

# CoCo~123



Glenside Color Computer Club, Inc.  
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## CoCo ~ 123 Memory Map

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Upcoming Events:  
The 24<sup>th</sup> Annual "Last" Chicago CoCoFEST! April 25-26, 2015  
Regular meetings every 2nd Thursday @ Schaumburg Library

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

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Here is the list of 2014 club officers and how to contact them.  
If you have questions about the association call one of the  
officers for the answers.

POSITION	NAME	PHONE	PRIMARY FUNCTION
-----	-----	-----	-----
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	630-589-4692	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

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## **GCCC INFORMATION**

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  
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## **CONTRIBUTORS TO THIS ISSUE**

**Jim Gerrie**  
**Richard Goedeken**  
**Allen Huffman**  
**Kip Koon**  
**John Mark Mobley**  
**Tony Podraza**  
**Stefan Schomburg**  
**Eddy Szczerbinski**

## **G. 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/splmap.html>

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

## **FROM THE PRESIDENT'S PLATEN**

### **"LEFTOVERS"** **December 25, 2014**

When I think of leftovers at this time of year, I think of the remnants of Christmas dinner or Thanksgiving dinner. I also think of the "leftovers" from the unwrapping of the presents, no matter how many or how few there have been. There is always the "clean-up". In "cleaning up" from this past year, let me leave you with a few items.

1.) Glenside gave away engraved 16GB "keys" to I.T. at the CoCoFEST! in April, this year. There are still a few "left-over". If you would like to receive one, send \$10.00 to George Schneeweiss, our treasurer, and your check number and snail mail address to me. I will mail you the 16GB USB 2.0 Memory "key" when George verifies receipt of your check.



2.) We received word about diagnosis of the headaches that Dave Barnes was having as stemming from a growing brain cancer tumor. Dave has under gone radiation and three sets of chemotherapy treatment since May and is somewhat weakened, but is surrounded by a loving and supportive family. Please keep him and his in your thoughts and prayers. Contact me privately if you wish to contact him.

3.) On my way to the Glenside picnic, I transported a special guest. Brother Jeremy, it seems, had some personal business to take care of, here in the States, and was in the country at that time. He drove to my house the morning of the picnic, and he, my wife and three other guests drove down to George Schneeweiss' home and museum (those who know what I mean, will understand). about seven miles from George's, my van burst a water line going to the rear heater core. We managed to limp the rest of the way and as we were pulling in, the van was swamped with picnickers who had recognized Br. Jeremy, the first of whom was George, himself. As that excitement continued, three grease monkeys poured around the van, diagnosing, proposing, elevating the van, crawling in, under and around the van in the eventual process of bypassing the rear heater core entirely with a piece of hose found in George's, uh, museum (you can get anything you want...) and getting my cargo (and myself) back on the road by the time the picnic broke up. (My unending thanks to Brian, Rich, and Paul).

4) Halloween, rolled around and then.... Bob and Annette Swoger's attached garage caught fire in one corner and managed to take out their car and part of the garage roof. They might be back in their house by late Spring/early summer. There were no physical injuries, but the loss and displacement is devastating. Please keep them, also, in your thoughts and prayers. We, who are close, have much to be thankful in terms of their safety.

5.) And finally, our treasurer, George, has been having some challenges that have been plaguing him.

So much for "Leftovers". I am not sorry in the least if this has sounded partially like a "family year end" letter or a list of concerns for which positive thoughts are requested, "We are family". I have my strings pulled whenever I hear of events that have affected our members detrimentally.

On another, more cheerful, note, Keep in mind that the upcoming 24th Annual "LAST" Chicago CoCoFEST! is around the corner.

Details can be found on the Glenside Website and/or elsewhere in this newsletter. I hope to see you there; same place as last year. Until then....I bid you, Peace.

Tony Podraza, President  
Glenside Color Computer Club

## **TREASURY NOTES**

We have \$6575.06 in the bank as of August 11, 2014. We have 88 paid members in 2014, down from 136 in 2011, and a total of 431 members to whom we send newsletters.

George Schneeweiss, Trea\$urer  
Glenside Color Computer Club

## THE SECRETARY'S NOTEBOOK

In an article below by Stefan Schomburg in Germany he mentions that he too also used a Sinclair computer. Most in the CoCo community never used a Sinclair and therefore can't understand what I am talking about when I tell them that the Sinclair was the better machine for the high-level language programmer. First the Sinclair had a line-by-line syntax checker; you couldn't enter a bad line of code. Second the Sinclair used Cambridge BASIC, very close to Dartmouth BASIC – BASIC not corrupted by Gates. Only BASIC programmers could appreciate this difference and there aren't many of us around anymore. Just for the record – I wrote LogiCall for both the Sinclair and the CoCo. The two are keystroke for keystroke the same. LogiCall on the Sinclair is 5200 bytes in length. LogiCall on the CoCo is 7900 bytes long – that is 1.52 times more RAM space required on the CoCo.

