

# CoCo~123



Glenside Color Computer Club, Inc.

Carpentersville, Illinois

Volume 33, Number 3

Autumn 2013

## CoCo ~ 123 Memory Map

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**Upcoming Events:**  
 The 23<sup>rd</sup> Annual "Last" Chicago CoCoFEST! **April 26-27, 2014**  
 Regular meetings every 2nd Thursday @ Schaumburg Library

### G.C.C.C. OFFICERS

Here is the list of 2013 club officers and how to contact them.  
 If you have questions about the association call one of the  
 officers for the answers.

<b>POSITION</b>	<b>NAME</b>	<b>PHONE</b>	<b>PRIMARY FUNCTION</b>
-----	-----	-----	-----
President	Tony Podraza	847-428-3576	The buck stops here...
Vice-President	Chris Hawks	815-943-4690	Meeting planning, etc.
Treasurer	Geo Schneeweiss	815-832-4441	Dues and Purchasing
Secretary	Bob Swoger	630-837-7957	Records and Reporting
Director	Tony Podraza	847-428-3576	CoCoFEST! Organizer
Librarian	Brian Goers	708-805-1888	Software/Hrdwr Manager
Editor	John Mark Mobley	847-409-8604	Newsletter Production
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Tony Podraza



Chris Hawks



Robert Swoger



George Schneeweiss



Brian Goers



John Mark Mobley

CoCo~123 - A Glenside Publication Since 1985

## 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 Glenside Treasurer:

**George L Schneeweiss**  
13450 N 2700 E Road  
Forrest IL 61741-9629

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

## CoCo~123 CONTRIBUTIONS

If you have any suggestions for the newsletter or would like to submit an article, please contact the CoCo~123 Newsletter editor:

**John Mark Mobley**  
4104 Wren Lane  
Rolling Meadows IL 60008  
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## CONTRIBUTORS TO THIS ISSUE

Brian Beach  
Mathieu Bouchard  
Alex Evans  
Kip Koon  
Elena Macias  
David McNally  
John Mark Mobley  
Chris Osborn  
Bill Pierce  
George Schneeweiss  
Robert Swoger

## G. C. C. C. MEETINGS

The Glenside Color Computer Club meets the second Thursday of each month at the Schaumburg Township District Library at 7:00 pm. If you need a map, see our Glenside Homepage at:

<http://glensideccc.com>

A social get-together always follows the meeting at a nearby restaurant, lovingly called, "The Meeting After".

## TREASURY NOTES

We have \$7755.90 in checking. We have 107 paid members in 2013, down from 136 in 2011, and a total of 398 members to whom we send newsletters.

George Schneeweiss, Treasurer  
Glenside Color Computer Club

## THE SECRETARY'S NOTEBOOK

For a FREE copy of the LogiCall Ensemble, email me at [rswoger@aol.com](mailto:rswoger@aol.com) or phone me at 630-837-7957. At present there are 58 copies of LogiCall that have been distributed. Try it, you'll like it.

You will all note that we are now using the website given us by Steve Bjork. Most like it and all the information it provides. A few felt more comfortable with the OLD site. SO, I provided both ways. Now, when you go to [GlensideCCC.com](http://GlensideCCC.com), you will first see the old Classic site for about a second (we now refer to this as the SPLASH page) and then you will see the new site provided by Steve. At this point you can navigate back to the Classic site. In the second paragraph of Steve's front page it reads: "To view the Glenside Color Computer Club's classic SPLASH page, please use this [\[link\]](#)" By clicking on the blue word [\[link\]](#), you will return to the old Classic web page.

The new site offers meeting information, CoCoFEST! information on events and exhibitors, a calendar, resources list, photos, documents such as exhibitor contracts, Constitution & Bylaws, and newsletters, and contact ability to reach Glenside officers. Please check out our new website. John Mark has worked hard on it.

Robert Swoger, Secretary  
Glenside Color Computer Club

## THE EDITOR'S CLIPBOARD

I have an Apple iPod Touch and I like to listen to podcasts while driving or riding in my car. I enjoy the Retro Computing Roundtable (RCR) podcast. They announce upcoming vintage computing events such as The 23<sup>rd</sup> Annual "Last" Chicago CoCoFEST! Their website has links to recent relevant articles. It is a good show. I recommend you check it out.

Here's a list of vintage computer podcasts. All of these podcasts discuss vintage computing in general, unless otherwise indicated below:

- 1 MHz Apple II Podcast (Apple II)
- ANTIC The Atari 8-bit Podcast (Atari)
- Boring Beige Box
- Chicken Lips Radio (Commodore)
- The Classic Computing Show
- DigiBarn Radio
- Floppy Days Podcast
- Next Without For
- No Quarter (gaming)
- Open Apple (Apple II)
- Retro Computing Roundtable
- Retro Asylum Podcast (gaming)
- The Retro League (gaming)
- The Retrobits Podcast
- You Don't Know Flack

All of these podcasts are free! You can listen to podcasts on an iPod, iPhone, Android smartphone or PC. I have used the iPP Podcast application for listening to podcasts on my Android smartphone. To listen to a podcast on your PC you can download the iTunes app. iTunes runs in Mac OS, Windows, and Linux. In order to get iTunes to run in Linux you will need to run the WINE application or use a utility like VirtualBox.

If you have any articles or article ideas, please submit them to me. You can contact me through the club website using the contact us section or the following link: <http://www.glensideccc.com/contact/index.shtml>

John Mark Mobley, Editor  
Glenside Color Computer Club

## Annual Glenside Picnic 2013

by  
John Mark Mobley

The Annual Glenside Picnic was held at the home of George Scheeweiss in Forrest, IL on Sept. 21, 2013.



