CoCo~123

CoCo ~123 HighLights

Articles:
Danger; Off Topic
DOCTOR! DOCTOR!
The Digiwiper
DATA STREAMS FROM THE WEB:
The CoCo And Your Life
In My Opinion: Ten Top Games

G.C.C.C. Inc. OFFICERS

Here is the list of 2001-2002 club officers and how to contact them.
If you have questions about our club, call one of the officers
for the answers.

POSITION	NAME	PHONE	PRIMARY FUNCTION
President:	Howard Luckey	708-748-5320	The buck stops here
V. Pres.:	Justin Wagner	630-393-7072	Co-ordination
V. Pres.:	Scott Montgomery	773-282-6044	Navigation
V. Pres.:	Brian Goers	708-754-4921	Special Events
Treasurer:	George Schneeweiss	815-832-5571	Dues and Purchasing
Secretary:	Tony Podraza	847-428-3576	Recording/reporting

Howard Luckey   Justin Wagner   Scott Montgomery George Schneeweiss Brian Goers   Tony Podraza

The Secretary's Notebook
Minutes GCCCI
August 9, 2001
OOPS! Minutes placed in too safe a place.
Cannot be found. Will be added to the next
newsletter when found.
Same thing for September 13, 2001
Submitted by Tony Podraza

October 11, 2001

Howard called the meeting to order at
7:50 PM at the Schaumburg Township District
Library. Present were Bob Swoger, Brother
Jeremy, Howard Luckey, Tony Podraza, George
Schneeweiss, Justin Wagner, Scott Montgomery,
& John Chasteen.

OLD BUSINESS

The location for the 11th Annual "Last"
Chicago CoCoFEST! will definitely be held in
Elgin, IL., again. The treasurer has verified that
a check has been sent to the Ramada Inn of Elgin
to secure the Banquet rooms for the FEST!. The
research for a different venue failed to uncover a
more financially advantageous situation for the
club and/or the attendees. Hotels were found in
the southern Chicago region with lower room
prices, but these did not have banquet rooms for
the FEST! activities. Also, Brian had reported
that the hotel chains had been selling and buying
different properties with the passing of every two
months, or do, and what had been a Ramada was
now a Holiday; A Day's inn became a Ramada.
This lead to the axiom of "Beware of hotels with
the name on the walls with Velcro."

Some of the names discussed for
invitations for speakers were John Kowalski
(Sockmaster); Bob Rosen; Chris/Trish Burke;
Kevin Darling. (Bob Rosen cannot physically
come, it was discovered later, due to health
problems, but was open to a telecommunication
attendance, if it could be arranged.)

The Annual PicqueNicque @ George
Schneeweiss' was an unmitigated success. After
seeing what George had accumulated over the
years, Annette Swoger hasn't said a word about
Bob's collections, lately.

A proposal to create a central
depository of released software was forwarded.
Sources could include CompuServe, Delphi &
Genie (but is it too late?)

The members wish to offer our
condolences to Brian Goers and Rich Bair for
their recent family losses.

John Chasteen has recently moved to
Schaumburg and has acquired an official Library
card for meeting room validation, should it be
needed. He also brought buttons that were made
for previous FEST!s for distribution at the 2002
FEST!.

The club has distributed a pair of Coco
Deluxe joysticks that were requested via the
CoCoLIST. Funds received for those joysticks
have been forwarded to the supplier.

OFF CoCo TOPIC-Bob Swoger
mentioned that he has recently acquired LapLink
Gold and after playing around with it for awhile,
has come to the conclusion that he likes it. We
look forward to seeing a short article on this in
the future. (Sure would be nice to see something
like this product be able to connect between the
CoCo and the other computers.)

HEY! Where did the NEW BUSINESS start?
Oh well.

The business meeting was closed at
9:00 PM.

Submitted by Tony Podraza

Minutes for November, 2001; Glenside
Color Computer Club, Inc.

The business portion of the Glenside
Color Computer Club, Inc., was called to order
at 8:00 PM.

The Treasurer's report was not accepted
as read, because the treasurer was not present

Members present were: Howard
Luckey; Bob Swoger;; Tony Podraza; Scott
Montgomery; and Brother Jeremy.

Old Business

It is an interesting observation that A
thread arose on the CoCoLIST that parroted
Howard's "President's Disk" article in the last
newsletter. (We will see some of them in this
newsletter).

No further news about the proposed
software compilation.

FEST! Preparations: There has been no
positive feedback from Tony on prospective
speakers for the FEST, however, Bob mentioned
that Steve Noskowicz is open to the idea of
presenting a LASER light show that he put
together using the CoCo as a controller for the
lasers. This is to be persued.

New Business

Tony will be setting up an account on
Juno.com for the sole purpose of making
newsletter submissions easier for the authors.
The account name will be:

coco-123@juno.com

Enter the Multipak interface.

The Multipak Interface PROVIDES + and - 12 volts on pins 1 and 2 of each of the four cartridge slots it offers. In doing so, it restores the bus of a CoCo 2 or CoCo 3 to the standards set by the CoCo 1. The Multipak Interface also buffers the address and data lines. BUT, it DOES NOT provide ANY buffering on the NMI and HALT lines (presumably for reasons of concerns about gate delays and timing in disk I/O applications??).
In any case, you get the same "naked", straight to the 6809 chip NMI and HALT lines on the Multipak Interface bus, and you have restored + and – 12 volt lines adjacent to them.

Result: There's probably MORE danger of destroying a 6809 chip in your CoCo from wiggling or improperly inserting or removing a cartridge from a combination of Color Computer 2 or 3 and Multipak Interface than there is from removing or inserting a cartridge directly into a CoCo 2 or 3! *(Editor's note: Which is a good reason to read the ad from Cloud 9-The Protector)*

Now, jamming + or - 12 volts down the NMI or HALT lines may not be the ONLY way harm is caused when one wiggles a cartridge in its bus slot. But it's probably the most common and most likely source of the problem.
CAN you harm a CoCo 2 or 3 by wiggling a cartridge directly in the CoCo 2 or CoCo 3 bus connector? I suspect you can... it's just a lot harder to do, and the mechanism of the harm will be different.