I'm sure Jim Gerrie never used a Sinclair though he enjoys BASIC programming on his CoCo. He just put his first 11 disks of games into the Glenside Library. Jim, I was hoping that you would promote the use of LogiCall when I last sent it to you, it would be so easy! Instead when you quit a Gerrie game the program stops like a bump on a log. Thanks to Jim you can play his games by downloading LogiCoCo.ZIP below and installing it on your Vcc equipped IBM type machine.

LogiCall can be updated at any time from:

<https://dl.dropboxusercontent.com/u/55520144/LogiCoCo.ZIP>

More bugs where found and fixed in the "Hunt the Wumpus" game on disk 59. Try it now.

Robert Swoger, Secretary - rswoger@aol.com  
Glenside Color Computer Club

## THE EDITOR'S CLIPBOARD

In the next newsletter, I would like to write about Forth for the CoCo. I have received the source code for Color Forth from Stephen Pereira and need to figure out how to assemble it in EDTASM and run it. I would be interested in any stories you would have to share of how you have used Forth in the past. You can reach me through the Contact Us page of our website.

John Mark Mobley, Editor  
Glenside Color Computer Club

## The CoCo and Me: A Short History Of The Influence Of The CoCo On Eddy Szczerbinski

A couple of days ago, I went to visit my parents. I now live in the Quebec city area and they live in the Eastern Townships (just north of Vermont and New Hampshire). The driving distance being a bit more than three hours away. I had work to do in Montreal and didn't want to sleep on the dreaded "traffic jam" island and I knew I had enough time in the morning to drive from Sutton where my parents live to Montreal. So it was a good occasion to visit them and spend some time in one of the most beautiful and quiet areas of Quebec. Plus, returning to my "hometown" always brings back memories.

After cleaning the dishes and very hearty supper, we sat down in the living room and we talked about various things, my daughters, the love my mother have for cats, my father's various projects, etc. At one point, the door opened for a question I wanted to ask my mother for a long time...

- What's the first thing that comes to your mind when you think about me when I was young?

- Like what ?

- Like what comes to your mind when I was going to high school and lived with you and dad ?

- Well, let me think, ..., you did learn lots with your CoCo and you impressed a lot of people with tricks you did with it. Do you still have it ?

I was almost shocked, ..., the CoCo, ... what ??? What a funny thing to remember. I had done so many other things, I played in theater acts, did some music, and listened to a lot as well!, lots of cycling, astronomy, hiking in the bush and our appalachians, had some good grades, lots of friends, ...

When asked about the memory she kept about my younger years, she thus mentioned the CoCo. And it kept me thinking a lot.

I had sold the "original one" a long time ago. My mother had forgotten that my uncle bought it just for the sake of helping me getting that "bigger CoCo" (a Tandy 1000 EX). Then I got a full fledged IBM 8088 compatible computer, an "already old" Mac Plus and went on with my life forgetting a little bit about the CoCo years of my life.

I came back in contact with the CoCo much later. I had always been very interested in electronics and used that knowledge in the various manufacturing management jobs I had. One time, we needed a quick way to create a random effect on a machine. Quite simply, a finger needed to be activated randomly to induce "controlled defects" to produce a special effect in a yarn being spun. As we were looking at expensive industrial controllers, the CoCo popped in my mind. I knew I could easily find a used one for a cheap price. The making a simple random program and using the "on/off" switch of the cassette player would do it. The "defect creating finger" would go up and down at various intervals and during different durations.

After the project (and I don't even remember what finally happened to this "fancy yarn"), I kept the CoCo II and got back the interest I had in it. Found some cartridges, and happily the "Doubleback" one that I loved so much in my younger years. Found a kit containing a ton of cassettes, a CoCo I and some joysticks, ... and others "lots", and others. I even enjoyed playing time with my daughters, they liked many games. They enjoyed the "retro" feeling, it was some kind of a discovery for them. They never imagined that computers used to be like that. No mouse? No internet? A game contained in a small box we insert in the side of the "thick" keyboard? What was that strange machine?

I now have a couple of CoCo's, from I to III. I keep them in nice boxes but I have one that is always easily available and that I take out often for a "Doubleback" game or to do some "cassette exploring" (of all the 100+ unidentified cassettes and disks I have), or maybe some attempts at assembly programming with the Edtasm cartridge. I have sold and traded a couple of those, with some various accessories as well, keeping the "fun" alive.

I have also got my hands back on old Macintosh'es that I repaired, but I always sold those and did not really want to keep or store them. I like repairing electronic things but I do not have enough interest in those computers to keep them.

