



REGULAR SCENE

Index & General Information 2
 ED Talk 3
 11th September 2001 3
 Data Blast 4, 5 & 6
 Classified 7
 Readers Letters 8 & 9
 Readers Quickies 9
 Importing Service 38 & 39
 CSIS - Hot News 39

FEATURES SCENE

CommodoreONE 7
 Rare Guide 1 7
 SX64 Project (part 1) 11
 Cadavar Interview 12, 13 & 14
 Apathy Rules 14
 A Story Of Two Halves 15
 Are You Obsessed ? 15
 Retro Replay 18

GAME SCENE

It's Magic II 10

SERIOUS SCENE

Wolf In Sheeps Clothing 16, 17 & 34

GEOS SCENE Yellow Pages

geoTELEGRAPH 19
 TheWAVE Status 19
 geoBEAP v2.0 19, 20, 21 & 22

REVIEW SCENE

Enhanced Newcomer 23
 CS-SuperPSU 34
 CS-SuperPSU Q&A's 34
 Fanzine & Diskzine Round-up 36

FEATURES SCENE (continued)

Retro Computing Today 23
 Rare Guide 2 26
 A Travelers Journals .. 26, 27, 28 & 29
 2001 Revival Show 35

SUPERCPU SCENE

JOS 24, 25 & 26

SERIOUS SCENE (continued)

The New HD-DOS 30, 31, 32 & 33

PUBLIC DOMAIN and DEMO SCENE

Postponed 0

MUSIC SCENE

Postponed 0

C64 EMULATOR & WWW SCENE

Postponed 0

CONTAX SCENE

Contax UK 37

ADVERTISEMENT SCENE

GO64 Back Cover
 Loadstar Back Cover
 Ebay Back Cover

INCLUSIONS

STOP PRESS update sheet,
 5.25" or 3.5" Coverdisk*,
 Coverdisk Sleeve(s)*,
 Coverdisk Information Sheet*
**optional*

ARTWORK

General : Chris Bohanna (new artwork)
 Front Cover : 8x8 (BSW)

CONTRIBUTORS TO CS

Allan Bairstow (editor), ebay
 Robert Bernardo, Andrew Fisher,
 Dave Elliot, Richard Bayliss,
 Nicholas Coplin, Wayne Womersley,
 Jeri Ellsworth, Protovision
 Dale Sidebottom, William Kennedy
 Shaun Bebbington, Go64
 Maurice Randall, Jens Schoneld
 Bo Zimmerman, Mahai Barbat
and anybody else that I have missed !

EDITORIAL ADDRESS

14 Glamis Close , Garforth , Leeds ,
 West Yorkshire, LS25 2NQ , UK

Telephone/FAX
 (0113) 2861573 before 9pm

COMMODORE SCENE COPYRIGHTS

All the material within Commodore Scene is freely available for duplication within the Commodore community and it is okay to reprint any pages in your own newsletters / fanzines / diskzine - PROVIDING - all credit is given to its original author and you give the details out of Commodore Scene.

Duplicating Commodore Scene in its entirety for profit (or to 'pass on' to another C64 user) is strictly prohibited. Please order an original copy. If the copy is for promotional purposes, then please contact me and discuss favorable terms.



General Advertising Rates

	Black & White	Colour
Back cover	N/A	£50.00
Full page	£25.00	£30.00
Half page	£20.00	£25.00
Quarter page	£15.00	£20.00
Boxed (Contax) ad	£5.00	per year
Classified	5p	per word
Classified	FREE	readers/subscribers

General Information

Polo Shirts	£15.00
T Shirts	£13.00
Sweatshirts	£15.50
Baseball Caps	£7.00

The following clothing items are available from the editorial address, please note that these items are quality products with fully embroidered logos on them - these are not cheap rubbish. Sizes : small (34"/36"), medium (38"/40"), large (42"/44"), X-large (46"-48"). Colours : white, black, sunflower, navy, bottle green and burgundy Please allow up to three weeks for delivery.

General Conditions

All material recieved by Commodore Scene will be regarded as 'printable' unless specifically stated otherwise. Swearing and foul language will NOT be printed.

Writers Pack

If you would like a CS writers pack to help you compile your submissions for CS then just drop me a SAE and I will post one out to you.

Advertisers Pack

All advertisement rates are negotiable. There is a 'CS Advertisers Information Pack' if anybody requires one, just drop my a line. All 'paying' advertisers will receive one complimentary copy of that particular issue (no coverdisk).

Distributors Pack

If you would like to distribute (or are thinking about distributing) Commodore Scene within your country then please drop me a line and I will send out this pack to you describing some of the terms and benefits.



allan.bairstow@btinternet.com

E-MAIL

Back for more ? Will you ever learn ? ;-)

Okay, lets get the moans out of the way first !

Telephoning me : Would everybody PLEASE remember to ring me before 9pm*. I have, again, had calls up to 11pm in the evening. This has to stop, I have a young family and I can not have people ring up in the late evening as this disturbs their sleep - and my wife's ! I will no longer be polite to people who ring after 9pm - *You have been warned.*

*This doesn't apply to overseas readers as I know how difficult it can be to work out the time differences - I've done it myself !

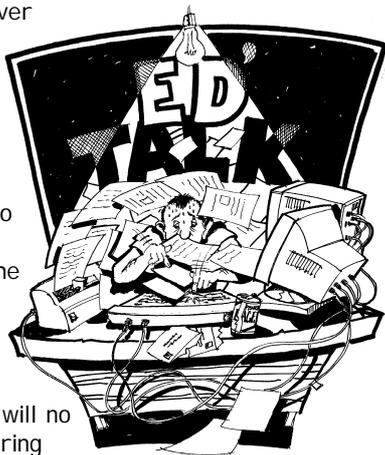
Religion : Being fairly prominent in the Commodore World, I get a lot of correspondence, e-mails, letters, etc - which I like, it is always nice to hear from new people. However, could I just point out that this is a Commodore magazine and not a platform for any religious (or political) banter. I know people are from many different beliefs and backgrounds, which is nice as a wide diverse readership is healthy and I enjoy all the communications we have. However, I recently received a lot of literature from a fellow reader/subscriber which I can only describe as blatant 'bully boy' tactics to get me to join the Jehovah's witness's. There are other platforms for religion, please use one of those - CS is for Commodore talk and not religion or political viewpoints. Please respect other peoples beliefs and feelings - especially mine ! - Nuff said.

Now lets get back to the other stuff !

Deadlines, etc : Most of you knew that this issue has been held back from its original October deadline. This was to allow me time to develop the CS web site, compile a new CSIS (importing service), program in the future issues of CS, allow me some free time with my family and a whole host of other things as well. Well, unfortunately, most of these things have not yet come to fruition, which is bad as I had planned to do so much more. All is going well though, but there still aren't enough hours in the day ! Producing CS on a regular basis is more than a one man job but unfortunately I am only one man ;-) I hope you will bear with me during the periods of what seems like 'inactivity' - believe me, it is anything but !

CS Newsletter : To help me and also to help keep you informed, I intend to do a black & white newsletter (text only) in between the normal issues of CS. For this year these will be free and I hope to post these out on a monthly basis. If they take off and people like them then they may become a regular feature. This will also mean that I get to produce them in geoPUBLI SH which is great as I get to play with my Commodore !

CS37 : New year - slightly new look too ! With the benefit of a little bit more time between each issue I am going to give the entire magazine a spring clean. Watch out for new layouts and a brand new CS Importing Service (CSIS) listing with easier to follow costings. Speaking of the CSIS, there are some new items coming that will blow you away - I have seen a



September
11th, 2001



As most of you know, for my real job I am a firefighter for West Yorkshire Fire Service. The events of September 11th in New York were unfolding whilst I was at work and I realised with increasing sadness that nearly all those firefighters rushing to the scene would probably not be coming back alive.

I will never be able to describe the way I felt when the first tower collapsed, because, I knew in my heart that most of those firefighters would have been going in to help people when everybody else in their right mind was coming out, that was their (and my) job and they would be killed doing the job that they loved. When the second tower also collapsed I felt sick to my stomach because I knew that the chance of survival was practically nil.

As a mark of respect I have donated over \$150 towards various charities, the main one being to the widows and orphans of the firefighters families to help them in their time of need, I also sent messages to our friends in the USA on behalf of the readers of CS.

I will never forget that day for as long as I live and it has changed my outlook on life forever.

Allan Bairstow, 2001

couple of them and they are superb.

Missing CS productions : Many people keep asking me about other things that I have planned but not yet delivered on - **CSTechfile**, **The Renaissance Archive**, web site updates/ completion, etc, etc. Well it's the same old story - not enough time - as I am still recovering from my complete loss of data from the end of last year (I am still trying to rebuild the CS database), I find myself quite literally either sorting out orders, replying to e-mails or trying sort out computer crashes - technology - who needs it !!!!!

Here is how far I have got :-

CSTechfile - still my favourite project, you will see it start this year !

CS Website - gets updated as and when, so to be fair to myself, I think it gets its fair share of my time !

CS Renaissance Archive - forget it for now, sorry.

CS Library CD-ROM - a bit of a success story here !

There have been quite a lot of CD's sold over the past few months (@10), so this little beauty gets updated quite a lot. As before, the data loss last year destroyed the cover, disk label, etc. So I have had to revamp it. Anybody who has bought this CS CD-ROM is entitled to FREE upgrades until the CD is full or finished. The accompanying booklet is also nearly finished and should be ready by the next issue. If you have bought the CD-ROM then please send it back (with return postage) in June and I will update it for you.

Well, thats it from me for now. 2001 was a hard year, I hope that 2002 eases off a bit and cuts me some slack ! I also want to assure you that my Commodore is still my passion and CS will be here to help you all in the years to come
- bye for now !

<http://www.commodorescene.org.uk/>

The estimated release date for CS37 is 1st April 2002



DATA : This weeks 'Big Hand' award goes to **Shaun Bebbington** for two reasons : (1) Organising the recent 'Commodore Revival 2001' exhibition in Crewe - see page ? for details, and also, (2) he has managed to promote CS in the October 25th issue of Micro Mart. In the supplement was a full colour ad with deatils on CS. The response has not been overwhelming but it HAS had some response - thanks Shaun.

DATA : Unbelievably, the famous DATEL Action Replay cartridge is having a bit of a revival ! Pictured, is the latest version of the cartridge. Now named '**RETRO REPLAY**', I assume to avoid any copyright problems. The cartridge boasts many new features and enhancements. Prices are going to be around 99DM (50 euros). I final UK price will be annouced shortly and I hope to include the cartridge in the CSIS soon. See page 18 for full details.

DATA : To all those people who have recently sent a mail to JTR (Jakob Voos) of Protovision and are still waiting for a reply. Due to technical problems some mail got lost on the mail server. So please : Who has sent a mail to JTR and still waits for a reply, please send again - to: jaktrip@gmx.de ! Thanks.

DATA : Open News Portal c64.sk now fully active. After the successful completion of the beta phase, the Open News Portal <http://www.c64.sk> now is fully active. This project is meant as an interface to all C64 fans world wide who not just want to enjoy nostalgic feelings with emulators, but also (or only ;) are active on the real C64. So on c64.sk you won't find news like "PC version of C64 classic xyz soon to be published" or "Local Honolulu radio station broadcasts original C64 Remix MP3's at 03:00 a.m.". On this site you will be presented with news about the C64 scene of today, current releases, parties and competitions, new game

projects and much more. The special thing about the Open News System is that everyone can publish his news. You released a new demo or are organizing a party? Without much effort you can let a wide audience know about this. But that's not all what c64.sk has to offer by far. About bigger events you can read in-depth articles aswell. There you also have the possibility to give your reaction

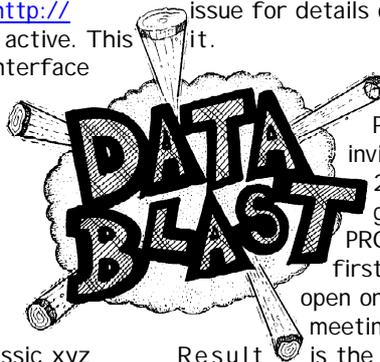
- ideal to give your feedback to a group or write your own view to a party report. Furthermore, the famous C64 Graphics Gallery (best of party compos) is a part of the site and with every visit you can look at one of the artworks as a thumbnail. Another click and you will see the picture in full size. Next to all this there is the direct link to the Forever 8 Bit party page (a party for all 8 bit systems held successfully two times already). If you want to become a regular News Supplier or Article Editor,

please contact the initiator of the project, CreaMD/DMAgic - creamd@c64.sk.

DATA : Check out <http://www.studiox64.com> (remember to hit your refresh button) for the latest version (1.04) of the great utility "C64 Sprite / Charset Ripper" for use with CCS64 save state files.

DATA : **GoDot** is now in the public domain, that is, it is now freely available

to everybody after the author gave the OK to distribute it for nothing. Please see the CSIS pages at the rear of this issue for details on how to get hold of it.



DATA : PROTOVISION invites you to the "Vision 2001"-Party! The C64 game producer crew PROTOVISION for the first time has decided to open one of their internal meetings to the public.

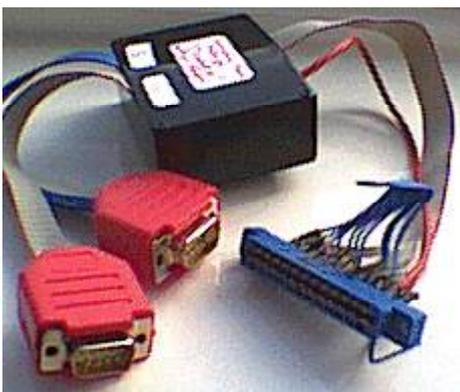
Result is the "VISION 2001", a C64 conference party near Hamburg! The following info should be interesting for you: - The "Vision" is a pure C64/128! Other systems are not allowed!! - Date: Friday, 30th November - Sunday, 2nd December 2001. - Location: Bürgerzentrum Pinneberg - about 7 km north west of Hamburg (can be reached very well with car or train) - Place: There's room for a maximum of 30 people (if there is more demand, there will be more room next year) -Price: Depends on the number of visitors (at least 10 DM, maximum 20 DM for all three days) -Planned: -Demo Competition (without any limitations) -Graphics Competition (-" -) -Music Competition (-" -) -Game Competition (-" -) -some kind of Fun Competitions (Bombmania tournament etc.) Everyone who submits a (serious) contribution to the competition will get an original game of his choice from PROTOVISION! - You will have the opportunity to directly and personally talk to the developers and makers in PROTOVISION. You can take a look at the current Protovision projects like Metal Dust, Pac It, It's Magic 2, Reel Fishing and more. More information you can find on the (simple) "Vision" site: http://members.tripod.de/Vision_C64/vision.html (only in German). Questions? Ideas? Submit compo entries? Mail to Courage/Protovision at offler@freakmail.de !

DATA : GEOS Programming Seminar in Chicago Sent on Tuesday, October 02 @ 18:11:59 CST GEOS From the COPS mail list, Randy Harris writes: At the Chicago EXPO, it was announced that a GEOS Programming Seminar would be held in Chicago. The date and location have just been set in stone. The cost will be minimal, to be announced. You will need to bring a complete working GEOS/Wheels setup to program on. If that is not possible, let me know and I will try to accommodate. The items needed which you should be able to get from Maurice Randall in advance or at the seminar: - GEOS 2.0 (64 or 128) - Wheels (64 or 128) - geoProgrammer - Hitchhiker's Guide to GEOS

Further info and details will be announced soon. DATE: Saturday October 20, 2001. TIME: 9:00 AM CST - 5:00 PM or later. WHERE: East Side Bible Church, 10524 Avenue N, Chicago IL 60617



DATA : After the mega hit NEW-COMER, PROTOVISION presents you now: The second hit game of the year: * IT'S MAGIC 2 * It did take longer than originally planned, but now It's Magic 2 is officially available and can be obtained at Protovision as the one and only original version. The price is just as low as 25DM / \$15 / £10. Everyone who wants to order this new C64 highlight and thus wants to support the developers, just go to the Protovision homepage <http://www.protovision-online.de> and inform yourself about the game and how to order it in the corresponding section. Direct link: <http://www.protovision-online.de/games/itsmagic2.htm> There you can convince yourself of the high quality of this second part. Visit our main site <http://www.protovision-online.de> Or the secondary page: <http://home.t-online.de/home/bundyman> with lots of additional infos and screenshots! See page 10 for a brief rundown.



DATA : The CS-4player adaptor has now reached the 'fully working' prototype stage (pictured above). Although it doesn't look too pretty just yet - it does work! Anybody who came to the recent '2001 Revival Show' in Crewe will know that! Here comes the crunch! I need six pre-orders before I can give the go ahead for the final building. The finished product will not have any visible wires - it will be a box (similar to the one in the picture) with a USER port connector in

the front and two joystick ports in the top. I need six people to send me £5 as a deposit to guarantee a final price of @£20 (£5 + £15). Unfortunately, until the go ahead for the job is given, a final cost per unit can not be agreed. Only when the tools are set up to make these units can a final true cost be published. If 'I' think the cost is too great (@£25+) then the project will be shelved and all deposits will be refunded. Anybody who sends in a deposit will of course get the option to pay the increased charge or get a refund.

DATA : Rumor has it that **Commodore Zone #16** has now just sent out the most recent issue of its fine fanzine, unfortunately it is also the LAST !!!! According to the information at the Binary Zone web site this is definitely the case as Kenz is moving onto pastures new although, he does say that he will continue to



support the Commodore though.

Judging by the amount of **Bouff** stuff on the site and in the magazine it appears that is the case! Farewell CZ!

DATA : Lights! Camera! Action! Cut! Print! The videos of the September 8 Chicago Commodore Expo are finally now ready to be distributed. Almost 4 hours of intense C= action on 2 videocassettes! See all your favorites — Jason Peterson, Greg Nacu, Dale Sidebottom, Randy Harris, Maurice Randall, Jeri Ellsworth, Mark Seelye, Jim Butterfield, and others. See the demonstrations of a Commodore in a PC case, JOS (Jolse's Operating System that multi-tasks under the 16-bit SuperCPU), Postprint printing with a Postscript printer, Postscript printing onto a t-shirt, and the CommodoreOne. (Sorry but I got there too late to tape Nick Coplin's demo of the 64HDD.) Listen to the sage words of Maurice Randall describing his travelling museum of CMD prototypes and to the Commodore reminiscences of Jim Butterfield. (Hey... if you have a good pause on your v.c.r., you can freeze-frame those CMD prototypes or those displayed photos of Maurice's trip to CMD.) Gaze at Joe Palumbo's selling table replete with brand-new Super

Snapshot v5 cartridges for sale. View the happy C= attendees at Shooter's Buffet Restaurant. If interested in purchasing the 2-videocassette package (NTSC only) of the Chicago Commodore Expo 2001, contact me for more information. Robert Bernardo, Fresno Commodore User Group. *If anybody wants to see these videos then I can copy them for you for the cost of the cassette and postage (@£5 - UK). Please send all orders to the usual CS address - ED*



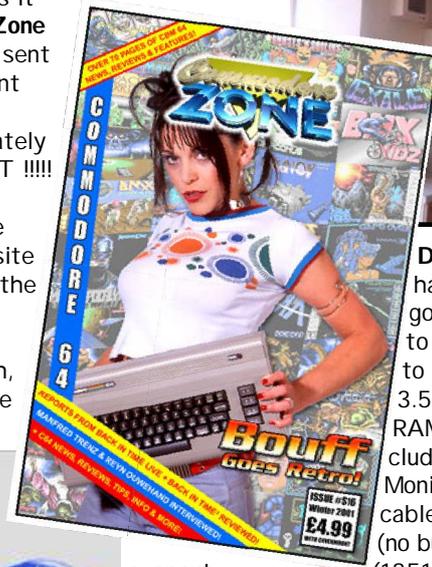
DATA : Danny Tod (above) has left the Commodore for good. Before he goes he wants to sell on his great hardware to the readers of CS. FD-2000 3.5" 1.6Mb drive - £20. RAMLink w/16Mb - £60 (includes battery backup). 1901 Monitor - £50 (inc. both 40/80 cables + inc. p&p). Action Replay (no buttons) - £1 SmartMouse (1351/Joy/Clock) - £5. Joystick -

£5. There are some real bargains there so get in touch before they go. 9todd25@solent.ac.uk.

DATA : All good things must come to an end. Gaelyne Gasson, famed writer of all things Commodore as it relates to the Internet, is auctioning off her last copy of "The Internet for Commodore 64/128 Users". This is her third edition, and there won't be an updated fourth edition. The final price was \$202.50 !!!!

DATA : Happy new year to all of you from PROTOVISION. Announced today - It's Magic, the predecessor of the hit It's Magic 2, can now be downloaded for free from the Protovision website! The game is now declared public domain. Protovision wishes you and the C64 a great new year 2002! <http://www.protovision-online.de/games/itsmagic.htm>

DATA : According to the book, the Guinness World Records 2001, the "most successful computer" is the Commodore 64. Quote — "Approximately 30 million Commodore 64 computers were sold between the model's launch in 1982 and its commercial decline in 1993. The computer contained 64K RAM, 16K graphics, and 16K sound." In the hardcover edition I have, there is a photo of the brown, breadbox C64 along with a



brown 1541, but some kind of black monitor (which is unidentifiable due to the lighting in the photo).

DATA : CLiPS and JOS join forces - WiNGS is born! Officially announced on the recently held VISION party: In an effort to develop an efficient and feature-rich operating system for the Commodore 64 with SuperCPU, Protovision strikes back with another major breakthrough: The two formerly competing products, CLiPS and JOS, now join forces! PROTOVISION brought together the main coders of both systems, Jolse Maginnis (JOS) and Chester Kollschen (CLiPS), who virtually shook hands on committing their power to one common project! This means more efficient development, a bigger platform for applications to base on and finally a much better final product for the C64 community. JOS already features: Unix/QNX like architecture, Microkernel, Message Passing, Multitasking, mountable devices, IDE64 support, digidriver and MOD player, modem driver, working TCP/IP stack, PPP dialer, IRC client and much more.

CLiPS already features: Plug and Play hardware detection, CMD drives native support, extremely fast and powerful GUI, Multitasking and Multithreading, file browser (Pathfinder), Drag and Drop, Basic Shell, configureable desktop and much more. Now imagine the BEST OF BOTH WORLDS: The new operating system: =WiNGS= is born and will take you and your C64 to new heights. Visit these websites for more information: <http://jos.sweetcherrie.com>
<http://www.clips64.de>
<http://www.protovision-online.de>
<http://www.vision64.de.vu>

DATA : The **CS Libray CD-ROM** is proving quite popular and is now stuffed with @490mb of material. At only £20 and free updates until it is finished, it is very good value for money. There is only a limited amount of games on here so this is for the serios/GEOS users of you out there.

DATA : Another CD-ROM from CS sees the revival of the **CS Tech2000** issue complete with all the disks. This version is in PDF format (you get Adobe Acrobat Reader v5 on the disk too), the disk images are .d64 and .d81 with the PC files just being 'as is'. The mini CD-ROM (3") is sell in for the low price of £5. The usual address and payment details apply.

