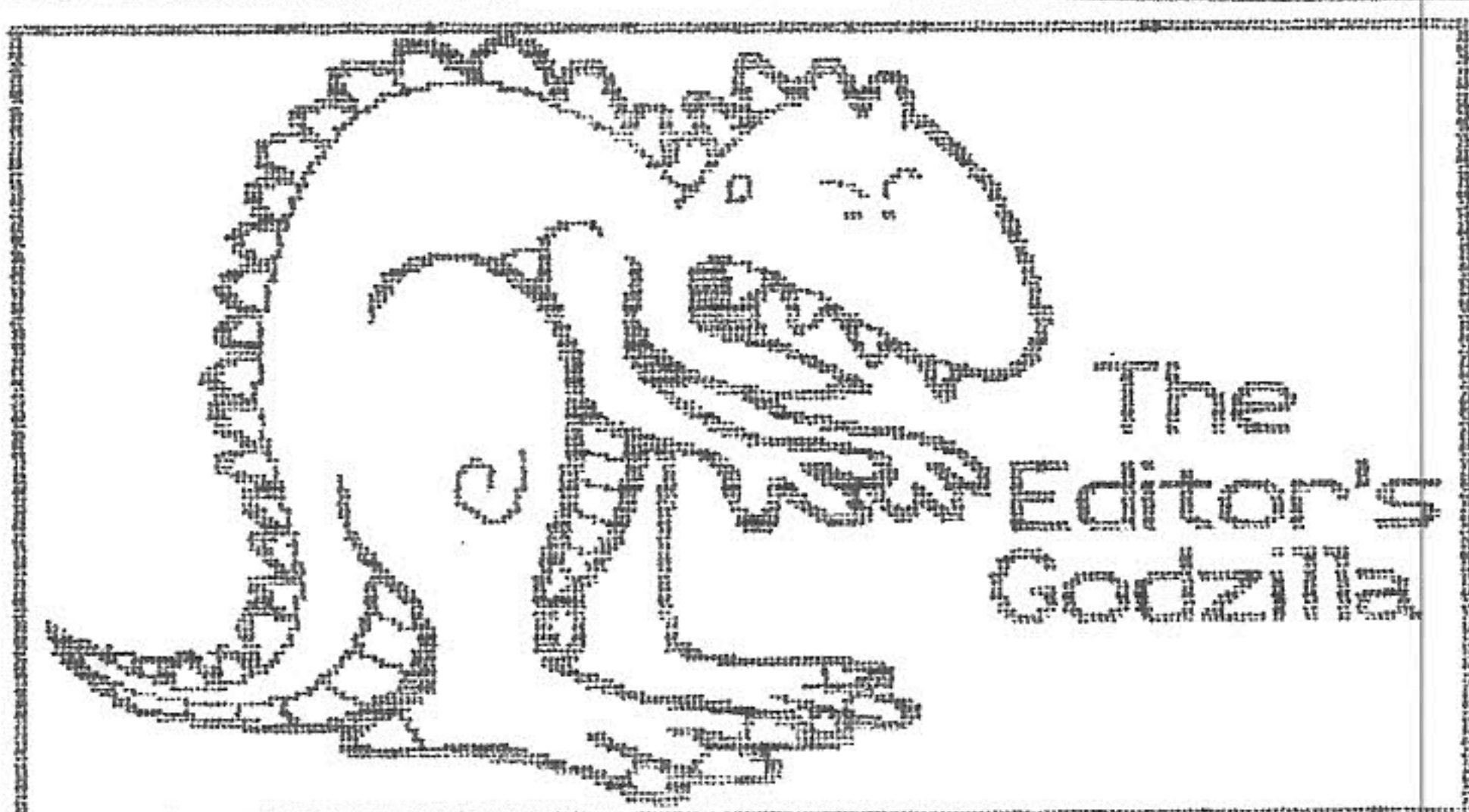


# FEUC

"Taking Commodore  
Computing Into The  
Twenty First  
Century  
And Beyond ..."

