## Commodore scene
### C64 - C128 - C64 EMULATOR

### INCLUSIONS
STOP PRESS update sheet, PP3 print sample,
Coverdisk (5.25"/3.5"), Coverdisk Sleeve,
Coverdisk Information Sheet,
(All coverdisk & related items are optional)

### ARTWORK
General : Chris Bohanna (new artwork)

### CONTRIBUTORS TO CS
Allan Bairstow (editor), Dale Sidebottom,
Ken Ross, Robert Bernardo, Paul Gibson,
Andrew Fisher, Nicholas Coplin, Sean Bebbington,
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Ah, that's better, it's good to be back in the driving seat !

This issue is filled to the gills with exciting features and news abound from all over the world about what is coming soon for your Commy !

After last issues less than 'ground breaking' issue (well, I thought it wasn't the best issue ever). I think that this issue will more than make up for it with these great features and projects to tantilise your taste buds !

My thanks have to go out to a few people this issue for their help in supplying some great stuff to grace these pages, **Dale Sidebottom** has supplied me with coverage of the **Chicago EXPO** and transcipts of some of the highlights, he also has sent a rundown of **CLiPS** - this has saved me an enourmous amount of time as I don't have to write it myself - thanks Dale (See pages 22 to 26). **Nicholas Coplin** has gvien his permission to use his web site for information on some amazing Commodore projects that he is currently developing and believe me when I say they are amazing - some of them took my breath away ! (See pages 20 & 21). There will be more indepth features on Nicholas's projects when information is made available. Another 'busy bee' is **Wayne Womersley** who, after I supplied him with an old copy of geoWRITE to compile his submissions, has managed to glue himself to his c64 and write pages and pages of stuff for CS. Wayne's scribblings can be found through out this issue.

For once I don't have to appologise for anything being late ! Things have been running smoothly for a change and this issue is currently on time (at the time of writing). Let's hope it stays that way in the future ;-)

I was rather suprised to recieve a very nasty letter from **Robbie 'The Rascal' Wakeham** recently. It took me by suprise to read such a scathing letter from sombody I have never even heard of ! Anyway, I have printed his letter in full in the letters page for you to read and make up your own mind about his sanity !

**CS34 & Holidays** : Myself and my family will be on holiday in Cyprus from 14th to 28th May 2001. This will mean that CS34 will either be out early (first week in May) or a bit late (2nd week in June). Therefore, the deadline for CS34's submissions is 31st April 2001 - so, get scribbling ;-)

**New Suff** : There will be some new stuff coming to CS very soon. There are some good articles in the pipeline and also some new items for the **Importing Service** listing, one such item is the **XE1541** cable.

**E-mail Fiasco** : As you may remember, just in time for last issues 'Stop Press' I managed to let you know what a mess **Freeserve** had made of my account. Needless to say, I was not a happy bunny. Anyway the good news is that the new e-mail address is at - **allan.bairstow@btinternet.com** - and it is proving very reliable indeed. The old address at **Compuserve** is now being wound down and will ceased to exist within a month or two, depending on when the subscription runs out.

**Commodore Variants** : Further to my request for articles from the other corners of the Commodore empire, I have had a small but perfectly formed response. In this issue there is a brief look into the **VIC 20** with help on making it go that little bit faster (see page 19). Also, we have the very rare **Commodore P500** featured in '**The Rare Guide**' (on page 12). I hope that more features of this nature will grace these pages very soon.

**Steve Judd** : Coming in the next issue is a reprint of a recent interview with Steve Judd. Steve is one of the front runners in programming the SuperCPU and this interview is enlightening for all you SuperCPU users.

**geoDOS** : In a future issue of CS there will be a VERY indepth feature on geoDOS.

Why ? - Let me tell you a story.

When Dale (Sidebottom) sent me the articles for this issue, they had been 'wrapped up' using **Wraptor v3**. This in itself was not a problem as I was familiar with unwraping files with Wraptor, but what was a problem was the fact that the finished file was well over 840k in size. This immediatly caused me one problem - how was I going to transfer the file back to the C64 from my PC (it had been sent via e-mail).

*I think I need to explain a bit here. What usually happens is this : I get a 'Wraptor' file via e-mail, copy it to a 720k PC disk, using a 1581 drive I then copy it to the C64 with **Big Blue Reader** (which also converts the file to a PRG file which Wraptor can then read). I then open up Wraptor, select the transfered file and Wraptor proceeds to unwrap it and I then get my files in the correct format for me to use.*

My first problem was how to transfer the file from a 1.44 PC disk (don't forget that the file was too big to fit on the smaller disk) to a partition on the CMD Hard Drive. This was not too bad as I can use either **MegaPatch3** or geoDOS, both these programs recognise the larger PC disk sizes. I did this but the unforseen problem was that the file had been copied, by default, as a SEQ file type (which Wraptor can not read). So I was now left with a problem of how to convert the file back to a PRG file type. There are many programs available for this task but absolutely none of them would work. I tried various things throughout the night and nothing worked - I was desperate ! I even ended up wiping off part of my RAMLink in a fit of tiredness - I went to bed to recover !

Anyway, after a few e-mails later, Dale asked me if I had tried to use geoDOS to convert the file back to PRG - What ? I didn't even know that it could do that. I went back to geoDOS and within a few seconds I had found the required box and the file was converted - surely it couldn't be that simple ? I then loaded up Wraptor and low and behold, there was my file, I quickly 'marked' it and off it went and unwrapped itself.

I couldn't believe my eyes, here was a program that I had had for years and I never even realized its full potential.

geoDOS has many, many tricks up it's sleeve and I believe it needs to be fully tested to get the benefits from it. As a guide to it's power, geoDOS has now replaced three other programs that I used to use to transfer files to and from the PC. It also allows me to complete a three or four stage task (through various programs), all in one go, under just one interface. I also believe that geoDOS is in the public domain, if this is the case then I will put it on a future coverdisk.

**e-mail - allan.bairstow@btinternet.com**

**http://www.commodorescene.org.uk/**

**DATA** : Here is the announcement for the Classic Computer and Gaming 2001 show. ATTENTION RETROGAMERS, COMPUTER COLLECTORS, VIDEO GAME FANATICS!!!! WE'RE BACK..
CCAG 2001 (Classic Computer and Gaming 2001). If you like collecting old computers, video games, and enjoy using them still, then come join us on:
June 30th, 2001
9AM till 6PM. National Guard Armory
IT'S ON ROUTE 57!!! 3520 Grove Avenue, Lorain, Ohio 44055-2048 (On Route 57, going North of I-90/Route 2) - IT'S FREE! - Both vendors and attendees! Computer User Groups and vendors inside, flea market outside! 5,000 square feet of indoor space and an additional 5,000 square feet of outdoor space is available along with ample parking. Setup: 29th, June, 2001 6PM-10PM. Please Call Ahead for Reservations: Jim W. Krych
jwkrych@n2net.net
440-979-9295
Fred M. Horvat    fmh@netzero.net
440-286-2566
And these other CCAG 2001 organizers:
Thomas J. McLaren
sirthomas@uk2.net
Please visit this site:
http://tomheroes.com/ccag.htm
We are looking to do a "Classic Game Experience" this year! One room is going to be set up for playing classic computer and video game cartoons and commercials. The other room is going to be an emulator room- MAME, etc. We are hoping for some people with arcade systems to bring them.

See ya at the CCAG!

**DATA** : Andrew Fisher is no busy compiling the new music for the forthcoming Revenge game that will hopefully be distributed via Commodore Scene.

**DATA** : Questions about the new



CSsuperPSU have been flooding in recently. To my great suprise, I have also have some orders for the units as

well ! Anyway, there are some points that need to be made clear for future purchasers and these are :- the length of the supply leads to the drives/computer are @75cm and the supply lead from the mains socket is @160cm long. The power output runs at 50/60Hz. A 'euro' socket can be ordered (no extra cost) but it will have to be fitted to the supply lead as there is not enough room inside the actual unit. No USA (110 volt) units have been ordered yet so exact specifications are not yet known, however, the engineer is costing one up now and a price should be ready for the next issue. A full rundown of the CSsuperPSU will be updated and printed in the next issue, including some prices for foriegn countries.

**DATA** : The LUCKI Commodore Club will host the "Spring Commodore Expo 2001" in the Louisville, Kentucky area on May 26th (Memorial Day Weekend). What we want to do is to let everyone know early and ask everybody to make their vacation plans accordingly! We hope you will reserve a room and make the entire weekend a family holiday!!! It will be held at the Holiday Inn Express which is actually located in New Albany, Indiana, just north of Louisville, across the Sherman Minton Bridge, off I-64. Although the Expo will be on the 26th, a Saturday, we are encouraging everyone to make a weekend of it! We want everyone to come in on Friday evening and enjoy the Hospitality Room which the LUCKI Club will sponsor that evening. Free soft drinks and snacks and all the Commodore conversation you want to enjoy! This also gives opportunity for those doing demos and such on Saturday to set up early, the night before. (The Expo room will be kept locked! This will be done to protect the property of "early birds" who choose to set up Friday evening.) Officially, the set-up time will be 8am to 9am on Saturday morning. The Expo will run from 9am to 5pm with breakdown time from 5pm to 6pm. We will go out to eat together that night. The cost of the hotel rooms is $59 a night for up to 5 persons/room. You can have smoking or non-smoking, one king size bed or two double beds. Roll-away beds are $10/night, I think. Now including taxes, etc., the total cost/room/night is $64.31. That means a group of four can stay for TWO nights for only $32.16 TOTAL COST for each of them! That is a terrific deal! (Of course, the cost to get into the Expo will be $5-10, but hopefully that will not keep anyone away. ;-) Also, the room cost includes a free continental breakfast.

Sunday morning, after your free breakfast, there will be an informal forum on the "Future of Commodore." I am hoping that those interested in the subject will stay and participate. It should be over by 9:30 am, and those who want to go to church can attend the denomination of their choice. Call 1-877-451-2595 to reserve your room or rooms at the Holiday Inn Express. Since this event is being held on Memorial Day weekend, the rooms could fill up quickly. To protect us, I have reserved 10 rooms to start with. If we need more, I can reserve more, unless it is filled up! If you want to reserve a non-smoking room, the operator will ask you for the name of the event and the reservation number. The name of the event is the "Spring Commodore Expo 2001", and the reservation number for non-smoking rooms is 61647559. To reserve a smoking room, the reservation number for the same event is 61647940. By reserving rooms in this way, you are guaranteed a rate that is $20 lower than what some of the other guests will be paying! If you have questions (or problems getting reservations), please email me privately. Unless otherwise instructed, I may answer your question
"publicly" if I feel others will profit from the exchange. ;-)

K. Dale Sidebottom
President, LUCKI Club

**DATA** : Forever 8 Bit - The party event



Imagine a hall full of enthusiastic computer fans. They are sitting in front of their machines - Commodore C64, Atari XL and ZX Spectrum. PC, Amiga or Playstation are nowhere to be seen. Instead of Quakecrap or Internet-Windows on the screens you can see cult games and incredible demos. A dream? No! Reality.



On the Forever 8 Bit Party. And there's even more to come: The party takes place in the centre of Eastern Europe - Trencin/Slovakia, thus attracting 8 Bit

fans from Germany, Austria, Switzerland, Hungary, Poland and Russia. Be there, too, when C64 demos become challenged again - can the Atari, which

has the same processor, do more? Is the Spectrum with its 48K able to be better? Be there when the world is full of 8 bit systems again. Visitors of the Forever 8 Bit 2000 - last year - can only confirm it: An atmosphere never experienced before, thrilling competitions on the bigscreen and a great party - that's the Forever 8 Bit. The entrance fee is just 7 DM, it's not hard to go there - and believe me, after these days you will return home happy, mind and soul en-riched.

Info: http://www.studiostyle.sk/forever/
Organisation Bus/Driving communities: jaktrip@crosswinds.net

**DATA** : Just to let you know, the new name for XLCUS is now... wait for it.... -> StudioX64 <-
My internet address is:
www.studiox64.com or
www.studiox64.co.uk
My email address is:
paulk@studiox64.com
The new name for XLCUS initiates our (well mine really - I am but one!) return to the humble C64 along with a forthcomming game release (schedule for March release - but may appear much earlier depending on how much time I have to devote to it). Hopefully up for release in January is my first album (this ones ALL C64 toonz), professionally EQ'ed and Mastered. This CD will contain the very best of MY C64 tunes, and sounds excellent (these are all my famous tunes, but correctly being played on a newer Sid chip 8580 - using sounds which one can only dream about making :) This will be followed up with the release of an advertising demo (for the album) and brief introduction to www.STUDIOX64.com.
So those are the plans for 2k1 (2001) hope they are of interest to you all.
- **UPDATE** - Just another quickie to let you know that I pressed the first version of my forth comming Sid-8580 album last night, and I can not tell you how well it has made the transfere to CD. I have never been soooo impressed (even if it is my own work) by the C64 audio chip Mr. Sid. Very soon I hope to sort out inlay printing and "On CD"

printing too, then I can send out a copy to you for review in CS.
                                          Paul Kubiszyn

**DATA** : I'm back with some news about the game REVENGE. The thing is going well. I'm looking for a way to sell the game so, maybe I can do that through Commodore Scene in U.K. only because I want also to talk with Go64 and Commodore World to sell the game in Germany.
                                          Domingo.

**DATA** : Just to tell you of my new web sit - http://members.aol.com/Ramlink666/CBMWEB.htm - It's not complete yet (what web site is?) but it's a good start!
                                          Shaun Bebbington

**DATA** : The new homepage of the band WELLE:ERDBALL can now be reached under **http://www.welle-e.de**. This group uses the C64 as instruments in their songs. Welle:Erdball doesn't just mix C64 sounds into their productions, they program the SID themselves and some songs are completely composed on the C64. The new homepage offers next to other things some MP3 pieces for download. **http://www.welle-e.de**

**DATA** :The Cyber 64 webpage has seen some more updates tonight (Including the site name "Cyber 64".
**http://cs.c64.org**
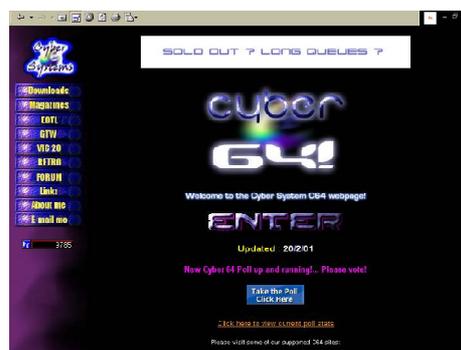
**http://www.cybersystems.org.uk**
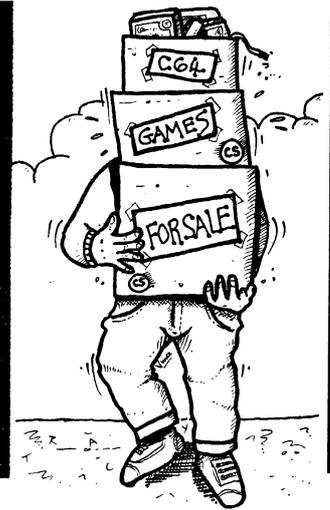**http://www.fgasking.freeserve.co.uk**
The site includes more up-to-date C64 news, more Games That Weren't bits and games. Including some exciting news on a long sort after C64 game. The Vic 20 page will be bursting into life soon, so if you can give a mention to this up and coming full blown archive (Along with Cyber 64 and GTW) then please feel free to do so :-) I hope you enjoy the updates for now, and sorry for a few glitches in places (Namely on the Vic 20 pages) ... these will all go soon!
                                          All the best everyone!

*Well we start off this issues letter's page with a very long angry letter from Robbie "The Rascal" Wakeham. To make it easier for you to follow my replies, I have marked his letter with reference points. See what you think !*

Hi Allan,
Goodbye Allan !!!
Thanks for the Commodore Scene number 32 plus the coverdisk. I'm sure the postage stamps will come in very handy for the Blue Peter Appeal (1) - unlike the contents of the envelope (2).

What a mishmash and total waste of money this issue really is ! (3) Perhaps, when you come down from the ego trip you're on, you might consider handing the reins of this magazine, (what's left of it) over to somebody who does really care about the 64 "scene" (4).

