

Dear Fellow ADAMite,

Well, you know about August. This is the month when you're reluctant to go outside at all... unless it's to the beach! August is HOT!

Well, HOT is the word for this month's issue. There are hot new hardware developments... hot bargains... hot news about ADAMCON... in fact, everything about the ADAM community is HOT!

Hot deals: I just ordered 100 ADAM printer ribbons from The Adam Connection. We can sell these for \$3 each! In this case, because we have only 100, we have to limit the sale to club members only. Buy as many as you think you will need, and SAVE THE CASES.

The HOTTEST PRICE EVER ON DISK DRIVES: No Joke! The prices are SO LOW that I can't even print them. All I can tell you in print is that they are at least \$50 to \$90 less than last month's market prices. They are from a reputable firm, and they are guaranteed. The bad news is that there are a limited number of them. To get these prices, we must order in bulk. I'm pretty sure this offer is your last chance to get a disk drive at this price. IF YOU EVER INTEND TO GET A DISK DRIVE, DO IT NOW. Call treasurer Francis Terry at (407) 380-1400. We must do this FAST, before they're gone!

ADAMCON is hot! The new catch phrase all over the continent is, "See you in Orlando in October!" The most fascinating (and unexpected) aspect of the convention is that it has spurred ADAM developers to have their projects ready to showcase at the convention. People who were working on their ideas rather haphazardly, having no real deadline, now seem determined to get all their ducks in a row by October. You are going to see stuff we never even IMAGINED just a few months ago, both in hardware and software. WOW!!!!

Still more door prizes, and they are HOT! Syd Carter is donating a Type III tape formatter; AWAUG is donating a serial interface. More about this next month. Eric Danz is donating a whole mess of software, and so are Wizard's Lair, The ADAM Connection, and many others. ADAM's House, NIAD, and others are scheming up surprises.

The network itself is hot! Now, more than ever before, ADAMites are trying to find ways to strengthen connections between scattered groups and pool our resources. I didn't even have room to go into this in this issue, but watch this space! Ideas are flying thick and fast. The convention will be a perfect opportunity to hash it out.

GoDOS is hot, and much of this issue is devoted to a sneak preview. CAN YOU BELIEVE YOU WILL FINALLY BE ABLE TO SEE IT IN OPERATION AT THIS MONTH'S MEETING? More hot news from 'The SoftWORKS Factory', successor to Digital Express: The peerless newsletter, Nibbles & Bits, should arrive in your mailbox in the next few days. I just now confirmed that it's all done!

There's much more hot news than I could possibly cram in. We'll hit the high points at the meeting, which is:

SUNDAY, AUGUST 13 1:45 PM

Hope you don't burn your fingers reading this issue!

**MDHM FINESII** 



This Month: "Who Done It?"

Wouldn't you like to get some use out of that CP/M datapack you bought? Do your wrists ache from yanking that joystick around? Are you tired of shooting aliens? Then dust off that CP/M datapack and prepare to enter the world of an INFOCOM adventure!!

"A wealthy industrialist, Mr. Marshall Robner, locked himself in the upstairs library of his New England colonial estate one night and committed suicide by taking a lethal overdose of anti-depressants.

"Or did he?

"You've been asked by Robner's attorney to make a thorough investigation of the case, simply to 'quash the suspicions which are inevitable' when a moneyed man dies a sudden and unnatural death. The Medical Examiner found nothing unusual, and interviews with family members and family associates are consistent with the idea that Robner committed suicide. Everything fits neatly — maybe too neatly. You smell foul play, and have 12 hours to crack the case." — excerpt from the DEADLINE manual by Marc Blank

You play the part of Sgt. Anderson, Chief of Detectives, of the Connecticut Police Department.

The cast of characters range from the deceased's promiscuous wife, Mrs. Robner, his rather irreverent son George, to the irascible gardener, Mr. McNabb. Doesn't sound too hard you say? There is also a maid, secretary, business partner, the wife's lover...well...you get the idea.

You move room through room or outside the house by typing in simple commands such as "North" or "N" or "Southeast" or "SE". Once you come upon a/ character, you can question him or her in PLAIN english, though there is a simple format to follow. For example, "Mrs. Robner, where were you the night of the murder?", is perfectly acceptable. DEADLINE recognizes over 600 words! DEADLINE has many other options which make it easy and enjoyable to play. You can get verbose descriptions of the rooms or shorten them if you've been there You can even have your printer turning out a written hardcopy of all that transpires so you can get out your magnifying glass and examine the clues more closely. Since you only have 12 hours to solve the mystery there is a clock on the screen that keeps track of what time it is as each move makes a precious minute pass. You can answer the phone if it rings, pick up and examine any object and even call in your able-bodied assistant. Inspector Duffy, to take an object back to the crime lab for further analysis. You can hide in a corner somewhere and give the command "wait 10 minutes" and watch all that transpires around you. To make matters more interesting, there are MANY possible endings to the case, but only one of them is correct!