Nov./Dec. 2010



-by Lenard R. Roach

With my first real subsidy publication under way, I am starting to work on my second novel which I won't get into too many details here but for those who remember my work on the Secret Organization of Commodore Users magazine back at the turn of the century will already have a clue as to what I am trying to write. That is correct; I am revitalizing that eight part story that had so many enthralled with the "What's next?" attitude. This was a fun story to write and I am looking forward to finishing it off and hopefully getting it to press sometime soon. I've been planning this for about a year but I didn't want to go through the hassle of typing in each word one at a time from the Newsroom format it has been locked into, but since the Newsroom saves all its files as PRG files I never thought that it was possible to transpose those text files into something I could use in both GeoWrite and Word.

I tapped on Dick's email one day and asked him about this and he told me to go ahead and try using Big Blue Reader and see if the program will transpose. I protested, saying that if any damage is done to these files, there would be no chance of recovering the data; it would be lost forever on soft media. Dick reassured me that no harm would come to the original files if you transfer the new data created by Big Blue onto another disk, preferably a 3.5 DSDD, while going through the transposition. I agreed, and started the search for the five or six disks that composed my entire work of SOOCU newsletters. It took about an hour of searching before I found the file box I put those disks in, and even then I could only find four of the supposed five disks. I still had the hardcopies of the work in my gray file cabinet so it is not a total loss if some of the disks won't transpose.

I pulled these disks out of the storage box located on my computer stand. I had stacked knick knacks in front of the boxes so they couldn't be seen by me or anyone else who sat at the Commodore. A quick look into the SOOCU hard files and I found the story I want started in issue four, so I found that disk in the collection and put it into the Commodore to read the directory. After LOAD"\$", I hit return and waited, and waited, and waited. The 1571 drive hummed, then made



that annoying ratchet sound, and the drive flashed its error message at me. "No problem," I thought. "I will load it through Geos and see if it will come up that way." A quick boot of the Geos operating system, and I was already seeking access to SOOCU issue four, but the infamous Operation Cancelled error showed up, so I thought maybe it was the disk may have finally gone south and needed some disk RX. I loaded issue seven of SOOCU into Geos and it booted perfectly. I read the directory and found the story I needed, cleverly marked STORY in the directory. Everything on the Commodore and the 1571 were working fine, so I had a bad disk. If anyone in the Commodore universe knows how to recover the data from a bad disk, please let me know.

Now that I know that SOOCU #7 was good, I decided to work my experiment on it. I got out of Geos and loaded the Big Blue Reader. Once installed, I went to the conversion of normal files and copied the information off a Commodore disk onto a 720K formatted MS-DOS 3.5 disk. While this was going on, I booted my Compaq laptop and plugged in the 3.5 drive my wife got me for a birthday and waited for it to finished loading all of what it takes to make it work. Once done, I clicked on the Word icon, removed the 3.5 disk from the Commodore 1581, and put it into the Data Station 3.5, and called up the file through Word. The conversion was -- nearly -- perfect. It was readable, but the case letters were in reverse. All the capital letters were written in small case and vice versa. This would not do. I sat there for a minute and thought. What else could be done? I thought of how Dick taught me to convert files back and forth between the computers, but I needed an extra step; something that would put the letters in the right case. One thing I have not tried was using Geos Text Grabber, a program designed to convert text between different Commodore word processors to GeoWrite files. It was worth a try.

I got out of Big Blue and again booted Geos, going onto the disk that housed the Text Grabber program. I had a few choices of source programs: Paperclip, Speedscript, and two generic C128 grabbers, aptly named Generic I and Generic II. I started with Generic I and again went into the Newsroom disk and found a story file to convert. I clicked on the Open button in Geos and both the 1571 and 1541 drives whirred to life. The program asked if I wanted to view the converted file, so I clicked YES. A second later the screen showed me a bunch of trash that made no sense at all. Whoops! This isn't going to work. I erased the disk that received the converted files and tried again, this time using Generic II as the source processor. Again the drives whirred and chattered and again the view text message appeared on the screen. I clicked YES and waited, expecting the same results as I got from Generic I, but viola! Generic II converted the text perfectly with only a little garbage in the beginning. That garbage was probably where I put the graphic for that frame of text. Success!

