



SINC - LINK



MAR-APR '92 VOL 10 # 2



SPRING AHEAD 1992 ISSUE

page 2	Club Stuff	page 20,21	CITIZEN Printer Review
page 3	Editorial	page 22,23	Mods to SHREB-BP (TS1000)
page 4,5	Bob's Notebook (2068)	page 24-27	Things To Do With TK2 (QL)
page 6,7	Printer I/f's Part 4 (2068)	page 28,29	Steve Gunhouse Writes (2068)
page 8	Gold Card bugs fixed (QL)	page 30	Family Trees (QL)
page 9	Graphic Screen\$ Dump (2068)	page 31-34	ZX-91 Newsletter (TS1000)
page 10-12	QLips (QL)	page 35	TTSUC QL SIG Meet (QL)
page 13	Kempston Port Mouse (2068)	page 36	Beautiful Lady (QL)
page 14,15	Tape Doctor Review (TS1000)	page 37	Vendor Listing
page 16,17	VideoFace Digitizer (2068)	page 38	Newsletter Exchange
page 18-20	Translation of QL Progs.(QL)		

TORONTO TIMEX-SINCLAIR USERS CLUB



SINC - LINK



MAR-APR '92 VOL 10 # 2

SINC-LINK IS A PUBLICATION OF THE TORONTO TIMEX-SINCLAIR USERS CLUB AND IS ISSUED 6 TIMES A YEAR. COPIES OF THE NEWSLETTER ARE \$1.50 EACH FOR NON-MEMBERS. CLUB MEMBERS RECEIVE FREE COPIES AS PART OF THE \$20.00 ANNUAL MEMBERSHIP FEE. A NEWSLETTER SUBSCRIPTION ONLY IS AVAILABLE FOR \$12.00.

NEWSLETTERS ARE EXCHANGED, FREE OF CHARGE, WITH OTHER TIMEX-SINCLAIR USERS GROUPS.

PLEASE CREDIT THIS PUBLICATION AND THE AUTHOR IF YOU COPY MATERIAL.

THE CLUB MEETS ON THE FIRST WEDNESDAY OF EACH MONTH AT FOREST HILLS COLLEGIATE INSTITUTE, 730 EGLINTON AVE. W., TORONTO.

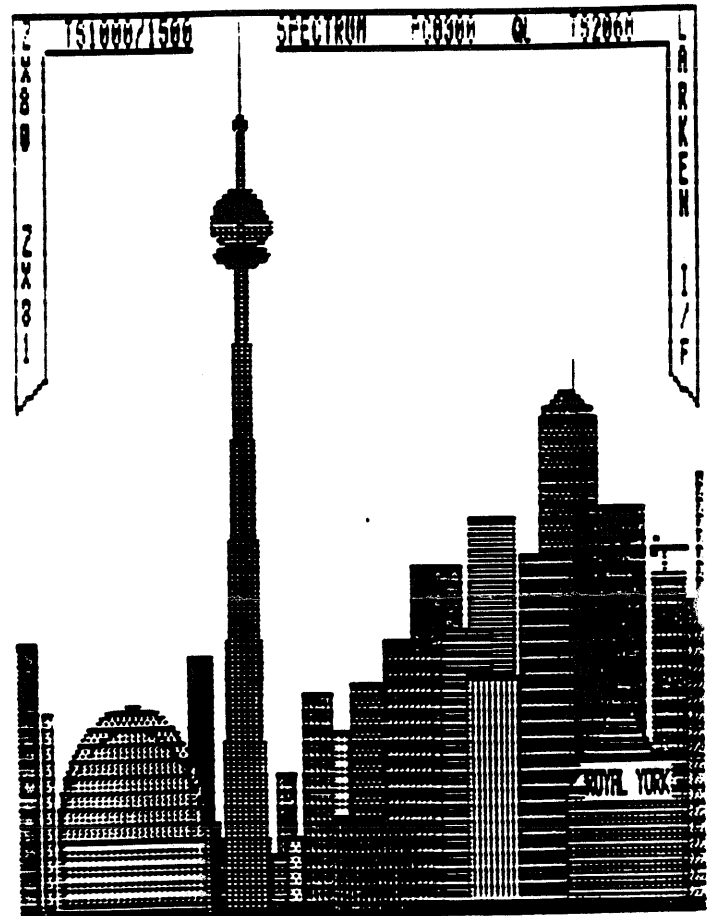
SINC-LINK IS PRODUCED ENTIRELY ON SINCLAIR AND TIMEX-SINCLAIR COMPUTERS.

SEND CORRESPONDANCE TO:

Attention: SINC-LINK EDITOR
TORONTO TIMEX-SINCLAIR USERS
CLUB, 14 RICHOME COURT,
SCARBOROUGH, ONTARIO,
CANADA M1K 2Y1

EXECUTIVE OFFICERS:

PRESIDENT:	RENE BRUNEAU (531-9749)
TREASURER:	BILL LAWSON (444-8772)
SECRETARY:	GEORGE CHAMBERS (751-7559)
ACTIVITIES:	LOUIS LAFERRIERE (820-3725)
QL CONTACT:	HUGH HOWIE (634-4929)
NEWSLETTER:	JEFF TAYLOR (244-8583)
LIAISON OFFICER:	GEORGE CHAMBERS, 14 RICHOME COURT,
(Out-of-town members)	SCARBOROUGH, ONTARIO, M1K 2Y1
	(416-751-7559)



TORONTO TIMEX-SINCLAIR
USERS CLUB

TORONTO TIMEX-SINCLAIR USERS CLUB

SINC-LINK

EDITORIAL

As promised last issue, I've printed a list of the clubs and individuals with which we exchange newsletters and information on a regular basis. I've also included a list of vendors (courtesy of the VISTA newsletter) still in the T/S business. The purpose is to make readers aware of the facilities available to them. In order for clubs, newsletters and vendors to survive we must support them. There is more information out there than any one club can possibly hope to supply. So think about broadening your horizons in the Timex/Sinclair world and contact these groups.

Our swap meet last month (Feb.) was a minor success. Everyone happily toddled off with some T/S item we didn't already have. Is there going to be a real fest somewhere this year? If you know of one, please contact our club with your info.

Special thanks to Rene Bruneau for assembling this issue. Due to an inordinate amount of overtime in the past couple of weeks, I would never have made the deadline without his help.

I sent a letter off to *SINCLAIR USER* last month complaining about how hard it was to find any UK Sinclair publications in the Toronto area anymore. I'm still waiting for a response. Does any reader know of any UK publication still available in North America? Drop me a line, please.

That's all for now...

J.T.

FOR SALE FOR SALE FOR SALE FOR SALE

10 year accumulation of ZX81, TS1000, TS1500 and TS2068 computers, hardware, software, books and magazines. For a 3-page list, please send SASE to: John McMichael, 1710 Palmer Drive, Laramie, Wy. 82070

DEAD KEY ROW

Dick F. Wagner

For several days the "A" to "G" part of the 2068 keyboard was inactive except that sometimes a sharp rap on the case would get it going again. This seemed to indicate a poor connection, or an intermittent connection in the keyboard. Other circuit parts could be a keyboard diode or even the Z 80 processor.

To eliminate a couple of possibilities, the keyboard was replaced with a spare and the Z 80A CPU was replaced. Still dead! The set of 8 diodes were next checked with a good ohm meter set on the highest scale of 20 megohms. Checking both directions thru the diodes (reversing test leads) all checked OK except the diode tied to the "A" to "G" keys which tested open. A good small signal diode will test about 3-6 megohms in one direction and well over 20 megohms in the other direction.

