	C.C.O.G. Color computer owners group Newsletter January 1991	LIUOMIA PLAZA SEARS CREWLEY'S 7 MILE RD SUNOCO MC SPORTING NO DA SUBSCO MC SPORTING MC
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PRESIDENTS COMMENTS:

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THIS IS THE START OF A NEW YEAR, THE ELEVENTH YEAR FOR THE COCO. THIS IS THE TENTH YEAR FOR THIS CLUB. I DO NOT KNOW EXACTLY WHAT MONTH IN 1981 THIS CLUB WAS FORMED. I DO KNOW THAT IT WAS JULY OF 1980 WHEN RADIO SHACK (TANDY) ANNOUNCED THE COLOR COMPUTER. I FIRST LEARNED ABOUT THIS CLUB IN OCTOBER OF 1982, AND BECAME A MEMBER SOMETIME IN 1983. I JUST SPENT THE LAST TEN MINUTES BEFORE WRITING THIS SENTENCE TRYING TO FIGURE OUT WHAT YEAR IT WAS WHEN I BECAME PRESIDENT OF THIS CLUB. I DO HAVE ALL THE NOTES FROM THE FIRST FEW MONTHS, BUT OF COURSE I DID NOT THINK AT THAT TIME TO PUT A YEAR ON THEM FOR POSTERITY. I DID HOWEVER MAKE NOTE IN MY AGENDA FOR THE JUNE MEETING THAT THE NEXT MONTH WAS THE FIFTH ANNIVERSARY ISSUE FOR RAINBOW. BY DEDUCITVE REASONING, SINCE RAINBOW. BY DEDUCITVE REASONING, SINCE RAINBOW STARTED IN JULY OF 1981, 1981+5=1986. SO, IT'S BEEN 4 AND A HALF YEARS FOR ME. THIS COMMING MAY I WILL HAVE OWNED A COCO OF ONE SORT OR ANOTHER (ORIGIONAL 16K 'D' BOARD, TDP-100 64K 'F' BOARD, COCO2, AND COCO3) FOR A FULL 10 YEARS FOR A FULL 10 YEARS.

SO, YOU SAY, WHAT'S THE POINT OF ALL THIS RAMBLING. WELL I GUESS THAT WE'VE BEEN AROUND FOR A LONG TIME. MANY OF YOU HAVE BEEN AROUND AS LONG AS I HAVE. SOME OF YOU, EVEN LONGER. I THINK THAT MAKES US ONE OF THE OLDEST COMPUTER CLUBS IN THE COUNTRY, DEDICATED TO A SINGLE COMPUTER FOR THAT LONG. ANY CLUB OLDER, DEDICATED TO A SINGLE COMPUTER, WOULD HAVE TO BE EITHER ANOTHER COCO CLUB OR A CLUB DEDICATED STRICTLY TO THE APPLE II FAMILY OF COMPUTERS. I HAVE TO QUALIFY THE "DEDICATED TO A SINGLE COMPUTER" BECAUSE I KNOW OF TWO CLUBS HERE IN OUR AREA THAT ARE OLDER.

Well, how much longer can we continue. Good question!! Do WE STILL HAVE MEMBERS? YES!! DO THEY STILL COME TO MEETINGS? YES!! DO THEY STILL HAVE COCO'S THAT WORK? YES!! THEN WE CONTINUE!! So I guess thats the POINT! YES, WE ARE OLD, AND YES WE ARE GETTING OLDER, AND YES, FOR THE FORESEEABLE FUTURE WE WILL CONTINUE TO GET OLDER. LET'S TAKE A LOOK FORWARD AND SEE WHAT WE HAVE COMMING UP IN THIS YEAR OF 1991. THIS MONTH, JANUARY, IS OUR TRADITIONAL MONTH FOR THOSE WHO ARE NEW, OR NEARLY NEW TO THE WONDERFUL WORLD OF COCOING. NEXT MONTH WE WILL LOOK AT UTILITIES. IN MARCH WE WILL SEE IF THE COCO IS ΙN SUITED TO THE BUSINESS WORLD. IN APRIL WE WILL LOOK AT HOW THE COCO IS GOING TO HELP US AROUND THE HOUSE. IN MAY WE WILL SEE THE HOUSE. IN MAY WE WILL SEE IF WE CAN STILL HOOK THIS OLD COMPUTER UP TO THE HOT NEW PRINTERS THAT ARE ON THE MARKET TODAY. IN JUNE WE WILL CHECK ON JUST HOW MUCH NOISE WE CAN MAKE WITH THE OLD COCO (SPEECH AND MUSIC). JULY WILL BE AN OPEN TOPIC MONTH. AUGUST WILL BE OUR EVER POPULAR GAME MONTH. IN SEPTEMBER WE WILL LOOK AT HOW THE COCO CAN HELP US WITH EDUCATION (OURS AND TO HELP WITH OTHERS). IN OCTOBER WE WILL LOOK AT GRAPHICS. IN NOVEMBER WE WILL CHECK INTO TALKING TO THE OUTSIDE WORLD. AND THEN OUR ANNUAL CHRISTMAS CONCERT AND PARTY IN DECEMBER. BERNIE