I, for one, am proud to be the owner of a collection of thousands of "pirated" games on disk and if you consider that to be a "sin" (5), you should be "locked-up" for charging £3.50 for issue 32 plus coverdisk (6).

Coverdisk - what coverdisk ? No menu, no games, no demos, no nothing ! No good ! No wonder you're running out of disks if that's the best you can do (7). And just for the record, who gave you permission to put the questions about life from the diskmag Arachnophobia, on the coverdisk ??? I notice it wasn't on there, but according to the info sheet, it should have been (8).

I never have, and never will, send anything to you for submission to your sub-standard magazine (9), so where did you get this from ? My money's on Andrew Fisher (10), am I right ? I "fell out" with him long ago so I guess this is just him being petty.

The reason I "fell out" with him was because you, and still do, advertise his name in the back of the magazine to give advice on certain 64 related matters. However, when I wrote to him, twice infact, to find out some technical details about IRQ loaders, he managed to "forget" everything about what I had asked him for in his reply to my letter, and just wanted me to copy off a load of my pirated games for him !

I didn't do this for two reasons. Firstly, he didn't send me enough disks for what he asked for, and secondly, the disks he did send where errored ! All this from the guy who's offering technical advice on the 64 ! I still have his letter if you doubt me (11).

Needless to say, I shalln't be renewing my subscription to CS (12), nor will a lot of other people (13) if what they tell me is true, but time will tell.

Looking back, since my first subscribing to the mag, you've continually "moved the goalposts" (14), haven't you ? Obviously, this letter won't get printed because I now see that you're not accepting any submissions on paper, only on disk (15). Well, that's one way of getting a few disks back I suppose (16).

So to get this message "spread", I shall simply photocopy this letter and send it to all my contacts and see if they agree with me or not (17). Most of them have already via the telephone, but this way I'll see just how many friends and true supporters you really have, or have not, as the case may be (18).

I know full well that we don't live in a "perfect world" and things do go wrong occasionally, but all we get, issue after issue, is excuses, excuses, excuses ! (19)

Give up the Commodore scene and write, "Allan Bairstowe's Book Of Excuses !" - now that would be a best seller ! (20)

I am sorry to say that you simply don't "have your finger on the pulse", do you (21) ? The people working with you are so "see-through" they're transparent and it never gets any better,(22) does it ?

If the magazine doesn't contain excuses, it's half full of apologies ! Sorry for this, sorry for that, sorry for being late again, sorry for the spelling errors, etc (23).

And like I say, it simply doesn't get any better, does it ? Take pages 26 and 27 of the latest issue 32 for example. I quote, "custom made for you by a proffesional electrical engineer £160".

I hope this professional's electrical experience is better than your spelling (24) ! £160 for a super PSU ? Nah, forget it mate, buy yourself a spellcheck !!! (25)

I noticed that all the other alternatives to this super PSU, are only available through you, via your CMD import service. All except one that is, which is available - from you !!! (26) And you still have the cheek and audacity to tell us that you're not making anything out of it ??? Ho, ho, ho, and I'm father christmas ! (27)

You omitted to say that you could still find them, along with other secondhand 64's and related equipment, in secondhand shops, bric-a-brac shops, car boots, etc. For a lot less than your prices quoted ! (28)

So that's just about it, except to say that I expressly forbid (29) you to put anything I've ever done, or put my handle (Robbie The Rascal) to, on any of your coverdisks, or forthcoming "specials" i.e. the proposed "Naughty Bitz Special". (30)

I have over 30 disks full of "adult material" and you're not getting your paws on any of them ! (31) That's not because I'm frightened of the "implications" (32) - far from it, I'm proud of this collection ! Rascal by name, Rascal by nature !!! (33)

No, it's because if anybody wants that sort of thing, they can get it from me for nothing (34). I don't believe it's morally right to make a proposed "minimal charge", in advance, for anything, let alone a bit of hard or soft 64 porn ! (35)

So you can forget about using anything the Art Ravers send you, I previously sent them, okay ? (36) Also, take note Mr Fisher ! Be Careful Mr Bairstowe (37) - you'd be treading on very thin ice ! (38) Don't forget, this letter is to be photocopied and sent all round the world. (39) I'm not frightened, are you ??? (40)

Yours sincerely,

Robbie Wakeham
aka Robbie The Rascal
and bloody proud of it !!!

34 Campingfield Lane,
Stalham,
Norwich,
Norfolk,
NR12 9DZ,
United Kingdom

*Well, thanks (?) for that Robbie,*

*(1) It is nice to see you making use of old stamps, it is very commendable. I send all mine to the Kidney Research Foundation ;-)*

*(2) What you do with the contents is up to you - you paid for it !*

*(3) Your opinion, not everyone else's.*

*(4) I'm far too busy to be on an ego trip. Are you offering to give up all your free time to run this magazine instead of me doing it all ? Thought not. Put up or shut up !*

*(5) I don't consider having a pirate collection of games to be a "sin". I do however condone anybody who pirates software that is still commercially available. If that applies to you then you should be rightly ashamed of yourself.*

*(6) £3.50 barely covers the cost of the magazine and disk production. Don't try comment on things you know nothing about, you will just make yourself look stupid.*

*(7) CS is running out of 'brand new' disks because there is no longer a supplier in the UK for them anymore - no other*

reason.

(8) It was obvious to the people with common sense (not you) that some of the disks had been incorrectly duplicated. Those people with common sense sent the disk back for recopying with the correct files, which I duly did. Speaking of which, I do hope that you are not suggesting that the 'life' list on the disk is your own work (and therefore copyrighted) ? Give me a break ! Some of the stuff on that list was being used by ancient Egyptians, NONE of it was original, you'll have to do better than that.

(9) I am well aware that you have not sent anything in for the magazine. Doesn't that say a lot about your irrational attitude towards CS ?

(10) Correct.

(11) Any problems you have with Andrew I have to assume are probably down to you anyway, judging by the general tone of your letter, but that is between you and Andrew, not me or the readers of CS.

(12) Bye then.

(13) I am sure that you can only speak for yourself, nobody else !

(14) It is necessary to change schedules and deadlines to continue to keep CS in production. My family has got to be my first priority. If you have a family then I truly I hope they are also your first priority too or you will find yourself on your own very quickly indeed.

(15) I have printed your letter (in full) and I will continue to print handwritten letters in CS. The 'disk only' contributions applies to articles and features not letters !

(16) All disks are returned to the owners - they are not used as coverdisks.

(17) If you have nothing better to do with your time then please feel free, although I am unsure as to what you hope to achieve by doing that.

(18) I don't understand your reasoning, sorry.

(19) Not 'excuses' - <u>reasons</u> ! If something goes wrong it is only fair for me to explain why it has gone wrong. This is common courtesy and good manners. Didn't your parents teach you good manners ? It would appear not.

(20) Not a bad idea ! Although I don't have the time at the moment - maybe next year ;-)

(21) I can't be expected to know everything about Commodore and I have never said that I did. That is why people send in submissions for CS. Maybe you should take note of that instead of complaining. Don't knock other peoples work unless you are prepared to do something yourself. Although I have my doubts on whether you could pen anything that the readers would want to hear.

(22) I would ask you to keep your pathetic attacks on contributors to CS to yourself, you are just showing your immaturity and for an old man, that is very sad indeed.

(23) Again, this is common courtesy, I was brought up to be polite and respectful of others. How about you ?

(24) I don't see the relevance between spelling mistakes and a professional electricians expertise. I also find it rather sad that you are complaining about a minor spelling mistake. What a sad, lonely little life you have.

(25) I have plenty of spellcheckers, unfortunately I don't have the time to spellcheck every word in every issue. Neither do you judging by your letter. The words 'kettle', 'black' & 'calling' spring to mind. The least you could do was to ensure your letter was spelt correctly before you started spouting off, it just makes you look like an idiot - or perhaps that is the impression you are trying to give ? I must say that it seems to be working.

(26) The alternative PSU's are available through me or directly through CMD and one is available from Maplins. Everybody knows that. People who order items from me are doing so because I have gone out of my way to provide a service and I have got off my backside to do something productive for the Commodore community (you haven't), I even test all these items personally so that they know they will work prior to them receiving their goods. What have you done apart from complain ? Everybody is welcomed to go directly to the supplier if they wish, I can supply any details they require. The reason people come through me is because they trust me and they get a good, friendly service. Not that you would know because you have never used it. Again you are talking about something that you know nothing about.

(27) I never have, nor will I ever make a penny from anything involved with the Commodore, that includes the magazine or the importing service. You can believe it or not, that is your choice. Not until you have, firstly, bought something from me and then, secondly, bought the same item from CMD directly can you make assumptions about the profit margins. There is no profit, simple as that. I have a clear conscience and I can sleep very well at nights.

(28) WRONG ! You CAN NOT find any of those items in that article secondhand. All those items are unique to Maplins, CMD or Commodore Scene and are all brand new units. If you are referring to the old style PSU's then you are correct, they are freely available (I have lots of them), but the article was concerned with users who require more power and stability from their PSU's for unique hardware which the standard PSU is not capable of supplying. Read the article again properly and you will see that is quite clear.

(29) Ooh ! I'm shaking !

(30) I don't need anything from you. I don't even know who you are or what you do. I had never even heard of you until this letter arrived. So maybe, just maybe, you are not as important as you obviously like to think you are and just for that, I will purposely find something from you and put it on the next coverdisk and also something for an upcoming special edition coverdisk as well. How does that grab you ?

(31) I don't need them thank you, I have plenty of material for the 'Naughty Bitz' special, a lot more than a mere 30 disks worth - is that the best you can do ?

(32) There are no implications, that special edition is purely for over 18's only. I hope you are not suggesting that it is okay to allow minors to view the material ? That is a very quick way to get yourself into prison.

(33) 'Rascal' by nature ? Sounds more like 'sad, lonely old man - still living at home with his mother' to me. Grow up.

(34) That sort of thing is free to anybody who wants it on the Internet, I never said otherwise.

(35) The charge is for the printing costs of that special issue (which is separate to the actual magazine) - not the contents of the disk (which is free). Am I talking to a complete moron or something. You really should read things thoroughly before you start spouting off.

(36) As far as I am aware I have not received anything by you, from anybody.

(37) Could you please spell my name correctly, it only shows you up for the ignoramus that you are.

(38) I don't understand, is that a threat or something ? If so, what are you going to do about it ?

(39) I am not worried in the slightest.

(40) Frightened of what exactly ? You ? - Then no, I most certainly am not. Any action you may take ? - Come on, wake up and smell the coffee. You are living in the past (about 20 years ago to be precise), the days of action against Commodore related material is long gone. Get a life you sad little man.

Well readers, what do you think ? I know I ranted a little bit in there, but hey, I think he deserved it. I will always take criticism and advice from those who know better than me, but, this sort of abuse from a complete nobody who does nothing but complain about things he has no scope of understanding I will not take.

I invite everybody to reply to either me here at CS or if

you prefer to send Robbie-the-rabid-dog a poisoned pen letter directly then I have included his address for you earlier on, if you do send him a letter directly it would be nice to see a copy for my own amusement ;-)

Well Robbie, "You are the weakest link - GOODBYE"

*ED*

*" I am disappointed that someone I considered a friend is being so negative about Commodore Scene " - Andrew Fisher*

Hi Allan,

Many thanks for sending CS32 which considering the bad time you are having is a minor miracle... I hope all will be well soon... I really mean that.

While I realize you have your hands full right now.. I would appreciate it if you could sort out the coverdisk I have returned. It does not appear to have the contents on side 2 as stated on the information sheet. Only a small glitch but I am particularly interested in the item compiled by Robbie Wakeham from the diskmag Arachnophobia... was this a recent item ? Have you known Robbie long as I have received stuff a long time ago and wondered what the connection might be... just curious thats all.

Anyway, hope you can sort out the coverdisk for me, marvelous mag as always.

Sorry for being such a pain...

All the best,

Linda Ripley

*Hi Linda,*

*Thanks for your concern over my bad Christmas period, everybody is now doing fine and things are back on track, I have even managed to get some things out of the way that I had been putting off for a while, so things are getting back to normal now.*

*The coverdisk - hmm! I don't know how it happened but some of you only got a partial file listing for some reason, but most of you got the full version - very strange indeed ! If you still have a bad copy of the disk then please return it to me for a new one.*

*Robbie Wakeham, oh dear ! I assume you have already read the previous letter ? To be honest, until that letter arrived I did not even know he existed.*

*You are not a pain, I am always glad to help out.*

*ED*

Hello Allan,

Could you please thank Andrew (Fisher) for some of the recent coverdisks as they have been well produced and thoroughly enjoyable.

Richard Bayliss

*Hi Richard,*

*Short and sweet ! Andrew will be reading this so no doubt he will be very pleased to recieve your compliment. The coverdisk is one of those items that I am unable to do myself - due to lack of skill - so I rely heavily on Andrew to compile it. So, a big thanks from me as well.*

*ED*

Dear Allan,

Thankyou very much for your quick response to my order of CS magazines, both back issues and subscription. It was sad though that you were sold out of CS25, since it would have been really interesting to read that test on the Canon BJC-4100 inkjet printer.

But what really got my attention was the CSsuperPSU in issue 32. WOW. I just gotta have me one of these ! I already have two 1541-II's and a FD-2000, and I'm expecting a Super-CPU and RAMLink from CMD any day now, I am also planning for a HD (hard drive) too. But what will be the total cost for one of those units including postage from the UK to Norway ?
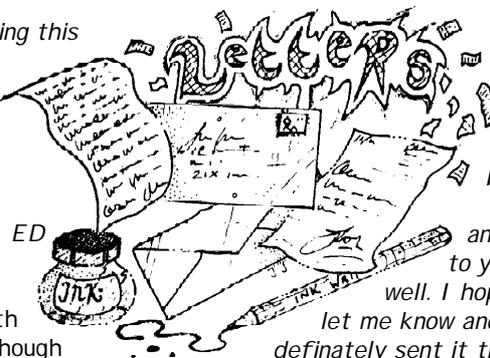
Yours, Yngve Dagslott

*Hi Yngve,*

*It is a pleasure doing business with you. Thanks for the order and I look forward to recieving an order for a CSsuperPSU when you need it. I have sent you the page with the BJC-4100 review on it and I have also worked out a price for you on the CSsuperPSU and enclosed that as well - ED*

Dear Allan,

Thankyou for your e-mails regarding the XE1541 cable. I have managed to sort out my problems with the X1541 cable by altering my BIOS settings on my PC, after reading the relevant article in the CSTech2000 special issue. I therefore no longer require the XE1541 from you.

Kevin Howell

*Hi Kevin,*

*I am glad that you have sorted out the problem with the X1541. I have always stated the X1541 cable should work with all but the most stubborn PC's and I am glad that the Tech special has come to the rescue for you.*

*I have to also thankyou too, as I have now had the XE1541 cable made up ready for someone to try it out for me. If it was not for your request for the XE1541 cable then I would probably not have bothered with it.*

*I am unable to test this XE1541 cable as I don't have the correct type of PC. Are there ny offers from anybody to test it for CS ? I will give that lucky person a FREE XE1541 cable for their trouble ! - ED*

Hello Allan

How are you?

I want to say that you were 100% right when you said in Commodore scene issue that TestDrive is much better with the SCPU. It's exellent. It so smooth,the controls & the speed. I've broke my old record twice. My latest is 32000.

Anyway I heard that there is TestDrive2. I've seen it on an FTP and I download it. But it didn't worked. Do you have a working version?

The same for the Red Storm game.

I didn't get the Issue 32 of CS maybe today.

Can you help me with that patch to upgrade your geos 2.1 to 2.2. Does it work for the 128 version?

Still, Commodore Scene, it was very helpful to me. I played with DMC and tried to make some sounds. The lessons were very good. In the first day that I played with DMC I made some low frequency sounds. They gave me a big headache for a day or so.