You really DON'T need to have much CP/M experience (thank goodness) to run an INFOCOM adventure. Simply slap your CP/M medium into a drive and pull the reset. When CP/M boots up, get a directory of the INFOCOM drive by typing DIR, and type in the name of the file with the ".COM" extension. In DEADLINE, for example, after typing in DIR you would see DEADLINE.COM, so just type in DEADLINE and you are off! Unfortunately, to my knowledge, ALL INFOCOM adventures come on disk media only, but they are definitely worth the trouble of buying one and having a friend with a disk drive copy it to datapack for your use. I even run mine directly from my 256K memory expander with no problems. DEADLINE is available from "THE ADAM CONNECTION", ALPHA-ONE, and others.

These adventures are awesome! The level of sophistication and interaction is amazing! You won't solve this mystery in a night, a week, or even a month! So if you've ever considered yourself an armchair detective, try the ultimate "Who Done It", try DEADLINE.

By now I'm sure you're wondering "Who Done It"? Hell, it was.....

## BIOS CALL JEROME HESS

Welcome to the second installment of BIOS CALL, your most up—to—date (?) CP/M source! Before launching into yet another action—packed column, I'd like to propose an idea that may help us to expand our public domain libraries. Over the past few weeks I've received several disks and DDPs in trade for the starter pak. First let me say — GREAT! I'm glad that the interest has started to show.

Now here's my proposal. For everyone who sends a disk of DDP in for the pak, why not load it down with YOUR favorite PD programs! They don't have to be CP/M. EOS, RLE, Clip Art, maybe even just some information text files that you've picked up somewhere. Even if you're REAL SURE evrybody MLST already have a copy of the program, send it anyway! There might be people out there who are looking for just that file and haven't been able to find it! Chances are if you like it, then someone else will, too.

Now back to your regularly scheduled column!

Last month we discussed (among other things) the file compression technique known as crunching, which utilizes the file extension .\*Z\*. This month I'd like to tell you about one of the most popular IBM file compression techniques that is now available for the ADAM! It's called ARCing.

The ARC or PKXARC operates in a very similar way as crunch, but works 15 to 20% more efficiently. The method that ARC uses is much too involved to go into in an article as brief as this, but I will say that the ARC format is used in several files that have been ARCed into a single file with an .ARC extension. This method will allow the easy transfer of several files at one time, and it will save file storage space as well.

Before I go any further, let me point out that files from an IBM that have been ARCed will still NOT OPERATE in CP/M. But if the files are from an IBM that have been made to run under CP/M, or if they are CP/M files, or if they are text files that have been ARCed to save space, then yu can use UNARC1.COM to decompress them and take a look at them!

On your starter pak, you'll find a program called UNARC1.COM. This is the utility that has been designed for use in CP/M to "UNARC", or extract, the files in an archive.

There are two methods to unarc a file. If you know the name of the file that you'd like to extract then your format would be:

UNARC1 A:FILE.ARC B:FILE.EXT

Where A: is the drive that the archive is on, and B: is the drive that you want the extracted file to go to (they could be the same drive.) FILE.ARC is the name of the file as it exists in the archive; FILE.EXT is the name you want to give the unarced file (if not the same.)

If on the other hand you have no idea what the name of the file(s) in the archive are, then there are several routes you could take. For example, if you want to extract all the files at once, you would use the format:

UNARC A: FILE.ARC B.\*.\*

Where FILE.ARC is the name of the archive and the \*.\* is CP/M's ambiguous file markers, telling UNMARC1 to get at ALL the files within the archive.

Note: As ARC is more efficient, I would STRONGLY urge that you have AT LEAST 2-3 times as much free space on your destination medium as the size of the .ARC file. This will insure that you don't run out of room in the middle of the process.

On the other hand, if you don't know the names of the files but you want to bring them out just one at a you can find the file names in the ARCHIVE by using this format: UNARCI

A: FILE.ARC

This will give you the name and some particular information about each file. Then you can use the first method described.

