Saving Our CLASSIC Heath 8-Bit Machines!

SEBHC JOURNAL

The Society of Eight Bit Heath Computerists' Monthly Newsletter

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Subscription Information & Order Blank on Page 11.

Reader's MAILBAG

Dear Len,

Noted your interest in finding some of your ancestors you mentioned in VI:1 and thought I might be able to give you a few hints. Paid a visit to our local genealogy library yesterday and looked in their computer files for the family names you had listed.

I found numerous HUMESTONs, HUMSTONs, etc., also plenty of CROWSHAWs, CROSHAWs, and other variant spellings, plus DOOLITTLE. But without a first name or a guess at the probable time period, it's quite hard to tie them down.

Have you checked to see if there is a large LDS (Mormon) church in Ann Arbor or the vicinity? These people [Mormons] are the original genealogists, believe me!

I belong to the local genealogy society, and we have lots of books and so on that we keep in the same room as the church material. Each LDS church [cf "Stake"] or at least one in any large town or city has a Family History Library. The one here is very nice and they recently installed six computers, complete with what they call the International Genealogy Index, plus another database simply called Ancestry. Also, most of this stuff is on microfiche cards or films, so you may not have to call Salt Lake to find what you want. None of the material I have here has any Salt Lake phone numbers on it, so I can't give that [information] to you right now. I do suggest that you check the phone book under churches for 'LDS' or 'Church of Jesus Christ of Latter Day Saints'. If you find that, there'll be a list of their facilities, and probably a listing for 'Family History Center', or 'Family History Library'. They're usually open six days a week, and sometimes evenings to nine. Visit one of them--or the only one--and ask some questions. They'll be very helpful. They don't care what religion you are (if any), and there's no charge for use of their facilities. You might try also to locate a local Genealogy Society or club, one of which I'm sure will be in your city. Go to one of their meetings; they're usually quite friendly and will answer your questions as to how to go about finding your people. HEY!! I just thought of something and looked it up in one of my magazines; here it is: Genealogical Society of Washtenaw County, Inc., P O Box 7155, Ann Arbor, MI 48107, no phone number given. From the looks of this listing there must be one of these groups in every Michigan town! So maybe you're in business. If you want to trace back a few generations, you don't neeed an expensive computer program--do it on paper. Genealogical forms are available from many sources. Have fun....

BOB EVANS, Hemet, CA

[Hey, Bob! Thanks for your informative letter which arrived the day after I posted the September JOURNAL! My brother in Florida called the same day and I mentioned your letter to him. He said that the name probably comes from a river in Scotland called Home, or something like Homesdown, and that there are a great number of variations on that spelling kicking around. He's here for a couple days or so, and we'll check out as many sources you suggested as we have time for. More about this later--thanks for writing. -- ed]

Dear Len,

I found your coverage of D-G Electronics' Super-89 CPU board and LLL's BIOS-80 in your September '91 edition (VI:2) of more than passing interest. Imparting knowledge of the older systems is a necessary part of the support [which] you and I provide to our subscribers.

Of course, one of the problems is that of determining exactly what a customer has without actually seeing the hardware. [For example] after a couple turns on the merry-go-round I recently assisted a new subscriber bring up HDOS 2.0 on a used soft-sector machine. Now there's a rare breed for the second-hand market!

But there is one thing I should add to your discussion of BIOS-80. Mainly, the reason is because I recently helped another subscriber to the "Staunch 8/89er" set up an exclusively soft-sector system after [he had been] running some years with hard-sector and BIOS-80 only. He had gotten Lee Hart's soft-sector controller and a pair of 96tpi drives, but wanted to eliminate hard-sector code from his BIOS-80 system to get more memory. [Note: A BIOS-80 BIOS can be between nine and 16k in size, compared with standard CP/M's 6k BIOS! -- ed]

Regrettably, [removing H17 code] can't be done with the materials on BIOS-80 distribution disc(s), nor can it be done if you originally brought up your vers 2.2.04 from the hard-sector "setup" disc. Both presume exisitence of (at minimum) the hardsector system. The only way (for both versions) is to go back to good old MAKEBIOS & select the menu's H37-only option. On softsector it's not actually too bad and takes only about five minutes to execute if you have [at minimum] a pair of drives to do it on. In this process you can add about 1k RAM to the TPA. Doesn't sound like much, but there are times when every byte helps! [cont'd]

More Reader's MAILBOX

That's all for now--and I wish you and the SEBHC JOURNAL a belated happy birthday!

KIRK L THOMPSON, Editor The Staunch 8/89er, P O Box 548, West Branch, IA 52358

[Yay, Kirk! Nice to know that at least ONE reader saw those articles. Now I wonder if anyone has actually tried to make up either system using my directions? The original documents which came with LLL's stuff were quite fractionated and covered everything in a most non-linear order and had narrative descriptions jumbled into the actual procedures--which jumped everywhere between front and back pages! From sheer desperation I re-wrote those instructions--after slogging through the verbosities--into the two reasonably-linear step-by-step sets of directions we printed in our last edition. And I do plan to continue doing such re-write jobs on all of the software documents I have until they all have a BEGINNING, a MIDDLE, and an END! Lee Hart and others may raise all kinds of hell about copyrights and other legal flummery, but if what's supposed to be an INSTRUCTION set reads more like an Agatha Christie who-dun-it, then it ain't a set of instructions, it's a Stinking, Wrongly-Named, Poorly-Written. Would-be Mystery novel, and don't belong in MY computer shack! RRRR-r-r-r-ROAR! -- ed]

[LLL BIOS-80 & S89 BIOS afterthoughts: 1 - The Super89 BIOS files come set up for both hard and soft sector operation on the hard sector distribution disc. It isn't always necessary to struggle with MAKEBIOS for that version. If you can read the hard-sector distribution disc, just replace the H37 BIOS on a soft sector boot disc with the Super89 BIOS. The rest of the operation is quite straightforward and follows the S89 distribution manual installation directions. Note: Either hard or soft sector S89 BIOS takes up from nine to 15k disc space. (I'm not sure how much memory it takes!) 2 - Henry Fale says it isn't too hard to make up an H37 BIOS-80 boot disc from the many BIOS-80 files on the distribution discs (there are two, one with all six BIOS versions, the other with the BIOS80 '.ASM code listing. Even with ZCPR installed, this BIOS takes up less disc geography than the S89 code does--about eight to 9k. In either case, the lost space isn't that big a deal as you get lots of additional flexibility. -- ed]

Dear Mr L E Geisler:

I've gone over the latest SEBHC JOURNAL lead article--VI:2 pp 3-8 et al, and it sounds as if this [information] might be an answer to my prayers and [perhaps] get me back into the 8-bit family. Thanks A Heap!