Kip Koon and Bill Gordon attended using Skype. It's impossible to enjoy Mirai corn through the computer, though...



The Wi-Fi signal is strong here, but the picnic table is over there.



Justin reprogrammed the firmware in the router so we could use it to extend the range of the Wi-Fi.



Kip - this corn is very very good and sweet.



The CoCo is a good excuse to get together for a picnic.



Nice day!



Brian is going to fly a remote controlled glider.



Nice food!



George has a collection of cars



Nice people! Nice Time!



George has a collection of trains



George has a collection of Batmobiles



George has an Edison cylinder phonograph

## Vintage Computer Festival Midwest (VCFMW 8.0) and Emergency Chicagoland Commodore Convention (ECCC) Report.

by  
John Mark Mobley

I attended the VCFMW and ECCC. I spent a good amount of my time trying to figure out what the Commodore group was doing with their Ethernet cards. The answer is:

- 1) Email (no attachments please)
- 2) Internet Relay Chat (IRC)
- 3) Telnet
- 4) Networked video games
- 5) Develop on a PC & then load files to the target
- 6) Load and save file to a cloud based file server
- 7) Web server

They have had Ethernet cards for 10 years. They have developed two networked video games in that time. The first game is for two players. Each player aims a cannon and takes a shot over a mountain and tries to hit their

opponent. The second game is for two to eight players. This game allows up to eight cars to race against each other. They are working on a third game. This game would likely allow two to eight players. The game is run from a cloud based server and the target is a dumb terminal. The target is told to display a sprite in a given position. Someone on an Android phone could play against someone on a Commodore.

One person from the Commodore group recommended bypassing Ethernet and going directly to Wi-Fi to connect the Commodore to the Internet. He used Roving Networks RN-XV Module (Wi-Fi) and Adafruit XBee adapter kit 5V to 3.3V converter.

Other Commodore users used a Cirrus Logic CS8990A chip to connect to the Internet. However, the chip does not include a TCP/IP stack, and therefore required a lot of extra code to make it work.

The CoCo users should also come up with ways to connect CoCos over the Internet. Jim Brain recommended these chips to possibly be used with the CoCo:

- 1) WIZnet 5500 (includes TCP/IP stack)
- 2) WIZnet 5300 (includes TCP/IP stack)
- 3) WIZnet 5100 (includes TCP/IP stack)

I see three ways to get Internet to the CoCo:

Example 1:

CoCoFEST Wi-Fi => Wi-Fi USB wireless adapter => USB => Raspberry Pi (or PC) => USB => USB-to-RS-232-Serial => DriveWire cable => CoCo

Example 2:

CoCoFEST Wi-Fi => DD-WRT Repeater Bridge => Ethernet => CoCo Ethernet Card => CoCo.

Example 3:

CoCoFEST Wi-Fi => CoCo Wi-Fi Card => CoCo.

CoCo users could play games with each other. How about a version of Tom Mix's P-51 Mustang Attack Flight Simulator that works over the Internet, rather than over a modem? This program currently allows two players to dogfight each other from separate CoCos over a modem. How about a version of Pong that lets you play another player over the Internet?

We could experiment with networked games now. Perhaps we can load P-51 Mustang and bring up a P-51 Mustang server. The P-51 Mustang server would connect your CoCo's serial port over the Internet to another P-51 Mustang server.

Is anybody up for the challenge?

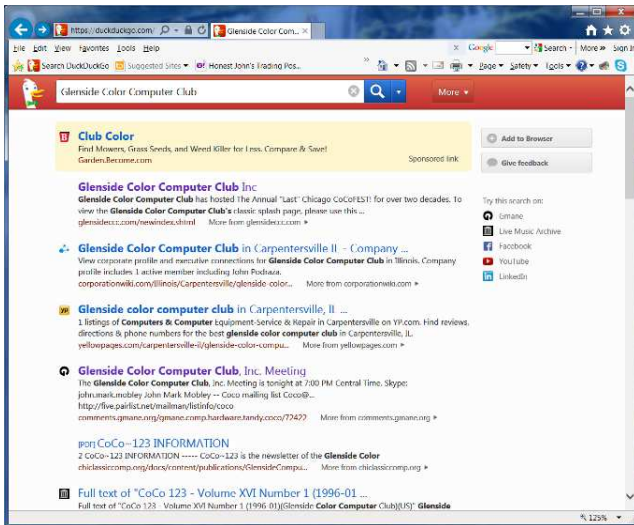
## Duck Duck Go By John Mark Mobley

Duck Duck Go is an Internet search engine that does not keep track of what you search for on the Internet. They do not sell your search history to advertisers, insurance companies, and such. There are no ads targeted specifically to you, although there are sponsored search results. Search rankings may be fairer, in that the search results are identical from one

user to another. This avoids a “filter bubble” where users become isolated from information that differs from their own taste/viewpoint/worldview/prior searches. My hope is that as more people use this search engine that the quality of the search engine will improve. I therefore encourage you to give Duck Duck Go a try.



A view of the Duck Duck Go website



Search results using Duck Duck Go

- Link: <https://duckduckgo.com/>
- Link: [https://en.wikipedia.org/wiki/Duck\\_Duck\\_Go](https://en.wikipedia.org/wiki/Duck_Duck_Go)
- Link: [https://en.wikipedia.org/wiki/Filter\\_bubble](https://en.wikipedia.org/wiki/Filter_bubble)

## Fest Quest Review

By John Mark Mobley

FESQUEST.BAS is an adventure game by Jim Gerrie. The game is based on a 1980's game called "Pit with Monsters" for the Sinclair ZX81 (or Timex Sinclair 1000) by Jim Ennes.

