Commodore Free

Issue 29 April 2009

Free to download Commodore magazine
Dedicated to Commodore Computers
Available as PDF Text SEQ HTML and D64 image
www.commodorefree.com

The Lemmings Anim

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EDITOR

After the Forth issue (last month) I thought we would return back to a mixed bag of articles and.....

Hey you at the back; stop falling asleep I said "we are returning to a mixed bag of articles!"

This month sees the end of our "in the beginning series" so with a tear we say goodbye to Lord Ronin and thank him for his interesting and often enlightening look at the Commodore user manual.

I seem to have fallen into my own trap and have created a Commodore 64 magazine rather than a Commodore magazine, My Amigas` have laid turned off for to many years now, finding space and time to house and even power them is just impossible at the moment. I regret I havent followed the Amiga scene for some time, I am an absolute fan of the Classic Amiga but cant say the newer versions have excited me. It seems to me anyway, the spark has died and the newer systems are: just another box running a customised Linux installation. Am I wrong is the Amiga going to be "the" next OS.

I paid for the Amiga OS 4 discounts and after many years I have received only a rather large oversized t-shirt that looks like a tent on me! BUT No coupon to upgrade to os4 as promised. So maybe I shouldnt ever pay up front I will stick with OS 3.5 (if I ever turn the machines on) I always wanted an Amiga A3000 (to my mind the best designed Amiga) but never found one for sale, well technically never found anyone who would part with one. I worked for Silica for a number of years who were the U.K. importer of Commodore products, although the head office and test centre had a number of A3000`s listed as "stock" they were all classed as spares only and would not sell them because none were in a working state. So after a long search I had to purchase an A4000 and that was a big disappointment, maybe I should have just purchased a 1200 with an accelerator card. Well they are my thoughts, is the Amiga still a strong system?

Readers
A couple of reader have sent in articles and I am reading through them for inclusion. I would like to say thanks for your time penning these and they "will be included" where space allows. We have more "readers code" (common stop playing games and start learning, OK I have had enough of your comments you with the long hair and red t-shirt please report to the principals office) I received a short story from Leon roach Called "In the Pulpit", I urge you to read it as its a highly amusing story about his BBS.

Also at this very moment, the Commodore Free disk magazine version is being updated and improved "how can you improve the best magazine ever" ehhhh errrmmm oh thanks for the nice comments you with the long hair and t-shirt please re enter the room! I am not sure its the best magazine, although some readers have emailed me to say so! but its definitely evolving into something, for people looking at purchasing DOTNET+ the Commodore Free Disk magazine was created using this very application. So this should give you an idea of the power, the rough version was produced in just a few days!

TV and Easter
I can't leave you without a comment about this, "I just couldn't let it lie"

Well the Easter weekend should have been a sci-fi geek-fest at least in the U.K. with the Doctor Who Easter special and Red Dwarf Easter special a 3 day special "one off" although there is now hints of a series 10 but no film, apparently in the U.K. Dave TV who funded the episodes graced the highest ever viewer figures from the 3 episodes. Doctor Who had a strange Deja-vu Feeling about the story line, like a number of the other "newer story lines" and as is the custom stole some ideas from other sci-fi shows, but it was a good episode and very enjoyable viewing.

Red Dwarf (back to earth) on the other hand was absolutely awful and should never have seen the light of day, I presume Dug Naylor was convinced by the cash hand out to start writing but the spark was gone. In fact the spark was so far gone it had left in a taxi 10 years ago and died was buried and then dug up only to find it had transported to a parallel planet just before mankind had stepped foot on the earth and suggested there may be a problem, and coined the term "credit crunch" I can't say there was anything in any of the episodes worthy of a mention, and why the long pauses between sentences like waiting for the TV audience (that wasnt there) to find something amusing (that wasnt there) HOWEVER so popular has been the 3 day special Dave T.V. (in the U.K.) are running the series from start to end, and of course the Easter 3 day special every day (multiple times) Maybe I was expecting to much, I heard a rumour the last episode would have no special effects, no props just pure acting, I am sorry this never happened because this would have been superb! All the main actors were and are excellent (in previous versions) or should that be previous lives.

Red Dwarf (back to earth) on the other hand was absolutely awful and should never have seen the light of day

Windows
I spent 3 days working to remove a virus from a laptop, (no big deal) well the problem seemed to be the virus had affected every single file on the machine even a format of the disk left traces of the infection, a secured delete utility of the hard disk didnt remove the beast! and in the end I had to revert to an older BIOS level then reinstall Windows. Add to that the manufacturers website listed the wrong drivers that wouldn't install on the version of windows stated and you end up with almost 3 days of frustration, the machine itself was slow and so even quick formatting took ages. After the machine was returned to its rightful owner I went upstairs turned on my C64 and it said READY. As it always does, I loaded an application from disk and thought "I have learned an important lesson here"

Now if I find out what the lesson was, I am sure I would be a far better man than I am now.

Here we go then with another packed issue

Regards
Nigel

www.commodorefree.com
www.commodorecomputerclub.co.uk

NEWS

NEW CLASSIC COMPUTERS WEB FORUM

Paul Quirk has created a new web forum for users of classic computers. Go to http://retro-link.com to see the opening message or to http://retro-link.com/smf/ to browse. To sign up to the forum just send an e-mail to paul@retro-link.com

According to Paul, Retro-link.com will be different. This is what he says --

"There will be a new site for enthusiasts of retro computers, with plenty of emphasis on the Vic 20. It will include other retro computer systems, as demand warrants. That site will be called retro-link. The domain, which has been registered, is at retro-link.com. I intend to have it ready and open to the public this weekend.

The theme will be a mature, friendly, harassment-free place where people can contribute as much or as little as they wish. It will be a positive place where people can post questions that have been asked a hundred times without being insulted for doing so. It will be less of a repository of information, and more of a social place to gather and discuss; as such, it's not intended to compete with sites like Denial or Lemon, but rather complement them."

The forum seems to be all-encompassing in its eight categories --

- General,
- 8-bit Commodores,
- Amiga,
- Atari,
- Apple,
- Tandy/TRS-80,
- Vintage PC,
- Others.

UIEC FIRMWARE UPDATE

From Jim brain
I have placed the formal 0.8.0 firmware release on jbrain.com for the 2.0 uIEC/IDE+CF, 2.3 uIEC/IDE+CF, all uIEC/CF units and all uIEC/SD units. Here are the relevant links:

uIEC/CF, uIEC/IDE+CF v2.0 HW, uIEC/IDE v2.3 HW:

http://www.jbrain.com/pub/cbm/hw/uIEC/uIEC-firmware-0.8.0.bin

uIEC/SD HW

http://www.jbrain.com/pub/cbm/hw/uIEC/uIEC3-firmware-0.8.0.bin

To use, place the appropriate file in the root directory of the primary drive (on uIEC/IDE, it will be the IDE master drive), and reboot your unit.

v 0.8.0 supports the following enhancements:

- direct sector access of the real storage device
- ignore DEL files in file_open
- drive mapper
- EXOS V3 fastloader support
- Implement Dreamload emulation
- RTC support
- Multi-file scratch
- Copy command
- Large buffer support
- Final Cartridge 3 freeze file fastloader support
- D71/D81 disk image support
- parse FSINFO sector for faster FAT32 free space calculation
- partial REL file support
- SD support for uIEC/IDE+CF

I encourage folks to upgrade their units to 0.8.0 as soon as possible. Many uIEC/SD and recent uIEC/IDE users have 0.8.0PRE1 on their units, but that is an interim release and should be replaced with this bug fixed release.

The C128 autoboot bug has also been fixed, though it was not an issue with the code. I accidentally left some debugging turned on in the firmware, and the timing issues caused the bug.

Jim Brain, Brain Innovations

C64NIC Available to Pre-order

From: Snogpitch
To: homestead@videocam.net.au
Subject: [Homestead] C64NIC+ Pre-orders now open!

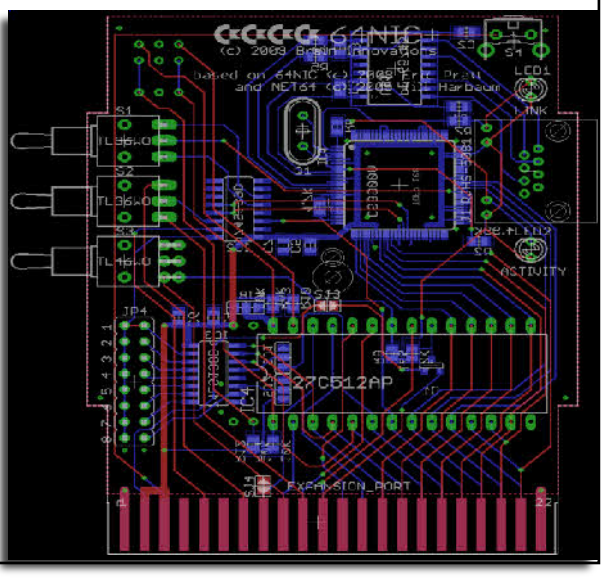
For those that know, what this is about, send in your pre-orders now! For those that do not, check it out: The C64NIC+ is a Retro Replay/TFE compatible ethernet cartridge. This was a culmination of effort of Jim Brain, CCCC, Eric Pratt and even some ideas from Bil Herd! Jim has spent a great deal of time engineering a new, low cost ethernet solution and the Cincinnati Commodore Computer Club is now accepting pre-orders. There are also some surprises on the board, so check out this thread over at retro-hackers:

http://retrohackers.com/forum/viewtopic.php?f=5&t=210&st=0&sk=t&sd=a&start=240

To preorder at the special price of $50, send paypal to: cmdreclub@iglou.com Be sure to mention c64nic in the subject Expected ship time is end of May. You may pick them up in person and save on shipping at the C4 Expo!

US shipping: $5
Canada: $10

other countries: send inquiries with your full address to cbmusers@yahoo.com and I will send you a quote! Thanks! David Witmer Cincinnati Commodore Computer
Club President
Webpage http://www.geocities.com/c64-128-amiga



CCEMU:
C65 Emulator for the Commodore 64
APRIL 1st (2009 Release)

Based on the previous work done for the CCEMU project, announced annually, this is a preliminary release of the Commodore 65 emulator for the Commodore 64. Using the Incredible KIMplement's http://www.floodgap.com/retrobits/kim-1/emu.html 6502-on-6502 emulation, modified for the 4510, and patching the C64's BASIC ROMs, this allows an emulation of the C65 to be performed on the 64 at a reasonable subset of the 65's actual speed. Many features of the VIC-III are supported, and users of Stereo SID cartridges can enjoy stereo sound as implemented.

Please note that this emulator is incomplete. The following issues are known:

- Incorrect colour palette. Not all VIC-III features are operational.
- Resolution is halved.
- Most BASIC 10.0 commands generate UNIMPLEMENTED errors. Part of the BASIC 7.0 code has been copied and patched into the 64's ROM-under-RAM, at the cost of reducing free memory.
- 64 mode is not available from within the emulator.
- All keyboards are treated as English.
- REU support is incomplete and most expansion RAM will not be seen.
- 1565 emulation by the 1541 is limited to high-level commands only.

The emulator was linked with the lb toolkit and crunched, and should run on most emulators as well as all native PAL and NTSC Commodore 64s. Download from c65emu.prg (6K) from here http://www.floodgap.com/ccemu/c65emu.prg

Commodore FREE : = this was of course another April fool, but you guess that running a PRG would not be able to emulate a Commodore 65 didnt you?!

Cottonwood BBS

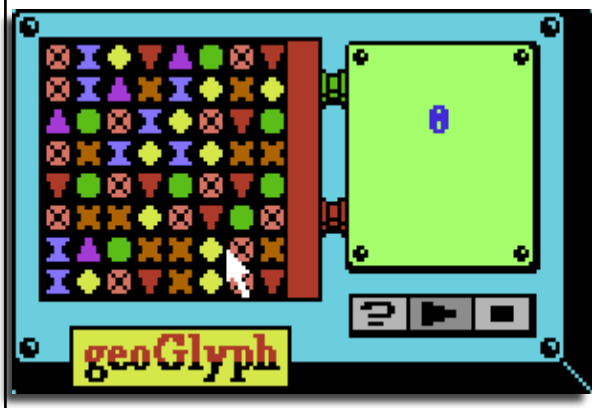
I'm happy to announce that Borderline BBS is now running on a CMD hard drive instead of the 1581 and seven 1571s that it's been running on for some time now. This means that the file transfer section is vastly bigger now, with plenty of room for additional files to be added. It also means that I'll probably be saving a bit on my electricity bill. ;)

Check out the "new and improved" Borderline BBS by calling +1(951)242-3593. For more information, visit the Cottonwood/Borderline website at http://cottonwood.servebbs.com

GeoGlyph

Newsgroups: comp.sys.cbm
From: "Sean Huxter

Subject: Teaser: geoGlyph



Still a long way to go, but this is a glimpse of my latest project so far:
http://www.huxter.org/c64/geos/geoglyph/geoGlyph-video-6.gif

Sean.
http://www.huxter.org/c64/geos/geos.htm

The game will be for the C64 and C128 running under GEOS. I'm coding it using the VICE emulator, and have not yet run it on my real 128, but this is generally not a problem. (Though I did have some weirdness when coding a random number tester - it behaved completely differently on my real 128 than in VICE.)

But since I'm using the regular GEOS getRandom routine to generate random numbers, it should be fine. My random tester worked fine when using GEOS's routine, but was very different when I tried polling the sound chip to get random numbers.
Anyway, I'm now at what I affectionately call the 90/90 stage. You know, when 90% of the work is done, and all that's left to do is the other 90%. . If anyone wants to check out my previous GEOS games, you can find them here:
http://www.huxter.org/c64/c64.htm
Just click on the GEOS screen. There are downloadable .d64 and .d81 files for your convenience. Sean

Hive Publishing GOLDEN YEARS

Just to let you know that the third book in the Golden Years series is due to come out soon.

Jerry Ellis' The 8-Bit Book 1981-199x follows on from The ZX Spectrum Book 1982-199x and The Commodore 64 Book 1982-199x, and covers over 200 of the best games for the a range of 8-bit systems. Once again, the book printing is financed on the goodwill of the community, and so I'd really appreciate it if you'd go to the website to take a look :)

http://hiivebooks.com/bookdetails.aspx?ISBN=9780977998326

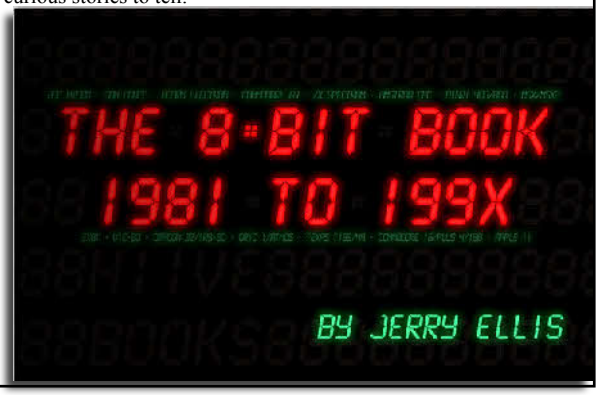
There is a sample chapter online to take a look at which you can get by clicking on the cover.
Thanks for taking a look, and my apologies (again) for the email intrusion. I'd be happy to receive any feedback (and even happier to get your pre-order!)

Please forward to any friends you think may be interested in this book. I rely on word-of-mouth to make these books possible!