Not suprisingly, my mother was not surprised to learn I still had some of those computers around. She was right about the CoCo teaching me a lot and introducing me to programming, softwares and hardwares. It also introduced me to electronics since I wanted to understand more about the inner workings of the computer, so I learned about resistances, transistors, small chips, microprocessors, etc. I have not done a career out of that but all that the CoCo taught and introduced me to has proven to be quite useful later. I will always be very grateful to the CoCo and also to the Radio Shack staff, namely Michel Grégoire, that were so patient with me.

I am sure that many of you share similar stories as this one and I hope you enjoyed it. Happy CoCoing!

**Apple, Atari, Commodore, Dragon, Sinclair and  
Tandy**  
by  
**Stefan Schomburg**

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Hello Bob, Thanks for your message and for sharing the newsletter with me. I'll have a read through it.

Nice web page you have. I bookmarked it straight away.

Interesting to hear what you did with the TS 2068. Timex-Sinclair wasn't big in the States, was it? At least not as big as Sinclair was in the UK. AFAIK, they had quite some succes with the TS 1000, but then lost track somehow. In the early 80's North American was controlled by Apple, Commodore, Atari and Tandy, I reckon? [*Sinclair came over here and the prices of all the others dropped to as much 1/5 to stay alive! Ed.*] Similar situation over here in Germany, everybody seemed to have a C64, so I was very special with my rubber-keyed Spectrum 16K... :-) [*C64 had the best keyboard at the time. Ed.*]The Commadore freaks were always laughing at the Spectrum, but they forgot that there was a massive difference in price. [*That's because Sir Clive was making computers for his people with empty coal buckets at home. Ed.*] Also at some events the Spectrum was clearly better, e.g. vector graphics, resolution etc. [*The CoCo always lagged behind the Sinclair but eventually Timex/Sinclair made too many bad executive decisions and went bye-bye. Ed.*] Nowadays all rivalry is gone and I like all 8-biters, but still I have a preference for the British ones. I had once a CoCo2, but the lack of a monitor port, the difficulties with a possible composite mod and the poor quality of the RF-out brought me to the Dragon 32/64. I'd like to have a CoCo3, but so far I always lost the auction for one or postage was the party-pooper. [*It is third party vendors we have these days that keep the CoCo alive and well. Ed.*] Best regards, Stefan

**Colossal Cave**  
by  
**Jim Gerrie**

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Dear John Mark and Roger,  
In case GCCC members might be interested I have ported Will Crowther's original Colossal Cave "Adventure" (the program that got the whole genre of text adventuring going)

to Microsoft Color BASIC for the Coco. I have fixed and finished uncompleted elements and changed some things to create some new challenges for old players. The file is called COLOSSAL.BAS and it is on virtual disk JGGAMES10.DSK

Download Link

<http://faculty.capebretonu.ca/jgerrie/Home/JGGAMES.zip>

Jim and Charlie Gerrie's Software Page

<http://faculty.capebretonu.ca/jgerrie/Home/jsoft.html>

This file can be found on LogiCall disk number 80

I have also added some new commands. The SCORE command will tell you how you're doing. The HELP command will provide some rudimentary aid. The UNLOAD command will perform the same function as the more standard "drop all" command of other adventures. The QUIT command not only quits but also prompts whether you would like to save the progress you have made so far before exiting the game. You are also prompted each time the program is run if you wish to load a previous game. The same file name "COLOSSAL/DAT" is used for each save, so in the emulator you must rename the resulting virtual file to another file name if you wish to differentiate between different saves. Just remember that when loading you must rename the file name containing the desired save data to "COLOSSAL/DAT" so it can be loaded by the program.

I might even try porting it to Dartmouth BASIC...

You will also find GAME2048.BAS on the disk. It's a version of the cell-phone sensation for the Coco...

Sincerely, Jim Gerrie

**"Get Lamp"**  
by  
**Jim Gerrie**

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People in GCCC might also be interested in "Get Lamp" a documentary about the origins of text adventuring which inspired my son and I to seek out the original text adventure and port it to the CoCo. Nice way to spend an evening.

"Get Lamp" Video

<http://youtu.be/LRhbcDzbGSU>

**Computer Coding Contest Idea**  
by  
**John Mark Mobley**

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I have an idea for someone for a computer-coding contest such as the "Retrochallenge 2015".

On the April 6, 2014 No Quarter podcast, a fictitious video game was described called Sorry Charlie (which wasn't revealed to actually be fictitious – an April Fools' joke – until the following podcast on April 13). It's been a running gag through many of their subsequent episodes. I thought it might be fun for someone to actually write this game for the CoCo (or at least include the better aspects of the game).