Regards, Michael (Romania)

*Hi Michael,*

*It is good to hear from you again. I hope all your Commodore stuff is living up to your expectations ?*

*The SCPU makes a hell of a differance to most games, especially those that have been adapted for use on the SCPU.*

*Test Drive 2 ? I'll have a look for you and if I get a working copy then I will send it to you. I will do the same with Red Storm as well. I hope you have got CS32 by now ? If not, just let me know and I will post it on to you again - I definately sent it though.*

*I am not sure what you mean by the patch for GEOS from 2.1 to 2.2 - I didn't think there was one. GEOS only ever got to v2.0 !*

*DMC ? Glad that you used the coverdisk files, I am sure the contibutor (Richard Bayliss - I think) will be very pleased to hear that. Sorry about the headache though ;-) - ED*

*More in the next issue - ED*

# - READER QUICKIES ! -

RQ - Can CMD convert any PC mouse into a smart mouse? I've seen a Star Wars C3PO Mouse I wouldn't mind. It's C3PO's face, and looks rather good!

*Reply : No, I don't 'think' they can, sorry.*

RQ - Do you know how compatible the IDE64 device is with existing software?

*Reply : No I don't. I haven't even seen one of these devices running yet.*

RQ - Do you have any Timer Jump Clips in stock?

*Reply : Yep, I sure do - lot's of 'em !*

RQ - When will CLiPS be available, and will it conflict with GEOS ?

*Reply : (1) I don't know, (2) I don't know ! See page 18 for a brief rundown of CLiPS by Nate Dannenberg.*

RQ - How do I clean a C64 disk drive hub without damaging it? What do I need to use ?

*Reply : The only way to clean the hub properly is to dismantle the drive to expose the hub and then use some cotton buds with some mild cleaning agent (disk drive fluid will do). You may even get away with just removing the top cover of the drive if you are lucky.*

RQ - Can the Western Digital W65C22 chip directly replace the C64's 6526 CIA chip and increase the port speed from 1mhz to 10mhz ?

*Reply : The short answer is no, it can't. Although the chip has a similar specification, the W65C22 has subtle differences in it that make incompatible. These will cause the computer to crash and probably damage itself as well !*

*Who says CS can't answer difficult questions ?
I would like to thank Creative Micro Designs for the answer to the last one question ;-) - ED*

## ME, STRANGE - NAHHHH!!!

I regularly read and enjoy Andrew Fisher's columns within the hallowed pages of this magazine.  Anyway I was influenced by Andrew to write this following piece -

J. UTNE who is programming ABRACADABRA has of course
pinched her name but cunningly abbreviated it so not all of us know it's a 'J'ar of ch'UTNE'y.

IF SYSTEM 3's game was called THE LAST NINJA why did they do 3 of them ?

FINALLY, following on from the fact that Allan has a bears toe ( poor man ! ) I have just realised the technical editor's full-time profession ( come on think about it ! ).

Wayne Womersley

---

*A few issues ago, it was mentioned about the differences between the original C64's and the newer versions. I said at the time that I was not 'in the know' about what these differences were. Well, here is Jakob Voos filling us in with the details - enjoy ! - ED*

# c64/c64c
## Different Strokes

The Commodore 64 was built in 1982 in a brownish "breadcase" style and therefor got his nickname. It was NOT a success ! It even sold that badly that Commodore heavily reduced the price to cover at least the building costs. NOW it was a success bigger than anything experienced so far :) Commodore ran out of them and although the c64 was selling like hot cakes, they did not gain the foothold they wanted to, because of a too-low-price. Commodore always liked to make spare-versions of products and mostly produced rubbish with it... But the c64c was surely one of their best attempts to save money.

So what did they do ? At first they "fixed a bug" in the SID chip. SID now sounds different sometimes - nobody would have thought it was a bug before! Another side-effect was that DIGI-music was hardly heard on new SIDs as they were created with the aid of the 1st SID's bug... We can be very happy that Commodore did not fix any of the other (MANY) bugs the Commodore itself has, for it is the bugs that help a lot in creating demo effects.

For a short time there were white c64s in the breadcase cover that in fact were c64cs. But then Commodore saw the PC-market grow and made a mistake. They backed away, they stopped fighting before the fight was over. The c64-case was reworked to look more up-to-date and more like a PC ! They even wrote "personal computer" on it ! From then on they tried to "keep up" (also with the Amiga) with a system that should have been below their pride :)

The old c64 would not have fitted into the new case - so the SID was not the only modification. In fact the reason why they saved so much on the c64c was by reordering the circuit. They kicked out one full circuit board and reworked everything so that it still worked. To my great surprise it works quite well. There are just two differences. One is a flashing line between two vertical splits. Vertical splits are used in demos mainly (e.g. Raster Blaster/Triad). The other one is, that SOME c64cs cannot display AGSP-scrolling. AGSP is used in creatures/apex for example. I don't know why, but this also works on most c64cs, though.

*Before you write something like "I`m not a tech-man" just ask me or Malte! I don't know everything but I can find out.*

*Jakob Voos*

*Thanks for that Jakob. I will 'try' to ask for help in the future, but, as you know all too well it is not always possible.*

# The RARE Guide
## To The C64

## Ladies and gentlemen, I give you the
# Commodore P500

'bulldozed' (i.e. ran over by a bulldozer to make them truly scrap); regardless all that remain are the few out on the streets and probably a couple former prototypes. This particualr P-500 has obviously preliminary ROMS as it starts up with a white screen and cyan border and the startup message:

```
*** commodore basic 128, v4.0 ***

ready.
```

Beyond that, I have not explored much of it as either a RAM or RAM controller chip is keeping me from getting useful BASIC results.

The B-128/P-500 features:6509 Microprocessor, 128 k of RAM (utilizing bank switching like the C-128), a true RS-232 C serial port, IEEE-488 peripheral port (like the PET/CBM computers), Cartridge Port, Full size keyboard with 15 function keys and numeric keypad. An 8088 coprocessor board expansion bus. (which could run CP/M 86). An internal power supply (which sure runs hot). 6581 SID sound chip (like in the 64), Datasette port (though the B-128 ROMs has no code to use it).

"Features specific to the B-128: 80 column B & W video output (6545)

Features specific to the P-500: 40 column VIC-II video output (like in the

The Commodore P-500, Commodore's 'Color PET'

The P-500 is just one model in a major (1982) re-vamp of computers by Commodore. The complete line consisted of: Commodore Ultimax Game Console (a 4k version of the 'Commodore 64') - pictured below.

of the P-500, a cross between a B-128 and a Commodore 64.

From various sources I discovered the P-500 was a casualty in bad planning. Com-

Commodore 64 (you proabably have already heard of this model *wink*)

Commodore P-500 (an intened upgrade/replacement for the Commodore B-128 (a business upgrade/replacement for the CBM 4000/8000 models)

Of those the most popular of course was the Commodore 64. The B-128 did reasonably as a business machine until larger systems (like the IBM PC) took the market. The ultimax was released only in Japan I have heard, and was not all that great. But this page is the story

modore, wanting to get customers committed to buying the then unreleased B-128 and P-500s sent dealers 'demo units' (read 'beta units') of the two machines for display to impress customers. These machines had not passed FCC clearance yet, and were not completely debugged. The problems began when some of the stores sold some of their demo units, and the FCC got wind that uncertified machines were being sold by Commodore. Of course the FCC got on Commodore's case and Commodore recalled all the units (except those that had been sold or those the stores refused to return.)

Sometime after that (I assume) Commodore found the 64 being popular (and cheaper than the P-500) and decided only to just release the B-128. I received rumors the other recalled P-500s were

64), Two joystick ports, ROM routines supporting the datasette (absent in the B-128 series ROMs).

*All information for this article has been taken from Larry and Diane's web site. It is believed that Larry Anderson wrote the actual text. Thanks Larry.*

## by CLASSICAL GAMES / PROTOVISION
### reviewed by
### Art Ravers and Paul Gibson

This style of game has been around for quite a few years now, the original BOMBERMAN was released for the AMIGA in 1989 and sold several million units worldwide. There's only two other games of this type I can think of on the '64' these are BUG BOMBER which was quite good if a little repetitive and the awesome if not infamous PENGUIN TOWER that only saw release as a demo !!! Anyway what about this game, well for a start you're going to need a basic setup of 2 people. The game comes on disk with a 4 page manual, the idea is simple, move your player round the mazes, collect equipment like bombs and other pick-ups and try to kill the other player/s within the time limit for each level. You start by pressing fire, you then need to make a verbal agreement on the winning score because Bombmania does not know any limit. The game is played over 8 levels that loop once you have been through them all. You drop bombs to blow away the blocks to allow you to move around the screen ( if you've played Penguin Tower you'll know what I mean ! ). You start with just 1 bomb but are able to collect more, there are two types of bomb - 1 you press fire and it goes off in 3 seconds and 2 you can put it down but it does'nt go off for 10 seconds oryou have the option of setting it off yourself (remote bombs).

Wayne - This is an interesting 'take' on the BOMBERMAN typegames, I was expecting lots of enemies to kill on each level like BUG BOMBER and PENGUIN TOWER but instead I found the game plays differently. This is not a bad thing as the 8 levels offer the player some room for challenges and definite strategies need to be applied ( along with a tad of forethought ) to win the game. I would like to say overall this is a good game, but I do have some reservations these are - The fact that you have to decide what score the final score will be, In my opinion the coders could have set a limit or allowed you the option to set a limit yourself from a menu before commencing play. The second thing and this is quite a major problem is the fact that it's a minimum two player game - What about all those people who don't have friends ? *(That's me ! - ED)* This severely restricts the buying market in my opinion. Finally the price, I think 10 quid for this game is asking a bit much - come on PROTOVISION, I like the game don't get me wrong but we're in the year 2001 and the majority of the English '64' community won't pay that sort of money especially for just the one game. I personally would pay 10 quid at a push for the excellent ICE GUYS ( PROTOVISION ) but I don't think there's enough depth in BOMB MANIA to war-

rant it. I think a much more sensible option would have been to sell this and ICE GUYS on one disk for a tenner, that would be excellent value for money. I hope I have'nt hurt anyone's feelings but I told ALLAN I'd review this game fairly and honestly.

Helen - We decided to review this one evening when Paul ( a friend ) came round. I think this is a really good game, it kept my interest, there's plenty going on. The music is very good and jolly, it's cool how you die - just like you've been barbecued. It's a bit poor having to have 2 players, I would have liked a 1 player option. I think the price of it is a bit steep for 10 pounds in this day and age. People, like wayne said don't want to pay it in this day and age. Other than that all in all not a bad little game. But you'll never find a game with everything you want.

Paul - I enjoyed this as well, It's been a long while since a good two player game came out for the '64' this actually reminds me of the ace game DORKS DILEMMA on the C16 ! What we found worked was - playing the game between us and when a certain score had been reached start from scratch but pass the joysticks between players so everyone got a go.
A cool game but like W and H, I think it's too expensive !

Overall - We all agreed that this is a good game, a touch too expensive, We are all interested to know about the other version of this coming out - BOMBMANIA PLUS, is it going to be different or what, perhaps ALLAN could contact PROTOVISION and print some info in Commodore Scene regarding that.
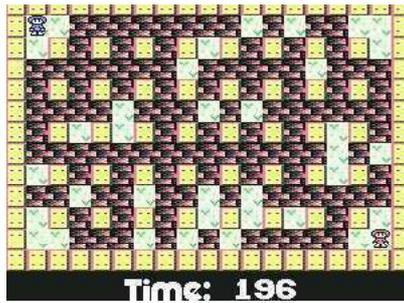
Also, we didn't get to try out the game with a four player adapter, which should certainly give an interesting new twist on what is already a winner of a game. If allan could get us one we'll gladly review the game with 4 people playing it -

We wait with eager anticipation !!!!

---

*Well, thanks for the review guys & gal !*

*I would just like to put my two pence worth in here at the end if that is okay with you ?*

*I would also just like to reiterate that when I display this game at exhibitions for people to play it gets a lot of stick ! And that is only the demo version ! I fully expect to have the full version with 4 player adaptor running at the next exhibition that I attend. I would also like to touch on somthng that I feel has been overlooked with this game, there are many power ups throughout the game and it took me quite a while to get used to them. Once you have played the game and fully understand the power ups and then get involved in the tactics it starts to get quite complex. I have seen lot's of people blowing themselves up many, many times in Bombmania in a fit of desperation as they realise that they are caught up in a fast and very furious battle of wits. I have to agree that playing with a full compliment of 4 players will be quite somthing else to behold.*

*For what it is worth, I believe that this game will be a classic - very quickly - PROVIDING that it is priced a little lower than it is currently.*

*I will get some more information on Bombmania PLUS as soon as possible and I will also try to secure a lower price for the readers of CS - ED.*

# FANZINE ROUND-UP

**Retro Classix** : Still no sign of the next issue of this UK master-piece. Come Graham, I need my fix !

**LUCKY REPORT** (September 2000 & October 2000) : Two glorious issues of this fine upstanding newsletter have graced my postbox since the last issue of CS. The September issue has some great articles from the members, one such report is from Dale himself on a new slideshow program which can display JPEG images in IFLI mode on a 40 column screen. The program by Tom Gosser is available from the LUCKI Library and I have sent for a copy for review in a future issue. If none of you have ever seen the c64 displaying JPEG's on a 40 column monitor then you haven't lived, they are truly amazing and very colour-ful. In fact I think I will dig out somthing for the next issue. In a slightly different contrast, the October issue is filled with articles from the front cover to the back page which have you completely gripped. When it arrived, I was on my way to work so I thought I would just flick through it and then read it when I got home in the evening. Little did I know the impact that the contents would have on me, I simply could not put it down. This issue of CS carries three of the indepth features found in this issue of LUCKY and the next issue of CS will carry another feature as well. These features are 'unmissable' and I urge you all to read them. My thanks go to Dale for supplying me with the complete articles & pictures - and the long nights unwrapping them ;-)

I have said it before but this needs printing again - the LUCKY REPORT's are all completely compiled and printed using a Commodore. You have to see a copy the fully appreciate the quality of the finished output. I take my hat off to you Dale, you do a superb job.

**Commodore Mailink** (January 2001) : A different editor guests on this issue (I think). This issue has obviously moved home because it was not done on a Commodore, at least it doesn't look like it has. This is not a complaint as I do not advocate the sole use of Commo-dore's for all things ! (unlike some people). There are times when a computer with greater speed and graphics capabilities is required to get a job done. Anyway, this newsletter has a good mix of articles from various sources and covers many topics regarding the Commo-dore. There is a particularly nice aricle (with pictures) about early Commodore Calculators.

Allan Bairstow

## CITIZEN WAYNE PRESENTS
# BITS - THE FEATURE

For those of you insomniacs that don't know, BITS is a computer / video game reviewing program shown on FRIDAYand SUNDAY nights. On the final program of BITS last year the'girls' announced the results of there competi-tion 'TOP 50 GAMES OF ALL TIME'. Games ranged from WIPEOUT to LLAMATRON ( A JEFF MINTER AMIGA GAME - COOL STUFF ! ) there were over 350 different games voted by the viewers but as mentioned only 50 could make the grade. They did'nt show the full chart but I've included here what they did show. 'At the bottom of the pile, the one that started it all off at NO 50 - PONG ' (They cut to a screenshot of PONG at this point which had the following credit at the bottom of the screen - COURTESY OF HASBRO ORIGINALLY RELEASED FOR THE ARCADES ). To quote the 'girls' again 'Insert Coin, Avoid missing Ball for high score, look at that ball go ! ' Other games mentioned were as follows :-
5 : METAL GEAR SOLID ( Andrew Fisher previously mentioned this series of games in an article for this very mag! )
4 : HALF LIFE
3 : ZELDA : OCARINA OF TIME
2 : ELITE
(they cut to a screenshot which I suspect was an emulator, which had the following credit at the bottom - Courtesy of FRONTIER originally for the BBC MICRO. Finally the one gamers up and down the country voted for was
1 : FINAL FANTASY VII
(credits were given to SQUARESOFT - available for the PSX and PC. Perhaps if ALLAN would be so kind we might get to see the full list in this very mag *(no problem, see the next page - ED)*. I for one would be interested to know the other entries, don't you think it's interesting though that out of the few title mentioned one game is from the 70s ( PONG ) and the other from the early 80s ( ELITE ) - who said retro-gaming was dead !