Andrew Rollings (Hiive Books)

Information from the WEBSITE
Jerry Ellis' The 8-Bit Book 1981 to 199x covers over two hundred of the best computer games of the 8-bit era.

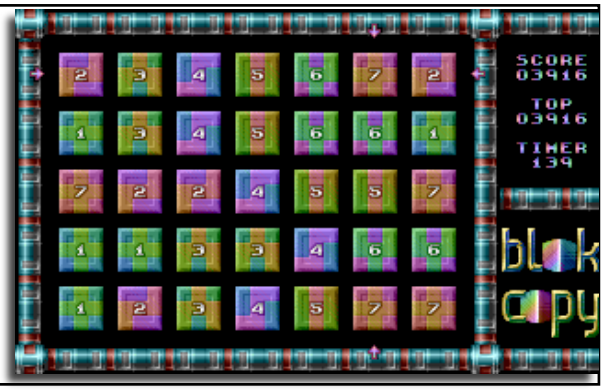
The 8-Bit Book 1981 to 199x completes the 8-bit home computer trilogy of the acclaimed Golden Years series, covering over two hundred of the most influential, inspiring and downright interesting computer games of the 8-bit era.
Computer and video games aficionado Jerry Ellis casts a nostalgic look back at over two hundred of the titles which helped to define the golden age of 8-bit computer gaming. As well as an essential selection of Spectrum and Commodore 64 games not featured in either of the first two books, The 8-Bit Book 1981 to 199x investigates some of the landmark BBC Micro, Apple II, Atari 400/800, Oric 1/Atmos, Dragon 32, TRS-80, VIC-20, ZX81, Amstrad CPC, Commodore 128, Acorn Electron, Commodore 16/Plus/4, TI99/4A and MSX efforts which provided players with the prehistory of todays global gaming industry.
Individual chapters focus on every year from 1981 to 1989, while a final chapter covering the early '90s pays tribute to some of the 8-bit games that simply refused to accept that their humble host machines time in the sun was at an end. Though the main thrust of each chapter is a page by page analysis of many of the most memorable titles of the age, an introductory overview of each years most pivotal events and developments is also included, as is a foreword from an influential figure synonymous with the 8-bit computer gaming industry (the identity of whom will be revealed shortly before the books publication).
Each of the two hundred and thirty games covered is given a full page review, accompanied by a selection of screen shots and the games original cover artwork. Though the final list of entries is still to be decided upon, titles already guaranteed to feature include such indisputable classics as 3D Monster Maze, Miner 2049er, Twin Kingdom Valley, Bomberman, Robotron 2084, Elite, The Perils of Willy, Repton, Theatre Europe, Vampire Killer, Turbo Esprit, Metal Gear, Exile, Snatcher, Prince of Persia and Final Fantasy. As with the first two books in the series, a fascinating assortment of less familiar titles have also been chosen by the author, all of which hold a unique place in the history of 8-bit gaming and have their own curious stories to tell.



BLOK copy DTV released

Another year(!), another release from Cosine... yes, it really has been an age and a half since our last product and theres just a hint of irony in the air as well because the latest release, Blok Copy DTV, is the same game as the last one! Well okay, not entirely the same because, although it plays pretty much identically to the original Commodore PET version, this port sports some shiny new 8 bits per pixel graphics and has a superb SID soundtrack by veteran C64 musician Sean "Odie" Connolly rather than the beeper tune that was cobbled together for the PET.

Blok Copy can be downloaded from the Cosine website http://cosine.org.uk/ or all good scene databases!



Dotbasic
PROGRAMMING LANGUAGE RELESED

Finally, DotBASIC Plus is ready for distribution! We have a web site where the manual and D81s can be downloaded for just $10. A CD-ROM and a colour printed manual are also available... LOADSTAR is pleased to offer the ultimate software development package for the Commodore 64: DotBASIC Plus. DB+ provides the means to create sophisticated, modern-looking programs in BASIC and is at the same time perfect for the programming novice. Included with DotBASIC Plus is a 80-page reference guide. The guide includes detailed DotCommand descriptions, as well as an extensive series of tutorials, screenshots, reference charts and a complete index.

Features:
-Over 100 new DotCommands added to BASIC, including a powerful do loop, commands for stashing/restoring memory, playing SID music, and displaying custom character sets, sprites, and hi-res graphics.
-Programs written with DotBASIC Plus automatically support a mouse in port 1 and a joystick in port 2.
-Easily create windows, drop-down menus, even scrolling menus and text boxes.
-Easily extendable. New DotCommands can easily be created and added to the DotBASIC library. The manual includes a chapter on this.
-DB+ includes a suite of impressive design tools to help you create custom screens, sprites, and text files.

On the website, you can learn more about DB+, see screenshots, download sample DB+ programs, and read an excerpt from the manual. A forum has also been created where DotBASIC users (and the merely curious) can ask questions, read tutorials, and download updates. We all know that the C-64 is the ultimate hobbyist computer. At LOADSTAR, we believe that DotBASIC Plus is the ultimate hobbyist computer language. Join us at http://8bitcentral.com/dotbasic

Outro 2 "THE END OF THE BEGINNING"

I know I said I would go through keyboard cleaning here, I just had to put that sub header up there, since this is the last bit in this series and you are now at the Beginning of your new C= life.

Sentimentality out of the way,

cleaning the KEYBOARD.
remember DO NOT use the commercial aerosol cans, this is because you run a very high risk of gumming up your keyboard for good. Radio Shack had to replace a 64c for me! their keyboard cleaner thing gummed up the board to uselessness.

swabs and alcohol.
Remember those tips about alcohol and swabs? Well here we will use alcohol and swabs again. Around here there is the pipe ash and tobacco. Add onto that one. Both the 7 cats and I are shedding from time to time. This stuff collects in the keyboard. Magically it appears to drift around and into the keys. OK I know about the dust being magnetically charged and all that stuff from college. Just thought the military of the world would love the accuracy of the pipe ash and cat fur that drops onto the keyboard.

So what do we do? First is the outside. That can be cleaned with the alcohol and the swabs. Normal grease and grime in the air and what comes off our hands. Easy clean up. AH!! It is a real good idea to do this with the power off, even unplugged for some of us. This can be done for the cover, or said differently the case of the C=. Also you can do this for the keys themselves. Honestly on this 128D keyboard. Most of the number keys on the top row, the + key, \ key and the clear home key are so dirty that I can't read them. Might help me in touch typing?

IF keys need to be pressed hard and or rocked to make the character show up on the screen then its a 95% chance you have crud under the keys. Now first off is the fact that the stuff falls in-between the keys. You won't see it all the time when dreck falls in the areas between the keys. Cleaning this is in two stages.

1. removal of the keys.
Power OFF Now then I just need one of my Girl Friends and her fem long nails. She was great at being able to slip and slide the stuff out of the slots between the keys. Since she is gone, I have to use other things. Matchbook covers will work, so will 3x5 biz cards and even the sleeve from a disk works. You need something semi strong yet soft thing that will fit between the keys. What is done is a gentle sort of "sweep" action, ensuring you go between all the keys. Personally I go from right to left and top row to bottom. That is because I am left handed and it is easier to go top to bottom for me. Rarely do I go in an up and down manner. Unless I see that is the way it is needed to remove a specific bit of "dirt". Go slow and soft when you do this method.

2. Next is the hard part.
You may decide to leave this to someone else! Because you must remove the keys. I can't do this without breaking them! So take that as a warning. My hands are that bad, so is my frustration level. On the flip side, One of my local U.G. members can pop them off with ease. Guess who is in charge of doing keyboards around here?

That key is on a spindle made out of plastic. Has a proper name that I don't know. Under the key and around the spindle is a spring. Press the key and it goes down making the contact and the spring sends it back up again. Crud under that and there isn't a contact made. Need cleaning and it is a task that I don't do myself. You need to carefully lift up the individual keys. They are pressure fit on the spindle. Remove it and the spring. Then clean out the area with anything from the dry swab, into a soft little paint brush. I do worry here about magnetism, but I also over worry about things. At times we have had to use a wet with alcohol swab to remove grime. For the beginner, this is really something that I suggest you have help with, either if a face to face type or in-depth instructions from some C= user online. Before you start this project!

There is much more to say on the C=. I have written for different C= publications for years, and given lectures about this PC. Never enough time and space to say enough about this multi talented PC. Let me end this way.

In 1993ce I was a computer phobic. Got the C=64 and now at the end of 2007ce. I use the C= PC every day for almost every computer application. Have three of them set up for use. I also Use the gifted Linux system from time to time for internet areas that discriminate on the C=. Love my C= PC and am not getting rid of it. Understand that I entered this platform after the big hey days of the 80s. I am like you a new user to the C= PC. Now go and have fun with your C=.

Business Calculator Description.

The Masterpiece!

Databases and Spreadsheets are great...
if you can spare half your life to learn them, then spend the other half Wrestling with cells and complicated Mathematical formulas etc. Business Calculator (Biz Calc. from now on) attempts to take all that trauma and hassle away and let the user get straight into it.

Originally started out of a personal annoyance that shops less and less include VAT in the price. (Does any-one out there share this? I resent it being rubbish at Maths; and quite slow! as yet another deception based on greed in my view. But what can I do about it!) Anyway, the program grew into helping some-one with their small business -so I don't hate commerce completely..?

TUTORIAL
It has become rather larger than simply working out how much the blood suckers will take. For those without a business, it may better to find VAT Calculator, the prequel to this program. All the features are here, but the inclusions for business may make it more complicated to understand. So here's a How To... of all the business features. ...Simply read the listing from 1500 !

Perhaps I haven't explained key press 2 properly. Though a bit of trial and error rehearsal will see most pick it up quickly. While one

"1" counts up a list of expenses.

"2" allows the user to Add to the takings, or change it altogether. There isn't a list for income as I did not see a need. This is printed as positives to add before taking from takings. (see! Not at all complicated -"pff !") The total is listed on the main menu as "Total Expense:" (Sorry, if that's somewhat dull or predictable.)

"4", you will notice only the top figures are changed. In case a quick reference is needed to a possible purchase, but the program needs keeping in tact. Although it also affects both percentage / takings listings. (possibly a bug. Or down to the fact I wrote this blindly for a friend who I haven't seen in a long time, I hope that my efforts would be of some use to him. ...Clearly not, as he still isn't speaking!)

"0" resets expense list. And I've got to say, in looking at it again The "To Tax Man/persons" only looks anywhere near right when there are no expenses to work out! We may look at this in the program description that follows. And may arrive at a solution such as changing to "Total Outgoing", or adding this, and working out what Tax is actually paid.

Looking at the program.
My first lesson in debugging or describing to others what things do, was to make a note at the time of the variables. As now when I look some weeks later it's like trying to get sense out of a politician! At this point I will be nothing short of amazed if I remember everything. And will have to look deeper into the code than I wanted to. This is more time consuming, and I have the washing up to do yet!

Here's what I do know:
Line 10 Always title your program in the first line of your code. The easiest way to know what it is.

Line 20 I wanted background colour white, and the ink to be mostly black. (reminds me of a song I sang at school) People were saying they were having trouble reading the other colours. The border on the other hand is reserved for something quite special which I will come to in due course. The border is set this way as the best choice only minor trouble being there seems no way to get the original border colour. Ah! well. If you know of a way, please let me know.

Line 30 Clear memory of all prior memory, but keeping the program.
- ML is Maximum Limit for list. Tinker with this if you need to.

- XP is short for "expense" -(haha! Nothing like Windows then eh!) It allows for a listing related to ML. It is also possible to type in a list of Income if needed for TaxMan/Person etc.

- VA is VAT or Value Added Tax. (nice to assume "Value" anyway.. This is set to the current rate. Can be changed either by altering the figure here, and saving. Or during the program which can also be saved.

- T is Takings. Presetting an amount is useful. It not only saves awkward bugs. It allows for examples to show the program is working.

- XP$ is linked to xp in that it is the string corresponding to the number

- c% is the colour for the menu later. You will see in line 20 the command ...Color4,6. Border colour of 6. Which could have been done quite differently so that if a change were needed only one line would need changing. Try moving "CLR" to the start of 20, put "C%=6" straight after it, followed` by the colours. And change the colour 4, to c%. Then if you want to start with a new border colour you only need to change the c%=... Within the legal range 1-16 (off the top of my head) This is so it doesn't look funny when you go to the border changing menu.

Line 40 Set maximum volume.

Line 50 Saves time retyping a commonly used string.

Line 60 SCNCLR: A way of clearing the screen. Simply means "ScreenClear". Like PRINT"{ctrl & home}"; On some models of 8 bit computers it was or IS simply CLS. And is the one of few of the compatibility problems I can think users may face when typing in any of my programs in this series. I haven't used POKES & PEEKS which would be another problem as they have meanings individual to the machines. And VOL is a POKE statement on the c64 (line40)

Line 70-90 establishes with user what the current percentage is.

Line 100 type your own Total here. Or the price of something you wish to buy when the sales berk, sorry "clerk" is being coy with the true cost to your livelihood.

Line 110-120 prints info. for sake of speed.

Line 130 does percentage calculation (Yawn!)

Line 140-160 As 110-120

Line 170 Share the variable in order to do something else with it later. (This was easy to remember: As to eat you must have something left over after TAX -good Luck! And, like sharing a meal. Empty = (time for) Tee!)

Line 180 Make sure user has read info. And is happy to go on.

Line 190 Needed as a point of reference, so that if anything needs to be added there is an extra '10' in the process. The other reason is that REM statements mark out a new section better than leaving it to PRINT, which could be anything.

Line 200-210 Clear Screen and print Title Business Calc (bc$), and Main Menu.

Line 220 Debugging, deciding best order. If you find the others linked to this statement, you can experiment and see what they do. (remove REM to try)

Line 230-260 Printing the menu, and calculates This takes some understanding. ...Good Luck!
...OK.

- VA = Percent, originally stood for VAT.
- T, as it says is Takings: T-X:
- X being the result of the formula you make the bare figure actually work out as a percentage sum. Thus instead of deducting 17.5 from the current takings. X permeates this to the appropriate percentage first. Otherwise the answer is completely different.
- Y relates to the other part of the screen. As covered above.

Line 280 resets a variable to be used to avoid even more embarrassment than not knowing what I'm doing.

Line 290-310 Uses the above variable in a for/next loop... for something or other... (see 330) XP stands for Expense. The little goes through the list of expenses to total them.

Line 320-360 Self Explanatory
Line 370-380 Why MU??? I can't remember. But this is where the TAX is deducted as whole outgoings.

Line 390 Another GOTO statement cancelled out by the preceding REM command.

Line 400 Tells the computer if it has gone above the on/off limit to reset to off and follow line by line.

Line 410 If H% (meaning whether to hide or not the instructions that may make the program hard to read. If H% is on (1) assume the user knows these things.

Line 420-500 Self Explanatory

Line 510 The extra command, this works anyway, see 620. A Question you may be asking is Why hide it? Especially as 2 or so arrow up presses at the end of the line just before the inverted commas will serve to keep the page intact. The Answer. Yes. But it would impede on expanding elsewhere. It is aesthetic therefore less important. Just saves the user typing in the command of the colour they prefer. Having said that this isn't impossible as the program can currently be read, though I did try to get a compiler. No reply though. Also, it would be easier another way. Try reprogramming to keep on the main menu, but cycle the colours one way by pressing c. or as you like with the arrow keys. It can easily be done. A Gosub statement with a return. A few REMs and Ouila!

Lines - Upto590 instructions already covered.

Line 590 "Q" always have an escape route!