The diode was replaced with one testing about the same as the good ones. It was possible to do the unsoldering from the component side and excess solder was removed from the 2 holes with a soldering wick. As soon as I started to unsolder the diode it separated in the middle of the glass case. I wonder how long the glass had been fractured? To do a good job of soldering the circuit board was removed from the case so the soldering could be done on the trace side.

This repaired the bad keys and after replacing the keyboard all is back in good shape.

from the PLOTTER newsletter

BOB'S NOTEBOOK

Transferring Files Between Computers

This is a follow-up report on the article in Sinc-Link by Rene Bruneau in the Nov-Dec 91 issue page 12.

With a new PC computer in my possession, I was anxious to copy quite a few of my TS2068 text files to it and Rene's article came along just in time. I have a 2400 baud full duplex modem inside my mini-tower and several software telecommunications programs to use with it. Of these, the one I selected to use was the one that came with the modem; it is called BitCom by Bit Software Inc of Fremont CA. The TS2068 has a TS2050 modem and the software I used was the Larken Maxcom for 300 baud.

I simply connected the phone cable from the 2050 to the line socket in the back of the mini-tower. Both computers were booted up and the software loaded. I put Maxcom in half duplex and then switched it to Terminal Mode. Rene had told me that at this point NOT to touch the TS2068 keyboard again until a Connect was established from the PC. I had done this earlier with the result that the TS2068 keyboard locked up.

Back at the PC, I entered < C > to start the connect and then typed < ATA > which triggered a string of tones from the PC which was answered by the 2050. For some unknown reason, trying to make the connection from the TS2068 will not work. Now, on the PC monitor, I could see the letters < aattaa >. At this point, I pressed < ENTER > and the word CONNECT appeared at the top left of the screen under the letters < aattaa >.

I then moved to the BITCOM option menu and selected < 1 > for RECEIVE FILE and then < 1 > to receive an ASCII file, i.e. TEXT, entered TT20A.CT which was the name of the file I was attempting to download and finally pressed < ENTER >. I then moved over to the TS2068 and selected Caps Shift 9 to choose ASCII transmit mode and entered the same file name TT20A.CT. This was, by the way, an Mscript file of about 15000 bytes.

I pressed < ENTER > and the transfer started. At the bottom right of the PC screen the words <Receiving TT20A.CT bytes:> appeared and the screens on both monitors began to spew out the text. As this happened, the number of bytes transferred showed following the word "bytes" on the PC monitor. When the file was transferred, both screens became still except for a notation on the PC screen that the transfer was complete. I then hung up both modems and exited both of the modem files.

A quick look at the directory in the PC showed that the file was indeed there and at that point, I loaded it into my word processor program within MSWORKS. The text was there neat as could be and required little editing. A few Mscript control codes were removed and a few extra blank lines taken out and that was all that was necessary.

Now, I had two more parts to this text file, TT20B and TT20C, this partitioning made necessary by the memory limitations of the TS2068. It was easy to concatenate the three parts into one file in the PC, do a final edit of the whole file and then go on with a printout to the 24-pin dot matrix printer.

My next experiment involved transferring a BASIC file, my pet "Tax file" that I wanted to continue to use with the PC. After a few false starts, I went about it this way:

First off, by reading my manual on QBASIC (the version of BASIC that now comes with MS-DOS 5.0) , I learned that QBASIC programs operate entirely in ASCII in the PC and it was

necessary to transfer the TS2068 BASIC file in ASCII format. To get the TS2068 file into ASCII, I saved it to a sequential file via the Larken system (ie, OPEN #3, name OUT and then LISTed it to disk). Once this was done, I proceeded to transfer the text file in the same way that I had done the earlier text files.

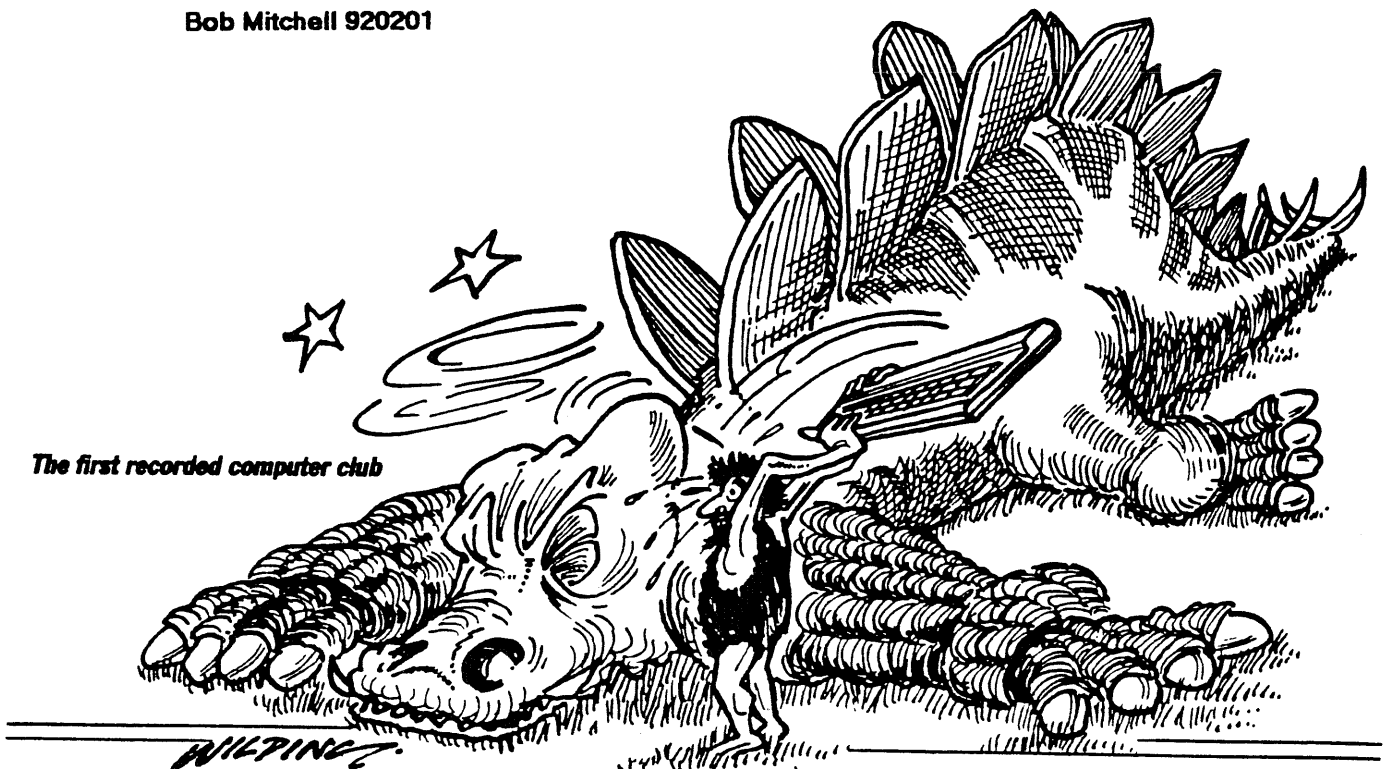
With this file now on the hard disk as a text file, I renamed it as a BASIC file by simply changing the extension from TXT to BAS. Now I opened up QBASIC and loaded this BASIC file for editing. Editing was no small undertaking especially since saving the QBASIC file does NOT save the variables in the way the TS2068 does. Back to the manual! Here, I found that I would have to, of all things, save the variables to a SEQUENTIAL FILE! All that book-learning and experience with the LKDOS sequential filing system now came in handy. In due course, (many hours of work), I arranged the program lines to send the variables to disk and subsequently to read them back when required. Sinclair's very user-friendly method of saving files along with the variables would be sorely missed, if many QBASIC files were to be written and used.