DATA : If you go to - <http://amiga.emugaming.com/> - you will see information on the 'new' face of the Commodore name, the 'evolution'. Is it a

Commodore or not ? Who knows ! The site is way oput of date and I certainly haven't heard anything about this one, have you ? The specification suggest is is nothing more than a low end PC clone with a bit of Commodore compatibility thrown in for good measure, see what you think :-



- > Operating system, equipped with graphical user interface (GEOS ?), located in ROM.
- > 200 MHz - 500 MHz CPU
- > Expandable to 512 Mb
- > Commodore-compatible 6502 on-board
- > TV or SVGA output
- > 56k modem or Ethernet
- > Web browser E-mail
- > Basic programming language

DATA : **LOADSTAR** is alive and well ! Next issue will see a freebie disk for you and also the lowdown on the new editors - Dave & Sheri Moorman.

DATA : More offering from the **CSIS** stable. Due to me meeting a 'very nice man' recently, I can now offer anybody ordering a **SuperCPU** or **RAMLink** - a fully max'd up unit complete with **16Mb for FREE** ! Thats right, you buy the unit and I will put 16Mb of memory in it for absolutely nothing at all ! See page 39 for more details.

DATA : There is currently a lot of retro stuff going on and as most CS readers own more than just commodores, I thought that a page in each issue dealing with other retro computers was in order. What do you think ? CS37 will be carrying a feature on a souped up **Sinclair ZX81**. If it goes down well there may well be more features later on.

DATA : The New Dimension is holding a JokeTro compo. You can go to the usual web site address or read on. Basically the compo is to build your own joke cracktro. This means that you have to make a really cool intro screen, but the name of your group has to be a joke - as well as the group's

members. It would be more fun, making fun out of another cracking group or then again, maybe you have your own ideas. When you submit a joketro for the compo this is how to score the highest points and earn a mystery C64 star prize (or a joke star prize) :

- We want to see good quality intros
 - Scrolltexts or other text to appear
 - Link any odd thing to your intro (Could be a SEUCK game)
 - Music is to play in the intro, so it could be your own or a music rip
 - Your joketro must be highly amusing
- The submitted jocketros will be judged by Richard Bayliss, The Overkiller/Hokuto Force (If he wants to) and CreamD of DMagic. We'll make an agreement to see which intro we think is the best. And the winner will win a C64 prize, being sensible or silly. You will have to wait and see. The closing date is 27th February. For more information, visit <http://tnd64.cjb.net> or then again maybe you should visit <http://www.angelfire.com/retro/dalaxatives> (It used to be the Da Laxatives web page, but now it is the JokeTro web page) :)

DATA : The next Commodore show in the UK will be at the same venue as before - The Limelight Club, Crewe. Full details will be posted out as and when they are available. It WILL be bigger this year, it WILL be better this year and there WILL be more people attendng and displaying items. It is hoped to also cover version 8-bit formats too. So, something for everybody there I think. Go and tell all your friends and lets make this a day to remember for all of us !





WANTED : Playdays on disk (no tapes please) for c64 or Amiga 600/500. Also require cartridges for gamegear. Will buy or swap for commodore software.

Send details to J.Nixon,
1066,Leek new road, Stockton Brook,
Stoke on Trent, ST9 9NT
e-mail : johnnixon@bushinternet.com

HELP : Hello, perhaps you can assist...
Would you be able to give me the dip
switch settings for a 3-switch Commo-
dore 1670 (US) modem? I would be
deeply appreciative if you could assist.

Raymond Sirois
e-mail : rsirois@stny.rr.com

FREE : I have 3 large cartons of
hardware, disk drives etc., and software,
tapes and disks including a selection of
wargames - my personal hangup. These
are all offered free to a good home but
must be collected. I stay in the Glasgow
area. Collector buys the coffees!
email : Jamhor@aol.com

FOR SALE : I have a lot of hardware to
sell ,2 harddisk,2FD -2000,4 x 128d,
drives and much more.

Contact : Andre Strubbe
Zuidlaan 53. B8370 Blankenberge
Belgium tel 003250426488

CommodoreOne

Hi all,

I have some bad news about the C=1. While Courtney and I were driving our rental to the airport we stopped at gas station in South Chicago. As I pulled off the freeway I said "ooh this area looks bad", but stopped anyway. Courtney got out and started fueling the car. It was hot in the car so I decided to get out too(leaving the keys in the ignition). While I leaned against the rear fender a young black man ran up and jumped in the car. I ran to the door yelling "Hey!" and tried to open the door, but he had locked the door. I banged on the window a few times and turned to Courtney and said in a dejected tone "Pull the gas nozzle out. He's stealing the car." She pull the nozzle out just in time as he drove off. I grab the radio antenna as the car went by and ripped it ff(guess I figured I could stop a 200hp car with my bare hands) and with a few swear words I threw it at the back of the car as it drove away. Courtney ran to the gas attendant and told him that our car had been stolen and that we needed a police officer and in a dead pan tone he said "Well I guess you need to find a pay phone then." We ran across the street where I thought I had seen a police officer directing traffic, but he looked at us stunned as we started telling the story and giving license plate numbers. After a few seconds of this we asked him if he was going to do anything about it and he said "I'm only a crossing guard."

We found a pay phone in a sleazy restaurant full of gangsters and called the police. It took about 30 minutes for an officer to arrive and take down our info. He did a real good job of emphasizing how stupid I was to be there and to leave the keys in the car. He said he would stick around until we got a cab, but none would come pick us up in that neighborhood so he took us to the police station after waiting 45 minutes. We made it to the airport only to find out that Courtney couldn't board her flight without the paper ticket and mine had already left.

Luckily Courtney still had the credit card for the gas that we could use to get home. To buy a ticket to back to Oregon on the spot was \$1400 and Courtney's was \$200 to Florida so I decided to go spend more time with her then find a cheap flight home later (which I ended up taking a horrible bus ride after the terrorist attacks...long story). They recovered the car 2 weeks later and there was nothing in it. We lost all our cloths, money, soldering station, VOM, all C=1 prototypes, Wheels, turbo232, a years worth of hand written notes on the c=1, Courtneys SX64, rare C= bubble jet printer, Warp Speed cart. The worst thing to lose was the notes I had and the hand drawn schematics which have set development back a little bit.

The C=1 prototype was almost at the end of it's usefulness, but I still needed it for new SID and fix the keyboard controller.

Very depressing. :(



Anybody recognise this device (the bottom one, **not** the Expert cartridge) ?
Have you got one ?
What does it do ?
Was it any good ?

Perhaps some good CS reader would like to say a few words on the subject ?

There is another 'Rare Guide' on page 26, go on then,
off you go !!!



Hi everybody, back for more I see !!

Lets roll.

(Extracted from an e-mail by Roman Chlebec)

Ok, the Commodore scene link-button is now changed, btw, I've found a photo from this year's Forever party in SK. I was quite surprised that I was holding Commodore Scene mag in my hands ;-)
Cool.. I hope you would like it ;-)

Roman

Well Roman, nice to see that you have good taste ! - ED

Hello Again,

I am rather interested in a C64c, just so it's say'd. But, I don't know how much it will cost to get it sent from the UK to Norway.

So ... I am wondering if you know or can find out what the price wold be to get it sendt to Norway ?

One more thing.....

Do you have any "Original" cartridges ? I am rather interested in the FastLoad cartridge among others.

Thank you for your time.

André Pedersen (Norway)

Well Andre, the good news is that I can supply you with all the items you need. The bad news will be the postage costs I'm afraid, they will probably be quite restrictive. The C64c's I have in stock and will not be a problem. As for the cartridges, well, I have a couple but not too many so I will supply you with a list of available cartridges at a later date. (A more in-depth reply was sent - ED). It is always nice to hear from users from further afield than the UK, infact a large part of the CS & CSIS business goes abroad. We aim to please :-) ED

Dear Allan,

After I had spoken to you last week, when you mentioned that you intend to compile a newsletter from within geoPublish to be distributed in between the magazine deadline dates and that after not using the program for some time, would have some difficulty in getting back into the swing of how things are done.

Well, I remembered a GEOS program I was given by Ian Swain of Fleetwood, which produced newsletter far easier than geoPublish. I looked through my disk boxes and found the program and have supplied it for you. I hope you can make use of it.

On the reverse side of the disk there are some articles which you may find of interest, together with the instructions for the newsletter program.

I hope you can make use of the program and the bits and bobs on the disk.

Best regards, David Walker

Firstly, thanks for the disk and I will look through the contents when this issue is finished. The alternative to geoPublish sound fascinating, however, I doubt that any program comes close to geoPublish as this is regarded as the Commodore's finest hour in terms of programming ! The only downfall of geoPublish is it's speed in operation - because it is so intensive as regards size and functions, the down side is that it is really slow in use. This has now changed with the advent of the SuperCPU though and it is



now, once again, the holy grail for DTP on the c64 !

I look forward to reading the articles and also sampling the program. Thanks for the help and support.

Cheers - ED

Allan,

Thanks for the back-issues of CS. I am seriously impressed with the work you all do! I tried the cover disk, but I am NOT a GEOS person, and the Metal Warriors brought up a great cover screen, then went poof - (I used True Drive emulation on VICE).

Anyway, I was thinking, concerning the coverdisk (not quite sure why you call it a "cover" disk) — perhaps we could rip down an issue of LOADSTAR to become a 1 Disk, 2 sides for a coverdisk for distribution with CS.

Actually, since I don't do GEOS, I am very interested in a source of ready-to-go software we may have not seen over here. I am just thinking while I am typing, but perhaps we could use one side of GEOS stuff every other month, and provide a "front side" for you.

What do you think.

Dave (David Moorman - editor)
LOADSTAR is ALIVE !!!



Hi Dave,

Well, were do I start ? Firstly I would like to offer the hand of friendship and say that I will do all I can to help you and LOADSTAR, I am sure that the feeling is mutual and that we will be able to promote each other in a helpful way.

Okay then lets talk coverdisks - I believe that is a UK based term that I 'think' was only used in England (and still is) and it refers to the disk that is supplied with a magazine. In the early days of computer magazines (1980's) they used to stick the disks to the front cover with selotape in a bid to sell the magazine with a 'freebie' attached to it ! - hence the name (front) coverdisk, I hope that enlightens you a little ?

As for the VICE emulator, well come on Dave, this a disk for a C64 ! I hope you have tried it in a real C64 since then ? To be honest, I also use the VICE emulator too and I find it very good but I give no guarantees that any disk supplied with CS will work on an emulator, sorry.

As for using LOADSTAR as a coverdisk for CS, that is a great idea and will be making an appearance with the next issue along with a rundown of LOADSTAR and hopefully an interview session with you too. As for supplying you with GEOS material, please feel free but most of the stuff comes from the USA to start with so I doubt we will be able to offer you anything new in that department though.

Anyway, we look forward to hearing more from LOADSTAR in the future, cheers Dave - ED

Dear Allan

Finally I have received commodore scene 34/35. Thanxs a lot for the mags, as usual really great stuff. Was a pity that the first issue 34 get lost... but thanxs a lot for re-send it again.

I want to talk about another subject now. As you maybe remember I have a QUICK DATA DRIVE. Some time ago you

sent me a wafer. But I need some more. Do you have some? please send me an e-mail if you can get some and how much they will be? Thnaxs a lot in advance.

I'm organizing a party here in my city, it is a multisystem party but I'm doing also a Retro Exposition with all kind of old computers. As well as we are projecting on the big screen 64 demos and some more stuff. I'll send you some photos of the event after the party.

We still working on the game REVENGE, we have some musics already by Andrew Fisher also Alex Martin a guy from Spain is doing some more for the game. But we are looking for some help with the graphics.

Nothing else for this time... Keep going with that great mag...

Commodore 64 rules forever...

Yours Domingo Alvarez,Tenerife

Hi Domingo,

You are most welcome to the magazines, after all, they are yours and you did pay for them - just a shame that the first ones got lost !

As for the Quick Data Drive - well, these are turning up all over the place, not quite the 'rare' item that it once was me thinks ! Sorry, but I don't have any spare wafers to let you have unfortunately.

I look forward to sharing the pictures of your party with the readers of CS.

Sounds like Revenge is coming along nicely, we are all waiting for it to arrive with great expectations.

Keep up the good work and I look forward to hearing from you again soon - ED

Hi all,

December 14th of this year will be my last day at CMD. It's been a long, sometimes bumpy but often rewarding journey. I'd like to thank those of you whom I've considered distant friends for the time we've spent together. I'd also like to thank the community as a whole - without those of you who have supported the Commodore platform for so long, so many great memories would have never been.

The first big Q-Link bash. The look of appreciation on Dave Haynie's face when first saw the CMD HD and blurted out something about how he wished Commodore would make products like that. The night in New York where I sat having drinks with Gail Wellington, never realizing until much later that the guy at the table buying me drinks and telling dirty jokes all night was the father of Pong. The moments in the wee hours of the morning when the silly things that pop out of your mouth are the things that actually end up making a product work. All priceless. And the people. I think back not only to meeting Jim Butterfield, Jim Oldfield, Fender Tucker, Lou Wallace, Fred Bowen, Lauren Lovhaug and a host of other Commodore luminaries... but also to the user group meetings in Chicago, New

York, New Brunswick and Phoenix, and the shows in Pennsylvania, Toronto, New York and Los Angeles where I met so many other Commodore users, all just doing their own thing. Those are the folks that had the most impact on my input to our designs. My sincere thanks to all those who have so warmly befriended me in these brief encounters over the years. And to Gaelyne, Maurice, Shari, Jim, Jason, Steve and the rest of the original Commodore World gang, words can't express my gratitude for all your efforts and your friendship over the years.

So I'm moving on, but not so much because CMD no longer produces Commodore products, but simply because I don't see myself doing the 'local PC repair shop' thing for the next few years. I'm a developer at heart, and there's little of that to be done at CMD these days, aside from some occasional web work. So I've taken a position as the Web Programmer for Hampshire College, a liberal arts school located in Amherst, MA, where they've just committed to a major update to their www presence. I'll still be doing some web programming for CMD here and there, and continue to develop web and other programming projects with Del Padre Visual Productions (take a peek at delpadre.com if you're interested and have a PC with an up-to-date Flash plug-in). For those of you who may wish to contact me in the future, I suggest using my dcotton account at dougcotton.com. I'll keep some forwarding on some of my CMD accounts for a little while, but eventually those will be phased out. Again, thanks to everyone in the community. I'll remember this era of my life fondly for all the years to come.

Doug Cotton

Well,

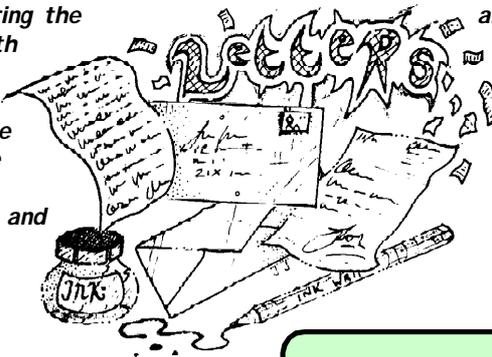
Rather a sad letter to end this issue on but as Doug is/was one of the leading lights in the Commodore history annals then I think it is well deserved.

Doug will surely be missed by all concerned and now that CMD has also left the market it is now, more than ever before, down to us as enthusiasts to keep the Commodore name alive.

As most of you know, Maurice Randall is now producing and improving the CMD range of hardware/software and the best thing we can do to support him and ensure our Commodore's have a long and fruitful life is to support him by buying the new stuff he brings out.

It's all down to how much we care !

The Commodore future is now ours - ED



- READER QUICKIES ! -

RQ - Can you make a photo scrap that is larger than the GEOS viewing window? I seem to remember doing it before but can't recall how.

Reply - What you need is a utility called 'Paint-Scrap v2.1', I believe 'Big Clipper' also works quite well but I don't have it.

RQ1 - What is an REU?

Reply - REU stands for Ram Exspansion Unit and it plugs into the cartridge port to increase the memory of the Commodore to run programs faster. Sizes available are from 128k to 16mb.

RQ2 - Do I need one?

Reply - That depends on what you want to do. 99% of programs don't need or support an REU at all. The modern OS's require at least 256k REU as a minimum, most will 'shine' with 16mb (such as Wheels, MP3, etc). The new generation of OS's require a large (1mb) REU AND the 20mhz SCPU.

Tom, the little tomcat, has gained a lot of experience already in his first adventure (I't's Magic <itsmagic.htm>), his journey to the outside world. After he returned to the Dream Islands and was celebrated as a great hero, he since lived happily at his master's place, the wise wizard who taught him being a good magician as time passed.

Now the Dream Islands - there, all animals live together peacefully - are in danger. And what Tom doesn't know yet is that he himself is conjuring up this danger by mistake! More about this you will get to know in the intro... But one thing is for sure: The Dream Islands will be pushed into chaos and the only one who can save them is our little Tom!

I't's Magic 1 was already nice, but I't's Magic 2 tops it by all means and is on its way to become a true C64-classic amongst the jump'n runs. In the picturesque intro you are introduced to the background of the game. A savable highscore and a fastloader are also onboard, but as the loader can also be disabled, the game perfectly runs on your FD-2000, HD or RAMLink <<http://www.cmdweb.de>>!



skeleton in level 1) that enhances the overall quality of the game graphics significantly.

By the way, at the end of every level a special guard is waiting for Tom and he will not give up his territory that easily. Luckily also these beasts are vulnerable and can be eliminated. But until this point there is a long way to go, for every world is divided into 6 levels! One level can only be completed if all the diamonds were found and collected!

Hint: In contrast to Giana Sisters, I't's Magic 2 scrolls in both directions - so you can always go backwards. This can also be very helpful while you abscond away from your enemies!

I't's Magic 2 awaits you with an overwhelming amount of lovely created details: Bridges give in to Tommy's weight... Snails from time to time leave a trace of slime behind them... Vulcanos spout around with rocks... Unbearable flames can not be defeated even through magic... Cooperative owls transport Tom

to places that otherwise are hard to reach... and more, and more, and more!

The game can be ordered for only £10 here at CS !

For questions: mail to Jakob Voos <<mailto:jtr@protovision-online.de>>)

I't's Magic 2 is shipped on a 1541-disk, but you can easily copy it to your FD, HD or RAMLink and run it there. A small manual is also included in the package.

IMPORTANT: Please always state for which C64 version you need the game - Europe/Australia (PAL) or USA/Canada (NTSC).

For banking transfers:
30050110 Sparkasse
Duesseldorf, Account: Jakob Voos 0061241907

All information in this article was taken from the PROTOVISION web site.



Tom and his master



One night...



... it happens

While in I't's Magic 1 Tom had to proceed against his enemies with shots and had to find magic items for finishing one level, now in I't's Magic 2, he has advanced his magic skills so far that he can just vaporize the enemies by jumping onto them, just in the very style of Giana Sisters! Additionally there are of course magical helpers like invulnerability or time stoppers that ease Tom's life in the fight against the occupants of Dream Island.

In the game there are five worlds in total, each with an own, precisely drawn multicolor graphic set. Also in contrast to its predecessor I't's Magic 2 provides music during the gameplay, two compositions in every world.

As hardly any other game, I't's Magic 2 uses the ability of the C64 to display also hires elements in a multicolor charset. This way you will be able to discover hires elements embedded in the levels (like the dinosaur



PART ONE

Project SX-64

Commodore SX-64 / FD2000 / Hard Drive / Ram Expansion Unit / CD-ROM / jiffyDOS

Prologue

After all the bad luck that befell me recently I thought it was about time that I had a bit of good luck as well. Thankfully, I didn't have to wait too long.

Recently, whilst doing my usual rounds on eBay looking for rare Commodore items, I came across an American SX64 which had been adapted by a medical firm for use 'in the field' during the late 80's / early 90's (see picture to right). To top it all off, there was only 3 hours left of bidding time and it was still selling for an unbelievably low price. I bid, I won. I was now the owner of something that I had wanted since I first saw one at Butlins (Skegness) in the very early 1980's, what's more, I only had to pay £37 for it - what a bargain !

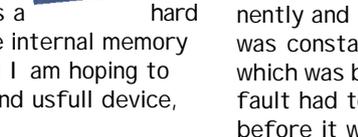
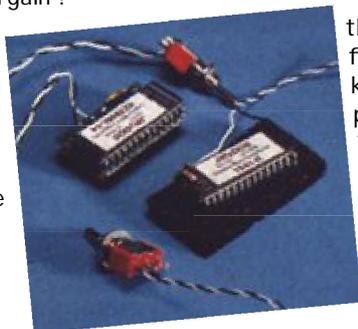
After a short while, it was delivered to me.

The SX64 was for its time a true revelation, but lets face it, even a portable Commodore with one drive is simply not enough in this day and age, so, by fitting modern devices such as a hard drive and possibly some internal memory and a 3.5" drive as well I am hoping to have a truly portable and usfull device, but more on this later.

With all this in mind, I got about assessing what needed to be done to get it back into tip top working condition before I finally decided what enhancements could be applied.

Stage #1 (Assessment)

The first thing to notice was that it was in very good condition for its age, a little cleaning would bring the casing back to its former glory, but that will be done later. Removing the keyboard from the front revealed a keyboard in very good condition and the internal surfaces were also of a very good condition, not even one scratch on the small 5" monitor. The main feature that sprang out at you when the case was opened was the addition of 4 medical inputs in what 'was' the spare drive bay above the internal drive (see main picture). It was then that it became



apparent that the keyboard-to-computer cable was missing so I couldn't fully test the computer yet.

Next up was powering up the beastie and seeing if it was functioning properly (minus the keyboard). After locating a power converter (USA use 110v) I plugged in the mains lead and powered up the SX64. The good news was that the monitor was working and had lovely vibrant colours, which was good but the drive light stayed on permanently and the drive motor was constantly spinning, which was bad. The drive fault had to be rectified before it would function again - damn ! A closer inspection revealed that the cartridge port had been sealed up (possibly something to do with the medical apparatus) and would need to be reinstated to make it fully functional again.

So the first steps to take to return this SX64 to its original state are as follows :

- 1) Locate a new cable for the keyboard/computer.
- 2) Get the drive working - if possible.
- 3) Remove the medical apparatus and relocate the cartridge port - if possible.

Stage #2 (Former glory)

Okay, first up I needed a new cable for the keyboard. My first stop was eBay (again). I was not hopeful as SX64 machines (complete) were few and far between so the chance of locating a cable were quite literally nil ! You can imagine

my surprise I came across a guy selling not one but two leads and three spare keyboards ! I was not going to let this pass me by. I bid high and fast - I won all items but the cost was great, but it was worth every penny.

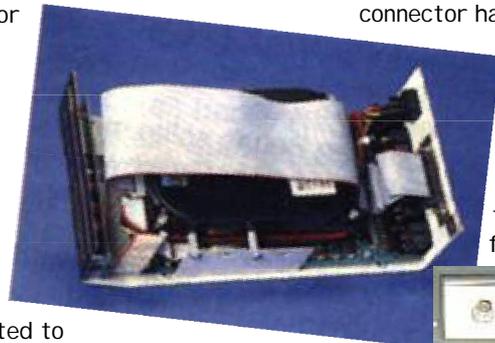
So, with the cable safely on it's way, I could set about removing the medical equipment.

Removing the casing of the SX64 is quite straight forward (don't forget that I an doing this 'blind' as I don't have a manual for it). Simply remove the side strips and then all the screws for the cove and it slips off nicely to the rear.

Now I could see inside.