                                          ---marty

The Guru Of CoCo-OS9 MIDI responds-

From the way Marty describes it, which is correct AFAIK, your danger of> trashing the Coco is much less if you plug a cartridge into the MPI while the MPI is powered off, even though the Coco is still on. That's 'cuz there will be no +/-12V to jump over to the NMI and HALT pins.

OTOH, turning off the MPI but not the Coco usually makes for a lousy bootup when you turn the MPI back on. ISTR the Coco (any version) doesn't really like having a dead MPI on its bus. In fact, unpowered TTL chips are quite a > load on the 6809's outputs.

I've always used a power strip to power the two up and down together (and disk drives, etc.) and hardly ever had any bad boots or funny starts.

BTW, jamming game packs into the Coco or MPI "hot" was one of the ways to copy the ROMs, before folks figured out how to tape over the NMI in.
                                --Mike Knudsen

And Marty replies...

Good to hear from you, old chap!
Between you and me, it's been my experience that IF one inserts or removes a CoCo "ROM Pak" cartridge very carefully and steadily, with great attention not to wiggle it at all, one can reasonably likely avoid risk of damage to the CoCo. This of course is consistent with the notion that the source of the damage is adjacent traces (especially the - 12 volt_HALT and + 12 volt_NMI ones!) shorting out. The PROBLEM is that it's such a natural human tendency to WIGGLE something when it's resisting going in or out!

I can't recommend to anyone pulling out or inserting the cartridge while the power is on. There's no point in taking that risk especially, as you write, when usually better, safer alternatives (such as taping over the NMI trace on the cartridge) are available. Also for what it is worth, the ONLY chip I can recall seeing damaged on CoCo's that WERE damaged by a removed or inserted Mpak IS the CPU chip.
Curiously, the GIME chip in CoCo 3's and the SAM chip in CoCo 1's and 2's doesn't seem to be harmed, as evidenced by replacement of the CPU tending in all cases I've seen to fix the damage.
Back in the old days, when I was constantly tinkering with my CoCo, making up hardware for it and testing it out on my system, I made sure to SOCKET most of the chips on my CoCo mother board(s). I managed to blow a few CPU chips over the years, but was happily able to get back up and running within minutes by just pulling out the (socketed in advance by me) CPU chip and inserting a new one. I also managed to blow one or two Keyboard PIA chips when I was developing my CoCo keyboard extender cable.

                                          ---marty

on my web page was written on the CoCo and ported over to the PC (including the long travelogues, which are about 1Meg in size... yup), using Telewriter 128. Everytime I write a letter the CoCo goes on. Just about every time I've checked email over the years (first calling all those BBSs, and over the last few years, the internet). I still use a shell account, and am typing this on the CoCo right now. Yes, I have a laptop, but other than web surfing, it doesn't get used for anything much... the CoCo is still the first choice for email, word processing, and other daily chores. In going through these disks, I saw not only the software I grew up on, but poems I wrote, translations of Japanese comics I did, buffer-captured interviews taken from BBSs, email accounts long since inactive of friends...

I wonder, if we all took a few minutes to think about how the CoCo has played a part in our lives. Nowadays, people everywhere use computers, but it's more like driving a car... something you turn on and off without thinking much about. But the CoCo was different. When I run across stuff like my COCOCLUE game, I remember staying up nights programming it, and spending hours on it and other such things (thankfully I long ago hooked up a PC keyboard to the machine!) I was born in 1966, got my CoCo1 in 1981, and the CoCo3 in 1986, and that makes it in half of my life. Heck, my current PC is a Toshiba Satellite notebook that has the same grey "spray-paint" finish as the CoCo1... and just like my old long-gone CoCo1, the grey has worn out where I rest my wrist, and there are now two black spots there. :) Chicklet keyboards, 4K, R.S. catalogs... I even got a summer job at RS. While going to school in NYC I didn't bring my CoCo with me (the only time I was without it, for four years... practicing the violin was more important than computers at Juilliard), and when I'd take walks around the city, anytime I'd see a R.S. store, I couldn't help but stop in and program a neat BASIC demo and leave the store with it running (this around 1986) than the annoying green screen. I wonder, does anyone still have a car they've used non-stop since 1986? Or 1981? Yes, in time the CoCo might have to go in the closet, but not anytime soon, and it'll never be thrown away even though I'm the most anti-packrat type of person there is. There's just too much of my life with this little machine (heck, even in my travels, it brought me new friends from as far away as Australia and South Africa, let alone these 50 states and Canada).

Ah yes, Tandy's little wonder indeed. How much of your life has gone through it?
:::::Larry:::::

Gene Heskett wrote:

I started on my first real 'do something with it' machine back in '77, an RCA Cosmac Super Elf. Using the machine code monitor, and building the other custom hardware I needed, KRCR in Redding CA used it for at least the next 10 years to put an academy video leader and the automation tones on their commercials. At the time I saved them a dub generation, a very worthwhile quality improvement on those old 3/4" U-Matic VCR's. Later that year I got a Timex 1000, and promptly gave that thing to the kids.

I then skipped to a TI99-4a, but of course making a real machine was very expensive. Then came my first CoCo, an old grey ghost that I still have, I added 64k chips, and os9 L1 and never looked back. I've always prided myself on having the dos typed in and the return key pressed before the Magnavox was warmed up enough to see it.

Both the RCA, and the TI had very unusual CPU architectures, with the RCA having all 16 of its registers available orthogonally with a couple of exceptions, like register 2? was the fixed DMA pointer. The TI-9900 only having one (I think it was 10 bit) register with a 4 bit offset index into main memory so that all real address and data registers were in fact in low main memory rather than in the CPU. Context switches were beautiful though, just reload that one CPU register with the new base offset, and the code at that offsets memory location was executed, leaving the register image of the process you just switched out of totally intact, and totally unaware that it may have been sleeping for a few eons when the index register was once again reloaded with the address of that process.

Both were just fast enough to get the job done, the RCA 1802's program loop released with the falling edge of vertical drive, and everything done except the hardware triggered DMA well before line 21 of every frame.

I also did a transmitter remote control in Z-80 hex, so I have a talking acquaintance with 4 CPU's at the byte code level. And all of them would

download all I could to keep him supplied with new files.

Lee, was that Ken Baker that had the line tester demo set up? He is the one that has all the NEW CoCo 3 computers for sale. I believe that the ones he has now are the newer ones with the 1987 GIMEs installed. I hope he is at the fest in May.