However, everything is easy when you know how and I would now find it much easier to go through this sort of exercise again. There is a whole bag of differences between TS2068 BASIC and QBASIC and this is not the time to go into them. Perhaps, a later article might be useful on this subject but that will have to wait until I have learned quite a bit more.

All of this was a successful start to a major project of moving many of my Mscript and Tasword files (and even a few BASIC files, too) to the new computer and I pass on these experiences to those readers who have similar requirements. I should add that if many transfers were being undertaken, the CONNECT would not be broken until the end of the session.

So, thanks to Rene for his tutorial that got me started. I have since completed many successful transfers with many more to go and the only thing that slows me down is the 300 baud rate of the 2050 modem. But I'm retired so I can spare the time.

Bob Mitchell 920201



The first recorded computer club

PRINTER INTERFACES AND DRIVER SOFTWARE
A Primer by George Chambers - Part 4 - HACKSEL

Part three of this series dealt with the AERCO printer interface and software. In this article we will cover the Hacksel interface and it's related software.

Peter Hacksel started making printer interfaces for the TS2068 probably about 1986/7. They were essentially a variation of the popular Aerco model. There were two versions. One mounted in the customary place at the rear of the computer; the other occupied the cartridge dock. Both versions were uncased. Of course the cartridge dock version had no need of a case. It was compact enough so that the dock cover could close completely. The ribbon cable to the printer came out the front and then could be passed under the computer to the rear.

The cartridge model was a unique idea. The cartridge dock, since there were no cartridges being manufactured at that time, was little used. Things changed shortly after, when the Larken disk system with it's dock cartridge came along.

When the Hacksel interface first appeared there was no printer driver software to go with it. Many persons made use of other software. Presently Peter developed software to accompany his product. It consisted of three blocks of code. These loaded in memory above address 61000. The three sets of code occupied different niches and they could be saved as a single block of code if desired.

The first article in this series, in the Sept/Oct'91 issue of SINC-LINK (Vol.9 No.5) contains a description of this software. The same article provides the POKES to be used, defines the "ASCII" and "2068 character" sets, and describes how to use them. I shall not repeat that here.

However I have noticed one shortcoming about the LPRINT driver. Possibly it is because of inadequate instructions.

I could not set a line length value. For example, if I am doing a program listing I am unable to set the line length to 32 characters. Instead I would get a printout the width of the printer.

I found that the LLIST will hang unless I keep a computer key, any key, depressed throughout the printing. This may be a peculiarity of my computer set-up.

There are two listings in this article. Figure 1 shows a listing which uses the CHR\$ form of printer control, while Figure 2 shows the OUT method. Both approaches are pretty straight-forward. Note LINE 100 in both listings. LINE 100 "points" the computer to the code starting address.

LINE 120 puts the computer in the "ASCII" mode, mentioned earlier. In Figure 1 the LINE 120 appeared to be redundant. Printer control codes were acted upon by the printer regardless of whether a 1 or a 0 were POKED into address 65535.

In Figure 2 LINE 120 was required, otherwise the printer did not respond to the control codes.

However when doing an LLIST I found that I needed a POKE 65535,1 in both listings (LINES 350 & 360) otherwise there was no linefeed action by the printer.

You will notice a number of lines through the Figure 2 program containing LPRINT CHR\$ 10. This is to supply the printer with a LINE FEED

instruction. I found that when address 65535 contains a 1, an LPRINT CHR\$ 10 is required for a paper advance. In Figure 1 the OUT 127,10 provides a similar necessary function. In Figure 1 the instruction LPRINT CHR\$ 10 could have been used instead of the OUT instruction.

I tried the second Hacksel code, "b+w63200", but had very limited success with it. Possibly because it was not compatible with a Fastext 80 printer. I set the printer into it's graphics mode, loaded a SCREEN\$, and called up the code with a RANDOMIZE USR 62300. I got the first line of graphics properly, then the printer put out about three lines of X's. Somewhat of a washout for the "b+w62300" code.

I then looked at my copy of "color61000" I found that while it was supposed to be 1300 bytes in length, my copy was only 130 bytes long. Obviously a case of a missing "0" in making a SAVE. Oh dear!!

Altogether I found that the Hacksel printer driver software was pretty much of a washout.

Figure 1.

```

100 POKE 26704,254
120 POKE 65535,1
200 LPRINT CHR$ 27;CHR$ 77;CHR$ 10
210 LPRINT "This is Elite"
220 LPRINT CHR$ 10
230 LPRINT CHR$ 27;CHR$ 80
250 LPRINT "This is Pica"
260 LPRINT CHR$ 27;CHR$ 45;CHR$ 49
265 LPRINT CHR$ 10
270 LPRINT "This is underlined Pica"
275 LPRINT CHR$ 10
280 LPRINT CHR$ 27;CHR$ 77
290 LPRINT "This is underlined Elite"
291 LPRINT CHR$ 10
300 LPRINT CHR$ 27;CHR$ 45;CHR$ 48
310 LPRINT CHR$ 10
350 POKE 65535,0
360 LLIST
380 STOP

```

Figure 2.

```

100 POKE 26704,254
120 POKE 65535,1
150 LET m=1000
200 OUT 127,27: GO SUB m
202 OUT 127,77: GO SUB m
210 LPRINT "This is Elite"
220 LPRINT CHR$ 10
230 OUT 127,27: GO SUB m
231 OUT 127,80: GO SUB m
250 LPRINT "This is Pica"
260 OUT 127,27: GO SUB m
261 OUT 127,45: GO SUB m
262 OUT 127,49: GO SUB m
265 LPRINT CHR$ 10
270 LPRINT "This is underlined Pica"
275 LPRINT CHR$ 10
280 OUT 127,27: GO SUB m
281 OUT 127,77: GO SUB m
290 LPRINT "This is underlined Elite"
291 OUT 127,10: GO SUB m
300 OUT 127,27: GO SUB m
301 OUT 127,45: GO SUB m
302 OUT 127,48: GO SUB m
350 POKE 65535,0: REM
360 LLIST
380 STOP
1000 IF IN 127<>108 THEN GO TO 1000
1010 RETURN

```

P.S. One of our members, Steven Gunhouse, has responded to the last article (See letter elsewhere in this n/l). In my article I mentioned that I had not been able to get the LPRINT CHR\$ 10 to produce a screen graphic on my Fastext 80 printer. Steven has sent some pokes which work, after a fashion. The graphics are there, but the individual passes of the printer are upside-down. We shall have more in the next issue of SDINC-LINK.

MIRACLE MAKES GOLD CARD NETWORK RECENT JSU PROBLEMS SOLVED

by Hugh H. Howie

Last year I bought the Gold Card, and readers of this Newsletter will know that I have had my problems with the Gold Card. Those problems would now seem to be at an end.

'Way back in July 1991 I wrote to Miracle Systems in England and ordered the Gold Card, as I understood this was the last word for the QL. For me it almost was the last word.

The Gold Card arrived in the middle of August, I understand there was quite a hassle getting the huge number of orders out.

One of the first things I did after it was plugged in was to print a two-column letter composed in text87, and the result was a mess. The two columns were intermingled and the typeface used was liable to change in the middle of a sentence, and then revert back to the original. If you haven't seen that sort of mess you have missed nothing.

I wrote to Miracle who replied with a 2.22 ROM to replace the 2.15 with which my Gold Card was equipped. Something to do with a time dependency in the Gold I was told. I was happy with the print-out.