Retrochallenge 2015

<http://www.wickensonline.co.uk/retrochallenge-2012sc/>

No Quarter Podcast – Sorry Charlie

<http://monsterfeet.com/noquarter/notes/78>

**Doubleback**  
by  
**John Mark Mobley**

I came across a game for the Tandy Color Computer called Doubleback. It doesn't run well in an emulator because it requires analog joysticks. As part of LogiCall, there is a file called NITROS9.VHD. This can be loaded into DriveWire 4. Then you need to set the hexadecimal offset for this file to 5A000H. You have to reset this offset each time you start DriveWire. Then you can navigate to drive 25 and type RUNM "DBLBACK.BIN". Alternatively, you can run LogiCall and navigate using the typical shortcuts. To my knowledge, this game has not been ported to any other system.

You can watch the game being played here:  
<http://www.youtube.com/watch?v=YvHoXgblGgI>

**MShell**  
by  
**John Mark Mobley**

MShell is an orthodox file manager that runs in NitrOS9. Norton Commander is to Microsoft DOS, and Midnight Commander is to Linux, what MShell is to NitrOS9. MShell is under development. Join the CoCoList and follow the development of this project.

Video of MShell  
<http://www.youtube.com/watch?v=MoOP03Fchw8>

CoCoList search on MShell  
<http://search.gmane.org/?query=MShell&group=gmane.comp.hardware.tandy.coco>

**DTSS Simulator BASIC Programming Contest  
to be held at the 2015 CoCoFEST**  
by  
**Kip Koon, Computer Doc**

I received an email recently asking if the Dartmouth Time Sharing System (DTSS) Simulator BASIC Programming Contest was still on. I answered his email with a resounding, "YES!" Then I went on to say that this person was the only one to respond so far. I guess it is my fault for not getting a page up on the Glenside Color Computer Club's web site before now. For that, I apologize. I am in the process of trying to rectify that oversight. For now though, I will use this article in the Glenside Color Computer Club Newsletter to get the word out. Now on to the fun part!

To get everybody's BASIC programming juices flowing, I thought I would offer some BASIC programming suggestions. The other day, I was trying to come up with a BASIC program that I could run on a Coco 1 with 4KB of RAM. The 4K BASIC Programming Contest recently mentioned on the Coco List is a separate contest headed up by Allen Huffman which is in no way related to this BASIC Programming Contest. However I wanted to mention it because it was this other contest that gave me an idea that could be used in this contest.

With only Color BASIC 1.2 and a max of 4KB of RAM running on a Coco 1, a considerable number of BASIC statements and functions we all are used to having available are just not present in this 1980 computer platform. This is very much like the BASIC Programming environment running on DTSS Simulator. Quite abruptly, I realized that the HEX\$( ) function was not available. Then it hit me, for the DTSS Simulator BASIC Programming Contest, we could possibly create our

own versions of much needed functions using the 15 statements and 10 functions present in the simulator by utilizing the DEFine function, GOSUB routine and RETURN statements. The valid statements are:

**Statements**

- There were fifteen statement types in the original BASIC.
- |        |  |
|--------|--|
| LET    | Introduces the assignment statement, and is required         |
| PRINT  | Provides free-form output                                    |
| END    | Is required  |
| READ   | Assigns values to variables from internal data               |
| DATA   | Introduces internal data                                     |
| GOTO   | Does just that, transfers to another line-numbered statement |
| IF     | Gives a conditional GOTO                                     |
| FOR    | Introduces the looping construct                             |
| NEXT   | Terminates the looping construct                             |
| GOSUB  | Does a GOTO to a subroutine                                  |
| RETURN | Returns from the end of the subroutine                       |
| DEF    | Introduces programmer-defined functions                      |
| DIM    | Allows dimensioning arrays                                   |
| REM    | Provides comments  |
| STOP   | Same as reaching the END statement                           |

The valid arithmetic expressions are:

**Arithmetic Expressions**

Besides the four standard arithmetic operations, BASIC includes raising-to-the-power, the symbol of which is "^". Normal precedence rules are used: Exponentiation, multiply and divide, add and subtract.

Left-association is used for multiple operations within a group. That is

$$(a - b - c)$$

is understood to be the same as

$$((a - b) - c)$$

There is one anomaly: a leading minus sign is treated as unary, and has higher precedence than exponentiation, which is contrary to the usual practice. That is

$$-x^2$$

is understood to be

$$(-x)^2$$

All arithmetic was done in floating point. In the GE-225 and GE-235, this meant a precision of about 30 bits (roughly ten digits) with a base 2 exponent range of -256 to +255.

Valid Functions are:

**Functions**

Ten numeric functions were provided.