The following 3 paragraphs on strategy are from <http://jimgerrie.blogspot.ca/2013/05/fest-quest-pit-with-monster-by-jim.html>

There are several aspects to game play beyond the trivia component. These are a legacy of PM (Pit with Monsters). The object is to explore and gather the right kind of items that will increase your geek cred. Other kinds of items add to your “floppy” supply. One must learn to recognize the differences between these two kinds of items. The opponents have different levels of geek cred (1-100). If you run into an opponent who has more geek cred than you, they will defeat you. If you have more geek cred than them, then you will defeat them, but you “use up” geek cred to do so (i.e. the amount of geek cred of your opponent is subtracted from your geek cred). So you must sometimes avoid such combat by using floppy trading (at least as long as your “disks” hold out) to overcome more powerful opponents. However, I added the trivia question component as a randomly occurring “save” feature (you only get asked a question half the time when geek combat occurs). If you meet up with someone with higher geek cred and you answer the question correctly, then you beat them no matter how much cred they have, but just barely, so your cred goes to 0. If you meet someone with higher cred, but flub the question, then you lose. But if you meet someone with lower cred, then your geek cred goes to 0. If you battle someone with lower cred, and get the question, you beat them in the usual way (your cred is reduced by the # of their cred).

So, in brief, navigating to the top floor takes a bunch of strategies. You need to collect floppy trading stuff (or equivalents, such as the coco CD or drive-wire cables). You also need to collect other items, which increase geek cred (manuals & cool hardware). You need to avoid combat with people with higher cred unless you feel you have enough floppies for floppy trading to defeat them, or you are confident enough that your trivia knowledge can save you in geek combat no matter what their cred. You also have to try to keep building up cred and floppy supplies, so sometimes careful exploration of rooms (and strategic retreats) can be more prudent than simply trying to move forward and upward via passages stairs and combat. Use the “s” option to see the status of your cred and floppy supplies at any “what direction” prompt. I should also mention the “q” can be used to start the game over.

There are also some completely random elements of the game that can knock you back down a few levels (the object of the game now is to get to floor 20 of the hotel where the "NO MINIMUM BID AUCTION" is going on). A geek squad can abduct you, or you can accidentally wander into an elevator. These events add a kind of "snakes and ladders" element to the game.

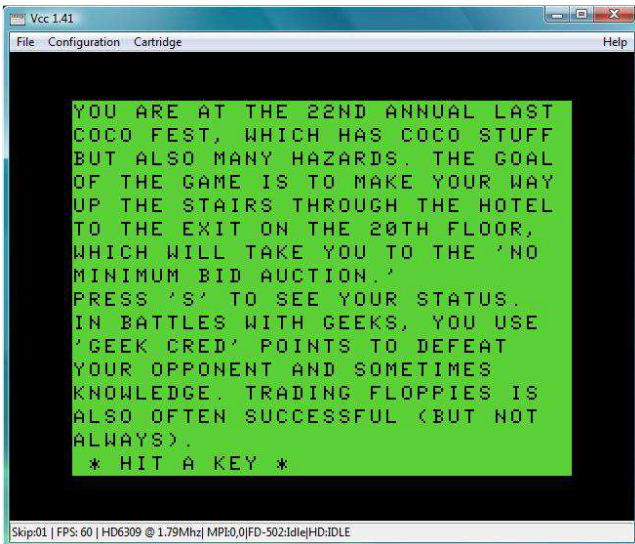
Fest Quest is on disk 44 of the LogiCall V7.0 Ensemble along with other games by Jim Gerrie.