My initial reaction of 'oh, my goodness, what have they done ?', soon fell away as I looked closer and realised that the alterations had been done professionally and without any damage to the original machine. Looking at the cartridge port from in side the top cover I could see it had simply been taped shut to prevent accidental opening. Once removed, it worked fine, one less job to worry about !

Unfortunately I forgot to take a picture of the inside of the machine as it originally was so I hope this brief description will suffice : the cartridge



connector had been fitted to the rear of 'glovebox' (above the 1541) which had a custom built board attached to it with the front terminat-



ing in four BNC connectors (see below). Where the cartridge port connector used to sit there was now a transformer which powered this unit, two fly leads from the PSU were tapped directly into the rear of the main power socket via scotchlok connectors - no power drain from the computers PSU and no damage to any internal components - very clever.

Simply unscrewing all these components and relocating the cartridge port in its original position made it fully functional again which confirmed after a brief test with a few games cartridges.

Next issue : SX64 components identification, 1541 drive fault finding & repair, full computer testing.

Do you remember the excellent Metal Warrior series? Do you remember Electronic Harem productions? Well, exclusively for Commodore Scene, I have written an EMail Interview with Cadaver, after hearing the sad news that he will no longer be programming any more Commodore 64 software. He will of course be checking out the Commodore 64. So, on with the Interview, and then will be my final comments. Cadaver has kindly answered all my questions :o)

When did you first start programming software on the good old Commodore 64. How did you feel when you were programming various programs?

I think I started with Basic in 1986. At first it was very exciting to "command" the machine, but gradually I began to notice the slowness of everything. So learning ASM in 1987 or 1988 was the next step.

What programs did you write. Which ones did you like the best, and which ones did you like the least?

From the basic-era, a game where you avoided brick walls which came scrolling at you (achieved by PRINTing at the lowest screen row) felt quite like an achievement at its time. Also one of the rare ASM programs I got finished in those times was a game called Sniper where you shot men at windows with a sight. That felt quite good too. Did some music routine tests & small intro-like programs as well. All unfinished crap (many disksides of them!) was least favorite, I guess :-)

Note: in 1991 I stopped all C64 programming experiments, to be continued in 1998...

What gave you the ideas creating the hit 'Metal Warrior' series, as added to the cover disk of Commodore Scene and Commodore Zone?

Originally that game existed on Amiga, I did it in 1993, inspired by various sideview shooting games on the Amiga, and also by Shadow Of The Beast for the more adventure-like parts. It played quite like the

C64 games, with scrolling, shooting & talking to people. It circulated among my friends, but it can't ever be released on the net because it'd be total humiliation for me (I was 15 when writing it, so...well...you could

call it immature) **(Not really - Richard)**

When I got into PC programming I tried to port/remake it a couple of times. But the attempts were always unfinished. In 1998 I got hugely interested in emulators (no working C64 anymore, at that moment) and started also cross-assembler experiments on C64. And from there came the idea of trying a C64 version, with total rewrite of the plot/characters/locations/etc, except that the main character is still a "metal musician" :-)

(I have to admit, programming Metal Warrior really worked out well - Richard)

Originally the idea was to do only one game and not expand it as a series. But because there were quite many interesting char-

acters in the first part continuing the story felt quite natural.



Which Metal Warrior game did you like the best?

Hmm...each is good in its own ways :-)
Part 1 is very effortless to play although simple Part 2 has maybe strongest mood and Part 3 is quite varied in gameplay and pushes the machine quite close to limits

(at least in memory use terms :-))

But if I have to pick one I pick part 3 because of the programming achievements. **(Despite MW3 being really difficult to play, I really found the game really addictive ;o) - Richard)**

You were working on a game called 'Detective Takashki' for the good old Commodore 64. What caused you to lose interest in finishing the game? Was it too difficult to create?



I initially reused too much code from the Metal Warrior series, including the scrolling which would only scroll in 8 directions with either speed 1 pixels/frame or 2 pixels/frame. So, although it was going to be an overhead game, it felt too much like coding another MW.

Also I created a very complex plot for it, full of ninjas, demons, yakuza's etc. :-)
In the end it would have been a massive pain to implement. For some time I thought of stripping the game down, making it even a simple level-based shooter. That was in the summer. Because of various music projects I didn't have so much time for it, and it really felt like a pain in the a—

(*censored* - Richard), because I had talked about it too much on the Net. Finally I had to totally cancel it.

Also one reason which I couldn't reveal at the time was that I got the plot idea for one more part in MW series, and that probably also ate away my inspiration.

What programs did you use to program your releases, how did you pack everything together to make a multi-loader system on disk?

- * A "makefile" script run with any C compiler's make utility to perform the build process fully automatically.
- * DASM crossassembler
- * Deluxe Paint (MS-DOS version) for all bitmap graphics
- * Selfmade sprite, character and blockmap editors (quite like SEUCK editors)
- * SadoTracker (own editor) for music in some of the releases
- * Various self-written small utilities, including a simple packer.
- * C1541 (part of the VICE emulator) for compiling the D64 diskimage, later replaced by a custom made utility for MW3.
- * PuCrunch by Pasi Ojala for very efficient packing in MW3

How did you feel when you saw that your games were cracked by various crackers (As we know crackers do it for points)? Were you upset, angry, or just didn't care?

As the games were all meant to be spread freely, I was purely happy & excited to see them "cracked", particularly with trainers installed. But what I wasn't so happy with was that crackers would get pissed off from me releasing quite many fix-versions (particularly MW3).

Of course one could say "test more thoroughly before release" but note that for example MW3's source code is 950 KB total, so it's not the easiest thing to verify correct operation, particularly when you have to go thru the whole game many many times :-)
It WAS tested a lot.

What were your best memories coding on/for a Commodore 64 computer?

Hard to say...maybe getting the first own spritemultiplexer running correctly?

What was your worst memory on/for coding a Commodore 64 computer?

Not so specifically worst memories, but the memory-use optimisation for MW3 was quite infernal. When I got it finished there was no room for music so I had to find a way to squash all runtime code & data by about 3KB...

Escape From New York was originally written from the Crap Game Compo 1999. What inspired you to do this sort of game?

Seeing other crap entries, also from the Spectrum crap game contests of past times.

You also written a program called 'SadoTracker'. How many people used 'SadoTracker' to compose their music? How was the music editor - compared to the DMC Player V4.0?

No idea about how many used it. I wrote it mainly for myself but at least it doesn't have many cryptic commands - and has an easily accessible help screen :-). The music player is not ultra-sophisticated and doesn't allow all kinds of weird effects but I was most concerned with sound quality and rastertime efficiency, as the musics would be used in games :-).

I actually never learned to use those other C64 editors, except "Megasound" by Jori Oikkonen, around 1990 or so.

Another game, which you had written for the Crap Game Compo, was called 'Advanced Action Movie Simulator'. What inspired you to create this game? What did you think of the overall result of the game?

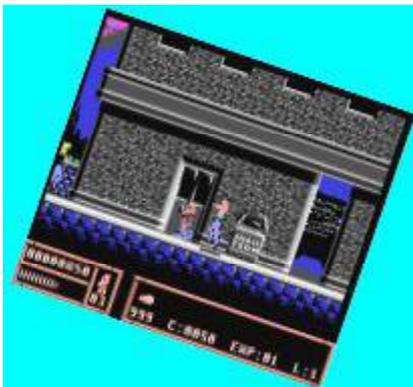
Heh...I had sick ideas for CGC2001... I was for example thinking of creating a "Ocean-like movie game" from some recent movie like Mission Impossible 2 (actually it inspired a few levels in the game), fully authentically including good graphics (like the black-singlecolor sprites on top of multicolor sprites) but totally crap playability & insane difficulty etc. But then I went for a simpler and low-tech approach: blaspheme all movie license games of past, present & future.

I think it's quite successful in its crapness, maybe the "romantic" part is most cruel & unusual for the player.

What was your first C64 game you ever bought? Did you like the game? Was it Cassette or Disk, what loader system did it use? Did you like the loading system.

Wizardry as a disk version. I think it used the standard KERNAL load routines so it loaded slowly & reliable. No loading music & pic :-). (Quicker than those dreaded Cyberload things on the Light Fantastic games - Richard)

Did you ever buy Commodore 64 magazines in the past. Like Zzap64, Commodore



Format, etc? If so, did you buy the magazines for the cover tape, or just for reviews, etc? I bought mine for the Commodore Format reviews and mainly for the cover tape, with cool games.

I read the finnish ones, Mikrobitti & C-lehti.

Did you ever own a C64 utility called SEUCK and played around with the program, ending up with loads of SEUCK games (like myself in the past)?

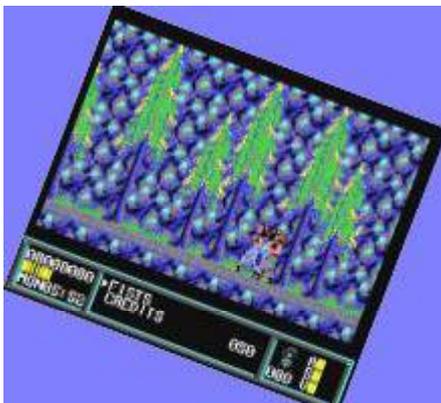
Yeah I did own SEUCK, and created some bad, bad stuff with it...

What do you think of those classic C64 games today?

Some have dated badly and look & play very poor, but some (like Last Ninja series) will probably feel excellent forever. (Cool, I love those Last Ninja games - Richard)

Which of my games did you enjoy the most?

Defuzion 3 I think :-). (Wow, that's unusual, some people did not like Defuzion 3 and found it unplayable - Richard)



Which of my games did you enjoy the least?

Haven't played enough of them to form an opinion.

Would you look forward seeing more of my game projects?

Yes, I guess so :-). Seriously, these times any software developed on the C64 is a good thing, considering how scarce releases are these days.

What is your favourite C64 demo?

The Second Reality remake by Smash Designs.

What is your favourite C64 program of all time?

Green Beret I think. Bruce Lee & Last Ninjas follow close behind...

Who is the best C64 musician in the world?

Rob Hubbard, for the Sanxion loader theme alone :-). (I thought he was going to choose me as best musician, heh, heh - Richard)

I know this is a silly question, but what is your favourite packer cruncher? I like AB Cruncher and Byteboiler V1.0, great programs.

Never actually used C64-based packers or crunchers because they're so slow anyway :-).

Would you be considering to use a C64 or C64 emulator in the future, to play all these true classics?

I actually found CCS64 & VICE to be surprisingly accurate when comparing to the real C64 again, so most of the time I'll be using them. I actually gave the C64 away to my big



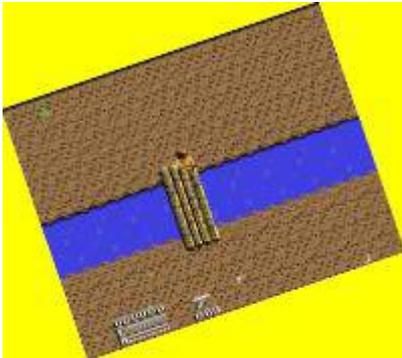
sister because I know her kids will put the machine to better (and more frequent) use :-)

To any C64 interview victims, here is one question I'll always ask. What do you think of 'Commodore Scene' magazine? Cover disk, etc ;o)?

Actually I have never read that magazine. (Maybe I should introduce CS :o)

Finally, any last few words you would like to say to all those readers out there? ;o)

Greetings to everyone in the C64 scene who has been in contact with me or who has spent some time with my releases! Though I don't intend to do any more releases in the future I'll keep following the scene for sure.

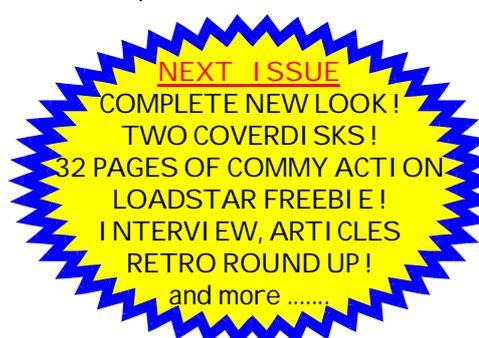


There we have it, a massive exclusive interview with Cadaver. Referring to the interview, he has written some really good C64 programs in the past and he still enjoys playing Commodore 64 games. I've even had permission from him to add MW3 on to the CS coverdisk (CS34).

I am still in contact with Cadaver for various reasons, for example C64 friendship, talking about TND game projects, etc. Probably for some helpful advice, and just to have a natter.

I could not believe that he really enjoyed 'Defuzion 3' (On this issues' cover disk). As not many people enjoyed Defuzion 3, due to the lack of playability. I also remember Laxity cracking Defuzion 3, but bugged the last level :o(.

Now, for Allans' comments about this interview :o)



Apathy rules By A.N.Onymous.

If any of you out there are thinking of supporting the C64 or 128 in the UK then don't bother. Why? Well, even with the best efforts, a profound change in how people think will have to happen. Take this example:

Commodore Scene magazine seems to have quite a good regular reader base, so you would think that if you where to write a new game then at least 80% of CS readers would purchase it - they are "never say die" enthusiasts, OF COURSE they want to see new software being released for their beloved 8-bit. Sadly, this is not the case. Why? Lets see....

1) People seem to like the idea of new software and hardware for their C64, but when it comes to money we have to assume that either they don't want to spend it, or they don't have it.

2) In terms of software, many readers have plenty, and of course, there is software with CS, so why bother anyway?

3) There must still be a small number of readers who don't have a disk drive, or when their trusted 1541 brakes down, either can't afford to replace it, or don't know where to buy one from.

4) There will be a small number of people who enjoy just walking into a shop and picking from the shelf. This can't happen anymore, and for some reason, mail order doesn't seem to fulfill their needs in some way.

Think of this... Allan could sell CS to only those people who have upgraded their C64/128 with a SCPU, RAMlink or whatever, which isn't that many in the UK, without making much impact at all on software/hardware sales.

What can we conclude from this? Well, there is just an absolute "hard core" of C64/128 users in the UK who seem to have enough disposable income to spend, which is a shame.

So, what does the "scene" need in the UK, other than a kick up the ass?

1) Obviously, people need more disposable income.

2) Users need to see the new software/hardware in operation. Once you've seen Driller running at 20mhz, or the latest GEOS upgrade, you'll be more convinced that the hardware etc... is worth the price tag. (Example: Allan at Commodore Scene had his RAMLink mk 1 brake down on him a while back. The very next day he ordered a new one because he simply could not live without it. I know how he must have felt at the time!)

3) In some way, we need to convince the popular press that it is worth running a "Modern uses for your old Commodore" article. This is simply to tell ex-users that things are still happening, and if one or two PC users want to come along for the ride then I'm not complaining.

4) Software needs to be put on the Commodore Scene cover disk that sends out subliminal messages telling people that they can't live without upgrading their C64/128 or buying the latest release from Protovision etc....

And, is anything being done in response to the above?

1) Nobody can make people have more disposable income other than those people who employ them. You all need pay rises, and good ones!

2) I hear news of a second "Commodore" show, even though the 1st (29/09/2001) was not very well attended.

3) Micro Mart is the most likely candidate here. Send them your emails and letters in mass asking for more Commodore coverage!

4) I am absolutely convinced that the SCPU sends out subliminal messages telling you to buy more stuff. Well, it's worked for me! Everybody, buy a SCPU.....

I hope that all the serious points here are headed.

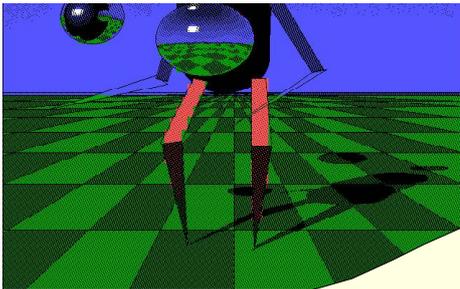
I'll see you at the next show then?



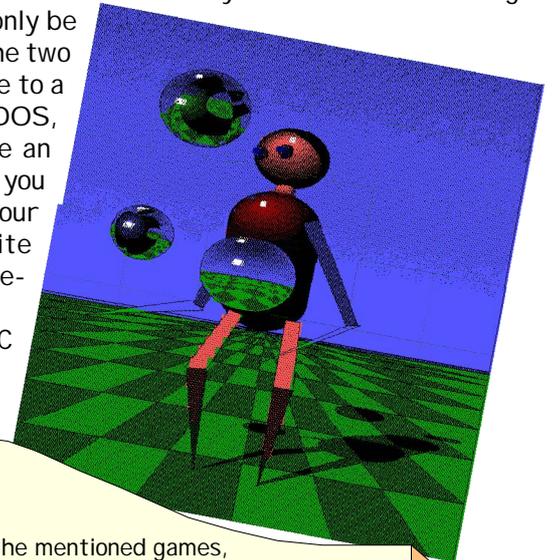
A STORY OF TWO HALVES !

This issues front cover was originally a geoPAINT file which has been transferred over to the PC - this is how it was done.

1) First up you need a **geoPAINT** file, preferably in colour and utilizing the whole page area. 2) Using a program called **I-PORT** you need to select the geoPAINT file you want to use and convert it to a **.GIF** file (note: you will only be able to copy half the image in I-PORT due to screen restrictions - hence the two 'half' images). 3) Now you need to copy your two files from the Commodore to a PC disk. The easiest way (by far) of doing this is to use **geoDOS**. With geoDOS, you can use your 1581 as a MS-DOS disk reader (800k) or if you have an FD2000 then you can read/write to larger 1.44Mb MS-DOS disks. 4) After you have copied your files to disk, transfer the disk to the PC and then paste your two files together in your favourite application - hey presto, a full geoPAINT image.



Sorry about having to use the PC but sometimes it is a necessity!



Are You Obsessed?

By Richard Bayliss

People can be very obsessed with various types of things, such as television, video, cinemas, girls, boys (depending on your gender), food (like chips) and of course the biggest obsession of them all is Computer Games. 'What has this got to do with the C64 then?' you may ask. Well, all will be revealed later.

The obsessions with computer games started way back in the late 1970's, where there was the good old, arcade classic game called "Pong". People started to get obsessed with this little game. It played a tad bit like tennis, but when this was old hat, a worm-type game appeared in the arcades as well as the legendary Space Invaders game. If you are lucky and you live near the sea front, then there may possibly be Space Invaders in the arcades. Well, when I went to Weymouth, at the sea front was the good old Space Invaders, and I played it, as well as seeing a few people play it.

As well as Space Invaders, Galaxians, Pac Man and Phoenix as well as some of the modern 8-bit games, such as Tecmo's Gemini Wing and do you remember the classic game called Fizz. A game where you had to go around the play area defusing bombs, while having to avoid being squashed by a boot?

As well as the mentioned games, Nintendo decided to release into the arcades, the classic Super Mario Bros., which people were addicted to.

Anyway, enough about these arcade games in local arcades. Let's talk C64. Well, I am sure that all you people are obsessed with the good old C64 huh? Yes, it has got to be you. I know people are obsessed with chronic new, crash a lot systems such as Playstation, PC, N64 and Dreamcast and then sling their C64 away, but why don't these people think about bringing back the nostalgia. This is because they don't really care about their C64's. We all know that the C64 should stay alive, because we are obsessed with the content and quality.

Magazines, such as "Commodore Scene", "Commodore World" and "Commodore Zone", are obsessed with the C64, just like me with my C64 web page. As you can see the amount of people who help support the C64, makes the C64sters happier, as we have been impressed with some new software. So go on people, like I say, help save the C64. Trash those PCs and consoles and bring back the nostalgia.

Well, time to get going now. I have to finish off more games for future issues of "Commodore Scene". I hope you all will look forward to these games!

Happy C64ing people.

A Wolf in Sheep's Clothing...

(Part #1)

by Nicholas Coplin

The number of users of 64HDD (the CBM drive emulation software for the PC) has been growing steadily since the introduction of version 0.6a0 nearly a year ago now. Many are gamers, who are returning to their beloved C64 now that there is low cost, fast and efficient way to use disk images directly from the net.

However, lets face it; how many Commie's want a PC sharing their C64 set-up? A question often asked is how to build the PC gear into a more in-keeping package. There are several ways to go about it depending upon what you have in mind and what you have available. Over the next couple CS issues I'll cover the various options.

Warning: there will be a lot of PC talk to follow ?, but it shouldn't be too painful...

Where to start...

Regardless of how you want your 64HDD system to end up looking, the one thing you want is a working system!

Therefore it is strongly suggested that you get the software and configuration working with the hardware you will ultimately be packaging before transferring it to its new box. This means setting up a basic PC box.

Given the low minimum specification for the 64HDD software, you should be able to pick up a 386/486 PC with all the bits for a few quid from a boot-sale (that's a few dollars from a yard sale for the American folks; DM at a flohmarkt for any German readers).

The PC system should be complete with power supply unit (PSU), circuit boards (PCBs) and drives. If you will be using the machine as a donor for parts, it is recommended that you have a look inside the case and choose a configuration that uses "small" components and assemblies. Typically you can tell from the brand if this is likely and also from the outside by checking the "footprint" of the case. Compaq and Unisys systems I've found typically make a good starting point. Old laptops are also a possibility, but are less expandable.

If you intend to run the 64HDD system without a keyboard (you don't need one after the initial configuration) then check to see if it will work without one plugged in (you might need to fiddle with the BIOS settings).

Something you are likely to notice is that many PC cases have a beige colour not too dissimilar to the newer CBM systems, so you may decide that this is near enough in-keeping and leave things as they are. One of my test set-ups is configured this way, and it isn't too bad... you



can either sit your monitor on top of the case, or tip the slimline case on its side as I did since I'm already using a C128D.

The various custom built options...

Okay. Want to do something a little more adventurous? Well, in summary these are the other configurations you can try. We'll only get part way though the list in this issue, with the rest described later in the series.

- Mini-tower with your real 1541/1571/1581 drives installed in it along side 64HDD (helps consolidate that stack of drives most power users have)
- Commodore Drive casing with PC internals (fits in neatly with the rest of your drive stack)
- C128DCR with 64HDD *Inside*[™] (not for the faint hearted)

With all these options there will be a number of common decisions to be made:

1) The X1541/XE1541 Connection:

There are at least three ways to go about this.



The first and easiest option is to buy yourself a cable and simply plug it into the LPT card and drive. There are various re-sellers for this cable and so finding one shouldn't be a problem. This method though has one small drawback, the standard cable provides only one serial connection.

This means when it comes to daisy-chaining various drives together you'll probably find that your CBM printer may not have a double connection and therefore misses out...

The second method is with an X1541/XE1541 adaptor. To get most value out of these, again they should be the "double connection" type, so you don't end up at a dead-end. I've also been able to also neatly fit a DB9 connector for Power-Loader support on one of mine.



The third method requires some soldering skills and involves connecting the individual wires from the cable directly to the LPT connector inside the PC's case. This gives the neatest result and is the method I have used on the 64HDD system housed in a 1571 case. You can have connections to multiple sockets if needed.

Regardless of which cabling method you will ultimately use, you need to be very sure about which cable type suits your computer. At the moment, 64HDD only supports the X1541 and the XE1541 cable. The XE design will work with virtually all PC port types (except perhaps for the very latest low power versions), whilst the X1541 is a much "dumber" cable and should be reserved for the older PC systems which only support a standard parallel port (SPP).

Warning: connecting a X1541 cable to a newer style LPT port may permanently damage the port. The basic X cable does not have diodes to protect the output lines from its inputs. Only the XE cable has this protection.

