

A Glenside  
Color Computer Club  
Publication

# CoCo ~

# 1 2 3

Summer's End 2022

Volume 41, Number 2



The Glenside Color Computer Club (GCCC) is the longest continually operating Tandy Color Computer user's group in the world.

### Corrections

In the last issue, the country Colombia was misspelled and corrected after the initial email distribution. Download the latest [corrected version](#) available online.

## Glenside Color Computer Club Officers

Jim Brain .....	Buck Stops Here President.....	<a href="mailto:president@glensideccc.com">president@glensideccc.com</a>
John Mark Mobley .....	Planning, Etc. Vice-President .....	<a href="mailto:vice-president@glensideccc.com">vice-president@glensideccc.com</a>
Brian Wieseler .....	Records & Reporting Secretary.....	<a href="mailto:secretary@glensideccc.com">secretary@glensideccc.com</a>
Eric Canales .....	Dues & Purchasing Treasurer.....	<a href="mailto:treasurer@glensideccc.com">treasurer@glensideccc.com</a>
Grant Leighty .....	CoCoFEST! Organizer Director of Special Events.....	<a href="mailto:cocofest@glensideccc.com">cocofest@glensideccc.com</a>

## Memory Map

<u>Editor's Notepad</u>	2
<u>President's Platen</u>	3
<u>Trea\$ury Notes</u>	4
<u>Operating System 9 #5</u>	4
<u>CoCo Suppliers</u>	5
<u>Tweaking LogiCall for Erase</u>	6
<u>A Brief History of LogiCall</u>	6
<u>Old &amp; New Games</u>	7
<u>Community Activity</u>	7
<u>CoCo News</u>	8
<u>Image Gallery</u>	13
<u>Calendar</u>	14

## Editor's Notepad



Grant Bloedow  
[newsletter@glensideccc.com](mailto:newsletter@glensideccc.com)



I've been putting in place some ideas I had for the upcoming issues and hope to have them incorporated and formalized by year-end.

It's been a pleasure reconnecting with the CoCo community this past year. So much to take in and find new again in this vintage computer, and all that is found, fixed, created, extended and happens in the retro computing community. I hope to highlight luminaries in our community in the next few issues.

If you have someone you'd like to put in the list to highlight in a future issue, send me an email! I'll confirm and reach out to each person before writing up a summary and including a focus article. There are long-time veterans of the CoCo community. Many have come from other retro platforms and paths. Every contribution to the community is a net positive that makes us stronger. So don't feel like a new luminary or CoCo pedigree is necessary.

## President's Platen



Jim Brain  
[president@glensideccc.com](mailto:president@glensideccc.com)



As the Summer winds down and Fall arrives, hobbies move more indoors and that bodes well for enjoying the CoCo. Or, at least that's how it tends to work in our household. When the weather is nicer outside, there's always something that demands I leave my "cave" and focus on something that can "only be done when the weather is good". To be honest, as much as I am not a huge fan of cold weather, I do relish that it affords me a nice excuse to work on indoor projects without appearing like I am shirking my outdoor responsibilities. Of course, some of those projects involve the CoCo, most often hardware design. Mostly, I am trying to learn some new facet of the system's design or attempting to get the system to do something it was probably never designed to do.

Fall also ushers in a set of classic computer shows, which I always enjoy attending. Just like CoCoFEST!, it's fun to reconnect with others in the community and catch up on lives and work and major events in everyone's life. Every year, it seems new faces emerge and enrich the conversation, either by being new to the community and requesting information, or by coming back after time away, desiring to share their knowledge or events and decisions long past. Either way, it definitely fills a void. Not to dismiss the CoCo per se, but it's often less about the hardware and more about the relationships that it fosters.

As some of you know, neither I nor my daughter were able to attend CoCoFEST! this year due to illness, which was frustrating. But, I'm glad others were able to attend and enjoy the event. I will catch up with some of you at other events this Fall and Winter, and hopefully see the rest of you at CoCoFEST! 2023.

I would like to again take this opportunity to congratulate John Mark Mobley and Eric Canales for volunteering to assist as part of our officer slate for 2023. I'd also like to welcome Brian Wieseler, who has volunteered to join our team as Secretary for the coming year. We thank also Brian Goers for the time he's given the club in various capacities over its lifetime.

Enjoy this newsletter and enjoy some indoor activities with your CoCo. At the very least, you can hold your hands over the left of the unit to keep your hands warm as the temperature falls!

## Treasury Notes



Eric Canales  
treasurer@glensideccc.com



This period's financials are showing us taking a few expenses as we gear up for this upcoming CoCoFEST! 2023. Our reserve is very healthy so we have plenty of room to make sure we put on a great show this year!

## June 2022

### Income

Interest/Rewards ..... \$2.59  
-Income Total-: ..... **\$2.59**

### Expenses

Newsletter: ..... \$9.07  
Office Supplies: ..... \$34.35  
Website: ..... \$12.00  
Misc. .... \$49.18  
-Expenses Total-: ..... \$104.60

Total: ..... **(\$102.01)**

## July 2022

### Income

Interest/Rewards ..... \$2.24  
-Income Total-: ..... **\$2.24**

### Expenses

Newsletter: ..... \$9.07  
Tandy Assembly: ..... \$50.00  
Website: ..... \$12.00  
Venue Search: ..... \$575.08  
-Expenses Total-: ..... \$646.15

Total: ..... **(\$643.91)**

## August 2022

### Income

Membership Dues ..... \$15.00  
Interest/Rewards ..... \$2.17  
-Income Total-: ..... **\$17.17**

### Expenses

Newsletter (Refund): (\$8.50)  
Tandy Assembly: ..... \$20.00  
Website: ..... \$14.40  
VCF Midwest: ..... \$100.00  
CoCoFEST! 2023: ..... \$1115.00  
-Expenses Total-: ..... \$646.15

Total: ..... **(\$1,223.73)**

## September 2022

### Income

Membership Dues ..... \$15.00  
Interest/Rewards ..... \$2.32  
-Income Total-: ..... **\$17.32**

### Expenses

Website: ..... \$14.40  
VCF Midwest: ..... \$16.95  
PayPal Fees: ..... \$16.30  
-Expenses Total-: ..... \$47.65

Total: ..... **(\$30.33)**

A few things to note from the above financials, we've stopped paying Micro\$oft for the newsletter software (Office 365) as our new Newsletter Editor, Grant B., is using new software. Our website expenses have gone up \$2.40, we only have our webhost and/or some political party to blame for this. We have taken an interest in sponsoring VCF Midwest and Tandy Assembly, as the general feeling is we want to support our local computer groups. Lastly we see some PayPal fees hit us in September, this was a donation that was sent via PayPal as we work on getting a cool new CoCo themed computer ready for the shows. The fees have already been reimbursed as part of the transaction and will be a wash at the year's end financials. More news to come on that by (hopefully) next newsletter!