I went nuts for the next hour converted all 23 text files on the SOOCU #7 that contained the story I wanted on that disk to GeoWrite text and read each file as it came across just to make sure things didn't go south on me again like it did with Generic I. The conversions were all successful. Now with that done, I knew how to get Commodore files converted into Word text files since I have been doing that ever since Dick was nice enough to send me a copy of Big Blue Reader and Wrong Is Write. All in all, the 23 Commodore Newsroom files converted into five pages of Word text, but this is with the margins out to one inch all around. When I re-read, edit, and add to the text, I hope to have about 10 or 15 pages for that chapter. Soon I will be working on converting the rest of the story into Word text.



Sadly, I could not get the story off of SOOCU #4 and #5, and #6 is missing altogether. Like I said earlier, I have the text in hardcopy in my files and will have to input that information one word at a time, unless someone can answer my earlier plea and come up with a way to rescue information off of aged 5.25 disks. Here we go again with another story based on the best selling computer in the world -- the Commodore. I hope to have it done soon.

## Monthly Meeting Report

November 2010

-by Robert Bernardo & Dick Estel

Our attendance was back up to our normal high of four, with a surprise visit from Alfredo Mijango, our member in Manteca (about two hours away). Also on hand were Robert Bernardo, Roger Van Pelt, and Dick Estel.

It seems like we spent a lot of the meeting having a meeting (or just talking, depending on how picky you are about definitions), before we actually touched the equipment.

Robert announced that all but the last two videos from CommVEx are on-line, including Roger's HamText presentation, which was scheduled but never shown in Las Vegas. Robert also brought photos from the October Amiwest Show in Sacramento, and these will be on-line as soon as the lazy bum (me) who has this duty gets them scanned and put into a web page (and as soon as Robert captions those photos).

Robert is working on a couple of hardware projects, and his comments on what he's ready to reveal follow:

Work progresses on the SUX 6400 (the Sound Ultimate Expander

6400 audio digitizer board for the C64). The first prototypes were to be ready at Thanksgiving. The SUX 6400 uses the Autumn Technologies program, Digimaster 64, which is the best audio-digitizing program ever created for the C64.

Another project, a RF adapter for the C64 joystick ports which uses the Amiga CDTV remote control, is moving along slowly in its development.

We got into the intricacies of D64 files and chatted a bit about long-distance member and newsletter editor Lenard Roach's book, "Run, Stop, Restore." Because Lenard is running into cost and technical problems getting the new version published, we thought maybe he should consider an audio book or podcast version.

The demonstration of the musical program, PetSynth, which uses the PET 4032 computer, was put on the back burner, because #1. the PET 4032 had something screwy with its screen display, and #2. the MSD SD-1 drive which we were using didn't respond to any disk insertion or commands. There was far more success in looking at the latest Commodore Mailink newsletter and running its accompanying disk-of-the-month. On one side of the floppy DOM, there was an old issue of Loadstar disk magazine but only side one. Anytime the disk asked for side two or other disks, there were no others to use.



Commodore  
Book  
Released!!!!

"Commodore: a Company on the Edge" tells the story of the pioneering Commodore computers through first-hand accounts by former engineers and managers.

548 pages  
Hardcover with dust jacket  
6" by 9"  
2 pounds (907 grams)



ISBN 9780973864960

On Nov. 29, 2010, Brian Bagnall said this about his new book --

I'm happy to report that my new book, *Commodore: a Company on the Edge*, is now available from VariantPress.com. This is a heavily reworked edition with about 40% new material. Before starting this project, I made a list of everything that I would have liked to include in the first edition. The main areas I wanted to work on were: more interviews to fill in gaps in the story, reorder the material chronologically, and add more period photographs. It was very important to me to put all this material in the right order so readers could read a coherent, chronological retelling of Commodore history. This time you can relive the Commodore experience in real-time.

Originally, the goal was to keep the same page count as the first edition. That turned out to be overly optimistic. After 15 new interviews and a lot of new stories plus numerous pictures, there was no way to make it all fit. As a result, the story has been split in two. The first book ends in 1984 when Jack Tramiel is forced out of the company, and the next book will focus on the Amiga years and Commodore's eventual demise.