• X1541 Cable with Power-Loader option (see 64HDD or StarCommander documentation for information about the XE1541 cable). *Wiring diagram to right.*

2) Power Supply Units:

The decision you need to make up front here is; will you have to use an external brick? Whilst the internal method is neatest and makes the unit very transportable, it does compound the packaging of the system if you are trying to fit it in a non-PC case. Also, PC boards can be very power hungry, and this tends to increase with processor speed and class.

If you are sticking with a 386/486 system, you may be able to use either an Amiga or a custom spec'd SuperPSU as the external source. Power levels should be in their range, however, be mindful that PC machines do need some strange voltages. For RS232 functions they'll need -12V (Amiga PSU does supply 100mA). The standard PC PSU also supplies -5V, though apparently there is very little these days that calls for it hence it has been removed from the ATX specification.

Remember, you are dealing with relatively high electrical currents here (several Amps) and possibly also mains power. I strongly recommend that if you don't know what you are doing that you just go ahead with a standard PC PSU and find the smallest possible. If you end up mounting it externally, you'll definitely need to extend the leads. Do this using heavy gauge flex wire to avoid heat build up due to the high currents.

3) Drive Controller Sub-System:

What we are really talking here is SCSI versus IDE... The bottom line is 64HDD doesn't care, so use whichever you can get a hold of. If you are buying new components because your collection of D64 images is getting sizeable, I'd be considering IDE from a "cost per megabyte" basis as it can be a fair bit cheaper than SCSI.

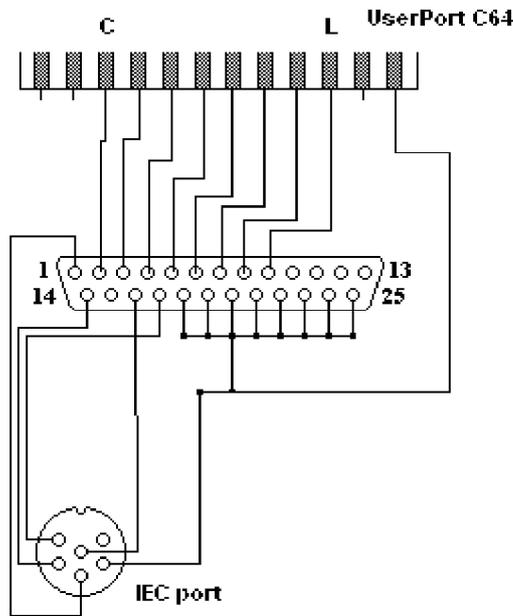
Though it is possible to mix SCSI and IDE drives in the one system, it adds to the complexity and undoubtedly forces you to have two controller cards, making packaging all the more difficult.

There are however some predefined rules about the size of hard disk that can be used by a PC and MSDOS. Many older 386/486 boards do not support LBA mapping of drives, and this may force you to a limit of 528MB if you go the IDE way. SCSI drives normally are equipped with software which overcomes this hurdle, for you only to then hit the MSDOS limitation of 2GB per disk partition. It's not impossible to have large disks on a lowly spec'd PC, it just takes some set up work to get the configuration workable.

4) PC mainboard and configuration:

Generally speaking there are two ways PC sub-systems are configured. There firstly is what I call the "all-on-board" method, where you'll find that the LPT and other ports are all mounted on the one PCB, which also has the processor. This style of board is definitely the neatest way to build a sub-system.

However, the alternate way having separate cards for I/O is not a show stopper and in fact it is this method used for my 1571 encased system. This was possible by using low profile I/O cards and eliminating what is not needed from a 64HDD



stem (eg the video card).

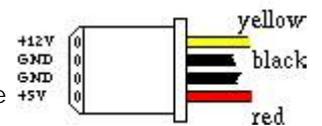
Basically, there is no clear winner here as a lot of it comes down to what fits the case you are using. Most PC mainboards conform to what is known as AT form-factor. This size will generally fit in a case (with some modification), but is not the smallest board available. The smaller form-factors go by the name of micro-AT, and these are more easily packaged, but can be harder to find supply of.

Mini-Tower set-up

There have been various projects described on the pages of Commodore magazines about building a C64 in a PC case. However, building a 64HDD tower is much more complex as the complexities normally pertain to the size of the C64 board, its unusual power requirements and the size of the circuit board.

Commodore's newer drives are powered by 12Volts (for the motor) and 5Volts for the controller. A PC Power Supply Cord.

A PC Power Supply Cord.



My suggestion would be to make small adaptor cables to connect power between the PC and the CBM controller boards

(allowing you in the future to pull the system apart more readily).

You'll also find that the drive mechanisms themselves are standard width and height thus fit straight into the drive bays. Finding a suitable fascia remains the main hurdle, but this can usually be "borrowed" from a PC unit.

Within the mini-tower you will have to mount the disk drive controller PCB. One point to note is that the early 1541 controller boards are not ideal as they also contain much of the power electronics; stick to the -II series. If you must use the older controller board take special care with where you connect power.

The various other 64HDD drives can be installed in the standard way as can the PC motherboard. I would be trying to keep all inter-drive connections within the case and only have one serial cable leading off to the Commodore keyboard.

The top-of-range 64HDD mini-towers may be configured as follows:

Drive	Controller	Bay Size
Hard Disk	PC/64HDD	3.5"***
CD-ROM	PC/64HDD	5.25"
PC Floppy	PC/64HDD	3.5"
1541-II	CBM Controller	5.25"
1581	CBM Controller	3.5"

*** you could use 2.5" or 5.25" hard disks, more next issue.

Next in the series...

Building your 64HDD into a CBM drive casing. This job is a little trickier than the mini-tower method, but the result can be quite rewarding.



Glossary:

Given there are so many acronyms in this article I thought it best to list some definitions here.

- IDE** A disk interface cable type, 40pins, normally cheaper per megabyte than SCSI types
- LBA** Logical Block Addressing, a method by which new drives map tracks and sectors

AVAILABLE NOW FROM CSIS

ONLY - £44 !

Fully inclusive of p&p.

Retro Replay

**Avail-
able NOW !!**

**The ultimate clone of
the infamous Action Replay
Cartridge with many added features**

... The new cartridge is named **Retro Replay** and has **32K Ram** and **128K Flashrom!**

Final tests were just completed and software development looks into a bright future, so we can start selling this cute hardware.

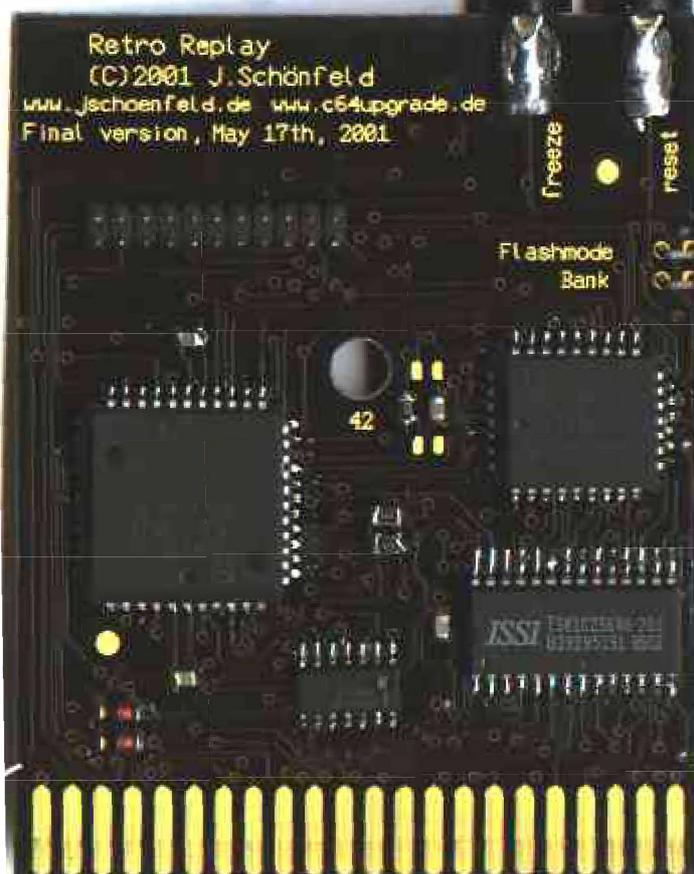
Please read these details:

- \$DE00 read bug removed
- the freeze-logic was re-developed from scratch and now beats all other freezers safety-wise.
- The buttons are of higher quality than the ones used on most other carts.
- The freeze button is digitally softened (no double freezes, no locking up here)
- **Software-switchable IO-area**, so a REU can be used along with the cart. (direct support for REU in Beta 4 is planned)
- The **FlashROM is programmable by the C64** (Software is in the works)
- Two different ROMs can be used and selected with a hot-pluggable jumper. (Think of one being PAL and the other one NTSC, or having other different ROM versions on the same cart.)
- 32K RAM and 64K for one ROM allow adding lots of features to the software
- The new board fits into many existing covers (will be delivered without cover!)
- Expansionport on the cartridge to allow connecting the RS232-Interface "Silversurfer"
- (theoretically up to 460800 Baud, 16 Byte Fifo)**
(Softwaresupport by the RR-ROM will be started soon)
- **Turbo Assembler Macro** in the Flashrom (huge update coming here aswell soon)!
- **Sprite & Char Editor** in Freeze-Mode (in the works aswell)
- **Graphics-Ripper** for Koala, Bitmap, (I)FLI and more
- **Gold plated contacts**, mainboard in cool black :-)

- many more additional software features planned

Jens is starting to accept orders from now on. Whenever you like to pay by bank order, please don't hesitate to send a **Fax to +49/(0)241 12088** (Don't forget your bank account information aswell as an agreement to the billing).

Whenever you are in doubt, or from a country outside germany,



better call Jens directly.
Phone: +49/(0)241 12077.

Jens is available from **9:00 to 21:00 CET** nearly every day, but please use this number for orders only since it's a private line aswell.

To allow all the people who pre-ordered to place their final order, the resellers will be supplied with the new hardware a couple of days later, so:

Whoever comes in late, might miss his chance ... :)

http://www.jschoenfeld.de/support/Inside_Replay.txt
Registermapping, Memory Maps, FlashROM information and Source-Codes for the Retro Replay can be found at

<http://www.ar.c64.org>
has a complete manual, along with a history of all changes, all the current beta-versions, add-ons and news for the Retro Replay.

Jens Schönfeld
Individual Computers
Roermonder Str. 228
52072 Aachen

For software questions: Andreas 'Count Zero' Rust
Email: count0@c64.org



geoBeap 2.0

The new geoBEAP 2.0, unlike the old, is a VLIR application based entirely on the geoModules foundation. In fact, two new modules were born during its writing: a module for doing the GEOS Convert function, and another for copying any and all file types (including GEOS, VLIR, and relative files!). Its interface resembles the old to an extent, but was actually based off the code from The Major ReOrg.

So, what does the new version do?

Lots! geoBEAP 2.0 will create (pack) and dissolve (or unpack) the following disk images: .D64 (standard C= emulator 1541 disks), .D71 (standard C= emulator 1571 disks), .D81 (standard C= emulator 1581 disks), ZipCode 4-packs (by DarkStar, the original disk image archiver), EMUTIL single compressed images (supports ANY drive type, and gets better compression than .D64 or ZipCode), EMUTIL multi-file compressed images (same as above, but multiple files), and the original .BEP format (unchanged since 1.5). geoBEAP 2.0 ALSO supports the following FILE archive formats: GEOS Convert (.cvt) files, LYNX (.lnx) archives (includes relative file support, and support for EVERY version of LYNX I know of), and ARK (.ark) archives (including relative file support). The LYNX support also includes geoPack files, making geoBEAP a direct replacement for that aging application.

geoBEAP 2.0 is being released as shareware!

There is a lot of great plans I have in the future for geoBEAP, and it was only exhaustion staring at the same kind of code every day that made me want to just STOP. I was poised to add .T64 (C= emulator tape image) format, as well as .LBR (library 64 and library 128) formats. During my research, I also discovered that Wraptor V3 uses LZW. This gives great hope that perhaps it may be added at some point also, since I am familiar with that algorithm and may be able to reverse engineer it. A lot depends on how much interest is expressed in this program however, so register it soon!

Revision Notes:

1/30/98 geoBEAP has been updated to version 1.5! It now supports CMD Native mode directories for creating and unpacking .BEP format archives. Wheels support has also been added. Lastly, geoBEAP will now run under GEOS 128 in both 40 and 80 columns. Ask for issue #145!

8/11/01 geoBEAP has been rewritten! In addition to D64s and .BEP archives, geoBEAP now supports Convert (.cvt) files, .D71 files, .D81 files, EMUTIL Single Compressed disk images, EMUTIL multi-file Compressed disk images, ZipCode 4-packs, LYNX (all versions) file archives, and ARK file archives.

If you find anything in here you have questions or comments about, feel free to leave me email at bo@zimmers.net.

geoBEAP 2.0

Part 2 - Let's Take Closer Look !

SYSTEM REQUIREMENTS

geoBEAP requires the following hardware and software to execute:

1. Commodore 64 or 128.
2. GEOS 64 or 128, Wheels 64 or 128, gateWay 64 and 128, and MP3 64 or 128 (sorta... some operations will complete without problems, but then the app terminates abnormally. It's MP3's fault).
3. At least one GEOS compatible drive. Two drives are required for disk image formats.
4. The geoBEAP application.

USING geoBEAP

geoBEAP is executed by double-clicking on its icon. This will bring up the main selection screen. On the screen you will see two large file windows, one of which is for the source drive, which indicates the disk containing the files to be packed or the disk on which an archive file to be unpacked is found. The other is the destination file window, which will show files on the disk where an archive will be created or where an archive will be unpacked to.

Running along the sides of the file windows are four arrow buttons for viewing different pages of file names. The up arrow will go back a page toward the beginning of the disk, while the down arrow will show files further down in the directory. The farthest up arrow will show the first page of files, while the farthest down arrow will show the last page of files.

Below each file window is a button for selecting which drive and disk is to be recognised as the source and destination. Clicking the drive button will cycle through your GEOS active drives from A to B to C to D and back to A. The disk button will prompt you to insert a new disk into the active drive for that file window. Users of Wheels 64 or 128 can use the disk button to select a new partition or subdirectory.

In the upper-middle part of the screen are selection boxes for choosing whether you wish to pack or unpack an archive. A darkened square next to your selection will indicate which options are active. This may be changed by clicking in an unselected box. Below there is a box to select the type of archive format. The text that appears inside this box will designate the selected format. Clicking on the box will change the format to the next available one. Continue to click on this box to cycle through all supported archive formats.

The selected archive format, and whether the pack or unpack box has been selected, will determine whether files in the source window can be selected. While in the pack mode of a disk image format, no files may be selected. While in the unpack mode of any archive format, or the pack mode of a file archive format, one or more files may be selected. Up to 256 files may be selected for any purpose.

The launch button will begin the packing or unpacking process as designated by your selections.

At the top right of the screen is the exit box, which will exit back to the desktop when clicked.

LAUNCHING

When the launch button is clicked, the system will examine your selections on the main screen to determine if the process can begin. What happens next depends on the selected format, and whether the pack or unpack box has been chosen.

.D64, .D71, and .D81 images

Packing:

The .D64 format was first invented by the authors of the Commodore 64 emulator for the PC called C64S. The .D71 and .D81 formats followed later. Each is an uncompressed image of an entire disk, assuming the disk does not have any errors. These format can be used to archive 1541 disks, 1571 disks, and 1581 disks only and respectively.

To create one of these archives, first make sure that one of the supported disk drives is the source drive, that the source and destination drives are different, and that a disk capable of holding the entire disk image archive file is in the destination drive. A 1541 disk image file (.D64) requires 689 free blocks on the destination disk. A 1571 disk image file (.D71) requires 1378 free blocks on the destination disk. A 1581 disk image file (.D81) requires 3200 free blocks on the destination disk.

When clicking the launch button, the user will be asked to give a name (max 12 characters) for the archive file. The extension .D64 or .D71 or .D81 will be automatically added to the name entered. After confirming the process, a progress box located near the bottom of the destination file window will appear and update itself as the packing process completes.

Remember that any disk errors on the source disk, such as those used as copy protection in some commercial programs, will abort the archival process.

Unpacking:

To unpack one or more of these archives, select their names in the source file window. Make sure that the destination disk is of the correct type (1541 for .D64, 1571 for .D71, and 1581 for .D81), and that the destination disk has been completely formatted. Un-archiving a disk image onto an unformatted disk will abort the process. Also remember that unpacking a disk image will completely erase any contents on the destination disk and replace them with the archive contents.

If more than one image archive file has been selected, a confirmation dialog box will appear between each archive file.

When this confirmation box appears, the destination disk may be replaced in order to receive the next image archive.

geoBEAP (.BEP) images

Packing:

The .BEP format was invented by the author of this program as a substitute for ZipCode and .D64 disk image formats. The .BEP format features support for any GEOS supported disk or partition, and a much higher level of compression than that afforded by ZipCode or even the EMUTIL format. Like the .D64 image archive, a .BEP archive file contains an entire disk image. Unlike .D64 image archives, however, the .BEP format may be of a 1541 disk, a 1571 disk, a 1581 disk, a CMD FD2000 disk, a CMD HD partition, or a CMD RAMLink partition.

To create one of these archives, first make sure that the desired disk and partition are displayed in the source drive window, that the source and destination drives are different, and that a disk capable of holding the entire archive file is in the destination drive. .BEP archive file sizes vary considerably. A relatively blank 1571 disk may compress to only 3k (12 blocks), while a 1571 disk full of programs may not compress much at all (970 blocks). Be sure to leave plenty of destination disk space for any possible archive. Failure to do so will abort the archival process, once the disk becomes full. Clicking the launch button will present the user with a dialog into which a name for the new .BEP archive file can be entered. The extension .BEP will be automatically added to the name entered. During the packing process, a progress box will appear in the destination window.

The .BEP archive format uses a very complex algorithm in order to get very good compression of disks. Because this algorithm is so complex, the creation of these archives can take a very long time. A processor upgrade cartridge, such as the CMD SuperCPU, can improve the performance of this format considerably.

Unpacking:

To unpack one or more of these archives, select their names in the source file window. Make sure that the destination disk is of the correct type, which depends on the type of disk the .BEP file was made from. geoBEAP will present an error if, for instance, it is asked to unpack a .BEP image of a 1571 disk onto a 1581 disk in the destination drive. The destination disk must also be completely formatted before unpacking can begin. Unpacking a disk image onto an unformatted disk will abort the process. Also remember that unpacking a disk image will completely erase any contents on the destination disk and replace them with the archive contents.

If more than one image archive file has been selected, a confirmation dialog box will appear between each archive file. When this confirmation box appears, the destination disk may be replaced in order to receive the next image archive.

As mentioned above, the .BEP archive format uses a very complex algorithm in order to get very good compression of disks. Because this algorithm is so complex, the unpacking of these archives can take a very long time. A processor upgrade cartridge, such as the CMD SuperCPU, can improve performance considerably.

GEOS Convert (.CVT) files

Packing:

The Convert program was first created by Berkeley Softworks, the inventors of GEOS, as a means of converting GEOS-type files into standard sequential CBM type files. Only in a sequential format can files be uploaded to the internet or BBS's. GEOS files that have been Converted will usually end with the extension .CVT, though almost as often as not there will be no extension at all.

Convert will only affect GEOS type files, such as geoWrite documents, GEOS applications, desk accessories, and so forth. To convert, select the desired files in the source file window

and click the launch button. If the source and destination drives are the same, the conversion will be performed in-place. In-place means that the GEOS file being converted will be replaced by the .CVT file. If the source and destination drives are different, geoBEAP will copy the source file onto the destination disk before performing the in-place conversion. This means that the destination disk must have enough space to hold the source files, and must not have files with duplicate names to either the source file, or the .CVT file being created.

During the file Convert process, a progress box located near the bottom of the destination file window will appear and update itself as packing completes. The extension .CVT will be automatically added to the names of the source files, and the source files will be given standard Commodore file names.

Unpacking:

The un-converting process will turn a .CVT file back into a usable GEOS file. To do this, select the .CVT files from the source file window and click the launch button. If the source and destination drives are the same, the unpacking will be performed in-place, meaning the .CVT file will be replaced by the GEOS file contained therein. If the source and destination drives are different, geoBEAP will copy the source archive file onto the destination disk before performing the in-place unpacking. This means that the destination disk must have enough space to hold the source files, and must not have files with duplicate names to either the source .CVT file, or the GEOS file being created.

ZipCode (1!, 2!, etc..) images

Packing:

ZipCode was written by A.L. Peters, and was both the first, and for a very long time the ONLY disk image archiver for Commodore computers. ZipCode will create a multi-file disk image archive of a 1541 disk. Although Zipcode supports a 4-pack format for standard 1541 disks, a 5-pack format for extended 1541 disks, and a 6-pack format for 1541 disks with errors, geoBEAP only supports the more common 4-pack version. Each file in a 4-pack archive begins with a number from one to four, followed by an exclamation point (1!diskname, 2!diskname, etc). ZipCode will also use fast and effective compression.

To create one of these archives, first make sure that the source drive is either a 1541 or 1571 disk drive, that the source drive contains a 1541 format disk, that the source and destination drives are different, and that a disk with at least a few hundred blocks free is available in the destination drive. If the destination drive is filled up during the creation of the ZipCode 4-pack archive, a dialog box will be presented to allow a new destination disk to be inserted so that the process may be completed.

When clicking the launch button, the user will be asked to give a name (max 14 characters) for the archive file. The prefixes of a ZipCode archive (1!, 2!, 3!, and 4!) will be automatically added to the name entered. After confirming the process, a progress box located near the bottom of the destination file window will appear and update itself as the packing process completes.

Remember that any disk errors on the source disk, such as those used as copy protection in some commercial programs, will abort the archival process.

Unpacking:

To unpack one or more of these archives, select the first file in each 4-pack (the one beginning with 1!) in the source file window. Make sure that the destination drive is a 1541 or 1571 disk drive, and that the destination disk has been completely formatted. Un-archiving a disk image onto an unformatted disk will abort the process. Also remember that unpacking a disk image will completely erase any contents on the destination disk and replace them with the archive contents.

If more than one 4-pack set has been selected, a confirmation dialog box will appear between each archive. When this

confirmation box appears, the destination disk may be replaced in order to receive the next image archive.

LYNX (.LNX) file archives

Packing:

LYNX was originally written by Will Corely as a fast archival format for combining numerous Commodore files into a single archive file. In addition to its speed, LYNX is also famous as one of the only file archive formats which supports Commodore REL (relative) type files. Since the introduction of the original LYNX program, numerous other revisions and clones have appeared. This includes the LYNX series, up through LYNX XV, Ultimate LYNX, Ultra-LYNX, and eventually geoPack. geoBEAP supports them all, including (despite much pain and suffering), the Commodore REL (relative) type files. GEOS users may be familiar with the "fact" that GEOS does not support relative files. This may have been true before, but with geoBEAP, it supports them now.

To create a LYNX archive, select the desired files in the source file window and click the launch button. After entering a name for the new archive file (12 characters max), the packing process will begin. The extension .LNX will be automatically added to the name entered. If the source and destination drives are different, the first step will be to copy the source files onto the destination drive. This means that the destination disk must have space sufficient to hold all of the source files, and must not already have copies of the source files. If the source and destination drives are the same, the archive will be created in-place. This means that all of the source files will be removed from the source disk directory and replaced with the single LYNX archive.