## Operating System 9 #5

### Gettin clicky with it.



Rick Ulland  
Contributor

How does one click? Seems easy, Tandy sold it in a box. Start Multivue, and there be tales of mice and menu. But out of this said box 'Multi-vue' didn't run much more than at a stagger. And the desk widgets were just... sad. With a hard drive it was interesting, but still didn't draw a crowd.

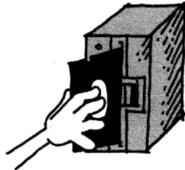
CoCo's had a little work done, yet Multivue is still in progress. I've been playing user vs. admin vs. programmer recently, resulting in this mess. A short diversion on disk directories as menu, and a run through for the BASIC09 authors who'd like some of that sweet, sweet menu action in their programs.

If you've not played with Mvue, it looks like your typical file browser window. Its menus on top and device icons down the left. Ignoring both, let's look at what Mvue actually does in the main part of the window where the browsing happens. On its travels though the directory tree, the system takes note of files named AIF.xxx (or aif.xxx, but use AIF) where xxx is some three letter extension. The aif is displayed as the ICON named within. Afterwards, any matching data files will be also. Once you Click a data file, you get the correct app and file preloaded.

If you've got EOU, many things are already set up, which is a problem. There are many, many, many things. They all have to be displayed, and Mvue is memorizing all those AIF... consider this.

Begin by creating a user directory at the root of each disk device, example /dd/AAA. After creation, view /dd in MultiVue and do File, Sort. Now AAA is the first icon on the first screen, no need to scroll or drill down. Copy directories and AIF files you actually use into AAA. Nobody will know it's secretly a menu.

Remember the AIF cache? When a user moves from /dd/USR into /dd/USR/WRITE they might encounter an AIF.doc that specs a text editor. From this point until a device icon is clicked again, all \*.doc files on device /dd are associated with the text editor. If the user instead goes to /dd/USR/READ, that AIF.doc might spec a text viewer instead.



To organize a user space, one example is put all the read mostly doc files in /dd/AAA/READ/SOMEDIRS. User McUserface will barge right in with all viewers blazing. To edit something, thoughtful admins first visit /dd/AAA/WRITE to grab the 'editing suite', and then back up one directory (don't click dd icon!) before proceeding to .../READ/SOMEDIRS. Still carrying the original editor icons from WRITE.

Symlinks would be handy about now. Instead we'll use our cheap storage space and just move some files around. It's much easier to do from the command line. Let's do that. To keep things simple, we'll assume device /dd. You've already made /dd/AAA, and ignore concepts like /dd/AAA/GAMES/NAME because example. But divide and conquer will be useful.

So, you've wandered around EOU, found /dd/GAMES/LEVEL2/ARCADE/KORONIS and decided to put that game on the short list. Hit the Tandy menu (the X left of files, identifies as hourglass) then 'shell'. Click towards upper left, finally lower right in the new window that appears. You now have a text shell in the KORONIS directory, dir will show all the game files. Use dsave to copy this into a user folder:

This bears some explanation. First, there is a hidden spec. Dsave copies from the current data directory (point in one device and directory tree) to the path you spec. Without options, it copies from that point, including subdirectories, to the end of the drive.

Although that's not totally true, dsave doesn't copy anything. It writes a shell script. The final ! shell bit 'pipes' its script to a new shell for immediate execution. It could be redirected to a file for editing, or just a second chance to check.

```
dsave /dd/AAA/KORONIS > file.bat
(do stuff to file.bat)
file.bat
```

This process will work for speeding up access to a whole lot of things in EOU. There are of course different situations. We'll deal with those as time goes by.

## WindInt? I barely knew it.

So how about using WindInt menus in your BASIC09 programs? About page 9-13 of the official 'Programmer's Notes' you'll decide Multivue(sic) is not easy, or even an answer, to getting clicky. But there have been developments.

BASIC09 itself is a very old fashioned, text based language/database. It is suitable for teletype or other serial terminal as any proper multiuser language would be. No graphics. But it can run other procedures in any language... so desktop computers got a few official bolt ons.

```
gfx - CoCo1/2 graphics
gfx2 - CoCo3 graphics
syscall - OS9 system interface
inkey - 'glass tty' single key entry
```

gfx and gfx2 began as output only video drivers. Want a mouse cursor, notmyjob, make some syscalls. Menus? See: mouse. Then make lots of syscalls. All in the identical form 'number,number,syscall(hex number,number)' Have you seen Commodore BASIC? Luckily, the NitroS9 folks have been chipping away at this problem for years, to the point gfx2 now includes not only the mouse, but menus to click it on.

Check out the video at [https://youtu.be/FJm2G\\_n1Gx0](https://youtu.be/FJm2G_n1Gx0), and here you can find demo code adapted to this run: <https://tinyurl.com/bdfaz9t9>

The readme on github covers the process of defining menus for your own purposes, here we'll just fly over the peaks. Start by ignoring the entire text menu, and set a menu cursor and a mouse.

```
RUN gfx2("gcset",$CA,1)
RUN gfx2("setmouse",3,255,1)
```

Then define some menus. The system menu\_id numbers are shared by everyone everywhere, so we've defined variables like MId\_Book top of the program. So here is our menu #1, aka "Bookmark", aka system number MId\_Book. It's a 10x4 dropdown of numbered items tagged 'm1'. There is no defined style for hotkeys, we've chosen to style them "<H>otkey".

```
RUNgfx2("menu",wd,1,"Bookmark",MId_Book,
10,4,m1,enable)
RUN gfx2("item",m1,1,"<B>M this",enable)
RUN gfx2("item",m1,2,"<G>oto BM",enable)
RUN
gfx2("item",m1,3,"<M>anageBM",disable)
RUN gfx2("item",m1,4,"<L>inks",enable)
```

Menus or items tagged 'disable' will appear greyed out onscreen and not respond. Can't read this status back yet, so remember where you parked it.