Dave Poitras

From: George Ramsower
<georgeram@STIC.NET>

Back then, I was working for Motorola. The state of the art equipment that introduced me to microprosessors was a remote data acquisition system used in the oil business. The main control unit had a 6800 in it. After seeing how cool that was, I figured this was the way of the future. So I studied the Motorola furnished courses on microprocessors and decided I MUST have a computer.
The only place I knew to find one with a Motorola chip was at Radio Shack or the Apple store....
The Apple Peddler wanted to sell me a whole package... 'puter, disk drives, monitor, printer, paper, disks... etc.. would have been THOUSANDS! I told him I only wanted the 'puter, and later, if I like it, I will expand the system.. I asked serious questions, like what would it be worth in six months if I decide I don't want it. He said .. not much, because by then, not many folks will want it, because the new stuff comes out every other month it seems.
If I put $3500 into this thing and don't like it, I might get a grand for it later... nope! Not for me!
So I went to RatShack and found the 4k Coco on sale for $399.xx. I took that home, played with it for a while and then got a cassette achine. I used that combo for about two months until I and a co-worker(he got one also) figured we could use more memory.. so we figured out how to modify the board and put in the 64k chips.
The co-worker was into software, and I was the hardware hack. It wasn't too long after this that he discovered a newsletter called Rainbow. We wrote for the free subscription, and later paid for the magazine when it became one.
I didn't get into OS-9 until the CC3(512k).. but I had LOTS of fun wiring up interfaces to the outside world on my coco.

I have three machines in service right now. A CC2, and two CC3s(OS9). The CC2 is doing X-10 stuff around the house, and one CC3 is a workstation with three RS-232 ports.. ie. modem, IFR FM/AM-1200s, and this Windoze box are connected to those ports. The other CC3 is in my shop. I have that one in an OLD modem housing. That machine is connected to three stepping motors that are on a small machine with a dremel on it. It has X and Y and Z movements, with resolution to .0001 inch.. Really! ONE-TEN THOUSANDS. And it's great! The coco3 and os9-L2 (stock) working as fast as it can in BO9 is stepping the motors at exactly as fast as the dremel can cut the metal. Whew! All in one breath!

George

From: Mike Knudsen
georgeram@STIC.NET writes:

"The only place I knew to find one with a Motorola chip was at Radio Shack or the Apple store...."

Actually, the Apple used a 6502, a spinoff of the 6800 by some former Moto employees who formed their own company, MOS Technology.
Unless you count the early kit computers (in the metal boxes with front panels full of lights and switches), the Coco was the *only* home/hobby/personal computer with a Motorola CPU chip.
I'd come to know the 6502 pretty well thanks to my KIM-1 single-board "trainer" that I bought in 1978. I learned about the 6809 from BYE Magazine articles and realized I just had to have a 6809 system. Then I remembered the fine print in the ads below Rat Shack's ads for their color-video "game" computer, for folks not serious enough to get a "real" TRS-80. Didn't take me long to go buy a 16K Extended Color Basic gray case model.
Like others, I was also taken by the Coco's incremental, pay-as-you-go philosophy -- but the computer, hook it up to a garage-sale cassette recorder. If you really get hooked, get a printer, a floppy drive, another drive, more RAM, etc. I did, and I did, etc.
I couldn't get away with dropping $1000 for a bare Apple II, or $799 for an Atari 800, or even $599 for a Commie-64 (they later fell to $199 or something, but I was too committed to the Coco by then, and had had it with the 6502).

I met people at the RainbowFest who were as nutty as I was about the CoCo and I also met Marty Goodman, in the flesh!

We talked about Delphi and I was in heaven. The Fest was so crowded and big that I couldn't get through the whole thing in one day! I came back, went to a couple of seminars and just before closing I was approached by this giant of a man.

He asked me a few questions about myself and talked me into joining a user group or club or something. He was one heck of a salesman!

Unfortunately, when I got home I was on overload (I actually was so excited and preoccupied that I missed my turnoff and somehow ended up driving all the way around O'Hare Airport).

When I got home I was still on overload and I misplaced the sheet the big guy had given me. To this day I've never found it again. Of course they had gotten all of my data but with all the other stuff on my mind I forgot all about the club I had joined.

Skip ahead over a year and at least two Fests.

I was anxiously awaiting my copy of the Rainbow when I spied a newsletter in my mail. It was from The Glenside Color Computer Club. A meeting was coming up and my wife talked me into going. I was hesitant, I had the Rainbow, the Fests and my CoCo; what more could there be? I went and I loved it. At that meeting I met a lot of local people who have since become my extended family in many ways. I learned a lot but I also taught a lot. I became active in other groups as well.

Unfortunately, between my ill wife and my job I can no longer attend the Glenside Color Computer Club's meetings (I work nights) but I do maintain contact with quite a few of those people, both current members and past ones. Everything else is history.

Oh, the big guy is Bob Swoger. He can still be found at the Fests working the booth and the crowds. I owe him a lot.

Carl Boll: root@chicoco.chi.il.us

From: Jamie Cho

I too spent countless hours in front of a CoCo playing games, computer art, programming and learning the basics of sound and color. OS-9 taught me the fundamentals of operating system design and helped me get an internship at college

which eventually led to my graduate work in robotics.

At the XP launch, Microsoft will tell us what we have won with
Windows, but they won't remind us of what we have left behind:
1. Instant on
2. Fanless computing
3. BASIC which IMHO is a good tool to allow children to learn math and science and express themselves creatively all at the same time.
4. A sense of community.

Hmmm, I better get off my soapbox here! :)

(My thanks to all those who have so graciously allowed Glenside to reprint their personal experiences here. -----editor)

In My Opinion
by Frank DiGiovanni & Marlin Simmons

Fellow CoCo Folke -

What are, in your opinion, the top ten CoCo arcade/simulation games you have played and, also, the top ten adventure/RPG games and why?

Here are mine:

Arcade/Simulation

1. Gantelet II - excellent graphics, good, smooth gameplay, fast and fun arcade action.

2. Thexder - smoothly animated, very good graphic quality. Only thing which could have been improved is the depiction of the transformation from robot to jet fighter. I have seen an IBM PC version from the same period where the robot actually is seen transforming section by section.