OK, SO WHAT !!. WELL SO NOTHING,

I GUESS. SO WERE OLD. SO WHAT.

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After a short business meeting where we voted to continue to financially support the BBS because it is still a primary means of communicating and transferring files for the NEWSLETTER.

WE CRANKED UP THE MIDI'S AND HAD A PARTY

BEGINNER'S CORNER VOL.20 BY ROBERT GAULT

THE DESIGN OF ALL COLOR COMPUTERS IS SUCH THAT THE 6809 CPU CAN BE MADE TO READ EITHER READ-ONLY-MEMORY (ROM) OR READ/WRITE-MEMORY (RAM) IN MEMORY LOCATIONS \$8000-\$FFFF. THE RESULT IS THAT EVEN THE COCO 1 HAD ACCESS TO 96K OF MEMORY. SINCE THESE LOCATIONS ARE WHERE SYSTEM CODE RESIDES IT HAS ALWAYS BEEN POSSIBLE TO MODIFY THE SYSTEM SOFTWARE EITHER TO CORRECT PROBLEMS OR IMPLEMENT ENHANCEMENTS.

So we all start off even, here is the often published code to switch the older units to all RAM mode. The Coco 3 is normally in this mode.

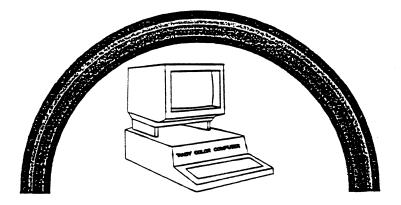
10 REM RAMROM 20 FOR M=&H7F00 TO &H7F17:READ A\$:POKE M,VAL("&H"+A\$):NEXT 30 END 40 DATA 34, 1 , 1A, 50, 8E, 80, 0 , B7, FF, DE 50 DATA EC, 84, B7, FF, DF, ED, 81, 8C, FF, 0 60 DATA 26, F1, 35, 81

THE ABOVE CODE WILL ENABLE COCO 1&2 USERS TO TRY OUT SOME OF MY PREVIOUSLY MENTIONED TECHNIQUES. HERE IS ANOTHER ONE. HOW CAN YOU EASILY MAKE YOUR COCO ACCEPT PCLEAR#, WHERE # GOES FROM 0 TO RIDICULOUSLY HIGH NUMBERS? PCLEAR0 SIMPLY NEEDS CHANGE ONE BYTE OF CODE; POKE&H968F,&H21 AND ONE BYTE OF DATA; POKE&HB7,PEEK(&HBC). PLEASE DON'T USE ANY GRAPHICS ROUTINES WHILE IN PCLEAR0 MODE. THAT IS A GUARANTY OF DISASTER.

POKE&H9692,#+1 will permit PLCEAR# where # > 8. Why clear more than 8 pages? Perhaps you have a lot of graphics to display? Another reason is exemplified in the Basic loaders for Mickeyterm.

MICKEYTERM IS ML. CODE THAT RESIDES FROM &HEOO TO &H5000. SINCE THAT IS WHERE ANY BASIC PROGRAM NORMALLY RESIDES, THE LOADER WOULD OVERWRITE ITSELF UNLESS THE BASIC CODE COULD BE MOVED; A PCLEAR11 WILL DO THE JOB.