Well, I think that should suffice for this month. As always, you can write or call me:

Jerome Hess PO Box 678203 Orlando, FL 32867

Phone: (407) 380-0457

OR, YOU CAN LEAVE A MESSAGE ON :>

THE MIDAS TOUCH

### LEARNING WITH LOGO .... 3

Once we understand how to move the turtles around, we can do some simple but nice displays. The easiest one would be to draw a tree. In order to do this, we first decide that we want to draw a branch. To do this, we write the procedure:

TO BRANCH: SIZE

RT 90

FD: SIZE / 2 WAIT 30 TR2: SIZE / 2

BK: SIZE BRANCH: SIZE

END

What we have done here is to define the procedure BRANCH. When you run the procedure, you have to input a number SIZE so that BRANCH will know how far to draw the branch.

Now we add another procedure, TR2, to add to the tree by extending the trunk and adding another branch. It places the added branch on top of the tree, at half the size of the first one. Add another procedure, TR2:

TO TR2 :SIZE
IF SIZE < 10 [STOP]
FD :SIZE
WAIT 30
TR2 :SIZE / 2
BK: SIZE
BRANCH :SIZE
END

If we look at this procedure, we will notice several things. First, we are telling ADAM that if our number, SIZE, is smaller than 10, then stop the procedure. Second, the WAIT command tells ADAM to stop for the count of 30 before continuing the program. Last, we see that we are dividing the number we inputted by 2 (shown in the line: <TR2:SIZE / 2>.) We also see that the procedure BRANCH, which we defined earlier, is being called from within this new procedure.

We will write one last procedure, which we will call TREE. It will localike this:

TO TREE:SIZE
IF OR:SIZE < 10:SIZE >110 [STOP]
ST CS
PU SETPOS [ 0 -80] PD
TR2:SIZE
HT WAIT 180 CT
END

Now, you have to save this program under the name TREE. In order to do this, enter:

#### SAVE "TREE

Note that you will use quotation marks only at the beginning of the file name, not at the end. Make sure that you have a disk or datapack in your drive before saving the file. After it's saved, you can run the program by entering the name and any number. For example, try this:

### TREE 50 ·

...and see what happens. Notice you do not have to use the command RUN, as you would in BASIC. This program draws a very crude tree, but shows very clearly how complex recursion works. By calling back on itself, the program could go on and on forever. To prevent this, we added a test condition to stop the recursive calls going on indefinitely. The test condition is the " IF OR " found in the TREE procedure, line two. We've added a half second pause to let you see the turtle draw each of the trunks first, then draw each branch. One important factor, in recursive calls, is that the turtle MUST return to its previous position; hence the turtle goes back to the bottom of the trunk, facing up.

This is shown in line four, where we put the pen in the up position (PU) and set the position of the turtle, then put the pen back down (PD).

(continued next month)

# RECENT MESSAGES: SIZZLING-NEWS!

From Ron Collins (Compuserve Massage:)
Pat, BJ (Big John Lingrel) left me a message... That's right! The Big Guy is going to try to make it to ADAMCON too! ... In some way or other, every piece of hardware & software we have is the result of someone's work in a related area. BJ's hardware led software developers to come up with better ways to use the hardware. The new solftware was so good that it forced BJ to come up with even better ways to use the software! Other developers came up with products which use both! Then someone else does it easier & better! Now we have GoDOS to handle it ALL! WOM! Tell Sol I can't wait to see him again. It's been a long time since my visit to West Virginia to watch him create SwiftBASIC 80 out of thin air! #Ron#

From George Havach (Compuserve Message:)
To ALL: Be sure and check out the following full-service
ADAM supply center:

Heritage House 2547 Second Ave. Council Bluffs, IDWA (712) 325-1672 (Ask for John)

They have lots of ADAM software and hardware in stock, and they also do repairs.

From Chris Braymen (Compuserve Message:)

...I've held off saying anything until I was sure it worked, but work it does! I've been playing 16 voice songs on 2 synthesizers through the MIDI interface I developed. So far, I've been writing the songs with VideoTunes and playing the files with another program. It sounds wonderful! I can hear the songs played by strings, brass, harpsichord, or whatever. Even dog barks if I want! But that is only half of what MIDI can do. I'll have the MIDI IN part of the interface working soon and I'm working on a full-blown multi-channel sequencer. I've been talking with a well-known hardware developer about making MIDI interfaces... Meanwhile, I've got one, it's a load of fun, and I can't wait to show it off at ADAMCON!