Meanwhile I had found that the Gold Card did not Network. I tried various things to find out what was wrong, and I discovered that the only time the Gold Card would Network was if it was in the same QL as Minerva (1.66 Minerva was the version I had) It did not matter which direction I was working, the Gold Card was no use with the JSU.

I wrote to Miracle, with lots of statistics and diagrams as to what I was doing.

Miracle said they were unable to duplicate my findings, and requested I send them an image of the JSU. Their reply was to say that the image I had sent was made with the Gold Card, and that the Gold modified the ROM when transferring it into high speed RAM, thus making the image not usable when blown into ROM.

They asked me to send them an image made by Trump Card.. I not only sent them the image made with Trump Card, but also made with Cumana, and also on three different QL's. A total of six different images. I thought this would be enough for them to work on.

Having been told by Miracle they could not isolate my problem, I was fortunate enough to try another Gold equipped QL, and found that this also was a No Net situation. This was now a matter of FIVE QL's not working with the Gold Card unless Minerva was present. This latest information was also passed to Miracle.

On the 11th day of February 1992, I received from Miracle a 2.28 ROM, and what do you know? IT WORKED, it not only worked but it NETWORKED. Not only that, but the problem I mentioned last month on failure to format MDV's, that also appears to be fixed.

I am well pleased, I am well pleased that my efforts have been worth while, I am happy that I now have a system which at this period of testing is probably second to none.

Yes, I have been persistent. Yes I have asked a lot of questions. Yes it has cost me a lot of unexpected expense in writing, and time in making tests to ensure I was correct. But it must also be remembered, that if I or anyone. spends a few hundred dollars on any given item, it is to be anticipated that the item will perform at no less a standard than the item which it replaces. Originally the Gold Card did not do so.

Now it does. Now it would appear that the Gold Card is compatible with the JSU ROM.

My thanks go to Miracle Systems for their attention to my complaints, and also especially to Mr M. Tomlinson for the manner in which those complaints were handled. I will not be concerned about dealing with them again. They have cracked through with Gold Trumps.

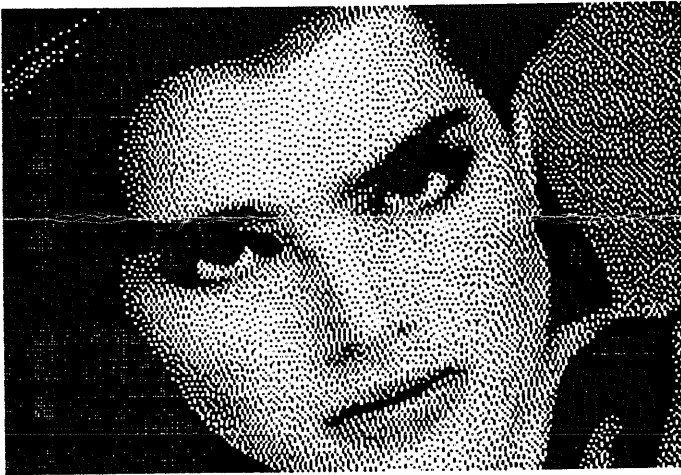
0215

GRAPHIC SCREEN\$ DUMP for the Tandy DMP105

by:-

CATUG

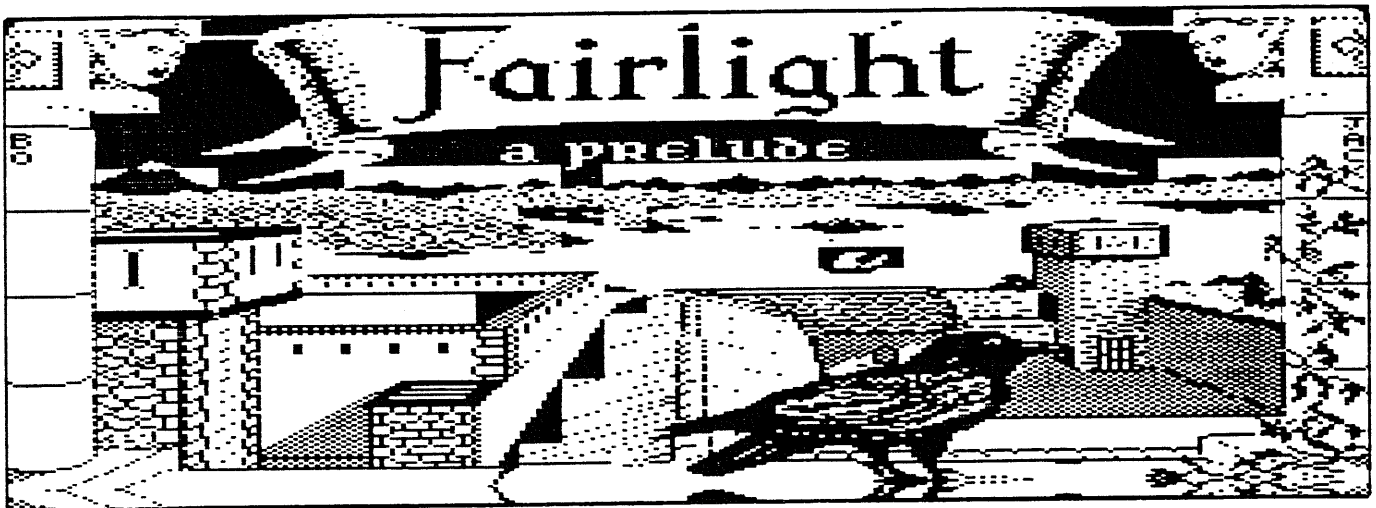
This printer is not supported by any software that I know of, having a non Centronics protocol but a fairly good 7 pin head dot matrix with graphics capability. The 176 vertical pixels divided by 7 do not result in an integer number. So, after a two hours session with Bob Swoger, the following program was developed and it worked, but SLOW, 15 minutes for the screen dump. Later on, I was able to convert the working part of the program to M.C. using the Timachine compiler. Now it only takes 20 seconds for Brooke\$ minus a piece of chin. B Integer out of range.



```

1 REM TANDY DMP105 PRINTER DRIVER by Abed Kahale 1/92
4 REM CLEAR 64769: REM Start address-1.
5 REM RANDOMIZE USR 100: LOAD "PDRVR.CC"CODE 64770
20 RANDOMIZE USR 100: OPEN #3,"LP"
30 RANDOMIZE USR 100: POKE 16092,0: REM no line feed, otherwise
se double spacing results.
50 RANDOMIZE USR 100: POKE 16093,32: REM LPRINTs & CHR$s sent
to printer.
60 LPRINT CHR$ 10: REM single line feed.
65 REM LPRINT CHR$ 27;CHR$ 19: REM PICA gives expanded picture
re BELOW.
80 LPRINT CHR$ 27;CHR$ 23: REM ELITE gives correct picture.
90 REM LPRINT CHR$ 27;CHR$ 20: REM CONDENSED gives hi-res narrow
picture.
95 RANDOMIZE USR 100: LOAD "BROOKE.C"$SCREEN$
100 LPRINT CHR$ 18: REM Puts printer in graphics mode.
110 REM RANDOMIZE USR 64770
120 REM !INT R,C,B: REM TIMACHINE Instructions.
130 REM ! LPRINT
150 REM ! OPEN #: REM TIMACHINE starts.
155 FOR Y=0 TO 175 STEP 7: LET R=175-Y: REM vertical pixels from
the top. (STEP 8) for 8-pin head.
160 FOR C=0 TO 255: REM Horizontal pixels.
170 LET B=0
180 LET B=B+POINT (C,R-1)
190 LET B=B+2*POINT (C,R-2)
200 LET B=B+4*POINT (C,R-3)
210 LET B=B+8*POINT (C,R-4)
220 LET B=B+16*POINT (C,R-5)
230 LET B=B+32*POINT (C,R-6)
240 LET B=B+64*POINT (C,R-7)
250 LET B=B+128
255 IF IN 127<>236 THEN GO TO 255: REM checks printer READY.
260 LPRINT CHR$ B;
270 NEXT C
280 LPRINT CHR$ 27;CHR$ 90;CHR$ 0: REM carriage return.
290 NEXT Y
300 LPRINT CHR$ 30: REM Back to character mode.
310 REM ! CLOSE #: REM TIMACHINE ends.