Line 600 For Instructions. err...press "I" key"

Line 610-620 covered above. Hide, Colour.

Line 630 In case of faulty or erratic pressing of keys. Now You wouldn't do that would you???

Line 650 menu for key 1 (skip the waffle)

Line 710 get a busier expense.

Line 720 put expense into next available slot.

Line 730 why is that reading to total expense equals total expense "minus" expense? ...I hate Maths!!! ...Ah! well, it seems to work.

Line 740 again skip rubbish if Hide is on. OK.

Line 770 wait for key presses listed if hide is off, as it is by default.

NOTE: Still can't get past line 730. For experimental purposes, and perhaps due to the fact I've been doing this so long that time to wash up has come round again! I have this zany idea to change the minus "-" to a plus "+" to see what happens. But you'll have to find this out for yourselves...or 1 million in gold bullion should do nicely! -not at all overpriced! (... ??? Did I just write how to find out? ..."tut!")

Line 780-790 allows further additions if maximum Limit is not reached. Try adding an "=", next to the "<" in 780. (an oversight). This will make full use of the dimensioned array (AKA. "slots") available.

Line 800-810 sends people away (with smacked handies) if they reach the limit. There's room in memory to expand Max Limit (ML) if required. Up to 1280 seems self explanatory enough. Except for 1030-1130 which is special The FOR... at 1060 starts the list.

Line 1070 looks to see whether a key has been pressed as this will be stored in the relevant memory location.

Line 1080 If it has a P then it carries out this instruction, and everything else is Halted! Until it has another P. And the program is returned here from the similar sub at 2330.

1090 If there's nothing in the slot we go back to the main menu. (this will only happen if slot 0 has nothing in it. As ML expands with the user input.

Line 1100 otherwise Print what's there.

Line 1110 continues with the next on the list.

Line 1120-1130 And on to the main sub for awaiting another key press.

Line 1140 tells us this is the editing tool. So in Menu "3", the user pressed E. (that might be worth noting.)

Line 1160 get out clause, if all else fails. (Like Government funding doesn't come through or whatever.)

Line 1190 If nn is greater than ml. Denotes that ML is the marker as to where the last filled slot is. So currently if 56 was typed in, the program would think what is going on here? And send the user back to retype a "legal" or usable number. Otherwise we may proceed provide we didn't mess about with the minus symbol.

Line 1200 prints a reminder to reduce occurrence of error.

Line 1220 checks there's something to change or make reference to.

Line 1230 Waits for key press

Line 1240-1270 Self explanatory, or explained previously.

Line 1280-1300 gets new number.

Line1310 puts new number in to replace old. ("New lamps for old" seems fitting somehow.)

Line 1320 if Hide is on. Computer makes a sound to inform user this has been carried out, and is about ready to proceed.

Line 1330 perhaps, there should be a yes or no option here. It is more complicated to put in than first glance would indicate.

TRY:

```
1471 geta$;ifa$=""then1471
1472 ifa$<>"n"thenpp=1  :goto 980
```

Add at 1015 ifpp=1thenpp=0: goto 480

AND THERE WE HAVE AN INSTANCE, A CLEAR EXAMPLE OF HOW CODE TURNS INTO SPAGHETTI. And Bolognese to it!At this stage it would be hard to get round this, short of a re-write (good luck with that one!), even than a jumbled up mess can still occur. Particularly if you suffer from Ideas aplenty (sense? err none. In my case). The other way you'll notice at 970 it also says what 1470 reprints. This is an attempt at memory jogging without the need to go into it again. Which shouldn't be necessary with a few dummy runs. And in Yape The plus4 emulator which this was programmed in. You can open a second instance of the same program for reference if you get stuck.

Line 1490 If you press to quit it will go here and END. This seemed like a good place to mark the program out from additional extras.

Line 2320 End of Instructions. ("feuwpf!")

Line 2300-2400 where program comes to in above menu. Why here? Well, it comes here in multiple parts of the program. So it was best to have it in one place.

Line 2410-2590 My favourite idea of all time. A simple but very pleasing idea. That if some-one has to work late, or for long hours. They can alter what they have to look at.

TIP:
You could set an automatic option using ti$, where if set to on the border changes automatically, even at random. Reset ti$ and have instances of checking throughout the program.

Firstly, it is important to note that while many of the commands look the same. (geta$, ifa$..., etc.) they do not have to be placed the same way. Here you'll notice line2480 Geta$ Not "geta$:ifa$=""then2480" this blocks the program from moving until a key is pressed, however we let it continue in a loop. (In all truth I was trying to put it more firmly into mind here that this can be done. As every book I seem to have read seems to only cover one way)

Line 1030-1130 The use of this is better emphasised with the Pause button, key press in the above menu. But it is more complicated as to how that is derived being in two places. And as it is only needed with the listing of expenses. Look at the list generator to see how this works. We've covered similar with AATimer in the addition of an option in the main menu. (I'm glad I could share this, as when it came to me I was overjoyed. Feeling I'd arrived -somewhere- as an amateur programmer) Rest is self explanatory.
Best Wishes
(c) John Fielden 2008

Listing of: BizCalc.prg

```
10 REM *BUSINESS CALCULATOR*
20 COLOR0,2:COLOR4,6
30
CLR:ML=55:DIM XP(ML):VA=17.5:T=100:DIMXP$(ML):C%
=6
40 VOL8
50 AK$=CHR$(18)+" ANY KEY TO CONTINUE "+CHR$(146)
60
SCNCLR:BC$="     *VAT EXPENSE BUSINESS CALCULATOR
*"
70
PRINT"IF VAT=";VA;"% OR WAS SET PREVIOUSLY    THE
N JUST PRESS RETURN"
80 PRINT" OTHERWISE TYPE YOUR OWN -"
90 INPUT" PERCENTAGE";VA
100 INPUT "ORIG. TAKINGS ";T
110 PRINT:PRINT"ORIG. AMOUNT: ";T
120 PRINT" VAT AT ";VA;" %.  IF TOTAL ";T*VA/100
130 X=T*VA/100
140 PRINT" TOTAL LEFT: ";T-X
150 PRINT" TOTAL IF ADDED: ";T+X
160 PRINTAK$
170 MT=T
180 GETA$:IFA$=""THEN180
190 REM *** MAIN MENU ***
200 SCNCLR:PRINTBC$
210
PRINT" MAIN MENU":PRINT" {A3}{A3}{A3}{A3} {A3}{A3
}{A3}{A3}"
220 REM   GOSUB180
230 PRINT" PERCENTAGE: ";VA
240 PRINT" ORIG. TAKINGS: ";T
250 PRINT" LESS % (VAT?): ";T-X
260 PRINT" ADDING % (VAT?): ";T+X
270 Y=MT*VA/100
280 TE=0
290 FORJ=0TOML
300 TE=TE+XP(J)
310 NEXTJ
320
PRINT"{down} INCLUDING ANY ADDED TAKINGS: ";MT
330 PRINT" TOTAL EXPENSE: ";TE
340 PRINT" LAST EXPENSE: ";E
350 PRINT"TAKINGS LESS EXPENSE: ";MT-TE
360 PRINT" REMAINDER LESS '%' OR VAT: ";MT-TE-Y
370 MU=MT-TE-Y
380 PRINT" TO TAX MAN: ";MT-MU
390 REM GOTO230
400 IFH%>1THENH%=0
410 IFH%=1THEN530
420 PRINT:PRINT"1 - TAKE AN EXPENSE"
430 PRINT"2 - ADD TO TAKINGS OR CHANGE AMOUNT"
440 PRINT"3 - GENERATE FULL LIST FOR PRINTING"
450  PRINT"4  -
 CHANGE NUMBER & % FOR ORIG. TAKINGS"
460 PRINT"0 - ANOTHER AMOUNT (RESETS ALL)"
470 PRINT
480 PRINT"Q   =  QUIT"
490 PRINT"I   =  INSTRUCTIONS"
500 PRINT"H   =  HIDE/SHOW NOTES"
510
REM  PRINT"C   =  TO CYCLE BORDER COLOURS{up}"
520 REM  RETURN
530 GETA$:IFA$=""THEN530
540 IFA$="1"THEN650
550 IFA$="2"THEN820
560 IFA$="3"THEN920
570 IFA$="4"THEN60
580 IFA$="0"THEN10
590 IFA$="Q"THEN1490
600 IFA$="I"THEN1500
610 IFA$="H"THENH%=H%+1:GOTO200
620 IFA$="C"THEN2410
630 GOTO530
640 REM ***********
650 REM *1 EXPENSE*
660 REM ***********
670 IFH%=1THEN710
680
PRINT"NOTE: AFTER KEYING IN EXPENSE AND         P
RESSING RETURN"
690 PRINT" PRESS ANY KEY FOR MAIN MENU"
700
PRINT"OR PRESS [SPACE BAR] TO INPUT ANOTHER.":PRI
NT
710 INPUT "EXPENSE COST";E
720 XP(K)=E:K=K+1
730 TE=TE-E
740 IFH%=1THEN770
750 REM PRINT"TAKINGS LESS EXPENSE = ";T
760 PRINT" AWAITING KEYPRESS.   SEE ABOVE."
770 GETA$:IFA$=""THEN770
780 IFA$=" "AND K<ML THEN710
790
IFA$=" "AND K>ML THENPRINT"SORRY, MAXIMUM LIMIT E
XCEEDED!"
800 IFA$=" "AND K>ML THENFORJ=1TO450:NEXTJ
810 GOTO200
820 REM *2 VAT*
830 PRINT" 'A'DD OR 'C'HANGE ADDED TAKINGS?"
840 GETA$:IFA$=""THEN840
850 IFA$="A"THEN880
860 IFA$="C"THEN900
870 GOTO840
880 INPUT" ADDITION";A
890 MT=MT+A:GOTO200
900 INPUT" NEW ADDED TAKINGS";MT
910 GOTO200
920 REM *************** *****
930 REM * EXPENCE LIST * *"3"*
940 REM *************** *****
950 SCNCLR:PRINT"{black}      BIZCALC":PRINT
960 IFH%=1THEN1020
970 PRINT"REMEMBER KEYS:-"
980
PRINT:PRINT"{black} '[SPACE]' TO GENERATE LIST"
990
PRINT"{black} 'E' TO EDIT LIST & NAME EXPENSES"
1000 PRINT" 'R' RETURN TO MAIN MENU"
1010 PRINT" 'Q' TO QUIT"
1020 GOTO2330
1030
REM *GENERATE LIST OF EXPENSES &      ALLOW A REF
ERENCE FOR IT*
1040 PRINT"{down}{down}{down}"
1050 PRINT"REMAINING AMOUNT ";MT
1060 FORJ=0TOML
1070 GETA$
1080 IFA$="P"THENP%=1:GOSUB2330
1090 IFXP(J)=0THEN1120
1100 PRINT"{lred}";J;"{orange}";XP(J);XP$(J)
1110 NEXT J
1120 PRINT"{black} ":PRINT" END OF LIST"
1130 GOTO2330
1140 REM *EDITING TOOL*
1150
PRINT:PRINT" ENTER NUMBER (IN {lred}GREEN{black})
 TO EDIT"
1160 PRINT" TYPE '9999' TO CANCEL"
1170 INPUT" NUMBER ";NN
1180 IFNN=9999THEN200
1190 IFNN<0 ORNN>MLTHEN1170
1200 PRINTNN,XP(NN),XP$(NN)
1210
IFXP(NN)<0.01THENPRINT"THERE IS NOTHING IN THIS C
ELL!":GOTO1140
1220 PRINT"CHANGE 'A'MOUNT OR 'R'EFERENCE?"
1230 GETA$:IFA$=""THEN1230
1240 IFA$="A"THEN1280
1250 IFA$="R"THEN1350
1260 IFA$=CHR$(13)THEN200
1270 GOTO1230
1280 REM *AMOUNT*
1290 PRINT"FROM ";XP(NN);" TO ";
1300 INPUTXP(NN)
1310 E=XP(NN)
```

```
1320 IFH%=1THENSOUND1,500,50:GOTO1340
1330 PRINT"REMEMBER KEYS!"
1340 GOTO2330
1350 REM *CHANGE OR ADD A REFERENCE*
1360 IFH%=1THEN1390
1370 PRINT"YOU MAY TYPE UP TO 30 CHARACTERS"
1380 PRINT" TO CANCEL CLEAR SPACE & PRESS RETURN"
1390 PRINT"FROM ";XP$(NN);" TO "
1400 INPUT" REF: ";XP$(NN)
1410 XP$(NN)=LEFT$(XP$(NN),30)
1420 PRINTNN;XP(NN);XP$(NN):PRINT"CORRECT Y/N?"
1430 GETA$:IFA$=""THEN1430
1440 IFA$="N"THEN1350
1450 IFA$<>"Y"THEN1430
1460 IFH%=1THENSOUND1,500,50:GOTO1480
1470 PRINT" REMEMBER KEYS!"
1480 GOTO2330
1490 END
1500 REM **INSTRUCTIONS***
1510 SCNCLR:PRINT"          BIZCALC":PRINT
1520 PRINT" THIS IS FOR THE LAY PERSON WHO FINDS"
1530 PRINT"SHOP'S HIDING OF VAT A HINDRANCE."
1540
PRINT"THE PERCENTAGE CAN BE CHANGED":PRINT" TO AN
Y AMOUNT"
1550
PRINT"THIS FEATURE WAS ADDED FOR THE BUSINESS"
1560 PRINT"PERSON. WHO FINDS"
1570
PRINT"DATABASES AND SPREADSHEETS UNECESSARILY "
1580
PRINT" COMPLEX.  AND LENGTHY TO SET UP.":PRINT" A
ND MAINTAIN ETC."
1590
PRINT:PRINT"THIS HELPS KEEP PROGRAM UP TO DATE."
1600
PRINT" ALSO, IF YOU ARE GOOD AT PROGRAMMING "
1610 PRINT"TRY LIST-50"
1620 PRINT" AND VA=VAT. ML=MAXIMUM LIST "
1630
PRINT" THE CURRENT VAT SHOWN IS MERELY A ":PRINT"
 PRINT STATEMENT."
1640 PRINT" THUS EASY TO CHANGE."
1650 PRINT"{down}";AK$
1660 GETA$:IFA$=""THEN1660
1670 SCNCLR:PRINT"          BIZCALC":PRINT
1680
PRINT:PRINT"FUNCTIONS FROM THE MAIN MENU:":PRINT
1690  PRINT"  '0'  -
 ANOTHER AMOUNT":PRINT"THIS CLEARS THE MEMORY AND
 STARTS AGAIN"
1700
PRINT" ONLY PRESS IF CERTAIN YOU ARE READY TO  MO
VE ON TO NEXT TASK":PRINT
1710  PRINT"  '1'  -
 TAKE AN EXPENSE":PRINT" THIS LETS YOU DEDUCT EXP
ENSES AND "
1720
PRINT"BUILDS A LIST TO MEMORY":PRINT"WHERE ZERO W
AS LOST, PLEASE SKIP.":PRINT
1730  PRINT"  '2'  -
 ADD TO TAKINGS OR CHANGE AMOUNT"
1740
PRINT" USEFUL IF COMING IN FROM MULTIPLE":PRINT"S
OURCES OR AT INTERVALS.":PRINT
1750 PRINTAK$
1760 GETA$:IFA$=""THEN1760
1770 SCNCLR:PRINT"          BIZCALC":PRINT
1780  PRINT"  '3'  -
 GENERATE FULL LIST FOR PRINTING":PRINT" AS THE N
AME SUGGESTS."
1790
PRINT"HERE, YOU CAN SEE YOUR LIST ON SCREEN,"
1800
PRINT"AND USING THE EDITING FACILITIES OF ":PRINT
" YAPE.":PRINT
1810 PRINT"PRESS RIGHT MOUSE BUTTON TO BRING UP "
1820 PRINT"SUB MENU.  SELECT COPY.  THEN USING"
1830 PRINT"A TEXT EDITOR.  (I USE WORDPAD)."
1840
PRINT"YOU CAN PASTE INTO EDITOR AND PRINT":PRINT
1850 PRINT"NOTE: THIS MAY REQUIRE SLIGHT "
1860 PRINT" ADJUSTMENTS.  MAINLY TO TABS AND"
1870
PRINT"SPACING.":PRINT"YOU MAY ALSO WISH TO ADD YO
UR OWN":PRINT" SYMBOLS. "
1880 PRINT"THE DOLLAR '$' IS ALL I CAN FIND ON"
1890 PRINT"YAPE THE COMMODORE16+4 EMULATOR"
1900 PRINT:PRINTAK$
1910 GETA$:IFA$=""THEN1910
1920 SCNCLR:PRINT"          BIZCALC":PRINT
1930
PRINT"IF YOUR LIST RUNS OVER THE SCREEN SIZE":PRI
NT
1940 PRINT" YOU CAN PRESS 'PGDN' OR GOTO YAPE-
MENU"
1950 PRINT" MACHINE, PAUSE:  THIS WILL PAUSE"
1960
PRINT"THE SCREEN.  FOR YOU TO USE THE COPY ":PRIN
T"  & PASTE FUNCTION"
1970
PRINT"ALTERNATIVELY, PRESS 'P' (IF AVAILABLE)"
1980
PRINT:PRINT" THE LEFT (CTRL) KEY SLOWS SCROLLING
!"
1990
PRINT"THE (CTRL) KEY MIMICKS THE OLD COMMODORE  (
C=) KEY"
2000 PRINT"AND WHERE WOULD WE BE WITHOUT THAT?"
2010
PRINT" HOLD DOWN (CTRL) TO SLOW DOWN SCROLL   SPE
ED"
2020 PRINT:PRINT"YOU CAN ALSO EDIT YOUR LIST."
2030 PRINT"AND GIVE EACH EXPENSE A REFERENCE."
2040
PRINT" THIS IS EXPLAINED.  (FROM MAIN MENU:    PR
ESS '3', THEN 'E')"
2050 PRINT:  PRINTAK$
2060 GETA$:IFA$=""THEN2060
2070 SCNCLR:PRINT"          BIZCALC":PRINT
2080 PRINT" IF PAUSING LIST (3): 'P' TO UN/PAUSE"
2090
PRINT" 'E' TO EDIT":PRINT" [SPACE] TO GENERATE LI
ST FROM START"
2100
PRINT" 'Q' TO QUIT":PRINT" 'R' TO RETURN TO MAIN
MENU"
2110 PRINT" ------------------------------------
"
2120 PRINT" OTHER MAIN MENU KEYS:-":PRINT
2130  PRINT"       'H'  -
 HIDE / SHOW MENU NOTES":PRINT" USEFUL FOR COPYIN
G AND PASTING"
2140  PRINT"       'C'  -
 CYCLE BORDER COLOURS":PRINT" A VERY NICE ASTHETI
C FEATURE"
2150
PRINT" NOT LISTED, BUT EXISTS FROM MAIN MENU."
2160  PRINT"       '4'  -
 CHANGE ORIG. TAKINGS":PRINT" ALSO CHANGES ADDED
TAKINGS LIST"
2170 PRINT" BUT LEAVES EXPENSES IN TACT."
2180 PRINT" ALLOWS PERCENTAGE TO BE CHANGED."
2190 PRINT:  PRINTAK$
2200 GETA$:IFA$=""THEN2200
2210 SCNCLR:PRINT"          BIZCALC":PRINT
2220 PRINT" (C) JOHN A. FIELDEN (2009)":PRINT
2230
PRINT"EVERY POSSIBLE EFFORT HAS BEEN MADE TO"
2240
PRINT"TEST THAT BIZCALC / VATCALC IS FULLY":PRINT
" WORKING.  NO WARRANTY IMPLIED OR "
2250 PRINT"OTHERWISE.":PRINT
2260
PRINT"IF YOU HAVE IDEAS THAT MAY SPEED UP & "
2270 PRINT"IMPROVE THE RUNNING OF YOUR BUSINESS"
2280
PRINT"WHY NOT SEND AN EMAIL TO:":PRINT"dazeleeper
(at)aol.com"
2290 PRINT"{down}    END OF INSTRUCTIONS"
2300 PRINTAK$
2310 GETA$:IFA$=""THEN2310
2320 GOTO200
2330 GETA$:IFA$=""THEN2330
```

```
2340 IFP%=0THENIFA$=""THEN2330
2350 IFA$="R"THENP%=0:GOTO200
2360 IFA$="P" ANDP%=1 THENP%=0:RETURN
2370 IFA$="E"THEN1140
2380 IFA$="Q"THEN1490
2390 IFA$=" "THENP%=0:GOTO1030
2400 IFP%=0THEN2330:ELSE RETURN
2410 REM *COLOR BORDER CHOOSER*
2420 SCNCLR:PRINTBC$:PRINT
2430 PRINT"  COLOR BORDER CHOOSER":PRINT
2440 PRINT: PRINT" 'R' - RETURN TO MAIN MENU"
2450 PRINT" USE ^ UP ARROW":PRINT" OR DOWN ARROW"
2460 PRINT"CYCLE ALL AVAILABLE BORDER COLOURS."
2470
PRINT"{home}{down}{down}{down}{down}{down}{down}{
down}{down}{down}{down}     {left}{left}{left}{le
ft}{left}";C%
2480 GETA$
2490 IFA$="{up}"THENC%=C%+1
2500 IFA$="{down}"THENC%=C%-1
2510 IFA$="R"THEN200
2520 IFA$=CHR$(27)THENA$=""
2530
IFA$<CHR$(17)THENA$="":ELSEIFA$>CHR$(17)ANDA$<CHR
$(145)THENA$=""
2540 IFA$>CHR$(145)THENA$=""
2550 IFC%<1THENC%=16
2560 IFC%>16 THEN C%=1
2570 COLOR4,C%
2580 IFA$=""THEN2480
2590 GOTO2470
```