Before creating the LYNX archive, geoBEAP will attempt to Convert all GEOS type source files into .CVT format files. Only in the .CVT format can GEOS files be placed into LYNX archives. Finally, the source files will be placed into the LYNX archive. If the source and destination drives were different, the archive will appear on the destination disk, and the source files will be unchanged on the source disk. If the drives were the same, the source files will have been replaced by the LYNX archive. During the creation of the LYNX archive, a progress box will appear in the destination file window.

geoBEAP will create a LYNX XV compliant LYNX archive.

Unpacking:

To unpack a LYNX archive, select the archive file from the source file window and click the launch button. If the source and destination drives are the same, only one LYNX archive may be processed at a time, and the unpacking will occur in-place, which means that the LYNX archive file will be removed and replaced by the files which are the contents of the archive. If the source and destination drives are different, any number of LYNX archives may be selected, and the archive files will be copied to the destination drive before they are unpacked. This means that the destination disk must have sufficient space to hold the contents of the selected LYNX archives.

During the unpacking process, a progress box in the destination file window will notify the user when files are being copied, unpacked from the LYNX archive, and Converted back from .CVT format to the GEOS file type format if necessary. REL (relative) files will also require additional processing to restore side-sector links. If more than one LYNX archive file was selected, a confirmation dialog box will appear between each archive file.

NEXT ISSUE

Part 3 of geoBEAP 2.0 covers the following file types :

- ARK (.ARK) file archives
- EMUTIL single file disk images
- EMUTIL multi disk images

Retro Computing Today

What is the big idea?

There seems to be a growing interest in computers and technology of yesteryear. With very few publications actually acknowledging this, it is left to a handful of small magazines to fill the gap, with profitable publications such as Computer and Video Games dedicating less than 4 pages to "The Old School". Retro Computing Today aims to be the one of the first professional publication to cover all topics regarding this very subject matter, instead of concentrating on one particular computer or platform, as Commodore Scene does, Retro Computing Today aims to cover as many topics as there are interests for. For instance, those people who choose to use a Vic 20 to view web sites through to the AmigaOne platform.

Obviously, the more support a particular platform receives, the more of the magazine will be dedicated to covering it, however, we would hope to provide some sort of balance, unlike at least 90% of current publications, whom tend to concentrate on the Windows/XBox platform and the likes.

Do you have big ideas yourself?

Details are sketchy at the minute, as the publication is still in early planning stages. We can confirm the following;

Launch issue for early May 2002. 8 copies a year (1 every 6 weeks). If there is enough demand, we will move towards 10 copies a year (1 every 5 weeks).

Website launched soon.

Special edition no. 1 will be available to pre-order soon.

So, if you would like to shape this publication, please email me with your suggestions or comments.

If you would like to write any articles for the launch issue, please forward them in .txt format, with the subject matter as Submissions092246. We would appreciate greatly any help we can get.

Thank you for reading,

Shaun/Retro Computing Today -
retrocomtoday@aol.com

ED's bit - come on, give Shaun your support. Shaun is one of those 'good guys' you here about. I know Shaun and he will always do his best to devote himself to a project, as he did when organising the 2001 Revival Show. I hope that the next issue will bring you a sample copy for you to read. I'll do all I can, I hope you will too!

Enhanced Newcomer - A quick overview



By Shaun Bebbington

Ahh... New Comer. A game which oozes class and polish in very much the same vein as those wonderful SSI and Interplay games did, all those moons ago.

The game is set in the future. After committing a horrific crime (you'll see what in the intro) you find yourself banished to an island, half naked and very confused. An untidy and wispy looking gentleman "Welcomes" you to the island, Explaining a little about life on it, and giving you some advice, you are then asked to follow him. Here after, you are to go it alone, until you find people to join you.



At this point in the game (that is meeting some of the characters on the island), I found it to be a little racist and bigoted (AVOID NEW COMER IF YOU ARE SENSITIVE TO RACIALLY NEGATIVE COMMENTS OR ISSUES SUCH AS HIV OR AIDS!!!). This game is geared towards adult game players. You have been warned!

The overall aim of the game? I'm not sure as I didn't get that far, although it seems to be to stick on the right side of everybody you meet, and to build some sort of team, probably to escape the island. (Sorry I can't say more than that. I had many difficulties in loading on my 128, and the 64 I got it to work on stopped working.)

What more can I say? Well, if you have ever played "Dragon Wars" from Interplay, you will find it easy to get into New Comer. If you have not, it is easy enough to play. Although it is obviously an epic in the fact that this version has taken nearly a decade to be finished and released, I'm not convinced that this is everybody's cup of tea. It's not got the non-stop action some shoot 'em ups have, nor the lovely colours of some platform games. It is however a problem solvers dream, with a good learning curve, and well thought out problems, and if that is the sort of game you like, I can only recommend it.



I guess you already know what JOS is.

If you don't, I'll tell you now.

JOS is powerful new operating system for our Commodore 64. The new stuff that JOS brings is very important.

JOS is the first 16 bit operating system created for the Commodore 64, that means a SCPU with at least 1 Megabyte of RAM is a must have. JOS allows multitasking - that means the computer can do many things at the same time, like Greg Nacu says, "I can listen to a .mod, surf the web, and copy something on my hard disk, all at the same time!" JOS has TCP/IP, like The Wave, has the ability to run applications written in C Language, compiled with a Cross Compiler. It also has it's own Assembly Development System and tools, as well as much more.

JOS combines two successful types of Operating Systems. It's both a CLI and a GUI. Let me explain. A CLI means 'Command Line Interface'. This kind of OS looks like UNIX. Those who have Unix Shell accounts, the one that Gaele and Videocam offers, are already familiar with the Unix environment. A GUI means 'Graphic User Interface'. This kind of OS looks like GEOS/Wheels. The applications which need graphics can use the GUI. The rest of them can use the CLI mode.

Ie: let's say you want to copy a file in Wheels or GEOS from one drive to another. That's very easy. You just click on the file, pick up it's shadow and you drop it on the destination drive. In CLI mode you must write the command. Some Wheels users are now used to CLI because Maurice Randall released geoShell. Like I said above, a SCPU is a must have.

What about the disk drives? At the time of this writing JOS supports the 1541 and 1571 floppy drives, the CMD HD, and the IDE64. More will come in the future, RAMLink and 1581 drivers are under current development. In

JOS every type of device has a driver. A driver is a little program with which the Operating System, (the OS) communicates with every disk drive, interface, etc. The current lack of certain drivers is because Josse doesn't have the hardware, so he must rely on others to program them, or to supply him with the hardware so he can support them.

Those who have the IDE64 interface are very lucky. JOS fully supports them! The IDE64 interface allows the Commodore the use of IDE hard drives. Those hard drives are a lot cheaper, and I mean a **lot** cheaper, compared with the CMD Hard drive and are also a lot faster than CMD hard drives. You can get more info on the IDE64 at the following web site - http://www.volny.cz/dundera/c64ide_cz.html - JOS supports the 1351 mouse, and SmartMouse which can be used in the GUI while plugged in port 1.

JOS is not a finished project, but it is more like something that develops and gets better everyday! It's currently in an alpha stage, and newer, fixed up or improved files are being posted to the official JOS web site frequently. Josse released a first version on his web site several months ago - <http://jos64.com> - since that time many things have been improved and added. After you download JOS from the binaries section of the web site above, you will need either GeoZip or Unzip64 v2x to extract the zip archive. If you have a CMD HD or an IDE64 harddrive you can save the JOS files there, either in the root directory of any partition, or in a subdirectory of the

JOS

WHEN COMMODORE DOESN'T GIVE UP !!!

root, called 'jos'. Or you could save them on a 1571 disk but not all of the files will fit on a single 5.25" disk, however to use the most basic parts of jos you only need the 'system files' package on the website.

If you have any supported drive that is a higher capacity than a 1541, make sure you download all of the files so that you have the full range of JOS's capabilities.

To start JOS you need to load BOOTER. After it loads you must wait a few seconds for the program to configure. JOS will automatically recognize your disk drives and harddrives. And will automatically disable drives that it does not support yet. After it's done, a prompt will appear waiting for your command. This is a big shock for a user that never used a CLI OS but don't be scared. You will learn it quickly. As I said, those who have Unix shell accounts will have a big advantage because they are used to this environment.

Before I start there are some changes on the keyboard within JOS :-

The CONTROL key is now the TAB key.

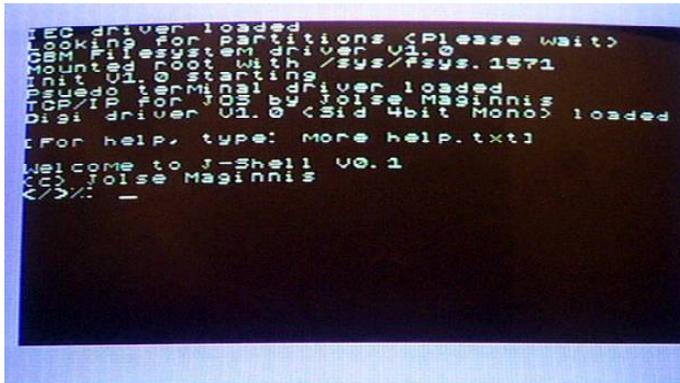
The C= key is now the CONTROL key.

The Back arrow key is now the ESC key.

The RunStop is now the same as pressing CONTROL+C.

Before you do anything, it's handy to know that you have

access to more than one screen (console) at a time. Not only do you have access to more than one screen, through the power of multitasking, each screen can have programs running at the same time as the other screens. The console drivers are set to contain for different 'virtual consoles' which you can switch between using c= + 1,2,3,4. You can also switch to an 80 column console with c= + BackArrow (you don't need an 80 col. monitor for



this).

Josse includes a help file. I suggest you read this! To Read the helpfile you must change to the jos directory like this, 'cd jos' and then type 'more help.txt'. The file will be displayed page by page. To get to the next page you press the space bar.

For every command JOS has a file. Let's start with the first command. Let's say you want to see the directory. You type 'ls'. If you want directory with full file information you type 'ls -l'. The -l is an option of ls. Many commands have options that can be used to change the small details of how they work. If the directory doesn't fit on a single screen you can use the 'more' command to read it page by page. For this you need to use pipes. The pipe character '|' is obtained by pressing SHIFT and the pound key.

So to list the directory page by page you type 'ls |more'. Is is a program, and 'more' is a program. The pipe connects their two functions together, 'more' stops things from scrolling off of one screen and 'ls' lists directory contents. Together they let you look at a directory, a page at a time.

There many more commands:-

mem — shows how much free memory there is available

ps — shows all running processes

cd — change directory

si — show system information

cat [files.] — reads a file and sends it to the default output device. The default is the screen but you could change it

to use cat for sending (for example) a postscript file to a printer.

```
more [files..] — display files page at a time
rm [file1] [file2] — remove (delete) files
cp [file1] [file2] ... [dir] — copy files
mv [file1] [file2] ... [dir] — move files.
```

In JOS every application is a process. If you want to see the current processes you use ps (to use a program, you just type it's name and press return). A list with all the processes will then be displayed. Now let's say you want to close an application, you switch to a console, type ps, and then to close the application you type 'kill' followed by the PID from ps that represents the application you want closed. A PID is a number assigned by JOS to each process when it first gets started.

When you are using multiple disk drives, you need to use the command 'cd' to access the other drives. For example: I use JOS with my two 1571 disk drives. The first one is device 8 and the second one is device 10. When JOS boots it sets the first 1571 as a boot disk. To access the other drive you type 'cd dr1'. dr1 is a directory that contains the contents of the second 1571.

The CTRL key is very handy.

Let's say you want to view a text file and you type 'more a'+CTRL key. JOS will then display all the files that start with letter a. You can also get a directory of the disk by pressing CTRL twice. You can get the directory from the second drive (if you have one connected) by typing 'cd /dr1' then press CTRL twice again. Jos allows the use of wildcards (*,?). Also output and input can be redirected to files with the > and < characters. ie: 'ps > procs.txt' will save the process list to the file 'procs.txt'.

The shell has a 10 line history which means that if you want to see the commands which you previously entered, you can go through them with CRSR UP/DOWN. To learn more about those commands you can search the web for a 'Unix shell tutorial' or you can learn some from Gaelyne Gasson's book **'The Internet for commodore users.'** There is also A Jos information site at - <http://www.king.igs.net/~billnacu/jos.html> -

JOS has a few applications already written for it. You can use Gunzip to extract zip files, you can use Puzip to make a zip archive. You can also listen to .mod, .xm, .s3m files with Josmod. ie: 'josmod mod file'. You can listen to wav files with Wavplay and raw samples with Rawplay. JOS supports the SID chip and Nate Dannenberg's Stereo 8Bit DigiMax DAC boards, when used with JOS those DAC boards will give a perfect sound.

There is a stars application, which displays an animated starfield. Web file.html displays a html file. Wc counts the words in a file. 'Echo anything', echo's parameters to screen. Memchk, displays all memory blocks. JOS has a text editor called Ned. You can read the ned.txt for the commands.

Enough about the CLI, let's pass to the GUI mode.

To do this you type 'gui'. You wait a few moments for the gui to load and then after the loading you will have 3 windows on the screen. A window with JOS credits, a file manager, and

ajirc (a graphical irc client).

None of the window buttons work at the moment, the GUI is under intense development. You can only select a window by clicking on it's titlebar or border. Also, JOS has a JPEG viewer, yes a JPEG viewer made by Jolse/S.Judd. It's only in hires mode with 2 colors at the moment - the Basic version made by Adrian Gonzalez/S.Judd was in color I FLI mode. The JOS GUI is in hires mode so JPEG displays in this mode aswell, however, when Jolse ports JOS to Jeri's Commodore one, (warning - results may blow your mind!) when the Commodore One is ready, Jolse will adapt the GUI and all the applications to C=1.

How do we load a Jpeg file?. That's easy. After you loaded the gui, press 'C= +BackArrow'. You are now in CLI mode. Then you type 'jpeg' file.jpg. ie: let's say I have a jpeg file called 'photo.jpg'. To load it you type 'jpeg photo.jpg'. You then let it do the rendering. You go back to the GUI by pressing 'C= + BackArrow'. A new window will be opened with the jpeg.

You can resize the window by pulling the bottom-right area of the window. What makes this JPEG viewer special, is the ability to see all the photo with the help of the window bars.

One of the most important part of JOS is the TCP/IP. JOS supports TCP/IP, PPP and Highspeed modems connected with either the Turbo232, the swiftlink, or The IDE64 Serial device DUART.

What do you need to get on the internet with JOS ?

First you need a modem, the faster the better, and a modem interface (Turbo 232). Jolse explains in the help file what are the steps required. JOS should load the uart.drv and tcpip.drv for you but if they aren't loaded (check with 'ps') you type: 'tcpip.drv' press return and 'uart.drv' press return. Then to

dial out type 'term /dev/modem' Which will attach you to the modem so you can type modem commands.

ie: atdt 546-5467

Once you are connected, you'll either need to start PPP by waiting for the prompts for username and password, or, if PPP is started automatically on you I SP, hit Run-Stop and run PPP (using pap):ppp /dev/modem username password - you will have to type that quite quickly, or you could make a very simple shell script to do it for you.

ie:'echo #! sh > pp' then 'echo ppp /dev/modem user password >> pp' Then all you would need to type is 'pp'.

It should say IP is up! and display your Current IP address.

Once you get on the internet with JOS you can use:-
irc /tcp/server:port ircnick - speaks for itself
telnet addressofsomewhere - telnet somewhere else
htpdd [dir] - starts a web server serving from that dir
telnetd - start up a telnet server

Ajirc is a nice graphical irc client that you can use once connected to the net' and probably the best proof of JOS powers is this. <http://c64.nvg.org> This server is a commodore running JOS.

I hope you enjoyed reading this article and that you give



JOS a try.

For the more development, Jolse needs input from the users. For more info on the subject you can email Jolse at - jmaginni@postoffice.utas.edu.au - and you can check Greg Nacu's site at: <http://www.king.igs.net/~billnacu/jos.html>

Remember - JOS is continually getting better.

Homestead is also a Good mailing list to ask questions on. On the jos64.com there is also a JOS specific Mailing list that you can sign up, to get the latest info, and ask questions directly to JOS Users.



TELETEXT ADAPTOR & TUNER from MICROTEXT



After many, many years of searching and waiting, I now have one of my most sort after items from the golden days of the Commodore 64.

The **MICROTEXT** teletext adaptor & tuner modules. As its name suggests, it is a device which allows you to view and print teletext pages from your C64/128.

There were two distinct parts to this bundle when it was originally distributed and they were :

- 1) Teletext adaptor with manual and software.
- 2) Teletext adaptor, tuner (PSU and connection lead), manual and software.

With option one you had to use the tuner from a video recorder to get the channels, with the second option you just plugged it into the C64/128 and away you go - teletext pages on your Commy !

Versions were also available for the Spectrum and Amstrad machines.

Even after all these years (15+ ?) it still works beautifully !

A Travlrs Journels: Maurice carries on the CMD torch

Hello everyone,

It's just about 1:00PM here on Thursday in Charlotte, Michigan. I'm all packed up, the truck and trailer are sitting out front ready to go. I'm sitting here eating a couple of hot dogs and drinking a Coke as I type this message. My wife came to meet me for lunch. We went down to the hardware store to get some extra keys made for my shop so she could check on it each day. It took so long at the hardware store, we had to stop and grab the hot dogs on the way back. Then she had to hurry up and get back to where she works at the local Chrysler dealership. We kissed and hugged and I'll give her a call when I get there.

As soon as I log off here, I'll finish up my lunch and then I'm on the road to Massachusetts.

I'm not exactly sure when I'll get the next chance to leave a message, it might be Friday night or maybe I can log on from CMD.

Friday, July 13, 2001

It was a long trip in my truck pulling a big trailer, but I arrived safe and sound at about 10:00 AM on Friday morning. Aside from about 4 stops for fuel, I managed to stay awake the whole time except for about 1 hour when I pulled into a rest area at about 5AM to take a little nap.

I was quite cautious driving my truck on this trip since it had been sitting for about 5 years since the last time I had used it. It needed a lot of attention to get it ready for this trip. But it did a pretty good job getting me here with just a couple of minor problems. An oil leak had developed which wasn't a big problem, I simply had to make sure to keep an eye on the oil level and to add a quart or two when needed. The leak caused me to add a total of 6 quarts of oil to get here. That's minor compared to the amount of gasoline I went through at 6.4 miles per gallon! It didn't matter how I drove, it got either 6.4 or 6.5 on every fuel stop. But that's always the way it's been. After all, even when empty, the truck and trailer together weigh about 14,000 pounds. It's the cost per gallon of gas that's killing me on this 800 mile trip.

The only other problem I had was that the truck got a bit louder about halfway into the trip. Both mufflers went bad and got noisy on me. I'll put up with the noise until I get home.

About ten years ago at a World Of Commodore show in Toronto, I met the guys at CMD and had a chance to talk to them for a short time there. This was the first time I had seen them since then, other than talking on the phone or through email. It was nice to see them once again.

It's a busy place at CMD, everyone's working, the phones are ringing, Mark and Charlie are in and out tending to business. Doug is doing his thing, taking care of various clients. Charlie's mother Ruth (and the wife of Charles Christiansen, Sr.), is there for the day to do some secretarial work, answer phones, greet the walk-in customers, and many other duties. In the main work area, a young man named Noah, is working on PC's for customers. Back in the production room, a gentleman named Angel, is busy soldering up some SuperCPU circuit boards. For the past couple of years, Angel has done most of the soldering work on the CMD products.

The main thing I did today was get familiar with some of the operation and check out some of the special modifications that need to be done to the various circuit boards before being assembled into a product. Angel showed me most of the stuff he has to do to each circuit board, including special modifications that are done prior to assembly.

Mark showed me the equipment used for programming the custom GAL and PLD chips used in most of the products and then turned me loose to create a batch of GAL chips that we would later install into some SuperCPUs and RamLinks during assembly time.

CMD has eliminated some warehouse space to cut back on expenses, but aside from that, most of the Commodore related stuff is still set up and intact. (But not for long!)

At lunch time, Doug invited me to go with him to get a bite to eat. We ate at a busy little Deli, and it sure was good. I had a very well packed sliced Kielbasa sandwich and Ginger Ale.

At the end of the day, Doug once again bought dinner for me and we ate at Bickford's restaurant. This time it was a T-bone steak and scrambled eggs with pancakes. I was all set for the evening.

Doug headed on home and I scouted around for a motel room. They were either filled up or were much more expensive than I was used to paying, but I was tired after the long drive and the first day at CMD. I paid \$75 for a dumpsy room and fell asleep.

-Maurice

Saturday, July 14, 2001

On this day, I was scheduled to meet Mark at CMD for some hands on training. They are normally closed on this day, so it would be a good time to get some work done.

However, our day wasn't going to start until the middle of the afternoon since Mark was entered in a golf tournament that morning. At about 3:15, we got started.

It was time to assemble some SuperCPUs. But first, we needed more chips. This time, it was the custom PLD chips that are the main key to making these units do what they do. We programmed up the chips that we needed and then went on into the production room to assemble the units. Using the boards that Angel had soldered up the previous day, we popped in the GALs and PLDs and did a quick visual inspection to make sure everything looked right.

Now we plug the first unit into a test machine. This is a slightly altered 128D with the internal drive removed, an HD connected and a RamLink and a bunch of testing software. Once the SuperCPU passed all the tests on this machine, the top cover is quickly installed while the unit is still hot and then it's plugged into the next test machine for further testing. Now the SuperCPU goes through some of the same tests, but this particular 128 is running with a power supply that runs at a minimum voltage level and the SuperCPU is all warmed up after its initial 15-minute test run on the first 128. If it gets past the testing on this machine, chances are good it will run on most any machine.

A couple of the SuperCPUs came through without any problems at all. But a few of them needed further work. One was found to have a PLD that just wasn't up to par. It would work good on the first test machine but not on the second one. That PLD went into the trash and a different one installed. It then passed the test. But to certify it completely, the unit had to go back and start the tests on the first 128 and finish up on the second one without failing.

Doug showed up on this day also and got caught up on some work in his office. I think he may have also been sorting through some files on one of the Macs that I would be needing to take with me. These would be the original files used for creating the CMD manuals. Creating and editing the manuals was always Doug's job.

It was getting close to 8PM now and time to quit for the day. I drove to an area where there was a shopping mall and several other shopping centers. I bought a pre-paid phone calling card and gave my wife a call from a payphone. I figured this would be cheaper than calling her collect. The night before in that motel room, the phone would only work with calling cards but could take incoming calls. So, I called my wife collect from a nearby payphone and gave her the number for the motel. She could then call me direct. But tonight, I could call her direct.

I then went to a nearby Burger King and got a Double-Whopper and the free fries. I had cold Coke in the cooler and waited until getting back to my truck for something to drink. It was a quiet parking lot in one of the shopping centers, so I just parked there for the night. Inside the back of my truck is a workbench that also doubles as a bed. Sleeping was a cheap deal tonight.

Sunday, July 15, 2001

It's Sunday, Mark and I got started at about 1:30PM. We finished up

a couple of SuperCPUs and got them ready for troubleshooting. These were two units that failed to work properly the day before. Actually, the problem with one of them was only in the ramcard.