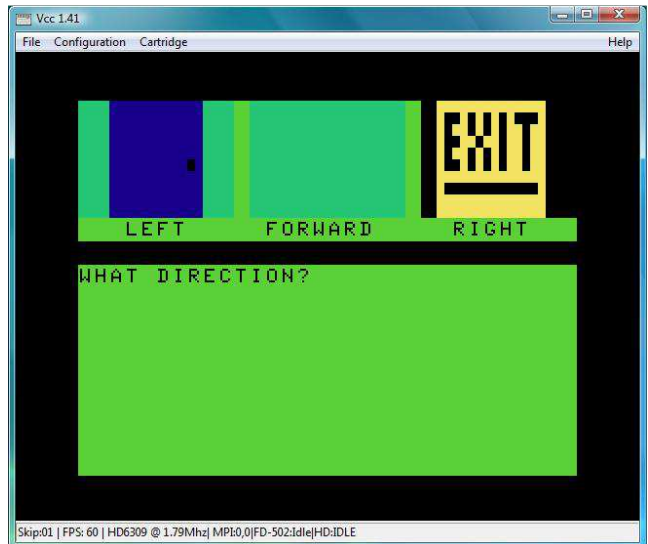
1) The opening screen



4) Sock Master is one of many characters in the game



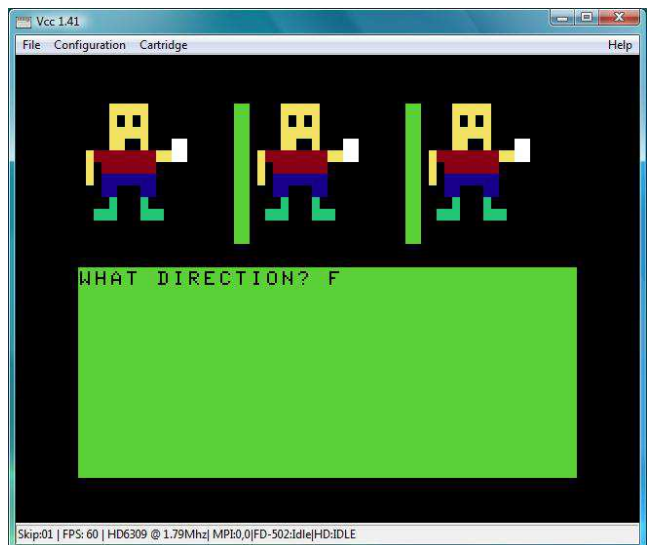
2) Instructions



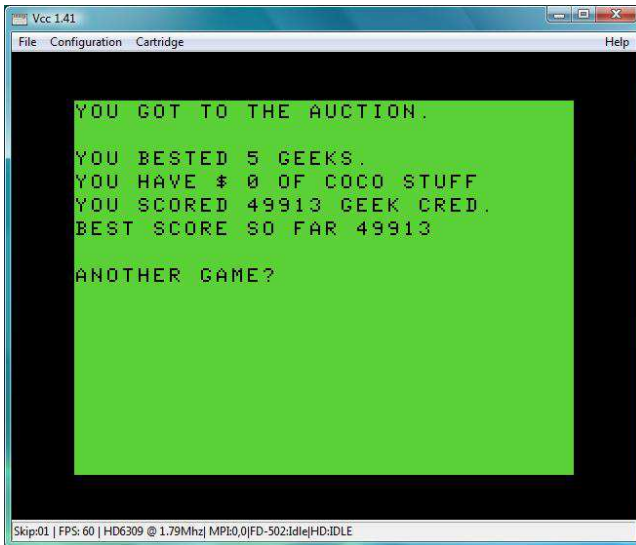
5) You made it to the 20<sup>th</sup> floor of the hotel. Go right.



4) What Direction? (L)eft, (F)orward or (R)ight.



6) The characters do the Happy Dance! You made it!



7) This is your score

My initial strategy for winning the game is...  
 RUN the game. Press the <BREAK> key and type:  
 H=100000  
 L=4  
 S=100000  
 CONT

H represents your Geek Cred/Health. L represents what floor/level of the hotel you are on. If L=1 then you are on the 20<sup>th</sup> floor of the hotel. S represents how many floppies you have.

Jim Gerrie's response when I shared this strategy with him: Hey, that's cheating! ;)

You may also want to edit line 876 to make the game easier.

Before edit:  
 876 IF B(Z+X)>0 AND B(Z+X)<25 THEN H=H+30

After edit:  
 876 IF B(Z+X)>0 AND B(Z+X)<25 THEN  
 H=H+60:SOUND 20,2:SOUND 40,2:SOUND 60,2: FOR  
 AA=1 TO 600:NEXT AA

You can find the software on Jim's software page:  
<http://www3.ns.sympatico.ca/jimgerrie/jssoft.html>

Look for: JGGAMES5.DSK

There are links to download these files and Jim's other DSK files at the bottom of the page.

### Adding LogiCall Features To Fest Quest By Bob Swoger

**LogiCall** provides an easy way to launch programs on disk. After running the program the user will want to exit the program and return to **LogiCall**.

Some programs reset the computer when they exit. This would boot the CoCo and **LogiCall** would start up again automatically. However, many programs simply halt. Typing RUN <ENTER> will run the program again.

In a program or game such as FESQUEST above, the program normally halts. FESQUEST before halting prompts the user "ANOTHER GAME?". If you respond with "N" then the program goes to line 2000 where the program puts on the screen; "GOODBYE. SEE YOU NEXT YEAR!" The next instruction is END, which HALTs the computer and there it sits doing nothing. You then have to RESET the computer to get started again.

To get **LogiCall** running again, insert: GOTO 9998 before: END so that the line now reads:  
 2000 PRINT:PRINT"GOODBYE. SEE YOU AGAIN NEXT YEAR!":GOTO9998:END

Next add the following line to the program: 9998 RUN"L Then add this line: 9996 SAVE "FESQUEST.BAS" Now type: GOTO 9996. Your modified program will now be saved and you will return to **LogiCall**. Leave 9997 unused in case **LogiCall** is not on the current disk due to the disk being full and you need to direct the program to a different drive. For example, if your **LogiCall** program disk were in Drive 0, you would want to add: 9997 DRIVE 0 to call **LogiCall** located on drive 0.

Some game programs prompt the user for a response. This might be a good way to leave the game. Go into the program to find where you are getting prompted for a response. Add another possible response like "Q" for quit. Then, if you respond to the prompt with a Q the program can be made to GOTO9998 and return to **LogiCall**.

## Turtle Graphics

By John Mark Mobley, Bill Pierce,  
 Chris Osborn, Bill G., David McNally,  
 Mathieu Bouchard, and Theodore (Alex) Evans

The following messages are from the CoCoList:

From: "John Mark Mobley"  
 Subject: [Coco] Turtle Graphics  
 I am looking for material for the next Glenside Color Computer Club Newsletter.  
 Consider if you would like to write or contribute to an article on turtle graphics.  
 Turtle graphics is available in the Python programming language.  
 Perhaps the DECB Draw command has some turtle graphics capabilities?  
 Perhaps someone knows of a turtle graphics application for the CoCo?  
 Link: [https://en.wikipedia.org/wiki/Turtle\\_graphics](https://en.wikipedia.org/wiki/Turtle_graphics)

From: Bill Pierce  
 Subject: Re: [Coco] Turtle Graphics  
 Color Logo and D.L. Logo and probably Super Logo (never ran this one) are all based on Turtle Graphics.  
 Color Logo even has a "turtle" shaped cursor. All were available from Radio Shack.  
 I used to run Color Logo quite a bit in the cassette days. I did run DL Logo a bit but not enough to learn it well. The DL Logo disk I had was in a box of disks I inherited



from a CoCoNut migrating to PC and I never had the manual to learn the language.