[Note: I've] written [this] on a peesee, which may be more powerful [than an '89] but I don't think it's nearly as user friendly. My wife won't use it at all. That may not be all bad!

LOWELL F BALTZELL, 752 Fairfield Drive, Augusta, GA 30909

[Well, Lowell, I've had several family members try both our H19-type keyboards in comparison with the H120 keyboards. Their unsolicited judgement was that they like the H19/89 much better than the '100-family keyboard! And they appreciate the lack of the '100's "electronically enhanced" key-click and auto-repeat "feature". Glad you found our articles of some value, but you forgot to tell us if we should keep on printing "8-bit hardware sketches".... -- ed]

Dear Lenny,

In going through my collection of SEBHC JOURNALs, I was horrified to discover that I'm missing the April and May 1991 issues! I've enclosed a $5 cheque for those, and hope you can still send them to me.

The info served up by the JOURNAL along with The Staunch 8/89er is invaluable in the care and feeding of my H90. I don't want to miss anything that will keep my machine purring along!

HAROLD SEGAL, 3563 Aurora Circle, Memphis, TN 38111

[Harold, your back issues went out this week and should be in your hands before you read this. Please tell your H90 not to worry! -- ed]

Dear Lenny,

Yeah, yeah, I'd be writing this in WordStar on the Z90 if it were working, but have a little work to do on the monster!

I let it sit for three or 4 weeks while touring "down under". On coming home, I switched it ON, get the regular "H:" prompt, but directly below it eleven and a half lines of the screen filled with !!!!! points! Called the local H/Z expert and confirmed that there's a memory chip (2114?!) on the CPU board that's bad. Haven't torn into the guts yet, but it's on the list of "things to do"! Oh, me....

If this current problem turns out to be anything more than [simple] chip replacement, I'll write you something about it.

CORKY KIRK, W6ORS/NNNOORS, 270 Kapualani Street, Hilo, HI 96720

[Roger, Corky! Seems I had a problem similar to yours on an old H19A I bought from the University Property Disposition office a few years back. This one was fixated in the keyboard decoder, and I eliminated it by replacing that (very expensive) IC. The bad decoder would print out different and weird non-H19 screen graphic symbol for every key struck, no matter how you tried to correct the problem! The 8-bit experience: "Never A Dull Moment". But that is exactly what keeps us enamoured of these dear "old grey boxes", is it not? (Peesee cultivators can't say that.) Corky, please do remember: We Are Anxiously Awaiting That Article.... -- ed]

--::<<[[8]]>>::--

SEBHC JOURNAL

Volume VI, Number 3, Page 4

A NICE PASCAL UTILITY...

A PRINTER CONFIGURING UTILITY IN PASCAL
By Kirk L Thompson
Editor, The STAUNCH 8/89er
P.O. Box 548, West Branch, IA 52358
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On page 9 of your August-90 issue (V:1) you discussed printer configuring utilities in interpreted BASIC. Roughly a month before reading that I had spent two afternoons writing just such a beast for my old 9-pin C-Itoh Prowriter 8510, but I did it initially under the HDOS 2.0 version of Lucidata Pascal. The listing for my latest CP/M version is given below; the differences between HDOS and CP/M versions are extremely minor. Converting it to Borland's Turbo Pascal may also be easy (for anyone running that version). My original reason for writing it was because printer output for Bauman's COBOL tutorial in REMARK--discussed by me in several letters last year--should be set to seventeen characters/inch.

Although written specifically for my C-Itoh, modifying it for other printer makes should be fairly simple. All that's needed is to change the codes sent to the printer. In the program, these come near the RESET procedure (end SET_MARGIN procedure), and inside the main section's CASE structure. The program sends printer control codes which set characters per inch, lines per inch, the left margin, and "reset" to the power-up configuration. For the C-Itoh Prowriter, these are:

Function	Codes
Pica (10 cpi)	ESC N
Elite (12 cpi)	ESC E
Condensed (17 cpi)	ESC Q
Six lines/inch	ESC A
Eight lines/inch	ESC 8
Left margin	ESC Lnnn
"Reset"	ESC N ESC A ESC L000

Two of these need further explanation. "Left margin" is the ESCape character, followed by an "L" and THREE digits. The digits define where the margin is set. For example, "000" is left flush, "010" is 10 characters to the right of flush, and so on. As for the reset function, the C-Itoh (unlike some other makes) has no separate code that performs this. So I've merely strung together in the RESET procedure those simulating printer turnon cpi, lpi and margin settings.

One advantage of writing such a utility in Pascal (or indeed any other compiled language) is that neither interpreter or runtime system is required once the program is compiled. Of course, Turbo Pascal will directly create a stand-alone .COM file. Lucidata requires only one more step, using the "$G" pragmat, as in:

```
PRUN $G:SETLST SETLST
```

to create a .COM (or .ABS) file from the .BIN p-code file. Once done, the program can be moved elsewhere for stand-alone use and doesn't require the runtime system to execute.

