbers are the same, then the serial port switcher is needed. This allows you to select between one of two devices (say two printers with device number 4). The switcher can also be used in reverse to connect two computers to the one serial chain. This allows two users access to the one disk drive and printer. Care must be taken not to change the switch while files are open or the drive is active. Using the switcher this way is a simple version of the VIC-Switch, which automatically switched up to eight computers. (If anyone is interested in a VIC-switch type controller, get in touch with me as I have a design for a similar device.)

Expansion Port Plug (\$7.00 each)

This is a piece of circuit board with 22 tracks etched on to each side. It can be used to connect your own projects to the computer's busses.

Capacitance Meter Boards (\$14.00 each)

Do you have a box of old capacitors that don't have any markings on them? If so, then this is the thing for you. The project was originally published in an issue of Transactor. The meter plugs into the user port and the software allows capacitance from a few picofarads to the high microfarads to be measured.

I hope this has given everyone some idea of what these thing do. If you have any specific ideas for a gadget you'd like, then see me at a meeting or workshop and we'll see if we can come up with something.

BYTES

--- FOR SALE ---

Computer Classics 300 baud modem (64/128) with or without phone.
Works well but only 300 baud. Any reasonable offer will buy.

Contact John Kelman on (079) 821 935.

Commodore DPS-1101 Daisywheel Printer - In Perfect Condition - Only \$280.00

Contact John Van Staveren on (07) 372 3651 (a.h.)

Commodore C-128 Computer - \$300.00

Commodore DPS-1101 Daisywheel Printer, with Spare Wheel - \$300.00

Contact Terry Steer on (07) 808 2424

Commodore C-128 Computer - 1530 Datasette - Manuals - Some Software
All in Perfect Condition - \$350.00

Contact Graham Watson on (071) 44 2917
=====

COMMENT

by Ralph De Vries

Another A.G.M. out of the way and here I'm back again as your newsletter editor. I guess that I must like the punishment!

In his annual report Greg Perry thanked all those hard working members who have contributed to the ongoing success of our group. I would now like to add my personal thanks to two people who have greatly contributed to the continuing fortunes of the C64/C128 Special Interest Group, namely Leigh Winsor and Doug MacLurkin.

As quite a few of our former 8-Bit experts have moved over to the Amiga during the last year or so it became obvious that new leadership was required to revitalize the still very large C64/C128 segment of our membership. We have been fortunate that Leigh and Doug have come forward and taken over from "the old guard". Leigh, in his capacity as C64/C128 coordinator, is actively promoting a series of talks for 8-bit users during our main meetings, and Doug has been updating the C64/128 Public Domain library (a very big job indeed), as well as contributing many words of wisdom to this edition of Cursor. They have certainly made my lot as editor of Cursor a lot easier!

I cannot forecast what percentage of our membership will forsake their C64s and 128s for the more glamorous Amigas (or, God forbid, those 'boring' IBM clones!) during the next twelve months. Currently approximately 25% of our members own Amiga and this percentage is bound to rise substantially; but even if half our members own Amigas there will still be some 400 odd 64/128 owners around looking for guidance and assistance.

It is my hope that many other "8 bitters" will join Leigh and Doug during the next year in looking after the ongoing welfare of our C64 and C128 membership.

AMIGA Modems + Software C64/128

NetComm Pocket Modem 123 Amiga or C64/128

- ☐ Smart modem with full 'Hayes' command set.
- ☐ AutoDial/AutoAnswer/AutoDisconnect.
- ☐ Speeds CCITT V22 (1200), V23 (1200/75), V21 (300/300) plus Bell 103, 212A.
- ☐ Australian Made with 2 Year Warranty.

PRICE including GPTERM-Amiga or GPTERM-64 **\$399.00**

GPTERM - Amiga

Comprehensive communications software for PAL/NTSC Amiga 500/1000/2000
Full Intuition support, multitasking, multiple window, icons, hot-keys, etc.

- ☐ Works on any Amiga compatible modem. Extended support for 'smart modems'.
- ☐ Status Line with on-line time and session cost in both modes.
- ☐ Baud rates 300-19200 including correct 1200/75 and 75/1200.
- ☐ User-defined 'configurations' for any services.
- ☐ AutoDial, Continuous dial, Circular dialling of multiple services, redial on busy.
- ☐ Automatic log-on and transmission of user-name or user-id and passwords.