I also brought along a V1 SuperCPU that quit working on me one night when I took it to a user group meeting. We found it to have a GAL chip that had gone bad for some reason. After finding the bad chip and replacing it, Mark also installed an updated ROM.

It was a short session today, but I have a feeling I'm going to have a few very busy days coming up.

I also tried leaving email messages today from CMD, but for some reason it kept failing. I think it was a DNS problem. I'll try to figure it out Monday during the day. Mark was letting me use a test account that they have on their ISP.

I think I'll sleep in my truck again tonight. It's comfortable and cheap. I can't take a shower in it, but I can still brush my teeth, shave, and wash my face. I'm not getting as dirty as I would if I were working in my auto repair shop, so getting cleaned up is fairly easy. Unfortunately, the other important facilities are missing, if you know what I mean.

Monday, July 16, 2001

It was a normal workday at CMD today. Charlie, Jr opened up at around 9AM and I got there about 15 minutes later. Doug and Mark came strolling in a short while later. Noah, Angel, and Ruth all showed up today also. Later in the day, Charlie Sr came in. Today was the first I've seen him since I got here. It was nice to meet him again.

Today was quite productive. I'm getting more used to how things are done around here and am starting to know where things are and what needs to be done. Angel built a few EX2+1 expansion cartridges and gave me the chance to see what gets done on those. I also did some of the soldering on them.

I attacked the repair shelf that contains some products that people have sent in for repair. This stuff needs to get done this week and so I was helping to turn out the work for CMD. I fixed and upgraded a SuperCPU that Allan Bairstow (from Commodore Scene magazine) had sent in. I also fixed another SuperCPU that would fail to work consistently. I then tackled an HD that Ken Zito sent in. That was easy. A simple BootROM upgrade and install the DOS and partition the drive and test. The unit is now ready to return.

I helped finish up a couple of MMU adapters and tested them. These needed to be packaged up with two of the SuperCPUs that we

built over the weekend. Then I put together my first two JiffyDOS chips. These were 128D chips that are mounted on a little circuit board with a switch connected.

After the day ended, I went to look for a motel room. The prices come down after the weekend and I was able to get a room at the Motel 6 for \$39.99. Much better than that trash motel on Friday night. I was also able to get a modem hookup in the motel room so I could download my email that's accumulated since Thursday as well as send out the three messages I've composed each day.

All in all, things are going well for me at CMD. At times I wonder

why I'm taking on such a task. Then at other times I look forward to working on all of these wonderful products. There's a lot to learn about these products, but it's helped a bunch that I've done a lot of programming for most of them. Having a good understanding of how they work is helping considerably.

Tuesday, July 17, 2001

Today was RamLink day. I started off by testing a unit that someone had sent in for repair. It involved replacing the ribbon cable and connectors to the LED board plus a new socket on the main board. After the standard RamLink test that's given to all new units, this was ready to



send back to the customer.

Now it was time to work on some new units. Angel already had some main boards and some ramcard boards soldered up, so getting these units finished wasn't going to be too difficult. I had to install some of the chips, put the boards into the cases, and fit the ramcards. Some of the RamLinks were ordered with RTC chips, so those had to go in also. Then, with the covers removed, each RamLink was put through a test session on a 128 test machine. The testing took about 15 minutes for each unit. Sometimes a RamLink wouldn't start up properly. When this happened, I'd have to troubleshoot it. A couple of them had bad chips right from the start. Generally, a bad chip will show up immediately. If the unit gets through the initial testing session, chances are good it will run for many years to come.

Altogether, I got 4 new RamLinks put together today. These were the last RamLinks to ever be built by CMD, and I had a hand in doing them. All future RamLinks will now come out of my shop in Michigan.

At the end of the day, I went to a grocery store and bought another pre-paid phone card. The one I bought for \$5 on Saturday lasted pretty good. I had used it to call my wife for 3 days and also to send and receive email from the motel room a couple of times on Monday night. I picked up a \$10 card this time. It should last me until I get home.

I'm saving some money again tonight, I'm sleeping in the truck. I think I'll get a motel room again tomorrow night.

Wednesday, July 18, 2001

Today was kind of historic. Two of the RamLinks that I assembled yesterday were getting packaged up to ship out. These were officially the last two RamLinks to be built at CMD's shop. For this I just had to get a picture. Charlie Jr wanted to take my picture with them, so he got my camera and took the shot. Angel just got to work, so I took the camera and got a picture of Angel holding one of them and Charlie holding the other one.

Don't be alarmed, I'll still produce the RamLink at my shop...but I couldn't resist this moment!

I did some finish work on 3 T232 circuit boards today and fully tested them with the special test equipment that Mark has built. After testing, I installed the boards into their cases and put the decals on and bagged them. There will be 3 more happy high-speed customers soon.

These are also the last T232's coming from CMD.

I also worked on three more FD-2000's today. I got the boards finished and ready to install. I also learned the little tricks needed to get the FD mechanisms ready. Then I tested the units and assembled them. After applying the front and rear decals, I put the rubber feet on the bottom and bagged the units up.

Those will be the last FD drives from CMD.

At the end of the day, Mark and his wife invited me over for dinner. That was the first 'real' meal I've had all week. That was nice of them.

After dinner, Mark took me downstairs to show me some "cool" stuff. He's also letting me borrow this stuff to show at the Chicago EXPO with the promise that I send it all back to him afterwards. This includes the original wire-wrapped prototype RamLink. This unit didn't work, but there is also the second prototype which is still a wired up unit that actually DID work. Then there is the third prototype that is very close in appearance to what the production unit would look like. Other wire-wrapped prototypes include the SuperRAM card and the MMU adapter. There is also a very early prototype of the SCSI adapter which found its way onto the HD main board. There is an unpainted RamLink prototype case. There is a prototype of the JiffyDOS board that is used with many of the JiffyDOS chips that have switches. There is also the very first 1541 JiffyDOS chip. And there is an EPROM programmer that Mark designed and built that he used to create the very first JiffyDOS chip with back in 1985.

Mark couldn't find the wire-wrapped SuperCPU prototype. He thinks he may have thrown it out!!

But we're going to look around the shop tomorrow to see if it might be sitting there somewhere. He thinks the FD prototype might be there also. I can't imagine losing stuff like this!

Thursday, July 19, 2001

Today is a day to go over things that haven't been covered yet. There's been a lot of details covered, but we're not done with everything.

Mark went over the testing procedure he developed for the geoCable II. There's a special test rig for hooking up to the geoCable. This is also plugged into a 128 and a test program is run.

We had another product that needed to get built and shipped before anything could be torn down. This was a SuperRAM card with 16 megs that someone had ordered. But we had a slight problem... we didn't have a SuperCPU to do the testing with! So, I had to take one of the partially finished boards and do what it needed to finish it and then I could test this new SuperRAM card.

Another old order that CMD needed to finish up was a refurbished 1541. We took a good looking unit and opened it up and performed all the necessary tests including an alignment. I installed JiffyDOS into it and put it back together and did a final test on it.

Another product that wasn't covered yet was the SmartMouse. So, we tackled one. Angel already had a board fairly well



completed. He went over it with me and showed me all the parts that he installs onto it and the cables that are used and how he routes the wires. There's also a minor modification needed for the case to make the cable fit into it. Once the mouse was fully assembled it was time to test it. One of the 128 test machines has software on the HD for this purpose. It goes through and checks the function of the built-in clock and ram. Then the mouse movement is tested as well as all three buttons. This mouse tested perfectly the first time.

Towards the end of the day, Charlie sat down with me to go over the software they use for the CMD customer database. This database software is in many ways similar to SuperBase, except that it runs on a Mac. Charlie and Doug were getting a Mac with a laser printer and a dot matrix printer ready for me to take back to Michigan. It would contain the customer database with the ordering software and price lists. Plus, Doug was installing the software and all the data files for all of the CMD manuals. Doug also put all the data files on it for any disk label or packaging label that might need to be printed. Of course, with me being a true Commodore person, this stuff will gradually migrate over to a CMD-equipped Commodore 128.

This was the latest we had worked all week. I think everyone could tell the end was near. It was about 8PM and Doug invited me to go eat dinner with him again. He took me to Chi-Chi's and I got the all you can eat enchilada special. We sat and talked about many things for a couple of hours. Doug has seen and been through many things over the years. And much of the reason these CMD devices interact so well with the user is due to Doug's thoughtful input during the development of each product. It was great to be able to sit and talk, and listen, to Doug. I've tried to do that with everyone at CMD all week, as much as possible. I've been absorbing and observing as much information as possible. But there's so much more that will soon be gone and possibly forgotten.

Friday, July 20, 2001

Production is pretty much over with at CMD. Charlie is packing and shipping just a couple of things that were built the previous day or that was already in stock. He needed to send out geoCalc and a couple of JiffyMon disks and these weren't ready to go, but the disk duplicator was still in operation. Mark went over a couple of more details about the duplicator that I would need to know and the disks Charlie needed were created.

Mark backed up the HD that was in the GAL/PLD programming machine. He also backed up the HD that was attached to the disk duplicator. This HD contains all the masters for all the commercial disks that were distributed by CMD including the full GEOS line. He then copied all the special software that is contained in the HD's that are used with the CMD hardware test equipment. He also made a full backup of the CMD HD that he used during all of the development of the CMD hardware. This contains all the source code for all the firmware used in each product including JiffyDOS, the RL-DOS, FD-DOS, SuperCPU

DOS, HD-DOS, etc. The source for the CMD utilities is also on this drive. After backing up the drive, he handed it to me.

My work this day involved filling the trailer. All day long the trailer was parked in front of the door. Many boxes were needed. This was to be the biggest job of the whole week. The back room's shelves were emptied of all the Commodore equipment and packed into the trailer. The GAL/PLD programmer was dismantled and moved into the trailer along with the stand it was sitting on. The disk duplicator sat on a desk that was also filled with printed disk labels and other related items. This was all dismantled and loaded into the trailer. Mark went through his whole office finding things that I should take with me. A lot of engineering drawings and schematics were found. We even ran across the first ramcard prototype for the RamLink. An early FD prototype board was found. But no SCPU prototype.

During the day, Doug was going through his office finding little goodies and memorabilia. He showed me some interesting things and some of the stuff he let me take.

Charlie spent some more time on the Mac that I would be taking. He got the two printers set up to work correctly with it and also had to disable the network card that was in it since it would no longer be used in the building. He also spent time working on the contract for our licensing agreement.

After helping with the stuff from the back room, Angel began cleaning and organizing the production room. This was where he worked most of the time. He usually came to work at about 9:30 AM and would work until about 2:00 PM. He did a lot of soldering work for CMD as well as much of the assembly work. Thoughtfully, he would think of anything that I might need to know and would show it to me. He was very unselfish and helpful, more than most any employee of any other company would be. And I was about to take away his job. I feel sorry for Angel and hope that CMD can still keep him around.

Charlie was now busy packing up the inventory that was sitting in the shipping area. There was a lot of GEOS products, various cables, product manuals, JiffyDOS systems, etc. He boxed everything up and moved it all into the trailer.

Noah stuck around for awhile after working on PC's to help with loading some of the heavy stuff and then he quit for the day. Angel was all done with what he needed to do. I thanked him for all the help he gave me and we shook hands goodbye. It was about time for Doug to leave. Everything he needed to help me with was over. It was getting fairly late into the evening by now. We shook hands and I thanked Doug once again for the dinner the previous night. He then went home.

I began boxing up the stuff from the production room. There's a lot of little parts in here, chips, resistors, connectors, boards, and numerous other electronic parts and pieces. Everything is going including the soldering equipment. All the custom testing equipment is also in here. It's all controlled by Commodore computers and 4 custom RamLinks and 3 HD's holding all the test software. There's 3 128's and a couple of 64's doing all the testing. There's a modified RamLink with a couple of EPROM sockets mounted on top just for testing the JiffyDOS chips. This is all going. I tore everything apart and packed it up into several boxes. Even the two benches used for soldering and assembly work is going into the trailer. The cabinets holding lots of parts were loaded.

It's just Charlie Jr, Mark, and myself now. We're looking around to see if there's anything we've missed. In the back room on the floor is a few assorted items that Mark is saving just in case he ever needs to repair the 64 or 128 that he has at home. In Doug's office, Doug still has his own 128 system on a stand next to his desk. His bookshelves are still filled with many Commodore related books and manuals. But this is all Doug's own stuff. Mark kept enough stuff for one of each of the hardware products. Other than these few things, a quick look around the place reveals only PC and Mac items. It looks much like a typical computer sales and repair facility now. It's no longer the highly specialized Commodore-devoted place that it once was.

Charlie, Mark, and I sat down in Charlie's office. We're all tired, but it's time to go over the contract. There's no backing out now, the trailer's all loaded! At 1:30AM early Saturday morning, money exchanged hands and the contract was officially signed. We took a few moments to take

some pictures signing the contract and shaking hands. The deal is now inked.

The lights are now turned off as Charlie and I walked out the front door. Mark stayed inside to set the security alarm and then walked out and locked the door. We shook hands once more and wished each other luck. I said goodbye to the two guys that started this whole thing, Mark Fellows and Charles Christianson, Jr. I then climbed into my truck and drove off pulling a 32 foot trailer filled from front to back with over 15 years of technology from Creative Micro Designs.

Saturday, July 21, 2001

Just wanted to let everyone know I made it home OK. After leaving CMD's place, I headed straight for home. It took me longer than it should have but nothing major went wrong, but could have...

I pulled into Wilkes-Barre, PA to get some gas. Imagine San Francisco and you can picture this town. I was heading down a steep street towards an intersection and couldn't stop the rig. Only the brakes on the truck were working... they got hot and faded and then wouldn't slow the rig down anymore. Luckily there was a side street that I was able to veer off onto. I coasted to a stop and let the brakes cool off. The brake controller for the trailer brakes had failed.

I spent a couple of hours there trying to figure out a way to get the trailer brakes working because the truck brakes alone couldn't deal with the load I was pulling. I cut the main power lead to the controller as well as the line that leads back to the trailer and touched them together for a test. The brakes applied OK but applied too hard and tended to lock up. That's not going to work. I needed a resistor. I looked around and found an ignition ballast resistor in the truck and wired it to the main lead. Touching the other lead to the trailer wire worked great. The resistor limited the current just enough to apply the brakes but not too much. It would be good enough to stop with.

But within a couple of test stops the resistor burned up. The current load was too much for it. My trailer has 3 axles. That means that six big sets of windings was pulling a lot of current. Hmm... Aha! I got under the dash and pulled the resistor pack for the heater blower motor. This was perfect. It has two heavy resistors on it. I could touch the lead to two different terminals to get a little bit of stopping power or a lot of stopping power. A few minutes more of cobbling things together and I could hit the road again.

Of course I still had an oil leak, but a quart of oil at each fuel stop kept things in order there. I stopped twice to take a quick half-hour nap also.

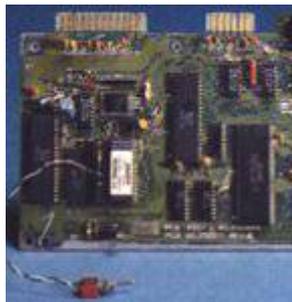
As I got close to Toledo, Ohio, I thought I was in for another problem. One of the tires on the rear axle of the truck started vibrating. Apparently a chunk of tread had come off. Within a couple hundred yards, the entire amount of tread all the way around the tire shredded and blew off. I was in heavy traffic in a construction zone and couldn't pull over, since there was no shoulder to pull over to. I had to ride it out for a couple of miles. Amazingly the tire was still inflated but lost all of its outer belt and tread.

It's a dually rear axle, so I decided to just keep going and hope that one tire on the right side would get me home and it did. The tire without the tread was smaller in diameter now so it wasn't getting much of a load. About 40 miles north of Toledo it popped and all the air came out but it still didn't shred itself. I just kept on going, but kept the speed at 50-55 mph.

At about 1:00AM early Sunday morning, I finally pulled into the driveway at home. My wife, Brenda, was glad to see me and I was glad to see her. Even our dog, Ling, was spinning his tail around in circles.

Monday morning, I'll be pulling the truck and trailer into the parking lot at my shop. Looks like I've got a job to do.

Maurice Randall



THE NEW CMD HD-DOS

What follows is a very much truncated description of what the new HD-DOS system will incorporate and also some helpful Q&A's. My thanks go to Robert Bernardo for compiling the information - ED

Many months ago in the Usenet group, comp.sys.cbm, there was a furor over the oldness of the DOS for CMD hard drives. Drive mechanisms on the market were getting bigger and bigger, but the HD-DOS limited the CMD hard drives to a maximum size of 4 gigabytes with 16 megabyte partitions. SCSI drive mechanisms that small were becoming hard to find. CMD itself had to resort to "pulls" or used drive mechanisms to build their drive boxes. Though many on-line users asked for a more modern HD-DOS to overcome the limitations of this DOS, which hailed from the late 1980's, CMD refused to spend the time or the money to modernize it. Then by mid-2001, Creative Micro Designs was out of the Commodore business.

Now, one man is doing what CMD refused to do, what CMD said would take them many man-hours, what CMD said would cost thousands of dollars to develop. That man is Maurice Randall, new developer and distributor of CMD products.

He is now close to releasing the new HD-DOS, and what a breakthrough it is! He crashes the 4 gigabyte maximum size barrier. He cuts through the 16 megabyte partition maximum. He enhances the HD-DOS with more features, more conveniences. Read on and see how Maurice has brought the new millenium to Commodore computers.

Read on and see how C= history is being made. 2002 is going to be a very good year!

Robert Bernardo
Fresno Commodore User Group
<http://videocam.net.au/fcug>

Maurice Randall says >

I started up a CMD-HD for the first time with my new HD BootROM. It was a bit buggy at first, but after a day of debugging, it's now starting the drive up and getting the DOS running just fine. For informational purposes, the CMD-HD contains a 64K computer inside the case with a 6502A processor. This computer is what makes up the SCSI controller as well as the interface to the 64/128 through the serial bus and the parallel port of the RAMLink. Just like the 64/128's have an operating system in rom, so does the CMD-HD. But what's in rom is very basic, for the most part the

BootROM is used to start the machine up and access the SCSI drive mechanism which will then load in the main HD-DOS. The rom is then switched out and the DOS which is loaded into ram is then put to use. The BootROM is also used during any reconfiguration operation such as when installing a new hard drive mechanism or creating a new partition.

Today, I was able to get the new HD-DOS booted up from the hard disk as well. Being new, it's naturally got a few problems that I need to work out. But over the next few days, those problems will get corrected and then I can continue working on the new features. A good share of the print spooler code is already implemented. This will allow the CMD-HD to act as an intelligent printer interface. It will trap any data being sent to device 4 and will store the data in a print buffer partition. While data is being received from the computer, it will begin to spool it out through the auxiliary port to the real printer or printer interface. Since it can receive print data quickly, and buffer it on the hard drive, you will be able to return to working on the 64/128 sooner, especially with those large print jobs. At the same time as the HD is sending print data out the auxiliary port, you will still be able to access the HD to load and save data normally. So, you won't be slowed down with disk access either.

The new BootROM is built just like a JiffyDOS chip that goes inside a 1541. It's a dual rom system with a switch that can mount on the back of the HD. With the switch in one position, you'll have the new BootROM in use, but if you flip the switch the other way and press the reset button, it will switch to the original V2.80 BootROM which was the latest one that CMD produced. The older BootROM will boot up the older V1.92 HD-DOS while the newer BootROM will boot up the newer HD-DOS. This will prevent any incompatibility problems that might arise with a rare utility or two. Although it's very likely you'll never need to switch to the older BootROM.

Once the BootROM module code is finalized and the print spooler is finished, I'll begin shipping the new HD-DOS package to everyone who has ordered it thus far. And at that time, all new CMD-HD's will ship with the new BootROM module installed and both HD-DOS's installed in the system partition. Of course, I'll continue working on the HD-DOS and will send out updates as they become available. The main HD-DOS can be upgraded easily since that part is all done through software. The BootROM isn't as easy to upgrade, so I plan to make sure that part is completely ready before shipping. As far as upgrading the software portion of HD-DOS, that's only about a 3 minute job to run the installer software, press the reset



button and you're done.

In addition to the current programs on the HD Utilities disk, I plan to introduce some similar utilities that will run from within the GEOS and Wheels environment. Later on, similar software will be made available for the FD and RAMLink as well.

Q : Once the Print Spooler is done and the information is sent from the Auxiliary Port to the printer, will you be making a type of cable that will send the data to the printer, that we can purchase from you? Or is this cable already available at Radio Shack or somewhere else?

A : For this to work, you will need either a printer interface such as a SuperGraphix Jr, MW-350, etc., or the printer must be a "Commodore-ready" printer that plugs directly into a normal Commodore serial bus.

In the case of the HD's print spooler, the auxiliary port works very similar to the serial port except that it is totally separate. Therefore, there will be no conflict between the two ports. The HD will intercept all calls to device 4 on the serial bus and send them out to device 4 on the auxiliary port. If you have a RAMLink and a parallel cable connected, the HD will receive all the device 4 data through the parallel cable which will be quite fast.

No promises yet, but I'm also trying to figure out a way to use a parallel printer cable without interfering with the RAMLink. Or it's possible I might be able to do it right from the SCSI pass-through port. But again, this is not a definite thing yet!

Maurice says >

A CMD-HD functions as a print-spooler for the first time ever!

Today was the first real test of the spooler and I'm very pleased with the initial results. It was pretty cool the first time. I could still access the HD to load or save files even while it was still spooling out the data to the printer that I had sent to it.

The print spooler captures all device 4 accesses and saves the incoming data to a print buffer partition on the hard disk. It starts sending the data almost

immediately. It's got special serial bus code for the auxiliary port that will detect if the printer is busy, such as when it's moving the print head and can't accept any data. When that happens, the spooler will let the rest of the HD-DOS take care of other jobs instead of locking up the system while waiting on the printer. When the printer is finally ready, it will send more data to it.

The print spooler doesn't seem to have slowed down the HD at all. If anything, it's made the computer (and ultimately, the user) more efficient.

Q : Any work done yet on the ability to take output from "legacy apps." that only work with specific printers (eg. Print Shop) and send the output to a laser printer?

A : I'm looking into it. I've got plenty of code space left to work with, so it's very possible.

Q : Would there be a more "MODERN" chipset that we could use for ultra fast serial to parallel conversion on the "NEW" serial port on the HD?

A : No, but I'm going to design a special cable similar to a geoCable that will connect to the data lines on the external SCSI port for the data and also plug into the auxiliary port for the handshaking lines. This will allow very fast transfers to the newer speedy printers and won't interfere with the SCSI bus. So, we'll have two ways to configure the output, serial to a printer interface or direct parallel to the printer.

Rod says >

You never cease to amaze me. This HD is amazing me as I play with it. I'm having fun trying it out. These machines are remarkable devices.

Today I booted up into Wheels and printed a geoWrite file. I'm using a dot-matrix printer for testing. The slowness of it gives me time to try various things. Anyway, geoWrite started sending the data, the HD intercepted it and began storing the data to its printer partition. Almost immediately, it also began spooling it off to the real printer. I didn't take long for the entire geoWrite file to be captured by the HD. I then exited geoWrite back to the Dashboard. The HD was still sending data to the printer.