- |     |  |
|-----|--|
| ABS | The absolute value                     |
| ATN | The arctangent                         |
| COS | The cosine                             |
| EXP | The exponential, i.e., e^x             |
| INT | The integer part (truncating toward 0) |
| LOG | The natural logarithm                  |
| RND | The next random number                 |
| SIN | The sine                               |
| SQR | The square root                        |
| TAN | The tangent                            |

Arguments for SIN, COS, TAN, and the value from the ATN are assumed to be in radians.

Error messages are given for arguments out of range for the LOG and SQR functions, although SQR then provides the SQR of the absolute value.

The RND function needed a dummy argument to get past the syntax scanner. That is, RND(0). The argument is ignored.

Other items of interest are:

### Variables

Variable names can be a single letter, or a single letter followed by a single digit. This provides for 286 possible variable names.

### Arrays

A single letter followed by a "(" denotes an array element, which may be one- or two-dimensional.

Without a DIM statement, the default dimensions are 0 to 10 for each dimension. The DIM statement allows other upper limits, but the zero element is always provided.

### PRINT Statements

The PRINT statement allows several quantities, including quoted strings, separated by commas (,) or semicolons (;). If separated by commas, BASIC moves to the start of the next zone. Zones are 15 characters in width. If separated by semicolons, BASIC does not move but starts the next item at the next space.

Numerical values are printed with either a leading space or a minus sign, and with a trailing space. Thus, numerical values in a PRINT statement with semicolons as separators will have at least one space between values. Furthermore, numeric values will always produce a number of characters that is a multiple of three. Thus,

```
PRINT 12; 34; 56
```

will produce

```
12 34 56
```

While there is no string data type, quoted strings are allowed in PRINT statements. If a quoted string and a numeric value are separated by a semicolon in the PRINT statement, the semicolon may be omitted. If the material on the printed line exceeds 75 characters, an end-of-line is automatically introduced. We sometimes say that the MARGIN is 75.

### Defined Functions

The user may define up to 26 new functions, giving them names from FNA to FNZ. Each such function is introduced by the DEF keyword. There must be exactly one argument. The variable name used as an argument is distinct from the variable with the same name in the rest of the program. The function definition must be a single line with the following form:

```
DEF FNX(X) = <expression>
```

The expression should contain an X unless the function value does not depend upon an argument; the expression may contain other variables from the program. DEF statement may appear anywhere in the program before the END statement.

Other commands you will need although not part of the BASIC programming environment are:

### Commands

HELLO	Starts a new session, enter your user number
NEW	Starts a new program
OLD	Retrieves a program from storage

SAVE	Saves the current program to storage
REPLACE	Saves the current program to storage, overwriting older version
RENAME	Renames the current program
CAT	Lists the names of your saved programs (short for CATALOG)
LIST	Lists the current program
RUN	Runs the current program
STOP	Stops the current run of the program (in case an infinite loop)
UNSAVE	Unsave the current program
SYSTEM	Names the system -- limited to either BASIC (default) or ALGOL
BYE	Ends the session
GOODBYE	Same as BYE

All commands may be abbreviated to the first three letters.

The NEW, OLD, and RENAME commands may be followed by a program name. If not, the operating system will ask you for the name of the program. The SYSTEM command may be followed by either BASIC or ALGOL. If not, the operating system will ask you for a system name. (Like the commands, the system names may be abbreviated to three letters.)

In addition, the SPEED command allows you to specify the Teletype speed, for a more realistic simulation. Thus, SPEED 10 will slow things down to about 10 characters per second. See the separate pdf document *Commands.pdf*.

Remember, you may write your program using whatever medium you wish, BUT the final result must run entirely within the BASIC programming environment in the Dartmouth Time Sharing System Simulator. If you have forgotten where to get the DTSS Simulator, here is the link to it on Dartmouth College's web site.

<http://dtss.dartmouth.edu/>

Read the web page carefully. There is a link to the DTSS Simulator itself near the top. Follow all the instructions. Once you download the simulator, look into the directory where you unzipped the files. For me that was DTSS-Win. In that directory, there are two PDF files you will be interested in. One is called "A BASIC Outline.pdf" which gives you everything you need to know about the version of BASIC in this simulator, some of which I have included above. The other one you will need is called "Commands.pdf" which has all the information you will need to use the simulator itself and again I have included some of it above.

In case you are not aware, the commands LOAD, SAVE, RUN and a few others were not part of the original implementation of the BASIC language that is re-implemented in this simulator. Those commands were actually part of the operating system that the "BASIC Compiler" ran on. Yes, you read that right. Many people didn't and still may not realize that BASIC started out as a compiler environment. To the dismay of the original inventors of BASIC, Bill Gates turned their powerful BASIC Compiler running on a GE mainframe computer – a GE-235 mainframe that had Matrix commands available (which, by the way, are some of the most powerful commands I have ever seen) – into an interpreted BASIC language that was missing a great deal of the powerful programming features the creators of BASIC had originally intended for the language. Most of the world knows some version of the interpreted BASIC language that runs slower and slower as the program itself grows larger and larger on one microcomputer or another. However, in the

Dartmouth BASIC Compiler, just as in any compiler environment, the size of the program has no bearing whatsoever on the running speed of the compiled program since the BASIC Compiler converts the BASIC program into Assembly code and assembles the resulting Assembly code into binary to run on the actual processor or CPU of the GE-235!