From Ricki Gerlach (mail):

I'm back in the USA now. I have my wife's permission to attend ADAMCON; now if I can just get the Army to release me for a week of sun in Florida, I'm coming. I am donating my seven volumes of Happy Clips as a prize to give away at the convention. I can also donate the 2-disk edition of my latest release, "LEARNING TURKISH WITH ADAM V2.3", if you think anyone would want a copy! I have found a source of ADAM cartridges for the game CARNIVAL. I'll sell them for the price I got them, \$3.85 each, plus \$1.50 postage. There are no instruction books, but if I find one, I'll copy it for each buyer. My new address is:

Gerlach Family Software PO Box 175 Ft. Campbell, KY 42223 From Neil Wick (several Compuserve messages:)
MTAG (Metro Toronto ADAM Group) just held our meeting, & it
looks like up to a half-dozen members will be at ADAMCON
(including Syd Carter, of course.) We hear that Canadians
are also planning to attend from the St. Catherines group,
Ottoma, and Edmonton. Two new products from our club alone
sound really exciting; this convention is a real incentive
for new product development! .. Some expect Syd's new
"Extended Format DDPs" and Gary Bowser's new "ADAM Image
Maker" video expansion module to overshadow even 60000S in
importance!

... The Adam-Image-Maker (AIM) was announced by Gary Bowser of Dasis Pensive Abacutors at the meeting. Gary has been selling products for the TI 99/4A, which uses the same video chip as ADAM. The AIM is based on the V9938 chip which is software-compatible with ADAM's chip, but offers many enhanced capabilities. I've seen it running on the TI computer myself, & it's really quite impressive, especially for graphics. The unit will be an "expansion module" which just hooks onto the right side of the ADAM. There's nothing to take apart; installation will be really simple. The following is promised:

>Software for CP/M & SmartWriter to allow 80-column text! >Complete assembly language & SmartBASIC programming guide! >128k of video RAM (vs present 16k), expandable to 192k! >RGB, Composite, and TV output!

Mouse port with mouse included!

a preview of it at ADAMCON.

>256 by 192/212 graphics mode; each pixel can be any of 256 colors!

>512 by 192/212 graphics mode. Pixels can be any of 16 colors chosen from the 256 in the pallette!
>32 sprites with up to 8 per horizontal line!
PLUS, all your present software will work as normal. Cost will be around \$300 Canadian (about \$255 US) or even less!
Expected availability is mid-November, though you should see

Our membership is around 100 strong, and we hold two meetings a month; membership is \$20 per year. We have a newsletter every two months. One recent newsletter ran 72 pages, but we're trying to cut down. Our address is:

MTAG, Box 165, 260 Adelaide St. E., Toronto Ontario, CANADA M5A 1NO

The president, Richard Clee, can be contacted at: (416) 783-0316 after 7:30 PM or on weekends.

Any club who puts us on their newsletter mailing list will get their club on our own newsletter mailing list.

## HOT NEWS IN DATAPACKS!

page (New Lander) Traper to the Charles Control of the Control of

by Syd Carter of Trisyd

Here's the scoop...Have you ever noticed how you're always running out of storage space on your digital data pacs??? Well, if you're one of the many Adam users who is in this situation then I have news!!!! Trisyd Video Games has PERFECTED a format generator that has now increased the size of a standard digital data pac from 256k to 306k, and that's just for starters.. As of writing this, the process is capable of generating format code to support up to 16 megs!!...Yes there is more..

At this time, the Trisyd Labs (as I fondly like to call it) is still tweaking every byte it can to provide the best possible format in the smallest package. Theoretical predictions indicate a new standard to be set for C-60 cassettes being a storage capacity of 320k or twice the capacity of a standard single sided disk drive. Provisions are now in effect to format C-90 and upwards type magnetic media in an effort to increase the DDP capacity into the 400+k range!!! AND THE BEST PART is that all this comes without having to modify your EOS operating system!!

What this means it that you can just drop one of these beauties into your data drive and store all the smartwriter letters or basic programs that it will hold. For CP/M applications, the need to utilize a modified O/S such as TDOS will be required. I've already spoken with Tony Morehen (Whom you all should be aware of as being the driving force behind all the wonderful improvements to CP/M) and he tells me that the implementation of this type of tape size is a very simple procedure, in fact, I would say he has already made the provision for such an event seeing as he has already made modifications to CP/M for the 320k, 720k disk drives and the hard disk!!. The tapes are now in the league!!

