Glenside Color Computer Club, Inc. Chicago, Illinois
Volume 39, Number 4 Winter 2019

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Upcoming Events:

Regular meetings have been moved to the 3rd Thursday of each month and are being held virtually via Blue Jeans until further notice. The next meeting is May 21st.

G.C.C.C OFFICERS

If you have questions about the association, contact one of the officers for the answers.

POSITION	NAME	E-MAIL	PRIMARY FUNCTION
President	Eric Canales	eric@canales.me	The buck stops here...
Vice-President	John Mark Mobley	johnmarkmelanie@gmail.com	Meeting planning, etc.
Treasurer	Brian Goers	briang0671@sbcglobal.net	Dues and Purchasing
Secretary	Rich Bair	mgdoc1@sbcglobal.net	Records and Reporting
Director	Tony Podraza	tonypodraza@gmail.com	CoCoFEST! Organizer
Editor	Steve Strowbridge	ogStevieStrow@gmail.com	Newsletter Production
Assistant Editor	Bob Swoger	rswoger@aol.com	Newsletter Production

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Eric Canales

John Mark Mobley

Brian Goers

Rich Bair

Tony Podraza

Steve Strowbridge

CoCo~123 INFORMATION

CoCo~123 is the newsletter of the Glenside Color Computer Club. Your annual contribution of $15.00 helps to keep our club going. Send your check to:

Brian Goers, Glenside Treasurer
PayPal to Brian7eg@gmail.com
Email briang0671@sbcglobal.net

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

Should you attend the Annual CoCoFEST! your annual contribution will be covered for that year.

CoCo~123 CONTRIBUTIONS

Special thanks to our contributors this issue: Salvador Garcia, Paul Thayer, Christian Canales

TREA$URY NOTE$

Balance as of 02/01:	$ 13,393.95
Interest:	$ 01.08
Refund:	$ 35.00
PayPal Deposits:	$ 375.47
February 29, 2020	$ 13,735.50

Brian Goers, Trea$urer
Glenside Color Computer Club

GCCC MEETINGS

The Glenside Color Computer Club meets the third Thursday of each month and are currently being held virtually through the BlueJeans video conference service.

https://bluejeans.com/889394355
Visit our website at:
http://glensideccc.com

Christian's Epic Game Review of GunStar

Christian Canales, roadpest58@gmail.com

If you wanna save the human race while traveling to distant lands while blowing up aliens, GunStar is your game. GunStar is a new scrolling shoot-em up game for the Color Computer 3 with the Hitachi 6309 processor and 512k RAM.

The goal is to make it through the levels where you have various goals to pass through each one. Your first goal is to leave planet Earth to reach the Star Gate where you then fight the mini boss to proceed to the alien world until you reach the final boss. You have to do this all in one try so if you die battling the last boss you return back to the title screen.

It was smooth and the sounds were nice, but sadly no music. The enemies float across the screen and bullets fly at you, and there's asteroids in level 2 that will damage you if you fly into them. The boss designs are good and the animations for the bosses and enemies were appealing to look at. There're two different power ups. Health and bomb drops float on the map that you can collect to keep the fight going.

It gets intense and suspenseful. It's challenging and when you beat it, you'll feel amazing. I was looking at the instructions and I found spelling errors on the instruction pamphlet. I found a minor bug where if an enemy collides into you while shooting, or using a bomb, it will completely freeze the game with no warning. Even with the minor problems, this game is a great pick up for anyone.

The Editor's Clipboard

We rely on folks just like you to help write articles for our newsletter. Being in COVID-19 isolation should give us all more time for the next one!

Help us make CoCo~123 better each issue, send us submissions. Email you suggestions and contributions to ogStevieStrow@gmail.com

From the president's platen

Hello all. I'm writing to you all on the eve of what would have been CoCoFEST! 2020 but it looks like that has been delayed for a little while.

Many of us are under lock down at home, trying to ride out the storm of a rather destructive and historic pandemic. Only time will tell just how much has been destroyed, many lives and many livelihoods.

Many of us are lucky to be involved in tech and so with many people working from home, our jobs are more important than ever. Others are not so lucky, many of our members and the people they know, and love are out of work or getting sick. Amid all this turmoil we have had to postpone CoCoFEST! for a few months. But all is not lost yet. A virus may delay us, but it will never defeat us!