ANSI Emulation

- ☐ Amiga ANSI emulation with 8 colours.
- ☐ Upload/download with Xmodem, XmodemCRC, Punter, Sealink, Zmodem, Ymodem, Ymodem-Batch (Multiple File Transfer supported.)
- ☐ ASCII capture, ASCII Upload.
- ☐ Printer log.
- ☐ 20 function keys.

Videotex Emulation

- ☐ Full Viatel specification.
- ☐ On-line mouse!
- ☐ 20 function keys and 26 "instant access" page keys.
- ☐ 100 frame carousel store.
- ☐ Save/load/print frames as text or graphics.
- ☐ CET Download (used on Microtex 666).

(See reviews in ACR, June 88, and on MegaDisk-7)

Packaged with 76 page manual. Not copy protected. PRICE **\$99.00**

NetComm 64/128 Modem for C64/128 including GPTERM-64 PRICE **\$262.00**

GPTERM - 64 Comprehensive ASCII/Videotex for C64/128 PRICE **\$59.95**

Also available NetComm 24/24 1200/1200 and 2400/2400 (Price approx \$560)

NetComm1234 300,1200,1200/75,2400 (Price approx \$650)

Contact Dr Greg Perry
GP Software,
21 Aloomba Rd,
ASHGROVE Q 4060
Phone (07) 3661402

510 DATA 77, 0, 0, 69, 14, 10, 15, 25, 32, 84, 82, 65
 520 DATA 78, 83, 65, 67, 84, 79, 82, 32, 1, 14, 4, 32
 530 DATA 84, 82, 65, 78, 83, 65, 67, 84, 79, 82, 47, 65
 540 DATA 77, 73, 71, 65, 45, 83, 21, 2, 19, 3, 18, 9
 550 DATA 2, 5, 32, 14, 15, 23, 32, 48, 54, 50, 32, 56
 560 DATA 56, 32, 51, 53, 56, 52, 76,151, 20,173, 14,220
 570 DATA 9,128,141, 14,220,186,189, 7, 1,201,194,208
 580 DATA 237,189, 6, 1, 41,240,201, 96,208,121,173, 11
 590 DATA 220, 48, 4,162, 65,208, 2,162, 80,142,191, 19
 600 DATA 41,127, 32, 97, 20,201, 48,208, 2,169, 32,141
 610 DATA 180, 19,142,181, 19,173, 10,220, 32, 97, 20,141
 620 DATA 183, 19,142,184, 19,173, 9,220, 32, 97, 20,141
 630 DATA 186, 19,142,187, 19,173, 8,220, 32, 97, 20,142
 640 DATA 189, 19, 76,111, 20, 72, 41, 15, 9, 48,170,104
 650 DATA 74, 74, 74, 74, 9, 48, 96,160, 0,140,194, 19
 660 DATA 162, 18,169, 7, 32,204,205,232,169,208, 32,204
 670 DATA 205,172,194, 19,192, 14,240, 15,185,179, 19,200
 680 DATA 140,194, 19,162, 31, 32,204,205, 76,129, 20, 76
 690 DATA 255,255, -1

How does it work? Essentially, it operates by interrupting the interrupts. Interrupts? OK, a short few words about interrupts.

Interrupts are part and parcel of computer design. While a computer is busy working away, doing whatever it is doing (even nothing!), it takes a brief time-out every so often to look around. Has someone pressed the keyboard, or punched a fire button? No? Fine, keep on doing whatever was going on. Yes? What was it? A command? The action of 'looking around' is termed an 'interrupt', and it takes place 60 times a second. Sounds busy! Each time the computer 'interrupts', it saves most of the main operating values, a bit like a card player facing his cards to the table. When the interrupt is done, it recovers those values, and the process continues. All this at lightning speed.

We can use those interrupts to make a clock. By telling the computer to detour via our routine at each interruption, it will process our program before returning to its normal path. The means of detouring the computer is usually termed a 'wedge', a bit of program 'wedged' into the computer to make it detour. Our wedge points to a clock routine, then back to the normal system.

At locations \$DC08 to \$DC0B is a real clock that works in hours, minutes, seconds and tenths of seconds. It can run at 60Hz or 50 Hz, to adjust for variations in national power supply voltages. By reading that clock at each interrupt and printing the values onto the screen, you have your own clock.