Do not confuse this as a patch job from existing tapes. These (Trisyd tapes?) are generated from scratch, 100% masters... This project has taken I year in research and development. It has met with failures yet still succeeded. The tapes created act just like they came out of the Coleco mother themselves, perhaps even BETTER!! These tapes are fully formatted. The missing blocks at the end of a tape (caused by improper spool length) are eliminated!! Within seconds the tape drive microprocessor is able to determine where it is on the tape and proceed to where it wants to be.

Well enough for this message... More updates to come as they happen.. I will announce price and availability soon!!! Keep posted!!

This message was downloaded from The ADAM Echo
(courtesy The Midas Touch BBS, Dale Malone, sysop)
WATCH FOR THIS PRODUCT AT ADAM CON!

## GODOS FIRES UP!

Yes, it's true... the beta version of GoDOS/GoBASIC was mailed out in July and is now in the hands of several knowledgeable ADAMites. It's also in the hands of at least one less knowledgeable person... your friendly neighborhood newsletter editor received a copy, too! In fact, all the groups represented at the Mobile preview session (Gulf Coast AUG) got copies to demo for their respective memberships.

We plan to demo GoDOS at the August meeting. You will see the same demos that we saw in Mobile (described in the May newsletter) and more. The pull-down menus and icons, for instance, were not fully installed in the earlier version of GoBASIC, but are now. Come see for yourself!

GoDOS and GoBASIC are contained on the same disk (which, in this beta version, defaults to GoBASIC.) There is a second disk containing the demos and the doc files. The demos are public domain, and we have listed one of them in this issue.

When you scan the listing, notice line 1100. This line tells the program to go into 40 column text mode, stop what it's doing, and list the program, if you hit CHR\$ (27) (Escape.) This is a nice feature for a demo; when you are through viewing it, you automatically see the listing. Other demos on the disk list automatically, too, but not necessarily in the same manner. Some list after you press Control C, some list when you press either Escape OR Control C, and some don't list at all. I don't know if this was intentional, but it does show you different ways of handling the same instruction, so it's helpful to the new user (and EVERYBODY is a new user as far as GoBASIC is concerned.)

For that reason, Joe Quinn of GCAUG has already released a PD pack of his own demos. Joe's demos aren't showy displays like those on the original demo disk, but simple illustrations of how to use the commands. They will get the first-timer off to a quick start. Joe is the most experienced GoBASIC user in the world, having been in close touch with Sol and Tony ever since April. He picked up on some of Sol's methods, too: he included a line in each of his demos to list the program at its conclusion.

Joe was good enough to send us a copy of his PD pack, which you will also see at the meeting.

Alan Neeley has already written a GoBASIC program, too; I haven't seen it yet, but I think it's been uploaded to Compuserve. So, you see, I was actually pessimistic when I said that we would see PD stuff within weeks of the release of GoDOS. Both these guys had their first program out within days... maybe hours... of the release of the beta version. They're just warming up. As Alan said in a recent CIS message, "Hold onto your hats, ADAM community! Things look VERY promising!"

Ron Collins, of the Akron AUG, left this report on CIS:

"...I spent the last hour looking at the program with SuperZAP. SoI has done some really amazing things. First, he borrowed from the Coleco SmartBASIC interface just enough to make the system recognizable to our system ROMs and also familiar enough to US for easy use. He has added a massive amount of new command syntax and capability. I saw references to turning speech on and off, setting mouse speed, drawing and erasing circles, blocks, etc. Accessing the colors of text/borders/screens is also a piece of cake now. Still not enough? He has added enough other stuff to the software that makes it really useful. My best description of it, based on what I saw with the block editor and my own trials to date is that GoBASIC is a super modified version of SmartBASIC blended expertly with the finest sound and graphics capabilities of LOGO. I think (a proposed) online RLE viewer might be a bit easier to realize under GoDOS. The pull-down menus are also quite nice... as is the ability to change character fonts on demand....

"I have finally been able to compare the two programs...
GoBASIC and French SmartBASIC+. There is NO comparison! The
beta release from SoI and Tony is... astounding! \* Ron \* "

Ron is on target about the LOGO-like commands. While you are waiting for GODOS to become generally available, which should be any day now, you might as well dust off your LOGO tape and play with the demos. Many of the GoBASIC graphics commands are similar to LOGO commands. Remember, "sprites" in Basic are the same entity as "turtles" in LOGO; it's just always been so much more complicated to use them in Basic. That's a thing of the past. The more comfortable you are with LOGO features, such as hiding turtles, rotating them, and changing their shapes, the easier it will be to jump into the GoBASIC sprite—handling commands.