There are many new firsthand interviews:

Brian Dougherty: GEOS developer

John Feagans: PET developer

Andy Finkel: Commodore game developer

Bill Gardei: C65 systems engineer

Neil Harris: Commodore game developer and marketing

Manfred Kapp: Commodore co-founder

Dale Luck: Amiga developer

Bill Mensch: 6502 and 65816 designer

Dick Sanford: Chief Financial Officer of Commodore

Bill Seiler: PET, VIC-20 systems engineer/surfer

Kit Spencer: Commodore's marketing guru

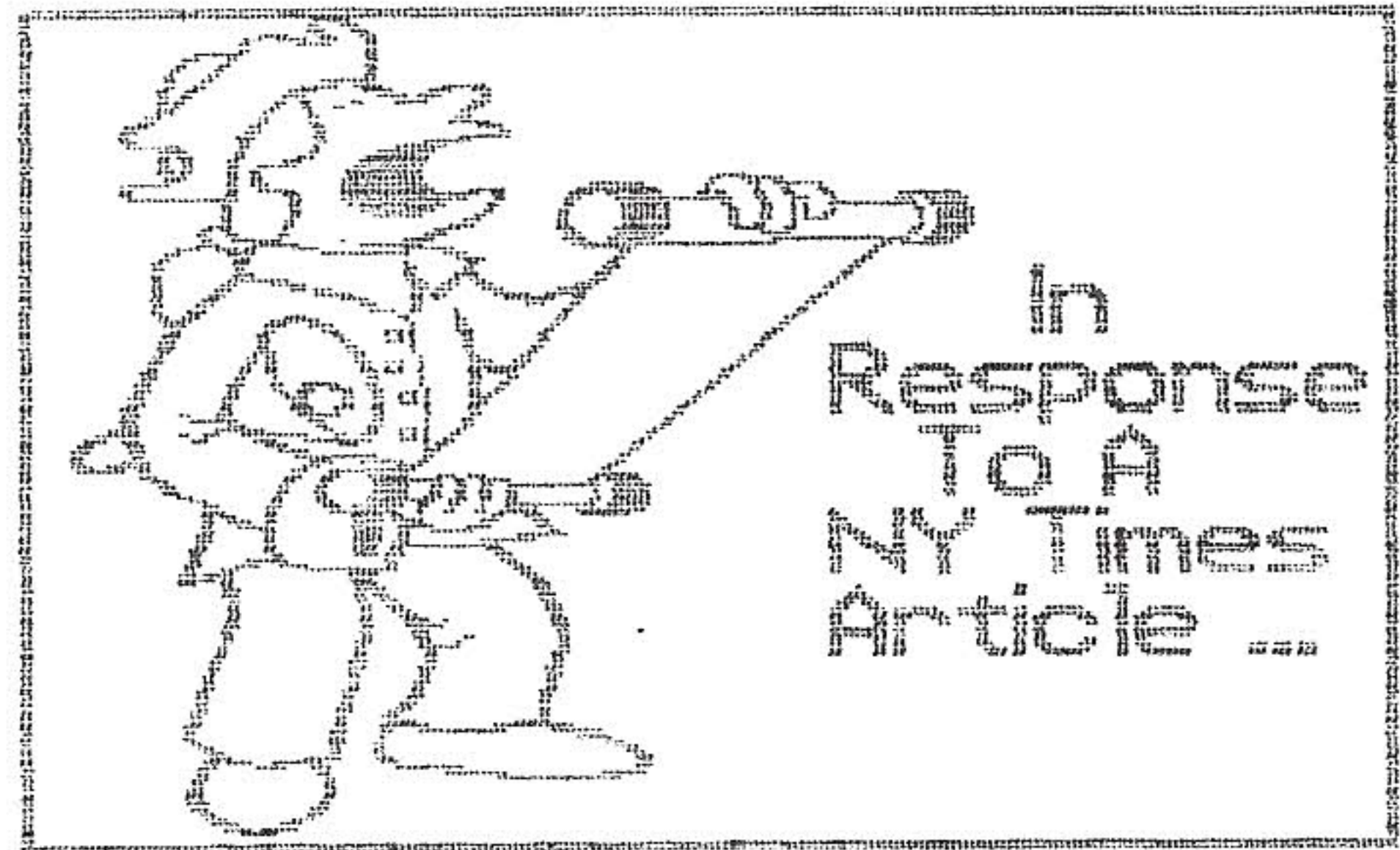
Yash Terakura: Commodore Japan engineer

Michael Tomczyk: VIC product manager and marketing

Plus additional fact-checking interviews with Chuck Peddle, Bill Herd and Bob Yannes. I did get a chance to talk with Jack Tramiel briefly but didn't get any new material from him unfortunately.