The trick is to keep the clock 'on-screen' and in the same place at all times. To do this, the 80 column screen gets reconfigured from a 25 to a 26 line display, with the clock on the 26th line. All normal screen action will take place in the usual 25 lines, leaving the clock alone to give a steady reading.

The clock will appear to stop from time to time. Don't be fooled. The clock runs all the time, but if the computer is busy showing a disk directory on the screen, it will stop updating the clock display until that job is done. Then the clock will be updated, without losing so much as 0.01 of a second.

There it is. A handy utility program, with a few ideas for something you might like to try. What about a ? Or a ? And do have a look at BASIC 8, I think its good value.

Public Domain. Do not remove REMs, please.

C128 SCREEN CLOCK

Paul Blair

The ability of the C=128 80 column screen controller is gradually being realized. Special software, especially BASIC 8, is now coming onto the market to extend the wizardry of the wide screen, especially if you have the newer C=128D-CR (cost reduced) model. The CR has an extra whack of screen RAM, which takes screen memory from 16K to 64K. Imagine what you can do with all that memory, dedicated to the screen?

Well, you don't need 64K to run this program. Any C=128 model will do fine. The idea is to use the TOD (time-of-day) feature of the C=128 to provide you with a (nearly) permanent time display on screen while you work.

The idea isn't new - there have been 40 column routines for the PET, C-64 and C=128 in 40 column mode. But people buy the C=128 to use 80 columns, so here is a routine for them.

Take your time, and check your work.

```

100 REM: C128 INTERRUPT CLOCK / 80 COL
110 REM: PUBLIC DOMAIN SOFTWARE
120 REM: PAUL BLAIR 0188
130 REM: CREDIT TO J KRESS
140 REM: CLOCK OK FOR 50HZ
150 :
160 IF PEEK(4864)<>96 THEN GOSUB 290
170 HS=4990:MI=4995:SCNCLR
180 INPUT 'ENTER CURRENT HOUR [HH] ' ;HR: REM USE DOUBLE QUOTES
190 INPUT 'ENTER CURRENT MINS [MM] ' ;MNS:REM IN PLACE OF SINGLE
200 INPUT 'ENTER AM/PM [A/P] ' ;AP$:REM QUOTES IN PROGRAM
210 ML$=RIGHT$(MNS$,1):MH$=LEFT$(MNS$,1)
220 MH=VAL(MH$):ML=VAL(ML$):MV=16*MH+ML
230 IF HR>9 THEN HR=HR+6
240 IF HR=18 AND AP$='P' THEN 270
250 IF HR=18 AND AP$='A' THEN HR=HR OR 128:GOTO 270
260 IF AP$='P' THEN HR=HR OR 128
270 POKE HS,HR:POKE MI,MV:SYS 4865:END
280 :
290 FAST: PK=4863
300 READ PB:IF PB=-1 THEN 320
310 PK=PK+1:CS=CS+PB:POKE PK,PB:GOTO 300
320 IF CS<>42229 THEN PRINT 'DATA ERROR... RECHECK':END
330 RETURN
340 :
350 DATA 96,173, 20, 3,201, 5,240,248,120,173, 20, 3
360 DATA 141,152, 20,173, 21, 3,141,153, 20,169, 5,141
370 DATA 20, 3,169, 20,141, 21, 3,162, 6,169, 26, 32
380 DATA 204,205,169, 16,162, 20, 32,204,205,141, 47, 10
390 DATA 162, 24, 32,218,205, 41,127, 32,204,205,162, 18
400 DATA 169, 7, 32,204,205,232,169,208, 32,204,205,162
410 DATA 31,169, 32, 32,204,205,202,169, 79, 32,204,205
420 DATA 162, 24, 32,218,205, 41,127, 32,204,205,162, 18
430 DATA 169, 23, 32,204,205,232,169,208, 32,204,205,162
440 DATA 31,169,141, 32,204,205,202,169, 79, 32,204,205
450 DATA 169,147, 32,210,255,169, 0,141, 11,220,169, 0
460 DATA 141, 10,220,169, 0,141, 9,220,141, 8,220,162
470 DATA 18,169, 7, 32,204,205,232,169,223, 32,204,205
480 DATA 160, 0,185,195, 19,200,192, 64,240, 11,140,194
490 DATA 19,162, 31, 32,204,205, 76,158, 19, 88, 96, 32
500 DATA 48, 48, 58, 48, 48, 58, 48, 48, 46, 48, 32, 65

```

PROGRAMMING BY NUMBERS

by Dan Phillips

FLDs

The good thing about the VIC-II chip in the '64 is that you can do all sorts of tricks with it that would otherwise be very difficult or impossible (sprites in the borders, for example).