But the newest new menu thing as of EOU 1.0. Hotkeys work properly! In other words the menu doesn't have to be open. If the menubar is simply active hotkeys are too. And viola! 'Discoverable' UI a user can memorize at their own speed, plus a mouse for youngsters and senior moments.

This is not baked into gfx2 or anything, as you'll see starting... now.

Once all the menus are laid in, we can start a window and turn on the mouse

```
RUN gfx2("wnset",2,wd)
RUN gfx2("onmouse",0)
RUN gfx2("mouse",valid,fire,msx,msy,
area,fullx,fully)
```

Originally dev's work be done, loop your loop and wait for a click. But that was mouse or nothing. If a user is already typing along that's just wrong. So we need to add a hotkey check, and wouldn't you know it, running inkey over & over & over a whole buncha times really wrecks things! The lightweight solution is to ask the system for help. Like this, I'm told:

```
regs.a:=0 \regs.b:=1 \hotkey:=""
RUN byscall($80,regs)
IF LAND(regs.cc,1)=0 THEN
RUN bnkey(hotkey)
...
```

Let's compare this old school approach to the new gfx2 calls. Starting with, guess what this does? Especially since it's newer, and when you look up getstat \$80 in the ancient texts, it won't be there. Even if, imagine looking up dozens of these calls in a row? Toss some love towards the EOU folks and the NitroS9 project overall. Not just alive, but growing.

Anyway, in this context the syscall indicates a keypress. So run bnkey(inkey) to check which key is being pressed only if a key was pressed. Wonder which well known OS-9 guru might have come up with that sort of speedup idea?

Returning to our new hotkey concept conceptually, what defines a hotkey? Regular keys are spoken for, CTRL keys are too. But <ALT>+key is both rare and easy to process. Let's steal it and rejoin our program in progress.

If this menu were part of a word processor, you'd pick off the regular characters now. Demo is going to ignore anything not in the ALT range. Any ALT

codes found are shifted down to regular printable text, and it's off to the string compares. If hotkey is in the list "bgml" it's menu Mid\_Book, item 1 to 4 respectively. Continue for other menus and hotkeys.

```
IF hotkey<>"" AND ASC(hotkey)>128 THEN
hotkey=CHR$(ASC(hotkey)-128)
menu_id:=0 \menu_item:=0
menu_item:=SUBSTR(hotkey,"bgml")
IF menu_item>0 THEN
menu_id:=MIId_Book
ELSE
menu_item:=SUBSTR(hotkey,"crnps")
IF menu_item>0 THEN
menu_id:=MIId_Page
```

Not all that clicky yet, let's close with the process for implementing the actual clicky mouse menus. These first lines ask, did user click on the active screen? If so, get menu\_id and menu\_item.

```
IF fire=1 AND area=1 THEN
RUN gfx2("getsel",menu_id,menu_item)
```

That's it.

However you got here, we have a menu\_id and menu\_item number. Some kind of decision tree ensues and the program loops around for another go. That's your bit, let us know what you come up with!

Next issue, more details about this Multivue thing. It's awfully handy, even if you don't use it.

-ricku

Feedback is good. Please email [rick@computerconnect.com](mailto:rick@computerconnect.com) with this month's article issues or questions. I'll try to keep up real time, at least correct the errors of my ways here.

## OS-9 Trick!

Forgot I knew this copy trick:

```
To get /dd/foo/bar.txt copied to
/h1/baz/bar.txt with minimum typing,
leave out the second arg!
cd /h1/baz; copy /dd/foo/bar.txt
```

L Curtis Boyle points out there is a PATH, or list of execution paths stored in a variable. This technique doesn't seem to be used much? I'll have to play with it.

## CoCo Suppliers



## COCOMAN.BIZ

maker of the switch-a-roo  
<http://cocoman.biz>



## The Zippster Zone

- Adventures in retrocomputing with the CoCo -

## COMPUTER CONECT

All projects and vendors may be listed here. If you would like to be added, or you're no longer selling or wish to be removed, send a link/note to: [newsletter@glensideccc.com](mailto:newsletter@glensideccc.com)

# Tweaking LogiCall for Erase

by Bob Swoger

While reviewing various articles about [LogiCall](#) for the CoCo3, I found two errors that bothered me. The first was one that stated LogiCall worked on ALL CoCos. Not so! It only works on CoCo3s! This is because LogiCall was originally written for the Sinclair Spectrum and the Timex/Sinclair 2068, both computers having 40 column screens. CoCo's I and II have only 32 column screens.

The second issue was that one writer stated that "you may press either E, D, K or 7 to remove a file from disk. (The 7 key on the Sinclair is labeled ERASE.)"

I'm afraid this was an overstated fact, LogiCall did not handle all these options. One of LogiCall's purposes is to accommodate the thinking of the average user. To remove a file from disk most MSDOS users use del for Delete.

In Europe they use Erase. Tandy users are more violent, they use KILL!

LogiCall was already using K for another function but LogiCall can get around this. The LogiCall program is called L.BAS. When you start up VCC, L.BAS is called and is running if you see the Drive prompt. Type "Q" <ENTER> and

LogiCall will cease running. Then:

- 1.) Change line number 31 to 32
- 2.) Add a new line

```
31 IF DB$ = "D" OR DB$ = "K" THEN DB$ = ""; PS = "E";  
GOTO 130
```

Now lets get really outrageous.