I don't want to ruin too many surprises, but I will mention a few things. First, thanks to John Feagans, an avid photographer, the book is populated with outstanding period photographs. One of the biggest surprises for me was finding out that current Nintendo CEO Satoru Iwata started his career programming VIC-20 games for Commodore Japan. The book digs deeper into actor William Shatner's association with Commodore and reveals some interesting tidbits. There is also a firsthand account of the horrifying PET Jet disaster. Lots of new changes like that.

The book will be available in stores in about a month. If you need it for Christmas, you can get it immediately from my publisher, Variant Press, which distributes signed copies from its website. <http://www.variantpress.com>.



-by Dick Estel

I have to take polite and gentle exception to your gratuitous slam against the "primitive" Commodore 64. It's apparent you have no idea what is being done with Commodore these days. Did you know they can run CD-ROM drives, flash drives, use modern printers, and much more?

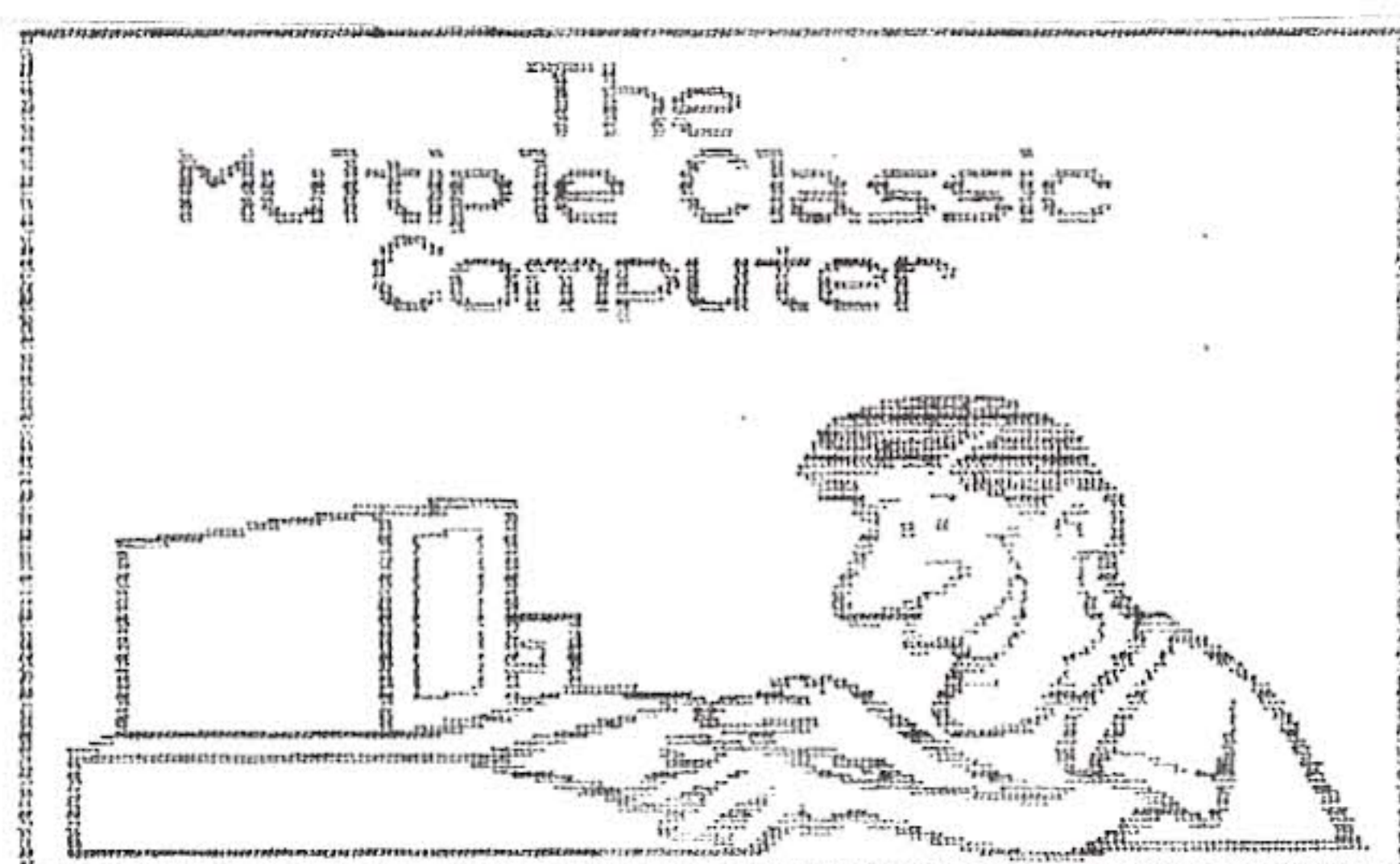


Although I belong to one of the few surviving Commodore clubs in the country, I readily admit I don't even own one anymore. I do still have my CMD 40 Mb hard drive, which I hook up to the club's C-128 occasionally to use a few programs that still are useful to us. When a 20 Mhz accelerator came out for the C-64 (about \$200), with a \$300 version for the 128 in the offing, I had to ask myself if I was willing to invest that much in such an aging system, and my answer was no. That's when I bought my first PC, a laughably weak and slow Windows 95 machine with 16 Mb of memory.

The things that people can make the old Commodores do are fairly costly, involving the creation of an interface that will translate Commodore language into something that newer stuff can understand.

Still there are surely thousands of Commodores still in use, and I don't think their users would appreciate being laughed at.

Always enjoy your columns, and despite the progress in E-Readers, I will probably never go that route. It's enough of a struggle trying to stay as smart as my "smart phone!"



-by Alex "Hummingbird"

This is a review of my experiences and thoughts of the MCC-216 (Multiple Classic Computer).

What is an MCC-216?

The MCC-216 is a Multiple Classic Computer that emulates, the Commodore 64 and soon, the Commodore Amiga and Atari 2600. It can potentially store up to eight