I must emphasise how Lucidata handles HDOS device drivers. There are actually two ways you can call this stand-alone program under HDOS. One is WITHOUT a command-line parameter, that is, you just give the command "SETLST<return>". If you do this and DO NOT have the printer driver LOADed, the program will abort with the somewhat irrelevant error message that there isn't enough memory to load the driver! You MUST have the driver LOADed if you call the program without a parameter.

Your other option is to INCLUDE the name of your printer driver on the command-line as a parameter. In other words, and using the standard HDOS convention of LP: for your printer, you can call the program with "SETLST LP:<return>". In this case, the Lucidata runtime system will AUTOMATICALLY load the driver you specify BEFORE it runs the program. This has distinct advantages over the previously-mentioned method. But please note that the code I've supplied DOESN'T check the command-line for this parameter.

Command-line parameter checking is, in fact, the next improvement I have in mind for the HDOS version. That would provide two things not presently existing in the program: a check for typographical errors in the parameter and, more importantly, the DIRECT use of that parameter as the actual printer device in the program. Doing that wouldn't limit the program to just use with LP: if your system setup requires (as mine does in a couple of instances) different driver names for the same printer on different bootable disks. Fortunately, because the printer driver is built into CP/M's BIOS, this kind of thing isn't required there.

SOURCES FOR PASCAL COMPILERS:

LUCIDATA PASCAL for CP/M and HDOS (by Larry Reeve and David Gibby): Kirk L Thompson, P.O. Box 548, West Branch, IA 52358; $25 postpaid, includes 100-page hardcopy manual. Not as fast nor as "extended" as Borland's Turbo, hence closer to Niklaus Wirth's original on the latter score. If you run both systems, having BOTH versions available is convenient because you can "share" programs and utilities between the two at the source-code level as I've suggested above.

TURBO PASCAL for CP/M (by Borland International): Sage Microsystems, 1435 Centre St, Newton Centre, MA 02159-2469, 617/965-3552; $60 plus shipping. Lightning compile and execution and a large number of nice extensions. Regrettably, Sage doesn't support hard-sector (H-17) format.

TINY PASCAL for HDOS (by Mark Kroska, based on an earlier version by Jim Teixeira--which, in its turn was based on a series of articles in BYTE in 1978). This is public domain and may be available from those local HUGs which still support the '89. Zenith Users Group (ZUG) stocks it as simulated with integers).

PASCAL UTILITY, continued

p/n885-1086[-37] for $20, plus $2 shipping. If interested, I sell it, with supplementary material not available elsewhere. A subset of standard Pascal, it uses integers only (CHAR and REAL aren't supported), but it's suitable for utilities/games not requiring REAL numbers (handling of CHAR type may be simulated with integers).

Listing 1 - Kirk Thompson's SETLST Utility Programme

```
program setlst (printer);
{
 Sends ESCape codes to the C-Itoh 8510B Prowriter printer to
 set elite, condensed, proportional, & pica (normal) cpi; 6
 or 8 lpi; left margin, and printer reset. REQUIRES H/Z-19
 terminal! Presumes the LMODE byte in Lucidata's PRUN.* is
 set to FF (true).
}

const
   ESC = chr ( 27 );
   BEL = chr ( 7 );

var
   PRINTER          : file of char;
   RESPONSE         : char;
   X                : integer;
   HERV, HXRV, HCUB, HCD, HEOP, HSCP, HRCP
                    : array [ 1 .. 2 ] of char;
   MARGIN           : array [ 1 .. 3 ] of char;
   MARG_INPUT       : boolean;

procedure MENU ( var OUTNUM : char );
{
 Displays menu and accepts integer input.
}
procedure CODE_SENT;
{
 Displays feedback of code sent to printer on screen.
}
begin {code_sent}
   case OUTNUM of
      '1' : writeln ( ' ':10, HERV, '
                        (Pica code sent to LP:.)', HXRV );
      '2' : writeln ( ' ':10, HERV, '
                       (Elite code sent to LP:.)', HXRV );
      '3' : writeln ( ' ':10, HERV, '
                   (Condensed code sent to LP:.)', HXRV );
      '4' : begin write ( ' ':10, HERV, '
                      (Proportional code sent to LP:.)' );
            writeln ( HXRV )
         end; {case of '4'}
      '5' : writeln ( ' ':10, HERV, '
                       (6 LPI code sent to LP:.)', HXRV );
      '6' : writeln ( ' ':10, HERV, '
                       (8 LPI code sent to LP:.)', HXRV );
      '7' : begin write ( ' ':10, HERV, '
                                (LP: left margin set to ');
            writeln ( MARGIN, '.)', HXRV )
         end; {case of '7'}
      '8' : writeln ( ' ':10, '(NOTHING SENT TO LP:)' );
      '9' : writeln ( ' ':10, HERV, '
                          (Reset LP: to power-up.)', HXRV )
   end {case}
end; {code_sent}

begin {menu}
   writeln ( HCD, ' ':37, 'SETLST' );
   writeln ( ' ':35, 'Version 1.2' );
   writeln;
   writeln ( ' ':10, '1 = Pica (normal 10-pitch) spacing' );
   writeln ( ' ':10, '2 = Elite (12-pitch) spacing' );
   writeln ( ' ':10, '3 = Condensed (17-pitch) spacing' );
   writeln ( ' ':10, '4 = Proportional spacing' );
   writeln;
   writeln ( ' ':10, '5 = 6 lines/vertical in. (default)' );
   writeln ( ' ':10, '6 = 8 lines per vertical inch' );
   writeln;
   writeln ( ' ':10, '7 = Set left margin' );
   writeln ( ' ':10, '8 = ' );
   writeln;
   writeln ( ' ':10, '9 = Reset to power-up configuration' );
   writeln;
   writeln ( ' ':10, '0 = Return to system' );
   writeln;
   if OUTNUM in [ '1' .. '9' ] then begin
      CODE_SENT;
      writeln
   end; {if}
   write ( HSCP ); {save cursor position}
   repeat
      write ( HEOP, ' ':20, 'Enter selection --> ' );
      readln ( OUTNUM );
      if  not ( OUTNUM in [ '0' .. '9' ] ) then write
                                                ( BEL, HRCP )
   until ( OUTNUM in [ '0' .. '9' ] )
end; {menu}

procedure SET_MARGIN;
{
 Accepts character input and sents it to PRINTER.
}
begin
   MARG_INPUT := false;
   write ( HSCP ); {save cursor position}
   while MARG_INPUT = false do begin
      writeln ( HEOP );
      write ( ' ':10, 'Set margin to (lead zeros
                                        required)?     <' );
      for X := 1 to 4  do write ( HCUB );
                                    {move cursor 4 pos. left}
```