```



QL VIRUS HITS

QUANTA is the organisation which links QL'ers world wide together, and in the January 1992 issue of QUANTA newsletter is something which I think all QL'ers, and many others, will appreciate.

It is about a VIRUS which would appear to afflict the avid QL'er, and hosts of other Computerists.

It is reproduced here with full acknowledgement to the Author Robert Thomson, 19 Mary St. Hamilton, Strathclyde, Scotland. ML3 6PX and to

QUANTA

=====

The QL Virus
by
Robert Thomson.

OH Doctor, dear Doctor, What's wrong wi' my man?
He's red-eyed and haggard - looks weary and wan.
It's sometimes quite scary to lie by his side -
He'll shoot up in bed with his eyes staring wide,
And utter pure bilge at the pitch o' his lungs!
Is he talking in riddles or speaking in tongues?

He talks of Minervas and Qimis and mice,
And some of his language is no' very nice;
He swears at the polis - at least at PCs -
But also Ataris, Amigas, and please
God keep him from gambling and starting to bet -
Wi' Gold Cards and Trump Cards, he's maybe in debt!

The flow of his ravings would fill you with awe;
There's Qdos and Qload and long live Qlaw!
And what the QL does he mean when he says
He'll defend the QL to the end of his days?
Oh Doctor, dear Doctor, my man is Qsick
Do you have a Qpill that'll work the Qtrick?

"He's perfectly Qnormal, there's nothing to Qfear;
You're over-excited - just Qdrink this m'dear.
It'll FLUSH all your BUFFERS, and make you like NEW
And if that's not successful, here's TK2 too;
When you Qsee me next Wednesday, I'm sure you'll Qfeel well.
There! - I've Qmade your appointment - on my trusty QL!!!!"

=====

Q L I P S

By Hugh H Howie

I have just been reading what Howard Clase had to say in the November issue of Sink-Link about the lack of feed-back on his tutorial which has been running in this Newsletter this past few months. In that same issue Howard also mentioned Alan Pywell. In case you don't know, Alan is the Software Controller for the Quanta Library, and he is a very humorous writer, and yes, it is true, he is complaining, no, complaining is not the right word, he is bemoaning the fact that there is a dearth of material coming in, he is also bemoaning the fact that there is no word of recognition or appreciation for the effort he is expending. He is asking "Would you please write and tell me how you like what I write, and also what do you want?" Some of the words used here are not necessarily what Alan uses but the intent is the same. He also said in an article in the August issue of Quanta, and I am going to quote his last sentence **"I am Sorry this episode is a bit short and not very informative - I just feel that I'm wasting my time....."**

What Alan is saying is that he would appreciate hearing from someone as to how his articles of instruction come across, and if his contributions are of value. This is exactly what Mr Clase is saying. **"Is MY stuff of value to anyone out there, or am I wasting my time....?"**

Another writer of note is Tim Stoddart who started a series of excellent articles in UPDATE Magazine, in which he dealt in depth with Trump Card, and all the wonderful things which it contained, as you know Trump Card contains TK2. This series was started in January 1990, and continued in July 1990. I have not seen anything of his since last year. Did he also get tired of writing for no one? A great pity, as he had a lot of information on the abilities of Trump Card. To know all the intricacies of this Trump Card would be wonderful. **Did Tim get tired ?**

Now it looks as if we might be losing Bill Jones who started UPDATE. He is selling off all his Sinclair stuff; if not all, then he is selling a complete 2068 system and also a complete QL system. We would hate to lose such an informed and humorous writer.

There have been many others lost because they did not know if their works were of consequence. Too often we hear the plea **"Does anyone out there read this?"** Please drop our tutors a line, It is too late for Christmas, but at least make it in time for Easter. If you are not sure of something in their article, write and ask them about it. This way they might get ideas they can follow up.

Yes Howard, your tutorial IS being read, and it IS

being typed in, I have done it myself, and I know of others who have done it.

A comment which I have heard about various tutorials is that the program being used in the tutorial did not do anything that another program did not do as well.

A program used in a tutorial does not necessarily have to do something new, it is sufficient that it teaches. If you learn, you do not have to use. It is nice if both criteria can be met, but the teaching criteria in this case is more important than the program of itself.

One complaint I sometimes have with a tutorial is that the instructor sometimes gives the student more credit for intelligence and knowledge than the student really has.

I often try to follow a lesson, and I find that in many cases I do not know why a certain symbol or character is used, and this is essential to the understanding of a program. I recently came across a symbol that gave me considerable pause for thought. This was the '%' as used in many programs. I mentioned this to Howard when I was writing to him, and at the moment he has not had time to get back to me; but I have since discovered, once again from reading, that this means INTEGER. Thus we learn.

Therefore I would request that tutors give us NO credit for intelligence. When you start a tutorial, treat us as beginners, give a quick summary of such symbols/characters, to be encountered, and if a new one crops up as the tutorial progresses, then a short note to this effect would be in order. Such as in this case:- (% is an INTEGER value) Or do I ask something too much? Or do I do the student a disservice?

As far as tutorials are concerned I do not think I will ever become a programmer. I say this because there is no need for me to become a programmer. I am not going to make a living out of it, much as I might have been tempted to in earlier years with my present state of knowledge of the computer. I am happy to read and glean as much information as I can from that which is presented to me.

I would be happy to know enough that I can make minor changes to a program if I wish to. There are more than enough programs in existence to cater to my needs, but where the tutorial comes into play is when I come across a program which does not work in my system, or I wish to alter or adjust for one

cont.

Q L I P S

(continued)

reason or another. Then I would like to have enough knowledge to go into that program and at least try to do something with it. This is why I like the tutorials. I can learn a new approach to a problem.

What little I know of computing came from reading, from what others wrote. Perhaps it was only a letter, perhaps a tutorial, perhaps just a request that someone else made that triggered me off to look it up for myself. But whatever I know, someone else wrote about it first, then I read it and applied the knowledge. This is where the real value of a tutorial comes in, it teaches to you how to dig for that elusive piece of information. A teachers job is not always to teach you something, but rather to teach you how to learn.

The Howard Clase DIR tutorial has shown me how to start with something small and develop it into a full blown program. I did not realise what was meant by a structured program, but now I begin to see how it grows, and how you have to come back and forth to re-structure as you proceed. I thought you did all this at the one time! Now I find you have to go back and forth! So although I doubt I will ever program on my own, at least I have a better understanding of what is involved, and as to why when one thing is changed it has an effect on something else a mile away.

Trouble is as I suggested before, an expert often gives us more credit than we deserve. But this does not absolve us from the responsibility of saying 'That was a nice concept you presented.' In a class you can ask a question which in itself shows a degree of interest, but on paper you have to take time to write.