systems. This neat, little device uses emulation through custom hardware that is able to run in real-time with similar behaviour to the original hardware. Each Classic Computer is run through a core system that can run in both NTSC and PAL, in this instance, the Commodore 64.

You can reboot the system by simply, lightly pressing the power button (select Core Image) or via a regular PS/2 keyboard, pressing Ctrl-Alt-Del

For the Commodore PS/2 keyboard:

NTSC Mode -> Press: Commodore + Alt + Pi

PAL Mode -> Press: Commodore + Alt + Pound

switch discs -> Press: CTRL TAB key

F12 -> Display reading and CPU power

F11 -> Switch between fast and normal CPU mode

Hardware Specifications of the Device --

- Altera Cyclone 3 FPGA with 10k gates
  - 16 MByte SDRAM
  - 2 MByte flash
  - Micro SD card interface
  - USB host interface (USB 1.1) for future expansion
  - USB device interface (USB 1.1)
  - video out (4 Pin S-Video or VGA out)
  - Stereo audio out (3.5 mm jack)
  - 2x joystick interfaces (DB-9 connector)
  - JTAG interface (internal for programming and development)
  - GPIO interface (internal, additional I/O's for to-be-defined functionality)
- The Front Panel supports:
- 2x DB-9 joystick interfaces for classic retro joysticks
  - Micro SD card interface for FPGA cores, boot and system ROM, games and application data
  - USB host interface for future expansion or the MCC with external devices (e.g. USB keyboard and mouse, USB memory stick, etc.)
- The Back Panel supports:
- Mini USB interface for power supply



- Stereo audio out (3.5mm aux jack)  
- S-Video out (4-Pin connector) or VGA high quality video out

- PS-2 interface for keyboard  
- PS-2 interface for mouse

The MCC-216 uses a Micro SD card for storage of the system and ROM images. A 128 MB card is bundled in with the device, but I have used a 2GiB card for maximum storage. I believe it can read up to 8GiB cards.

The company, Cloanto, has a partnership with the developers of MCC, which is the reason why you get C64 Forever and a few demos and games to get you started. The demos and games are loaded through an index system, which reads the selected core (C64) that is chosen. A nice, selectable index of demos or games appears and by a simple press of the fire button on a joystick (supplied) or via a PS/2 Keyboard (C64 or PC - sold separately) and using the cursor keys and Enter/Space, you can load up the selected demo or game. The index file can be edited via a text editor or through an Excel spreadsheet designed by the MCC team (available from the MMC website), which allows you to produce a list of images with their folder paths, D64 or T64 image types, etc.. However, the filenames must be only eight characters with a suffix, e.g.,

+Application!