Here's a relatively new trick, which people seem to be calling 'Flexible Line Distances' or 'Flexible Line Displacement' (FLD).

"What is FLD?" I hear you cry. It's rather difficult to explain. The vertical scroll register and the raster compare register are used so that the screen is split and the rest of the display, rather than being displayed immediately after, is displayed a certain number of pixels down the screen.

Understand that? - I'm not sure if I did. However, help is but a few hundred keypresses away. Type in the following program and remain ignorant no longer. After RUNNING it, make sure there is plenty of text on the screen then press the f7 and f5 keys for a free demonstration of FLD in the comfort of your own home.

Program 1.

```
10 for x=49152 to 49332
20 read a:poke x,a:c=c+a
30 next
40 if c<>22381 then print"data error!":end
50 poke 16383,0:sys 49152
300 data 169,0,133,251,169,27,141,17
310 data 208,169,127,141,13,220,169,41
320 data 141,20,3,169,192,141,21,3
330 data 169,1,141,26,208,162,15,189
340 data 165,192,32,210,255,202,16,247
350 data 96,169,1,141,25,208,173,17
360 data 208,41,112,9,3,141,17,208
370 data 165,197,201,6,208,9,165,251
380 data 240,11,198,251,76,77,192,201
390 data 3,208,2,230,251,169,50,162
400 data 89,160,192,32,155,192,76,129
410 data 234,169,1,141,25,208,162,58
420 data 160,4,165,251,240,32,133,254
430 data 152,41,7,133,253,173,17,208
440 data 41,112,5,253,236,18,208,208
450 data 251,141,17,208,232,224,246,176
460 data 14,200,198,254,208,226,138,24
470 data 105,8,170,224,246,144,211,169
480 data 0,162,41,160,192,32,155,192
490 data 76,49,234,141,18,208,142,20
500 data 3,140,21,3,96,13,55,70
510 data 32,82,79,32,53,70,32,83
520 data 83,69,82,80,13
```

At the end of this article is a bare-bones FLD routine, in the form of a BASIC loader and an assembler listing. All the unnecessary bits have been ripped out so that it should be easier to

see how it works. It only splits the screen once and the displacement value is held in location 251 (\$fb), try POKING different values into it.

This is essentially how the programs work: on the raster line where the split is to take place, the vertical scroll register is increased by one; then, on the next raster line it is increased again, and on the next, and so on until the vertical scroll register holds a seven, in which case, on the next line, the scroll register is loaded with zero, then a one, and so on and so on for as many lines as necessary. Each time the scroll register is increased, the screen is moved down one raster line. When the raster line has reached the bottom of the screen, the routine is exited.

With programs like these, you might see some vertical black lines on the screen. These are displayed when the VIC chip has nothing to display. They are a bit-representation of the value held in the location which is the last byte of the first half of the current video bank being used. For example, if you were using the second video bank, the location would be 32767 (\$7fff). Program 1 and 2 use bank number one, so try POKING 16383 (\$3fff) with different values while either one is running.

Besides weird visual effects, the only practical use of FLDs that I can see, is for sliding hires screens smoothly onto the display. Or, you could slide the screen up and down and pretend you've got an Amiga!