I want to offer a glimmer of hope. Many times, we all thought the "last" CoCoFEST! could be truly the last, but this isn't one of those times.

CoCoFEST! will continue, and we're hoping it will continue as soon as this July. It may be a small show this year, but rest assured, the show must go on.

We are now on the lookout for any venues that can host us from late July or onward. We're also searching for more speakers. Let us know if you're interested in speaking. Also be on the lookout for a fest location near O'Hare. I urge everybody involved to keep working hard and I'll see you this year, and if not, the next year and onward until my "last" fest!

Eric Canales, President
Glenside Color Computer Club

Secretary's Scroll

Greetings CoCo fans: Rich Bair here, with a summary of the last three membership meetings and some thoughts about the coming three months:

Our January meeting was devoted to these topics:

1) Should the club have a permanent (PO Box) address?
2) Should the club transfer the "official" web site to a domain held in the club's name?
3) As we transition to having the TandyList be our membership database, how can TandyList generate mailing lists for the newsletter and for meeting minutes, keeping in mind members' desires regarding data and email privacy?
4) What revisions to our bylaws are needed now?
5) Who can we get as speakers at the CoCoFEST!?
6) What about trophies at the FEST!?

No decisions were made on these topics.

The February meeting focused on

1) a permanent address for the club. Eric Canales volunteered that as long as he is president, he has no objection to using his home address. Having a PO Box address involves a recurring monthly expense that seemed rather high given the undefined benefits. A motion was made and passed to drop the topic for now.
2) club ownership and control of the official web site. Steps in that direction are ongoing.
3) FEST! speakers. We are still seeking. A budget was allotted for inducements.
4) FEST! trophies. A committee was appointed to manage the topic.
5) a permanent logo for the club. Artistic submissions are welcomed.

The March meeting concentrated on the moves necessary to adapt to the coronavirus threat. (Most other topics were tabled for now.) As a large proportion of our members are in the 65+ age bracket, we concluded that, given the government advisories currently in place, the April date for the FEST! must be cancelled. For rescheduling, the best the Holiday Inn could offer us was two different dates in November. Furthermore, they assert that we will owe them $1,800+ as a cancellation fee. Negotiations are ongoing.

Many of those present felt we should try for a late-July or early-August date to reschedule at a different venue. It was even proposed that we contact Heron Point to see whether they might have had a change of heart about not hosting us this year. Right now we are completely unsure what will happen.

In the meantime, if you have prepaid either as a vendor or as an attendee and want a refund, send an email to Tony Podraza (the FEST! director) either through our web site or directly to Tony at tonypodraza@gmail.com We will refund your money completely, the same way you paid (PayPal or check). If we don't hear from you, we will assume that you are hoping that the FEST! will be rescheduled (as we are!). But if it becomes necessary to completely cancel, we will refund to everybody.

Stay safe, stay healthy, and if you get bored fire up the CoCo for a fresh draught of nostalgia.

Happy CoCoing!

Rich Bair, Secretary
Glenside Color Computer Club
mgdoc1@sbcglobal.net

http://nickmarentes.com/ProjectArchive/gunstar.html

Celebrating the CoCo's 40th anniversary!

The 29th Annu st"
Chicago Co ST!

Tickets
$15 er
nd
under
21 and under
valid student id
ly: $5 discount

April 18 &
2020

register at
https://www.tandylist.com/
Onsite registration: 4/18 @ 8AM

Encouraged!

Postponed!
More information coming soon

Buffet dinner:

$20 per person aged 13 or older

Specify at preregistration
First come first served!

Hotel accommodations:

Online booking:
https://tinyurl.com/cocofest2020
CoCoFEST! rate: $99
(Fees & taxes not included)
Group code: CCF

Check out their shuttle service
to/from O'Hare

New location!

Holiday Inn - Elk Grove
1000 Busse Road
Elk Grove Village, IL 60007

Phone: (847) 437-6010
FAX: (847) 806-9369

More information:

http://www.glensideccc.com/
Contact: Tony Podraza

Virtual CoCoFEST! On CoCoTALK!