HERE IS ONE ONLY FOR COCO 3 USERS. TAB DOES NOT WORK CORRECTLY ON HRES TEXT SCREENS. WHEN BASIC WAS UPDATED FOR THE COCO 3, THE TAB CODE WAS NOT PATCHED CORRECTLY. POKE&HA373,&HF6: POKE&HA374,&HFE: POKE&HA375,2: POKE&HA376,&H12 THIS SEQUENCE WILL, HOWEVER, MESS UP TAB ON THE WIDTH32 SCREEN.



"VIEWPOINTS" BY GUS KORTE

THAT WAS AN INTERESTING ARTICLE BY JIM SNIDER IN THE PREVIOUS CCOG NEWSLETTER. THE TELEPHONE MODEM ELECTRONIC BULLETIN BOARD SYSTEM (BBS) THAT OUR CCOG CLUB CAN USE, AS SET UP BY JIM SNIDER, IS NOW IN IT'S THIRD YEAR. WELL DONE JIM! YOU HAVE DONE A GREAT JOB FOR THE CLUB AND YOU DESERVE OUR THANKS TOO. I KNOW I ENJOY CONTACTING THE CLUB MEMBERS ON THE BBS. IN ADDITION I'VE LEARNED A LOT BY READING THE VARIOUS MESSAGES ON THE DIFFERENT AREAS OF THE BBS REGARDING OUR COCO HOBBY. I STILL CAN'T UNDERSTAND WHY JIM NEEDS TO ASK MEMBERS TO USE IT SINCE THE ADVANTAGES OF IT ARE SO USEFUL TO EACH MEMBER. ANOTHER COMPLIMENT JIM SHOULD GET IS ONE FOR THE WONDERFUL CCOG DISKETTE LIBRARY HE ORIGINALLY SET UP FOR OUR CLUB. AGAIN JIM YOU DESERVE OUR THANKS FOR THIS TOO. Well done Jim! THE MICKEY TERM PROGRAM THAT I OBTAINED FREE FROM THE CCOG LIBRARY HAS BEEN VERY USEFUL IN CONTACTING THE BBS. THERE ARE OTHER PROGRAMS FROM THE CLUB LIBRARY WHICH ARE ALSO VERY USEFUL TO PROMOTE OUR COMPUTER HOBBY. WHY MORE CLUB MEMBERS AREN'T USING THE BBS AS JIM INDICATED, IS A PUZZLE ESPECIALLY SINCE PART OF THE CLUB DUES PAYS FOR THIS SERVICE. AS JIM MENTIONED YOU ALL HAVE A RESOURCE THAT'S GOING TO WASTE.

IN THE ABOVE-MENTIONED ARTICLE JIM ALSO INDICATED THAT DAVE MYERS, OWNER OF COCOPRO, IS LEAVING OUR CCOG CLUB BECAUSE OF LACK OF SUPPORT. DAVE WAS AT MANY OF OUR CLUB MEETINGS OFFERING US MAINLY USED PRODUCTS REGARDING THE COCO. I BOUGHT SEVERAL OF HIS PRODUCTS AT BARGAIN PRICES. IT'S TOO BAD THAT A VERY USEFUL CLUB MEMBER AS DAVE MYERS HAS DECIDED TO QUIT THE CLUB. FORTUNATELY FOR THOSE DESIRING HIS_PRODUCTS HE CAN STILL BE CONTACTED THROUGH JIM'S BBS.

This month I distributed our CCOG newsletter to one of several Radio Shack stores where I was told that several COCO3 models were sold during the past holiday season. So you can note from this that the COCO3 is still selling. If that kind of record continues, maybe the COCO3 will have a longer lifetime than some of us have thought possible. It also shows that a lot of people know the COCO3 is a bargain in these days of generally high computer prices.

RECENTLY I TRIED USING A PROGRAM INSTRUCTION THAT IS USEFUL FOR HALTING A PROGRAM AT ANY POINT. IT WAS USED IN A PROGRAM IN THE RAINBOW MAGAZINE SO I TRIED IT AND IT WORKS TOO. SIMPLY TYPE THE RSDOS COMMAND INPUT, FOLLOWED BY ANY NUMERIC OR STRING VARIABLE, INTO YOUR BASIC PROGRAM AND IT STOPS THE PROGRAM THERE WAITING FOR YOUR INPUT ENTRY. YOU CAN PRESS MOST ANY KEYBOARD KEY AND YOUR PROGRAM WILL THEN CONTINUE. THIS IS A NICE WAY TO PUT A PAUSE INTO YOUR PROGRAM AT SOME DESIRABLE POINT.