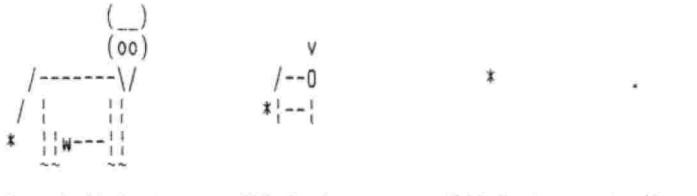
LISTING end -- Humor?!

```
      readln ( MARGIN );
      if (MARGIN [ 1 ] in [ '0' .. '9' ])
         and (MARGIN [ 2 ] in [ '0' .. '9' ])
         and (MARGIN [ 3 ] in [ '0' .. '9' ])
         then MARG_INPUT := true;
      if MARG_INPUT = false then write ( BEL, HRCP )
   end; {while}
   write ( PRINTER, ESC, 'L', MARGIN )
end; {set_margin}

procedure RESET;
{
 Reset printer to power-up configuration.
}
begin
   write ( PRINTER, ESC, 'N' );   {pica pitch}
   write ( PRINTER, ESC, 'A' );   {6 lpi}
   write ( PRINTER, ESC, 'L000' ) {margin 0}
end; {reset}

begin {setlst}
   RESPONSE := '0'; MARGIN := '000';
   HERV [ 1 ] := ESC; HERV [ 2 ] := 'p'; {enter reverse-
                                                    video}
   HXRV [ 1 ] := ESC; HXRV [ 2 ] := 'q'; {exit reverse-video}
   HCUB [ 1 ] := ESC; HCUB [ 2 ] := 'D'; {cursor backward}
   HCD  [ 1 ] := ESC; HCD  [ 2 ] := 'E'; {clear display}
   HEOP [ 1 ] := ESC; HEOP [ 2 ] := 'J'; {erase to end of pg}
   HSCP [ 1 ] := ESC; HSCP [ 2 ] := 'j'; {save cursor pos'n}
   HRCP [ 1 ] := ESC; HRCP [ 2 ] := 'k'; {return cursor to
                                          saved position}
   assign ( PRINTER, 'LST:' );
   rewrite ( PRINTER );
   repeat
      MENU ( RESPONSE );
      case RESPONSE of
         '0' : begin
                  writeln;
                  write ( ' ':10, 'Finished; returning to
                                                  system.' );
                  writeln
               end; {case of '0'}
         '1' : write ( PRINTER, ESC, 'N' );
         '2' : write ( PRINTER, ESC, 'E' );
         '3' : write ( PRINTER, ESC, 'Q' );
         '4' : write ( PRINTER, ESC, 'P' );
         '5' : write ( PRINTER, ESC, 'A' );
         '6' : write ( PRINTER, ESC, '8' );
         '7' : SET_MARGIN;
         '8' : writeln ( 'NOTHING DONE!' );
         '9' : RESET
      end {case}
   until RESPONSE = '0'
end. {setlst}
```

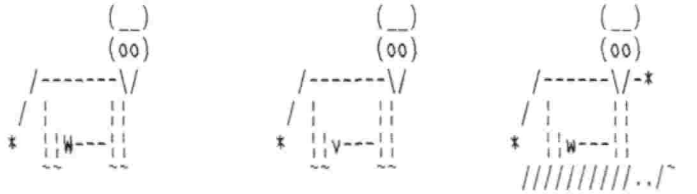
[eof]

[Editor's note: The following printout was received earlier this month postmarked Kalamazoo, MI, without return address. The author apparently was too embarassed to sign his/her work, but we thought it might entertain our readers--and perhaps get them to be creative also. (Computing Can Be Fun!)]

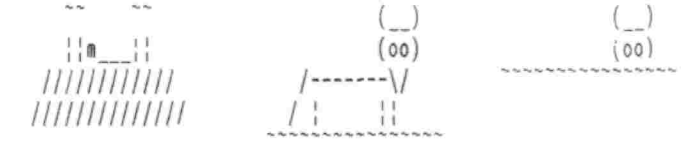
THE COMPLETE GUIDE TO COWS
or
Non-Graphic Printer Graphics



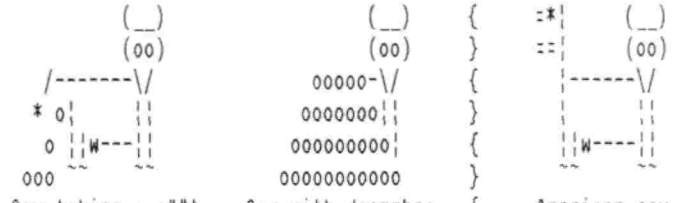
Cow at 10 feet 100 feet 1000 feet 1 mile



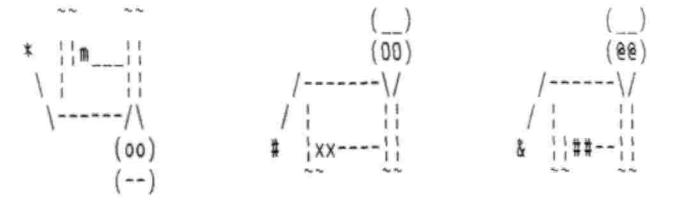
Cow before milking Betty Ford's Cow Cow munching grass