3. Sub Battle Simulator - a very fun, tactically engrossing submarine combat simulator which is also historically interesting to me. Title screen and game action graphics are very well done.

4. Tie - Downland and Donkey King - I really have enjoyed both of these CoCo 1/2 games, both of which make good use of the CoCo ½ graphic capabilities, relatively limited as they are with a maximum resolution of 256 by 192, and of the artifact colors available with the CoCo 1 and 2 graphics modes. Both games are also very challenging. Tom Mix's Donkey King is a nice rendition of the arcade classic Donkey Kong.

5. Koronis Rift - excellent use of fractal graphics in the depiction of the landsc apes and

---

ANNOUNCEMENT

For All Those Retro-Computing Fans Who Miss Those Classic 80's Basic Computer Games!

I have put several Basic09 games in the OS9/incoming directory of RTSI. There is a football and a golf simulation, a version of Mine Sweeper, The Towers of Hanoi puzzle and a peg leap puzzle. Two versions of the classic two player game dueling cannons, one of which will run on a VDG screen under OS9 Level 1. A slightly slow, but interesting version of one-player battleship, based on a sink the sub--before it sinks you-- theme. A version of the classic game Wumpus, called Cave. I have also put an amortization calculation program there. All the files are compressed using LHA. Source and RunB versions included. I'm interested in any bug reports (if any) that people can provide.

Jim Gerrie
jgerrie@becon.org

****
Jim & Patty Gerrie
6 Tasker Street St.
Catharines, ON L2R 3Z8
(905) 988-9272
http://people.becon.org/~jgerrie
****

On a serious note, I would like to wish each one of you a very blessed Holiday season. I would also remind you that there are those in this world for whom this season will have a very somber and heart-wrenching meaning. When you gather with you friends and families, this year and every year, ask yourself what you can do to show your "neighbor" that you care.
"Love was not put in our hearts to stay."
"Love to be loved, must be given away"

tp

RUN
The 11th Annual "LAST" Chicago CoCoFest!
May 4th and 5th, 2002 Elgin, Illinois

Syntax error

Glenside Color Computer Club, Inc.
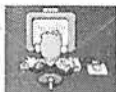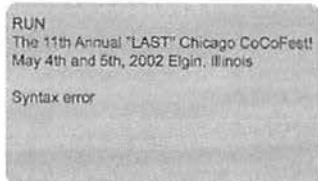
HERE WE GO AGAIN!!! ARE YOU READY FOR THIS??? WILL IT NEVER END???

FLASH **** FLASH **** FLASH **** FLASH **** FLASH

Here are the 5 "W's"
WHO?   1) The Glenside Color Computer Club, Inc. presents
WHAT?   2) The ELEVENTH Annual "Last" Chicago CoCoFEST!
WHEN?   3) May 4th & 5th, 2002 (Sat. 10am-5pm; Sun. 10am-4:30pm)
WHERE?   4) RAMADA INN of ELGIN
                     345 W. River Road (A city block from I-90 & IL-31)
                     Elgin, Illinois   (Same great location as last year!)
                     Overnight single occupancy room rate: $65.00 (plus 10% tax)
                  There is a $10.00 surcharge for each additional person
                  (Example: 3 people = $85.00 per night; plus tax)
                  Call 1-847-695-5000 for reservations.
                  Be sure to ask for the "CoCoFEST!" rate.

!!!!! THERE IS A LIMITED SUPPLY OF ROOMS BLOCKED OUT FOR THE FEST   !!!!!
!!!!! RESERVE YOUR ROOM EARLY -- THESE ROOMS WILL BE RELEASED FOR !!!!!
!!!!! REGULAR RESERVATIONS ON April 12, 2002 AND WILL NOT, !NOT!   !!!!!
!!!!!   BE AVAILABLE TO THE FEST ATTENDEES   !!!!!
    >>>>> 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 to the CoCo Vendors
                C. To provide educational support to new users.
                D. TO HAVE AN OUTRAGEOUSLY GOOD TIME!!!!!
         (More about this at a later date)

And now, the "H" word.
HOW MUCH? 1) General Admission, ALL ATTENDEES: $5.00/day, $7.00 whole show
           ******* Children 10 and under - FREE *******

Advance ticket sales available between 1/12/2002 and 4/12/2002 from:
          George Schneeweiss
          13450 N 2700 E Road
          Forrest, IL 61741
          Include a Self-Addressed-STAMPED-Envelope (SASE)

For further information, general or exhibitor, contact:
Tony Podraza, Secretary, GCCCI   Brian Goers, VP, Spcl Evnts, GCCCI
847-428-3576, VOICE   708-754-4921, VOICE
847-428-0436, BBS   bgoers@ais.net
tonypodraza@juno.com
          Be sure to visit GLENSIDE"S Website "http://members.aol.com/clubbbs/glenside/"

CoCo ~ 123 INFORMATION

The CoCo ~123 is the newsletter of the Glenside Color Computer Club. Your annual contribution of $15.00 keeps 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, local meeting room and good times with fellow CoCo users at our annual Chicago CoCoFEST! Other member benefits include: Sam's Club eligibility; CoCo community supplier discounts; access to club archives; notification of community events (the CoCoFEST!s); and friendly fellowship.

CoCo ~123 CONTRIBUTIONS

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

Howard Luckey
4 Gibson Rd
Park Forest IL 60466-2122
or
Tony Podraza
119 Adobe Circle
Carpentersville, IL 60110
tonypodraza@juno.com
or
coco-123@juno.com

CONTRIBUTORS TO THIS ISSUE

Howard Luckey-Robert Gault-Tim Lindner-
Tony Podraza-Nickolas Marentes-Larry
Greenfield-Gene Heskett-Glee Veal-George
Ramsover- Dave Poitras-Ken Carlin- Carl
Boll-Jaimie Cho-Frank DiGiovanni- Marlin
Simmons- Jim Gerrie- Mark Marlette-Marty
Goodman-Mike Knudsen-- Bob Swoger
George Schneeweiss-

G. C. C. MEETINGS

The Glenside Color Computer Club meets the second Thursday of each month at the Schaumburg Public Library at 7:30 p.m. A social get-together always occurs at nearby restaurant If you need a map, see our WWW Glenside Homepage at:

http://members.aol.com/clubbbs/glenside
Bob Swoger, Webmaster
Glenside Color Computer Club, Inc.