So I am going to do that here and now, I am going to say a great big THANKYOU to (in no specific order of/or precedence) Howard Clase, Bill Jones, Bill Cable, Tim Stoddart, Tim Swenson, and all you other contributors to our collection of Magazines and Newsletters, and if I have missed anyone (as I am know I have) it is because there is not enough room to mention all your names, but you can be sure, if you write an article in any paper I get, that article is going to be read, and from each and every one I learn something.

So what am I going to do now? Why, I am going to sit down and write a note to some of those who have written articles I have learned from. (When I get around to it)

THANKS TO YOU ALL

120191

ARCHIVE ORDER PROBLEM:-

I have been making a very simple index of the contents of QUANTA, in the course of which I have three cards for some items, and I am having a problem getting them in order.

Example, I have three cards for PRINTERS, numbered or named printer 1/3 printer 2/3 etc, they were placed in the file in order, but when I Ordered the complete file I came up with printer 3/3 printer 1/3 etc. The spacing between printer and the number is the same in each case.

Where have I gone wrong, and how do I correct it?

Hugh H Howie, 586 Oneida Dr. Burlington.
Ont L7T 3V3

!!!!

QL BACKSLASH '\ ' Tell me more.....

For some time now I have been playing with the BACKSLASH. '\ '

It is a wonderful thing to reduce keystrokes in certain commands such as DIR \SER will send a directory of flp1_ to the printer.

DIR \RAM1 created on flp1_ a file RAM1
DIR \RAM created on flp1_ a file RAM

Both files created were a Directory of FLP1_ Does anyone have ANY ideas as to why the change of designated device does not work, and what else can we use this '\ ' for? does the \ only apply to ser?
Hugh H. Howie, 586 Oneida Dr, Burlington,
Ont. L7T 3V3

!!!!

MONITOR CUT - OFF AT SIDES-----

I had to get another Amber Monitor the other day, just an old cheap one as a replacement for my second system monitor which bust up.

It works fine, except there is a bit of cut-off at the sides which makes it tricky to see the cursor at times.

So when I switch on I press F2 for TV mode, then type in MODE 4

Problem solved.

Hugh Howie

INCREASE YOUR PRINT FACTORY AND OTHER SOFTWARE PACKAGE PRODUCTIVITY WITH A MOUSE FOR YOUR KEMPSTON PORT



For the last three or four years I have heard several rumors regarding people using a Commodore 64/128 compatible mouse with the TS2068. But due to its price (between \$35 and \$40), I was not ready to experiment until I had confirming information to its compatibility. The November-December issue of Sinc-Link with George Chambers letter to "Out of Towners" contained just the information I needed to make that purchase.

The mouse I have purchased is the "Winner M3" mouse which is compatible with the Commodore 1350 and 1351 mice. The mouse plugs into any Kempston compatible joystick port. Since I have a Larken disk interface, I plugged my mouse into the Larken interface's Kempston port. To initialize the mouse you must press and hold down the right mouse button when you power on the computer. This move can be a little tricky if you wish to activate a Larken AUTOBOOT program from disk (remember you must hold down the ENTER key to activate an AUTOBOOT when powering up).

My first application on which to try my mouse was the Print Factory's First Edition. As soon as the program came up, the mouse operated flawlessly as if were made for the TS2068/Spectrum!

And what are the advantages to using a Commodore compatible mouse? Let's see...

- o ONE HAND OPERATION
- o SMOOTH CONTROLLED MOVEMENT
- o QUICK AND EASY "FIRE BUTTON" ACTIVATION
- o NO NEED FOR SOFTWARE OR PATCHES TO EXISTING PROGRAMS (JUST AND PLUG AND GO!)

On the negative side...

- o ONLY WORKS WITH KEMPSTON COMPATIBLE JOYSTICK INTERFACES, BUT NOT THE TS2068 JOYSTICK PORTS (so far).
- o MOUSE CORD IS MUCH TOO SHORT (ABOUT 24"/70CM LONG) AND LIMITS MOBILITY WITHOUT A JOYSTICK EXTENSION CORD (AVAILABLE FROM RADIO SHACK FOR AROUND \$10, #26-117).

-- Mike Felerski

ZX81-Program Review

Tape Doctor by Sebastien Boisvert

Reviewed by Ron Campbell

Tape Doctor is a tape utility program for the ZX81, TS1000 and TS1500 type computers. It is really a set of utilities that Sebastien has gathered together from various sources. He has put them together into one program that is panel driven and very easy to use. I did find his documentation a little lacking but once you figure out what he is trying to do, it is easy to use. The program contains a relocating routine. This enables you to relocate the routines either in the 8k to 16k area if it is available or to anywhere within available storage. I had to adjust my ramtop and then I could relocate to location 28672. One thing missing from the instructions is the exact amount of storage the routines require.

When you first load the program in, you enter RUN 1630. You will then be prompted to give the address of where you want the routines to be loaded. A screen is then presented and you will have to make some changes to the program in order for the routines to be loaded at specific address's. Once you have done this initially, you do not have to do it every time you reload the program. The next time that you load the program the main menu will appear. Simply select the number of the function and follow the instructions.

There are 8 functions available.

1) Program Name Reader - this routine will read the name of a program on tape and if the printer option is ON, it will also print the name on the printer. Very useful if you have a tape and you don't know whats on it.

2) Program Name and Time Reader - Basically the same as option 1 but it also displays the load time of the program. One thing I found by accident and is not documented, after the name and time is displayed, just hit enter and it will continue to the next program.

<u>PROGRAM NAME</u>	<u>TIME</u>
WIZZARD	1:00
KINGDOM	3:04
MAZE	1:05
TAPE DOCTOR	4:11
USII	3:18

ROUTINES NOW RELOCATED AT 28672

CHANGE "8192" IN LINE 960 TO
28672

CHANGE LINE 900 TO READ:
900 LET L=USR 28804

CHANGE LINE 920 TO READ:
920 RAND USR 28876

CHANGE LINE 1530 TO READ:
1530 RAND USR 29333

CHANGE LINE 990 TO READ:
990 RAND USR 29726

PROGRAM NAME READER NOW AT 28804
VERIFY ROUTINE NOW AT 28672
LOAD ROUTINE NOW AT 28876
BACK-UP ROUTINE NOW AT 29333
BREAK ROUTINE NOW AT 29726



MENU

1. PROGRAM NAME READ
2. PROGRAM NAME AND TIME READ
3. LOAD PROGRAM FROM BAD TAPE
4. VERIFY PROGRAM
5. MAKE A BACK-UP
6. BREAK PROGRAM
7. MAKE TAPE LABELS
8. TOGGLE PRINTER (OFF)

VERIFY

3) Load a Program from a Bad Tape - I did not try this option but it is supposed to LOAD a tape that has a bad spot on it. After your program is loaded, the last complete line is found and the computer will create an empty display file and an empty variables area.

4) Verify Program - This routine will let you verify a program saved on tape. After you SAVE the program to tape, rewind the tape and then run this routine. It will compare byte for byte, the program on tape against the program in storage and tell you if there is a mismatch.

5) Make a Back-up - This will make a tape copy of any program that cannot be interrupted. The routine will load a tape program into storage and then the screen will go 'grey'. Put a new tape in your recorder and press 'S' and the program in storage will be copied to the new tape. This works quite well and I have used this function a lot.

6) Break Any Program - This routine will break ANY program. After the program is loaded, a report code "D/number" will appear. You can now list the program.

7) Make Tape Labels - I have found this to be a very good routine. It allows you to make a label that fits into a tape box and display what is on the tape. I modified Sebastiens program to allow the printing of more than one tape label, this being the only default I found with this routine.

8) Toggle Printer - used to turn the printer OFF and ON in functions 1 and 2.