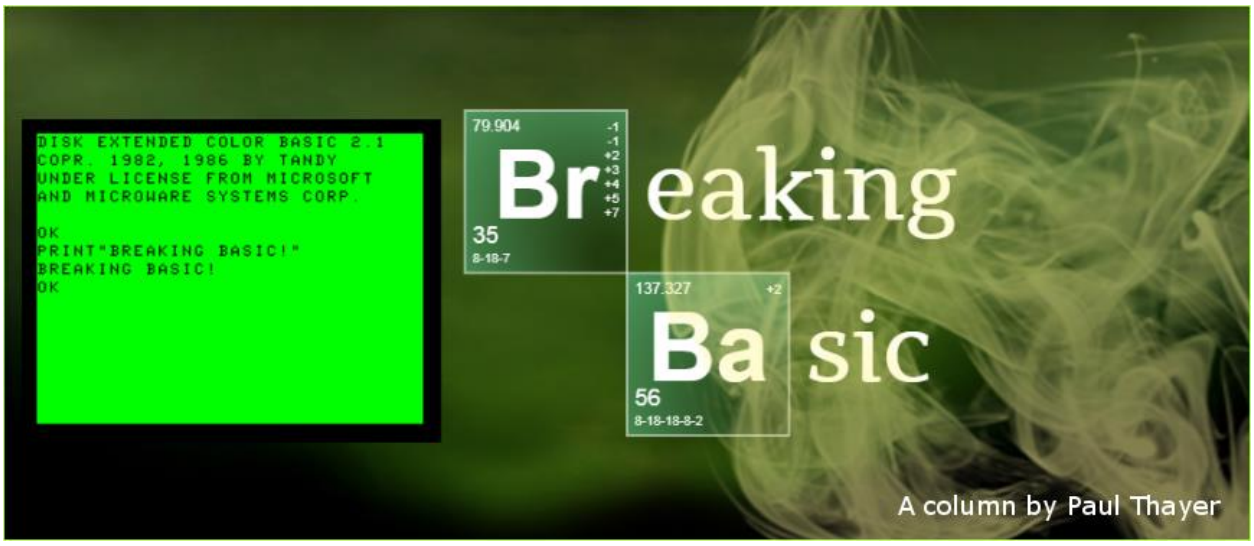
CoCoFEST! May be postponed, but that did not kill the spirit of gathering to celebrate, *virtually* at least, and CoCoTALK! the weekly live talk show inspired by CoCoFEST! Hosted their own virtual, albeit unofficial CoCoFEST! on April 18th the day we all should have been together in person.

Nearly two dozen people joined virtually to give presentations and the event lasted 6 hours averaging 70 live viewers throughout. The lineup consisted of:

D. Bruce Moore- National Anthems
Darren "Daz" Ottery - Blue Monday Cover (TRS-80 cocomix)
Nathan Byrd - Daggorath Online
Norm Lamourex - CoCo Rainbow Fest 1989 video
Steve Strowbridge - Ka*BOMB! world premiere
Brendan Donahe - CoCoVGA Q&A
Ken Reighard - Nightmare Highway - the music video
Rick Adams - Temple of ROM II level design and code demo
Ben "Explore VR" Drakes - Project "A" Teaser #2
Nick Marentes – 2019/2020 CoCo projects summary
Henry Reitveld - Arcade 1Up cabinet running VCC
Jason Reighard – showed his wares from cocoman.biz
Ron Delvaux - CoCo Max 2 & 3 Demo
David Ladd/Mark Overholser - PS2 Mouse adapter
Erico Monteiro - SG4 Outhouse demo
Eddy Szczerbinski - Dragon Light pen demo
D. Bruce Moore - CoCoFEST! 20th Anniversary Book video and discussion, bonus Joey & CoCo video
Paul Fiscarelli - CoCo Keybard/Joystick to USB adapters
Michael Furman - DwTerm v0.2 and pyDriveWire v0.5c
David O'Connor - CoCo 3 repack into Model 4 case
L. Curtis Boyle/Rob Inman - Demo of NitrOS9 EOU Beta 5
Scott Wendt - USB joystick to CoCo adapter
Jim Brain - Inside Retro Innovations laboratories, projects, probes & scopes

You can watch the replay on YouTube: https://youtu.be/t4qkRI1JyqU

Thank you all who shared their time with us, it was the next best thing to being at CoCoFEST! for real.