Readers Information for the C16

A tip for any-one keen on the art. On loading the emulator, drag in this file (alter as required and save for future use) type RUN, keys will be changed. You can then type NEW and bring in the program you are working on, or start your new prog. Hard to find codes have been added in the listing, like the code for black typing.
Happy Prog'ing

```
10 REM *************************
20 REM *KEY #2* *FOR COMMODORE16*
25 REM *------------------------*
30 REM *PROGRAMMED IN  YAPE     *
35 REM *------------------------*
40 REM *EDITED BY JOHN FIELDEN  *
50 REM *************************
60 PRINT"°":REM CHR$(144);
70 PRINT"³":REM CHR$(147)
80 KEY 1,"GRAPHIC"
90 KEY 2,"AUTO10"+CHR$(13)
100 KEY 3,"THEN"+CHR$(144)
110 KEY 4,"SCNCLR"+CHR$(13)
120 KEY 5,"AUTOOFF"+CHR$(13)
130 KEY 6,"RUN"+CHR$(13)
140 KEY 7,"LIST"+CHR$(13)
150 KEY 8,"HELP"+CHR$(13)
1000 LIST

READY.
```

keylister *key3*

```
63550 REM *KEY LISTER*
63551 REM * (C) JOHN A. FIELDEN 2008 *
63552 REM * GIFTWARE / SHAREWARE  *
63553 REM *  IF YOU LIKE THE PROGRAM *
63554 REM * CONTACT: DAZELEEPER(AT)AOL.COM *PLEASE STATE THE PROG. YOU HAVE  *
63555 SCNCLR:PRINT"  KEY LISTER":PRINT"  EEE EEEEEE"
63556 KEY 1,"LIST-150"
63557 KEY 2,"LIST151-250"+CHR$(13)
63558 KEY 3,"LIST251-350"+CHR$(13)
63559 KEY 4,"LIST351-450"+CHR$(13)
63560 KEY 5,"LIST451-550"+CHR$(13)
63561 KEY 6,"LIST551-650"+CHR$(13)
63562 KEY 7,"LIST651-750"+CHR$(13)
63563 KEY 8,"LIST751-850"+CHR$(13)
63564 REM  KEY 1,"LIST851-950"+CHR$(13)
63565 REM  KEY 2,"LIST951-1050"+CHR$(13)
63566 REM  KEY 3,"LIST1051-1150"+CHR$(13)
63998 KEY
63999 REM *IT GOES TO HERE: LAST LINE*

READY.
```

Interview with Spiro Trikaliotis

Part of the Vice Team

COMMODRE FREE
Please introduce yourself to our readers

SPIRO TRIKALIOTIS
My name is Spiro Trikaliotis. From my name, it is clear that I am of Greek descendants; however, I was born in 1973 in Germany, where I still live. I studied computer science and received my diploma in 2000. From 1996 until currently, I have been researching in the area of wireless networks with different research institutes and the University of Magdeburg. I am currently working at the ifak, a research institute where I can work on national and international projects.

Since 2006, I am married to my wife Sandra. We have no children yet, although we expect some change here soon.

I started working with electronics sometime before 1983. I played with a electronics construction kit from my brother. Late 1983, my father bought a computer - he started with a Laser VZ200, but he returned it in favour of a C64. That's where it all started. I soon began to play with BASIC, and then I learned Assembler and also PASCAL.

In 1989, I received a new computer. Although I favoured an Amiga, I received a PC which seemed at the time to be the better choice for the future. Somehow unfortunately, this proved right. Thus, starting with MS-DOS 3.2, later Windows 2.03 and later versions, and OS/2, I progressed through the different operating systems.

In 1989, I received a new computer. Although I favoured an Amiga, I received a PC which seemed at the time to be the better choice for the future

In 1999, I came back to the Commodore when I realised there were still many people who use them at least some of the time. I searched for an emulator and found several of them, among them VICE. Because of some annoyances in WinVICE, I contacted the VICE mailing list, and before long, I was part of the VICE team. However, I must admit that most of the VICE core was already built up, so, my involvement in these parts is rather small.

Currently, I am using Windows and Linux almost equally. In 2000, I started porting Michael Klein's cbm4linux to Windows. I had a working version the same year, but I could not release it because I had a licensing problem: cbm4win 0.1 (not to be mistaken for 0.1.0, which was released some years later), as I called it at that time, was built using Microsoft's DDK sources. cbm4linux, on the other side, was GPL. So, I had a license conflict. The net result for me was that I left cbm4win in the state and I could not release it. Years later, I rewrote cbm4win completely, making sure I do not use any source from Microsoft, so I could GPL the complete sources. In the meantime, I rejoined both cbm4linux and cbm4win, forming OpenCBM. In fact, I am mainly responsible for both ports of the project.

CF- How are you still involved with Commodore machines?

I still own my first C64 from 1983 and my first 1541 drive from 1984. The C64 has been repaired one time, because a joystick which was connected by a pal broke the CIA chip, but other that that, both machines are in pristine condition. In the meantime, I bought some more devices: I have a C128, a C128D, and, of course, some devices to be able to test OpenCBM: Two 1571, another 1541, a 1541-II, I had two 1581, but only one of them is still with me. I got a 8250LP device, which I used together with an IEC2IEEE device to try and find a problem with OpenCBM and the IEC2IEEE. Oh, and I have a Plus/4.

Of all of these devices, the C128D, a 1581, a 1571 and the 1541-II are currently on my desktop.

CF- Vice; can you explain this to our readers who may not have heard about the software

VICE is a Commodore emulator. That is, it is software which will let you run programs for your old Commodore machines for your current hardware. In fact, it tries to mimic the behaviour of the old machines as best as possible. Currently, VICE emulates the C64, the C128, the VIC20, the Plus/4, the PET machines as well as the CBM2 machines (a.k.a. CBM6xx/7xx). VICE also contains some tools like PETCAT and C1541; the latter is a tool to handle disk images. However, many people consider c1541 rather cryptic, as it has to be used from the command line.

Additionally, there were some people who built an DTV emulator on top of VICE; the project was called VICEplus. However, in the next version of VICE, that project will be reintegrated into VICE. Note that VICE mainly focuses on the old Commodore 8 bit machines; thus, an Amiga emulator is not likely to appear anytime.

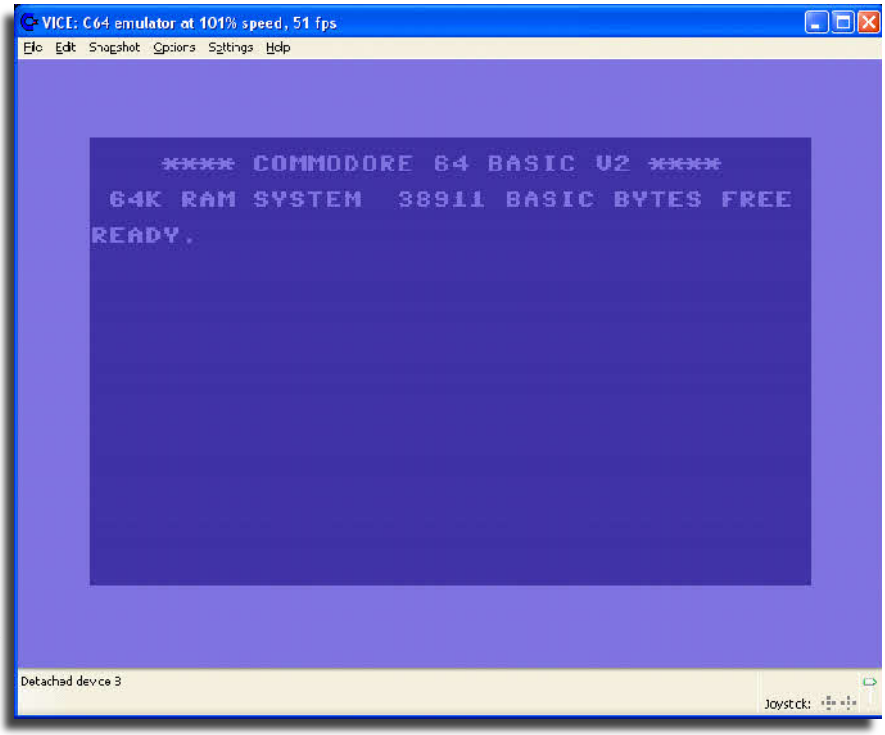
Among the big variety of machines VICE emulates, it also runs on many different platforms. Among them are Windows (95, 98, Me, NT4, 2000, XP, Vista), Linux, xBSD and many other unixoid variants, MacOS X, Acorn RISC OS, QNX, OS/2, different AmigaOS types, GP2X, SkyOS, Minux 3.x and Atari Mint. There are also some "unofficial" ports (that is, not from us) on other platforms.

That state of the different emulated machines as well as the state of the different platforms VICE runs on differs, however. The C64 emulator is most probably the most mature one, and the Windows and the Unix ports are most probably the most feature-rich ones.

CF- You are listed as one of the Vice contributors can you tell our reader the extent to your involvement with the project?