1. LOAD OR WRITE PROGRAM
2. SAVE TO TAPE
3. ENTER 'R' AND USE 28672
4. PLAY BACK PROGRAM

IF UNSUCCESSFUL VERIFY OCCURS,
REPORT CODE "R/0" WILL APPEAR.

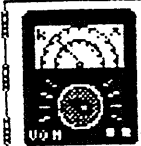
MAKE A BACK-UP

1. PUT SOURCE TAPE IN PLAYER,
PRESS PLAY AND PRESS ENTER
2. WHEN LOAD PATTERNS DISAPPEAR
AND SCREEN TURNS GREY, PUT
COPY TAPE IN PLAYER, PRESS
RECORD AND PRESS "S" ON
COMPUTER
3. WHEN BACK-UP IS SAVED,
COMPUTER WILL STOP WITH
REPORT CODE "C/(NUMBER)"

GAMES FOR ZX81			
SIDE A		SIDE B	
ZAP	>001	WHAM	>001
MAZE	>030	SLOP	>125
KING	>060		

ZAP

MAZE



HARDWARE REVIEWS

from VISTA newsletter

VideoFace by Romantic Robot Ltd.

Romantic Robot UK Ltd.
54 Deanscroft Avenue
London NW9 8EN England
(081)200-8870
(081)200-4075 FAX
PRICE: £29.95 (about \$57)

The VideoFace module for the Spectrum (and 2068) computer is a composite video interface that plugs onto the edge connector at the back of your computer. With this interface and the included software you can capture any composite video signal, digitize it, and SAVE it as a SCREEN\$ on disc or tape. Composite video signals are most commonly found on VCRs and camcorders, at an RCA jack marked "video out". So, any image on television or video tape is available for display on your computer, including movie scenes, cartoon characters, or family members-- the sky's the limit (see examples in column 2)

The module itself is very simple-- a black RAMPack style case, with 2 LEDs on the front, an RCA jack on the side, and a contrast adjustment knob on top. After attaching the interface and connecting the RCA jack to a waiting VCR with a male/male patch cord (available at Radio Shack) you can LOAD the software from the supplied tape. This only takes a few minutes, and the program BASIC can be re-written to accomodate disc system commands. The software will auto-start, displaying a menu with 13 options. You will also notice the green LED is lit if all is connected properly, meaning the device is receiving a video signal. By pressing "P" or "Q" the scanning procedure begins-- the red LED lights and whatever is on the VCR/TU screen is being fed to your computer's monitor. You can now adjust the contrast with the knob on the top for the best picture quality and SAVE a picture by pressing "S". The software actually will save 6 frames and you can page through these to SAVE the one you like. You can also use the arrow keys to adjust the picture scan, as the VideoFace scans a smaller area than a whole TV screen; this means you can adjust and center your image if

you wish. After you have finished the scanning process, you have a number of options other than saving the images-- you can go back to scanning, you can step through the six captured frames, COPY to a TS-2040 printer (or an 80-column printer if you can supply the COPY program), or EXIT to the main menu. Another option is animation-- the six captured images can be run by fast or slow in "flip-card" fashion, producing a form of motion. This is really a very powerful tool, and if you modify the software for disc operation, it becomes a very fast method of building a library of SCREEN\$ saves.

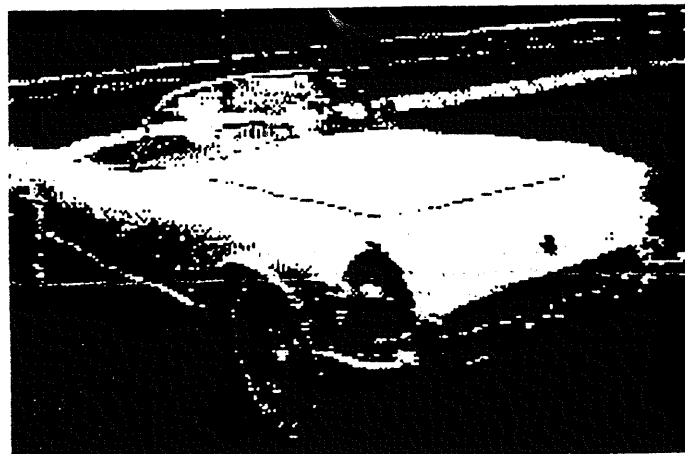
Now the question arises; how to get one of these? Simply call them up and order it! They accept VISA card in England, and VISA will handle the currency exchange at the proper rate for you. I paid \$66.87 including air mail from England, and it came in about 2 weeks, which is fine service from anywhere in the U.S., let alone overseas! Also remember that London is 8 hours ahead of Pacific Standard Time, so calling in the early morning is a must. Mountain, Central and Eastern time zones can adjust accordingly (7, 6, or 5 hours ahead). If you need help placing an international call, get help from your long-distance carrier (ATT, Sprint, etc.). They will be glad to help, as it's money in their pocket! Figure on spending about \$4 for the call, by the way. You will need to add "44" to the phone number also, as that is England's country code. My whole phone number was 011-(overseas operator) 44-(England) 81-(London suburbs) 200-8870 (their number). If you are interested, Romantic Robot has many other products available, such as an 8K printer interface, 280 disassemblers, and toolkits. Actually, the phone+VISA method is a great way to get new and different items for your 2068 with Spectrum ROM. You can find phone numbers in recent British computer magazines and order as much as the budget will allow! I have done this quite a few times and have found that the service is fast and very cordial, and they always want to know how I found out about their product. Many are quite amazed that there are Sinclair fans still active in "The States"! If you need something different for the computer, give England a try!

- SAMPLE SCREEN\$!

VIDEOFACE SCREEN SAMPLES



Digitize the kids--
camcorder necessary



From a classic car show...
to anything else you like!
VideoFace from Romantic Robot

Attention SMUG DIGITIZER Users

Robert Shade of Philadelphia has modified the SMUG-supplied *EYE-BY-NIGHT* digitizer program and John McMichael's *VIDEOTEX*, *VIDEO 3D*, and *VIDEOCOPY* digitizer programs for use with the LARKEN disk system. He has also gone to considerable effort to make these programs more eye-pleasing with imaginative colour combinations. For a small fee he will modify your copy of the SMUG software or the McMichael program(s). You must be a legitimate owner of the McMichael software and Robert has the list, so no cheating!

Watch for reviews of Robert's modified programs in the next issue of Sinc-Link.

For more information contact: Mr. Robert Shade
3210 North Broad Street
Philadelphia, PA 19140
(215)-228-0224

Mr. John McMichael
1710 Palmer Drive
Laramie, WY 82070

} see page 36

FLASH FLASH FLASH FLASH FLASH

Text 87 + 4

QLers awaiting the latest version of Text 87 should note that their orders may have been delayed due to the fact that a few bugs were discovered just prior to release. According to a UK dealer - Software 87 - these problems have been corrected and the orders are now being processed. Hugh Howie placed his order 19 December 1991 and just received his package 3 March 1992



"Look at me when
I'm programming you!"
HOEST IN ROYS LIFE

TRANSLATION OF QL PROGRAMS

Some time ago, I tried to translate some programs that were written in Europe, in German, I suspected. I even bought a COLLINS dictionary, but to no avail. I just could not get anywhere. One day at a club meeting P. Hudsmith volunteered ^o was volunteered \$ to help with the translation. This is the second installment of his efforts and it works !!! I have been using " SHELL " for some time and I am quite happy with it.

As part of SHELL there was a help page, and I could not even try to translate it. However here it is. Philip came through and even supplied the instructions for " NEWCLICK ". I have not loaded NEWCLICK as yet , but will try it out before too long.

Once again a big THANK YOU to P. HUDSMITH for his translation.