Hello and welcome to "**Breaking Basic!**" A new column the crazy active Color Computer Community!

The purpose of this column is to present readers and CoCo user's with assembly language add-on's or advanced BASIC techniques for the CoCo 3. For each column I will work a topic that is either an idea I had or a challenge submitted to me by a reader. This month's topic is saving and loading HGET/ HPUT buffers for the CoCo 3 high resolution graphics screens. The techniques laid out here have been proven to work with the 320x192x16 graphics mode or HSCREEN2. I have not tested them in any other modes, but I'm thinking they will work. This will not work for PMODE buffers, unless you know the starting addresses of those buffers. Then you're good! 😉

One of the draw backs of programming in BASIC when I was younger is that I would spend a good amount of program time and memory drawing graphics to the screen and then storing them in buffers for use later within the program. You know the drill. Set all the palette colors to black. HDRAW, HLINE, HCIRCLE, and HPAINT your way through drawing the graphics. HBUFF this, HGET that. Then set your palettes. Sometimes the majority of the programming space was consumed here.

It wasn't until much later I learned that I could do all of this ahead of time and then SAVE the buffer to disk. Then I just load the buffer at the beginning of my main program or sometimes in a loader program depending on the size of my main program. After that you just HPUT away! No need for putting that bulky rendering and storing code at the beginning of your program! It saves memory and it reduces the amount of time the user waits to start using the program!

The first thing you want to do is draw whatever graphics you want to HGET on the screen. Once they are on the screen follow the normal procedures for HGETting them into the 8k buffer. Remember that it is most practical to use widths that are of even numbers. For example, a graphic the size of 32x16, but not 31x16. The HSCREEN2 mode renders each byte as 2 pixels so you run into complications when trying to use odd widths. The formula I use to determine each buffer size is (W/2)*H=B. Half of your width (**remembe**r bytes, not pixels) multiplied by your height equals your buffer size in bytes.

BASIC's default 8k page for the HGET/ HPUT buffers is page $34 (52). This is important to remember for this topic as well as some future topics I intend to cover.

Once all your graphics are in the buffer you will need to determine the total byte size of all combined buffers. That is IF you want to store them on disk as the exact size, otherwise you can save the whole 8k page as well. It will take up more space, BUT no calculations are necessary.

Each buffer stored on the page has a 5 byte header. So the formula for each buffer would be ((W/2)*H)+5. Calculate that for each buffer stored and then add them all together. Add that to address $4000 (16384) and you have your ending address for saving.

Example:

BUFFER 1= 128+5=	133
BUFFER 2= 320+5=	325
BUFFER 3= 136+5=	141
TOTAL SIZE=	599 ($257)

$4000 +	$257=	$4257 (END)
(16384 +	599=	16983)

I have found that addresses $4000-$5FFF (16384-24575) are safe with BASIC programs that are less than 8k. We will be poking memory address $FFA2 with our buffer page number. $FFA2 is the MMU register that will set the 8k memory page that the fore mentioned address will represent in low memory.

If we HGET all the graphics onto page $34 we do this to save the buffer to disk:
POKE&HFFA2,&H34:SAVEM"*filename"*,&H4000,*end address of buffer* (or &H5FFF),0 and boom! Your file is on disk. You can save any 8k page this way, not just $34. You just substitute the &H34 above with the page you want.

This takes care of the saving. To load the buffer back into memory you essentially reverse the process minus the HGETting.

Occasionally I have ran into the issue where I need to load my HGET/ HPUT buffers in with a BOOT or loader program because my main program is too big for me to poke $FFA2 without frying my program code. Keep this in mind as you go so that you don't lose your precious program that I'm sure you will spend hours on.

Anyway, to load the buffer you simply do this:
POKE&HFFA2,&H34:LOADM"*filename*" and you're done. From there you just HPUT away as if nothing ever happened because you loaded your buffer into BASIC's default buffer page $34.

BASIC automatically repopulates address $FFA2 with the value that was originally there when saving and loading is finished so you don't have to worry about resetting it!