ID =

1.3.6.1.4.1.23153.1000.24.2.1

Type = game

Entity = "Mr. Chip"

Title = "Ad Infinitum"

Year = 1984

Genre = action-shooting

System = c-64

Port = 1, joystick

Tape =

"APPS#ADINFIM1.CHI#ADINFIM1.T64",

"APPS#Ad Infinitum (Mr. Chip, 1984, C64)#adinfinity.T64", "1"

However, if you add your own images, it could look like this:

+Application!

ID =

0.0.0.0.0.0.16384.1000.2.1

Type = game

Entity = "Elite"

Title = "Commando"

Year = 1985

Genre = arcade

System = c-64

Port = 2, joystick

Floppy =

"APPS#commando#commando.d64",

"APPS#commando#commando.d64", "1"

You can also use the Cloanto Archive Manager to expand your ROM library. Although, I found this method slightly confusing and couldn't get to grips with the Excel index creator/editor. So, I ended up creating and modifying the list manually.

My overall experience - 3 stars

There is a YouTube video of MMC in action at

<http://www.youtube.com/watch?v=nF8imGPOyPs>

Video Output - 2 stars

Now, over the last week, I have had a bit of a challenge trying to get one thing to work on the MCC-216. That is the video output! I was initially offered a VGA-output MCC but went for the S-video version. Unfortunately, it wasn't as simple as I thought it would be. In order for a four-pin S-video connection to fully work, you need a direct connection to a TV and not through a Scart adapter. If you do, do this, the video output will be black and white or Commodore 64 does classic Nintendo GameBoy style. You can use an S-video converter to composite video, but you will lose picture clarity and quality. I even tried using a NTSC/PAL video converter, but alas, no such luck, just colour, then black and white pulses. Strange! Yep! It sure was! Finally though, after replacing my LG 19" TV/monitor for a Hitachi 19" TV/monitor with a direct S-video

connection, was I able to experience full colour on the MCC-216. So, you must choose the right MCC with the right video output for you. The VGA output model would seem more compatible than S-Video and would provide a cleaner, crisper image quality.

Sound Output - 2 stars

No real quibbles, apart from the MCC is emulating the 8580 SID which produces, in some cases differences in SID playback and is quite hellish for sampled sounds,



i.e., they are too quiet. I am sure the 6581 SID would provide more compatibility for playback. A fine example is any sampled sounds in demos or games, try Bionic Commando by Capcom (Tim Follin music). For more information about the differences with C64 SID's, go to [http://en.wikipedia.org/wiki/MOS\\_Technology\\_SID](http://en.wikipedia.org/wiki/MOS_Technology_SID)

Demos and Games - 1541 Drive Emulation - 2 stars

I am not sure why, but some demos and games don't seem to load correctly or even crash. You either get garbled text or run ... ready. The one that really puzzled me was, Commando by Elite. I have tried several different trainer versions and each one loads perfectly. However, when it comes to pressing the fire button, the game just won't run. Jiggling around to the synthetic melodies of Rob Hubbard is good enough, but I want play the game as well. Sometimes, successful loading is totally random... quite puzzling, really.

Screen Positioning - 2 stars

Some demos and games use routines to take advantage of the screen borders, mainly for scrolling text or score bars. In this instance, Delta by Thalamus is a fine example. Roughly half of the score bar is missing, probably due to the screen positioning. Changing the screen modes on the TV doesn't make any difference, even from 4:3 (full screen) to 16:9 (widescreen).

Improvements +suggested! --

Loading Images

If the ROM images stored on the Micro SD cards could be read in as a folder, then read in as a disk or tape image, it would rule out the need for the menu system and would simplify the loading process.

Sound

A choice of SID chips would cater for lovers of both 8580 and 6581; perhaps it could be chosen on the core selection or other menus.

Price - 2 stars

The MCC-216 Standard +S-video model is currently priced @ \$199.99 USD.

The MCC-216 Colour Lightning +VGA model is currently priced @ \$219.99 USD.