From: Chris Osborn  
Subject: Re: [Coco] Turtle Graphics  
That's interesting timing! It's LOGO Week on RetroBattlestations!  
<http://redd.it/1ps46b>

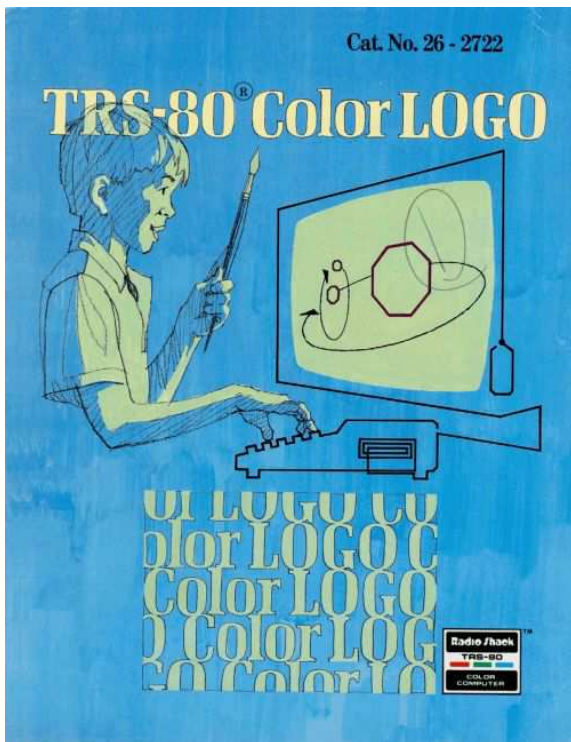
I've been messing around with the Color Computer LOGO; it's so primitive compared to other LOGOs.

From: Bill Pierce  
Subject: Re: [Coco] Turtle Graphics  
Chris, DL Logo is much better, but it runs under OS9.

From: Bill G  
Subject: Re: [Coco] Turtle Graphics  
DL Logo. And I would imagine the Logo Cartridge as well. Maybe I can find them when I get home.

From: David McNally  
Subject: Re: [Coco] Turtle Graphics  
I used to have both Color Logo and Super Logo. The only real difference with Super Logo that I knew of was the fact it could do decimal math so you could create circles. Color Logo was integer based so circles looked like a figure with a bunch of sides.

From: Mathieu Bouchard  
Subject: Re: [Coco] Turtle Graphics  
I used to have both Color Logo and Super Logo. The only real difference with Super Logo that I knew of was the fact it could do decimal math so you could create circles. Color Logo was integer based so circles looked like a figure with a bunch of sides.



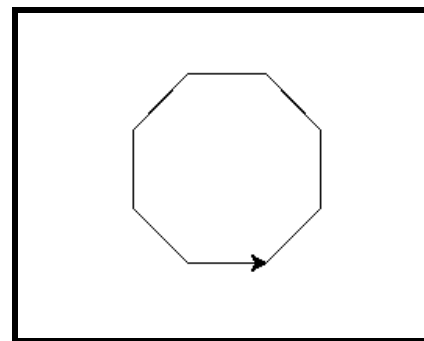
In Bresenham's circle algorithm, you don't need decimal math, nor a square-root function, nor even multiplications & divisions:

```
'COMPUTER: TRS-80 COLOR COMPUTER
'ENVIRONMENT: COLOR LOGO
'BY MATHIEU L BOUCHARD NOV 2013
TO CIRCLE
HT SETH 90 MAKE :X 128
REPEAT 128 (
MAKE :Y (:Y+1)
MAKE :K (:K+:Y)
MAKE :U :X
WHILE :K>:X (
MAKE :K (:K-:X)
MAKE :X (:X-1)
)
SETX :X SETY (192-:Y)
FD (:U-:X)
)
END
```

This computes squares and square-roots incrementally. The trick is that successive results of 1+2+3+4+5+... make a square-like sequence: 1, 3, 6, 10, 15, ... also follows the pattern  $(x*x+x)/2$ . This allows to find differences between consecutive points in the circle equation.

From: John Mark Mobley  
Subject: Re: [Coco] Turtle Graphics  
This is my Python Turtle Graphics Program.

```
#!/usr/bin/python
# This is an example of Python Turtle Graphics
# This program makes an octagon/stop sign
# Works under Cygwin if you run XWinServer first.
# Works on a Mac
# Works under Linux if run inside X Window System.
import turtle
import time
turtle.pendown()
for a in xrange(8):
    turtle.left(45)
    turtle.forward(50)
turtle.penup()
time.sleep(7)
```



Program output

From: Mathieu Bouchard  
Subject: Re: [Coco] Turtle Graphics  
> This is my Python Turtle Graphics Program.  
> import turtle  
> import time  
> turtle.pendown()  
> for a in xrange(8):  
> turtle.left(45)  
> turtle.forward(50)  
> turtle.penup()  
> time.sleep(7)

Reminds me of my Ruby/Tk program named TkTurtle.rb, which I wrote in 2001. After starting it, you'd write this on the prompt to draw the same octogon (no need to penup/pendown in this case):

```
8.times {lt 45; fd 50}
```

which is very close to ColorLOGO's

```
REPEAT 8 (LT 45 FD 50)
```

It's available at:  
<http://blade.nagaokaut.ac.jp/cgi-bin/scat.rb/ruby/ruby-talk/15217>

There has been at least another turtle library for Ruby since then, but I've never tried it, and I think that it's quite recent. I also think that it's closer to Python's, whereas my inspiration was really just ColorLOGO (though I didn't really mean to replicate the language, just the turtle).

From: John Mark Mobley  
Subject: Re: [Coco] Turtle Graphics  
Does anyone have a screen capture of turtle graphics running on a CoCo that I can use in the newsletter?

From: Chris Osborn  
Subject: Re: [Coco] Turtle Graphics  
Screen capture or photo? Feel free to use mine.