ON PAGE 87 OF THE JANUARY 1991 RAINBOW MAGAZINE, I NOTICED IN THE LIST OF COCO CLUBS FOR MICHIGAN OUR CCOG CLUB IS THE ONLY ONE LISTED. OHIO ON THE OTHER HAND SHOWS 3 COCO CLUBS. Some states show no CoCo CLUB AT ALL. THAT INDICATES TO ME THAT I'M LUCKY TO HAVE SUCH A HOBBY SUPPORT GROUP AS THE CCOG IN OUR LOCAL AREA. NOT EVERYONE HAS THAT ADVANTAGE.

A REMINDER ESPECIALLY FOR NEW MEMBERS OF THE CCOG, THE VFW USES YOUR MONEY DONATIONS FROM OUR CLUB IN IT'S MANY CHARITABLE ACTIVITIES ESPECIALLY CONCERNING UNFORTUNATE HOSPITALIZED VETERANS. IT'S ALL GOING FOR A GOOD CAUSE. THE LIVONIA VFW ALSO COLLECTS USED BOOKS AND MAGAZINES TO GIVE HOSPITALIZED VETERANS. SO IF ANY OF YOU WANT TO CONTRIBUTE SUCH, WHICH YOU WOULD OTHERWISE DISCARD, GIVE THEM TO THE VFW BARTENDER TO MAKE SOME UNFORTUNATE VETERANS HAPPY. ALSO WE OWE SOME THANKS TO THE VFW BARTENDER BECAUSE HE VOLUNTEERS HIS TIME TO OPEN THE VFW POST FOR US AND SERVE US DRINKS. HE GETS NOTHING FOR PROVIDING US THIS SERVICE SO LET HIM KNOW YOU APPRECIATE HIS EFFORTS FOR US WHENEVER YOU CAN.

EXPERT'S CORNER VOL.19 BY ROBERT GAULT

I RECENTLY WROTE A LARGE AND COMPLEX PROGRAM IN TANDY BASIC AND NEEDED TO PROOF READ IT TO BE SURE THAT THE CODE WAS EFFICIENT AND THAT NO LEFTOVER BUT UNUSED LINES WERE PRESENT. WHAT I NEEDED WAS A ROUTINE THAT WOULD TABULATE ALL OF THE VARIABLES, GOTOS, GOSUBS, AND OTHER JUMPS. I HAD REMEMBERED READING SOMETHING THAT MIGHT HELP SO I WENT THROUGH ALL MY COMPUTER MAGS.

"VARIABLE CROSS-REFERENCER" BY MICHAEL L. JOHNSON, HOT COCO, JULY 1984, LOOKED LIKE A GOOD START. THE IDEA WAS TO WRITE A PROGRAM USING LINE NUMBERS >60000 AND MERGE IT TO THE PROGRAM TO BE PROCESSED. THE NEW PROGRAM WOULD READ MEMORY LOOKING FOR ALL PROGRAM VARIABLES, TABULATE THEM, SORT THEM AND PRINT OUT THE LIST. SO FAR SO GOOD.

THE PROGRAM CONFUSED HEXADECIMAL NOTATION WITH VARIABLES AND COULD NOT HANDLE 'AND ONLY RECOGNIZED REM WHEN AT THE BEGINNING OF A LINE. THIS I COULD LIVE WITH. IT ALSO WAS THE BEST EXAMPLE OF DISORGANIZED CODE AND INCORRECT GOTO USE I HAVE SEEN IN SOME TIME; WHICH I COULD NOT LIVE WITH. GOTO, GOSUB, THEN, AND ELSE WERE NOT WITHIN ITS DESIGN PARAMETERS. IN SHORT, I DECIDED TO COMPLETELY REWRITE THE CODE. YOU WILL SEE THE RESULTS IN THE NEXT ISSUE.