FROM THE PRESIDENT'S DISK

I'm baaaaak. Oops! I didn't mean to crash through your plate glass window and front door like that. I'm sorry. Boy that looks bad. Please forgive me, the Terminator.

Hey folks, what's happening on the *listserver.coco*? For the last three or four weeks I've been getting 30 to 40 messages a day sometime more. A lot of the topics I don't know much about, such as: iChip, M.E.S.S. emulator, tcp/ip for the CoCo, name the doo-hickey game, cd-rw drive, etc. I don't read everyone of them and at some stage I do a mass deletions. Also, a lot of the time I don't understand the technical details of the discussion so I feel that I am unable to add any useful information. I think it is great that there is so much activity and I've been wondering if any of the contributors would consider writing comments or articles for the Glenside Color Computer Club newsletter, CoCo~123. I am mentioning it here first then later I am going to ask specific individuals if they would.

Last month I received a letter from Mr. Howell asking for information about hardware and software dealers for the CoCo. I sent some of the ads we've had in the CoCo~123 newsletter, and I hope that helps him. Helping fellow CoCo-ists is one of the great functions of a computer club. We band together to help each other. And I want to thank Tony for the all the work he has done over the years for the Club and the work he is doing now for the newsletter

Remember the 11th "LAST" Glenside Color Computer Club Fest is May 4th and 5th 2002 in Elgin. I hope many of you can make it.

Until the next newsletter keep the CoCos running.
Howard Luckey
President, Glenside Color Computer Club

Did you know that **your** favorite one liner could have been printed here?

A discussion about a website for the newsletters ensued. Cost and/or sponsers were discussed. Further, if we were to set up such a site, formats for layouts were set forth. Example: post the table of contents and minutes but leave the articles offline or only have older newsletters posted so that those wishing to see the whole newsletter would have a reason to join the club and receive full access or the newsletter by mail. This is still to be hammered out, as we do not even have server space for such a site, as yet.

Tony mentioned the desirability to have a get-together at the "storage facility" to further the task of organizing and cataloguing the material that former "cocoists" have been donating to the club.

Speaking of which, Tony also mentioned that the treasurer, George, should be directed to reimburse Jim Cox for shipping his donation.

Howard read a letter from CoCo user Leon Howell.

The business meeting closed @ 21:00 hours.

A demonstration on how to save a screen shot captured on a WinBox followed. For those who might not know, but would like to, Read the next article ,otherwise skip and goto the next section.

Notes taken by Bob Swoger and typed by Tony Podraza

DANGEROFF TOPIC***

Capturing a screen shot on a WinBox
By tony podraza

It really is simple, if the directions are given clearly, and all the components are in place. First, open Paint. (Point and click the following: Start>programs>accessories>paint) Next, set up your screen that you want to capture. Press the "Print Screen" key. Now go back to Paint. Open the "EDIT" menu and select "Paste". If Paint asks you if you want the bitmap enlarged, click "yes". Your screen shot will be saved as a JPEG.

Sorry that this isn't CoCo related, directly, but it is part of the "LEARNING" function of the Club.

And now, for something completely different.

DOCTOR! DOCTOR!

Tim Lindner asks

"I know I could cause major damage if I insert or remove a Pak while the CoCo is turned on.
Is this the same with the Multi-Pak? Even if the switch is set to a different slot? Even if I know the "software" switch is set to a different slot?"
To understand the answer to this question, you need to understand WHY inserting or removing a cartridge from the CoCo might damage it. I'm as good a person to do so as any... I believe I was among the very first to call attention to this problem back in the early 1980's in a letter I wrote to Rainbow.

The way the original Color Computer One system bus is designed and laid out, the -12 volt bus line is on pin one, and the HALT line on the adjacent pin 3 of the bus connector. Similarly, the +12 volt bus line is on pin 2 (just below the -12 volt line, on the other side of the edge card connector) and the NMI line is adjacent to it on pin 4.

If one wiggles the cartridge as one inserts it, and IF the cartridge has all pads on its edge connector tinned (including the + and - 12 volt lines and the HALT and NMI lines, even tho ROM packs don't use any of those lines) THEN there's a chance that one can short -12 volts to the HALT line and / or +12 volts to the NMI line.

Now, the HALT and NMI lines go DIRECTLY to the 6809 CPU chip. And that chip will be destroyed if you jam + or -12 volts down one of those lines.

THIS is most likely the main cause of CoCo destruction from inserting and removing cartridges.

The CoCo 2 and 3 lack + and - 12 volt lines on their system bus. Pins 1 and 2 are, I believe, grounded (or perhaps not connected... I'm too lazy to go back downstairs and look at my collection of CoCo 2 and 3 schematics to learn for sure which). In any case, the chance of damaging a CoCo from carelessly inserting or removing a ROM-Pak is far less with a CoCo 2 or 3 than it is with a CoCo 1, I'm pretty confident.

The DigiWiper project being conducted by John Kowalski and I is almost finished. The software and hardware is done. All that is left to do is to create the operating manuals, run off some disks and build units to sell.

Distribution is to be handled by the tried, tested and reliable Jim Davis.

In order to drum up some finances to purchase the parts necessary to build units, I am now accepting advance payments. The price has been set to $30US plus $4.95 for postage, handling and insurance.

All payments can be posted to:
Jim Davis, P.O. Box 1704, Nixa, MO. 65714
Jim's e-mail address is:
gearboxed@mindspring.com

SO WHEN WILL IT BE AVAILABLE?

I am hoping to be able to send Jim the units to sell (I'm in Australia) around mid December this year but the postal service as it is right now along with the "Christmas rush" may force a delay till mid January. It will also depend on how much money can be collected to fund the assembly of units.

SHOULD WE TRUST HIM?

For those who have been following my progress over the last 4 years would know by now that I always deliver on what I say. I always keep people up-to-date via my web site.

YEAH RIGHT!

I have added to my web site more information about the unit including a diagram of how it hooks up and a brief description of how an edit is done with it. Once the manual is written, I will make it available for free download. I also plan to create a short mpeg file showing it in operation.

I have also added to the web site a table listing the people who have e-mailed me stating they are interested in purchasing a unit along with the status of whether they have paid and whether the product has been delivered to them. This way, everyone knows the state of their order. No confusion! The way things should be done!