There are ways to manipulate what values BASIC uses for the MMU registers. If you're curious to get a head start you can reference my post regarding double buffers in BASIC on the Facebook community:
https://www.facebook.com/groups/2359462640/permalink/10156519618697641/

There is also a way to use other 8k pages aside from $34 to be HGET/ HPUT buffers. I will cover those topics later. In the meantime, if you'd like to read up on using multiple 8k buffers refer to Eric A. Wolf's BASIC game called "Concentrate" from the February 1990 edition of the Rainbow, starting at page 88. It can be found on the TRS-80 Color Computer Archive site:
http://www.colorcomputerarchive.com/

If you have suggestions for topics, questions or need support regarding this topic please feel free to email me at paul.g.thayer@gmail.com

Remember to be very careful when accessing memory outside of BASIC. One false move can wipe your program clean, save a lot, and save multiple copies.

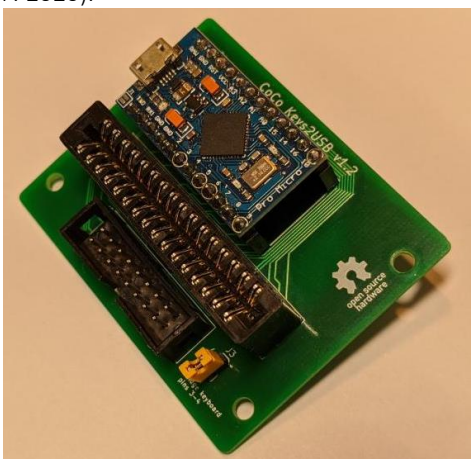
Enjoy! And sweet programming dreams!

Paul Thayer

CoCo News

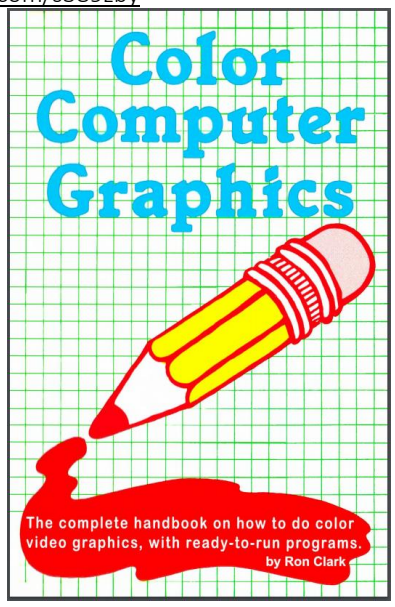
Compiled by
Salvador Garcia,
Steve Strowbridge

Paul Fiscarelli announced the development of a CoCo keyboard to USB adapter. This adapter allows us to connect a Real CoCo keyboard to a computer's USB port. The adapter is based on Chris Hawks' design and used in his (Chris') CoCo 3 Pi computer as displayed at numerous past CoCoFESTs! Paul's intention is to make the entire project open source and possibly sell kits (maybe even at CoCoFEST! 2020).



Bill Pierce announced a new release of the VCC CoCo 3 emulator. Changes are listed on the download site at the VCC GitHub site:
https://github.com/VCCE/VCC/releases

Carlos Camacho announced that he had finished scanning Ron Clark's book Color Computer Graphics and had uploaded it to the Color Computer Archive. Special thanks to Steve Ostrom.
https://tinyurl.com/s389zby



Peter Cetinski announced the next Trash Talk podcast on Zoom and YouTube. Check out more information about this podcast at its Website:
https://www.trs80trashtalk.com/

Jason Reighard posted some information about his new product called the Joey, a serial port switcher. More information at his Website:
http://cocoman.biz/jss/

John Guin mentioned that the int10h.org site had just released version 1.0 of its retro fonts:
https://int10h.org/oldschool-pc-fonts/

Chad Edward posted the idea of having a CoCoZFEST! In Australia, possibly somewhere along the Gold Coast. Stalk Chad for more information.