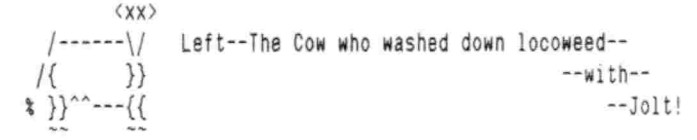
Grass munching cow Cow in water Cow in Deep Water



Cow taking a s##t Cow with diarrhea American cow

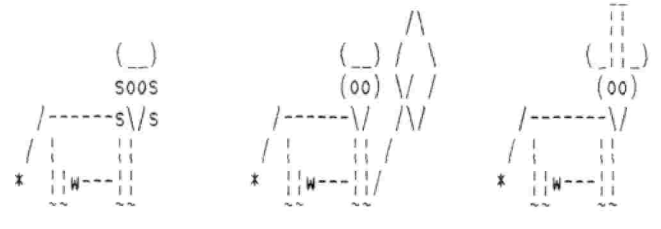


Australian cow This cow drank Jolt This cow ate locoweed



Left--The Cow who washed down locoweed--
--with--
--Jolt!

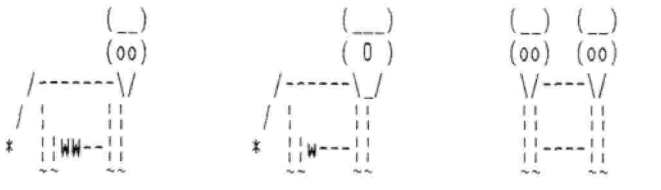
"cows" concluded -- Misc



George Washington's cow

Benjamin Franklin's cow

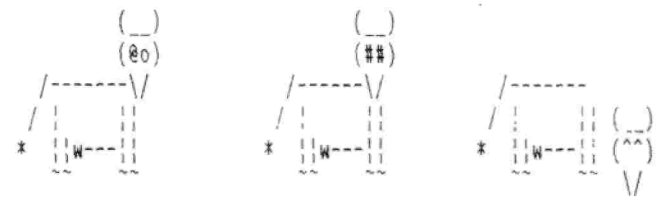
Abraham Lincoln's cow



Hugh Hefner's favorite cow

Jason & Argonauts met this cow on the Isle of the Cyclops

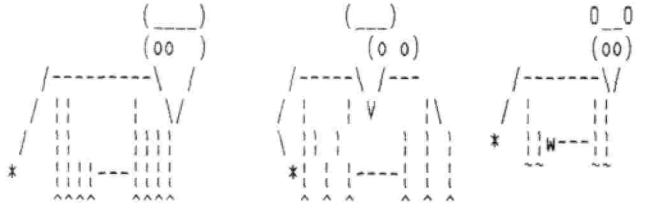
Dr Doolittle's cow



Here's the Little Rascal's pet cow

Flash Gordon's (spaced-out) cow

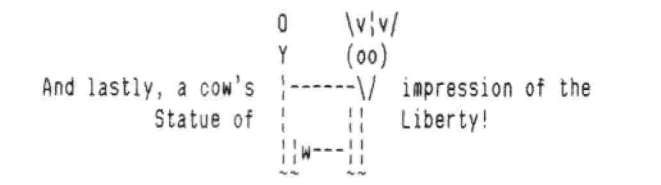
The Headless Horseman's cow



Pablo Picasso painted this cow

Salvidor Dali's favorite cow

Walt Disney's Disneyland Cow



And lastly, a cow's impression of the Statue of Liberty!

[Another Editor's Note: We think this series was sent to us by our JOURNAL author friend, Laszlo Veisi of Niles, MI. We apologise--for having edited the images slightly so they'd fit our column layout--to whomever it was who COWardly submitted these unsigned bovine images to us. We hope our readers have enjoyed this non-computing diversion--but we DID say earlier: Eight-bit Computing Is (Should Be) FUN!]

RATHER RANDOM INPUT

by

Your Editor

This general portion of Michigan was severely plagued by numerous electrical storms during June and July. Early in June we were completely without power for forty-three contiguous hours. Three weeks later, we again lost power, this time for 44 hours. During both incidents, Our Beloved Power Supplier, Detroit Edison, had crews working non-stop around the clock to restore power to every one OUTSIDE a quarter-mile radius centered on our QTH/1020/location! Also during the same period, their "24-hour trouble phone lines" were either busy (understandable), answered by a "nobody's home" recorder, or (not understandable or comforting to experience) a number of non compos mentis (we assume) human operators who'd promised: "Faithfully, power will be restored Quite Soon Now--In Fact, Crews Are Probably Working on Your Lines As We Speak"! Yeah, sure.

Since we had lost about half the text of the July JOURNAL during that June outage, we decided to check out battery-powered backup supplies (for Heather) at the local CompuAdd store. The 450VA unit which we finally bought is quite adequate for Heather and the LQ-800 printer (it also can run the '89 AND our H120 simultaneously). We thought it was a Real Bargain at $339 + 4% tax, and thus far it has more than paid for itself by performing flawlessly thru numerous power line blinks and burps.

We recommend that everyone who has suffered the indignity and inconvience of power-company outragery get a similar device and install it just as soon as you can. But don't get it from CompuAdd, especially if you're short of "green stamps"! Instead, order American Power Conversion's Back-UPS 450 from P-C Connection, 6 Mill Street, Marlow, NH 03456, phone 800/800-5555. Their catalogue number for this model is 7107, price is just $235, AND NO HIDDEN CHARGES. Please note that this is over $100 below CompuAdd's price.