<https://twitter.com/fozztexx/status/398339882398937088>



Turtle Graphics on the CoCo

From: Theodore (Alex) Evans  
Subject: Re: [Coco] Turtle Graphics  
Bill Pierce wrote:

> Color Logo and D.L. Logo and probably Super Logo  
> (never ran this one) are all based on Turtle Graphics.

Turtle Graphics are a feature of Logo (ok, the best known feature), but I wouldn't say it was "based on" turtle graphics. D.L. Logo is actually a pretty good Logo interpreter and is capable of a whole lot beyond Turtle Graphics.

## Odds and Ends

Bob, it has taken me two days to read the whole report. And I think that the magnifier is GREAT. And Allen did a real outstanding job. Very interesting all the way. I hope that he can do a lot more like that. The club should help him out financially I think. I don't have his email address or I would tell him myself how much I enjoyed his work. Please if you can, email this to him. I think that he is a great guy. Just as ALL the guys in the club are great.

Thanks a lot Bob.

George

Hi George, Please excuse the friendliness of this letter. I hope it is all right for me to call you George. After participating in the auction via video feed with Allen Huffman's help. I already feel like a member of your group of coco enthusiasts. After speaking with Bob Swoger, I would like to formally join the Glenside color computer club.

After viewing the video feed Saturday and Sunday, I really feel I was there. I'm making plans to be there next year – at the CoCoFEST! I mean. I'd like to be at your annual picnic but I will probably not make that. How about a Skype feed for that too? I hope to meet you next year. Take care and happy CoCoing! Kip Koon

Dear Bob, My brother David Macias has been a CoCo enthusiast since his first CoCo computer purchased in the 1970's. He enjoyed the CoCoFEST!s and even dragged me there one time. After that I understood his affection for the CoCo.

Sadly David died on 2/13/09. I would like to have someone benefit from his CoCo stuff someday. If there is a local contact who can help me gather that I would appreciate it. Sincerely, Elena Macias

*[Dave's CoCo collection was present at the 2013 CoCoFEST! "No Minimum Bid Auction" and was distributed to many of those present. Ed.]*

## How Long Do Disk Drives Last?

By Brian Beach

A study was done to find the reliability of hard drives. When run 24 hours a day, 22% of consumer-grade hard drives failed in the first 4 years. If you want to know more, try out the link below for the full article.

Link: <http://blog.backblaze.com/2013/11/12/how-long-do-disk-drives-last/>

## Origin of the BASIC Programming Language By Kip Koon, Computer Doc

I was talking to a friend one day about the Interpreted BASIC Language we are all familiar with in our beloved Color Computer, relating how the BASIC Language was originally a compiled language instead of the interpreted language we are all familiar with. He was surprised to hear that fact, if I recall correctly.

I told him about a book I was reading called "Back to BASIC: The History, Corruption, and Future of the Language" by John G. Kemeny and Thomas E. Kurtz, who are the creators of the BASIC language. One holds a doctorate in Computer Science and the other holds a doctorate in Mathematics, but since I've had to move much of my stuff around a little before Thanksgiving, I can't locate my copy of the book to verify any facts. It has been several months since I read the book, so I'm writing this article from memory. If I recall incorrectly, please forgive. Thank you.

It was their insight into an observation of a growing need in students at Dartmouth College that led to the eventual creation of the BASIC Programming Language. Again I will say, "Did you know that the original form of the BASIC Language was a Fully Structured Programming Language implemented as a Fast Compiler?" When a student typed RUN on the console, their program was immediately compiled, not interpreted, on the spot, and the results displayed right there on the student's screen. This was implemented on a GE Mainframe that until that time only had batch processing available to run computer programs for students (or faculty, for that matter).

When I found out about that fact, I was shocked. I thought, "Well, if BASIC was that good, what happened to it?" According to John Kemeny and Thomas Kurtz, BASICally, Bill Gates happened to it. In their book, John Kemeny and Thomas Kurtz both blame Bill Gates for the corruption and ultimately the bad reputation that has befallen the highly structured wonderful programming language that was their creation.

John and Thomas wanted to create an easily-learned computer programming language for non-programmers; those students in other courses of study that needed a computer to accomplish and realize calculations needed to support their studies, but who did not want to have to learn computer science just to get their work done on the mainframe computer in the computer department. They were not there to become computer programmers, but rather to become experts in other fields of study.

I have studied many examples of their language generously splattered throughout the book, and I must say if their BASIC Compiler had been implemented on our Color Computer, then we would have had a truly powerful, highly structured, easy-to-read programming language at our disposal.

John and Thomas give many comparisons between several versions of the BASIC language which existed back then in widespread use on several 8-bit machines of the day, citing many examples as compared to the commands and structure available in their BASIC Compiler. Did you know that the file access commands like LOAD and SAVE, etc. weren't really part of the BASIC Language itself? Those and several other commands were really part of the underlying operating system which ran on the GE Mainframe computer there at Dartmouth College in the Computer Science Department.

The story behind the initial development and ultimate form the original version of the BASIC Compiler took, as designed and implemented by John Kemeny, Thomas Kurtz, and under their direction, by many computer programming graduate students, is a very interesting story to behold. I bet the computer room there at Dartmouth College was a flurry of activity as each graduate student that participated in the development and implementation of the BASIC Language compiler discovered and created many new ways to implement much-needed commands by the student population at large.

After reading the book, I found a copy of the assembler source code, as well as a BASIC User's Manual of one of those very first versions of the original BASIC Compiler that ran on that GE computer, and I must say, it reminds me a lot of 6809 Assembler Source Code.

One of those implemented commands added later on during the development of their BASIC compiler is the MAT command. Behind that simple-sounding three-letter keyword was a massive programming effort culminating in one of the most powerful features of the entire language. With one single command, one could affect changes to entire arrays of data, or make calculations on a mountain of data all at once, to such a scale that it boggled the mind to think about it, much less to fully understand how it did it. My mind went round and round as I studied examples of its use, as I had only heard of it, but never had an opportunity to use it, since the BASIC interpreters I had available did not have it included.