All programs that are compiled to binary using the compiler process just as this BASIC Compiler uses will run at the speed of the computer's actual processor core whether it is a Mainframe, Mini-frame or Microcomputer. This is why the creators of BASIC were so upset with Bill Gates, because their fast, efficient, compiler was reduced down to a crawl by Bill Gates and his team at Micro-soft as it was called back then.

Anyway, back to the DTSS Simulator and programming in BASIC for the Contest. All participants will have their programs presented by me at the 2015 CoCoFEST in honor of the 51<sup>st</sup> Anniversary of the first time the Dartmouth Time Sharing System with the BASIC Compiler running on the GE-235 Mainframe way back on May 1, 1964 ran the very first BASIC Compiled Program. The first program run has since been lost to time, but it would be interesting to have seen what it was. Let's all try to come up with what that first program might have been like. Remember to use as many of the statements and functions as you can, but you are by no means required to do so. The only stipulation I am putting on the contestants of this BASIC Programming Contest is the resulting program MUST be able to run in the DTSS Simulator BASIC Programming environment. You can create your program however you like. Just remember the above stipulation. Let your creative juices flow! I'll see you all at the 2015 CoCoFEST! Starfleet Out! Qaplah! End Transmission!

### **1980 4K CoCo Programming Challenge** by **Allen Huffman**

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Let's pretend it is July (or August, depending on which source you use) 1980, and you wandered in to a Radio Shack store and saw the brand new TRS-80 Color Computer. Unlike the TRS-80 Model I, this machine had color and sound built in, and used a normal color television for the display just like an Atari 2600.

You quickly plopped down \$399 (plus tax) to buy your very own Color Computer, plus spent a little more for a cable that let you hook up a cassette recorder to load and save programs to cassette tapes. If they were available, you may have even opted for a pair of joysticks.

You got home, hooked the machine up to your television, and powered up the machine to be greeted with COLOR BASIC 1.0. You had 4K of RAM available to begin writing your first program. What could you have written?

#### **Contest Concept**

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The goal here is to write something as if you were using the original 1980 CoCo. There was no Extended Color BASIC, and you couldn't afford to upgrade the memory past 4K. You only have a cassette recorder for storage. (If someone really wants to, I suppose they would write a Program Pak entry, as a different category, allowing them to have 8K or 16K of code in ROM, using only 4K of RAM.) We should probably split

the contest in to two categories: BASIC and MACHINE LANGUAGE.

Also, we may wish to consider how the program was written. NATIVE (actually on a 4K CoCo or emulated 4K CoCo) versus EXPANDED (written on a later CoCo or later emulated CoCo) or CROSS HOSTED (written using tools on a different computer). The reason I mention this is because it's not possible to run native EDTASM on a 4K CoCo, so any assembly language would have had to be hand-coded (bonus points for doing it that way, just like they had to in 1980).

Using a 16K or 32K CoCo to run EDTASM makes things easier. Doing it using a PC-hosted compiler changes things further.

At the very least, we should note how the program was developed:

- Native - programmed on a 4K CoCo
- Expanded - programmed on a larger CoCo
- Cross Hosted - programmed on a non-CoCo

I suppose we can also note:

- Real - done on a real, physical CoCo
- Emulated - done on a virtual CoCo

A Native/Real attempt would be much more "legit" in 1980 compared to an Cross Hosted/Emulated attempt, though the focus is the end result.

What could you have done in 1980?

For more details and status, visit [www.cocopedia.com](http://www.cocopedia.com). There you will also find instructions on how to emulate a 4K CoCo using the Xroar emulator on a PC, Mac or Linux machine.

There is a new CoCo Coding Contest. See link below for more details.

[http://www.cocopedia.com/wiki/index.php/CoCoCoding\\_1980\\_Contest](http://www.cocopedia.com/wiki/index.php/CoCoCoding_1980_Contest)

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### **DynoSprite** by **Richard Goedeken**

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DynoSprite is a sophisticated video game engine for the Tandy Color Computer 3. See the links below for more details.

<https://github.com/richard42/dynosprite>

<http://search.gmane.org/?query=DynoSprite&group=gmane.comp.hardware.tandy.coco>

### **We Had Us Another Annual Picnic!**

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The Annual Glenside Picnic was held at the home of George Schneeweiss in Forrest, IL on Sept. 20, 2014. The weather was a bit cool but still pleasant.