Although PC Connection is primarily peesee-oriented, ask them for a copy of their latest catalogue. They carry a good line of printers, and have a Service Center "ready, willing, and authorised to service your Epson and Canon BubbleJet printer". They offer same-day turnaround on most repairs at the low rate of $25/hour, also handle warranty repairs on equipment whether or not it was purchased from them. They'll even send you packaging for safe transit of your equipment! For more information, call them at 1-800/800-0015...and do say that you read about them in the SEBHC JOURNAL!

I wonder: Will PC Connection rent their packaging to our Cape Cod friend, Oscar? Seems as if he needs to ship one or the other of his two '89 computers to us every other month...

PLEASE NOTE: LINDLEY SYSTEMS has moved from their East Coast location to: 8139 E Mawson, Mesa, AZ 85207; ph 602-380-9175. Our thanks to Paul Herman & his Z100 LIFELINE for this info!

SEBHC JOURNAL

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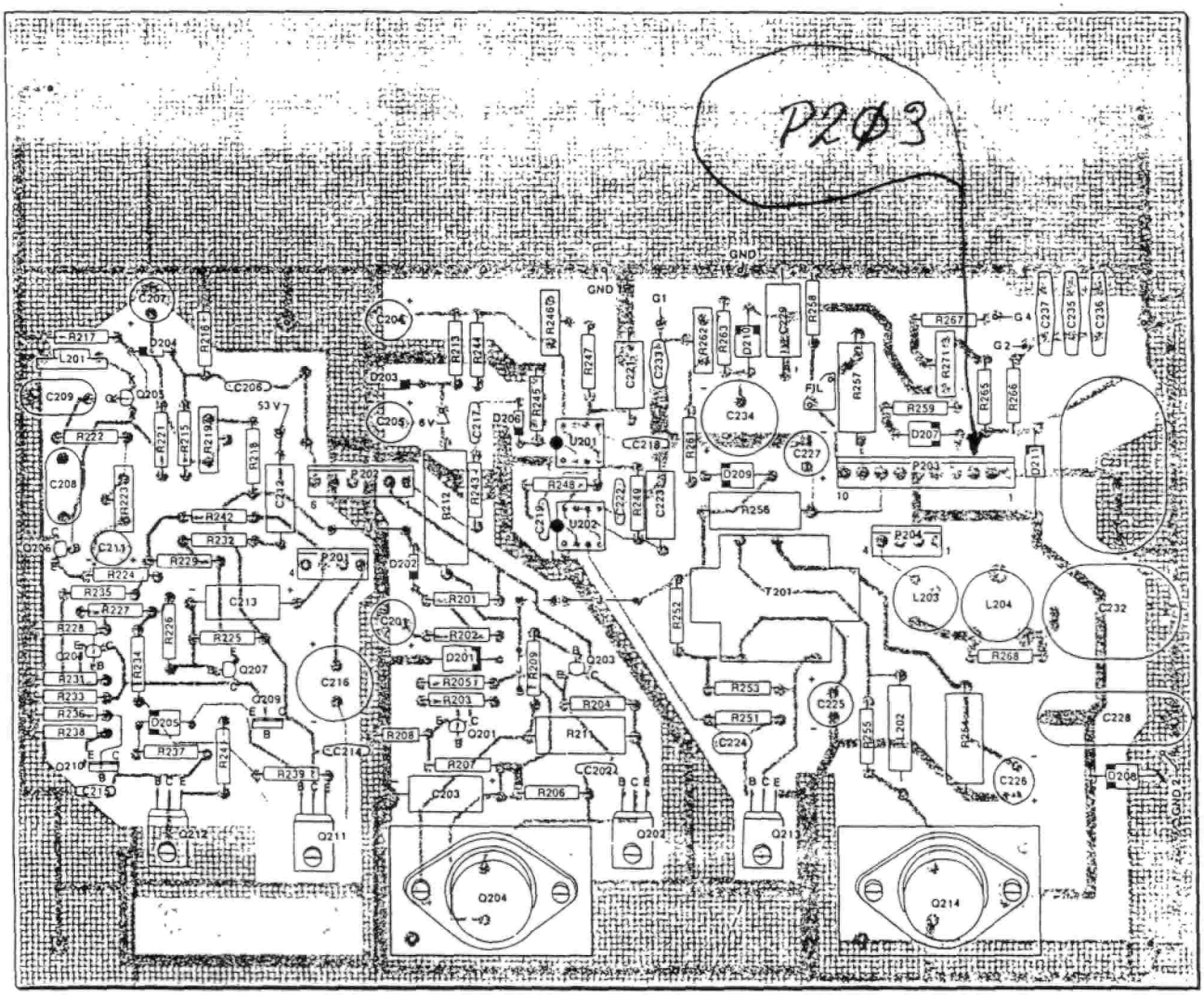
H/Z HARDWARE SKETCHES
For the Dedicated Only!

H/Z89 and Z90 VIDEO DEFLECTION CIRCUIT BOARD

Part number HE181-3400. Shown from component side.



SERVICE NOTE

This board was Heath's last version. It has an outboard CRT interface card mounted on the heat-sink/radiator behind Regulator Q204 and Horizontal Driver Q214. Electrical operation is nearly identical with earlier boards except there is an external brightness control on the computer's rear panel. Usually the most serious failure is heat-related and is caused by poor mechanical and electrical contact between C201 and P201--pins 1 and 2--which destroys the circuit board's solder-to-foil bonds. Carefully remove card and examine, clean and GENTLY re-solder loose connector pins to circuit-board foils. With card component-side up, use a good heavy pair of pliers and moderately flatten all P201's pins. Clean flattened pins and apply a thin coating of solder to all of them to ensure better contact. Use low heat to avoid re-opening pin-to-foil bonds when re-soldering them. If circuit foil lifts from the card during these steps without breaking electrical contact, a drop of "crazy glue" or equal usually restores the foil's mechanical bond to the card. DO NOT RE-SOLDER GLUED FOILS UNTIL GLUE IS THOROUGHLY HARDENED--usually overnight. The glue is quite flammable and will emit hazardous, noxious fumes which will make you deathly ill. Be sure to use lots of fresh-air ventilation during this step.