Let's consider the problems involved in creating this type of program. First we cannot use the normal good practice of placing frequently used code in subroutines at the start of the program. Remember that our program is tacked onto the end of the target program which may be 60000 lines long. Any call to a subroutine, any goto or equivalent statement will require Basic to read all 60000 lines first. This means inline code must be used wherever possible even if we have to duplicate code (within reason.)

Second we must be prepared to handle several hundred variables. This will entail much string manipulation using string arrays and we must take care to keep this to a minimum to prevent system garbage collection. When Basic cleans up discarded strings, the computer can seem to lock up for minutes.

THIRD WE NEED TO UNDERSTAND HOW BASIC STORES A PROGRAM IN MEMORY.

	00 XX XX 00 02 xx xx xx xx	
	! ! ! LINE CONTENT	END PROGRAM
LINE NUMBER	! ! LINE NUMBER	MARKER
LOCATION OF NEXT	! LOC. OF NEXT LINE	
LINE IN MEMORY	END OF LINE MARKER	

LINE CONTENTS ARE STORED IN TOKENIZED FORM. THIS MEANS THAT ONLY VARIABLES, STATEMENTS ENCLOSED IN QUOTES OR AFTER REM/('), AND HEX. NUMBERS (&HA072) ARE PRESENT IN ASCII. IN GENERAL THEN, TO FIND VARIABLES, WE WILL STRIP THE LINE OF LITTORALS AND THEN LOOK FOR ASCII CHARACTERS.

TO FIND GOTOS, GOSUBS, THEN100, OR ELSE200 WE WILL HAVE TO SCAN MEMORY LOOKING FOR THE CORRECT COMMAND TOKENS.

As you might expect, things won't be quite so simple. In any event, look for the code next time. There will be two programs; one for variables; one for jump transfers. Until then I suggest studying the above reference or trying to write some code yourself to do the same thing.

OS-9 BY TOM NAPOLITANO

THERE ARE STILL A FEW OF YOU MEMBERS OF THE COLOR COMPUTER OWNERS' GROUP WHO HAVE NOT BEEN USING THE CLUB BULLETIN BOARD. SOME TOO ARE USERS, BUT INFREQUENTLY. I WISH I KNEW THE REASONS FOR THIS, BUT IN THE HOPES OF RECTIFYING THE SITUATION, THIS MONTH'S COLUMN IS ABOUT RUNNING THE MOST BASIC OF ALL COMMUNICATIONS PROGRAMS FOR OS9, OR ANY OTHER SYSTEM FOR THAT MATTER. It's called "xcom9". (The odd name by the way comes from a combination of "xmodem", "communication" and "os9". Xmodem is the binary protocol supported by even the most primative of bbs's and communication packages, and this program is very basic, and very primative. In fact the same copy of xcom9 is so basic, it will run on any 6809 os9 system in the world. I know of NO exceptions.

To start, you must have the harware necessary to communicate between your os9 system and a modem. You must also have a version of an serial interface driver (i.e. aciapak, modempak) in memory or in your commands file. Preferably, it should be in your boot file, loaded upon powerup. You also must have a telephone line attached to your modem. Using the stock coco3 system with aciapak then, your port and modem device will likely be called "/t2" unless you've changed it. The standard /t2 device descriptor is for an RS232 pack containing a 6551 serial hardware chip addressed at hexadecimal FF68. If you change the hardware, you must change the software device driver and/or descriptor to match and vice-versa.

Once you think you have everything working, try this. Boot up the system, and type mdir. You should see listed somewhere your device driver and /t2 device descriptor. If you don't, then you have to reread your manual on making an os9 boot disk. If you do, type:

ECHO TESTING >/T2

You should see your modem "send data" (SD) light flash briefly. If you don't, be sure your modem is turned on. If it is, check all the connections between the computer, RS232 pack and modem. You also may have to consult your local rs232 guru to verify that your rs232 cable has all the correct connections between the appropriate pins on those complicated 25 pin connectors. If you can't make the send data light flash by means of the echo command, don't bother going any further.