As I already told above, I have been involved with VICE since 1999. I started contributing to the UI of the (Win)VICE monitor. Since then, I have been doing different things. I mainly worked on the GUI of WinVICE. Additionally, I have written the "The Final Ethernet" (TFE) / RRnet network emulation of VICE, I have considerably reworked the RAM Extension Unit (REU) emulation of VICE with the help of the investigations done by Wolfgang Moser. Other than that, I believe it was mainly some small changes, especially after specific bug reports from users.

So, in this sense, there is nothing I am specifically responsible for.



Since March of 2008, I am one of the two maintainers of VICE. That is, we try to make sure VICE keeps up with the high quality, or even improves it. Time will tell if we can fulfil this position.

CF- Will Accelerators be implemented into the software like TurboMaster (4Mhz), Flash8 (8Mhz) or SuperCPU (20Mhz)?

This question is hard to answer. First of all: If someone implements it in a sane way, I do not have any objections to adding such a feature. Among other criteria, here, a sane implementation is an implementation which does not break other features or slow down the emulation considerably.

However, the problem is: For such an addition, someone has to take the time to do it. In order to perform this coding, one has to know the hardware involved from the inside out. While TurboMaster or Flash8 might be possible and considered rather easy to implement, I doubt this is the case with the SuperCPU, which even relies on some ASIC. Thus, the behaviour of that IC has to be reverse-engineered - a tedious process.

Also note that I do not own any of these devices, nor do I know anyone who does own them. I cannot speak about the other VICE team members, but I doubt there are many who own such devices. So, unless someone gave us the necessary information, it is unlikely the implementation will be done. Additionally, in most cases when we code something, it is because we have a personal interest in doing so. Remember, it is our spare time, our hobby. Thus, it is unlikely anyone will start such a project.

Of course, remember, VICE is open source: Anyone is free to implement the changes. Personally, I would be glad if anyone comes up with an implementation of his personal and most favourite gadget, and I would work together with him in order to get it included into VICE in a "sane" way - as described above.

CF- Can you tell our readers what may be implemented in the next version?

The other emulators are not as accurate as the C64

Well, at a foremost, 2.1 will integrate the DTV implementation of VICEplus. However, version 2.0 has not been out very long now. We will see what will be there when 2.1 comes out.

Q. How accurate as a whole is the software?

It depends. ;) At first, we must distinguish between the different emulators. I believe the C64 emulator is at a rather accurate level - of course, it is still not complete. In fact, there are some problems which would require large rewrites of big code parts in order to be fixed.
The other emulators are not as accurate as the C64. The C128 might be almost similar, at least for the 64 mode part of it.

However, I see two problems here: At first, I think most of the current VICE members have grown with the C64 or the C128, and we know them from the inside out. This is not true for the other machines, thus, it is harder to make a good emulation. I, for example, only own a C64 and a C128. I do own a Plus/4, but I almost never use it. So, how should I improve the PET or the CBM2 emulation? The second problem is that many people recognise problems, but they do not tell us. How are we supposed to fix problems we do not even know about?

Thus, if anyone has interest in working on these emulations, feel free to contact us. As a spare time project, we appreciate every help we can get.

CF- How can readers help with the project?

Of course, the best contributions are patches: Patches which correct incorrect behaviour, or patches, which add functionality. We recognise that not everyone has the ability or has the time to write code. Thus, there are other possibilities, too: Among them, I think "technical information" is the most important thing: Tell us what is wrong, i.e., filing bug reports. If you have any technical information not known to date (service manuals, results of own experiments) - tell us. Do you have some demo, some test program which behave differently on the real thing and on the emulator: Tell us.

Of course, there are also other parts of VICE which might need some help. For example, the documentation is not the best part of the emulator. Thus, if anyone has skills in technical writings, he might help us a lot, too.

CF- Do you feel emulation plays an important part in the survival of old machines?

Indeed, I believe so. Despite the fact that there are still many machines available - especially many C64s, one has to remember that the machines will not last forever. Thus, emulation will be the way to get the information and the "feel" of these old machines to the future.

Note, however, that emulation is not restricted to software emulators like VICE: devices like the DTV or the Commodore One are also emulators, and they have the same - or, at least, similar - intentions as we do.

CF- "Can you explain OpenCBM to our readers?"]

OpenCBM started out as cbm4linux which was written by Michael Klein; I believe he started the project in 1999. It was his approach to connect CBM serial devices (floppy drives, printers) to the PC on Linux machines, in "the same way" like, for example it is possible using Star Commander by Joe Forster. In fact, Joe helped Michael with technical information, as far as I know.

Of course, "in the same way" is not completely correct: cbm4linux did not - and does not - have any fancy GUI. However, Michael could not just port over the transfer routines of the Star Commander to Linux. The reason is simple: When Commodore invented the serial IEC protocol used for the bus, it did not have in mind that some day, computers will be multi-tasking and doing many things simultaneously. Thus, they invented a synchronous protocol; that is, whenever a transfer is to take place, both sides have to use a rather strict timing. Before Michael's work, it was believed that a multi-tasking machine like a PC running Linux will not be able to hold that timing. The Star Commander does not have that problem, as DOS is not multi-tasking.

Michael found out that he can, in fact, disable multi-tasking for short periods of time on Linux. There is only one operation that is critical: In some cases, the receiver of a transmission can delay transmission for an arbitrary time. It is ready to receive, it gives a signal which has to be answered within 200 us, or the transmission will fail. Now, 200 us is very tight on a multi-tasking machine. Michael found out that he can use an interrupt for this if he exchanges two pins on the then-famous XE1541 cable: The XM1541 cable was born. (There is an intermediate cable version available, but this is not important here.)

That's why even now, OpenCBM is not able to use the XE1541 cable nor the X1541 cable.

Now, given the good work from Michael, it was relatively easy to port over cbm4linux to Windows, resulting in cbm4win. Version 0.1.0 of cbm4win was already functional in 2000 on Windows NT 4.0, but, as explained above, for legal reasons, I could not release it. The date must have been 2003 or 2004 when I rewrote cbm4win a second time, and when I released it to the public. In that time, I received so much help from Michael as well as Joe, and also from thorough testing from Wolfgang Moser.

In the mean time, cbm4linux and cbm4win diverted in the sources; thus, it was hard to keep them consistent whenever a bug was found. Thus, Michael and I decided to rejoin both projects, and the result is OpenCBM. It comes in two flavours, OpenCBM/Linux (formerly cbm4linux) and OpenCBM/Windows (formerly cbm4win); however, the sources are the same, except for the platform specific parts.

Q.how it is OpenCBM utilised?

OpenCBM itself can be used in two different ways: At first, there is the command line, where you have to run the various commands OpenCBM includes. I like to work this way, but many people dislike it. However, as OpenCBM also has a programming API, implemented by a DLL (Windows) or a shared library (Linux), it would be easy to built a GUI around it. However, it seems almost no one has done this. There is, however, a GUI for Windows available, called gui4cbm4win. It has been written by Leif Bloomquist, and now been taken over by Payton Byrd. It is a Visual Basic application which directly calls the OpenCBM commands on the command line. Thus, in my view, it is no clean solution - but, one must admit, it was never meant to be one.

To overcome this limitation, as most Windows users need some UI, I wrote a Virtual Device Driver for OpenCBM. This way, any DOS program which runs on Windows NT 4.0, 2000, XP or Vista can use the OpenCBM API. DOS program? Yes, DOS program, as there is one program available which has a UI that many people are familiar with: The Star Commander. Joe, its author, added the possibility to use that API, thus, OpenCBM + Star Commander are a good team on Windows now.

when I started on OpenCBM, I needed some more cables, as I had only one variant. Joe Forster send me all required cables for free no postage, no nothing.

However, with Windows XP and Vista in 64 bit versions, there are some problems: First, both do not run DOS programs any more; secondly, on Vista 64 bit, OpenCBM does not load any more because it is not signed. If anyone has the ability for me to sign it (with a VeriSign signature or similar), feel free to contact me. I do not feel I should spend $400 per year just to be "allowed" to run my driver on Windows 64 bit.

Q. Does our reader need any other hardware for use with OpenCBM?

Yes, indeed. The easiest solution needs your computer to be equipped with a parallel port. Note that it must be a native one: Parallel ports on PCI or PCI Express cards will most likely not work; at least, I do not know any that actually work. All ISA cards I know do work, and PCMCIA cards might work, depending upon how they are internally organised.

If you have a parallel port, OpenCBM needs either an XM1541 or an XA1541 cable. Instructions on building these can be found on Joe's site: http://sta.c64.org/xm1541.html for the XM1541, and http://sta.c64.org/xa1541.html for the XA1541. Additionally, if you want to be able to do fast transfer, you might want to additionally use an XP1541 cable (http://sta.c64.org/xp1541.html). Note that the XP1541 cable alone is not enough; it must be used in conjunction with one of the other two cables.

If your computer does not have a parallel port - many modern machines fall into this category -, there is another solution: The XU1541 cable (http://www.trikaliotis.net/xu1541). It connects your drive to the USB bus instead of to the parallel port. This cable was originally designed by Till Harbaum, but he lost interest in it. Currently, OpenCBM development versions support this cable, but the latest release does not. If anyone builds such a cable, it would be best if he contact me so I can tell what the current status is.

Note, however, that the XU1541 cable does not convert your Commodore drive into some memory that can be used directly from Windows; you still have to use OpenCBM in order to access it.

Additionally note that besides their names; all the cables (i.e., XM1541, XA1541, XU1541) can be used for all IEC devices, not only for the 1541. In fact, in conjunction with an IEC2IEEE device, I use them also to connect a 8250LP drive (from the PET era, with an IEEE bus) to my PC.

This is not true for the XP1541. This is only available for the 1541 and the 1571; additionally, it cannot be used with the XU1541.

Q. Is OpenCBM free to download and use?

Yes. OpenCBM is GPLv2 (http://www.gnu.org/licenses/gpl-2.0.html), exactly like VICE. You get even the source code, and you are allowed to modify them. But, if you give away binary versions, you must take care - read the license before doing this!

Q. What was the decision to produce free software, why didn't you charge for the software?

In both projects, OpenCBM and VICE, I had no choice, even if I wanted: Both were already GPL, thus, I had to use that. However, if I would have to program everything from scratch, I believe I would not charge for it, anyway. Even if I wanted to: To market is so small, who should buy anything?

However, I made an interesting observation: Since I started with OpenCBM, I have been given the one or the other thing I needed. For example, when I started on OpenCBM, I needed some more cables, as I had only one variant. Joe Forster send me all required cables for free no postage, no nothing.

Then, at some time later, Andreas Senk contacted me because he had built an IEC2IEEE, a device designed by Jochen Adler, but it did not work with OpenCBM. After some research, I found I could not debug this without actually owning such a device. Andreas sent me his device, so I could do the tests - and I found a rather severe timing bug in OpenCBM. When I wanted to return the device to him, he told me I could keep it, as he already had built a new one - again, for free.

I already received some small parts for my Plus/4 for free when I needed it. I got it with the words: "You have given so much time for OpenCBM, now, I give you a little bit back." These are fine moments.

CF- Do you still feel there is commercial value in 8-bit machines, for example if a new 8bit system was released do you think anyone would purchase such a system?

Other than for nostalgic reasons: No, I don't think many people would buy them. I believe even the DTV was mostly bought by people who already owned a C64.

look at the Commodore One: Even considering the fact that the marketing was not very good in my opinion, it was not a success. I cannot believe how many people will buy something like this. In fact, I doubt I would buy such a machine myself. It has no practical value. It's the same as with the Commodore 65. It might be nice from the technical point of view, thinking about the time frame when it was made, but the lack of software is a big problem.

Q. If Commodore were still around today what do you think they would be making?

I never was good in these "what-if" questions, so I would rather not say anything on that subject. In fact, when I came back to the Commodore scene in 1999, I did not even know that Commodore had filed for bankruptcy some years before.

Q. Are you working on any other projects you would like to talk about?

Oh, I could tell you, but then I would have to kill you - nah, just kidding.

Taking my limited time at the moment - which especially you must recognise because it took you almost a year to do this interview I think I should not announce anything as long as I am not totally sure that it will eventually become true. The only project which is "almost done" is the integration of the XU1541 into OpenCBM. In order to integrate the XU1541, OpenCBM was extended in a way that it supports plugins now. There is currently a plugin for the XA1541 and the XM1541 cables, and another plugin for the XU1541 cable. If there will be new cables in the future (firewire, anyone? ;)), it would be a matter of writing a plugin only.

I would like to greet all the people out there who read this and did not fall to sleep until now, and I especially thank you, Nigel, for the opportunity to speak up here, and your patience for me not answering in time.

If anyone wants to contact me, my contact details can be found at http://www.trikaliotis.net/ (no fixed mail address, as I occasionally change them due to SPAM reasons.)

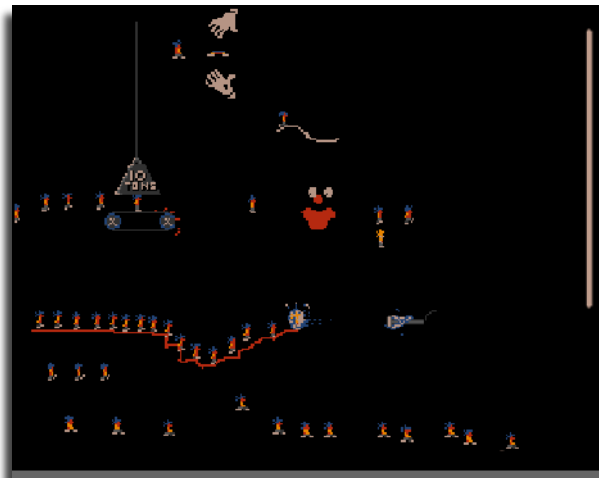
when I came back to the Commodore scene in 1999, I did not even know that Commodore had filed for bankruptcy some years before.

COMMODORE FREE Comments

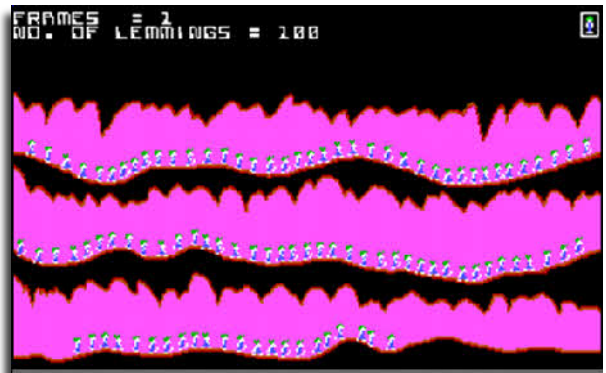
Spiro Trikaliotis How can we thank you enough for all the time you spend on these free projects, thank you for your time and answering my questions.

The Complete History of Lemmings

By Mike Dailly (revision: 8) Copyright Mike Dailly



The Lemmings Anim



The Original Lemmings Demo.

Lemmings started life as a simple animation back in August 1989 when DMA Design had just moved into their first office (which only consisted of 2 small rooms), and were beginning a new game called Walker (based on the walker that was used in Blood Money).

Scott Johnson (author of Hired Guns on the Amiga) had just been hired as a freelance artist after being rescued from a 2 week stretch behind the counter at McDonalds, and assigned the task of creating the graphics for Walker. After building the walkers head, he set about drawing little men for the walker to shoot at in a 16 by 16 pixel box.

I however maintained that they could be done in less; 8 by 8 - or so I thought. One lunchtime I borrowed someone's Amiga (probably Gary's, although it might have been a spare), and set about trying to prove him wrong.