Program 2.

```
5 rem location 251 ($fb) holds
6 rem the displacement.
7 :
10 for x=49152 to 49271
20 read a:poke x,a:c=c+a
30 next
40 if c<>14897 then print"data error!":end
50 poke 16383,255:sys 49152
300 data 169,27,141,17,208,169,127,141
310 data 13,220,169,26,141,20,3,169
320 data 192,141,21,3,169,1,141,26
330 data 208,96,169,1,141,25,208,173
340 data 17,208,41,112,9,3,141,17
350 data 208,169,144,162,53,160,192,32
360 data 110,192,76,188,254,169,1,141
370 data 25,208,162,149,160,4,165,251
380 data 240,32,133,252,173,17,208,41
390 data 112,133,253,152,41,7,5,253
400 data 236,18,208,208,251,141,17,208
410 data 232,224,245,176,5,200,198,252
420 data 208,226,169,0,162,26,160,192
430 data 32,110,192,76,49,234,141,18
440 data 208,142,20,3,140,21,3,96
```

Assembler Listing

```
.org 49152
:
lda #27 ;clear high bit of raster compare
sta 53265
lda #127 ;turn of normal interrupts
sta 56333
lda #one&255 ;set irq vectors
sta 788
```

```

lda #one/256
sta 789
lda #1           ;enable raster compare irq
sta 53274
rts
;
;this routine sets the verticle scroll reg
;to normal (3) at top of screen.
one   lda #1           ;clear interrupt flag
      sta $d019
      lda $d011
      and #$70
      ora #3
      sta $d011
      lda #$90           ;raster line of next irq
      ldx #int&255      ;point to next routine
      ldy #int/256
      jsr next
      jmp $febc         ;leave interrupt
      ;
int   lda #1           ;clear flag
      sta $d019
      ldx #$95           ;line where split starts
      ldy #4             ;first value to
      ;be put in verticle scroll reg
      lda $fb           ;get the width of split
      beq over          ;if 0 then leave interrupt
      sta $fc           ;store as a counter
beg   lda $d011         ;clear vert scroll bits
      and #$70         ;and set to 24 rows
      sta $fd           ;store it temporarily
      tya              ;find first three
      and #7           ;bits of y reg
      ora $fd          ;ora with stored value
wait  cpx $d012        ;next raster line?
      bne wait         ;no. keep waiting
      sta $d011        ;store new v scroll value
      inc              ;inc line
      cpx #$f5         ;bottom of screen?
      bcs over         ;yes. leave interrupt
      iny              ;inc value for v scroll
      dec $fc
      bne beg          ;not done enough lines
over  lda #0           ;data for
      ldx #one&255     ;next
      ldy #one/256     ;interrupt
      jsr next
      jmp $ea31        ;leave interrupt
      ;
next  sta $d012        ;sets up
      stx 788          ;new
      sty 789          ;interrupt
      rts

```

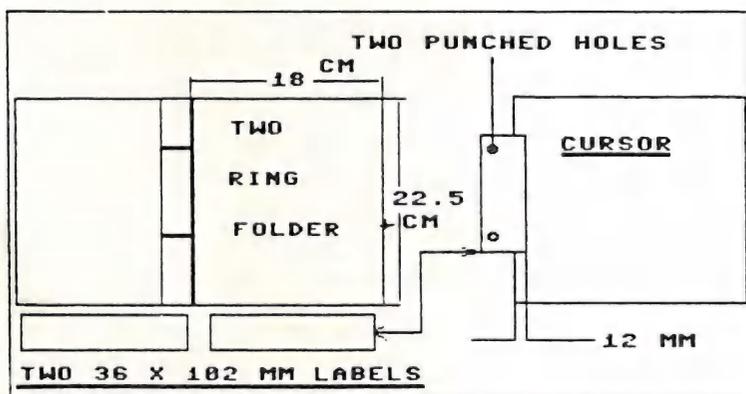
-ooOoo-

MAIL BOX

Readers may be interested in a method of filing my copies of *Cursor* in a neat folder, each holding one year - each folder then appropriately labeled by years, e.g. 1985/1986/1987 etc.

My stroke affected right hand made usual drawing impossible, so "DOODLE" drawn instead. Note the following points:

- 1) - Two A5 size ring binders (K-Mart, Big W, Coles, Newsagents etc) - \$3.00 ea.
- 2) - Labels from computer supplies. I use Fastonall Number 42-032, size 101.6 x 36 mm.
- 3) - One label attached to each side of *Cursor* by appr. 12 mm, on stapled side. Press remainder of labels together, then punch two holes, fit to binder.
- 4) - Each folder marked by year.



Your Bathurst Connection - Fred Hawley

Nice tip, Fred, and also useful for other magazines and newsletters!