As always, all had a good time and good food. We enjoyed fried chicken, potato salad, coleslaw, baked beans, Mirai corn, chips, cookies, and soft drinks.

We also enjoyed a surprise visit from Brother Jeremy, joining us all the way from Exeter, England.

Tony Podraza's car broke down upon arrival. Many of us pitched in to help get it drive-able again. George had plenty of parts in his barn to help with the repairs.



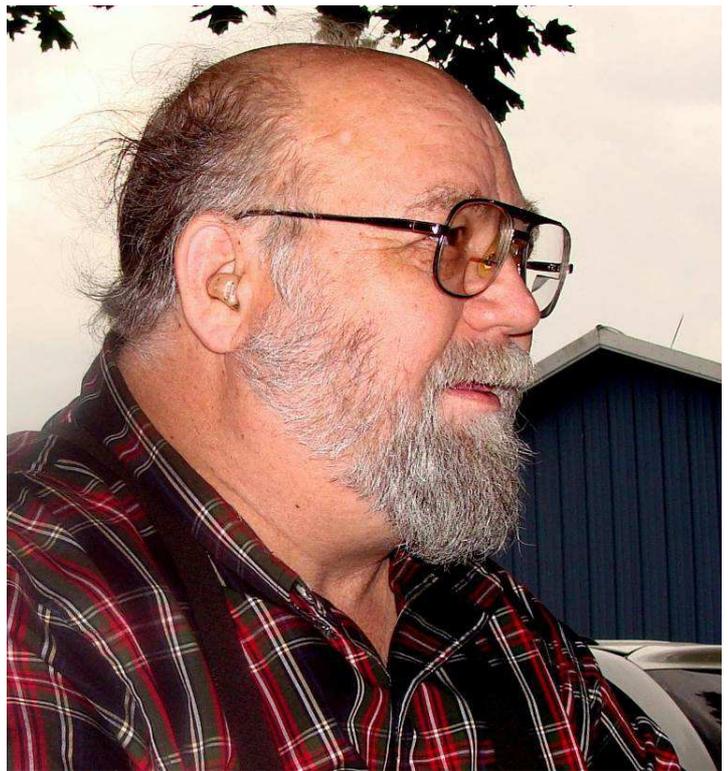
Tony hopes his car will survive.



Huh?



Fixing Tony's van



Tony is content to supervise the repairs



Hmm...



Let's hope this jack holds!



Brian Goers is Skype-ing with Bob Swoger from George's computer.



Brother Jeremy, Tony Podraza, & Frank Pittel



Frank Pittel



Rich Bair looking content with the car repair.



Justin Wagner & Brother Jeremy chat



Brian Goers, John Mark Mobley, & Frank Pittel in George's office



Nancy Hawks is a happy camper.



Christopher Hawks listens to another of Brother Jeremy's yarns.



Hold still, I've almost got it...



Brian Goers & John Mark Mobley



What does this do?



Brian ponders what to do next.