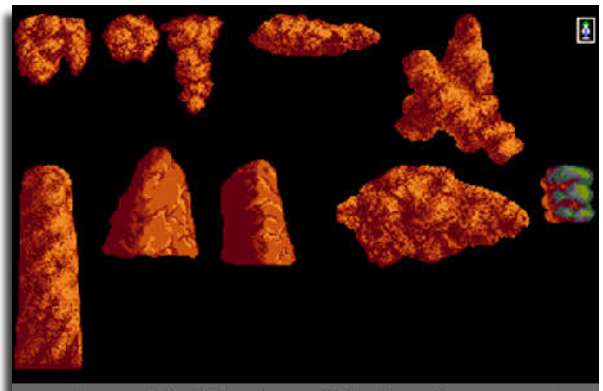
The resulting image which only took an hour or so to make, I created the men, the gun, and the 10 ton weight. Once everyone had seen it they had a good old laugh, Gary Timmons added the mouth, the clapping hand and the rotating thing - and everyone had another chuckle.

Gary also made significant improvements to the character, and you can see Gary's almost complete lemming, just right of the chewing mouth. My one, is a bit "stiff", while Gary's is clearly the one that was used in the game.

It was actually Russell Kay (author of PC lemmings), that first laughed "There's a game in that!" rather than Dave Jones, he's also the one that did the first demo which was shown to Psygnosis in late September of 1989 at the PCW show. It was also Russell that coined the phrase "Lemmings" when talking about these little guys. The demo itself came about for a couple of reasons; first I had just done the animation, and Russell was keen to use the little guys in something, but the second reason is probably the more interesting.

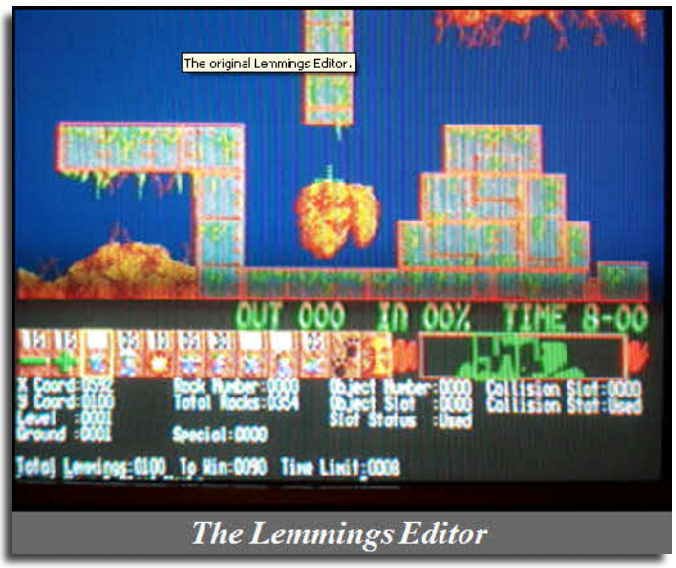
Russell and Dave were having a discussion about weapons in Blood Money, and Dave was thinking of adding "salamander" style missiles that followed the landscape, but didn't really know how best to implement it. Russell however, had figured out a way, and used the Lemmings to demonstrate it. Dave decided against it though, and added the bombs that are in there today.

There's been much debate over the choice of colours as well, but the colours were selected, not because they were the easiest to choose, but because of the PC EGA palette. With the limited choice, it was decided the green hair was nicer than blue, and with that, the final Lemming was born. I was actually the next person to code up a demo on the Commodore 64, but I only got so far as having a single Lemming walking over the landscape before Dave put me onto another project.



The Earth and Rock style.

The history of lemming Lemmings PART 2

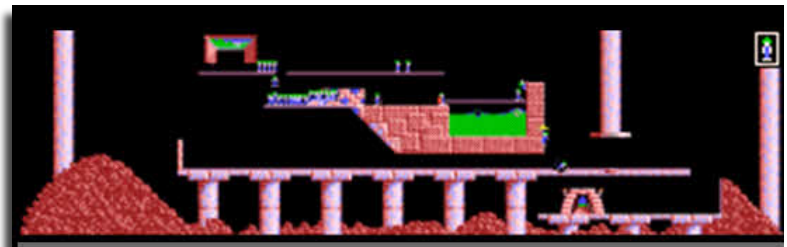


The Lemmings Editor

The level editor was built around the Deluxe Paint interface; a program everyone at DMA was very familiar with. It was incredibly easy to use, and being built directly into the game it allowed for a very quick turn around on level creation. Gary, myself and Scot were the ones that did the bulk of the levels, But Dave did manage to sneak a couple in as well; although it was probably because he told us too and we couldn't really argue with him.

Having said that, it did take him ages to get any that were even worth while considering! He used to try and beat us, and after proudly stabbing a finger at the screen and saying "There! Beat that!", we'd calmly point out a totally new way of getting around all his traps, and doing it in a much simpler method. "Oh...", he'd mutter, and scramble off to try and fix it.

Of course, this was the beauty of Lemmings; there were so many ways of completing a level. I can't remember if anyone else managed to get levels into the final game, Steve tried hard - since there was money to be had! But just couldn't get to grips with it.



Its Hero Time!

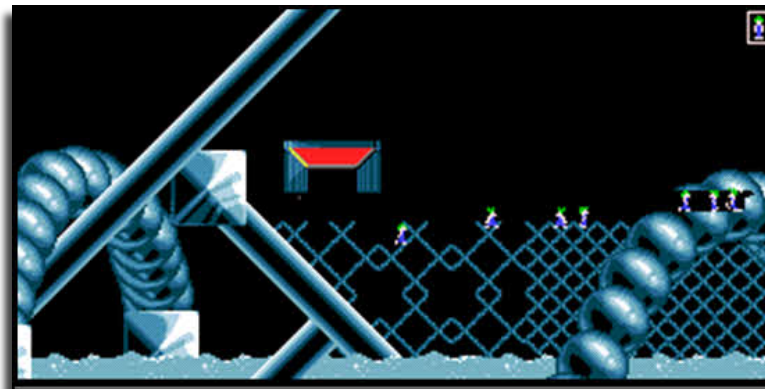
We all actually had great fun doing levels, and were always trying to beat each other by doing the most fiendish design we could. This never happened of course, and by the end of Lemmings we were all so good at the game, it would only be a matter of seconds before we figured out how to complete a new level.

We did manage to fox Psygnosis now and then, and I can lay claim that it took John White an hour to figure out "Its hero time". When ever Psygnosis did some testing, we'd get back a fax with the level name, time taken to complete, and some comments and a difficulty rating. These were usually around 3-6 minutes, and some general comments on how they found it.

Every now and again though, the fax would be covered in scribbles with the time and comment's crossed out again and again; this is what we were striving for while we were designing the levels, and it gave us all a warm fuzzy feeling inside.

You could always tell the levels Gary did, as they were very "minimal", a few blocks and that was about it. My own (and Scott's to some degree) tended to look like pictures, or at the very least pretty. Scott's levels tended to be packed together better than mine, but I liked drawing huge levels; "Hunt the Nessy" and "The Steel Mines of Kessel" were mine for example.

I also loved making the user do multiple things at once. "The Fast Food Kitchen" was one of mine, and required the player to jump back and forth to complete the level.



The Art Gallery

After I created the "The Art Gallery" Dave did in fact tell Gary to go and make them a bit more pretty, as he could now see what was possible, and couldn't imagine people paying for bland looking levels, and 3 blocks on screen was just that. So Gary went off and put lots of fluff around the edges to make them more appealing, but nothing that interfered with the playing of his level.

You can see examples of this in levels like "Lemmingology" , "We all fall down" and "All or Nothing". All of these have very simple play areas, while the surrounding detail is meaning-less to the level itself. Still, it didn't stop Gary from producing some great levels.

I also liked to give small clue's in the name ("It's Hero Time" referring to a single Lemming going 'over the top' as it were), while Gary used to try and make clever references to things ("I have a cunning plan" - Black Adder), where as Scott just tended to make up nice sounding names. Of course we all did a bit of everything, my "The Island of the Wicker people" being a reference to a line from Batman.

The History of Lemmings PART 3

The Special Levels

I've since met many people that were around 6 or 7 years old at the time, who have told me they used to play it. There have been very few games with such a cross section of players; Mario games are the only other ones I can think of since not even the Sonic games are played by such a wide cross section of ages.

The music and particularly the sound effects have to get a mention, so crucial to were they to the game. Both were created by Brian Johnson (Scott's younger brother), and the reason the tunes were, well - basic, was to avoid any copyright problems.

This was around the time when games first started to worry about such things, where as before they would have just happily ripped them off, but not now. This is why we were stuck with such timeless classics as "How much was that doggie in the window?" etc. However, I do seem to recall that Gary Timmons did the intro music, for some reason.

I was also the one responsible for creating all the "custom" levels for the game. We picked games that used the Amiga's dual-playfield system as they only used 16 colours, this ruled out games like Blood Money which was a full 32 colours. We did a test with a Menace level since we already had all the graphics to that, and once we saw how this looked, we went hunting for others.

We were then lucky enough to get some graphics from Psygnosis and Reflections for Beast, Beast II and Awesome which then made up the rest of these levels. The special levels were very basic, as they couldn't have traps of any kind (due partly to the change in colour palette), which meant I had to try and make hard levels using only the skills and backgrounds only; never an easy thing to do.

The problem was now that we had all these really hard levels, but no easy ones. So, Gary then set about making simple ones; either by making easier versions of hard ones, or brand new levels. Levels like "Just Dig" (Lemmings level 1) were example of the new, simple levels. Designed to ease the player in,. these levels were so simple, that some under 5's managed to play the first few levels unaided.

2 player Lemmings

'Just Dig' so simple, a 4 year old could do it.

The sound effects were superb however and deserve a special mention, since the game wouldn't have been the same without them. Scott's mum I believe was the first voice of the lemmings.

The other great thing with the original lemmings was the 2 player option. This came about because of games like Populous and Stunt Car Racer. These were the games we were playing in the office at the time, and they were the first to use Null-Modem cables for multi-player action.

We tried this as well, and I actually coded up a Null-Modem cable routine up, and even got a mouse moving around on Dave's machine, being controlled by me on mine. However, since the Amiga could have 2 mice plugged in, Dave decided to go with the split screen option instead.

This was a great addition, and one I've been very sorry not to see again since. The PC has problems controlling more than once mouse, so it was dropped from that version, but the Atari ST version did managed to retain it.

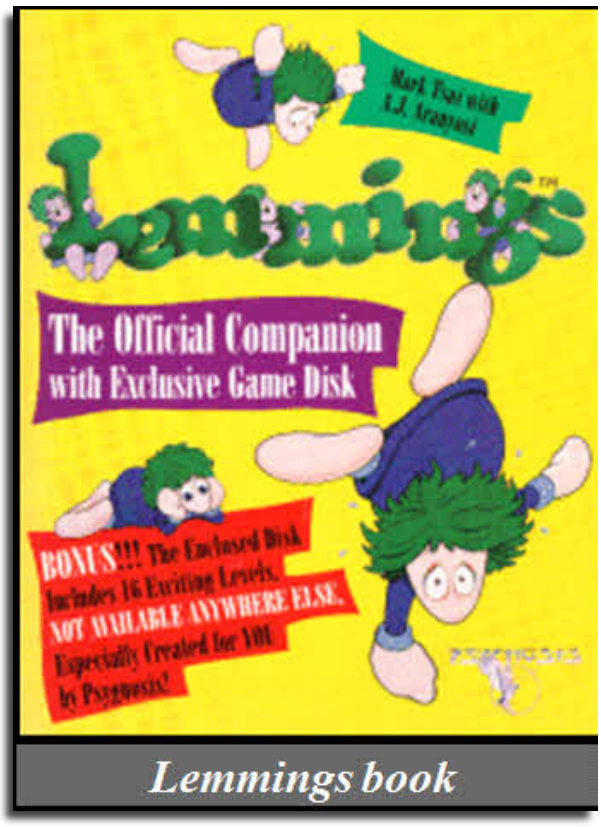
This I believe is where many games fall down today, they don't spend the time making a good learning curve. Its also one of the reasons why I think the game did so well, everyone could do at least a few levels.

The History of Lemmings PART 4

The Arcade version of Lemmings

When the arcade machine was being written, the CEO of Data East apparently wouldn't start a meeting without challenging the person to a 2 player version of lemmings (according to Dave that is).

I've never been quite sure why no one has ever done a proper multi player Lemmings game since, and these days with and internet connection, it would be a great game to play.



Lemmings book

The arcade version is also where the fast forward of Lemmings 2 came from, once we saw it in the Arcade version, we realised we just had to have it. It's now very hard to play the original Lemmings without the fast forward.

The arcade version was controlled with the joystick or a trackball and was still in the very early stages when it was cancelled. I still have the original prototype here, rescued from the skip when DMA moved from Dundee to Edinburgh.

Another little known fact, was that Psygnosis also did a book of solutions, written by Mark Tsai (current owner of Lemmings.com), and A.J. Aranyosi, it included 16 new levels from the "oh no, More lemmings" level set. This book is now well out of print, but is ISBN:1-55958-188-3 in case you want to look for it.

It was printed in black and white pages, and gave detailed descriptions on how to complete each level from Lemmings and the new bonus levels.

The Lemmings front end was also going to look very different initially. We came up with the idea of lemmings holding up cards, like in stadiums to spell stuff out. The rest of the lemmings were going to be doing lots of other funny animations.

So I set about doing this. I had a screen full of lemmings, all animating differently, and some holding up cards. This was neat, but confusing... so it was eventually dropped.

All the 6's.....

The official drawings were done by Gary, however they were done well after the game was underway. They had to be drawn since Psygnosis kept asking us what they really looked like for boxes and adverts and we couldn't tell them. So Gary knocked up these sketches to give them the basic idea.

We also received various comments back from the public, one of which sent our eyes rolling! The level 666 was received very badly in places, since many thought this was a direct effort to put the devil over as being "cool" or whatever.

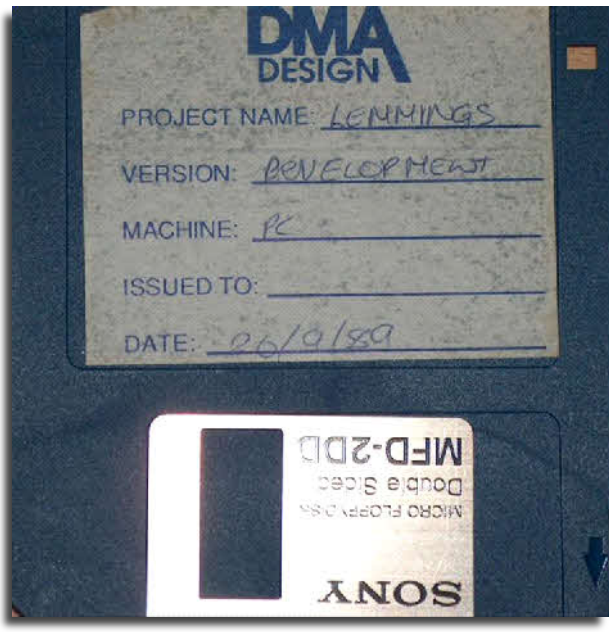
However, it all started out as me trying to get a level full of "fives", but while I could get 55 of each skill, 5min, 55 seconds for the timer, I couldn't get 55% of lemmings to save; only 66% (it has since been pointed out that if I'd change the number of lemmings, I could have easily gotten 55%). So it changed to 6. Then since it was in the hell level, I though of 666.

I never thought it would cause quite the stir it did, although I still say you're helping them escaping from hell it to a far better land!