OK, I'M SOLD. WHAT DO I DO TO ORDER ONE?

Firstly, send me an e-mail @ **nickm@launch.net.au** and tell me you are interested in purchasing one. To guarantee your unit, send the advance payment to Jim Davis.

I will e-mail you to let you know the units have been shipped to you and you reply to me to indicate that you have received it.

THIS GUY'S A CON JOB!!

Sorry, my honesty is all I have. Take it or go buy a VIC-20. :)

OK, WHERE'S THIS WEB SITE OF YOURS?

http://www.nickm.launch.net.au/CoCoWorkshop/index.html

Nickolas Marentes

DATA STREAMS FROM THE WEB

From CoCo Software on CD to The CoCo And Your Life: Something to Think About

From: Larry Greenfield
<lgreenfi@NYX10.NYX.NET>

Hi all again. Well, I've spent most of the last two weeks trying to get everything I have on those 5.25 floppies onto a PC CD-ROM for archiving (not only to have in case the disks start going bad, but to "have" for the future... heck, I still have an unopened CoCo3 and FD502... wish I could say the same for a CM8 though...) :)

At any rate, as I was moving all 300 or so disks over to the CDROM, I realized just how much of my life is on, and went through this little machine... I don't mean just commercial software such as games and Utilities, but other things I've used day-in-and-day-out for just about half my life. How many times have I booted up Ultimaterm 4.0? About 2-3 times a day for the last 15 years. All of my written letters are done using Telewriter 128, even though I have a PC and laser printer now, and even on the CoCo, had more powerful (though more cumbersome) word processing programs. Most of the content

be very old indeed in computer years now. For all the fancier opcodes available in the Z-80, and its extra registers, its lack of anything resembling a long branch made big programs pretty wrapped up in kludge after kludge to get interpage branches done. After that I said no more of that, ever. How that thing at one time owned 90% of the embedded market is absolutely beyond me.

Tandy's Little Wonder was the best of the lot, by a very wide margin.

Cheers, Gene

Gene,

In the fall 1966 I started studying how to wire IBM tabulator equipment at Tyler Jr. College in Tyler, Texas. We had a 548 Interpreter, a 514 Reproducing Card Punch, a 085 Collator, a 082 Sorter and a 402 Accounting Machine. The full speed 402 would move a blazing 100 punched cards per minute through the machine. Ours was known as a Series 50, which meant that it ran at half speed. (A whopping 50 cards per minute.)

In early 1967, we started studying Autocoder, which was the assembly language for the IBM 1401, a 6-bit character machine that had been the workhorse of a lot small and medium-sized computer departments. The fall of '67 and spring of '68 we did several more Autocoder projects, but a couple of weeks were also spent on Report Program Generator (RPG), COBOL and FORTRAN, too. Autocoder assembled source code fairly quickly as did the RPG compiler, but the COBOL and FORTRAN compilers were excruciatingly slow. I think largely due to the fact that COBOL source statement were read and converted to assembler which was then automatically fed to Autocoder which then finally produced machine code.

The 1401 we had at TJC had 12K of core storage. That was only 4K short of its maximum of a whopping 16K. The 1311 disk drives used removeable packs that were 6 platters high (about 4") and about 12" to 14" in diameter. There were a total of 10 surfaces useable in the 6 platters. (The top and bottom surfaces weren't used.) The capacity of this huge disk pack was 2,000,000 characters. (Just a little more that what fits on a 3.5" floppy today.)

Remember, this was 1966-68. The CoCo wasn't even a twinkle in somebody's eye. Luckily, I had pretty free access to the 1401 which basically became my toy. (Well, I did let the school use it when they had to.)

Later I went to work for a company that had a System/360 Model 30. It had 32K core storage but could be expanded up to 96K. The 2311 disk drives could store up to 7.25 million bytes of data. I was the night shift operator, so after I finished my work for the evening, I'd look at assembly language listings, then try to write small programs. I taught myself System/360 assembly language code, and piddled around with several little self-assigned programming projects. Again, after hours, this computer became my plaything.

At the end of 1968, I got drafted into the Army. After spending a two months learning how to kill the enemy, I was assigned to Fort Rucker, Alabama. We had 3 Univac 1005 computers, and a bunch of high-speed tab equipment. The 1005s each had 4K of core storage. Unlike their non-military counterparts, these were single-address machines. The Assembly language processor was called SAAL, Single Address Assembly Language. We were very busy most mornings. (I worked midnight to 8am.) However, we would sneak in some test programs from time to time. By the way, there were no disks or tapes on these systems. Eventually we upgraded to a tape-based System/360 Mdl. 30.

In Jan. 1971 I started to work at the City of Garland. We had a System/360 Mdl. 20. That was gone in a year or so. I didn't get my first CoCo until about 10 years after I started at the City.

I retired in 1996, twenty-five years and one day after I started.

Lee Veal

I have a white case CoCo 1 style. It does have 64K. This is one of my "prizes" as it is in perfect condition both physical and operational. I picked it up from a long time friend that helped me quite a bit when I first got into using the CoCo back in December of 1982. The RS manager gave her my name one day and next day she started helping me on the way to being a true serious CoCo user. I used Pro-Color-File to put the our Oldsmobile customer list in a database. In return the dealership bought me a wide carriage NX-15 printer, as they wanted a wide printout of the database on the old greenbar paper. That was in 1985. Man, this is bringing back some memories, Like becoming the Co-Sysop of the CoCoBean BBS. I used log on to the Delphi * C-serve CoCo file databases and

When OS9-L1 came out at The Shack, I knew I'd made the right choice. I must have had the first or second copy of it sold in my county. I think I really did get the first L2 copy sold in northern IL -- drove quite a ways to get it.

I won't try to estimate how much of my life went into the Cocos. Anyone who's run UltiMusE can guess how much time I put into writing and debugging that monster of a program. Then there's all my RSDOS assembler days before that. And the GCCC meetings, and Fests, driving from Chicago to NJ to sell UME at a Fest, flying to Atlanta for the same reason, etc.

Do I wish I'd spent this time/energy on something else? Well, name it. On a different computer system? Don't make me laugh! -- Mike K.