I am a new Commodore 64 user and I would like to say a very special thanks to your club (of which I am now a full member).

But to start at the beginning. I am a newcomer to the Commodore 64 computer. I have spent hours upon hours trying to slog my way through the thoroughly confusing manuals that come with the computer.

Being a retired secretary I thought I would be able to understand the basics involved and so borrowed a copy of a word processor. Not only did I get a faulty disk but I still couldn't produce work as I had expected. When I was lent the word processor disk I was also lent some old 1985/6 copies of "Cursor". They were to be my release from this 'confusing computer'.

After two phone calls I was given the number of a very special person - Mr. Cor Geels of the Wavell Heights Sub-Group.

What a delight to have the computer technology made easier by such a patient understanding teacher. Cor has produced a working copy of my word processor, as well as a work disk, and spent many hours instructing me on the basic technology and operating techniques and thus saved me hours and hours of frustration.

So to all new owners of Commodore, don't give up in frustration - contact your nearest regional sub-group and you will also be delighted with the knowledge that will soon become yours.

Thank you CCUGQ for your Cursor magazine and a VERY SPECIAL THANK YOU to Cor Geels.

Joan Byrne

I read CURSOR cover to cover as soon as it arrives in the mail and I always say I must write something for the columns. Then the next issue arrives and I still haven't put my fingers to the keyboard (pen to paper).

As a country member I miss having other computerists to discuss programs and ideas with. I am including on this disk a small program that I wrote and find useful to work out costs of STD phone calls. I have tried to make it work on both 64 and the 128 but the 64 version is a bit untidy. Could you pass it on to someone to look at and maybe the library if it is useful to someone.

At the moment I am agonising over buying an IBM clone (portable) but what do you do with four years accumulation of 64 and 128 programs, data, instructions books, to say nothing of my 128, 2 drives, monitor, modem etc. There is no room on my desk for two computers but I would want to have access to some of my data which is for Superbase and Swiftcalc. I faced the same dilemma when I upgraded to the 128 but the 64 mode solved this problem by letting me go back to my old programs if I wanted to.

Does anyone who upgrades ever go back and seriously use their old machine again. I find that the 128 in 64 mode is pretty tiresome. I sometimes load up my old copy of Superbase 64 and look at some files and after the 128 version it is deadly slow and the 40 column screen makes me feel I am looking out a window with the curtains half pulled. I am sorry if I offend some of you 64 fans but that is how I feel. I think that after using either an Amiga or a clone the old 128 will seem pretty slow.

Permit me to make a comment on Lindsay Vardy's "Some Tips" in last months CURSOR. Re running 64 programs on the 128 at fast speed. If you put in the line

```
SCR=215:COM=PEEK(SCR):IF COM=128 THEN FAST
```

the program will still run on a 64 without a syntax error and will run in fast mode on a 128. If you add to this line you can also tailor other 128 special features eg 80 column and maybe changes of colour for the different machines.

May your bytes not bite

John Kelman (Emerald)

I have passed your program on to Doug MacLurkin, our P.D. Disk Librarian. Upgrading to another computer always means taking some agonising decisions. I don't think that members who upgrade to a more powerful computer will often go back to their earlier love. Usually the learning curve to master the new technology is quite steep, and the time factor is also of some importance. The earlier machines are usually passed on to other members of the family or end up in the wardrobe. Some say that that is progress.....

PRO-DIGITAL SERVICES

UNIT 3 - 16 TAYLOR STREET
BOWEN HILLS, QLD, 4006

Phone (07) 854 1640

Fax # (07) 854 1574

PRO-DIGITAL SERVICES repair a wide range of computer equipment, including all models of **COMMODORE Computers & Peripherals**

PRO-DIGITAL SERVICES HAVE OPENED IN BRISBANE TO PROVIDE YOU WITH A FAST, EFFICIENT SERVICE

ALL REPAIRS ARE COVERED BY OUR 90 DAY WARRANTY

DISCOUNT FOR USER GROUP MEMBERS

COME IN AND SEE US FOR A FREE QUOTE

DIRECTORY

MANAGEMENT COMMITTEE

President: GREG PERRY - Ph. 366 3296 (10am - 4pm)
Secretary: MIKE WILLIAMS - Ph. 209 9084
Treasurer: JOHN VAN STAVEREN - Ph. 372 3651
Technical Coordinator: GREG SHEA - Ph. 345 2799
Sub-Group Coordinator: TERRY STEER - Ph. 808 2424
Chief Librarian: ALLAN HORNE - Ph. 398 7441
Newsletter Editor: RALPH DE VRIES - Ph. 300 3477