# GEEK
# OF THE
# WEEK !



This competition was held over a number of weeks. The final results were - BUTTERFLY ( her of the middle digit fame ! ) came third. Coming a close second - quote time methinks ! ' The guy who still wears the jumper knitted for him by his mum with a games logo on it ( ULTIMATE PLAY THE GAME ) - WELL DONE KENZ ! '. First place - JOHN CLARK who speaks KLINGON, I spoke to ALLAN on the phone about this, and as he said ' how can you go up against someone like that ' ahem, anyway the top prize was a top of the range PC.
Those of you interested or have a local library with INTERNET access go to
**WWW.4later.com/bits**
Another strange but true fact, As the credits for the show were scrolling up the screen the SHOWS presenters and PRODUCTION CREW favourite games came up. Included were such classics as :- SPY HUNTER, DEFENDER and CHUCKIE EGG ! Hey Allan, any chance of showing KENZ with his jumper on, we thought it would be a right laugh ! *(see above ! - ED)*
## * UPDATE *
Just as I was about to send this feature off Allan sent me the whole of the top 50 BITS chart - THANKYOU ALLLAN !
Anyway, it's a BIG disappintment for us 8 BIT gamers there were only two games from our 'ERA' in there, these were - CHUCKIE EGG and MANIC MINER ( both voted for by spectrum owners ). As you'll probably know both these little gems were released for the '64'. Coincidentally both these games had sequels as well although people are probably more familiar with - JET SET WILLY ( Manic Miner's sequel ) than Chuckie Egg 2. If you guys are kind I might even consider reviewing these for a 'PLATFORM GAME SPECIAL' if ALLAN is up for it ! *(sure thing Wayne - ED)*

Channel 4 – BITS chart – Top 50 games – EVER

**The Bits Brain:**

This is the Top 50 Games Ever at the halfway point:

1. **Elite** - Braben's and Bell's 15 year-old space epic
2. **Final Fantasy VII** - Squaresoft's huge tale of magic and loss
3. **Legend Of Zelda: Ocarina Of Time** - The return of Link in beautiful 3D
4. **Half-Life** - Valve introduce the concept of plot to FPS
5. **Metal Gear Solid** - Kojima's filmic stealth 'em up
6. **GoldenEye 007** - Intelligence comes to console violence...
7. **Perfect Dark** - ...And again
8. **Final Fantasy VIII** - More realistic sequel to RPG classic
9. **Half-Life: Counter Strike** - The best online mod?
10. **Secret of Monkey Island** - Guybrush in the funniest game ever made
11. **SWOS** - Much lusted after footy pinball crossover
12. **Unreal Tournament** - Took Quake on an almost won
13. **Tetris** - The game that started the Game Boy's rise
14. **Sonic The Hedgehog** - Megadrive debut of Sega's speedy mascot
15. **Doom** - ID's FPS innovator that saved the PC
16. **Resident Evil** - Survival Horror innovator from Konami
17. **Deus Ex** - Recent ambitious FPS special agent hit
18. **Chrono Trigger** - Superb SNES mech RPG
19. **Sensible Soccer** - Better than Kick Off 2...so there!
20. **Resident Evil 2** - Fully-formed high-budget sequel
21. **Command and Conquer Red Alert** - Most popular in Westwood's RTS series
22. **Tomb Raider** - Lara already waning in popularity
23. **Super Mario Kart** - SNES racer and possibly the best ever
24. **Starcraft** - Deep and involving strategy
25. **Quake III Arena** – The masters returned to retrieve their crown
26. **Mario 64** – 3D gaming comes of age in Miyamoto's platformer
27. **Civilisation 2** – Sid Meier's intelligent strategy sequel
28. **Zelda 3** – SNES version of the classic series
29. **Resident Evil: Code Veronica** – Best looking horror game yet
30. **Paper Boy** – Even without the handlebars it was a classic
31. **Nights** – Saturn cult classic and endlessly inventive
32. **Gran Turismo 2** – More cars and attention to detail than other racers
33. **Duke Nukem 3D** – Comedy violence hits the PC
34. **Command and Conquer** – The first real RTS hit after Dune 2
35. **Civilisation** – Sid Meier brings politics to gaming with aplomb
36. **Chuckie Egg** – Spectrum platform with devoted fans
37. **Soul Calibur** – Flash DC beat 'em up
38. **Quake** – Doom goes true 3D
39. **Pong** – The game that started it all
40. **Pokémon Red / Blue** – Hate 'em or love 'em...
41. **Kick Off 2** – Dino Dini's Amiga hit footy game
42. **ISS Pro Evolution** – Best football game ever made
43. **Final Fantasy VI** – Pre-PlayStation Square classic
44. **Earthworm Jim** – Shiny's comedy platformer
45. **Dungeon Keeper** – Design, manage and populate fantasy dungeons
46. **Championship Manager 99/00** – Latest of the popular management sim
47. **Castlevania: Symphony Of The Night** – Underrated 2D PSX platformer
48. **Cannon Fodder** – Sensible strike again with cartoony war actioner
49. **Xenon 2: Megablast** – R-Type was still the better shoot 'em up
50. **Xenogears** – Another robot Squaresoft PSX adventure

---- ELITE ----

Load New Commander (Y/N)?
(C) D.Braben & I.Bell 1985

Channel 4 – BITS chart – Top 50 games - EVER

This issue we are lucky enough to have on the coverdisk 'Flummi's World' from Substance.



Jan Zimmermann has given Commodore Scene to use the full / original version for the readers to play.



The last words about this come from Jan Zimmermann



"Well, it's hard to give a good statement about the game or the Commodore. But I would like to have the names of the other people published who have been involved in this game: Daniel Sczepansky (gfx) and Matthias Hartung (music & sound)

Well !
What are you waiting for ?

Go and get it !

**ON THE COVER DISK !**

# FROM PC TO 64
## (AND BACK AGAIN)
### by Andrew Fisher

When I finally got access to a PC last year, I decided it would be wise to invest in an X1541 cable to convert things backwards and forwards. (The other major option for 64 users is of course Big Blue Reader, which I will also discuss.) With CD-ROMs and Internet sites full of retro stuff for emulators, REAL 64 users can benefit too.

### ZIP-A-DEE-DOO-DAH !

My good buddy Ken Ross recently sent me a PC disk with a copy of the ICPUG Electronic Magazine and a demo from Triad on it. However, it was stored in ZIP-code format. This means there were four files, labelled 1!TRIAD, 2!TRIAD, 3!TRIAD and 4!TRIAD.

This means that a whole disk has been compacted into these four files, designed for quicker transmission through a modem and reliable unpacking.

Copying the files from the PC (720K) disk was easy with Big Blue Reader and my FD2000 drive (which can also handle 1.44Mb disks). It was converted from ASCII to COMMODORE ASCII, the same filenames retained, and the default file was set to PRG.

However, I hit a few snags with the ZIPCOLL V2 program (included on the issue 32 coverdisk) - load it up and select Disk Unpacker in this case. Basically, you need to switch Zip-DOS Read to N (for NO).

### BUZZ LIGHTYEAR, STAR COMMANDER

The other method is of course to use an X1541 and the Star Commander software. However, I had hit a few snags, in that the first few times I tried it I ended up with unreliable copies and/or disk errors, and the PC software itself kept crashing. Allan sent me a copy of his SC.INI (settings) file and this cured some of the problems, but the main one is that Star Commander MUST be run in DOS - it does not like Windows or other multi-tasking environments.

So, what can you do with your magic cable? Well, the morning I was testing out these changes, I happened to get a disk from Wayne & Helen Womersley (the Art Ravers). I used SC to copy the file (called HAPPY BIRTHDAY) to the PC, and then ran the emulator to see a special birthday picture they had drawn for me!

Of course the real benefit is from transferring files on the PC back to the 64. From the Binary Zone CD-ROMs I have been able to copy back demos and games, including many of the rare ones on Frank Gasking's excellent website.

As an example, I had played the demo of MOOD, the first person shoot'em'up. From Frank's site came the third version of the preview, this time with sound FX! And in a previous issue I mentioned METAL GEAR - a very rare title. Although it suffers from slowdown, this NTSC game works fine now I have copied it back to a "real" 64.

# geoTELEGRAPH

## THE geoNUT DISK DEPOSITORY

(Formaly the geoCLUB UK GEOS Disk Library)

Disks cost £1.30 for one 'double-sided' disk (that's TWO cs library disks). Make all cheques payable to Dave Elliot , at : 32 Wood Lane, Cippenham, Slough, SL1 9EA, UK.

**CSDisk63 #1** + **CSDisk22 #2** = **£1.30** side1 #1 side2 #2

Greetings All,

This month we have 4 new additions to the library. A collection of scanned art from ANDREW FISHER, which includes some of the following—Charlie Brown, Snoopy, Homer Simpson, Judge Dredd, a collection of Pokemons, Lara Croft and many more. The disks are numbered 314 replacing 1 previously damaged disks and 592, 593 and 594. Andrew has done a very good job at scanning these pictures, so if you want some new and up to date pictures, these are for you.

CS DISK 293
A 'Home Grown' disk this time, it's a DIY Calendar programme, and it's a very good one as well. Create your own months, weeks and years, don't forget Birthdays and Anniversarys. Thank You David

CS DISK 294
BLOK AXB, BLOK BATCH and  BLOK BOOTIE - sorry, I've no idea;  GEOVIEW to look at the following SKATER - Ice skater; EXERCISE & EXERCISE BIG - I can't do that! . RUNNING HORSE - At full gallop;  LION KING - Cute, but I guess it had to happen; BRUM - A car, not Birmingham!; BALLERINA - just dancing away;  ADLER 1 & 2. - an Eagle, and an Eagle in flight, Excellence. The pointer is Yacht 2.

CS DISK 295
GEOVIEW to look at BLUME 4, 5, 6 & 7 - four very nice 'flowery' type pics (Borders); AUTO 01 to AUTO 13 - Some very good car pics, from VW's to BMW's. The pointer is an Allosaurus.

CS DISK 296
GEOVIEW again;  AFFE - a Chimp;  AMIDA - Eastern Lady; ANGELN - Angling;  APFEL - an Apple;  ARBEIT  1 & 2 - My Reviews!; .ARCHI - Building; ASTRO - Mythical beings; AUS - Punctuation marks. There's some really excellent pics on this disk. The pointer is a tractor.

CS DISK 297
GEOVIEW again for  BENGAL -  A tiger; AMAZON  - a

barely clad (?) lady; 3 LADIES - clad!;  ANGEL 1  -  you can say that again!;  IBM PICS - The Angel & the Amazon all on the same pic, too too much. The Pointer is an elephant.

CS DISK 298
PICSHOW to view some more of those great GG and JJ type pics. GG & JJ,  STARTREK - CRASHED - EGYPT MASK - MASK 2 - STRIDER GIRL - SPIDERMAN - VILLAGE HUT - THE SIMPSONS - BIRDS - SPIDERMAN - WINTER - SANTA - POLAR BEAR - RAM - EAGLE  -GIRAFFE . GEOVIEW again for DISNEY 5 , SMALL ART 1 , A5 BAMBI PAGE . The pointer is a Lighthouse.

CS DISK 299
GEOVIEW again. ASCLE - Moses?; AUKT - a Cup Winner?; AUTO 1 & 2 - Comic cars; AUTOS 1 - add your message to this van; AVOCADO - I thought it might be a pear, but it's a bird; AWARD - A Medal, so where's mine!; BABY - Ahhh; BAD 1 & 2 - 1 = Sharon in her bath, 2 = me in mine!. The pointer is an Eagle.

CS DISK 300
GEOVIEW for ORCHIDS 1 & 2 - Various Orchid Pics; FRAMES - a selection of; ORCHID CLIPS2 - A photo Album. The rest of this disk contains Desk Accessories - DESK SWAP + INFO . SELECT INPUT for the 64 & 128 . SHOW FONT for the 64 & 128 . PRINT & INPUT for the 64 & 128 . PATCH BOOT 1581 . AUTO BOOT 64 and 128 . The pointer is a Yacht.

CS DISK 301
GEOVIEW once more for - BEL2 - The Liberty Bell;  BETTY - a little girl;  BIRNEN - Pears!; BLATTER - some kind of a plant; BLUME 1, 2 & 3  - Flowery note pads. The pointer is a Bulldozer.

CS DISK 302
GEOVIEW agian; BAR - a Bear with a salmon;  BANKROTT - a tombstone; BARBER - the Singing kind; BASKE - Basket ball; BASSW1 & 2 - an old tree, and a young tree; BEAGEL -  a Woofy;  BEL 1 - another Liberty Bell pic; BIENE - either a Bee or a Wobby!. The pointer is T. Rex..

CS DISK 303
I have included the following application, as there is an article in the March geoNews which mention it. TROJANKILLER - see

### ED TALK

Another edtition of the geoTelegraph garces this issue with more stuff than room unfortunately.

geoDOS will be making an appearance in a future issue soon. This program is actually quite complex to describe but th features in it are bewidering to say the least. Look out for it soon.

I would just like to thank Ken Ross for his begineers guide to GEOS which I have had to hold over until next issue. - ED

geoNEWS March 95, page 8 Ted Woodwell; DUAL TOP 2.6 - this is an updated vertion, for geos 64 users; SYSTEM INFO - information about your system; SHOW FONT - the converted to English version; MAIL TRUCK & FROM DESK OF - 2 geoWrite Letterhead files, to give you some ideas, to view press CBM & H keys; GEOFONTIZER - grab's a 9 block CBM font from a geoPaint doc; GEO TO SEQ - converts geos to SEQ; BORDER FONT & CARD - 2 font files.

**CS DISK 304**
NEW SYSTEM ERROR (V2.0) - gets you out of a System Error; NEWSYSMOD - modifies New System Error, disabling dialog box; GEOFAXDEMO - send and receive Faxs on your 64!; POST NATIONS - label type clip-art; GEOGRAPESHOT - mixed clip's; ZODIAC - signs of the zodiac; GEO-ORNAMENT - ornamental clip's; SCRAPECAN - use to copy and paste very large photo scraps. (some files maybe copyrighted).

**CS DISK 305**
The following 6 disks, are of animals of all kinds. Most files have more then one type of said animal, and use the full page. The quality of these pic's is very good, and have a range of sizes: GEOVIEW - to view the following: BUGS 1, FISH, DINOSAUR, CHEETA, CATS, 2 BUNNYS, ART101.

**CS DISK 306**
GEOVIEW - to view the following: OTTER, KITTY, KOALA, OWL, OWL HEAD, PARAKEET, CAMEL, BISON, GAZELLE.

**CS DISK 307**
GEOVIEW - to view the following: PIG, RAM, COW & CALF, BULLS HEAD, ZEBRA, HORSE, HORSE 2, BEAR, ARMADILLO, STORK, KANGAROO, ART98.

**CS DISK 308**
GEOVIEW - to view the following: ART107, ART108, ART109, BAT HORNTOAD, GREYHOOND, RACCOON.

**CS DISK 309**
GEOVIEW - to view the following 2 PC-X FILES - XPLATUS, XFOX + Mac Files People 97, 89 and 90.

**CS DISK 310**
GEOVIEW - to view the following: WOMAN, ANGEL, APE, ART100, ART115, RABBIT, XMAS TREE.

**CS DISK 311**
A selection of PCX conversions, includes—ACACIA, ACORN, AZALEA, FLOWER 2, CORN 2C, BARBERRY etc.

**CS DISK 312**
geoSOURCER by Jean Major,; a geos programmers disk to help dissassemble geos source code plus lots of help, 128 and 64 mode. geoDebuuger V2.0 etc.

**CS DISK 313**
FLOWER46, FLOWER47, FLOWER49, FRUIT, FRUIT2, GARDENING2, GARLIC, KALE, HAT/FORK, GBERRY, GARDENGATE, GARDENGATE2/1, GHERKIN, GINGER, GREENPEA, WEAT, HORSERADISH, HARV2, LEAF, HARVEST2, LEAFFALL.