You won't believe how flexible the fonts are, too... you can change fonts to any of six sets already in memory, or you can use your own; and you can easily rotate them, reverse them, or display them in mirror-image, and place them anywhere you like, even scrolling them in windows. I've tried before to describe this, but you just have to see it.

The documentation has been the major holdup in getting GoDOS distributed, and even though TSF has been working steadily on it, it's still on the skimpy side. Knowing Sol and Tony, I am positive that they will write reams about GoDOS and GoBASIC eventually, but at this moment we have to make do with descriptions of the commands. (Which is why I really appreciate the early PD releases by other parties!) The doc files on the commands are thorough and clear, though. We have included in this issue several of the files from the doc disk, so you can get a general idea even before viewing GoBASIC. There are over 300 of them, so we didn't have room for all of them in one issue. (We'll run more next month.)

MESTINE

```
This demo program from the GoBASIC doc disk illustrates the use of
multiple windows on the screen, each scrolling messages in a different
font. Please Note: this listing is for information only; DO NOT TRY
TYPING IT FOR USE WITH YOUR STANDARD SMARTBASIC. It will not work.
        10 REM simple GoBASIC graphics windowing demo
       100 lm(1) = 2: nr(1) = 10: tm(1) = 2: nd(1) = 9: co(1) =
   15: c1(1) = 4: ft(1) = 2
       110 lm(2) = 13: nr(2) = 12: tm(2) = 4: nd(2) = 8: co(2)
      1: c1(2) = 11: ft(2) = 4
       120 \ lm(3) = 3: \ nr(3) = 22: \ tm(3) = 20: \ nd(3) = 3: \ co(3)
      1: c1(3) = 3: ft(3) = 6
       130 lm(4) = 26: nr(4) = 3: tm(4) = 2: nd(4) = 15: co(4)
      15: c1(4) = 6: ft(4) = 5
       200 wd$ = "Now is the time for all good men to come to
    the aid of their party. The quick red fox jumped over the
  _ lazy brown dog. GoDOS windowing ...": NOBREAK
       500 TEXT40: PRINT: PRINT: INVTEXT: TXTFONTS 4,1:
    TXTFONTS 2,0: INVERSE
       505 PRINT "This is a simple demo of graphics"
       510 PRINT "windowing in GoBASIC with GoDOS. It"
       520 PRINT "utiliizes simultaneous output to four"
       530 PRINT "windows with independent fonts."
       535 PRINT: PRINT "(tap <ESCAPE> to quit demo)": NORMAL
       540 PRINT: PRINT: PRINT: Which option?": PRINT:
    PRINT
       550 PRINT "1 = test user input": PRINT "2 = test string
  printing"
       560 GET k$: IF k$ = "1" THEN fg\% = 0: GOTO 1000
       570 IF k$ <> "2" THEN TEXT40: LIST: END
       580 \text{ fg%} = 1
      1000 OUTERCOLOR = 15: GM2COLOR 1,14: GRAPHICS: HTXTWDW
      1002 FOR x = 40 TO 4 STEP -4: LENGTH = x: SQUARE 60,100:
   NEXT
      1005 FCOLOR = 4: FPLOT 160,0 TO 160,120: FOR x = 1 TO 4
      1010 HTXTWDW lm(x), nr(x): VTXTWDW tm(x), nd(x)+1: WDWCOLOR
   co(x), c1(x): HOME
      1015 FCOLOR = 1: WIDTH = 8*nr(x)+3: LENGTH
   8 \times nd(x) + 11: RECTANGLE 8 \times lm(x) - 2, 8 \times (tm(x) - 1) - 2
      1020 ht(x) = PEEK(8): vt(x) = PEEK(9): NEXT
      1050 ON NOT fg% GOTO 1100: ct = 1
      1055 \text{ k} = \text{MID} * (\text{wd} *, \text{ct}, 1)
      1060 \text{ IF PEEK}(64885) = 27 \text{ THEN}
                                       TEXT40: BREAK: LIST: END
       1070 GOTO 1110
      1100 GET k$: IF k$ = CHR$(27) THEN
                                            TEXT40: BREAK: LIST:
   END
      1110 FOR x = 1 TO 4: HTXTWDW lm(x), nr(x): VTXTWDW
   tm(x), nd(x): WDWCOLOR co(x), c1(x): GFONTS ft(x)
       1120 POKE 8, ht(x): POKE 9, vt(x): PRINT k;: ht(x) =
   PEEK(8): vt(x) = PEEK(9)
       1125 IF vt(x) = tm(x) + nd(x) - 1 THEN
                                            PRINT: vt(x) =
   vt(x)-1
       1130 NEXT: IF NOT fg% GOTO 1100
       1140 ct = ct+1: IF ct > LEN(wd\$) THEN ct = 1
       1150 GOTO 1055
```

### SNEAK PREVIEW OF GOBASIC COMMANDS

### SPRITE COMMUNEDS

AIDEALL.

no parms

# Removes all sprites from screen.

SPRESET

so parms

# Writes the data table pointed to by the SPRITEPTR command into VRAM.

STDHAG

no parms

\* Displays all viewable sprites at normal magnification.