COMMITTEE MEMBERS

C-64/128 Coordinator: LEIGH WINSOR - Ph. 379 2405
Amiga Coordinator: STEVE McNAMEE - Ph. 262 1127
Plus/4 Contact: CLARENCE STOCK - Ph. 397 8894
Vic-20 Contact: *Position Vacant*
Education Officer: BILL WEEKS - Ph. 341 2823

LIBRARIES & SALES

LIBRARY - Software, Books & Magazines: DOREEN & ALLAN HORNE - Ph. 398 7441
SALES - Disks & Accessories: LEIGH WINSOR - Ph. 379 2405
SALES - Public Domain Disks & Tapes: DOUG MACLURKIN - Ph. 358 4442

"CURSOR" NEWSLETTER

Editor: RALPH DE VRIES - Ph. 300 3477
Associate Editor: REUBEN PHILLIPS - Ph. 345 6417

BULLETIN BOARD SYSTEM: Phone Number (07) 344 1833

Sysop: GREG SHEA - Ph. 345 2799
Assistant Sysop: JIM VICK - Ph. 345 1878

Address all Newsletter Mail to: *The Editor "CURSOR", P.O. BOX 384, ASHGROVE, Q, 4060.*
Deadline for the October issue is FRIDAY 2nd SEPTEMBER!
Current Page Format: 58 Lines - 90 Characters per Line.

Address all other mail (including Library Material) to:
C.C.U.G. (Q) Inc., P.O. BOX 274, SPRINGWOOD, QLD, 4127
If unable to return library material before a meeting, members may also leave this with their nearest management committee member (but please ring first!).

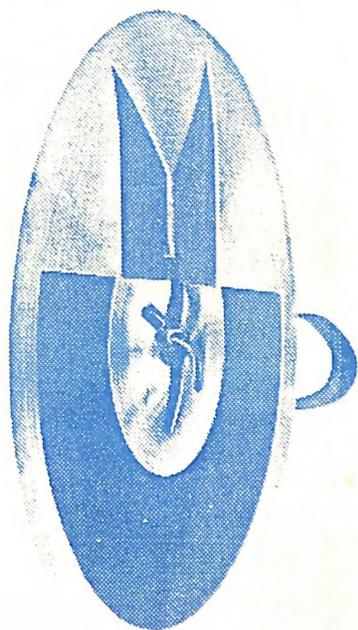
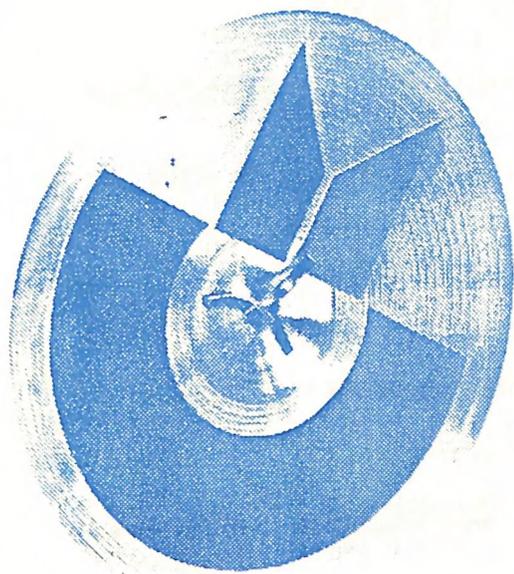
Opinions expressed in CURSOR are those of the Author(s), and not necessarily those of the C.C.U.G.(QLD) Inc. or the Editorial Staff.

Permission for reprinting by other Commodore & Amiga Computer Users Groups is granted, *provided* that both source and author are acknowledged.

Published by: COMMODORE COMPUTER USERS GROUP (QLD) INC.
P.O. Box 274, Springwood, Qld, 4127

Printed by: BANA SERVICES
36 Nerine St., Kingston, Qld, 4114.

The Number One Symbol in Computers. Commodore.



C commodore
COMPUTER
Keeping up with you.