**CS DISK 314**
A Disk full of scanned art by Andrew Fisher, includes the following—SIMPSONS, BABYART,KRUSTY, BUCKCHOPS, POOCHIE, BURNSC64, SIMPSON DOOR, VIVALOS, BARTBONGOS, HOMER FLAG 1 and 2 and a great selection of POKEMAN PICTURES.

**CS DISK 315**

The next 2 disk are a mix of clips. SIMONE, SIMON-BIG, SIMON B, SIMON B (BIG), JANE, JANE (BIG), CASTLE DOOM, CASTLE DOOM_BIG, HORSE (BIG), MARE & FOAL (BIG), MARE & FOAL 2, SUMMER SLEEP.

**CS DISK 316**
SNOWY RIVER-1, SNOWY RIVER-2, SNOWY RIVER-3, CROSS_COUNTRY, CROSS_COUNTRY B, TERMINATOR, WALTZING MATILD.

**CS DISK 317**
If like me, you've done the Pools or the Lottery, and you've never won, just who do you blame?. By using The Gambler, if you don't win, I can give you Dave & Ian's address's, use from drive 8 only. The Gambler picks either your Pools entry numbers, or your lottery ones. The rest of this disk contains Doreen's PCX conversions, This Disk is Cars, which are - CLSC2, CORVETTE, DATSUN, EAGLE, FORDS, HONDA, MERCEDES 1 & 2, HONDA/1, CARART 2, CLASSIC 1.
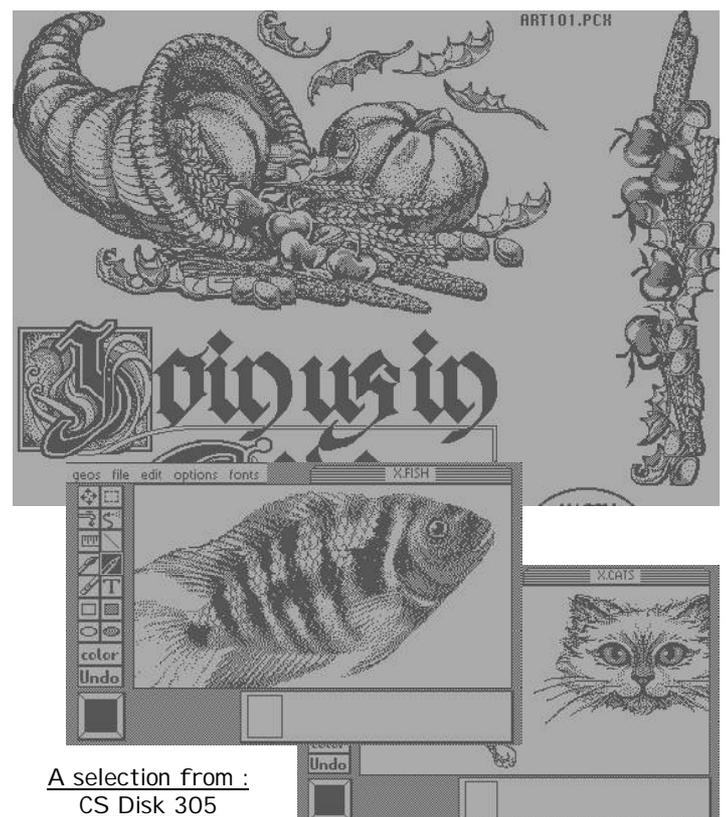
**CS DISK 318**
From Doreen this time, the theme is - OUTDOORS. The pictures are - BARBECUE 1 & 2, BBQ88, BURNED, HAMMOCK, HOUSE, CANOE, BBQ, CAMP, FAMILY 1, OLDIES, INPOOL, KITE, LAMP POST, LIFEGUARD, STONEHENGE, SUN 1, FAMILY 1/1.

**CS DISK 319**
From Doreen again, a mixed theme, Outdoors & Book 1. The pics are - OLD BOY, STORKRD, STUART, STUDYDEN, SUN4, TERRACE, SUN2, ABORIG.ART, ALDERB, BA-DUCK, BIRD 1 & 2, BELVEDERE, BUGESCHE.

**CS DISK 320**
Doreen's called this collection Women. the pics are - 2WOMEN, BIZLADY/C, FLAPPER, MADWIFE (I could make a comment about that one, but I value my life!), FLAMENCO, GGIRL2, MOTHER, LADYSIT1, LADYTHINK, MINMEY, LADY WAIT, OLD LADY, MOTHER 2, 3 & 4, S-FAT LADY, OPERALADY, S- FEM RG.



A selection from :
CS Disk 305

# The Miracle Of
# PP2 & PP3
## on the C64

Although we may have what some people consider to be an outdated computer, the strides that have been made recently have been truly amazing. Just going to show that our Commodore was built not only to last but to be used in the new millennium.

We now have access to the latest type of printers and especially Laser printers. Thanks to the efforts of Dale Sidebottom and Maurice Randall we can now print Laser quality documents from our Computer and since I have been using the new system can vouch that the finished article is as good if not better than a PC document.

What you need.

A **Laser Printer** with Postscript Level 2( the most popular are the H.P or Lexmark Optra range. The Lexmark comes with Postscript as a standard addition, whilst the H.P. is an additional extra.)

Dale Sidebottom's **Laser Lover's Disk**.

**PP2/PP3** from Maurice Randall.

Laser Lover costs around $25, whilst PP2/3 is free once you own Laser Lover.

Over the next few months I will be doing various articles on PP2/3 as I progress through the program. The printing capabilities are vast and cannot be covered in one article. I am using a normal geoCable which in the program is classed as a mark1 with the newer cable from CMD classed as mark2.

Once the program is loaded, you are presented with a screen with various icons, the main two that I have been using at this time are—Layout and geoWrite. Layout is where you create your projects and geoWrite for your documents. If

this is to create a new project, you will be presented with 11 options. Choosing option 6 will allow you to create an A4 (11.7x8.27) Lanscape document. If anyone is unfamiliar with printing ideology——Portrait is printing from top to bottom, whilst Lanscape prints from left to right.  Once the project is opened your screen will become the shape of the document chosen with the sizes available running along the top and left of the document screen. Also included are various icons like cut, back, edit. Plus a info box with your project number and page number. The normal drop down menu all Geos user are familiar with is also present—FILE...close, print and exit. PASTE...geoPublish, geoWrite page, geoPaint file, Jpeg file, geoPublish and geoWrite file. OPTIONS...previous, next, goto, insert and delete page. If any of the options are unavailable, they will be presented in italics.

To add your geoWrite file, simply choose PASTE geoWrite page and you will be offered the normal dialog box with all your geoWrite files available. Choose and you will return to your project or exit and enter geoWrite without exiting PP2/3 and visa versa. To paste your document simply pick your spot on the page and click, once transposed in you document you can do various things to it like—enlarge, cut, (still not figured out all the options) etc plus you can impose your document to the foreground or background. Now for the best part (my humble opinion), we can paste straight into our projects Jpeg files. Jpeg's are to the PC as geoPaint files are to Geos. No conversions are neccessary, all that is required is for the Jpeg to be on your Commodore system, be warned this type of file can generate a lot of bytes, if you do not own a hard drive then you could be limited in the Jpegs you can use. Again all the options previously mentioned with the geoWrite file are available for your Jpegs. Once you are satisfied with your creation then all you have to do is print. The print dialog box gives you a few options like number of copies, page to page, select output source, PS Level 1 or 2. Once you have chosen your preferences they are automatically saved for you. Like all applications the more RAM you have in your computer the faster your printer will print. The latest models come with between 2-6 megs, I think, since the Lexmark comes with Postscript then the printer will have enough RAM to run Postscript. If you own a colour printer then you can of course print in colour.

*Dave Elliott*
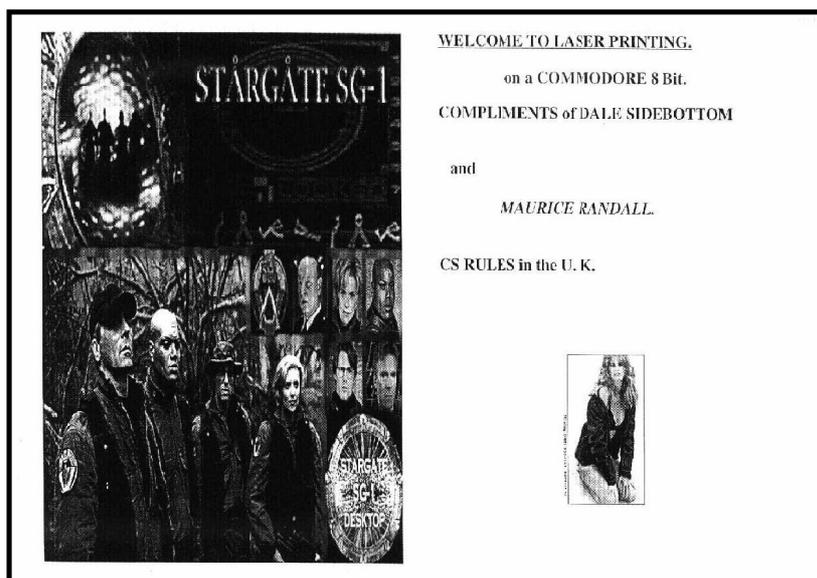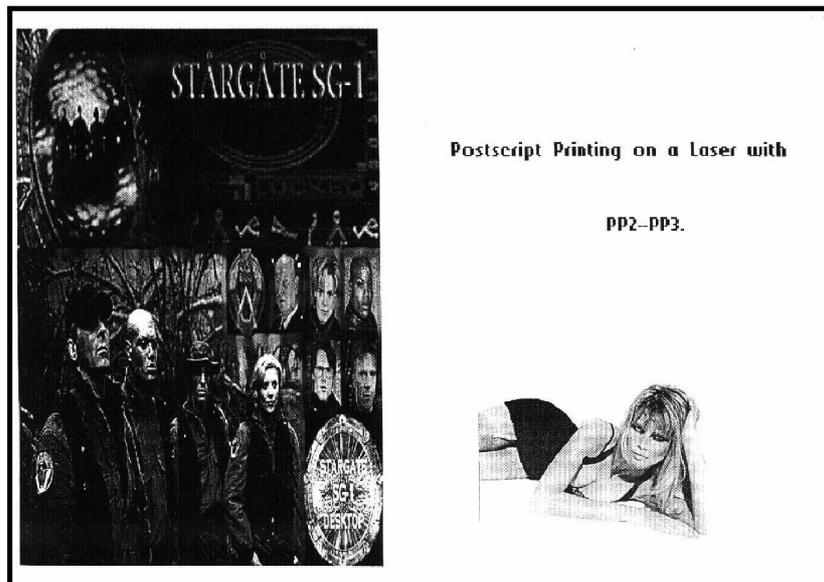
# A Short Review of CLiPS

## by Nate Dannenberg

For a while now, a revolutionary new program has been in the works, named CLiPS, written by Chester Kollschen.

**What is it ?**

It's a 16-bit operating system for the C64 requiring a SuperCPU with at least 1mb of SuperRAM. It is designed to look and operate like a modern Window-ed GUI (but perhaps faster and with fewer bugs. :-)

[*Dale's note : GUI - graphical User Interface (like GEOS), CLI - command line interface (like the C=BASIC screen*]

CLiPS is a multitasking alternative to other projects like JOS (Jolse Operating System) or LNG (Little-unix, Next Generation). In fact, it is unlike it's counterparts, which are CLI-orientated, because CLiPS is graphical from the start.

**But what does it DO ?**

It multitasks. That is, it lets you run several programs simultaneously, each residing within a small portion of the screen ... a window, as it were. CLiPS will have full support for all the modern devices that we use everyday, like CMD Hard Drives, or RAMLink, or maybe even *IDE64*. IDE64 is a program used to operate IDE devices (such as hard drives and CD devices) from the C64.

CLiPS lets you open up to 64 processes at once, two of which are always the Kernal/GUI and the mouse driver. A process is considered to be either a large, mian window (for example, a word processor) or a small, thread window (like one of several documents you might be editing within a processor). All the while, these threads (the rotating paperclips) are continuasly running, with the proff being their constantly smooth, spinning motion.

Right now (since it's still in the demo stage), it only has one application. That program is an animation of a rotating paperclip, with the words "CLiPS Rulez!" appearing (and rotating) on a seperate layer above it. At the Chicago EXPO, Greg Nacu demonstrated CLiPS, opening 6-7 large windows and nearly 50 small windows (threads), each with a 'papervlip' rotating inside.

**What good will it do me ?**

CLiPS will give much more of the flexibility found in Windows. You can create shortcuts to other programs, and place them on your desktop. You can change the background images, often called the 'wallpaper'. CLiPS expects to offer a task bar at the bottom, as well as aletting you maximize or minimize a 'window'.

For more information on CLiPS, what it can do, and where it's going, point your browser to **http://www.clips64.de**

Chester can be reached by e-mail at **c.kollschen@clips64.de**



# HANDY IMPORT

## by Andrew Fisher
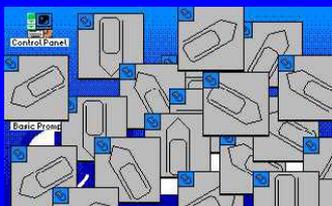
For all those Commodore Scene readers who saw Dave Elliott's advertisement in issue 30, I was the one who bought the HandyScanner (and the FD2000)!

Written by GEOS legend Joe Buckley, HANDY IMPORT is the application GEOS users need to convert their scanned graphics.

After loading, the "file" menu has two options, Get File or HandyScanner, which allows you to adjust the colours of the converted file. HS files are saved as black foreground on a white background, and this is fine for many files. However, GEOS uses dark grey foreground and light grey background as standard. So, you could set the option to these colours for later convenience.

"file" brings up a very good dialog box with a list of files on the current drive/disk. You can choose one, some or all the files (and clear your selection) with icons, plus move around the list with file up/down, page up/down or move straight to the top or the bottom.

Selecting "open" asks you which disk (or drive where appropriate) you want to save the converted file(s) to. WARNING: HS files are very small because of their compression. Always leave at least 4-10K per file free on a disk you are converting to.

Now the application will automatically tell you which file it's working on, and the GEOS filename it is saving. This is usually the old filename with a + on the end, or the name truncated to 15 characters plus the + sign. You will now be left with a geoPaint version of the file that is identical to the original.

As a final hint, I suggest using the file "info" box on the DeskTop to make notes about what each file contains for future reference. You can even customise the file with an icon of your own.

So far, I have given Dave FOUR disk sides of scanned graphics for the Disk Depository, and more will be completed soon. The disk numbers are 314 (replacing a damaged disk), 592, 593, and 594. The disks includes images of the Simpsons, South Park, Pokemon and lots more.

*NOTE : There are a couple of scanned images from Andrew on the coverdisk for you to view from within geoPAINT - ED*

*I know this is not much for Vic 20 users, but it is a start! If you have any comments on this article, please let me know! If you would like me to do articles for the C+4, please also let me know. I might not be able to do many, as I don't get much time on my girlfriends PC, so, as with this, I can't promise regular stuff!*

# VIC 20 Scene ?

**by Sean Bebbington**

The Vic 20 has some great games available for it (Rockman! One of my personal favourites.), but some where written in basic and appear sluggish as a result.

Unfortunately, there is no SCPU upgrade for the old Vic (If only - but probably not viable from a marketing point of view), but there is a way of speeding up some software slightly!

The first location of the Vic chip ($9000) contains an "interlace" mode. This was intended for use with multiplexing equipment, which would allow the Vic's picture to be blended in with another by cutting the updates in half from 30 updates to just 15 per second. So, if we cut the updates to just 15, in theory some of the processors time will be freed up for other things. Try running the following program;

```
10 TI$="000000"
20 FOR I=0 TO 2000 STEP 0.5
30 REM DO NOTHING!
40 NEXT I
50 PRINT TI$,TI
60 END
```

This program seems pretty pointless, but when finished write down the TI$ and TI values and type the following;

```
5 A=PEEK(36864):A=A+128
7 POKE 36864,A
```

What you are now telling the computer to do is to turn on bit 7 of location $9000, and leave all other bits the same (so that the screen stays in the same place). This then cuts the number of screen updates in half.