I copied a couple of files to the HD. Even during the copying process, data continued to go to the printer. The printer was happily chugging away. I ran a few applications from the HD. They loaded fine even while printing was taking place. I was very pleased to see that the Wheels disk driver turbo code running in the HD wasn't interfering with the print spooler! (Note: I planned it that way 4 years ago!).

I then exited the current app and

returned to the Dashboard. I clicked on the menu to exit back to BASIC. The HD was still working on that geoWrite file even while in BASIC. I loaded up CMD's FCOPY and copied some files to and from the HD.

I exited FCOPY. I did @\$=P to view the partition directory. I found the Loadstar partition and switched to it. The printer was still going. Dot-matrix printers are great for this test! I loaded up Loadstar and messed around looking at stuff, loading stuff and such. The geoWrite file was still coming out of the printer. While reading a text file from the Loadstar presenter, I pressed 'P' to print it. It spooled off to the HD's printer partition at the same time the geoWrite file was still going to the printer.

I exited Loadstar and booted back into Wheels and got back to some programming. The geoWrite file finally finished printing. And lo and behold, the text file from the Loadstar partition started coming out of the printer while I was running Concept and assembling a file.

This is too much...

Q : Any luck on partitions that are more than 16M in size ?

A : Yes, but the design work isn't finished yet. I'm working on a combination of a BAM and a FAT for the big partitions. The memory of the HD doesn't have the luxury of megabytes of ram in which to load a big FAT table into. Because of that, it would be way too slow to look through a FAT table sector by sector to find a free sector. Using a BAM for this purpose is quick. That's how the CBM drives and the current CMD partitions do it. But it's slow for following a chain of sectors in a file. The actual sectors of the file have to be read. Using a FAT, any portion of a file can be accessed quickly. Even the BAM design is somewhat different from CBM's design. It uses a tree method for quickly getting to a sector that contains the map of free sectors. So, we will have the best of both worlds. A BAM for quickly finding free sectors and a FAT for quickly indexing into a file. It also makes deleting files very, very quick.

The way my design is set at this point in time is looking like a 1gig limit on the partition size. I don't want to make it too big or we will still have a performance loss. But with 1gig, we will at least have enough room to load in a whole CD-ROM to the partition. Or vice-versa.

Q : Won't CD sized partitions make the whole idea of burning CDs easier ?

A : Actually the idea will be to use a foreign partition for burning CDs from. But to begin with, the 'extended native' partition can be used for building the CD in order to get the files arranged and

tested, and the directory layout and subdirectories set up how you want it. When finished, then a 3rd party application can build the foreign partition exactly like the CD will be, block for block. Burning a CD from a foreign partition built like this might work. Time will tell.

Q : What will the max size of the drive be ?

A : Work is being done in the DOS tables to allow a drive mechanism up to 2048gb. That might as well be no limit on drive size! And since I last spoke, the partition design is now up to 4gb with no performance loss. An extended native partition size can be anywhere from 16mb up to 4gb in 2mb increments. This is still not final though. The maximum could still go up or down depending on my continued work with the directory header design.

The beauty of this design is that it will be fast. Block sizes are 512 bytes and the entire block contains data, no track and sector pointers. The pointers are contained in the FAT in a way similar to how MS-DOS does it, but not quite the same. When a block gets allocated to a file, a bit in the BAM will also get cleared indicating that block is in use. If a whole section of blocks gets allocated, then one of the master bam bits in the header also gets cleared. The master bam helps to find a whole area of the partition that has some free space. Then within that area, the bam branches will show the actual free blocks where new files can be placed.

There is no such thing as a cluster in this design. We use 512 byte blocks, period. That allows the maximum use of the disk space. There are no tracks and sectors. Blocks are addressed by the block number with the first block as block 0, the next one as block 1 and the last one might be block 8,388,607.

So, with this BAM design, we can quickly write files to these big partitions. And with the FAT design we can quickly access any single byte within a file with nearly the same speed as if we were to access the first byte. This will allow many future possibilities such as large fast databases. Or indexing into a specific portion of an image file, a sound file, or whatever.

The directory entry layout is still being designed. But it looks like I'll allow up to 32 characters for filenames.

Q : What about HD-ZIP drives being able to read/write IBM format ZIP disks?

A : This won't be included in the HD-DOS, but there's no reason why they can't be read using a new application designed for that purpose much like Big Blue Reader or geoDOS does.

I've got a little project going on the side that will probably have this in it.

I'm taking CMD's FCOPY and making another variation of it for copying to and from MS-DOS disks. It will find its way onto the CMD Utilities disk. The main reason I'm doing this is because I get too many phone calls at work from people that have a 64 or 128 and need a way to copy files from their PC that they've downloaded from the internet. I will sell them a CMD Utilities disk for that purpose. These people are in a catch-22 situation. Sure they can download Little Red Reader or geoDOS, but how do they get those to a Commodore disk? The absolute simplest solution is to sell them a CMD Utilities disk with an MS-DOS file copier on it.

Maurice says >

About 5000 1581 disks could be stored in a 4gb partition. Over 24,000 1541 disks will fit! Just take your CMD-HD to the user group meetings. Leave the big heavy disk cases at home and preserve them.

Maurice says >

The print spooler is nearly complete now. I've done a lot of fine tuning over the past week or so and have it working quite well now. I ran a test of the spooler while using CMD's MCOPY. First I booted up into Wheels and printed a GeoWrite page. I was using a Star NX-1000C for this test. The printer driver I used is called "NX-1000" and was written by Dave Ferguson. It has several options for print density. I selected the option for using 6 passes. This makes a very nice high quality print but takes a very long time to print a page. It only took GeoWrite less than one minute to dump the whole page with 6-pass data to the print spooler. Normally the computer would have been tied up for the next 20 minutes. Anyway, I then exited out of GeoWrite and opened a window containing a partition from the HD. I double-clicked on CMD's MCOPY. Wheels loaded it in and exited to BASIC to run it. All during this, the spooler was still outputting to the printer. I selected a 1581 partition on the HD as the source and put a blank disk in the FD to use as the target. MCOPY then proceeded to copy the partition to the disk. Print spooling then stopped. The reason is MCOPY hogs all the processing time in the HD which keeps the spooler from running. However, as soon as MCOPY finished copying to the FD, the print spooler continued right from where it left off. It worked great!

Maurice says >

The print spooler now includes two different methods of output to the printer.

(1) You can connect any standard serial bus printer interface or Commodore-ready printer to the auxiliary port. When configured this way, all print data

captured by the HD will spool out through the auxiliary port.

Or (2) you can connect an optional parallel adaptor which I will be producing. The adaptor connects to both the auxiliary port and the SCSI pass-through port on the back of the HD. Both ports are used for this purpose. The adaptor adds a parallel printer port to the HD. The adaptor also has a SCSI pass-through port so you can still plug in external SCSI devices to your HD. Any standard parallel printer cable can be connected to the parallel printer port on the adaptor. When configured this way, all print data captured by the HD will spool out through the parallel cable directly to a printer's Centronics port. This will provide much faster output to these types of printers.

One other thing I will be adding to the print spooler are JiffyDOS routines just in case there's ever a printer interface made that will contain JiffyDOS. (or possibly JiffyDOS roms made available for certain existing interfaces - Yes??)

All the work is finished in the DOS for allowing any size SCSI mechanism to be used. The limit has been slightly reduced from my previous postings, though. We only have the ability to use up to 1,024 gigabytes now instead of 2,048 gigabytes. Shucks... :)

More new stuff...

For those using Zip drives in their CMD-HD, a disk change is now detected by the DOS. Just like with the FD-2000, if you pop out the disk and insert a different one, the partition table from the new disk will be read into memory. Previously, you would have to press the reset button to force the DOS to read the new partition table. In GEOS or Wheels, you can't just press the reset button without causing problems. Actually, any removable media drive used will work as described above.

Also, during power-up or reset, if ID 0 is not found for booting up the DOS and loading in the partition table, the DOS will search for the first device it can find that contains the DOS and partition data. This would allow someone with an external Zip drive to disable the internal mechanism and connect the Zip drive to the back of the case and use it as if it were the main mechanism. External SCSI Zip drives use an ID of 5.

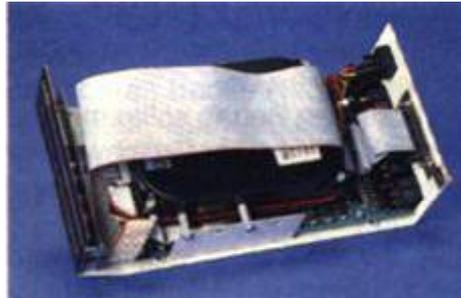
We've always had foreign partitions to use, although I don't think too many programmers have taken advantage of them. BCOPY+ can use them, but there's a catch. The original DOS only supported

a maximum of 65280 blocks in a foreign partition. This is slightly under 16 megs. Sure, FOREIGN CREATOR could make a larger foreign partition than this, but the DOS still could only access the first 16megs of it. For an application to use a larger foreign partition, it would have to have its own low-level routines for addressing the blocks beyond the 16meg point. If physical addressing were used, it could access as far as the 32 meg point. I'm not going to change the DOS to deal with this because I don't want to upset any compatibility with older applications.

Instead, I've added a new 'extended foreign' partition type. These can be as large as 8 gigs and are fully supported by the DOS for reading and writing blocks. These will have uses for things such as capturing scanner image data, CD burning, big data buffers, and any other fast data storage needs.

The previously mentioned 'extended native' partitions are still being developed. These can be as large as 4 gigs

each. The file system is under development and is coming along quite nicely. The design no longer uses a BAM/FAT design as previously mentioned. A BAM is still being used, but the FAT design has been dropped in favor of a



'CAT' for Chain Allocation Table. Each directory and file will have its own CAT. The DOS can look at the CAT block and immediately determine where any byte of the file is located. It can quickly tell if the file is fragmented or contained entirely within consecutive sectors. As few as 8 bytes can describe the entire location of a file within the partition if the file isn't fragmented. If the file is fragmented, then 8 bytes will describe each broken up chunk of the file. If the file is scattered about in 4 pieces, that means that only 32 bytes will describe where any portion of the file is located. By reading these bytes, the DOS can quickly go to any byte within the file. The CAT design also saves a great deal of space and is much faster than the FAT design. The FAT design would require 3 bytes to describe each block of the file. The DOS would still have to chain through the FAT to determine where a particular block of the file is located. With a FAT design, the DOS would have to read through about 2600 blocks of a FAT table to determine where the end of a 650 meg file is located. Those 2600 blocks are 512 byte blocks. That means that 1300K of data would have to be read to find the end of the file. Of course it wouldn't be that bad on smaller files, but you get the point.

With my CAT design, the DOS might

only have to read one block of the CAT table for the file to find where the end of the file is or any point in between. So, the performance is almost the same no matter how big or small a file is. 4 bytes describe the starting block and 4 bytes describe the ending block, or they describe the starting and ending of a chunk of a broken up file. Chances are, most files won't be broken up in very many pieces. Even on a badly fragmented partition, only 1 CAT block would have to be read and analyzed to be able to index into any portion of a file that is broken up into as many as 63 chunks. Additional CAT blocks will be used for describing files with more than 63 broken chunks.

I'm working on the formatting routines and other aspects so I can get one of these new partitions installed for testing. I've got to also add some new extended block addressing commands. The old B-R, B-W, U1, and U2 commands won't work with an extended native partition. There will be new commands to take their place. They aren't finished yet, but will most likely be called E1 and E2. They will use 3 bytes for addressing and will always read or write a 512 byte block and can be used with any partition type. There will also be a file pointer (F-P???) command similar to the current buffer pointer (B-P) command to use for pointing to any byte within a file. The B-P command can only index into the current block that is loaded into the channel buffer. But the F-P command can point to any single byte within an entire file. To point to the last byte of the file, the programmer wouldn't even have to know the size of the file. The F-P command would be used to point to the maximum size that a file can be and the DOS would automatically adjust the pointer to the byte following the last byte. This allows for files to easily have data added to them.



There is a buffer in the HD's memory where blocks are read in prior to passing them along to the actual buffer being used by the current channel. This is the same buffer that was always used by the older DOS. 512 bytes were always read or written from this buffer. If a 256 byte block was to be accessed, half of the 512 byte block would be transferred from this buffer to the channel. This buffer is now 2048 bytes in size to accommodate reading blocks from a CD-ROM. This is something I'm still planning

for the DOS, which is why I've made the buffer this size. It might also be used as a cache buffer for reading in 4 blocks at a time from the HD mechanism even when only 1 block is called for. This would help decrease file loading times and other drive accesses as well since the next block to be requested will likely already be in the HD's memory.

As soon as the extended native partition work is finished and tested, I'll be shipping out the first DOS+ release to everyone who has it ordered as well as all HD's that have been shipped since August of last year. It will also be included with all new HD's.

For anyone interested in the cost of the HD-DOS+ upgrade, it's \$40 plus \$10 to UK. **A final UK price will follow ASAP - ED**

The upgrade includes the original HD Utilities disk plus a new HD-DOS+ Utilities disk, an HD manual addendum, installation instructions, and a new DualBoot rom module with a switch for mounting on the back of the HD. The switch is used to switch your HD back and forth between the older DOS and the newer DOS if you ever need to. Or you can simply tape the switch inside the case and leave it set to the newer DOS. The DualBoot module has both the CMD V2.80 BootROM and the new DOS+ BootROM in one. The HD Utilities disk has the latest CMD V1.92 HD-DOS and the utilities that CMD provided. The HD-DOS+ Utilities disk includes the new HD-DOS+ V2.00 along with new utilities for Wheels and non-Wheels users.

If you have more than one CMD-HD, you can order extra DualBoot modules for \$30 each. You can use the same DOS+ utilities disk for each HD.

Q : Does "disable the internal mechanism" of the HD mean an external Zip drive cannot be used as backup for the HD with your HD-DOS+?

A : No, what this means is an external Zip drive can be used in place of the original internal mechanism. External Zip drives only work as ID 5 or 6. The original DOS only would work with ID 0. Actually, it could work with ID's other than 0, but there were no utilities available to install the DOS on anything but ID 0. And the DOS had a few other limitations too. But not anymore. An external Zip drive can also be used as a backup device and I plan a utility for directly copying data between SCSI devices. I've added code in the DOS for making utilities such as this easier to program for.

This will be handy for not only backing up your working drive but also for duplicating it to a larger mechanism prior to installing the new larger mechanism.

Q : Are non-PS-to-PS text transla-

tors still in your plan for future upgrades?

A : Currently, the HD acts merely as a print spooler and not as an interface that can translate incoming data from one print format to outgoing data in another format. It all depends on how much programming space I have left in the drive's memory as to whether or not I'll be able to implement that feature.

I've still got about 12000 bytes to work with and can do a lot in that amount of space, so we'll see. I've also got the HD-DOS designed so that it can swap code in and out as needed much like what is done in Wheels or other OS's when memory is limited. So, some tricky coding can still get a lot of features included.

Q : How do I know if I need the chip you mention installed on my HD?

A : First of all, nobody needs the new upgrade unless they really want it. This is one of those "gotta have it" deals because it's the latest thing going for our CMD-HD. And there's going to be some new software written for it, I'm sure.

If your present system serves all your needs, you're fine just the way you are.

Think of it like this... Adding the DOS+ upgrade to your HD is like going from GEOS to Wheels. There's simply much more to it.

The upgrade is no more difficult than installing JiffyDOS into a 1541. It requires a rom chip replacement which is included and then you install the new DOS with the installation utility after powering the unit back up. The utility will install both the V1.92 DOS and the V2.00 DOS into the system partition for you. Which DOS you use will depend on the position of the new switch that gets mounted on the back of the HD when you install the new rom module. Just like with JiffyDOS in the 1541, you'll most likely never need to flip the switch to the old DOS, but it's there if you ever need to. I've been running the test HD with nothing but the new DOS. I haven't put a big mechanism into it yet, it only has a 270 meg in it. But it works fine for testing until I'm ready to try one of those huge partitions that I'm working on.

Our utmost thanks have to go to :

Maurice Randall
Click Here Software Co.
High-Performance software
for your Commodore
email: maurice@ia4u.net
web: www.ia4u.net/~maurice

Thanks for your genius Maurice, you are the real star for 2002 !

LPT	Printer port on a PC, has 25pins and normally referred to as DB25
PC	Personal Computer, these days it is used for a machine that generally runs MSDOS
PCB	Printed Circuit Board, the board where circuit components are soldered to.
PSU	Power supply unit, provides low voltages for the computer from the mains supply
SCSI	A disk interface cable type, 50pins, normally peripherals and cards are more expensive
X1541	Cable for connecting a PC system's LPT to Commodore equipment via their serial port
XE1541	Similar to the X1541 cable, but with diode protection for connecting to newer cards

www.64hdd.com (latest info and 64hdd download zip)
ncoplin@lycos.com (author's email address)

© COPLIN 1999-2001

The Commodore Scene Power Supply Unit (PSU)

Reviewed by W.R. Kennedy (USA)

I learned of Commodore Scene and also of the CS-Super Power Supply Unit in a recent LUCKI report. Being impetuous, I ordered one immediately. I didn't even sweat when I removed the power supply cord from one of my spare C= 128 power supplies (That's a requirement of Mr. Allan Bairstow because they used that cord in their PSU).

Mr. Bairstow, (that's pronounced bear's toe, but I don't think he's kin to any bears I know - anyway bears have claws, not toes). But I digress. As I was saying, he wrote me the nicest letter when he received my order and immediately made me feel like I belonged to his company. He said he was instructing his engineer to begin immediately on my PSU. That was March 17, 2001, and he promised the unit by the end of the month. He was true to his word. (Sometimes you worry when you pay in advance) but this time it was quite different from giving your money to a stockbroker!

When the package arrived early in April, it was not in a box ! Do you know it had nearly \$20 In \$5 and \$2 British stamps on it? It was WRAPPED in bullet-proof-paper, and sealed with iron-impregnated self-stick tape ! I worried for a half hour trying to get to my PSU some-where inside. I was getting giddy and thought about calling Allan to see how to get in the package. If I did that, he was sure to wonder how I ever figured out some of the software programs I have. Hardware is pretty difficult, too ! Eventually, I managed to breach the bands which held it, and out popped the prettiest piece of hardware. My unit is about 8.5cm by 15cm by 14cm, light grey. (If you want inches, divide those centimetres by 2.54). It has one hole from which all the output leads come out. Another hole has the input cord.

Now, I have a CMD-FD-2000, two 1581's, two 1571's, a RAMLink, a CMD HD-100 and a C-128. The PSU accommodated those and had a couple of leads left over for future use. I filled a large cardboard box with all the power supplies I removed which the PSU replaces. The PSU puts out enough to handle all these and Allan says it doesn't hurt if a couple are left unattended (Just don't short them out)

I have had it running since April (2001) and as Allan says, it might run forever. It has a very quiet fan which runs all the time. I have a hearing problem (wear two hearing aids - as I told Dale, I invented Aids before the doctors discovered it!) and the fan is just noticeable to me. The unit never gets hot.

The unit comes with what CS calls a "Euro input socket". It is just like the plug that goes in a 1571 or 1541 drive. So, I just removed a cord from one of my spare 1541's and plugged it into the PSU and then into the wall socket (this is what the British call the 'mains'). I pointed this out to Allan and he said he would make this clear in future descriptions. With all equipment switches 'off', and old power supplies removed the leads from the PSU are all connected to your hardware. Any unused leads need to be protected from possible shorting - just put some tape over them. Then, plug the PSU into the wall and it will come on (there is no on-off switch as it doesn't need one). (Incidentally, all lead lengths are adequate). Now all this is included in the installation sheet which comes with the PSU. It emphasises that each peripheral is to be switched on, one unit at a time and the computer LAST ! Allan says the unit is not able to sustain a power-on of all equipment at once and he says it will possibly make the PSU fail as it could draw too much power at once and the surge might damage the supply. This is a small price to pay for so much convenience. I have my monitor, printer and two 1571's on separate plugs and leave them connected to a power surge-protected socket. When not in use I turn the computer on and off at the computer: The RAMLink stays on, the 1581's stay on, the FD-2000 stay on and the HD-100 stays on. I usually just leave the computer on and turn off the monitor and printer at the power socket switch.

I have been quite happy with my Commodore Scene Power Supply Unit. It has been dependable, and if it runs 'forever' as Allan 'Bears-toe' claims, it will be here for my heirs to figure out. I wish you all could get to know Allan, because he seems to be as nutty as me!



More CS-SuperPSU Q&A's

Q : Does the PS supply all the correct power lines to the 64? - I'm thinking of the IIRC 9V required by breadbox 64s for the SID - later 64s get by with 12V. Or is it vice versa?

A : *It supports everything for the 64 and/or 128, with reported no problems at all. I have tested it on many c64/c64c with no problems at all. Both 9v and 12v are supplied, along with all the other stuff.*

Q : Also, does the PS have a pass-through port for a monitor? I think that maybe I can source or build a converter plug so I can have my 1084 monitor use it, thus freeing up yet another space on a still overpopulated power strip.

A : *No. There was not enough room for stuff like that so I asked the engineer to concentrate on the Commodore power.*

Q : Is it repairable? (eg no potting resin) If the unit breaks I don't want to ship it halfway around the world to have a resistor changed.

A : *Yes. There is an internal fuse should anything go wrong, the case just unscrews. All parts are readily available from electrical suppliers.*

2001 Revival Show

Well, it all seems so long ago now !

This was the first collaboration between Shaun Bebbington and CS to organise a show, to be fair, Shaun did all the work and CS did it's best to promote it !

Ticket sales for the show were good and a promising number of people intended to show up but as it was a 'first show' for the both of us I was not expecting miracles or huge numbers of people to attend as I have been to well established shows and realised just how few people actually turn up ! With this in mind I was not surprised at the lack of attendance but I was gladly surprised to see how far some people had travelled to help us support the Commodore. There were, however, a few surprises in store !

After travelling down the night before and staying as a guest with Shaun & Shell (and Fuzzy, the amazing cable chewing kitten), we had an early start to our day by visiting **High Street Micro (HSM)** to see what he had on offer.

Now I had heard a lot about HSM and until you go there you have NO IDEA just how much stuff this guy has for the Commodore (spectrum, atari, etc), you just have to believe it to see it, it is truly breathe taking - don't believe me ? Then please feel free to ask anybody who went there ! Most people who came to the show were re-directed to HSM and practically everybody spent money there. I personally spent about £150 on items and some of them were rare, one item in particular I had never even seen before, even in the heyday of the Commodore - Music Maker 128 keyboard overlay in box with original disk and instructions - never been opened and still sealed from the 1980's ! - I just HAD to have it ! I could go on but writing about it just doesn't do it justice, look at the photos on this page, it's all Commodore stuff, floor to ceiling, most still film wrapped, all originals.

On with the show

The venue is excellent, there is no other word for it. We were upstairs in a huge room with our own facilities such as toilets and bar, unfortunately the bar was not opened due to the lack of people who would have used it - maybe next time eh ? Downstairs was a regular bar (which served real ale) and on the floor below was a kitchen serving good food throughout the day - very nice ! There is even a cash machine in the premises - how good is that ?

The CS display was brimming with items covering all aspects of the Commodore. I tried to show off most of the new software available when ever possible. The prototype of the 4 player adaptor was working fine and Bomb Mania was



getting a right good old fashioned bashing around - great fun with four players ! Other games were show working with and without the SuperCPU and the people who were new to this type of enhancement were astonished to see the Commodore running around like a dog on heat !