From Ken Carlin:
Since everyone lese is giving CoCo histories, I thought I'd present mine as well.
I started off near the beginning of the CoCo line when my parents bought me a 4K CoCo 1 for Christmas shortly after they were introduced. And of all the gifts I've gotten over the years, that one still remains my very favorite.
Having no other source of income available to a teenager with an expensive "habit", I mowed lawns and delivered the newspaper to be able to upgrade it to 32K, then later to a 64K CoCo2, then a disk drive, RS232pak (and I'm sure you can guess everything else I added).
Rainbow was a constant companion, teaching me how to efficiently program and giving me a wealth of free software if I was willing to type it in. Later, when I went to college, it also gave me something interesting to read during the breaks between classes. Heck, it even gave me a friend that I still have to this day. He saw me carrying around a Rainbow and was able to instantly identify me as a fellow CoConut.
Still later, I ran a BBS (a heavily modified CoBBS) on the CoCo2 and then CoCo3 when it came out. I still have the disks I ran it on, and I may just fire it up again to read some of the messages from the past.
I do regret not having gotten into OS9 until the CoCo3 came out. Still, OS9 was my introduction into "real" operating systems, and I still think in many respects it's unrivalled even today. My other regret is that I've forgotten alot of how it works, especially since I'm trying to get

my CoCo3 system back to the way I had it when I packed it away.
Now if I could only track down a copy of Gantelet 2, I'd die a happy man.
<grin>

Thanks for reading...

--Ken Carlin

P.S. I give permission for reprinting this in the newsletter I saw mentioned. I just hope it doesn't bore too many people.

From Carl Boll:
As long as others are sharing their history of the CoCo, I will as well.

Back in the early days of computing, 1976 to 1978 I took Computer Science courses. I learned BASIC, COBOL, IBM 360 ASSY and at a later point Fortran. All of this was done on punch cards. Then I got an apprenticeship as a printer at R. R. Donnelley & Sons.
When the Atari 2600 came out they had an optional keyboard for it, I just had to have it (I already had bought the console to play games on it). It was disappointing to say the least as a home computer.
For the next few years I looked around at various computers but decided they just cost too much in relation to their abilities!
The only computer that really interested me was the Coleco Adam with its impressive software on tape but you couldn't get any of the accessories that were listed so I kept waiting.
Then one day I was at Radio Shack and I saw a large display of 16K CoCo 2's. They had one set up and the machines were even on sale for what I felt was a reasonable price ($99.99). I bought one along with a cassette recorder, some tapes, a few cartridges and of course joysticks.
Lo and behold, a free copy of the Rainbow was inside and I just had to subscribe. My first real programs were typed in from the Rainbow. I bought software from the ads. I subscribed to Delphi. I religiously hacked that poor CoCo from articles by Tony DiStefano and Marty Goodman until it no longer looked like the cute little game console it was marketed as when I bought it.
The there was a RainbowFest here in Chicago. I just had to go. I had been to other local computer shows but they lacked CoCo specific stuff, other than a few public domain programs which I already had.

smooth movement of the same as you travel about the planetary landscape. Fun, well-designed combat sequences. A good story behind the game as well. It would have been doubly fun if this arcade game had also had an adventure game component to go with the arcade action.

6. Mega-Bug - an excellent takeoff of the Pac-Man inspired eating dots in a maze concept with some superior additions not previously existing in that concept, such as a much larger maze, the movement magnification window, and the talking opponents. "Weeeee gotcha!!"

7. Canyon Climber - dodging angry goats, hopping arrows, leaping mountains - this was a really fun arcade game. Fast arcade action with good quality graphics.

8. Robocop - Although I would have referred it to be a longer playing game with more screens, I felt this was a good, fun, well-designed rendition of Robocop with some nice vocal sound in it.

9. Poo-Yan - A faithful, fun adaptation of an arcade classic.

10. Rommel 3-D - a nice adaptation of the Battle Zone arcade game which really captures its flavor, though I feel it could have been improved in some ways.

Note: There are numerous CoCo arcade games I have not yet had the opportunity to play which seem promising, among them Sundog Systems' Sinistaar, Eversoft's Pac-Dude Monster Maze, Sundog's Kyum-Gai, Warmonger, and the Contras, both of which I intend to order, in the OS-9 version for Kyum-Gai, from Jim Davis soon, and some others which may alter this list's contents should I have the chance to play these at some point.

Frank M. DiGiovanni
= =

And from Marlin, we read:

1. Ghana Bwana. Wonderful game play with a consistent theme throughout.
2. Donkey King/The King. As close to the arcade game as you can get. All of the officially licensed Donkey Kong games I've seen suffered by comparison.
3. Malcom Mortar. My favorite CoCo III game.
4. Microbes. A decent Asteroids clone.
5. Space Assault. Back in the early 80s a Space Invaders clone was pretty much a requirement. Tandy's was a pretty good one.

6. Polaris. Nice Missile Command clone.
7. Zaxxon. Tandy's first officially licensed arcade game. Even then the main reason it was an officially licensed version was because Datasoft developed and sold the game themselves before selling the rights to Tandy.
8. PacDude. A very good Pacman clone.
9. Sailor Man. Tom Mix's Popeye clone.
10. Pitfall II.

With an honorable mention for Marty's Nightmare written by Steve Bjork for sale at one of the fests. I cheated and bought it from CoCoPro when they sold the copies leftover from the fest.

Marlin Simmons

Minnesotan's guide to computer lingo
With all due apologies to Mark Marlette:

Vell, here ve go den.

LOG ON: making da vood stove hotter
LOG OFF: don't add vood.
MONITOR: keep an eye on da vood stove
MEGAHERTZ: when a big log drops on your bare foot in da morning.Uffda!
FLOPPY DISK: vhat you get from carrying too much vood.
RAM: da hydraulic ting dat makes da voodsplitter vork.
DRIVE: getting home during most of da vinter
PROMPT: vhat ya vish da mail vas during da snow season.
ENTER: come on in. Coffee?
WINDOWS: vhat ya shut vhen it gets 10 below
SCREEN: vhat is a must during black fly season
CHIP: vhat ya munch on during Vikings games
MICROCHIP: vhat's left in da bag vhen da chips are gone.
MODEM: vhat ya did to da hay fields last Yuly
DOT MATRIX: Einar Matrix's vife
LAPTOP: vhere da grandkids sit
KEYBOARD: vhere ya suppose to put da keys so da Misses can find em.
SOFTWARE: da plastic picnic utensils, ya?
MOUSE: vhat leafs dem little droppings in da cupboard.
MAINFRAME: da part of da sauna that hols up da roof.
PORT: vhere da commercial fishin boats dock. Also dulut.
RANDOM ACCESS MEMORY: vhen ya can't remember how much ya spent on the new deer rifle vhen da vife asks about it den.