Now run the program again. The end TI$ and TI results will probably be exactly the same. This is because, even though you have enabled the "interlace" mode, and freed up some of the processors timing, the program is quite simple, and easy for the processor to handle, and so there probably hasn't been any time saving at all!

The (small) time saving happen when the computer is running a program which has long calculations or has a lot of GOSUB/ RETURN commands etc.... Basically, anything that will eat up processor timing or requires a lot of updates, like games written in Basic!

Now we come to the practical use. Dig out some of your old games, reset your computer and get ready to load them as normal.

This time, before loading, type;

```
POKE 36864,PEEK(36864)+128
```

now load as normal.

Some games will work as normal, as the game will over rule you, and set up it's own mode and screen position etc.... Occasionally, some games will not work, as (for some reason) they require the memory map unchanged from the reset. For the rest, you may notice a small speed increase from normal. This won't be much, but just enough to make them more playable, or less sluggish!

Thanks for reading. If you have any comments on this article, Email me at L_S_Bebbington@Excite.com. Until next time, Shaun.

## A MUSICAL INTERLUDE
### by Wayne Womersley

Apart from being the start of the new Millenium (despite what some people might say!) 2000 was a very good year for music.

HEART OF ASIA was a top 20 hit towards the middle of the year. The interesting thing about this track I found was its similarity to the INTERNATIONAL KARATE soundtrack by ROB HUBBARD.

ZOMBIE NATION - Released December time this became a huge club hit. I saw this mentioned on The Big Breakfast (CHANNEL 4) it was one of there hit singles of the week. Whilst showing a clip of the video, a scrolling message informed viewers that this track had sampled a KRAFTWERK (a well known 70s/80s synth band) tune. Also on Channel 4 in December the 'BITS' Girls mentioned 2000 being a retro year with this song previously coming from a 64 game. Well, the girls are right, the 64 game in question is LAZY JONES by DAVID WHITTAKER. The interesting thing about this game is that David did the game, the music and everything! Most 64 musicians tended to concentrate on music (one notable exception I can think of being MARTIN WALKER if anyone can think of any others please write in and let me know!

I shall be covering LAZY JONES in the ARCADE special for Commodore Scene (hopefully this year).

**NORTH BY NORTHWEST**: What you might ask, has this classic 60s HITCHCOCK film got to do with the 64? Well, maybe its just me but the title music (which is used during the film as well!) sounds an awful lot like the in-game DELTA music or should I say the other way round. Delta, of course wasn't released till March 1987.

# Commodore C64 Projects

### by Nicholas Colpin

www.64hdd.com                    e-mail : ncoplin@lycos.com

*This site details a number of Commodore 64 related projects I am currently developing. Some of these projects will also work with other CBM 8-bit machines, for example 64HDD. Most projects listed are uniquely mine, but some projects are enhancements to ideas/hardware hacks provided by other Commodore users. Feel free to download whatever interests you.*

## Emulator Developments

These projects combine PC hardware and MSDOS software in such a way as to enhance the functionality of the Commodore 8-bit computers. These are not emulators in the sense that we've become accustomed to (eg VICE, CCS64, C64S which operate solely from a PC). Rather these projects use the PC as a slave for expanding Commodore capabilities. These projects are the main thrust of my development efforts.

**64HDD** - The CBM Drive Emulator (currently in development v0.6a3 which now includes a parallel interface for real speed): This project lets you connect a CBM computer's IEC port (serial port) to the LPT port of a PC system and let it use its hard disk drives, CDROMS, Real-Time-Clock, etc. The FDD (floppy disk drive) can be commanded to read/write 1581 disks using Womo's 1581COPY. The PC connection is made using a standard X1541 or XE1541 cable. The C64, C128, Plus4/C16 and Vic20 all work with 64HDD. In addition to 386/486 PCs, 64HDD now works with Pentiums ! The PC system used with 64HDD can be a full computer system or you can do as I have and fit the FDD, HDD, PC board and PSU into a modified 1571 casing. In addition to native mode, emulation of D64, D71, D81, T64, LNX images is being provided. The MSDOS mode now also supports CBM 16-character filenames in Win95 LongFileName format if the **LFNFILES** (which includes "Odi's LFN tools") have been downloaded and configured. The main download includes utilities and test software, as well as 64Xplor (a cross-platform file Explorer for C64/C128/C16/Plus4/Vic20 machines and works with real and 64HDD drives). A driver is now included for setting GEOS time/date from the 64HDD system (full GEOS support is not yet possible). Alternatively, you can just check-out the current specification summary sheet as a PDF, or follow the site links to see a comparison of LOAD or SAVE times of 64HDD on my 386sx33 against other standard drives.

In the future it is hoped to extend the serial protocols to support the Burst and JiffyDOS protocols.

*A more indepth feature on the 64HDD will be in a future issue - ED*

**USB64** - (The next major project after 64HDD) - The Commodore essentially had a Universal Serial Bus all those years ago as its peripherals were a chain of intelligent device controllers. This project extends the functionality of the 64HDD by allowing the CBM computer access to all functions within the PC box via the enhanced IEC serial bus. Some concepts at the moment include the follwing :

- PC Mice (already a 64HDD function)
- PC Joysticks /Control Wheels
- PC printers
- PC RS232
- PC USB
- PC A/D sampling from the SoundCard
- PC Scanners
- PC Ethernet
- PC Video output

**Power64** - (One day in the very distant future...) Use of a PC based CPU core emulator to replace the 6510 via a cable connection to the C64 expansion port. As only the CPU core is emulated on the PC (not video or sound), trials suggest 6510 computing speed would be equivalent to 20-30MHz when the core is run on a Pentium100. Additionally, such a core emulator can replicate undocumented OpCodes, something new generation 65x02 chips cannot.

## Software Developments

**QuickCAM64** - This is a project by Nate Dannenberg, with some new drivers by me. Nate made the original circuit to connect the Connectix QuickCAM to the Commodore's UserPort and provided the basic software for viewing pictures. I have recompiled the software into "easy-to-use" D64 format with appropriate loaders and have added 2Mhz support for the hi-res modes if you are using a C128-in-C64-mode.

In the future I plan to develop video capture software which buffers the data to RAM or expansion RAM and then lets you save it to disk or play it back, as the original code will not let you save the images directly.

**KERNAL Patch Files** - A collection of patched KERNALs for use with C64 emulators. As you know today's PC can run these emulators at speeds several times faster that the 1MHz C64, the problem though is that with most emulators the cursor also speeds up making it impossible to type accurately. Included in the zip are KERNALs patched for 1, 2, 3, and 4MHz emulation. The patch effectively sets the CIA counter with values for the faster clock rates, and hence the limit of $FFFF corresponds to approximately 4MHz. There is also a utility called PATCH64S to patch the C64S.RES file which holds the ROMs for the C64s emulator.

## Hardware Developments

**LCD64** is a hardware /software project for the Commodore C64. A Hitachi controlled alpha-numeric LCD screen is hardwired to the UserPort and the Kernal ROM coded to operate with both screens (video and LCD). Current status is that

a 40character by 4line LCD display has been wired up and mounted into a C64c casing (deck behind the keyboard now tilts for view angle adjustment). Simple control software has been written in BASIC, but the major re-write of the Kernal ROM has not been done yet.

**PC–Joystick A/D Converter**
- Always wanted to use your PC steering wheel to do a few laps of Pole-Position? How about use a "real" flight controller with F15-Strike-Eagle? Well it is now possible with this analog-to-digital converter/adaptor. Unlike other circuits that simply connect the PC-joystick to the PotX and PotY inputs, this circuit converts to analog signals to the standard digital up /down /left /right equivalents so you can use all the popular games without having to patch the code.

**Light Gun** - These are the updated instructions for converting a Sega 3050 Light Phaser for use with a Commodore. Two trigger options are described, a "LightPen" mode and a "LightGun" mode. The first mode is compatible with software such as Micro-Illustrator, the second works with shoot'em ups such as Operation Thunderbolt (included in download!). The instructions include pinout information for the adaptor and a BASIC demo/test program for the LightPen mode. Note that only Control Port#1 on the C64 is connected to the Light Pen input on the VIC chip. Standard Light Pen software will also work with the Light Phaser.

I'd like to hear from anyone who knows of other Light Gun games for the C64. Now…. if only I could find time to program a C64 version of Virtua Cop!

**Numeric Keypad** - The C64 did not have a numeric keypad available and so this project was built back in 1990 when I was spending much of my time keying-in sprite data and machine code. The keypad connects to control port#2 and a software driver transfers the key presses to the keyboard buffer. As a bonus, the keypad keys are directionally decoded and so can be used to cursor around applications supporting joystick control (I found using the keypad preferable to the joystick for drawing in many graphics applications).

**EPROM Cartridge** - These are the instructions for re-using the Commodore SuperGames cartridge as your own EPROM cartridge. The SuperGames cartridge is one of the few Commodore brand cartridges that uses standard 27x64, 27x128 or 27x256 type EPROMS. In addition, there is a 4bit control port (74175) at $DF00-DFFF which controls which of the 16kb bank is active. Chip U1 appears at address $8000-9FFF (ROML is /CS), U2 at $A000-BFFF (ROMH is /CS). On reset both GAME/EXROM are pulled low forcing the 16kb external ROM memory map. This can be changed by splitting the GAME/EXROM pins so that only EXROM is active or swapping signal from the 74175 chip to ac-

tive high rather than low. Auto-boot can be included in the start bytes of bank 0. The bit definitions of the $DF00 control port are as follows:
· Bits 0 & 1 define bank selection 0-3, bank 0 is power-on default
· Bit 2 is GAME/EXROM control, setting gives RAM/BASIC back
· Bit 3 is like a write-protect, preventing further writes to the latch.
Simple hacks may be to re-wire Bit3 as A15 and use 27x512 chips; or to re-wire and provide independent control of GAME and EXROM

## Useful Tools for the PC

**CBMDISK** - A PC DOS program that displays the contents of a D64, D71 or D81 disk image to the screen (now upgraded to use a pseudo-Commodore font). The output can also be re-directed to a file for storage or printing. Additionally a map of the disk error information can be produced if an error extended disk image is being viewed.

**CBMBASIC** - A PC DOS program that displays the contents of a CBM BASIC file saved in raw commodore format (eg. PRG). It has tokens definitions for BASIC 2, 3.5 and 7.0. (now upgraded to use a pseudo-Commodore font)

**CBMCART** - A PC DOS program that displays the details of a CRT cartridge image (used by some emulators) and allows the file contents to be extracted as ROM files for burning into real EPROMs

**IEC-CRO** - A PC DOS based program that displays /logs the activity on a X1541 equipped LPT port. If you have a fast enough PC you will be able to accurately observe the IEC bus signals.

**DigitalWorks Models** - This is a collection of CBM related macros for the third party digital circuit simulator called · DigitalWorks. Version 2 of this simulator was freeware. Version 3 is commercial. The CBM related macros are coded for version 2 so that they are available to all users. Once your designs have been proven in the simulator, you can use an ExpansionPort prototyping board to evaluate them. This evaluation board was made by cutting a double-sided strip board to size, glueing a breadboard to the top and soldering a wiper socket strip to each track so that your wires can be pushed in.
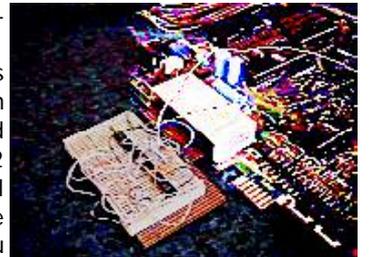
**Contact :** Please feel free to email me with corrections / suggestions. I will endeavour to help where I can with problems, but other priorities may mean that I cannot solve all issues. Please use the subject heading in your emails - I like getting Commodore mail :) Where possible, please send me a HTML link to things you would like me to download rather than an attachment. I am interested in hearing about your Commodore related projects and also have information about many other projects which have existed in days gone by.

# Jeri Ellsworth & her 24BIT Video Card

*One of the biggest surprises of the session was the demonstration of a 24-bit video card by Jeri Ellsworth. Actually, her demo was a bust! Nothing worked quite the way she had planned it, but that was okay. Most appealing were her ideas. What she planned and envisioned for the future of Commodore is what excited us most, and it held the entire company spell-bound for nearly an hour.*

*This is a transcript of that session. It is not intended to be complete. It has been edited for space and clarity.*

*In addition to that, some readers may find parts of this discussion very difficult to follow, such as those times when she and others toss around terms that are not familiar to the rest of us. But that IS part of the EXPO experience, and that is part of what this article is trying to convey.*

*(Some effort has been made to explain some of these terms. If you have any questions about what is said here, relay your questions to CS and, perhaps, Dale can persuade Jeri to answer them in a future.)*

-------------------------------------------------------------

My name's Jeri Ellsworth. I'm 25 years old. I got started back in '82 or '83. My dad bought me a Commodore 64. I used to sit there when I was 7 or 8 typing on it, doing the Commodore magazine programs, typing for hours...hunting and pecking...and running it at the end and having syntax errors, and having to shut it off because I didn't know how to save the program or format a disk.

I was always interested in electronics and mechanical things, and I would tear apart radios and TVs and dishwashers or anything I could get my hands on. I lived on a farm nine miles from town with no one else around, and so I just learned how to entertain myself, and it just happened to be the computer.

The way that I got into Commodore hardware hacking was these cartridges. I was just fastinated with these game cartridges that had Donkey Kong or whatever on it, and I didn't understand how it worked. I just thought it was just wires inside making connections from one pin to another. I would take nails and I would scrape across the cartridge board in the back of the 64 and would try to make games come up and watch funny colours on the screen. [Lots of laughter here.]

I think I helped Commodore go out of business because in the first year of warranty, I think we took it back three of four times. But out of necessity after I did that one time, sticking something into the user port, I burned out the 64 and I had to open it up and try to figure out why it didn't work. My Dad said, "Now you've done it. You've ruined your computer and it's out of warranty and I'm not going to fix it."

So I opened it up and found a little fuse...bypassed that and got it working. [More laughter. Jeri is the only person I know who defines a fuse and something you must wire around in order to run a computer!]

As other people saw earlier, my computer whose motherboard died here had a jumper wire across the fuse...so even today I still do the old "jumper across the fuse" trick!

I got more and more into hardware. Probably my biggest project was when I was 14 or so I made an I/O digitizer, oscilliscopes, and different little things. Then I kind of got diverted away from the whole thing cause I didn't have a lot of money to buy fancy chips, tools, and stuff to work with it. So I've been kind of dormant for awhile, just kind of following everything, playing with my Amiga and stuff.

Four years ago I opened a computer store, opened another, and another; and now I have three computer stores and we're opening a gaming center for selling Nintendos and Play Stations. So now I bought myself some freedom to go ahead and buy some tools and some time so I now can start designing again. This whole time I've been kind of reading and learning about different programmable devices.

Jeri, working in her shop called 'Computers Made Easy' located in Camby, Oregon, USA.

**Voice from the crowd** : Where do you live?

**Jeri :** I live in Oregon. My stores are up the Wilamette Valley...Canby, Monmouth, and Albany.

**Dale Sidebottom** : How did you hear about this Expo?

**Jeri :** I stumbled across it on the internet. I had never seen it before. I didn't even know that it existed. So I was really excited to see that it was here. I decided maybe a month ago that it was time for me to make a really cool project, and so I started building the video chip. It's been a total scramble trying to get it to work for the show.

I built this prototype. It has DMA [direct access memory] and banking and all kinds of things. It has one sprite on it. It has true 24-bit colour. It has a DDA [24-bit digital to analog converter] that goes on here which you can plug your monitor into. It has another mezzanine card that plugs into the top of it that does all the register decoding to try to emulate the VIC registers.

The reason that I have so much external circuitry is because the particular chip that I bought, I thought that 84 pins would be enough to do it; and as the project progressed, I found out that there's not enough pins for memory and there's not enough pins to interface to the VIC. So my project grew out of the chip and started growing onto all these boards and became a real mess. [She showed the chip to the audience, then turned it over to display a mass of wires which seemed run helter-skelter. The crowd laughed in agreement.]