I'm sure many computer programmers can appreciate the effect such a command would have had in their programs. For one, programs would have been considerably smaller, had that command existed in the other BASICs available to them, and much more efficient. Yes, John, Thomas and all those graduate students there had their hands full, all right.

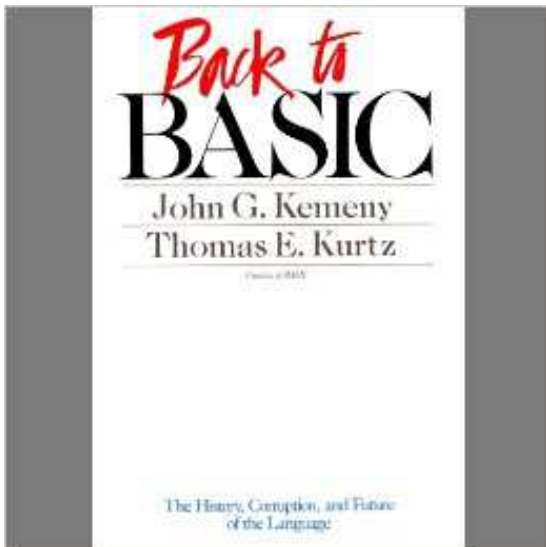
If I recall correctly, the BASIC Language was born on May 6, 1964 at about 4:10 am when the first BASIC program was run, which has, sadly, been lost to time. It would have been interesting to see what form that very first BASIC program took, albeit probably a simple program indeed.

During the first five years of the life of the BASIC Language, much change took place in the look and feel of the language itself. The very first version of the compiler only contained just a few commands, all of which are well known in Disk Extended Color BASIC. Interestingly enough, the INPUT command was not one of them. In the beginning, there was no way to input any type of data whatsoever.

The book mentions what those first few commands were and you all would recognize them. They are well known. Yes, I'm not mentioning all the details on purpose. I want you to enjoy reading the book like I did! If I remember correctly, I read it in just a few nights of nice golden silence at home in my favorite lounge chair. In other words, everybody else was sleeping. I get most of my work done at night and it was no exception in the reading of this book. I hope you all enjoy learning about the Origin of the BASIC Programming Language like I did. Qaplah! Starfleet Out!

Both noted computer science and technology advocates, authors Pitre and Loguidice reveal the story of a pivotal period in the home computing revolution from the perspective of Tandy's CoCo. As these computers were sold in Radio Shack stores throughout the United States and other countries, they provide a critical point of reference for key events in the unprecedented evolutionary period for the PC industry in the 1980s. The book also features first-hand accounts from the people who created and promoted the CoCo, from the original Tandy executives and engineers to today's active product creators and information keepers.

The CoCo impacted many lives, and this book leaves no stone unturned in recounting this fascinating slice of the PC revolution that is still in play today. From early telecommunications experiments to engineering and budgetary challenges, it covers all the aspects that made the CoCo a truly personal, useful computing experience in as small and inexpensive a package as possible.



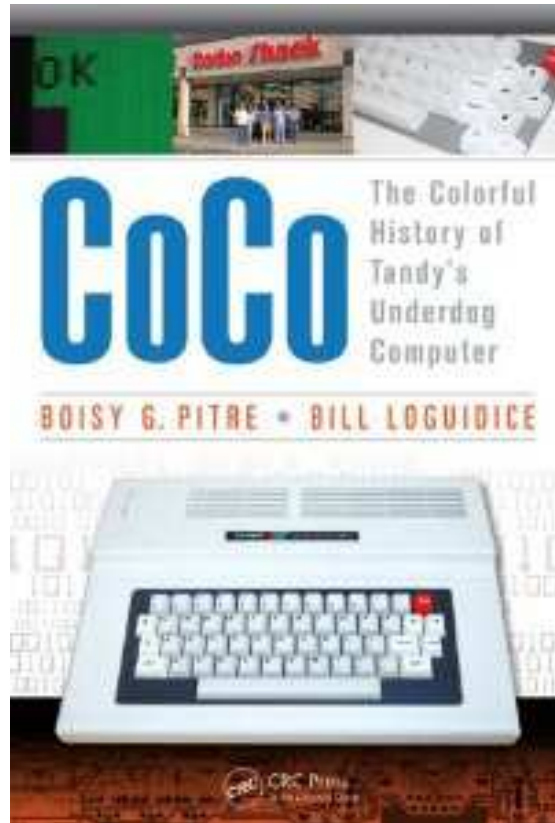
## CoCo: The Colorful History of Tandy's Underdog Computer

By John Mark Mobley

Boisy Pitre and Bill Loguidice have written a new book on the CoCo. The book is scheduled to be released on December 16, 2013.

The following text is taken from the Amazon Book Description...

This is the first book to document the complete history of the Tandy Color Computer (CoCo), a popular 8-bit PC series from the 1980s that competed against the era's biggest names, including the Apple II, IBM PC, and Commodore 64. The book takes you inside the interesting stories and people behind this unique, underdog computer.