- 3.) Change line 130 to read:

```
130 IF PS = "7" OR PS = "E" OR PS = "DEL" OR PS = "DELETE" OR  
PS = "ERASE" OR PS = "KILL" THEN LOCATE7,22:PRINT X$;  
LOCATE0,22; INPUT "ERASE";  
PS: KILL PS: GOTO 10
```

Type RUN and type "S" at the prompt. Now, at the Drive prompt, if you press E, D, K, 7, DEL, DELETE, ERASE or KILL, you will get the ERASE prompt.

Remember to save this new version on every drive. Do it your way.

This upgrade was made before 2018, so if you have been upgrading lately you may already have this fix.

Bob Swoger, Communications  
Glenside Color Computer Club

# A Brief History of LogiCall

by Bob Swoger



While working as a technician for Motorola, I learned to program IBM, DEC, and Xerox mainframe computers. The first desktop computer I used was Hewlett Packard's HP9830 programming Motorola's top of the line MICOR 100 Watt 12 Channel UHF all transistor 2-way radios.

During the late 70's engineers in our computer club were purchasing Radio Shack Color Computers but being only a technician the price was too high for my income. In 1983 I received a Timex Sinclair TS2068 computer for Christmas.

Sinclair had promised they would provide a floppy disk interface but never came through. Several third-party vendors did create floppy drive interfaces for the TS2068 computer. I chose LarKen, a Canadian vendor. LarKen had provided a way to switch between the TS2068 and UK's Sinclair Spectrum ROMs on the fly allowing my computer to run the software written for either machine.

If necessity is the mother of invention, laziness is the father. To use the LarKen floppy system one had to type "Randomize User 100:" in front of all calls involving floppy operation. It was at this time I began to write what was to become the LogiCall operating system. It was used to call disk management operations and call programs to load and run using less keystrokes.

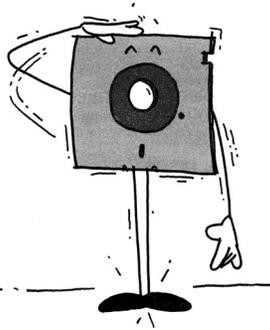
The Larkin system also provided a battery backed up Static RAM disk in the system allowing five drives, zero through four. The result was that when you turn on the TS2068, by the time the screen of your monitor lit up the computer had already run three programs and displayed the catalog of the first floppy drive on your screen followed by a "Drive?" prompt asking for which of your five drives to display next. From the "Drive?" prompt pressing <Enter> without entering a drive number changes to the "Program?" prompt. You could then type in the name of the program you saw on the screen and that program would run.

If you pressed the F1 key, you were given a two-page help file of 22 features that LogiCall could provide. This help feature kept you from having to go to a manual each time you had forgotten what keystroke to use. The disk management features included movement of files from one disk to another, renaming files, deleting files, disk copying and disk formatting. Also available was the ability of a single keystroke to print to either a large printer or the smaller Sinclair four inch-wide printer. A single keystroke to call in your terminal package, word processor or disk management system was provided.

If instead of entering the program name to run, pressing enter one more time highlighted the first program in the disk catalog. Using the arrow keys you could highlight the program you wanted to run instead of typing in the name of the program, again, saving more typing. At the Dayton Computer Fest in 1995 LogiCall V6 was given to two vendors to sell rather than selling it myself.

At the Annual Glenside Picnic at Forrest Illinois in 2010 we were discussing the fact that CoCo 3 had several new high capacity storage systems, VCC and Drive Wire. It seemed to me that LogiCall could provide a great operating system to improve CoCo 3 operation. John Mark Mobley and Chris Hawks consented to give me help converting Cambridge BASIC code to Radio Shack code.

I noted that CoCo 3 world had far more appliance operator types than computer development type users. Case in point, I asked two computer club presidents how to erase a file from disk. They didn't know how. So I made LogiCall accept several different inputs to execute the desired function. For example, F1, "H" and "?" all call the HELP file. O, O, E and L returns one to LogiCall from the FORMAT and MOVE utilities.



At our next CoCoFEST! we offered a free thumb drive containing LogiCall V7. We handed out over 100 copies as door prizes. At this time, twelve years after its creation, we still know of 86 LogiCall owners.

At the CoCoFEST! 2013 Aaron Wolfe arranged a competition for CoCo Software.

[LogiCall V7](#) took first place. Aaron noted that more than an operating system, LogiCall was a system ensemble. As an ensemble it did not take away any RAM space from the primary running program. Once the primary program is called, LogiCall exits RAM and is called back in after the called program has finished running.

To acquire LogiCall for CoCo 3 or VCC, contact Bob Swoger at [rswoogerATaol.com](mailto:rswoogerATaol.com)

## Old & New Games

By Grant Bloedow

We have had a few releases this year that are exciting. In the last issue was a news item for the release of **Ghost Rush** by Paul Shoemaker. I wanted to highlight the work of community members and their contributions! As games are released and available They will get a highlight here!

## Recent Releases

### Space Pirate Kimiko

by Dave Veary (MrDave6309)

This game has impressive graphics, and future options to run with an add-on sprite cartridge for music and graphics on older hardware. While it will run on hardware, the full-featured game is run via VCC for now.

<https://youtu.be/PL2TvLbX0q8>

### Robot Nightmare

by Ken Reighard

<https://kenscococorner.itch.io/>

Another nightmare... the stuff of legends! Enjoy this new release from Ken. I sense a theme forming.

<https://youtu.be/bOLbp3ZIlmM>

### Ghost Rush (Halloween Edition)

by Paul Shoemaker

<https://tinyurl.com/yendap92>

Unique take on the Pac-Man characters, with the Ghost as the protagonist. Paul draws on the spirit of the season with this variant. It has an amazing flexibility to run on MC10, CoCos 1-3 and Dragon after smashing a bug while at a recent Dragon meetup.