Please visit the MCC website for prices and other accessories:  
<http://s318412817.e-shop.info/shop/catalog/browse?shopparam=>

Conclusion - 2 stars

The MCC-216 is a real box of tricks with real potential, and if the developers tweak and improve the environments on the C64 and future systems, I am sure it will be a winner.

For more detailed information on the Multiple Classic Computer, head over to +to!

<http://mcc-home.com/index.html>

RB's take on this: The Multiple Classic Computer seems more of a console and less of an expandable C64. The more traditional users will decry the lack of a serial port for Commodore disk drives; the positively traditional will even miss a cassette drive port. Its problems with games and demos, its screen-positioning troubles, and its use of the an 8580-emulated SID chip instead of the more compatible 6581 make the MCC less desirable. The MCC would need further improvement before I would buy one.

For what its worth, the creators of the MCC were invited to this year's Commodore Vegas Expo. They declined, saying that they had a show to attend one week later in Las Vegas.

## Monthly Meeting Report



December, 2010

-by Robert Bernardo & Dick Estel

On hand for the final FCUG meeting of 2010 were president Robert Bernardo, treasurer Dick Estel, and newly-elected board member Roger Van Pelt. Roger replaces Meredyth Dixon, who has left the Fresno area and has been unable to participate for some time.



We also elected Brad Strait as vice-president to replace Bill Terry, who has also been unable to attend for many months. Since Brad was absent, his election is subject to his approval, but we agreed to give him all the honors and few if any of the duties that go with the office (actually, honors are about as scarce as duties).

We took a look at a package of items that had been sent to us by Fender Tucker, former editor of the Loadstar disk magazine. Fender had needed some 5.25 floppy disks, and we were able to provide him with some. In addition to his payment, Fender sent the latest copy of Loadstar Compleat, a CD-ROM containing D64 images of virtually everything ever published on Loadstar "and more!" The CD also contains the VICE Commodore emulator program which will run the Loadstar files.

One of the cool things about Loadstar Compleat is that the CD comes inside the shell of a 5.25 inch disk (with the original media removed). Our copy even arrived in one of the last existing Loadstar paper sleeves, complete with the no longer valid Shreveport address.

Also in the package were a number of full cover magazine-style covers that were used with Loadstar disks that were sold on newsstands. A few of these may show up as door prizes at the next CommVEx.

Robert passed around the latest copy of Commodore Free, a monthly Commodore magazine published in England. Robert also announced that he is negotiating to buy a CommodoreOne, Jeri Ellsworth's C64 on an ATX board which fits in a PC case. You can check out Jeri's story at:

[http://en.wikipedia.org/wiki/Jeri\\_Ellsworth](http://en.wikipedia.org/wiki/Jeri_Ellsworth) (note there is an underscore between her first and last names).

Read about the C-1 at:

<http://www.c64upgra.de/c-one/>  
And here's another site with some cool stuff about Jeri:

<http://www.lifehacker.com.au/2010/02/macgyver-of-the-day-electronics-hacker-jeri-ellsworth/>

Robert is becoming quite the hardware guru (he would probably decline this designation). He showed a photo of the first prototype of the SUX 6400 (the Sound Ultimate Expander 6400 audio digitizer board for the C64) discussed in the November report, and dropped a couple of very obscure hints on his next project, codenamed Mr. T. Actually, there were no hints of any type; everything about this project is confidential for the time being, but we're expecting an announcement of great interest to the Commodore community one of these days.

Robert brought along three recently-acquired cartridges, two of which were related to ham radio work and which displayed a menu but performed no observable function; it appeared the AEA Pak Ratt and the AEA Com Fax cartridges were expecting an additional device to be connected to the Commodore. The other cart was a terminal program, Touchterm 3.9, which presented a fairly typical Commodore terminal menu, but of course, with no dial-up connection, we could not test it.

We did discover when Robert turned on his Apple Powerbook to show a Commodore-related e-mail, that the Pizza Pit now has a wireless connection, so we can read our email while munching Stan's specialties.

Finally, we looked at and took some photos of Robert's Amiga CDTV and the matching black keyboard he had acquired at the October Amiwest Show. The only things now needed to turn this game machine into a real computer are the matching mouse and disk drive.