The reason this one doesn't work now is that there's probably just a wiring error somewhere. About four days ago, I decided that I would turn it on, then I would try to do a DMA access or I would try to bank a 16 K chunk of memory into the system memory...and it would lock the computer up. I just figured it would take me two months to try to debug this.

It was just easy to start over, so four or five days ago I started a new card. I dropped most of the features on this one and I just used the 84-pin package. I got a functional one that I can just get a display up and show something. So basically this does a 1024x800, 800x600, 512x400 (which is kind of an oddball one), and 300x200 are the resolutions that I have put into it now.

I use a compressed look-up table on it, so that it uses very small bit-map images. So the problem is...a lot of things like the PC's uses...a bit-map image at 1024 [referring to a 1024x800 pixel screen display] can be a megabyte of information and that's too much for the '64 to be pushing around.

So I decided to go with a system similar to what the 64 uses now where it's got...

**Roger Lawhorn** : Cards. We call them "cards."

**Jeri :** I thought they were called "stamps." Okay, it uses 8 by 8 cards that go across. There's 127 of them and there are some bytes at the end which are unused which I've implemented to change the palette. For every single line you can change the palette.

So every row can have a unique palette, and it's split up

into four sections with...however it divides with 127. [127 cards divided by 4 equals 32 cards per section except for 31 cards in the last section.] I think we are dropping one card off at the end. But it changes the palette four times per line. For every 4 by 8 pixel area you can choose any of four colours...your background, foreground, or two of the palettes.

I've also implemented where you can change the foreground/background with these unused bytes at the end, too. So every line can have a different foreground/background colour. It gives you a lot of variety for colour per scan line.

But, anyway, with that system, it makes it quite a bit smaller, and I can fit a 1024 [display screen] in 64K roughly. Well, over 64K with the colour look up tables, but it's very easy for the 64 to push around.

**Dale :** Right now, we are just seeing lines there, right? I mean, you don't have any text or...

**Jeri :** Well, actually, maybe I should back up a little bit. I was programming this as I was doing some tweaks on it, because there's a problem with it. For some reason my colour look-up table is stair-stepping down every line. It's not lined up straight across like it should be. So I've got an address line somewhere that's in the wrong place, or its just not adressing memory correctly.

So what I was doing, the night before I was taking off [she flew to Chicago]...it's like four in the morning...I was doing tweaks on my computer. I have it so that it's "live" programmable. I can reprogram the chip while it's running and view what it changes. So I would view the schematic, move a wire around, reprogram it. Well, I had it hooked to an old monitor. Just an old Packard-Bell monitor...which teaches me!

I should have known. Every time I turned it off and on, I heard a static sound. Well, I didn't put any diode protection on the input and I burned out my ALTERA chip before I even had time...

**Dale :** We have a lot of problems with ALTERA chips.

**Jeri :** Oh?

**Dale :** I'm just teasing you. We don't know what you are talking about, but it sounds great. [Lots of laughter follows.]

**Jeri :** Am I going too technical here? [The crowd emits a loud chorus of NO's!]

Well anyway, I zapped the chip...DEAD! It wouldn't work any more, so I haven't had any time to program anything. I had FedEx "next day air" bring me a new ALTERA chip. It just showed up several hours ago at the front desk. I plugged it in. I just programmed it, and I'm hoping this monitor won't zap it until I get some protective circuitry on it.

Ultimately, what I want to do is...I might make a plug-in cartridge port. But I've been doing some reaseach of ASIC's [application specific integration circuit chips]. I want to take the whole 64, put it onto a single chip...everything...on one single ASIC chip. That's going to cost me...wholesale cost...maybe $40 in quantity. I'm guessing.

But it has a maximum speed with the technology it uses to go up to 166 mhz. So I'd like to make a 166 mhz Commodore 64 with... [The crowd erupts into laughter and wonderment!] I don't know if this is going to work! Okay? It's a dream so I'm musing aloud again.

**Dale :** Will it be PAL compatible...in other words can it use European electricity, as well as electricity here?

**Jeri :** It will run on a 5 volt supply, so that's not a problem there. I don't think I'm going to do NTSC on it. I'm open to suggestions. I think the space on the chip can be used for better purposes because NTSC would take away from where we could add MPEG decompression for doing web broswing. Or maybe put a MIBS [a brand name] processor for reading graphics.

**Dale :** But you're saying, with your plan, it would be possible to have a 166 mhz Commodore.

**Jeri :** Possible. I've read on the internet that there are "cores" out there what will run the 6502 processor at that speed. Also that we might be able to get it done for around forty bucks...for a chip...my cost.

**Dale :** We'd pay you...

**Jeri :** $10,000....your cost.

[Lots more laughter]

What I want to do is keep it cheap, really cheap. I want to have it as a single chip if I can on a single board, so you will take your 64... take the motherboard and throw it away...so we get rid of the slow bus.

Nate Dannenberg: What about the SID chip?

**Jeri :** Oh, I'll emulate that. Actually I think the 64 needs a little bit more umph with sound.

At 166 mhz, it wouldn't be too tough to interface any PC peripheral to it probably. So maybe that's something I shouldn't even try to mess with it. Just get a SID emulation in there, or actually it will be in hardware so it won't be in emulation. It'll be the real thing.

**Dale :** Do you need any seed money for this?

**Jeri :** No, I think I can get the prototypes, but I mean, I wouldn't take any money until I have the actual thing working. I don't want to be like all these other companies. Vaporware...I just hate that!

**Roger** : So it's not going to be Commodore 64 compatible?

**Jeri :** If I put all the registers in the same place, there is no reason that the software won't run unless there's a timing issue. The problem is with a lot 64 programmers...they're bit-bangers or whatever they call themselves...they rely on little quirks of the machine.

What I'd like to do is get people's suggestions because there are a lot of ideas I have, but I really need to know what people [regular Commodore users] want in it first.

**Dale :** Jeri, did you mention whether you are self-trained or whether you have a master's degree...?

*Jeri and her demo table*

*"Am I too technical ?"*
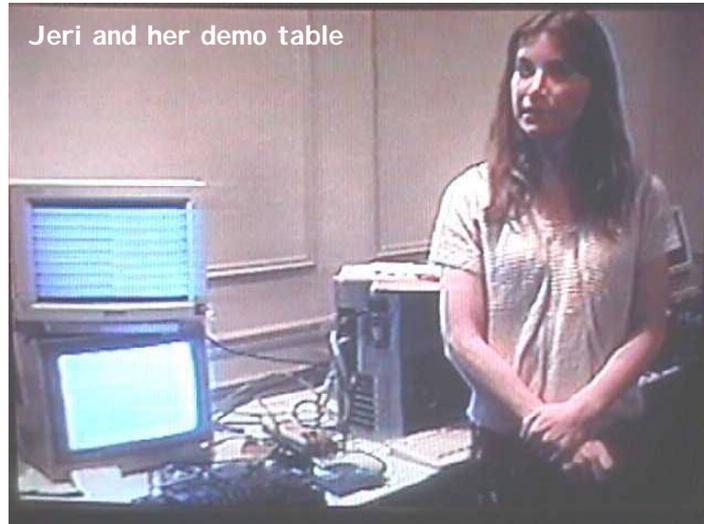
**Jeri :** I am entirely self-trained. I didn't even graduate from high school. I was having too much fun skipping out and writing a BBS back then. I wrote a little BBS program during most of my time in high school.

**Dale :** So until you got your three computer shops, your father must have thought that you'd be a failure?

**Jeri :** Oh gosh! [It was difficult to tell whether we or Jeri were laughing harder.] I was still living with my dad until I was twenty! He was like, "Are you going to move out sometime?"

He owned a gas station, so I was down there turning wrenches for my dad as just a grease monkey.

**Dale :** Obvious(ly), one of the things we would like to do is to have a Commodore with more than 16 colours. How many colours are you playing around with on this [demo monitor].

**Jeri :** This one here, I had to cut back because I pulled everything into this little chip. I dropped it to 12-bits. But this other board, wherever it is, has 24-bits...

**Dale :** Sixteen million colours?

**Jeri :** ...16.7 million. This one [the one just shipped in by FedEx and programmed the day of the demo] has 4096.

The real limitation in it is the compressed look-up table setup I have. And I am not even sure what the name of it is...cards?

**Voice from crowd** : Yes, cards.

**Jeri :** I am not on the programming side. I just looked at how the VIC [video interface chip] worked, and its really a nice efficient way to do it. It's a little bit harder to program graphics, I believe. A "planar" or "chunky" setup that they do in PC and Amiga is definitely a lot easier for doing graphics, but it's just huge and bulky and you have pictures that are huge...like one megabyte pictures, and they shouldn't have to be that way.

I've even kind of toyed around with the idea... "chunky" to "planar" and stuff that they were doing in the Amiga could easily be ported over to this...converters right in hardware. [It sounds like peanut butter, but instead she refers to how the Amiga and PC handle video input/output.]

**Ryan Czerwinski** : One thing that you might consider is a hardware compression.

**Jeri :** Oh yeah, I think it needs to have have MPEG for the web. 166 [mhz] should be okay but that should be off-loaded from the CPU, I think.

**Nate** : I started a project like that for the MP3 chip, and I believe you've got one going, too.

**Jeri :** Yeah, I actually have the chip with me. It's like we were working in parallel. I have a board at home that I started to wire up, and I abandoned it just to get this one done in time. I wanted to have have video and MP3 and just dazzle everyone with all these colours and sounds and...

**Voice from crowd** : We're willing to wait, even until next year if you'd like to come back!

**Jeri :** I hope so. I really want to move pretty quick on it. I don't know. I may be just dreaming too big. I may have to solicit help from people to get things done.

At this point, several programmers and others from in the crowd volunteered to give her any assistance they could.

**Nate** : Heck, I could use some help from her on the MP3!


*Jeri's c64/PC testing rig*


**Jeri's first atempt at the 24BIT, c64 video card**

**Jeri :** I wouldn't mind making up some of these prototypes [of a new video chip] and getting them out to the programmers.

I would like for us to have a little foresight in this so that the end products can be compatible with what we are doing now.

**Dale :** So we'll have backward compatibility as we move down the road?

**Jeri :** Yes, that's a big mess that Amiga was in. Every machine was having little compatibility issues. If we plan ahead, then five years down the road, we can have a machine that's good for several years, instead of something that's just good a year and then we have to update it. And then all the software has to be updated again.

I'm probably not good at setting these standards, but if someone will tell me where a register needs to be...

**Nate:** You just set the standard right there. [Lots of laughter]

**Jeri :** Okay, I guess so. I set some standards, but I mean, where should things be...

**Randy Harris** : Also, you [we] want something to be practical real soon. Could something be implemented that is practical and useable right now?

**Jeri :** It's all written in VHDL and that's pretty easy to change.

**Dale :** What is VHDL?

**Jeri :** It's a harware definition language...you can write like in 'C' Language. You can program CPU's that way.

**Voice from the crowd** : Do whatever you want. We'll enjoy it!

**Dale :** I think it's great that you want to get input from people who have been using this machine for 10 years or more.

**Jeri :** I love the machine. You know, I have this nostalgia for it because it's just a part of my past and I just don't want to let go of it. I don't know! It's just kind of a nutty "fanatic" thing I'm doing right now.

**Voice from the crowd** : You have the same disease the rest of us have!

**Jeri :** I feel right at home with you guys! This is great!

Then someone shouted out, "Yeah, this is great therapy!" The whole room `roared' in agreement.

-----------------------------------------------------------------

*Epilogue : I spoke to Jeri on the phone recently. She is has not been able to make the prototypes quickly, as she had hoped. She is still struggling to overcome problems that must be solved before a 24-bit video chip for the Commodore 64 can become a reality.*

*I think that realistically, none of us can expect this project to develop quickly or easily. Nonetheless, she is continuing in her research. Currently, she is trying to make connections with one of the original engineers on the VIC project, hoping to find schematics that may make her efforts more fruitful. We wish her the very best for the challenging journey ahead.*

*She has confirmed that she will attend the next EXPO for Commodore coming here in May. I hope to find you there, too!*

K Dale Sidebottom
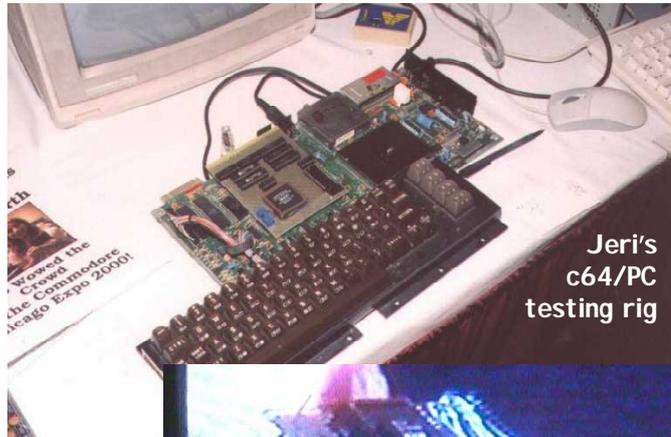
# Chicago EXPO 2000

## by Stephen Blasko

The Chicago EXPO was held at the Ramada Inn in Harvey, Illinois, on Saturday, September 23, 2000, from 9am until 5pm. There were about 75 people in attendance. There were demonstrations scheduled throughout the day. The time span felt like it was only a half-hour as I tried to take in all of the demonstrations, take notes, take pictures, talk to people and still have time to buy things. The EXPO was well coordinated by the South West Regional Association of Programmers (SWRAP).

SWRAP's president, Randy Harris, greeted everyone and then asked who had traveled the furthest, so naturally I spoke up and said my name and that I was from New Jersey. Another fellow, Henry Dale, said that he was from Delaware. Other states were mentioned, but the fellow from Sweden, Pelle Olofsson, seems to have traveled the furthest. Adrian Gonzalez traveled from Mexico, Jeri Ellsworth flew in from Oregon, Robert Benardo came from California, and Robin Harbron 'mushed' all the way down from Canada.



**Pelle Olofsson from Sweden**

The first demonstration began at 9:30am. Randy Harris demonstrated geoDOS. Having used geoDOS, I am always interested in learning all I can about this great software. Basically, geoDOS gives you the ability to read and write MS-DOS formatted disks for cross-platform compatibility. However, you do need to have a disk drive such as Creative Micro Designs (CMD) FD-2000 (3-1/2 inch disk) to accomplish this cross- platform compatibility. [Exception: Some PC's will write to double-density disks (800K). Thus, geoDOS allows you to handle DD 3 1/2" disks in IBM format from a 1581 disk drive.]

At times the group watching the demos was so large that I had trouble taking good pictures, so I would return later for a photo opportunity. Besides the scheduled demonstrations, there were other demonstrations continuously going on throughout
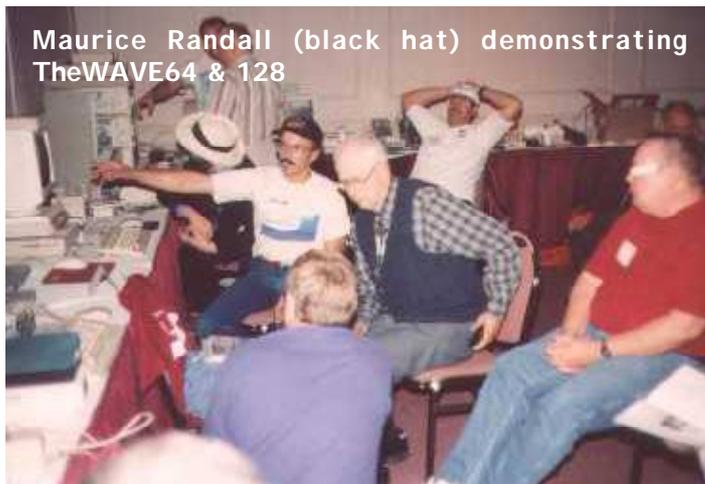


**Maurice Randall (black hat) demonstrating TheWAVE64 & 128**

the day. Hugh McMenamin was demonstrating his photo album (slide show) that he put together...really neat graphics. I purchased one of his disks with his programs which I will show at one of our upcoming meetings.