Brian Schubring's wife - Kim  
3D



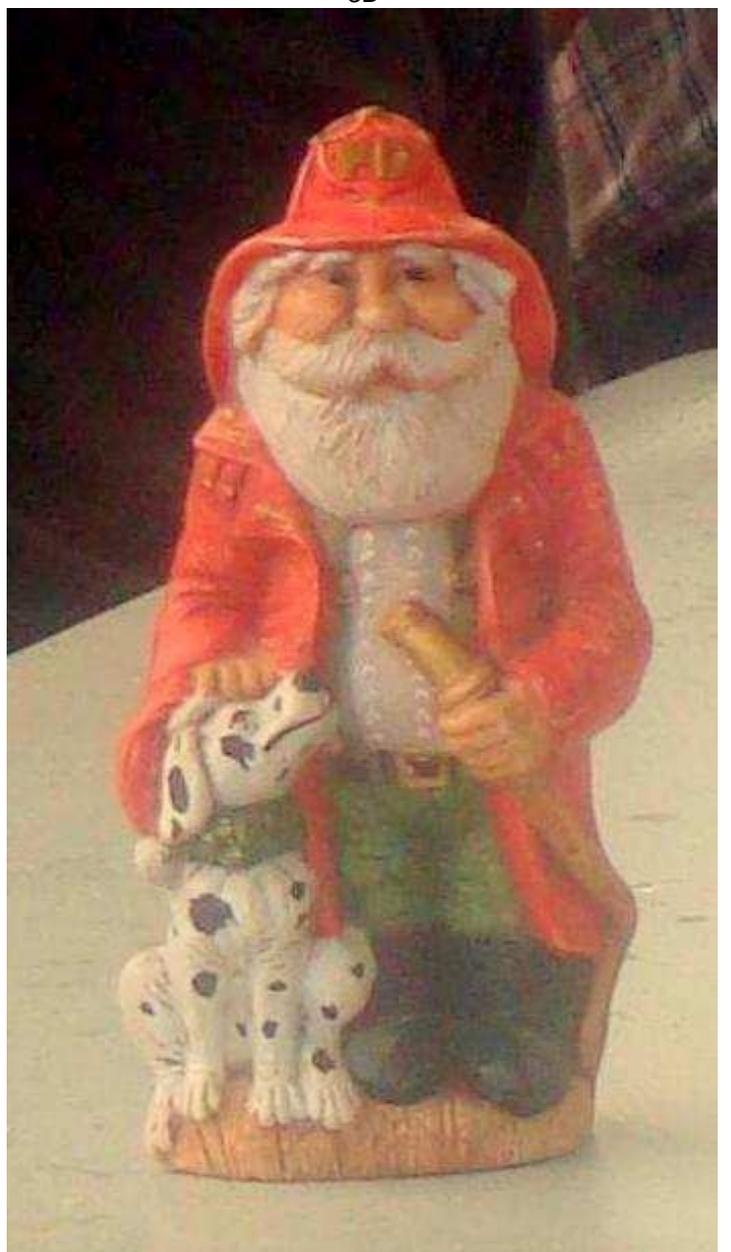
Brian Schubring's wife - Kim  
3D



Brian and his twin sister



Brother Jeremy & Justin Wagner



George pulled this out to say how much it reminded him of Bob Swoger!

See you next year: April 25 & 26, 2015  
**HERON POINT CONVENTION CENTER**  
645 West North Avenue  
Lombard, IL 60148  
665 Building on the lower level  
Saturday 9 am to 5 pm, Sunday 9 am to 3 pm

**Calendar of Events**  
by  
**John Mark Mobley and Salvador Garcia**

Thursday, January 8, 2015  
7:00 PM to 9:45 PM CST  
Glenside Color Computer Club, Inc. Business Meeting  
Schaumburg Public Library  
130 South Roselle Road  
Schaumburg, IL, USA  
Skype access available via: john.mark.mobley

Thursday, February 12, 2015  
7:00 PM to 9:45 PM CST  
Glenside Color Computer Club, Inc. Business Meeting  
Schaumburg Public Library  
130 South Roselle Road  
Schaumburg, IL, USA  
Skype access available via: john.mark.mobley

Thursday, March 12, 2015  
7:00 PM to 9:45 PM CST  
Glenside Color Computer Club, Inc. Business Meeting  
Schaumburg Public Library  
130 South Roselle Road  
Schaumburg, IL, USA  
Skype access available via: john.mark.mobley

Friday, Saturday, & Sunday April 17-19, 2015  
Vintage Computer Festival East (VCF East)  
Wall, New Jersey, USA  
Link: <http://www.midatlanticretro.org/>

Saturday & Sunday April 25 & 26, 2015  
The 24<sup>th</sup> Annual "Last" Chicago CoCoFEST!  
Heron Point Building  
Next to Fairfield Inn & Suites  
Basement/Lower Level  
665 West North Ave.  
Lombard, Illinois 60148, USA  
Link: <http://www.glensideccc.com/cocofest/index.shtml>

Friday, Saturday and Sunday May 1-3, 2015  
Vintage Computer Festival Europa (VCFe)  
Mehrzweckhalle des ESV München Ost  
Link: <http://www.vcfe.org/E/>

Be sure to visit our Website to see up to date information on upcoming events. <http://glensideccc.com>

## The 24th Annual "Last" Chicago CoCoFEST!



### 2015 CoCoFEST!

**Proudly Presented By**  
**The Glenside Colour Computer Club**  
**Fairfield Inn, Lombard, Illinois**

Here are the 5 "W's"

- WHO?** 1) Glenside Color Computer Club, Inc.  
**PRESENTS**  
**WHAT?** 2) The 24th Annual "Last" Chicago  
**CoCoFEST!**  
**WHEN?** 3) April 25 & 26, 2015  
(Sat. 9 am-5 pm; Sun. 9 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 2014!)**

**Overnight room rate:**

**\$84.00 plus 11% tax (\$93.24 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 - \$5.00 2nd & more**

**\*\*\*\*\* Children 12 and under - FREE \*\*\*\*\***

For further information, general or exhibitor, contact:

**Tony Podraza, GCCCI Robert Swoger, GCCCI**

**847-428-3576, VOICE 630-589-4692, VOICE**

**tonypodraza@gmail.com rswoger@aol.com**

**Please note the new starting times, 9 am, not 10 am.**

3rd time's the charm - this is the last \$5 fling as this will be our last visit to this location. The Fairfield has been good to us.