**DBLMAG** 

DO PREMS

# Displays all viewable sprites at double magnification.

HIDE x

where x = 1 to 32, inclusive.

# Removes the sprite (x) from view.

FIND x

where x = 1 to 32, inclusive.

# PEEKing into the following addresses will return the indicated information: address 180 contains the vertical cooridinate (0-208) address 181 contains the horizontal coordinate (0-255)

address 182 contains the sprite # (1-32) address 183 contains the sprite color (0-15)

SPCOLOR x, color

where x = 1 to 32, inclusive.

color = 0 - 15

\* Changes sprite (x) to the desired color.

PUTSPRITE x AT h,v

where x = 1 to 32, inclusive.

h = horizontal cooridinate (0-255).

w = wertical cooridinate (0-208).

# Places sprite (x) at the indicated horizontal / vertical cooridinate. (Remember to set the color first.)

ROTATE x

where x = 1 to 32, inclusive.

# Rotates sprite (x) 90 degrees, clockwise each time.

HMIRROR x

where x = 1 to 32, inclusive.

\* Mirrors sprite (x) on its horizontal axis.

where x = 1 to 32, inclusive.

\* Mirrors sprite (x) on its vertical axis.

VERSE x

where x = 1 to 32, inclusive.

# Exchanges the SET and RESET bits of sprite (x)'s bit image.

SPRITEPTR (address) where address = 0-65535, inclusive.

# Sets the pointer to the user's sprite bit image data table in RAM.

STAMPCOLOR f.b

where f = foreground color (0-15).

and b = background color (0-15).

# Sets the forground and background color for STAMPSPRITE.

STAMPSPRITE x AT ht, vt where x = 1 to 32, inclusive.

where ht = 0 to 30, inclusive.

where wt = 0 to 22, inclusive.

# Stamps the bit image pattern of sprite (x) at the specified cooridinates (similar to HTABing & VTABing).

SHAPE COMMANDS

SHAPEPTR (address)

where address = 0-65535, inclusive.

# Sets the shape pointer to the start address of the user-defined shape table.

SCALE = x

where x = 1 to 255, inclusive.

\* Sets the size factor for vectored (as opposed to bit mapped) hi-res shapes; affects the mext one drawn.

where x = 0 to 63, inclusive.

# Used to rotate shapes in 5.625 degree increments.

DRAW x at h, v

where x = 1 to 255

where h = 0 to 255

where v = 0 to 191

\* Plots the shape designated by (x) at the specified horizontal and vertical coordinates.

XDRAW x at h,v

where x = 1 to 255

where h = 0 to 255

where v = 0 to 191

\* Xplots (erases) the shape designated by (x) at the specified horizontal and vertical coordinates.

**POLYGONS** 

(All polygons are drawn in the current FCOLOR.)

RADIUS = x

where x = 1 to 55

\* Sets the RADIUS of the circles drawn with CIRCLE, XCIRCLE, FCIRCLE and XFCIRCLE.

CIRCLE he ve

where hc = 0-255

and vc = 0-191

\* Draws a circle at the selected coordinates using the current RADIUS, which must be set first.

XCIRCLE ho, vo

where hc = 0-255

and vc = 0-191

\* Erases a circle at the selected coordinates using the current RADIUS, which must be set first.

FCIRCLE bc.vc

where hc = 0-255

and vc = 0-191

# Draws a filled circle at the selected coordinates using the current RADIUS, which must be set first. CONTINUED, NEXT PAGE+

### POLYGONS (continued from previous page)

XFCIRCLE he,ve

where hc = 0-255

and vc = 0-191

\* Erases a filled circle at the selected coordinates using the current RADIUS, which must be set first.

x = HIOIW

where x = 1 to 191

\* Sets the WIDTH of any RECTANGLEs that are drawn.

Must be set before using a RECTANGLE command.