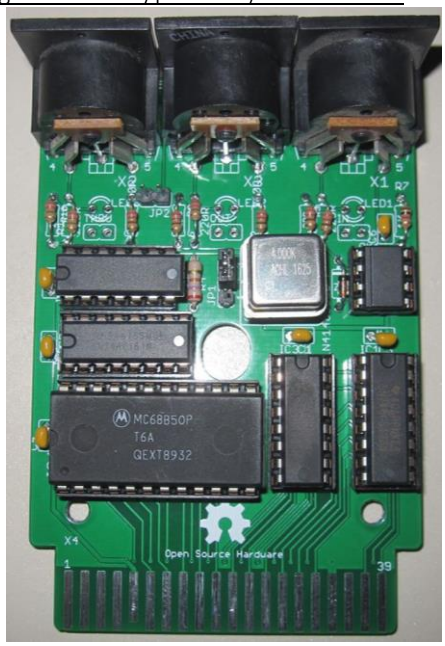
John Guin posted a link to a Website that documents a project of a TRS-80 Model I clone:
http://www.glensstuff.com/trs80/trs80.htm

John Linville announced the availability of episode 56 of the CoCo Crew Podcast which includes an interview with Dale Puckett, a review of Currillian Cruiser and a discussion of assembled vs kit vs PCB. This discussion inspired the related CoCo Bits article.

Dave Philipsen introduced his CoCoDev project. This is a 6809 computer implemented with an FPGA, using a modified version of the CoCo ROMs. The computer is a development platform for embedded applications where data acquisition and device control (motors, servos, etc.) is required. Although it is somewhat compatible with the CoCo, it is not meant to be a CoCo replacement. More info:
http://www.davebiz.com/wiki/CoCoDEV
https://youtu.be/-XeEjg0m-gM

Ron Klein announced that he created a Git repo for his AtomDevEnv project. ATOM is a cross-platform text editor with syntax highlighting like NotePad++ and Ron has included several scripts that can be accessed via drop-down menus to launch your code directly in an emulator. Check it out here:
https://github.com/mrgw454/AtomDevEnv

RETRO INNOVATIONS' Jim Brain announced the availability of his new MIDI Maestro. More info here:
http://www.go4retro.com/products/midi-maestro



Terry Steege shared information regarding Boisy Pitre's Call for Papers 2020. Deadline for submittal is Friday April 10th, 2020. More info here:
http://www.boisypitre.com/computing/cccfp/

L. Curtis Boyle announced that Beta 5 of the NitOS9 Ease of Use project will have the ability to launch VDG graphical games like Sierra "Quests" series, Lucas Arts' Rescue on Fractulus and more will be possible directly from the G-Shell GUI which loads on boot. Follow and download EOU at
http://www.lcurtisboyle.com/nitros9/nitros9.html

Mark Sherman is hosting RetroChallengeRetry 2020/04. If you're in the mood to share a cool retro project with the world visit
http://mwsherman.com/RCR/2020/04/

Michael Furman is working on updates to PyDriveWire (Python based DriveWire server) and DWTerm. DWTerm will support 80 column 8-color ANSI graphics from RS-DOS! PyDriveWire is already available in the CoCoPi distribution and he's working on making easy-to-install binaries for PC's available soon.

CoCoTALK! hosted a live "virtual" CoCoFEST! on YouTube with 6 hours of presentations and discussions.
https://youtu.be/t4qkRI1JyqU

D. Bruce Moore promoted the CoCo 40th Anniversary Photo Book, chronicling the history of the CoCo in vivid full color pictures. Pre-order before March 21st. More info here:
https://youtu.be/u40lqON0xdI

Ron Klein mentioned that he is working on a version of CoCo Pi for the Raspberry Pi 4. Although he had some challenges, it looks like he is progressing. Stay tuned for more news.

Eric Canales, president of the Glenside Color Computer club announces that CoCOFEST! Is being postponed to later on in the year once the pandemic crisis is over and we all return to our semi-normal lives. Stay tuned for further updates as they become available

John Linville officially announces that the CoCoFEST! Challenge is hereby cancelled. He will revisit this event when there are set dates for the CoCoFEST!

Henry Rietveld shared a ink to a link about a guy who implemented a USB port on a CoCo using a Raspberry Pi as a keyboard adapter that connects directly to the CoCo's keyboard connector.
https://atariage.com/forums/topic/303537-coco2-usb-port/

Robin Round shared a link to an informational page about a project by Jeff Tranter. Jeff created a PCB of a modified version of Grant Searle's 6-chip 6809 computer.

https://easyeda.com/tranter/6809-Single-Board-Computer

Dave Veary aka MrDave6809 is doing some amazing work customizing a CoCo 2 to use a Raspberri Pi as an interface for USB keyboards, Blutooth, WiFi and more, follow his projects and progress on YouTube
https://www.youtube.com/channel/UCF2yHy7HJPdQyLmrZi-Y28g