### Zero Hour

by Nick Marentes

<https://nickmarentes.com/ZeroHour/index.html>

## Community Activity



(Episode 1, May 5, 2015)



(Episode 1, Mar 3, 2017)



(Episode 1, May 17, 2019)



(Episode 1, Oct 8, 2019)



(Episode 1, Nov 18, 2021)



(Episode 1, Jun 19, 2022)

## Notable software finds online

Rick Adams:  
Temple of Rom II  
Omnistar  
Bomb Threat  
<https://rickadams.itch.io>

Ken Reighard:  
Robot Nightmare  
Nightmare Highway  
Treasure of Kantu  
Spy, and more  
<https://kenscococorner.itch.io>

Paul Thayer  
Timberman  
(CoCo game, with ongoing port to MC-10 by Simon Jonasson)  
<https://pthayer100.itch.io/timber-man>

I'd love to showcase your podcasts/periodic posts. Just send me an email at [newsletter@glesideccc.com](mailto:newsletter@glesideccc.com)

# CoCo News

By Salvador Garcia



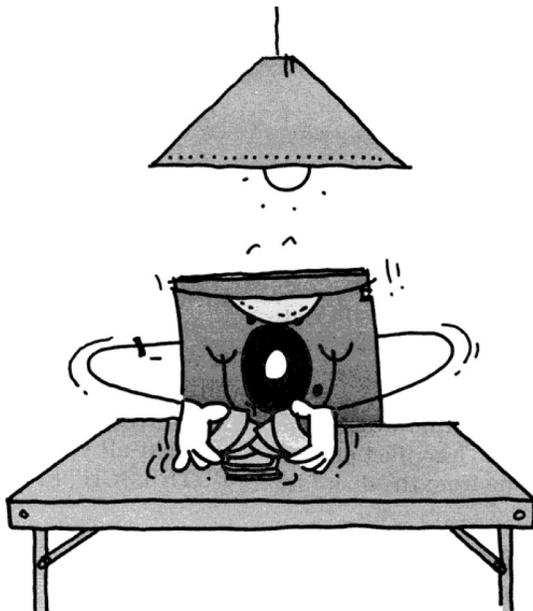
Will Pitts proudly presented his new build. This is a modern Windows 11 computer based on the Gigabyte GA-H57M-USB 3.0 motherboard, equipped with a Core i7 870, 8GB RAM, 128GB SSD and a 1TB hard drive. This motherboard has the unique ability to support one floppy, so Will decided to incorporate a 5.25" drive. His objective, years in the making, was to have a modern build with a 5.25" floppy drive. Congratulations to Will! He mentions that his next project is connecting an 8" floppy drive.

We wish him luck and look forward to report this accomplishment in a future issue of this newsletter.

```
DoDraw ldd Sprite.Y,y * Get the Y pos
jsr DoIt * Do something
ldd Sprite.X,y * Get the X Pos
jsr DoIt * Do something
lda Sprite.Id,y * Get the image
jmp DrawEx * Go draw it
```

Chet Simpson posted and shared his latest video, titled "Data Structures, 6809 Assembly Language, and You!" As per his description, the video discusses using data structures with 6809 assembly language.

<https://youtu.be/FzYrwBAws-s>



The CoCo Community welcomes another game for the Color Computer! Fabrizio Caruso announced that his game, Cross Snake, was ready. He provided links to download it and other games. Cross Snake, as well as the others, were written in C using Cross-Lib, a multi-platform framework that supports over 200 systems.

Cross-Lib github:  
<https://tinyurl.com/2p897nja>

XHorde:  
<https://tinyurl.com/mr34crsh>

XSnake:  
<https://tinyurl.com/mw3hvwu3>

XBomber:  
<https://tinyurl.com/4pxw47d2>

XShoot:  
<https://tinyurl.com/2s4m9tsd>

XChase:  
<https://tinyurl.com/y3bwj88s>



Marco Van de Meulenhof announced that, as a hobby, he is making badges. Check out his Website to see what badges are available. Spoiler alert: These are not just for the Color Computer, and it isn't just badges!

[www.retrobadgeman.com](http://www.retrobadgeman.com)



Antonio Caballero posed an interesting question the Facebook group: Could it be possible to do something like this on the Color Computer? For reference, he posted the following video:

<https://youtu.be/4e0fRKHG7Hk>

## thorpej/cocofs

A tool for interacting with TRS-80 Color Computer disk images

Jason Thorpe shared with the community his utility cocofs to interact with the contents of Coco disk images. His utility is available on GitHub and run on macOS, NetBSD. He added that this utility should work on any UNIX-like system with a C99 compiler. Will also build in Windows using MinGW-w64.

<https://tinyurl.com/5n8adbvp>

The binary for Windows is located here:

<https://github.com/thorpej/cocofs/releases/tag/v1.0>



Have you longed to have a MAME bezel that replicates the TV famously used by Radio Shack in their Color Computer advertising? Do you feel that your life isn't complete without this bezel? If so, fret no more! Tim Lindner has done all the work for you! He's located that exact same TV, acquired a picture of it and now has created a bezel for the MAME emulator. Download at the following link:

<https://tinyurl.com/37pcc5yx>



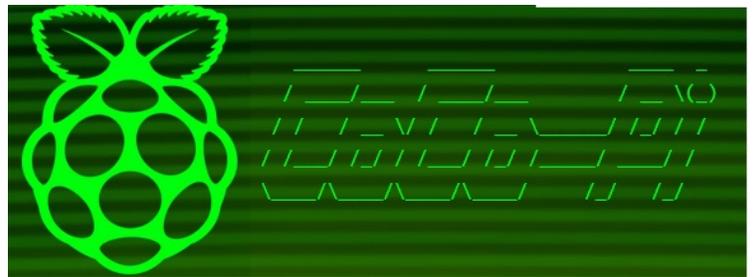
Wait! What? Brendan Donahe is at it again! He shared this proof-of-concept demo video of a USB keyboard adapter using the Raspberry Pi Pico connected to an MC-10 Micro Color Computer.

<https://youtu.be/MPuWSxc4ej8>



Allen Huffman shared a link to a ZIP file which packages the XRoar Color Computer emulator plus the NitroS-9 EOF release. Allen says "Run XROAR, type DOS and you are in EoU." The distribution uses Michael Furman's boot rom and IDE hard drive image.