Dale Sidebottom, assisted by Maurice Randall, demonstrated how to install an internal SCSI Zip 100 MB removeable- media drive in a CMD hard drive case. I had always wondered how it was actually done. The complete conversion took all of about twenty minutes with Maurice Randall providing the custom front panel cut-out. Very remarkable since they did not have a workbench to work on.

Generally, Zip Drive conversions are done on earlier CMD hard drives that have 40 megabytes of storage. By installing a 100 MB Iomega internal Zip drive, you can use it just like a hard drive. Even better, you can use any number of Zip disks with this arrangement. This is something to think about should my CMD hard drive fail to work. I must say that I have had my HD-170 (170 MB) for nearly two years with no problems...knock on wood!

Mark Seelye (pictured bottom of page 3) demonstrated his 3-D graphics program which had the object rotating and appearing to come closer (getting larger) and move away (getting smaller). The program runs on a Commodore 64 and is written in assembly language. He can change the shapes of the different surfaces. Because the code is in machine language, having 3-D objects rotate while appearing to get larger or smaller seems effortless. I have seen Mark's work at last year's Chicago EXPO and know that besides being dedicated to 3-D graphics, he really enjoys programming. Quite an interesting feat.



**Robin Harbron of Canada**

Steve Judd (pictured on page 9) demonstrated his music program written in assembly language. He demonstrated musical instrument sounds and how he could stop the music and make changes, etc. Very informative!

Steve also showed his BASIC extension for the 64 mode on his SuperCPU which gives graphic commands similar to the 128's but with a much higher performace level. Quite amazing!

Maurice Randall gave a side by side demonstration of the WAVE 64 and WAVE 128. It was interesting to see the 64 and 128 versions working at the same time and to compare the screen resolutions and scrolling speed. As one would expect, the 128's screen was sharper, but the 64's screen ran faster. The web browser can connect at 56 KBPS to the Internet now that the CMD Turbo232 cartridge can be used. Perviously, a speed of 38.4 KBPS was the maximum possible with the SwiftLink cartridge.

The Public release of the WAVE 64 and WAVE 128 (version 1.0) has been made official. The WAVE can be downloaded for free from Maurice Randall's web site. You do need Wheels, SuperCPU/SuperRAM (4 MB minimum) and at least a 1581 disk drive to use the WAVE. Use of a smaller capacity disk drive is possible; however, considerable file management tasks would have to be carried out everytime you powered up. New features
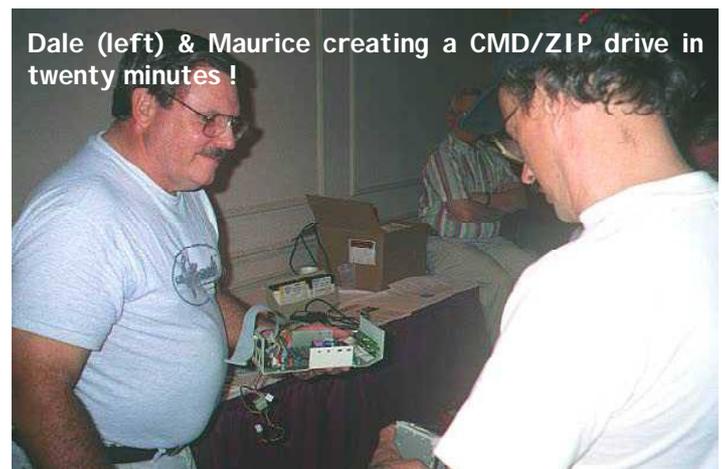


**Dale (left) & Maurice creating a CMD/ZIP drive in twenty minutes !**

unveiled in Version 1.0 are the Turbo232 support and customizing of ISP communications profile, as well as a telnet download and delete key preferences. Well done Maurice!

A newcomer from Oregon at the Chicago EXPO this year is Jeri Ellsworth (demo on page 5). Her demonstration
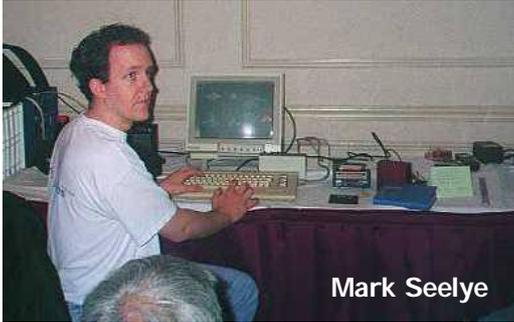
Mark Seelye

of a video board was overwhelming. I do not pretend to understand all that was said during this demonstration, but what Jeri demonstrated was a 24-bit video board wired into a Commodore 64 and connected to a VGA monitor. As I mentioned, this was overwhelming to me as a lot of technical discussion transpired. Jeri also discussed her 'dream' of creating a 166 Mhz chip that would have the complete Commodore 64 architecture. Now that would be something to see!

I missed the CLiPS OS (Operating System)/SuperCPU demo because I took a break to have a quick lunch, but not quick enough. As I understand from talking to several people who watched the demo, there were four windows on the screen with each doing a separate task. Beyond that, I do not know and am sorry that I went to lunch at the "wrong" time. (See CLiPS review on page 11.)

Eric Kudzin demonstrated his CD-ROM drive music player as well as his CD-ROM drive program with his Commodore 128. He has been making improvements on his CD-ROM program. He demonstrated how he can use his CD-ROM drive just like a CMD hard drive by selecting a program from the CD-ROM directory and loading and running the program on his 128.

I was lucky again this year with winning not one but two door prizes. I won a 1571 disk drive and a Koala Pad with cartridge and several software diskettes. Not bad! I was also able to obtain free Public Domain software for our club and have already given these disks to our Disk Librarian, Glenn Bauscher. There were plenty of Commodore things to buy, and I did just that.

It was nice talking to Adrian Gonzalez who worked with Steve Judd to create the JPEG viewer program. Adrian and I had exchanged e-mails awhile back, so it was nice to talk to him in person. I also had a nice chat with Nate Dannenberg who discussed his Commodore 128 Tower and MP3 music program. I also talked with Henry Dale and his wife Marie chatted with my wife. Henry and Marie live near Wilmington, Delaware. He has a Commodore 128 and his wife has a Commodore 64. Henry is intested in Wheels and geoDOS and has a SuperCPU/SuperRAM, RAMLink, CMD hard drive and a Lexmark Colour Optra 40 PostScript printer. Marie also has quite a set up as

Nate Dannenberg

well.
This was my second Chicago EXPO, and I enjoyed it very much. It is always nice to be with other Commodore enthusiasts. There were a lot of smiling faces at the EXPO.

Afterwards, a group of attendees and participants went out to have dinner at Shooter's, a local restaurant. My wife and I went along with Henry and Marie Dale. The food was good, and the conversations lasted for quite some time.
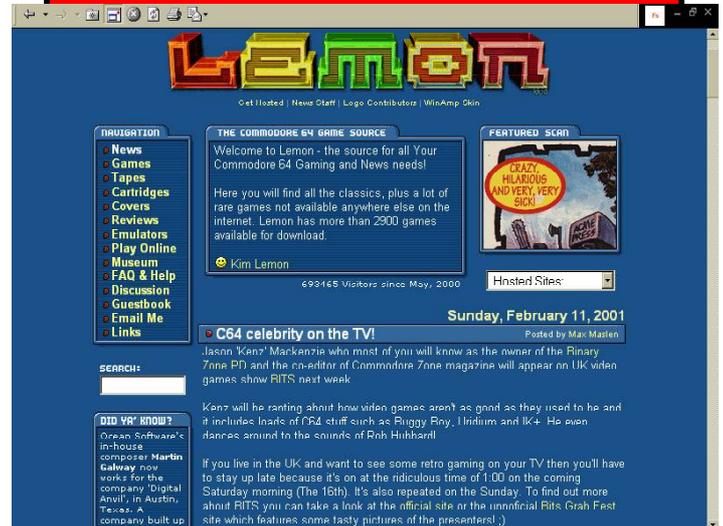
the eye. As I said before, I have spent a long time using this site for referals to game screenshots and getting details such as 'who distributed it', 'who was the author', 'when it was released', etc, etc.

information side of things rather than bog down it's allotted space with game .D64 files. This site has a great deal of quality information but it still has a good mix of info & downloads, this is not an easy task to accomplish but Max has done it very well indeed. This is good because I go there for information, not games.

*NOTE : (If you require an extensive archive then I heartily recommend The Game Guide as that carries a vast array of downloads and I believe that is more up your street).*

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Little did Max know that I have been plundering his sight for over a year to brighten up the pages of CS with his screenshots and snippets of information. I think he was glad to hear that though as it is always good to know that your work is appreciated. Future issues of CS will carry reviews written by Max (for his web site) when they are required.

As you can see from his original e-mail, there are many facets to his site and there is a lot to get you drawn in for a long period of time - this happens a lot when you are browsing the web ;-)

The site itself is very well laid out and very pleasing on

Overall, I recommend this site wholeheartidly to those of you who need some further knowledge on a given topic (like me - ED). This is a vast site with some fantastic sections and hard to locate information. You will be seeing more stuff from this site in the future as I intend to keep close ties with Max so that CS can bring you some exciting features in the future.

Great stuff Max, keep it Commodore !

Allan Bairstow

What about downloads of games ? Well, there are quite a lot of downloads, both for the C64 and the PC, but this is not always desireable and not every site allows downloads of games for the Commodore as they tend to distract from the content of a site. There are many other sites which cater for that type of thing and this site tends to deal more on the history and
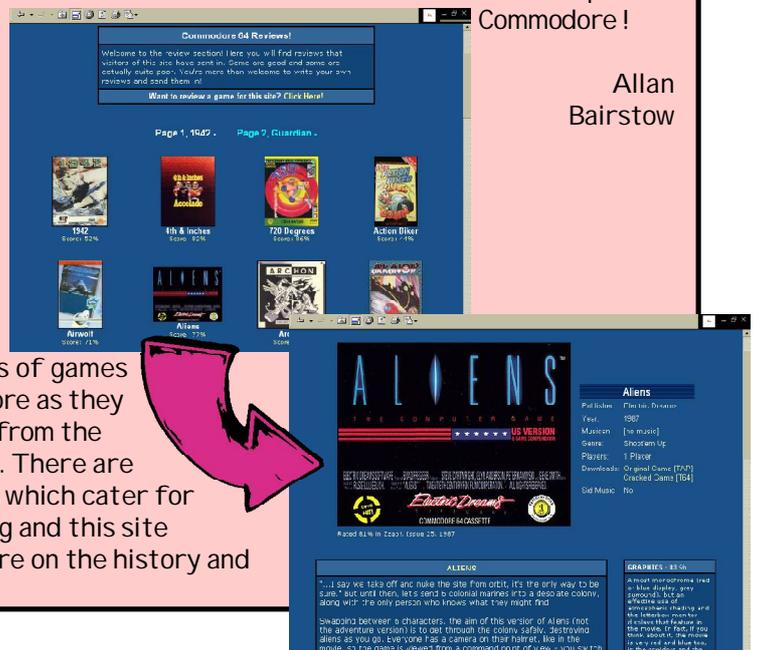
# DISKS THROUGH THE DOOR

## by Andrew Fisher

**26KG by Triad**, made for the LCP2000 competition
BEST BITS : the clever bump-mapper in the sunglasses of a dude, and the very stretchy 26KG logo
WORST BITS: the first music, which reminds of the very average tunes in "Spice Up Your Life", and the fact it is not the most earth-shattering demo Triad have ever released.

OVERALL: 6/10

**WAVE BACK** by Faith (music collection)
BEST BITS : some very funky tunes (28 in total), and the VERY fast IRQ loader used
WORST BITS: although a good idea, the timer for each tune does seem to be out slightly, and when it reaches 0:00 the tune restarts regardless of how it is meant to restart

OVERALL: 7/10

**SID AGONY #4** by Anubis (music collection)
BEST BITS : Good tunes from the likes of Mitch & Dane, Taxim (that U2 cover again) and more
WORST BITS: very average intro, no explanation of the controls, no tune saver (but they are working on it)

OVERALL: 6/10

**STARBURST 96** by Padua (won The Party 2000 in Denmark)
BEST BITS : clever Ash+Dave style intro, IFLI picture of Madonna, the shade bobs part, a nice starfield with logo, the glenz cube, and it all ties together nicely
WORST BITS: it's four years old, and contains the re-used intro from the game "Starburst". Also, an unnecessary nude woman alongside the dull "blueprint-drawing" part. Why did it win?

OVERALL: 7/10

**ROCK'N'ROLE** diskmag issue 23, Role
BEST BITS : lots of text, nice menu, fast loading/ decrunching of text, nice IFLI picture in the intro
WORST BITS: no music menu to choose a tune (but music is good), the "enemies" chapter which could do more harm than good, predictable content

OVERALL: 8/10

**ARACHNOPHOBIA** diskmag issue 19, by Spiders Crew & Role
BEST BITS : original chapters like Birthdays and Formula 1, nice selection of music in a menu (best - REM's Radio Song cover by IronCat), fast to load, Mr. Chaos supplies games on side 2
WORST BITS: news concentrates on groups (who's leaving who, etc.) too much, lack of people voting for the charts (but good to see the Art Ravers, Allan Bairstow and Jason Mackenzie featuring!)

OVERALL: 8/10

# GAME PREVIEWS & HACKS

Of course, one of the most important recent releases has been **METAL WARRIOR 3** by Electric Harem, and the preview was on the last coverdisk. Onslaught have released a good hack, which includes a text-map and walk-through of the solution.. but according to Danny Tod, there is more than one way to complete the game! Apparently, LAXITY released a "100% version", but this has proved to be bugged.
BEST BITS : good graphics and music, interaction with other characters, the massive size of the game, three different people to control
WORST BITS: getting lost in the huge map, the much higher difficulty level, and occasionally going through a door/exit when trying to jump (which means a disk load). Again, according to Danny Tod, it will only work with a 1541.

OVERALL: 8/10

**QUATTRO** by Spiders Crew, spread by Role
BEST BITS : one/two player version of "Boxes" with a rules variation. Music by XL/XLCUS used on the title screen
WORST BITS: very simple

VERDICT : OK

**BROTHERS IN BLOOD** spread by Onslaught
BEST BITS : two player horizontally scrolling platform game
WORST BITS: not finished and no enemies, "borrowed" graphics from Hawkeye (main sprites) and Orion (backdrop)

VERDICT  : NEEDS A LOT OF WORK

**BLOOD** by Arts of Darkness, fixed/spread by Excess
BEST BITS : gory animation as you shoot escaping prisoners!
WORST BITS: fun but limited, average graphics and presentation

VERDICT  : OK

**KESTREL PRV** spread by Laxity
BEST BITS : nothing
WORST BITS: basic shoot/avoid em up with naff asteroids

VERDICT  : POOR

**LORD OF OBLIVION** preview by Creutzfeld & Jakob
BEST BITS : graphics are OK
WORST BITS: another horizontally scrolling shoot em up with basic sinus attack patterns and a small playing area

VERDICT  : AVERAGE

**IKETA** full game from CP Verlag
BEST BITS : IK style one or two player beat em up on a scrolling background! Good graphics and some nice ideas
WORST BITS: slightly limited moves, limited computer AI, simple title screen

VERDICT  : GOOD

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- Programming
6 West Bank Street, Hindsford, Atherton, Manchester,
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Andrew Fisher
- Technical, GEOS, Music
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## 4 Player Adaptor
The 4 player adaptor (as used with Bombmania, Pac-IT, etc) is now under construction by the same engineer that brought you the CSsuperPSU. Build quality is guarateed. No price as yet but I will try to keep it reasonable !

## geoDOS v2.95
As this software is now in the public domain. It will grace the coverdisk of a future issue of CS. For those of you who can't wait that long, you can just drop me a £1 coin (for postage & disk) and I will copy it for you immediately.

## FD Game Collection
Hands up who remembers Russ Micheals ? Well, Russ was working on a few projects just prior to calling it a day. One of those projects was a collection of his finest software on FD disks. I have all his original software disks and I am currently sorting out the finished project disks from the scrap ones. If anybody is interested in owning a collection of Russ's classic games then watch this space - they are coming soon.

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