LENGTH = x

where x = 1 to 191

\* Sets the LENGTH of any RECTANGLEs and SQUAREs that are drawn. Hust be set before drawing.

SQUARE h,v

where h = 0-255

and v = 0-191

\* Draws a SQUARE at the selected coordinates using the current LENGTH, which must be set first.

XSQUARE h,v

where h = 0-255

and v = 0-191

\* Erases a SQUARE at the selected coordinates using the current LENGTH, which must be set first.

FSQUARE h,v

where h = 0-255

and v = 0-191

\* Draws a filled SQUARE at the selected coordinates using the current LENGTH, which must be set first.

XFSQUARE h.v -

where h = 0-255

and v = 0-191

\* Erases a filled SQUARE at the selected coordinates using the current LENGTH, which must be set first.

RECTANGLE h,v

where h = 0-255

and v = 0-191

\* Draws a RECTANGLE at the selected coordinates using the current WIDTH and LENGTH, which must be set first.

XRECTANGLE h, v

where h = 0-255

and v = 0-191

\* Erases a RECTANGLE at the selected coordinates using the current WIDTH and LENGTH, which must be set first.

FRECTANGLE h,v

where h = 0-255

and v = 0-191

\* Draws a filled RECTANGLE at the selected coordinates using the current WIDTH and LENGTH, which must be set first.

XFRECTANGLE h.v

where h = 0-255

and v = 0-191

# Erases'a filled RECTANGLE at the selected coordinates using the current WIDTH and LENGTH, which must be set first.

### CLIP MANAGEMENT

READCLIP adrs AT ht,vt

where (adrs) is the memory address at which the clip is located; ht=1 to 31; vt=1 to 23.

\* Captures a clip from the GRAPHICS screen at the user specified address.

WRITECLIP adrs AT ht,vt where (adrs) is the memory address at which the clip is

located; ht=1 to 31; vt=1 to 23.

\* Writes the clip at the user specified address
to the GRAPHICS screen at the specified address.

CLIPSIZE #h,#v

where h= 1 to 8, and

v= 1 to 8

\* Sets the clipsize for READCLIP and WRITECLIP; each "h" and each "v" represents 8 pixels.

PULLDOWN adrs AT b,d

where (adrs) is the memory address at which the menu words are stored; "b" is the box under which to pull down the menu; "d" is the number of items to pull down.

\* Used to pulldown the specified submenu of items at the specified command box.

REVITEM x

where "x" is the item number (1 to 10) in the pulldown menu to reverse.

\* Used to indicate a user selection by reversing the selected submenu item.

**PUSHBACK** 

no paras

\* Pushes back the last pulldown menu and restores the screen underneath.

PUTICON x AT ht.vt

where "x" is the icon number (1 - 28); "ht" is the horizontal coordinate (1 to 29); "vt" is the vertical coordinate (1 to 22).

\* Displays the specified icon at the selected screen position.

REVICON x AT ht.vt

where "x" is the icon number (1 - 28); "ht" is the horizontal coordinate (1 to 29); "vt" is the vertical coordinate (1 to 22).

\* Displays the specified icon in reverse video at the selected screen position.

STARTDIALOG

no paras

# Opens a dialog box in GRAPHICS mode.

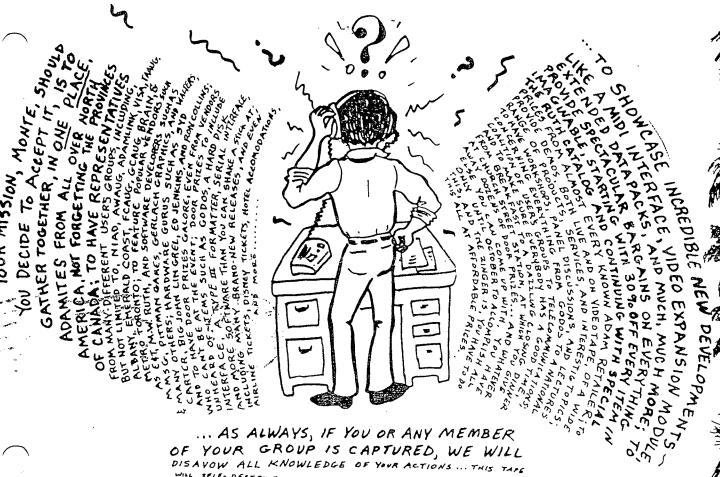
EXITDIALOG

no parms

\* Closes the dialog box and restores the previous GRAPHICS screen.

... to be continued next month ...





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