End of game screen

The History of Lemmings PART 5

The number of people that claim to have been involved in the original Lemmings, is huge. The actual number isn't.



The main folk were Dave Jones (Amiga), Russell Kay (PC), Gary Timmons (Animations), Scott Johnston(Backgrounds), Me (Mike Dailly), Brian Watson(ST), Brian Johnson (Music+SFX) and Steve Hammond (PC EGA/CGA Graphics conversion). Tim Write (I think he did the music player), Tony Williams (PC Music), oh and Scott's mum (Lemmings Voice)!

If I've missed anyone and you think you know some one else who should be on this list, then please let me know - but I reserve the right to laugh at you.

This list obviously doesn't include any Psygnosis staff, since during the first lemmings game, they only really gave feedback, and tested - although John Whyte's level feedback was excellent. He used to draw up a lovely grid with level names and then rated them and gave some comments back.

And so there we have it - the full story of Lemmings. I'm sure that this will be added to as the others read it and remember little stories of their own, or correct some small points listed here, but this is pretty close.

Hope you enjoyed it!

COMMODORE FREE
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RETROVISION 2009 REVIEW - BEER, GAMES AND CURRY!

Despite the Ice and Snow, Retrovision 2009 (and the 14th Retrovision to be held) was yet another great event, with three days of retro gaming goodness at The Folly Bridge Inn Pub (also famous for its Mixed Grill) in Oxford, England.

Despite the poor weather having prevented some people from attending, many people still managed to get to Oxford, including people from Scotland, Finland and as far away as Los Angeles in America.

Highlights of the event included what we believe to be the European Debut of Shredz64. Shrez64 is a great "Guitar Hero" style game created by Toni Westbrook for the Commodore 64 (Although we had it running on a Commodore 128D). The game uses the PSX64 Interface, also created by Toni, which allows you to hook a PS2 Wired Guitar Hero Controller up to your C64.

Other Commodore Highlights included a Commodore 116 (Modified to use 64k of Memory and play Commodore Plus 4 Games), an original C64 and a Vic 20 which were all left running various classic games over the weekend (all loaded from a 1541-III). Many other retro systems were also present from an Atari 2600 to the Amstrad CPC 464.

Moving away from the retro systems and to more modern systems the event also had a new game running on the Japanese Nintendo Wii called "Lets Tap", where the Wiimote is placed on a cardboard box and your character is controlled by tapping and hitting the box to get from one side of the screen to the other while avoiding the obstacles. This game has only been released in Japan so far, but should be released in Europe later this year, and is definitely one to look out for! There was also an OCZ Nia Neural Impulse Actuator for the PC running on the Saturday, where people could see if they could control the built in test "Pong" game using their mind, rather than conventional controllers.

Both Friday and Saturday evenings saw a retro-raffle with many exciting prizes from headphones to key ring light sabres, games and retro gaming systems, with Xbox360 Rock Band following the raffle and turned up to the max, while quieter games of the card game Monty Python Fluxx were occurring in the bar area downstairs.

Saturday evening also saw another reformation of the Commodore 64 Band SID80s (Now known as 6502 Reloaded) with composer and musician and creator of many great C64 SID Tunes Ben Daglish, Game designer and Musician and founder director of Sensible Software Jon Hare and finally Games Programmer of many great games Jeremy Longley. The band played a 1 hour acoustic set of many classic C64 tunes including Paper Boy with Arcade Classics, Deflektor and Spellbound.

Sunday was the chill out day for many people, starting with traditional mountains of Sunday Roast Lunch being served downstairs at the Folly Bridge Inn, while upstairs multi player games were running on the big screen projector including 10 Player Saturn Bomberman and 4 Player Mashed on the PS2. For those of us who were left, a Curry Bus had been booked to us to Jamals Indian Restaurant for a rather nice Indian meal, before heading back on the bus to the Folly Bridge for a last bit of Singstar on the PS3.

For me it is not just the retro gaming which made this a great event, but the atmosphere of the event (which was limited to 80 people) and the people who attended the event, with many people having also attended previous Retrovision Events and returning for more. I cant wait until next year for the next one!

Tickets are now available for Retrovision 2010 which will be held on the 29th 31st January 2010. The price of a 3 day ticket is £20 each, with 5% of Retrovision profits going directly to the Richard Joseph Cancer Charity Fund (http://www.justgiving.com/jonhare). It will also once again be held at the Folly Bridge Inn Pub in Oxford and readers of Commodore Free are welcome to attend, although tickets are limited so we recommend they are purchased early. Tickets and more information can be found here: http://www.retrovision.org.uk/rv2009/index.htm

THE RISE AND FALL OF THE PULPIT

by Lenard R. Roach

It was a dank and clammy night. The wind wafted through the trees, obliterating any light being made by the moon. I stood in the empty alley behind the 7-11 awaiting him. He was late. I should of known better than to trust him, but he was the only one who had the goods. Sure, I could have gone out of town and picked it up, but I was already running late. A trip out of town would require a special explanation to the wife, and I have lied to her enough. After this last pick up, I would be done. I 'm calling it quits. I 'm getting too old and the people I have been dealing with are becoming too dangerous.

Just as I was ready to give up, get back into my `85 Chevette, and leave, I heard him. Who couldn't `t hear him? His old `76 Toyota Corolla with the bad muffler bearing and squeaky shocks could be heard from a quarter mile away. As he approached, the alley cats scrambled for cover. I should have done the same, but this meeting was too important, and I needed his special brand of merchandise.

His one headlight remained on high beam as he stopped just behind my car and his vehicle sputtered to a stop. I could barely see the driver, but I knew it had to be him. The moan of a rusty car door opening, the crunch of gravel under foot, and the rhythmic footfalls told me that he was approaching. He stopped just in front of his headlight, the light silhouetting his frame. His appearance was that of nothing I have ever seen.

He was a ball. That `s right. Nothing more than a ball, perfectly round hairy ball of what? My contact looked like a five foot tribble as he slowly approached me

He was a ball. That `s right. Nothing more than a ball, perfectly round hairy ball of what? My contact looked like a five foot tribble as he slowly approached me.

Captain L? he asked in a gruff voice.
The same. I tried looking past the fuzz, but to my amazement I didn't `t find anything tangible that was holding this hairball up. Am I addressing The Great Hairy One?

At your service, he replied.
Do you have the stuff? I asked directly.
Do you have the payment?
I patted my left jacket pocket. I have it here.
Let `s see it.
First let me see the merchandise.
Don `t you trust me?
I trust everyone. It `s the devil inside them I don `t trust.
Do you think I 'm the devil?
I looked intently at him. I don `t know what to think. Nonetheless, the merchandise, please.
The Great Hairy One grunted. I think it was a laugh, but from the creature I could not tell. He stepped to the rear of his Toyota and somehow opened the trunk.

Come and see, he beckoned.

I stepped out of the headlight beam and crossed to the back of his Toyota, my body tense and ready for anything. This unknown creature could do anything and without me knowing where any hands, feet, or weapons would hide I didn 't want to take any chances. I stood at the back of the car for a few minutes, waiting for my eyes to adjust to the little lighting that was there, but once they did, I could not believe what I was looking at …

There before me was all that I was looking for Commodore drives, keyboards, REUs, modems, the whole lot.
I brought extra in case there was something else that you wanted, The Great Hairy One said. I started to rummage through the plethora of Commodore computer equipment when something grabbed my arm and pulled me back. I looked at The Great Hairy One. He was standing close. Tsk, tsk, he said gruffly. You've seen that I deliver, now how about you?

I reached into my left jacket pocket and pulled out a flat, plastic, square package. Something from under the fuzz pulled it out of my hand and the package was instantly consumed by the hair. He began to giggle; at least I think it was a giggle. At any rate, I think he was happy with what I brought in exchange for the Commodore merchandise.
Weird Al `s Even Worse ` album on CD, he said, just what I asked for, and new, too. I got it fresh off of Amazon. I never opened it. I brought it immediately out here to you. You've done well. There was a lilt in his voice. Please feel free to take all that you need. Do you want something extra for the other Commodore stuff?

I already have all I wanted, The Great Hairy One said as the sound of the first track began to play from underneath all the hair. I quickly rummaged through the computer equipment, grabbed an extra 1581 drive, an REU, and some DSDD 3.5 disks and made my way back to my Chevette. After loading these items in the car, I got in, started the vehicle and left. All the while The Great Hairy One was dancing away around the alley…

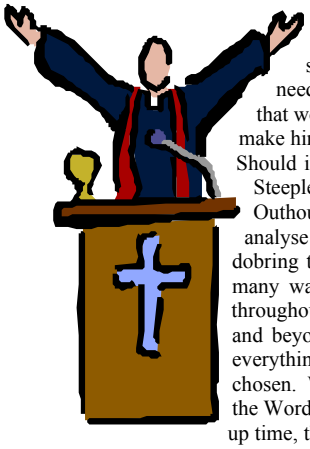
Thus was the beginning of the work which was soon to become the greatest and yet short lived bulletin board system ever to run on a Commodore 64 the Pulpit BBS.

Well, this may not be exactly how this all began in fact, this is only partly true all right, I lied out my teeth! You want the truth? Fine, I `ll give it to you, but I must warn you, it `s not anywhere as exciting or mysterious as the previously written pages.

It began in the summer of 1994. I was calling so many local BBS ` from my Commodore and even though all these boards were great, there really didn't seem to be anything out there for anyone of faith to call that was Commodore based. I have seen how some of these boards were set up from my calling in and the jealously began to rage in my breast. I know I could do something better with my C64 system, but I had neither practical experience nor the software to make it all possible. On a perchance posting on the KBPD Commodore board, I read from its SysOp, Sgt. Butch, that he was planning to shut down his board in favour of going to the IBM format and was looking for someone to purchase his Commodore equipment and subsequent files which made up the KBPD. I instantly jumped at this opportunity and after several hours on my knees begging my beautiful and understanding wife Alana to allow this purchase to take place, we were on our way to Belton, Missouri, with money in hand and her father `s pick up to get this large amount of Commodore merchandise. The deal was struck, and within about an hour `s time we had all of Sgt. Butch `s Commodore computers, drives, and disks loaded in the Dodge Ram and we headed back to Kansas City, Kansas.

It `s your stuff, dear, Alana said sternly as we pulled up in front of the house. You drag it into the house and put it away. I want nothing more to do with it.

Like a child in a candy store, I began the joyous task of unloading the pick up and putting all that Commodore equipment in its proper place. As I dragged all this out of the vehicle, I examined each piece carefully, deciding what could go into storage in the basement and what went immediately into the computer room for set up to my soon to exist BBS. As I worked a thought occurred to me: What



was I going to call my new BBS? Sure, it was going to be set up as a Christian BBS, but it needed a catchy name something that would grab a user `s attention and make him keep coming back for more. Should it be called The Church, The Steeple, The Way, The Door, or The Outhouse? I finally had to begin to analyse what it was I was going to dobring the gospel of Jesus Christ to many wayward Commodore users throughout the greater Kansas City area and beyond. Therefore, by the time everything had a place the name was chosen. Where else does one hear about the Word but from the pulpit? So by set up time, the new BBS was going to be named The Pulpit.

Now, what software was I going to use? I had Sgt. Butch `s C*Base 3.0 disk, but with working offline with the confusing and often frustrating C*Base 2.0, I wasn't ready to tackle its upgraded cousin. I went through the disk files and found several BBS packages to work with. After calling several friends, I asked them to call in to my house line with their Commodores and go through each BBS package I uploaded and give me their opinion of each. One by one, packages like Ivory and other programs, both familiar and unfamiliar, were eliminated. Finally, the argument was inevitable. I had to learn to use C*Base 3.0, the best BBS package for the Commodore 64 of the day.

I dialled into The Temple of Doom BBS and asked its SysOp, Indiana Jones, who was running C*Base 3.0, for a crash course in how to set up and operate the software. He was very cordial and helped me in ways I couldn't imagine. It took a couple of weeks, but I got all the files ready and each disk drive set up to receive messages in accordance to the functioning of C*Base.

The day came. I posted on all the BBS ` I was a member of to let users know that The Pulpit BBS was online and ready to help in any spiritual needs out there in cyberspace. At first the calls came rushing in, so much so that we put in a second phone line to handle the flow of messages and questions. Then the BBS went from part time to a full 24/7 running time. At first it seemed that The Pulpit was going to be a big success and everything was going to be fine. What could possible go wrong? Plenty.

I'm sure those who ran BBS ` in the past have had their share of rascals that would log in and start harassing the users. The Pulpit had its problem child. A Ku Klux Klan member who liked to call in at 3:00 am while drunk and send hate messages to everyone on the board began causing stuff among members. Distress posts went out to me and I tried to quell those who were distressed by letting them know that The Pulpit, like a church, was open to all those who are in need. It was apparent that this person was in need and I didn't want to shut him out of the church because he had a problem. That would not show him the help he seemed to need. However, I would talk with him and see what could be done. Our conversation was brief in the message base, but the user agreed to back off and not do that again. A week went by and everything was fine. Then a post came to me saying he was getting sexually rude with one of the women members of the BBS. I went into the private message base of The Pulpit and read what was sent to one of the women. Nothing shocking in my opinion, but still I would investigate further. The problem user again agreed to back off.

Keeping this person as a user on The Pulpit and not just kicking him out like other users insisted I should do began to draw off members to the BBS. Calls became more infrequent to the base. I would

I dialled into The Temple of Doom BBS and asked its SysOp, Indiana Jones, who was running C*Base 3.0, for a crash course in how to set up and operate the software

check on some of the other BBS where I knew some of these users frequented and they all basically said that if you `re going to keep that person around on The Pulpit, then they were not going to call in any more. I finally demoted this user `s access rating to the lowest possible, leaving him a private message explaining what I had done and why. A heated message came back from him and he no more called The Pulpit. I posted on the other BBS ` that the problem was permanently solved, but the damage was already done. If this was how I was going to conduct my church, then they wanted no part of it. Calls came almost to a crawling halt. The Pulpit was dying.

To add insult to injury, one summer day in July 1995, I got a knock on my living room door while I was working on some upload files to The Pulpit. I got up and answered the door. Before me stood a uniformed member of the Kansas City, Kansas Police Department and a worker from the Board of Public Utilities. The officer spoke first.

Are you Lenard Roach?
I am, I answered. Is there something wrong?
May we come in?

Surely, I said.
I stepped away from the door and allowed the officer and BPU worker into the house. The officer stood in front of me while the worker immediately went about the house checking in each room. He entered the basement where I stored all of the Commodore overflow.

What is this all about, officer? I asked. At first I thought that maybe my dog bit a BPU worker while they were out to read the meter and they were searching for the dog, but the officer `s words brought me to a total loss.

Mr. Roach, are you aware that you are using a lot of energy at this residence?
No. Now I thought someone tapped into my power again, but the officer continued to speak.
Mr. Roach, we have reason to believe that something illegal is happening in this house.
My jaw dropped. Like what? I asked.
You tell me.
I have no idea. I pointed to the basement. What does something illegal have to do with the BPU?

Mr. Roach, the officer began, whenever the Board of Public Utilities detects a spike in energy use, they call us to come out with them to examine the premises in case they find any illegal activity. With their diligence we have shut down many operations here in the area.

What kind of illegal operations might I ask?
Portable pot farms.

I drew a breath in amazement. Are you trying to say that I have been growing marijuana here and the BPU can detect that? How is that possible?