IF ALL IS WELL, ITS TIME TO COMMUNICATE! COPY THE FILE "XCOM9" TO YOUR COMMANDS DIRECTORY AND TYPE "XCOM9". How do you get a copy of xcom9? Download IT FROM YOUR LOCAL COCO BULLETIN BOARD USING ANOTHER SYSTEM OR JUST ASK SOMEONE FOR A COPY. THE FULL COMMAND LINE FOR XCOM9 IS (TYPICALLY): XCOM9 /T2 #30K

THIS REQUESTS 0S9 TO LOAD AND RUN XCOM9 USING /T2 AS THE MODEM PORT AND AT THE SAME TIME ALLOCATING 30 KILOBYTES OF MEMORY FOR ITS BUFFER. THIS LAST IS IMPORTANT IF YOU INTEND TO DOWNLOAD TO AN ASCII BUFFER. WHAT YOU WILL SEE IS A SINGLE LINE DESCRIBING YOUR CURRENT DEFAULTS. WHAT YOU USUALLY WILL WANT TO SEE IS: ASC (ASCII), ~ECHO (NO ECHO OF CHARACTERS), FLO 11,13 (FLOW CONTROL) AND VARIOUS OTHER INDICATIONS SHOWING THAT YOU ARE NOT NOW SENDING OR RECEIVING FILES. TO GET HELP TYPE CONTROL-Y AND THEN H. YOU WILL SEE A FULL SCREEN LISTING OF 18 OPTIONS. NOTE THAT NOT ALL ARE FUNCTIONAL ON YOUR SYSTEM, BUT ALL THE IMPORTANT ONES ARE. ALL ARE PRECEEDED BY THE CONTROL-Y. THE MOST USED ARE THE XMODEM UPLOAD AND DOWNLOAD AND THE DATA CAPTURE FACILITY.

TO CONNECT TO A BBS OR TIMESHARING SYSTEM, YOU MUST FIRST DIAL OUT. EITHER MANUALLY DIAL YOUR TELEPHONE OR USE THE STANDARD HAYES DIALING COMMAND SUCH AS ATDT5551212 and listen for the data connection to be made. When made, type a few returns until the far end recognizes you and begin communicating.

TO CAPTURE TO A BUFFER, TYPE CONTROL-Y, R AND THEN THE FILE NAME TO WHICH TO CAPTURE. IF YOU ATTEMPT TO CAPTURE MORE DATA THAN YOUR BUFFER CAN HOLD, THE PROGRAM STOPS, DUMPS THE BUFFER TO DISK, THEN STARTS OVER. THIS WILL LIKELY RESULT IN LOSS OF SOME DATA. WHEN YOU WANT TO STOP THE CAPTURE AND WRITE OUT THE BUFFER, TYPE CONTROL-Y, R. AFTER THE BUFFER IS WRITTEN, YOU WILL BE AGAIN ASKED FOR A FILE NAME. EITHER ENTER ONE, OR JUST RETURN TO ABORT.

USING XMODEM BINARY DOWNLOAD PROTOCOL IS SLIGHTLY MORE COMPLICATED. TYPE CONROL-Y, X AND THEN ANSWER THE SEND/RECEIVE QUESTION WITH S OR R. WHEN ASKED TO BEGIN, TYPE CONROL-Y, G TO START THE XMODEM TRANSFER.

I HOPE THIS SHORT INTRODUCTION HELPS YOU GET STARTED. ONCE YOU'VE BECOME A REGULAR ON THE LOCAL "BOARDS" YOU WILL WANT TO OBTAIN A MORE SOPHISTICATED COMMUNICATION PACKAGE THAT MAKES DIALING EASIER AND FILE TRANSFER FASTER.

C.C.O.G.

COLOR COMPUTER OWNERS GROUP

Oldest COCO Club in Metro Detroit Meetings the third Tuesday of each month 7:00 PM - 9:30 PM LIVONIA VFW - 7 MILE & MIDDLEBELT SIDE DOOR - "THE FOXHOLE"

Join other COCO owners for Hardware and Software demos, Public domain Library, Discounts, and general knowledge exchange.

1991 Meetings

Jan 15	Jul 16
Feb 19	Aug 20
Mar 19	Sep 17
Apr 16	Oct 15
May 21	Nov 19
Jun 18	Dec 17

MEETINGS INFORMAL AND OPEN TO THE PUBLIC

Contact: Bernie @ (313) 283-2474 or BBS @ (313) 292-4713