<https://tinyurl.com/2cw4e2ta>

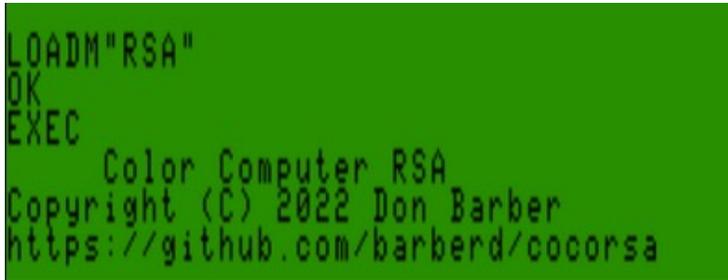


Ron Klein continues to release updates and improvements to the CoCo-Pi Project! Version 0.248 which includes the newest MAME version. From the CoCo Pi Website: When updating your CoCo-Pi, please make sure to select "Update CoCo-Pi from git repo" and "Run CoCo-Pi fix script" in order for all the changes to be applied. Install the latest MAME package (from the same menu). Select name-0.248-1 as the default version.

<https://tinyurl.com/4mcnp3c>

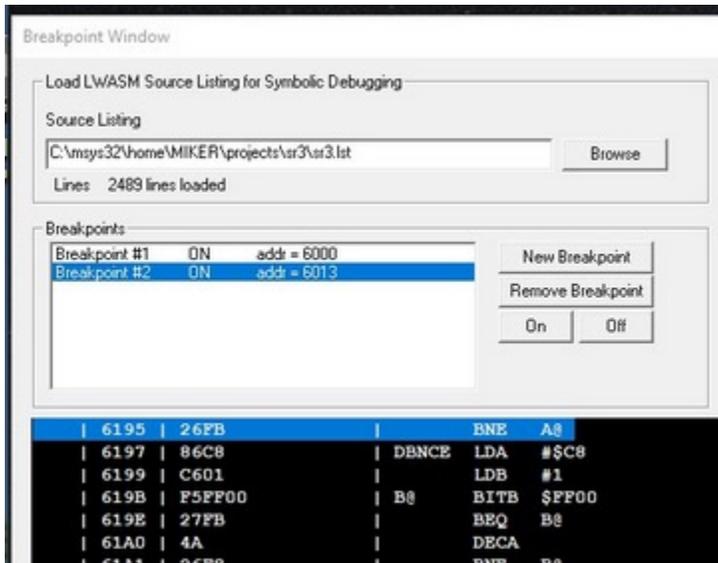
Ron also announced the availability of the new CMOC 0.1.79 package for the CoCo-Pi:

<https://tinyurl.com/2d38jwzs>



Don Barber shared “Color Computer RSA”, a software piece that he wrote. He states, “This is a program for the Tandy / Radio-Shack TRS-80 Color Computer to perform RSA key generation, encryption, and decryption. The code is all written in 6809 assembly. It will operate with up to 2048-bit keys.” The software, along with its source, is available at the following link:

<https://tinyurl.com/ywdbfcfm>



Mike Rojas is working on a Source Level Debugger module for the VCC emulator. The module will include a processor state and memory display. He mentions that this module could be adapted to the OVCC also. He has a GitHub project here:

<https://tinyurl.com/ypaavp7a>



James Rye shared a link to his online DSK editor for the CoCo. He mentions that it is a work in progress. This includes a text window that can tokenize and detokenize BASIC programs and save the result to a DSK file. The DSK editor is at the following link:

<https://jimrye.org/cocodsk>



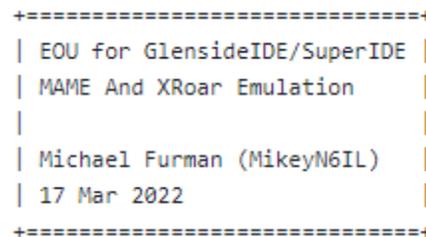
Allen Huffman shared a link to his GitHub page that hosts his CoCo 3 game Invaders09 for the Color Computer 3 running OS-9 Level II.

<https://github.com/allenhuffman/Invaders09>

Also, catch the video where he discusses this game:

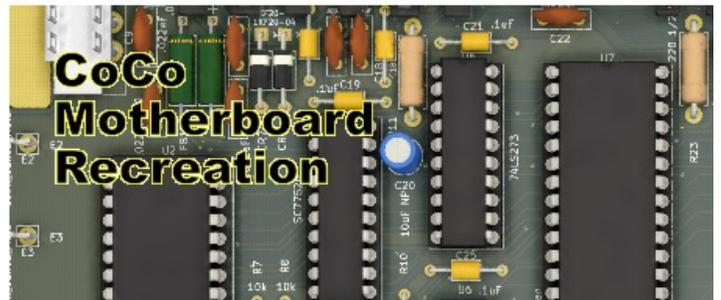
<https://youtu.be/xTzC1qTPbto>

Although this game initially debuted in 1994, Allen mentioned that Jamie Cho made substantial changes to the game and revamped the GitHub page. Allen now says that it runs on NitROS-9, but is not sure if it will still run on OS-9.



Allen Huffman shared that he had found a gold nugget. Michael Furman put together a package for XRoar that includes the HBDOS ROM and easily launches the EOU edition of NitROS-9. More information at the following link:

<https://tinyurl.com/3fp6fewr>



Rocky Hill shared news that he had recreated CoCo motherboards. He has the Gerber files available on the GitHub page. There are several models of motherboards that have been recreated. Rocky mentioned that he sourced most of the parts and the BOM is or will be available when it is ready.

<https://tinyurl.com/y5zryjt4>

# Tandy Assembly

Oct 2, 2022  
Courtyard by Marriott Springfield  
100 S Fountain Ave.  
Springfield, OH 45502

Be there or be analog! Party with friends with the same goals! Learn something new about your favorite Tandy/Radio Shack computer! Be part of a community that constantly works to make these computers better, stronger, faster!

[Editors note: The publication was not made in time for this announcement and event. We hope everyone who wished to attend made it there, and would love to receive a summary of the show for a future issue.]