OTHER VOICES, OTHER VIEWS

From the San Diego Mug's D&D LITE Sep-91 Newsletter's "W-O-M" (WOM=Write-Only-Memory--You're supposed to ignore it.) -- by Ol' WhiteBeard, Hissef

[Condensed to fit our column layout. -- ed]

"I'm paging through a copy of Portable Office--Sep-91--and my eye catches (ouch!) on an article's beginning sentence. It says: 'Marte Brengle bought a portable computer with BO.'

"[Bo knows portable computers??] Is this an article about computers or athlete/consultants, or about a heretofore uncelebrated member of my clan? Of course, I had to read the rest of it to find out.

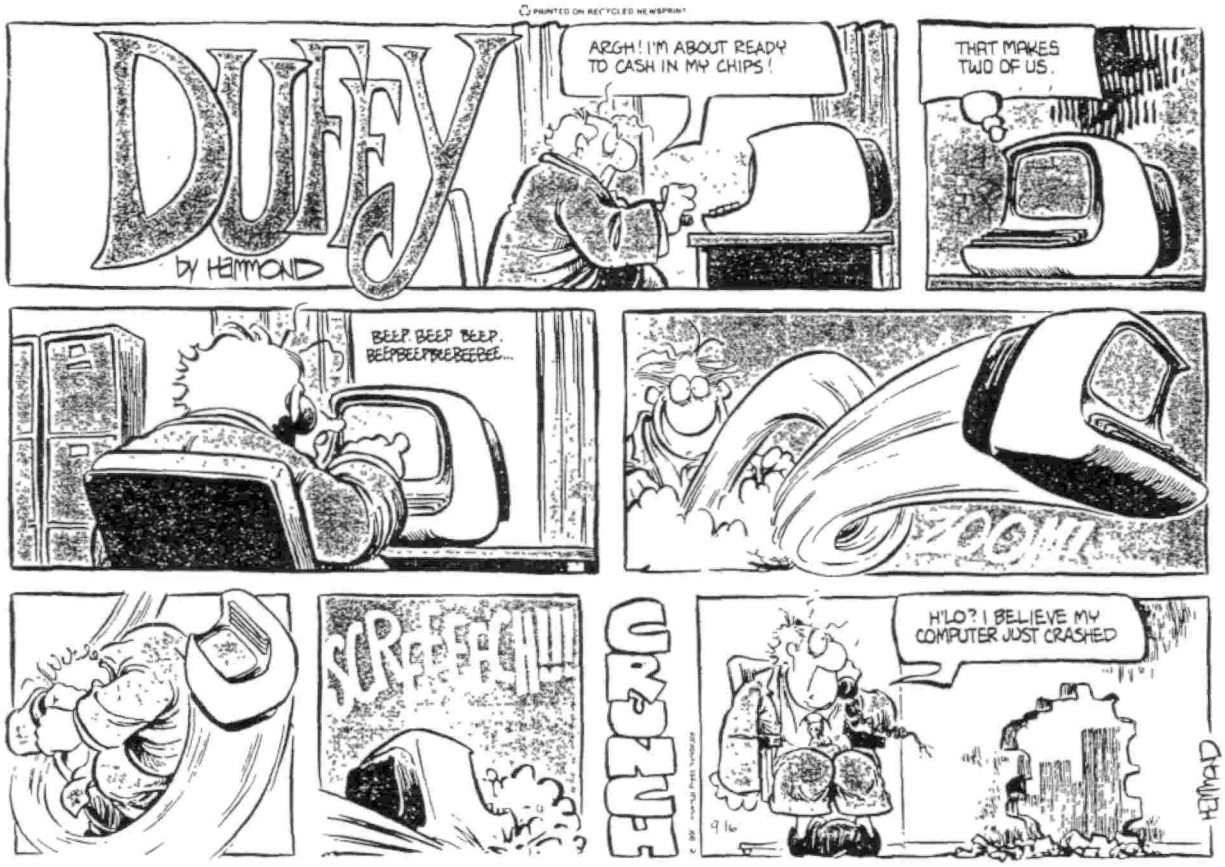
"The article is in fact about buying used computes. It's titled 'Pre-Owned Bargains' and subtitled 'How to find a deal that doesn't stink and may save you thousands'. [Classy eh?] The article is principally a collection of anecdotes about how various folks found wonderful bargains in used computers, although sometimes lots of refurbishment was needed to bring them up to snuff. I question the author's taste in opening with a tale of a computer which smelled bad, apparently because it previously belonged to a heavy smoker. (That ain't what I remember we used to call 'BO'.) "But my (presumed) relative, undaunted, 'used a spray substance which kills smells in gym clothes' and '...managed to get the computer and discs aired out.'

"Spray substance? Aired out? Gimme a break! What was that *substance*--something so evil or vile or illegal that it couldn't be identified? Would YOU spray a *SUBSTANCE* on a computer without knowing what it was? If it's strong enough to kill smells in gym clothes, I wouldn't want to get any on me, much less on my computer. I'd stay clear of the sprayed gym clothes, too. And since when does 'air out' apply to anything else than those shoes with a little built-in pump--as in 'Pump up and air out!'?

"I think I'd be more worried about physical damage to the workings of the computer--and those diskettes--from smoke particles and other smoking by-products. Hasn't everyone seen those pictures showing the size of a smoke particle compared with the dimensions in disc drives? I mean that smoky aroma exists for several reasons: to entice new smokers to aquire the habit, to help me remember why I quit, and to alert us that this computer has been subjected to a nasy environment for a long time. If tobacco tar is carcinogenic, I suspect it's also corrosion-o-genic. Do you think $500 (what Marte Brengle purportedly paid) for a tobacco-odor-permeated Toshiba T1000 with 'plenty of trimmings' is a bargain?! Me neither.