Classic Games by Sundog Systems

All programs require a 5-1/4 Disk Drive and noted system. These programs are not for use with the CoCo Emulator.	Genre	System	Price
Champion	Action/Arcade	CoCo 2 64k, CoCo 3 (B/W)	$3
Crystal City	Action/Arcade	CoCo 3 128k, RGB/CMP	$5
Dragon Blade	Adventure/RPG	CoCo 2,3 64k, (artifact colors)	$4
GrafExpress 2.0	Programming/ Utility	CoCo3, 128/512k, RGB/CMP	$10
Hall of the King I	Adventure/RPG	CoCo 1,2,3, 64k (artifact colors)	$4
Hall of the King II - The Inner Chambers	Adventure/RPG	CoCo 1,2,3, 64k (artifact colors)	$4
Hall of the King III - The Earthstone Revealed	Adventure/RPG	CoCo 1,2,3 64k (artifact colors)	$4
In Quest of the StarLord	Adventure/RPG	CoCo 3 128k, RGB/CMP	$8
Kung-Fu Dude	Action/Arcade	CoCo 1,2,3, RGB/CMP	$3
Kyum-Gai	Action/Arcade	CoCo 3, 128/512k, RGB/CMP	$5
Kyum-Gai - OS-9	Action/Arcade	CoCo 3, 512k, RGB/CMP OS-9 Level 2	$5
Paladin's Legacy	Adventure/RPG	CoCo 2,3 64k, RGB/CMP (artifact colors)	$5
Photon	Action/Strategy	CoCo 3, 128/512k, RGB/CMP	$5
SoundTrax	Utility/ Productivity	CoCo 3 128/512k,	$10
SoundTrax Instument Disk Set (1-3)	Utility/ Productivity	CoCo 3, 128/512k, SoundTrax Sequencing System	$5
The Contras	Action/Arcade	CoCo 3, 512k, RGB/CMP	$5
The Quest for Thelda	Action/Adventure	CoCo 3, 128/512k, RGB/CMP	$5
War Monger	War Game Contruction/ Simulation	CoCo 3, 128/512k, RGB/CMP	$10
Warrior King	Action/Arcade	CoCo 3, 128/512k, RGB/CMP	$5
White Fire of Eternity	Adventure/RPG	CoCo 2,3, 64k, (artifact colors)	$4
Zenix	Action/Arcade	CoCo 3, 128k, RGB/CMP	$5
For ordering information email me at: gearboxed at mindspring dot com $3.00 US S/H will be added to entire order. (US/CANADA)			

THE PRO-TECTOR

The Pro-Tector daughter board is ready to ship. This unit is a plug in device to the CoCo's motherboard after a socket is added. This device buffers the address lines of the processor. In the event of an external failure on the bus the processor is protected. I have used this device for years and has saved me MANY CPUs. Since the 63x09EP is getting harder to procure this adapter is a low cost alternative to always replacing the CPU. Cloud-9's 2 meg Memory/SCSI card will have this buffering already present. This product is for users that have other memory cards and would like to have a some protection. If you have a Y cable connected to your external cartridge port, this device can only help in that type of environment. Note the processor IS NOT included.
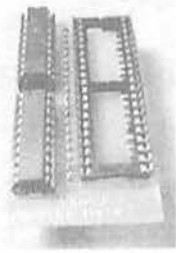
The unit will ship with the following items:

1 - Pro-Tector board
1 - 40 pin "machined" Augat style socket for the motherboard
1 - Installation Manual
1 - Schematic package

Please note that unsoldering of the processor is REQUIRED. If you are uncomfortable at this then please Email me below. I will provide this service at NO CHARGE. You pay for round trip insured shipping of your Color Computer. I will also give you a discount on the shipping charge for the product as well. Since you are already paying for shipping back to you.

Cost is US $16 each, plus $4 shipping per order, not per unit. Shipping will be UPS ground or USPS within the US. If you are outside of the US please indicate method of shipment desired and I will check into the added cost, if any. If you would like a different method of shipment please indicate. Ex: UPS-RED, BLUE, FEDEX, AirBorne, etc. These will all have additional shipping costs added to the base price. For more information contact:

Mark Marlette -- mmarlett@isd.net

EOF

By Tony Podraza

Look at the month, will you? Best laid plans of mice and memory .This was supposed to be OCTOBER's ISSUE!

BUT, if it had been, we wouldn't have had "The CoCo and Your Life" article in this issue. Well, maybe we would have, at that. I found the mini autobiographies quite interesting. I hope that none of you were bored. Of all the comments that were made, I think that Jaimie Cho really hit the nail on the head as to why, after 21.5 years, the CoCo still has a following, The constant discovery and self support that we give to one another has fostered (and I quote) "a sense of community" that one just might not find in some other computer circles. But, I could be wrong. It's been known to happen.

Be sure to mark you calendars for the first weekend in May for the 11th Annual "Last" CoCoFEST! It will be at the same "BAT-Time, same BAT-Channel" as last year. We hope to see you there.

Remember, we can always use your articles, experiences, tips and trials. You can now submit material directly to "coco-123@juno.com". We already have some material slated for the next issue, (our main article next month is by James E. Jones, and has to do with recursive something or other. (Guess I better read it, huh?)) but, believe me, we can always use more. PLEASE!

Be sure to consider supporting the vendors you see in this newsletter. They paid BIG money to advertise. **NOT.** Any and all space for product information that you see in the CoCo~123 is offered to the suppliers **free** of charge. Just another way Glenside can serve the community. If you have something to offer, or know of somebody else who has a product, send in an ad. We want to know what is still available.

Until next time, I bid you Peace
p.s.   We were going to include some pictures of the Picque-Nicque that was held in September, But we'll hold off until the next issue, when we, in the Chicagoland, will NEED to be reminded of the beautiful warm day and the delicious food and fellowship at George Schneeweiss' rural antique and car museum. Well, not officially, you know, but the restored Plymouth RoadRunners were a sight to behold..

tp