## Undocumented!

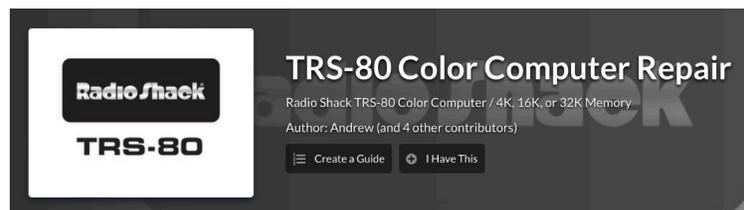
Graham Toal posted a few links to documentation that presents even more undocumented instructions for the Motorola 6809 and Hitachi 63C09. Check them out! Are any of these instructions new to you?

<https://tinyurl.com/yn3ae8sj>

<https://tinyurl.com/5cfwydy>

Plus, the source for the decoder:

<https://tinyurl.com/2n7ntdwd>



This came across my screen recently and was surprising to see a popular modern computer repair site highlighting the venerable Color Computer!

[www.ifixit.com/Device/TRS-80\\_Color\\_Computer](http://www.ifixit.com/Device/TRS-80_Color_Computer)



Mike Rojas' long awaited keyboard membrane replacements for the CoCo 1, 2 and 3 are now available! If you have a keyboard that's seen better days these membranes might bring it back to life. If interested contact Mike Rojas via Facebook Messenger or email him directly at [mikerojas36 <at> gmail <dot> com](mailto:mikerojas36@gmail.com). As of this writing many of these membranes have been sold. Contact Mike to get on his list.

## Back to

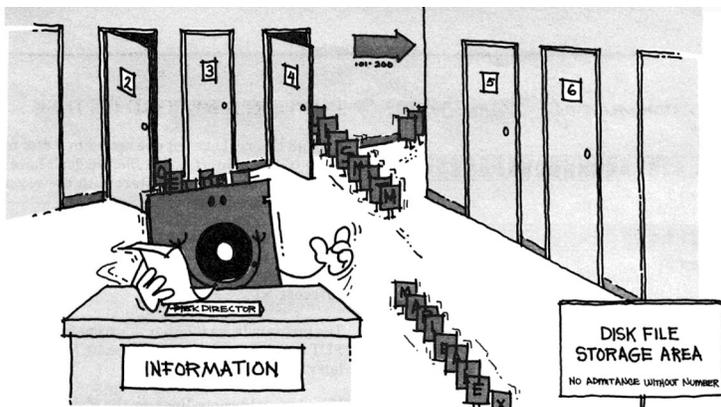
# BASIC

Carl England shared a BASIC listing. His description: "On the SDC, this program will copy a 40-track double-sided real OS-9 floppy to an 80-track single-sided disk image. Required files before starting the copy are BLANK35.DSK, BLANK40.DSK, and BLANK80.DSK to receive files from different-sized real floppies. It ends by patching the copied image to make it a "single-sided" image. (lines 730-780) Unfortunately, 80-track single-sided images created on the SDC are incompatible with VCC, so if you are planning on migrating the files to VCC, it will be necessary to create the blank disks in another fashion. (the 40-track images are compatible.) I can now recover all my 5 1/4" OS-9 disks!"

### The BASIC listing:

```
10 DRIVE0,OFF:DRIVE1,"BLANK35
20 POKE234,2:POKE235,1:POKE236,0:POKE237,1:POKE238,4:POKE239,0
30 EXEC&HD75F:IFPEEK(240)=0THEN50
40 DSKINI1
50 CLS:PRINT:PRINT:PRINT:PRINT:PRINT:PRINT:PRINT:PRINT
60 INPUT"INSERT FLOPPY";AS
70 MA=&HD89D
80 PRINT"CHECKING DRIVE 0
90 POKEMA,1
100 POKE234,2:POKE235,0:POKE236,0:POKE237,1:POKE238,4:
    POKE239,0
110 DS=&HD75F
120 EXECDS:ER=PEEK(240)
130 IFER<>0 AND ER<>8 THENCLS:PRINT"NO DISK IN DRIVE 0":END
140 TR=35:POKE236,35:EXECDS:ER=PEEK(240)
150 IFER<>0 AND ER<>8THEN180
160 TR=40:POKE236,40:EXECDS:ER=PEEK(240)
170 IFER<>0ANDER<>8THEN180
180 SI=1:POKEMA,65:POKE236,0:EXECDS:ER=PEEK(240)
190 POKEMA,1
200 IFER=00RER=8THENSI=2
210 IFSI=2THENDRIVE1,"BLANK80":GOTO240
220 IFTR=40THENDRIVE1,"BLANK40
230 CLS
240 PRINT"COPYING";TR:CHRS(8);"- TRACK"
250 IFSI=1THENPRINT"SINGLE-SIDED          DISK"ELSE
    PRINT"DOUBLE:SIDED DISK
```

```
260 LINEINPUT"PRESS ENTER TO CONTINUE";AS
270 CLS
280 POKE238,4:POKE239,0
290 FORI=1TOSI
300 POKEMA,(I-1)*64+1
310 POKEMA+1,(I-1)*64+2
320 POKE55292,162+8*(SI-1)
330 FORJ=0TOTR-1
340 FORK=1TO18
350 Z=J*SI+(I-1)
360 PRINT@256,"":PRINT"SIDE:  "I
370 PRINT"TRACK:  "J;"  ";Z
380 PRINT"SECTOR:"K
390 POKE234,2:POKE235,0:POKE236,J:POKE237,K
400 EXECDS
410 ER=PEEK(240):IFER=0THEN480
420 GOSUB570
430 IFQ$="A"THEN560
440 IFQ$="R"THEN400
450 IFQ$="I"THEN 480
460 IFQ$="S"THEN550
470 '
480 POKE234,3:POKE235,1:POKE236,Z
490 EXECDS
500 ER=PEEK(240):IFER=0THEN550
510 GOSUB570
520 IFQ$="A"THEN560
530 IFQ$="R"THEN490
540 IFQ$="I"THEN490
550 NEXTK,J,I
560 POKEMA,1:POKEMA+1,2:CLS:GOTO710
570 PRINT@384,"":PRINT:PRINT:PRINT@384,"";
580 IFER=1THENPRINT"BUSY ERROR":GOTO660
590 IFER=2THENPRINT"INDEX ERROR":GOTO660
600 IFER=4THENPRINT"LOST DATA ERROR":GOTO660
610 IFER=8THENPRINT"CRC ERROR":GOTO660
620 IFER=16THENPRINT"SEEK ERROR":GOTO660
630 IFER=32THENPRINT"HEAD LOADED ERROR":GOTO660640
IFER=64THENPRINT"WRITE PROTECT ERROR":GOTO660
650 IFER+128THENPRINT"BUSY ERROR":GOTO660
660 PRINT"ON DRIVE"PEEK(235)
670 PRINT"(R)ETRY (S)KIP";
680 IFPEEK(235)=0THENPRINT" (I)GNORE";
690 PRINT" (A)BORT";
700 QS=INKEYS: IFQ$<>"R"ANDQ$<>"S"ANDQ$<>"I"ANDQ$<>"A"THEN700
    ELSERETURN
710 IFSI<>2THEN790
720 PRINT"MODIFYING ID SECTOR
730 CLEAR400:DSKI$1,0,1,AS,BS
740 PRINTASC(MID$(AS,17))
750 X=ASC(MID$(AS,17))AND6
760 XS=CHRS(X)
770 MIDS(AS,17,1)=XS
780 DSKO$1,0,1,AS,BS
790 PRINT"FINISHED
```