Calendar of Events

Compiled by Bob Swoger

Glenside Color Computer Club, Inc. Business Meetings

Future dates: May 21st, June 18th, July 16th

Check the calendar on our site for updates

Third Thursday of each month.
7:30 PM to 9:30 PM Central Time

BlueJeans Video Conference - https://bluejeans.com/889394355

You can call in: Phone Dial-in
+1.408.740.7256 (United States)
+1.408.317.9253 (Alternate number) (Global Numbers)
Meeting ID: 889 394 355

The 29th Annual "Last" Chicago CoCoFEST!

Date: Postponed until further notice
Location: To be determined

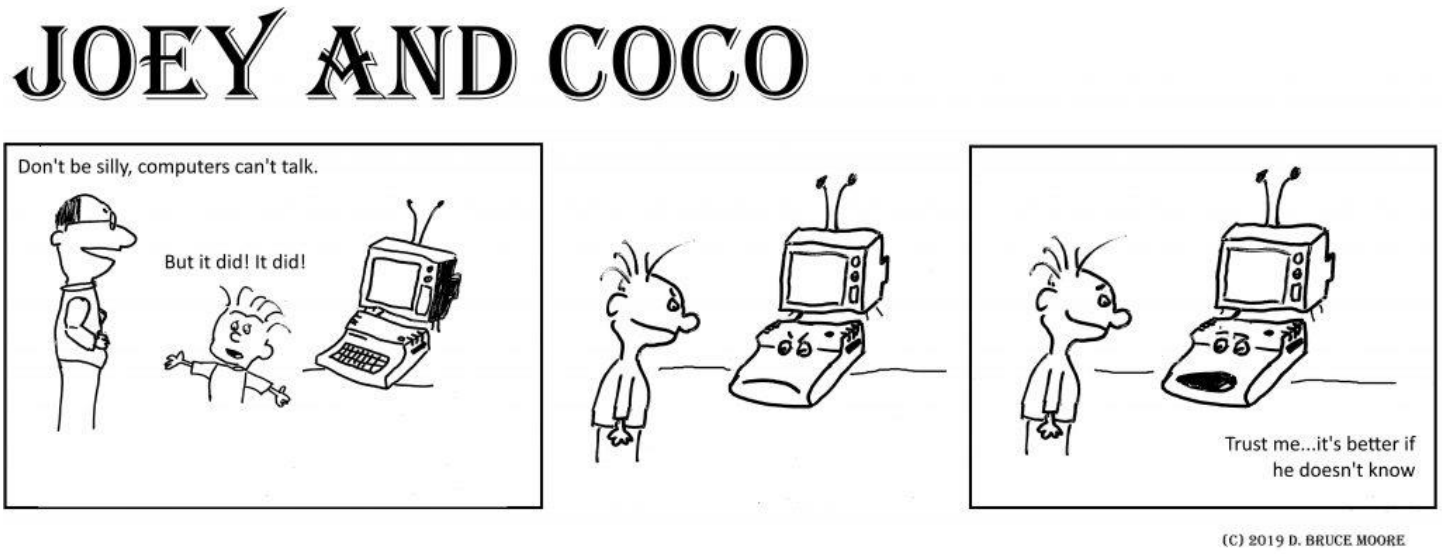
http://glensideccc.com

Image courtesy of D. Bruce Moore

CoCo Community Corner

A list of Coco web resources compiled by Steve Strowbridge

Source	Link(s)
Glenside Color Computer Club, host of CoCoFEST!	Website | Classic splash page | Facebook
The TRS-80 Color Computer Facebook Group	Facebook
The Color Computer Mailing List	Website
The TRS-80 MC-10 Facebook Group	Facebook
The Coco Crew Podcast	Website | Facebook
The Dragon 32/64 Communities	Website | Facebook
CoCoTALK! Weekly live Color Computer talk show	Website | Facebook
The CoCo Show Podcast	Website | YouTube
Looking for more CoCo Links? Visit I'm a CoCo Nut!	Website

Close Parenthesis

D. Bruce Moore has kindly allowed CoCo~123 to publish his new CoCo themed comic. We now bring you comic strip #3 "It Talks!?"