"I guess I'm just being hyper-critical, because after the plesant surprise of finding my family name mentioned prominently in print--and in the same sentence with a high-profile athlete--I was disappointed that it was ensconced in such flakey writing, and questionable bargain hunting."

[Note: Author Al Brengle is SDHUG's Officer At Large. -- ed]



EIGHT-BIT & "OTHER" VENDORS

::> EIGHT-BIT SOURCES, SERVICES, and VENDORs DIRECTORY <::

Listing last updated on 24 Oct 1991

CDR SYSTEMS, Inc., 7171 Ronson Road, San Diego, CA 92111; ph: 619-560-1272, 9a-5p Pacific Time Zone--ask for Herman.

Chalfant, Rick, 100 Bayberry Drive, Springboro, OH 45066; ph 513-748-1344 Stocks H/Z89s, parts, software. Check him out; you might be pleasantly surprised!

D-G ELECTRONIC DEVELOPMENTS Co., 700 S Armstrong, Denison TX 75020; phone 214-465-7805 (Central Time Zone)
8-bit "Heartbeat" computer, 8-bit "Super89" CPU upgrade/replacement board. Bruce Denton, president; Service & advice available, also some H8 and H/Z89 hardware at clearance prices; contact Bruce for details. A *Certified* GOOD GUY!

DISK MOVERS, 8534 McCormick Blvd, Skokie, IL 60076; phone 708-679-3727 (Central Time Zone)--ask for Miriam. HARD-SECTOR and soft-sector discs for H/Z8s, '89s in bulk quantities at very low prices! "VERY NICE and HELPFUL PEOPLE." (Do give them a call and mention us!)

GOLDSMITH SURPLUS, 2107 N Adams/PO Box 18676, Indianapolis, IN 46218; 317-545-4747, ask for Phil or Eric. Dealers in "Almost Any Surplus Material You Have (or Need)"! (Please mention that you found them listed here!)

HOYLE & HOYLE SOFTWARE, 111 Sparrow Drive, Isle of Palms, SC 29451. (Answer mailed enquiries only.) Their QUERY-III database runs on H8s thru Z120s. "REALLY GOOD GUYS"!

LINDLEY SYSTEMS, 8139 E Mawson, Mesa, AZ 85207 -- phone: 602-380-9175. All kinds of neat-OH 8-bit software such as PC89LINK--lets you transfer 8-bit stuff to H/Z100s and peesees over a null-modem cable. Ask either Bob or Bill for a catalogue, they're Really Fine Fellows!

MAGNOLIA MICROSYSTEMS, 2818 Thorndyke Avenue West, Seattle, WA 98199; phone 206-285-7266 (Pacific Time Zone). Ask for "Mark". Special memory upgrades and op-systems for H/Z89s & 90s. Trustworthy people.

MICRO COMPUTER REPAIR SERVICE, 2308 Industrial Highway, Ste C Ann Arbor, MI 48104; phone 313-663-3646. D-DRIVE REPAIRS & SALES. Ask for Mike Morris, he's "A SUPER GUY"! (Tell him Lenny sent you.)

MICRONICS TECHNOLOGY, Suite 159, 54 Dalrada Road, Montgomery, AL 36109; phone 205-244-1597 voice, 205-244-0192 bbs CTZ Darrell C Pelan, pres. Soft & Hardware, '89 hardiscs Catalogue & 8-bit help available. A REALLY GOOD GUY!

New Orleans Data General Services, 7230 Chadbourne Drive, New Orleans, LA 70126; phone 504-241-9388--"Dave". Colour and sound boards for H8, H89. Out of business, but willing to provide tech advice on their products. Dave's ANOTHER GOOD GUY!

QUIKDATA COMPUTER SERVICES, Inc., 2618 Penn Circle, Sheboygan WI 53081; phone 414-452-4172--Henry Fale (Fah-lay) Prop. Mfgr, sales, service, 8-bit machine support & parts; publishes H-SCOOP Heath/Zenith user's newsletter, 24-hour H/Z user BBS. Ever busy but "A REAL GOOD GUY!"

SIGMASOFT & SYSTEMS, 2433 Winterstone Drive, Dallas TX 75023-7818; 214-596-0116 (Central Time Zone)--Clay Montgomery--hardware/peripherals mfgr, software publisher, hardware & tech support, RAM drives, Hi-Res grafix addons for H/Z89s. Catalog & help; A *FANTASTIC* GOOD GUY!

SKYCASTLE COMPUTER PRODUCTS, Box 1412, San Carlos, CA 94070; 415-254-3931 after 6pm Pacific Coast time--ask for Mike. Calligraphy-II and other FANTASTIC dot-matrix graphic printer software products. A REALLY, SUPER-GOOD GUY!

TMSI/LEE HART, 323 West 19th Street, Holland, MI 49423 616-396-5085 (evenings, weekends--usually) Their motto: "Inovative Products for the H/Z89"
Misc. 8-bit hardware items, hardware/software support for '89/90 users. "A NICE GUY & TOP-NOTCH ENGINEER!"

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THER VENDOR NEWS... OTHER VENDOR NEWS... OTHER VENDOR NEW

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Lindley Systems has moved from their old Carolinas location to Mesa, Arizona (see addresss listing above). We're delighted to once more list them here for our valued subscribers! Contact them Really Soon Now & tell 'em Lenny sent ya.

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THANK YOU FOR YOUR ORDER!

Rev #910630

The SEBHC JOURNAL's Back Page

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* The SEBHC JOURNAL is composed, edited and published by L E Geisler at 895 Starwick Drive, Ann Arbor, MI 48105. Phone 313-662-0750, 9am - 6pm Eastern Time Zone, Mon thru Fri only. Other times (EMERGENCIES ONLY): 313-769-6052 (residence).

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