Shaun had brought along a raft of items which also brought much interest and talking points and discussions about old computers, software and peripherals soon filled the air. We were all busy all day.

It was nice to see some regular faces and the new faces also made a welcomed appearance. One couple were so impressed with what they saw that they have since order many items from the CSI S and not the cheap ones either !

Along with Shaun, I spent the day talking to many people trying to install the virtues of a computer system that was reliable and well supported, I think we did a good job too.

We decided to leave earlier than we had originally wanted to but in hindsight it was the right thing to do. It had been a long day and everybody was getting tired. We had a lot of packing up to do and then it was off to the local hostelry with Dave Elliot for a few night caps and a chat.

We all learnt a lot from this first outing and with the knowledge that we gained we hope to improve the show dramatically for next year - see you there then.

THE 2002 SHOW

Lets make the next show one to remember, myself and Shaun will be pulling out all the stops to make it something special so please do your best to attend - I guarantee that you will have a great time.

We are hoping to have a better involvement with HSM this year and possibly a stall brimming with goodies for you to drool over and buy. There are a few other things (and people) that we are hoping to bring to the show but more details will be sent to you as soon as we have them finalised and confirmed.

We can't do it without you though so please attend. If people don't come along then there won't be any more shows !

Allan Bairstow



Full details of the next show, along with travelling and accommodation locations will be sent out as soon as I have it.

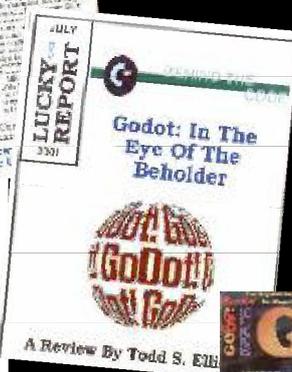
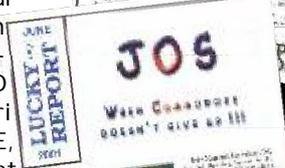
FANZINE & DISKZINE ROUND-UP



LUCKY REPORT : May, June, July, August 2001

The most consistently good and colourfull newsletter

for the Commodore 64/128 is here as always, filled to the gills with great articles and up to date information. Don't forget - it's all produced with a commodore and printed out in full colour through a colour laser printer with the commodore too - very impressive ! Articles range from EXPO reviews, software reviews, Jeri talking about her CommodoreONE, JOS/CLIPS > WINGS news, GoDot rundown, hardware reviews of IDE64, a very interesting use for your old commodore 1200 baud modem case, obviously Maurice RANDall makes a regular appearance with many articles devoted or related to him - and why not ? I hope to run some of these superbly written articles in the next issue of CS.

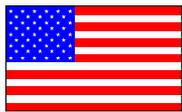


proximately 12 months to complete which in turn makes the magazine VERY late indeed ! Having said that, the contents are very good but because of the delay, they are out of date and old news indeed. Normally I would recommend any commodore publication but I have to admit that if I was paying for it I would not be very happy. The guys at GO64 are trying their best to rectify this situation so we should be seeing an improvement very soon, lets hope it works out as the magazine is good.



Commodore Mailink - September 2001, November 2001 & January 2002

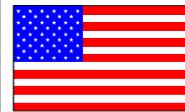
With the new year comes a new editor for this quality newsletter - after Tom Adams decided to stand down, in stepped Linda Tanner to continue the good work. Already there are a few changes in the content and print quality, which is to be expected with a new editor. Good work from Linda, good luck in your new role.



UCUGA - premier issue - January 2002

United Commodore Digest's Groups Association (UCUGA), is another publication from the stable of Dale Sidebottom. Dale talked about this at the recent EXPO (I have it on videotape - if anybody wants a copy please contact me). As this new magazine comes from the same place and is produced with the same hard/software as the LUCKY REPORT it is not suprising that it has the same feel to it as its sister publication. That is were the similarity ends. This new newsletter is an amalgamation of many user groups throughout the USA who have gotten together to fill the pages with good reading material for the Commodore. This first issue partly introduces you to the participating groups and also tantalises us with an article on the newly formed WINGS O/S for the commodore, news on the CommodoreONE and a bio report on Courtney (Geri's friend). 12 pages (6 double sided) of informative articles and good reading is enough for everyone.

United Commodore Digest's Groups Association (UCUGA), is another publication from the stable of Dale Sidebottom. Dale talked about this at the recent EXPO (I have it on videotape - if anybody wants a copy please contact me). As this new magazine comes from the same place and is produced with the same hard/software as the LUCKY REPORT it is not suprising that it has the same feel to it as its sister publication. That is were the similarity ends. This new newsletter is an amalgamation of many user groups throughout the USA who have gotten together to fill the pages with good reading material for the Commodore. This first issue partly introduces you to the participating groups and also tantalises us with an article on the newly formed WINGS O/S for the commodore, news on the CommodoreONE and a bio report on Courtney (Geri's friend). 12 pages (6 double sided) of informative articles and good reading is enough for everyone.



The Village Green - 6 issues from December 2000 to June 2001 (a collection of 11 coverdisks)

More newsletter from accross the pond. There is also an Amiga section in here as well ! To my absolute shame I have not had time to look through the disks contents. Anybody want to sort through them for me ?



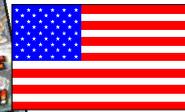
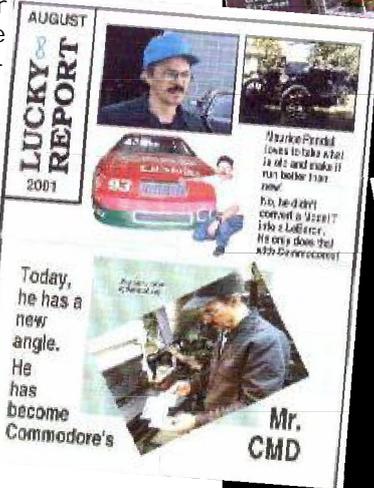
Commodore Zone #16 - The Final Issue

Well, the only showing from the UK and it is bad news ! After a whole year of waiting, this issue finally arrives (but not my copy !). Judging by the phenomenal amount of Bouff stuff on the Binary Zone web site (and in the issue) I am not suprised that Kenz has his mind on other ventures ! Sad news for us all. So long CZ.



GO64 - 7/2000 & 8/2000 (with coverdisks)

Well, just how late is this ? GO64 is a German publication which took over the defunct Commodore World from the late CMD. As it is a German magazine it is to be expected that the text is in German too - which it is. The deal is that an English equivalent will be made available asap and delivered to you after the German version is compiled. That conversion process is now taking ap-



LOADSTAR - 204 to 209

I fully intended to do a full run down of Loadstar in this issue along with an interview with its editor - Dave Moorman - but it will have to wait for CS37 !





Allan Bairstow - *C64 - C128 - C64 EMULATOR*
 Importing Service, Commodore Scene Magazine,
 New & used hardware & software
 14 Glamis Close, Garforth, Leeds, West Yorkshire,
 LS25 2NQ
 Tel : (0113) 2861573 - 9.30am and 9pm
 Fax : (0113) 2861573
 E-mail :
 allanbairstow@commodorescene.freemove.co.uk

Victoria Road, Shifnal, Shropshire, TF11 8AF
 Tel : (01952) 462135

MAGAZINES & FANZINES

Commodore Scene
 See 'Commodore Scene' box



Commodore Zone
 Binary Zone, 34 Portland Road,
 Droitwich, Worcs., WR9 7QW
 Tel : (01905) 779274



ADVICE ON ?

Allan Bairstow
 - General, GEOS, See 'Commodore Scene' box
Mike Berry
 - Programming
 6 West Bank Street, Hindsford, Atherton, Manchester,
 M46 9AQ
Andrew Fisher
 - Technical, GEOS, Music
 30 Rawlyn Road, Cambridge, CB5 8NL

PUBLIC DOMAIN LIBRARIES

Binary Zone PD
 See Commodore Zone box.

CLUBS & ASSOCIATIONS

British Association Of Computer Clubs
 J. Hughes, 39 Eccleston Gardens, St. Helens,
 Lancashire, WA10 3BJ
Independant 8 Bit Association
 Brian Watson, Harrowden, 39 High Street, Sutton In
 The Isle, Ely, Cambridgeshire, CA6 2RA
 Tel : (01353) 777006

REPAIRERS/SUNDRIES/MAIL-ORDER
& HARDWARE

High Street Micros
 - Repairs, software - 20/24 High Street, Crewe,
 Cheshire, Fax (01270) 580964
Importing Service
 See 'Commodore Scene' box
Needmore Limited
 - Repairs, Tel : (0151) 5212202
Ribbons & Things
 - Printer ribbons and consumables
 8c Treefields, Buckingham, MK18 1BE
 Tel/Fax/Answer machine : (01280) 817217
Ribbons Unlimited
 - Printer ribbons and consumables - PO Box 7,
 Belper, Derbyshire, DE56 1AD, Tel : (01283) 734050,
 Fax & answer machine : (01283) 734051
Trading Post
 - 2nd hand hardware & software

Retro Classix
 - All formats fanzine
 - Monthly, £2
 - Make all monies payable to 'G. Howden'
 4 Chatterton Avenue, Lincoln, LN1 3TB



DISKZINES

The Big Mouth
 See 'Commodore Scene' box

SOFTWARE

Importing Service
 See 'Commodore Scene' box
John Thomson
 Software & hardware for c64 & other 8-bit's
 78 Holtdale Avenue, Leeds, LS16 7SG
 Tel : (0113) 2671393
Roy Cross
 76 Castle Drive, Neath, West Glamorgan, SA11 3YE
High Street Micros
 20/24 High Street, Crewe, Cheshire
 Tel : (01270) 580964



Allan Bairstow & Commodore Scene
 allanbairstow@commodorescene.freemove.co.uk
Frank Gasking
 m00xbs00.@mcmail.com
Richard Bayliss
 RChrisBayliss@yahoo.com

C64 WEB SITES

Up to date site links are on the Commodore Scene
 web site at <http://www.commodorescene.org.uk/>

COMMUNICATIONS & BULLETIN BOARD
SYSTEMS

Chic BBS (Weekends ONLY) Dial : (01753) 890111
Lentil BBS Dial : (01483) 834626
 Sysop : (01483) 834606 - voice
Midnight Express BBS Dial : (01384) 865626
Tiger BBS Dial : (01753) 672520



CLUBS & ASSOCIATIONS

Woombug
 Scott Roseboom, PO Box 213, Woombye,
 Queensland 4559, Australia

REPAIRERS/SUPPLIES/MAIL-ORDER
& HARDWARE

Creative Micro Desisgns
 - New hardware & software, Commodore World
 magazine, help & advice
 PO Box 646, East Longmeadow, MA 01028, USA
CMD Direct Sales
 - Mail order service
 Postfach 58, A 6410 Telfs, Austria

MAGAZINES & FANZINES

GO64!
 CSW Verlag, Gohestr. 22, D-71364 Winnenden,
 Germany
Commodore Mailink
 Tom Adams, 4427 39th St., Brentwood, MD 20722-
 1022, USA
C= Voyages
 Fresno Commodore User Group, 3487 E. Terrace
 Ave., Fresno, CA 93703-1939, USA.
GEOS Publication
 7969 Woodcrest Drive, Louisville, KY 40219-3859,
 USA
LUCKY Report
 K.Dale Sidebottom, PO Box 303, New Albany, IN
 47151-0303, USA
The Village Green
 C.C.U.G. #447, 623 29th St., Astoria Ore. 97103

DISKZINES

The Big Mouth Magazine
 Now available from Commodore Scene
Loadstar
 443 Gladstone, Shreveport, LA 71104, USA

CS IMPORTING SERVICE



C64c (Jumper Clip fitted) CS £15.00

SUPERCPU

- SCPU64 (no SuperCard) £155.00
- SCPU128 (no SuperCard) ... £199.00
- CPU MMU adapter (C128/C128D) .. £30.00
- SuperCard (0Mb) 64 or 128 £61.00
- 16Mb Simm for SuperCard CS £30.00



- CD Player CS £2.00
- Atapi CD-ROM Driver CS £2.00

5 1/4" Floppy Drives

- 1541 CS £30.00
- 1541-II CS EN/A
- 1570 CS EN/A
- 1571 CS EN/A



JiffyDOS

- 128 Kernal £33.00
 - 128D Kernal (metal case) £33.00
 - 128D System (metal case) £47.00
 - C64 Kernal (24 pin) £39.00
 - C64 v4 Kernal (28 pin) £39.00
 - SX 64 System £47.00
 - ROM's for disk drives each £24.00
- (Ordering JiffyDOS, state make / model / type & serial number of your equipment)



Replacement Power Supplies

- CMD HD PSU for CMD Hard Drive, 1541-II, 1581 & RAMLink Mk1 £46.00
 - FD & RAMLink Mk2 CS £20.00
 - CMD C64 / C64c & C128 heavy duty / repairable (requires the USA>UK converter) £120.00
 - USA>UK power converter CS £23.00
- *** CS-SuperPSU ***



RAMLink

- RAMLink - base (no RAM-Card II) (J) £130.00
- RAMLink jumper clip £2.00
- RAMCard II, 0Mb, no RTC £39.00
- RAMCard II, 0Mb, w/RTC £45.00
- RTC add-on for RAMCard II £15.00
- 4Mb simm (for RAMCard II) CS £20.00
- Back up battery with cable £20.00
- Parallel cable (RAMLink to HD) £16.00



HD Series

- HD-1000 (1Gb) £415.00
- HD-2000 (2Gb) £499.00
- HD-X (no internal hard drive - you fit your own) £190.00



FD Series

- FD-2000 no RTC (J) £139.00
- FD-2000 with RTC (J) £149.00
- FD replacement mechanism £40.00
- FD instruction manual £12.00
- RTC add-on kit (existing owners) .. £30.00

CD-ROM DRIVE

- CD drive CS EN/A

CD-ROM DRIVE SOFTWARE

- CD-ROM commander 128 CS £20.00
- CD-128 (music player) CS £20.00
- CD-ROM 64/128 (Gateway) CS £10.00

IDE64 HARD DRIVE INTERFACE

- IDE64 fully assembled version ... CS £90.00

IDE64 SOFTWARE

- Novaterm v9.6 (5.25" or 3.5") £24.00
- TheWAVE 64 / 128 CS £3.00

Magazines / books / etc

- CMD product catalogue CS £1.00
- Anatomy of the 1541 £7.00
- C64 science & engineering £7.00
- C64 tricks & tips £7.00
- C128 computer aided design £7.00
- C128 BASIC training guide £7.00
- Compiler design & implementation .. £7.00
- GEOS prog.s reference guide £22.00
- Graphics book for the C64 £7.00
- Hitchhikers guide to GEOS £22.00
- Ideas for use on your C64 £7.00
- Printers book for the C64 £7.00
- Mapping the C64 £7.00

GAMES software

- Bombmania CS £10.00
- Ice Guys CS £10.00
- Sword of honour (3.5" & 5.25") .. CS £5.00



GEOS software

- GEOS 64 v2.0 £34.00
- GEOS 128 v2.0 £38.00
- Wheels64 v4.2 (5.25" or 3.5") £28.00



- PPLQ border font collection £16.00
- Dweezil's greatest hits £24.00
- SuperFonts CS £7.00
- MergeFonts CS £7.00
- SpecialFont collection CS £7.00
- InstallGW_Drives CS £2.00
- HD-ZIP(al) CS £2.00

Serious Software

- Bank street writer £10.00
- Big blue reader £30.00
- CMD utilities £20.00
- FlexiDRAW £15.00
- FlexiFONT £15.00
- GoDot CS £25.00
- I-Paint (80 col's & 64k VDC) £30.00
- I-Port (80 col's & 64k VDC) £30.00
- JiffyMON - monitor £16.00
- Master type £10.00

MECC educational series :

- spelling bee £10.00
- adventures with fractions £10.00
- expeditions £10.00
- pre reading £10.00
- the glass computer £10.00
- the market place £10.00
- Multi Screen Construction Kit CS £5.95
- PASCAL 64 £6.00
- ReRUN disks £8.00
- Superbase 64 v3.01 £27.00
- Superbase 128 v3.01 £27.00
- Where in the world is Carmen SanDiego ? £23.00
- Where in time is Carmen SanDiego ? £23.00

Miscellaneous Items

- 5.25" 10 branded disks CS £6.00
- 5.25" disk drive cleaner CS £4.00
- 3.5" disk drive cleaner CS £5.00
- 64k VDC Upgrade Kit (C128&D) . CS £25.00
- geoPublish master disk CS £20.00
- Printer/plotter pens (3x black) CS £3.50
- Printer/plotter pens (3x colour) CS £3.50
- USA to UK power converter .. CS £23.00

- Fan cooled, outlets for 1x computer (c64/c64c/c128 but NOT c128d), 8x devices (1541-II, 1581, RAMLink1&2, CMD hard drive, FD2000, FD4000 and SuperCPU). UK, European and USA versions available CS £160.00

CS-SuperPSU optional extras

- IDE64 power connector CS £FREE
- C64>C128 gender changer CS £8.00
- 1541-II>CLONE gender changer .. CS £8.00

Input Devices

- Smartmouse (1531 compatible) £39.00
- Gamepad (megadrive style) £23.00

Port Devices and Cables

- 3 way USER PORT expander £24.00
- USER PORT extension cable £16.00
- EX3 cartridge port expander £24.00
- EX2+1 cartridge port expander £27.00
- Expert Mk1 cartridge v3.2r CS £15.00
- Expert Mk2 with ESM v4.1 CS £18.00
- Expert system disks* each CS £4.00
- * state disk required - 2.1 / 3.2 / 3.2r / 4.1
- geoCable II (with pass thru port) .. £24.00
- Retro Replay Cartridge CS £44.00
- Serial cable (1m) CS £5.00
- Serial cable (2m) CS £8.00
- X1541 (with Star Commander) ... CS £9.00
- XE1541 (with Star Commander) . CS £15.00

Telecommunications

- Diamond Supra Express 56e V90 Pro modem (geoFAX & TheWAVE compatible) CS £65.00
- ScanLynx2000 (geoFAX) CS £25.00
- Turbo 232 modem interface £31.00
- Modem cable (DB9 to DB25) £8.00

- Wheels128 v4.2 (5.25" or 3.5") £31.00
- MegaPatch64 / Topdesk CS £28.00
- MegaPatch128 / Topdesk CS £30.00
- (State 5.25" or 3.5" for MP/TD64 & 128)
- Gateway64 v2.5 £24.00
- Gateway128 v2.5 £24.00
- Gateway 64 & 128 combined ... £35.00
- geoFile 64 £31.00
- geoFile 128 £35.00
- geoCalc 64 £31.00
- geoCalc 128 £35.00
- geoProgrammer £35.00
- geoPublish £31.00
- geoChart £24.00
- geoBasic £16.00
- geoShell £16.00
- geoMakeboot £10.00
- geoFAX v2.1 £31.00
- Desk pack plus £24.00
- Font pack plus £20.00
- Font pack international £20.00
- Collette utilities £16.00
- GEOS companion £16.00
- GEOS power pak 1 £16.00
- GEOS power pak 2 £16.00
- PPLQ master system & fonts 1 & 2 . £39.00
- PPLQ font collection 3 £16.00

INCOMING !

- 4 Player Adapter CS £TBA
- Abracadabra ! CS £TBA
- Bombmania PLUS CS £TBA
- CommodoreOne £TBA
- Doubledesk 128 CS £TBA
- It's Magic 2 CS £TBA
- Metal Dust (SCPU only) CS £TBA
- Newcomer CS £TBA
- PacIT CS £TBA
- PrintText 64 CS £TBA
- PrintText 128 (64k VDC in 80 col)CS £TBA
- Profilabel 64 CS £TBA
- Profilabel 128 (64k VDC / 80 col)CS £TBA
- WINGS CS £TBA

Key to codes

RTC = real time clock
 CS = Postage included
 (J) = JiffyDOS installed
 TBA = To Be Advised

ORDERING INFORMATION



Please add the following postage costs to your completed order :

CS items	NIL
£0.01 to £10.00	£4.00
£10.01 to £20.00	£8.00
£20.01 to £30.00	£18.00
£30.01 to £50.00	£22.00
£50.01 to £60.00	£25.00
£60.01 to £150.00	£35.00
£150.01 to £300.00	£50.00
£300.01 to £800.00	£60.00
£800.01 plus	£70.00

Add a further £15 for insured postage



CS items	£6.00
£0.01 to £10.00	£9.00
£10.01 to £20.00	£16.00
£20.01 to £30.00	£25.00
£30.01 to £50.00	£29.00
£50.01 to £60.00	£33.00
£60.01 to £150.00	£41.00
£150.01 to £300.00	£60.00
£300.01 to £800.00	£72.00
£800.01 plus	£85.00

Please note that all items are supplied with UK compatible PSU's were applicable and an adapter (**not supplied**) may be required in some countries.

Payment Details

Make payments payable to : **A J Bairstow**
Accepted Payment Types

CASH - If you are sending cash then please use secure postage - CS will not be held responsible for any lost money. UK Sterling only please.

Cheque or Postal Order - A great way to pay, cheques take up to one week to clear but a postal order will ensure a fast turn-around of your order.

Credit Card - online via PayPal, pay to allan.bairstow@btinternet.com. Payment can only be made in US\$.

International Money Order - Guaranteed payment between different countries. Secure and very safe.

Direct Bank Transfer - This new method is very popular and assures immediate action on your order. Usually FREE to use and is very quick.

Contact address

CS Importing Service
 14 Glamis Close
 Garforth, Leeds
 West Yorkshire
 LS25 2NQ
 United Kingdom

Telephone (before 9pm) / Fax
 (0113) 2861573

E-mail

allan.bairstow@btinternet.com

All details were correct at time of going to press. Delivery can be up to four weeks after the 1st of the month. **Please - ring before 9pm in the evening, thank you.** All prices are subject to change - you will be notified prior to orders being accepted.

CSIS - HOT NEWS



Who said the 'bargain' was dead ?

If you are quick I have these two beauties for you at real knock-down prices !

The **1581** (no PSU) is going for **£40** and the **1764 REU** (256k) is only **£50**.

First to contact me will get them at these prices.

You want more ? Okay then how about this - Complete set of **GEOS128** disks with manuals and

an 'uninstalled' version of **Wheels128** to go with it for the measley sum of **£30** - saving you a massive **£74** !!!!!!!

MORE ?
You want more ?

Okay then, how about these two offers then



Offer #1

Buy a **RAMLink** with a **RAMCard** and you will receive a **FREE** bank of memory simms that will max you out at **16Mb** - for absolutely nothing at all !

Offer #2

Buy a **SuperCPU64** (or **128**) with a **SuperCARD64** (or **128**) and you will receive the **16Mb** 72pin simm module for **FREE** - absolutely no charge what-so-ever, gratis !



NEXT ISSUE

Commodore Scene will see the first major re-organisation of the Commodore Scene Importing Service since it was started many years ago ! As they say - 'out with the old and in with the new'.

NEW pricing structure !

NEW and easier to understand postage & packaging costs !

The **EURO** hits town and things get easier for everybody !

Credit Card payment options now ready !

Use the new **on-line product guide** and payment facility !

More offers and give aways !

NEW items for sale !

and a whole lot more