Portable pot farms require a lot of sunlight in order to make them work. This sunlight can be artificially created with sunlamps put in a

damp spot like a basement or crawl space where marijuana can grow and thrive. Sunlamps need a lot of electricity to work. This excess energy use causes a spike in the customer `s electricity bill, drawing suspicion that the resident may be doing something illegal. When that happens, they call us and we come out with the BPU to investigate.

So you think I'm growing pot, right?
Again, you tell me.
The BPU worker came up from the basement and crossed the kitchen into the dining room where the officer and I were. I didn't find anything here that looks like they had any sunlamps hooked up to anything in the basement or crawl space. The officer looked square at me. Can you explain the spike in energy use in your home, Mr. Roach?
I turned to the BPU worker. May I ask when your department detected the so called energy spike ` in my bill?
About six months ago, he answered. That `s about the same time I set up this. I led the men to the computer area where I was working earlier on The Pulpit. I pointed at the Commodore 64. I have been running an online BBS that is like an electric church. Would you like to see how it works?

That `s not necessary, the officer said. The BPU worker got on his hands and knees and looked at all the power bricks that went to the keyboard and various drives of the unit. After a few seconds of examination, he arose and faced the officer.

This has to be it, he said. These components are each pulling a significant amount of power. Put them all together and you have an good power drain. I smiled at them both. Really, I was trying to keep a civil tongue in my mouth by not shouting Retards! Directly to their faces.

The officer sighed and hung his head for a moment. He looked up at me and also smiled. We `re sorry to have bothered you, Mr. Roach. Please understand that this is all a routine. Please accept our apologies. You have a nice day. We `ll see ourselves out.
After the officer and BPU worker left, I sat down in the computer chair and faced the Commodore 64; a rude user, no callers, and now this. I looked up at the ceiling to address God. I'm sorry, sir, I said, This just isn `t worth it. I hopped online and posted at several different boards that The Pulpit was going to close its doors by the end of next week. Thanks for everyone `s support in this endeavour, but I feel it necessary that due to circumstances this ministry should shut down. I got some congratulations for a job well done, and some sorry to see it leave messages on the other boards, but nothing came to The Pulpit `s boards directly. By the end of the week, I pulled the plug on what once started as a great idea.

Six months passed…

Lenard, what are you going to do with all this Commodore junk? Alana asked in January of 1996. If you `re not going to do that computer thing that you were so hopped up to do last year, then do something with all this stuff.

She was right. All I was using my Commodore for now was writing, BBS calling, and the occasional game play. I needed to clear some of this equipment out of the office and put it somewhere other than the basement, where the load of Sgt. Butch `s Commodore machines and disks still remained. My glory days of making my Commodore out to be something were all gone. As a matter of fact, with the introduction of this thing they were calling the internet, BBS were shutting down by the dozens. There really wasn't much thinking about what should be done. The Commodore was still great, but there can still be too much of a good thing. This was it. I stepped over to the phone and made a call…
It was a clear and cold night. I awaited by my Chevette for his arrival behind the 7-11. I didn't have to wait long to hear the familiar sputtering of the Toyota. Behind me he parked and got out. The five foot fuzz ball that was The Great Hairy One stepped out of his vehicle and approached me.

Your post said this was something worth my time, he said in his gravelly voice. What have you got?

I opened the hatchback of the Chevette and showed him the plethora of Commodore hardware, disks and magazines I loaded up before the trip. He examined the merchandise carefully.

The Great Hairy One took a step forward. Captain, I'm really sorry about what happened to The Pulpit. It `s a great loss to the BBS community.

I remember a post you made to The Temple of Doom ` BBS some time back saying that you would love to have gotten your hands on whatever Sgt. Butch ` had hidden in his garage that he wouldn't sell to you. He sold it all to me and here it is.

If he had eyes, I think they would have brightened by then. You `re kidding? he asked me. This is Sgt. Butch `s Commodore stash? I nodded. He literally jumped into the tail of the car and started digging through the material like a ravenous beast. I stepped back to stay away from any flying debris as he pushed away hardware and software to find the bits he always wanted. His fur, like tentacles, was holding several pieces of software and equipment in the air.

This is glorious, he said. I heard rumour that he had this stuff, but I could never see it for myself. Some of this stuff will give me a pretty penny on the open market. How much to you want for the lot?
Nothing, It `s all yours.
The material he was holding fell to the ground. I think he was staring at me in disbelief.
I can `t do that, Captain, he said. It wouldn't be right. I've got to give you something for a haul like this.
You `d be doing me a favour by just taking it off my hands, I said. It `s starting to clutter up the basement anyway. You `d be making the wife and I very happy if you would take it.

The Great Hairy One took a step forward. Captain, I'm really sorry about what happened to The Pulpit. It `s a great loss to the BBS community. You know I enjoyed visiting your board, but that `s no reason to be giving all this stuff away. Please let me give you something for it.
Like what?
From under a tuft of fuzz came a crisp $50 bill.
Take it, he said. Consider it a final donation to a once worthy ministry.
I hesitated for a moment then I reached out and took the money and stared at it. Already The Great Hairy One was loading all the equipment into his Toyota. In mere moments, the Chevette was empty and his car was full.
I climbed into the Chevette and awaited The Great Hairy One to pull out so I could leave, but instead he met me at the driver `s door.

Captain, he said, thanks for everything.
I reached out and petted his massive hair. Thank you.
What will you do now?
Don't you worry, I said as I started the engine, I'm not out of the Commodore business yet. I've got one program published and I'm working on another. A sequel, who knows? Maybe I `ll write a book about working on the Commodore. I don `t think anyone `s ever done that.
Give me a copy.
Better than that, I `ll let you proofread it and I `ll put whatever comments you have about it on the back of the book.
Done.
With that, The Great Hairy One got into his vehicle, backed out, and left, leaving me to ponder my Commodore future …

ROACH,
The Rise and Fall of The Pulpit

MossyCon5 report

By Lord Ronin from Q-Link

The day started off vile. Woke up at 9am, those that know me, understand that `s about 4 hours too early for this creature of the night. To make matters worse, that despicable sun god drove away our local rain god. Leaving hot burning solar radiation to pour on my poor Nosferatu skin. Plus the sky was an unnatural colour. Twas blue and not slate gray as is our custom. Knew the day was going to be bad.

Save that the kitties where friendly #30, did spend all night up on the computer so I could be awakened at the proper time. I Even had that big coffee cup ready with wake up juice. Most of the things for the con had been loaded (as was I) last night into the jeep. Sadly #30 was too tired to attend the event, and crashed shortly after the borrowed jeep pulled out for the con.

I arrived there a little after 10am, at the Moose Lodge #408, here in Astoria. Some "guys" where outside having a smoke break {delete 664 blocks of rant about discrimination and oppression of smokers}. Filled my pipe and looked around for our contact man. Found him (it is his jeep I borrowed anyway) and set to work on the start of the day. While talking with him. Robert Bernardo pulled up with his large car. That even squinting across the street. I could see he had it full of wonderful C= things.

Rather than take the interior twisty steps to the lower level. My plan was to take the straight steps along side of the building to the lower level. Had our man Karl Konka (Moose contact(clear the way and the door for us. Making it a lot easier to move things from street level to the event room. Karl did that and in some manner received permission to have the connecting gate to the lumber yard opened. That made life a lot easier for Robert. Rather than traipse across a street and down the long flight of ancient concrete steps that have an unsecured handrail. Robert was able to park right at the gate and tote those wonderful (yeah he did escape with them) Commodore items from the car about 15' into the big room.

I Dug out my old dealer table cloths from my days at the sci-fi conventions. Long imperial emerald green one for Roberts tables and a red one for my smaller set up.

This year I was a bit more prepared for the event site. I Dug out my old dealer table cloths from my days at the sci-fi conventions. Long imperial emerald green one for Roberts tables and a red one for my smaller set up. I had a strip box and extension cord this time as well, plus a few extra power cords and serial cables.

Insert at this point that; I took some photos and in a bit these will be sent to our webmaster Balzabaar with annotations. Robert took photos as well, and Matt shot some pictures of us, and for us. There is also some raw video footage that will be made into DVD and for the web site. At least that is my current understanding.

I did have to make a fast trip to the shop, facing the A500 kitty. Who thought I am supposed to spend the day with her, and not at the con. As Robert needed a 40/80 monitor. Brought back the 1084s that will be for the new BBS. That was connected to a flat 128. Ah but more on that one in a bit.

Took time to set things up, but after the lay out of things, where I shot most of my photos. We started off with Robert explaining his items. Was not a great day for him. Starting off was the monitor from his school. Would not accept the Amiga One at all. Ignored its existence, killing the demo of the OS 4.1 on the Amiga system. We did see the disk and booklet for OS 4.1. Robert did explain about the specific power pc theme board that is in his unit. That it isn't around any more but there is another one for a very high price in Euros.

Not doing this in the precise order of presentations, because some caught my attention more than others, as well as my understanding. 128mega chip IIRC the name correctly is a story in and of itself. That is a bit farther in the time line. A SID type of chip, that was not demoed because of time and the sad fact that at the last moment Steve Jones was taken ill after a trip to Puerto Rico. There was in that vein also a moog device that works with the C=. Robert didn't know how to operate it and there wasn't time to look into the manual and try to understand. As it was a part of Steve's projected demo. Two types of the uIEC device where on the table and that is what I wanted to see the most at that time. But that demo for that was later in the day. A 2040 dual PET drive that was on it's way to Ray Carlsen for repairs sat on the table. I had not seen one of those before today.

An item that was on the table with Roberts presentation was the "tough book" from Matt. Now to me it seems to be the beginning of a lap top Commodore 64. Using a small LCD screen from a DVD player and the 64DTV chip from one of those hummer toys. Matt gave a run down of the current state of the little C=. Along with his plans for the future operation. Which will use one of those SD things for a disk drive. Yeah that is one of the things that I am drooling about. On the video he had the unit opened up and explained the internals of his creation. Because of space, well it is small man real small, I wasn't able to take a shot of the insides.

Then it was time for the fat freak in the top hat to show off his items. Well for almost the entire 6+ hours of the con. The small amount of attendees where being tormented by S.I.D. music. Brought along my last working SX-64. Finished on Saturday the last parts of a double sided 1541 of music. All from Q-Link. One side has selections I grabbed from a 19mb zipped file that was sent to me a long ago, but until I gained the Linux system was too big to download to the Commodore. Now I was able to open it up and look at all the directories of the S.I.D. artists. Making selections of over 55 songs to put on the disk. Those were put on side #1 with the Stereo SID player V10.3. Along with the 1541 and the 1581 booter. Side #2 had a collection of songs that I had downloaded when Q-Link was still up. Playing both sides that bugger ran till a little after 4pm.

Passed those out to the attendees and I spoke on my other give out. The MossyCon5 CD. About how it was constructed, using 98% and more Commodore. In fact it was the Linux that made the CDs. All the other work was done on the Commodore. Geos and GeoDos with post print 3.8 were my primary tools for the writing stuff and file transfer. So I could convert the post script files made in post print into pdf files for the CD. That last part was done on the Linux system with the burning of the CDs. Except for some jpeg of scans and of photos I shot, the rest was done on the C=. At least what we did. A few files were found on line and placed on the CD as well. Have a few originals left after the con

I Showed a few familiar things, like the atari joysticks; these are useless if you are left handed. Then my fave the Quickshot, a recently acquired Okimate-10 thermal printer with disk and a still sealed black ribbon in the box. A sealed Geos 2.0 with GeoWrite 2.1, some verbatim 10 count disk boxes still sealed. Couple of odd modems, A us robotics password 2400 and a odd ball 1200. Both had been used in the past at the Pink Panther BBS and gifted to us

my Mad Max of that BBS and MHI. And good news gang! No one asked me this year about the dice RPGs.

Then we went back to some of Roberts more detailed demos. First up was that new 128 mega byte chip. Here we had the second round of computers fighting Robert. You see, he had brought several flat 128 units. These were to be tested and if needed/possible repaired by Ray. Ah the fun we had at this time. First one that Robert opened up had some wild chip placement. A C=64 factory Jiffy DOs chip. But the 128 one was ah, not that way we suspect. There was a chip in the empty socket that was unlabelled. Just had a black tape over the window. Bit scary when in slot next to it, there was the servant chip, we suspect and it was wired to the Jiffy Dos chip. Let us just say that Robert will be doing some editing of that part of the video. Because the system failed to work.

Now we have round three of the Computer Wars against Robert. The demo didn't work at all!

Bang, another one 128 flat was brought forth. Ah good news, this one had torque screws and we didn't have the proper driver for it. OK another flat 128 was brought out of that car, which magically holds so much C= stuff.
Well the case was stock Phillips screws. But the metal sheathing was ... right you got it torque screws. A little bit of improper tool use and it did open up.

Now we have round three of the Computer Wars against Robert. The demo didn't work at all! Well though I can drag this out a bit more, I won't do that. Robert tried and fought and ... Well it turned out that the first one of the new 128 mega byte chip units, was bad. The second one that he brought fresh out of the bag, worked the first time. I am not certain of this unit for my work. There are three screens of options on the menu. This is recorded on the video. Many bits of Maverick, and we did fire up the main screen for that in 64 mode. Tried out my old friend ZED. He showed a word processor that I had not seen before. On menu 3 there is Leader Board Golf, a form of solitaire that I had not seen before and at least one other game. Many of the options I do not know, but my memory does have it that one of the first options on the first menu is the Servant option.

Honestly that ate up time till about 3:45 when we were asked by a Moose man how long we would be staying. My watch is busted so I had no idea of the time. This sort of forced a fast run of the other items. But there were exclusions.

I very much wanted to see this uIEC device in action. I have been hearing about it, just never even with some pictures. Its difficult to get the device into my mind as to what it will do for me as a hard core daily C= user. OK now I know that it uses .D64 files, but it will also use regular ones as well. My opinion of this device has changed. Out of the two, I am not leaning to the Jim Brain one. No offence meant to Jim. The option that I saw for disk changing on the other unit makes that one more in line for the heavy use that I have for the uIEC thing. As I do a lot of disk changes, like playing games that are multi disk. But yeah I want one of these now for myself. Having seen what it does and had hands on work with them.

Well this is long and doesn't cover all in detail for what we did today at MossyCon5. Small as it may be with several people having to cancel at the last minute. We had a good and C= informative time. In fact we may be able to use the same location for next year and MossyCon6. Yeah I have some plans for that already. So till next time gang. Make mine Commodore.

Now for dinner a double shot and bed

BCNU
Lord Ronin from Q-Link

AMENDMENT
Lord Ronin from Q-Link wrote:

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The other board is a NKC Electronics SD2IEC: http://www.nkcelectronics.com/sd2iec-boar2.html ($44.99). I can't personally speak to the board, as I do not own one, but I am sure it's a fine unit. It also is a bit cheaper than the uIEC ($50.00). However, I think it's important to note that the demo showed the NKC SD2IEC *AND* the SD2IEC daughtercard (http://www.nkcelectronics.com/sd2iec-daughter-boar2.html). That is a $14.99 option that provides IEC connectors and disk swap buttons. I also think the daughtercard is a kit and must be assembled for that price (it might be available pre-assembled at an additional cost)

Both SD2IEC and uIEC units provide disk swap functionality (they share the same DOS code, so they share the same functionality). Thus, you are free to install switches on the uIEC for disk swap support.

However, because the uIEC cabling is manually intensive, I am readying a similar daughtercard for the uIEC. It provides disk swap switches as well. I'll probably initially offer it for free, and then later split it out as a $10.00 option, much like NKC.

Jim Brain