## Image Gallery



Showcasing the memory of the Queen.  
– Ron Delveaux, CocoDiscord Art Gallery



Ye Olde Pumpkin highlighted several variations in the Rainbow Magazine over the years.

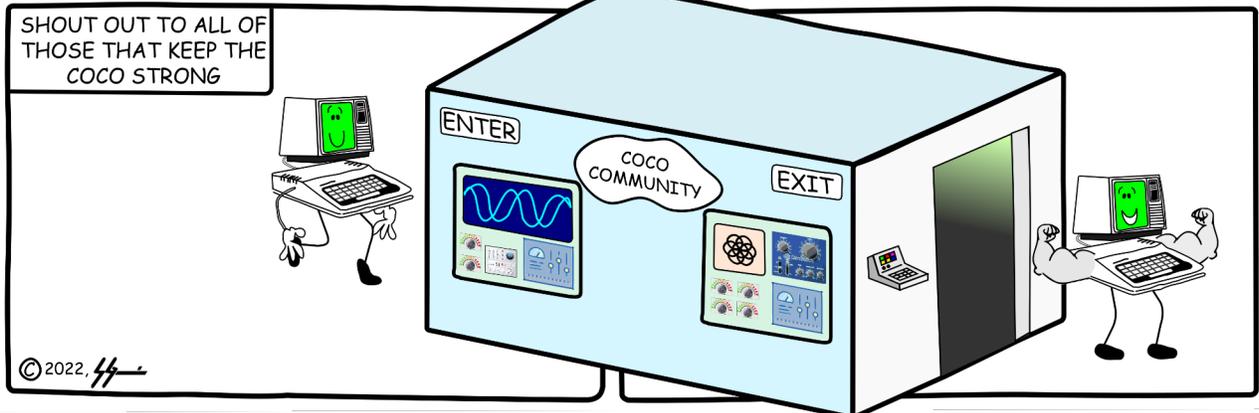


Purple Hellcat  
– Ron Delveaux, CocoDiscord Art Gallery



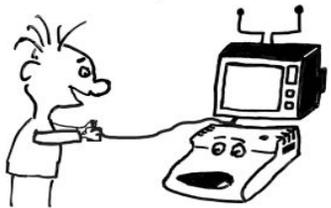
## CoCo Chronicles

Salvador Garcia



## JOEY & COCO

These Fun-sticks are totally awesome!

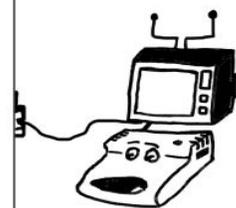


They're called "joysticks", kid.

Whatever. "Joystick" sounds kinda lame, anyways



Maybe. But...



... it's better than being named after a HORSE.

© 2019 D. Bruce Moore

## Calendar

### October 2022



October 17, 2022, Monday

- Color Computer 3's birthday

October 22, 2022, Saturday

- 1:00pm - 10:00pm
- Club Picnic @ Woodfield Mall, Schaumburg, IL

October 31, 2022, Monday

- Halloween

### November 2022

November 1, 2022, Tuesday

- American Indian Heritage Month

November 3, 2022, Thursday

- 6:30pm - 7:30pm

Club Demo

- 7:30pm - 10:00pm

Club Meeting

November 6, 2022, Sunday

- Daylight Saving Time ends

November 8, 2022, Tuesday

- Election Day

November 11, 2022, Friday

- Veterans Day

November 17, 2022, Thursday

- 7:30pm - 8:30pm

Glenside Board of Director's Meeting

November 24, 2022, Thursday

- Thanksgiving Day

November 25, 2022, Friday

- Native American Heritage Day

The CoCo~123 newsletter is published by the Glenside Color Computer Club. Your annual contribution of \$15.00 helps to keep our club going and permits you to vote each year.

Send your check to:

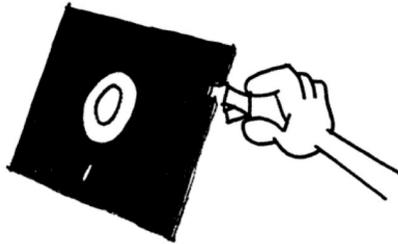
Eric Canales, Treasurer  
5847 N Cicero Avenue Chicago, IL 60646

Our treasury provides newsletters and good times with fellow CoCo users at our Annual "Last" Chicago CoCoFEST! and our Annual Glenside Picnic.

If you attend our Annual CoCoFEST! as a vendor, your annual contribution is covered for that year.

Submissions for content to share in upcoming issues of CoCo~123 can be uploaded via Google Drive  
<https://tinyurl.com/mrxdv79d>

or emailed to:  
[newsletter@glensideccc.com](mailto:newsletter@glensideccc.com)



We will be looking for you online! And collaborate and share all the good news of the CoCo community.