Here are the 5 "W's"

- WHO?** 1) Glenside Color Computer Club, Inc. PRESENTS
- WHAT?** 2) The 23rd Annual "Last" Chicago CoCoFEST!
- WHEN?** 3) April 26 & 27, 2014  
(Sat. 10 am-5 pm; 8 pm-11 pm; Sun. 10 am-3 pm)
- WHERE?** 4) Fairfield Inn & Suites Lombard  
645 West North Avenue  
Lombard, IL 60148  
(Near the intersection of IL-355 and North Avenue)  
*(Same location as 2013!)*
- Overnight room rate:**  
\$79.00 plus 11% tax (\$87.69 Total)  
Call 1-630-629-1500 for reservations.  
You must ask for the Glenside "CoCoFEST!" rate.  
>>> YOU MUST REGISTER UNDER "CoCoFEST!" <<<  
>>> TO GET THIS RATE <<<
- WHY?** 5) A. To provide vendor support to the CoCo Community  
B. To provide Community support for our CoCo Vendors  
C. To provide educational support to new users.  
D. TO HAVE AN OUTRAGEOUSLY GOOD TIME!!!

And now, the "H" word.

**HOW MUCH?** All Attendees - General Admission  
Saturday & both days: \$5.00 1st - \$5.00 2nd & more  
Sunday Only: \$5.00 1st - \$5 2nd & more  
\*\*\*\*\* Children 12 and under - FREE \*\*\*\*\*

For further information, general or exhibitor, contact:  
**Tony Podraza, GCCCI**      **Robert Swoger, GCCCI**  
847-428-3576, VOICE      630-837-7957, VOICE  
tonypodraza@gmail.com      rswoger@aol.com

## Calendar of Events

by  
John Mark Mobley and Salvador Garcia

Thursday January 9, 2014  
7:00 PM to 9:45 PM CST  
Glenside Color Computer Club, Inc. Business Meeting  
Schaumburg, IL, USA  
Premium Skype access available via: john.mark.mobley

Thursday February 13, 2014  
7:00 PM to 9:45 PM CST  
Glenside Color Computer Club, Inc. Business Meeting  
Schaumburg, IL, USA  
Premium Skype access available via: john.mark.mobley

Saturday February 22, 2014  
Engineers' Week at IIT (Illinois Institute of Technology)  
Wheaton, IL, USA  
Link: <http://www.dupageeweek.iit.edu/>

Thursday March 13, 2014  
7:00 PM to 9:45 PM CST  
Glenside Color Computer Club, Inc. Business Meeting  
Schaumburg, IL, USA  
Premium Skype access available via: john.mark.mobley

Saturday, & Sunday April 5-6, 2014  
Vintage Computer Festival East (VCF East)  
Wall, New Jersey, USA  
Link: <http://www.midatlanticrotro.org/>

Sunday April 6 to Monday April 14, 2014  
MSI Robot Block Party!  
Museum of Science and Industry  
Chicago, IL, USA  
Link: <http://www.nationalroboticsweek.org/events.php>

Thursday April 10, 2014  
7:00 PM to 9:45 PM CST  
Glenside Color Computer Club, Inc. Business Meeting  
Schaumburg, IL, USA  
Premium Skype access available via: john.mark.mobley

Saturday, & Sunday April 26-27, 2014  
The 23rd Annual "Last" Chicago CoCoFEST!  
Lombard, IL, USA  
Premium Skype access available via: john.mark.mobley  
Link: <http://www.glensideccc.com/>  
Link: <http://www.glensideccc.com/cocofest/index.shtml>

Saturday May 3, 2014  
Maker Faire  
Carl Schurz High School  
3601 N. Milwaukee Ave  
Chicago, IL 60641, USA  
Link: <http://makerfairechicagonorthside.com/>  
Link: <http://www.schurzhs.org/>

Tuesday, July 22, through Sunday, July 27, 2014  
KansasFest 2014, APPLE II FOREVER  
Rockhurst University in Kansas City, Missouri, USA  
Link: <http://www.kansasfest.org/>

Be sure to visit our Website to see up to date information on upcoming events.



# Bugbook Historical Microcomputer Museum

Over **200** historical computers and calculators displayed!



### Do You Remember These Bugs?

These “Bugs” were on every book, article and column written from 1974 to 1984 and on every piece of hardware produced. Many from the Boomer generation would have seen these “Bugs”, and may have a memory of the materials they were associated with. Bugbooks, which later evolved into more than seventy books in the “Blacksburg Continuing Education Series”, were used in electronics and computer education.

### Why Bugs?

In a book called “Computer Literacy” by John V. Lombardi, the author describes that in the heart of every microcomputer resides an electronic device known as a microprocessor. That chip of plastic, loaded with circuits, has an appearance like a rectangular bug. This microprocessor “bug-looking thing” is the brain of the microcomputer.

### A Picture of Technology From an Earlier Time-

David Larsen and the LCF Group have arranged items for display which describe the newest technology as it was pre-1980 before cell phones and iPods.

Also showcased are all of the popular ‘BugBooks’ and ‘Blacksburg Continuing Education’ series of books. In the ‘70s and ‘80s, these books were a staple for technicians, engineers and users of microcomputers--an important part of the digital revolution.

Conveniently located in suite 8 of The Village Green  
201 E. Main St. Floyd, Virginia 24091 • 540-808-2880

### A Retelling of History...

of microcomputers and related electronics is interesting indeed! It has been a dream to share these stories, which have been written over a number of years.



### Not Only Computers...

Other electronics and artifacts, timeline and histories from the microcomputer revolution, and other tools of the period are represented within the museum.

*The vacuum tube was a necessary part of electronics in the early 1900s. David displays some of his antique and vintage vacuum tubes at the museum, including an Edison lamp with carbon filament.*



### A Large Collection!

We strive to show a historical collection which is of ‘Smithsonian quality’. The pieces at the museum represent some of a very large collection amassed over 40+ years by David and associates, which is stored in a Floyd County warehouse. We hope you enjoy the displays and exhibits; invite your friends to come and see!

**Bugbook Historical Microcomputer Museum is registered with VA Association of Museums (2010)**



For more information please visit us online at  
[www.bugbookcomputermuseum.com](http://www.bugbookcomputermuseum.com)