I have entered the HELP PAGE as well as the NEWCLICK instructions on a disk, and our librarian will be in possession very shortly. He might even be able to incorporate the HELP PAGE in the SHELL .

Louis Laferriere

HELP SCREEN

" Part of QL-SHELL "

D	-	shows the contents of a file.
T	-	displays an ASCII file on the monitor screen.
U	-	displays an optional file in Hex on the monitor screen.
E	-	deletes a file.
F	-	starts the program when the file name contains no KEYWORD.
C	-	copies a file.
B	-	sets the BAUDRATE for a Printer Port on.
P	-	switches output to the printer (SER1) ON and OFF by the commands D. T. and U.
I	-	shows the date and time.
X	-	starts a job concurrently.
W	-	starts a particular job.
S	-	starts a command file.
K	-	deletes QL-SHELL from the Buffer.
ENTER	-	deletes the screen.

NEWCLICK PROGRAM

OPERATING INSTRUCTIONS

1. Start.
2. Program.
 - 2.1 Newclick_Cde
 - 2.2 Boot_Newclick
 - 2.3 Config_Newclick_bas
 - 2.4 Newclick_Doc
3. Commands.
 - 3.1 CTRL+SHIFT+F1
 - 3.2 CTRL+SHIFT+F2
 - 3.3 CTRL+SHIFT+F3
 - 3.4 CTRL+SHIFT+F4
4. End.

The NEWCLICK_CDE program is an expansion of the Cost-Free (Public Domain) Click Routine by L.Hirschbiegel and P. Szymanski. The Screen shut off now functions. The activate and deactivate commands can be followed on the screen.

2. Program.

2.1 Newclick_Cde places the true (actual) High Program there and can be installed with Boot_Newclick.

The Commands are :

Click On
German Belegung On
Monitor Screen On

Time till the screen is activated 5 mins.

2.2 Boot_Newclick

By means of Boot_Newclick, Newclick_cde will be installed.

2.3 Konfig_Newclick_bas

The installation of Newclick_Cde can be ended with this program.

2.4 Newclick_doc

This file.

3. Newclick_cde commands

3.1 CTRL + SHIFT + F1

The Key click can be switched ON and OFF.

3.2 CTRL + SHIFT + F2

The German Show sentence can be switched ON and OFF.

3.3 CTRL + SHIFT + F3

Switches the screen shut off ON and OFF after a specified time. This part of the program is being smoothed out by the author.

3.4 CTRL + SHIFT + F4

The report that gives you advice on commands activating can be switched ON and OFF.

4 End.

Lots of fun and success with Newclick.

A CASE OF NOT ALWAYS FOLLOWING INSTRUCTIONS

Whenever we leave the apartment for any length of time I always disconnect the power leads to my computers. Last week on our return from a few weeks vacation I proceeded to reconnect the power leads and test the various Sinclair computers. My 2068 with RAMDISK and LARKEN disk drive interface would not select any of the options from the keyboard. I then replaced the 2068 with my back-up unit, but as the keyboard is not as sensitive to my touch, I was going to send the unit to Dan Elliot for repairs. I started to list the keys that were not working such as 2,9,w,o,s,l,z etc and then I read the warning on the back of the 2068 which says " NO USER SERVICEABLE PARTS INSIDE " and decided to open the unit. I saw a very short ribbon cable connecting the keyboard with the base of the machine and pulled it out from the slip connector and without doing anything else pushed it back in. Lo and behold when I retested the 2068 the keys were all working OK. So I was back with my original 2068 with the soft touch and my back-up unit still intact and " NO REPAIR CHARGES " Sorry about that Dan.

PRINTER - QL or IBM

EPSON FX 850 or PROPRINTER III

A little while ago I dropped in at STEALS on DUNDAS ST. to see if there were any good buys. Lo and behold I spied a CITIZEN 200 GX Dot Matrix Printer for a really good price. So I took it home to try it out and use it with my QL. It is so flexible that it can be used with my printer driver for the STAR Micronics NX-1000 without any changes. I also believe that it can be used as an IBM Proprinter with just a few operations of the default switches.

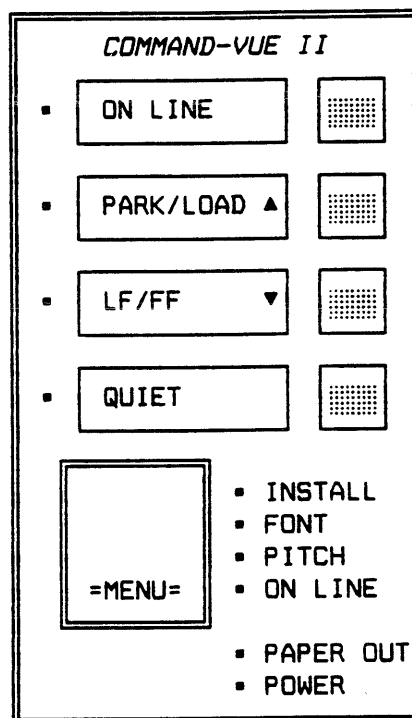
So far I am quite happy with the performance of the CITIZEN printer and the price was right. There is even an option at extra cost for colour printing. You have the choice printing in any one of 7 colours or if your software supports colour printing a full colour print.

Attached is a sample of one of the demonstration tests
So far it looks very good.

Louis Laferriere

CITIZEN 200GX

- * Exceptionally Fast Output: 213 CPS Super High Speed Draft
40 CPS Near Letter Quality
- * Excellent Paper Handling: Paper Parking, Convertible
Push/Pull Tractor, Bottom Feed
- * Dazzling Print Quality: 2 Draft Fonts, NLQ Sans Serif,
Roman and Courier
- * The Right Options: Color On CommandTM 7 Color Printing,
RS-232C, Cut Sheet Feeders
- * Guaranteed Reliability: Full 24 Month Warranty
Parts and Labor
- * Intelligent Front Panel: Command-Vue IITM
PLAIN ENGLISH Menus



Position the paper. Change the Pitch. Select a Font. And much more! Simply slide the selector lever and make your choice in PLAIN ENGLISH. Only CITIZEN could bring you such versatility with this little effort.

CITIZEN Printers That Run Like Clockwork

MODIFICATIONS TO SHREB-BP

A ZX81 Hi-Res Graphics Utility

SHREB-BP consists of the Static ram Hi-Res Extended Basic (SHREB) developed by G. Harder and F. Nachbaur with an additional utility to print the hi-res screen out on a big printer. The printer must be Epson compatible and should be of fairly recent manufacture to take advantage of all the features of the software. Menu options include 5 sizes of horizontal print, 8 sizes of vertical prints, line feed, indenting, and reverse paper feed. Pressing break during the printout will return you to the menu. As supplied on the club tape, the package is set up for the Oliger Printer Port (memory mapped at FFFF).

Mel Richardson, one of our out-of-town members, asked if we could modify the code to drive a Byte-Back printer I/F. The following are some notes and observations:

The printer driver code is located at address 22050. To change the codes to suit your printer I/F input the following:

```

100  FOR X=22050 TO 22064
110  INPUT A
120  POKE X,A
130  PRINT X;" "; PEEK X
140  NEXT X
150  STOP

```

GOTO 100 and enter the following codes;

BYTE-BACK

```

22050 245, 219, 31, 203,
22054 127, 40, 250, 241,
22058 211, 31, 201, 0,
22062 0, 0, 0.

```

AERCO

```

22050 245, 219, 127, 203,
22054 103, 32, 250, 241,
22058 211, 127, 0, 0,
22062 219, 127, 201.

```

I have a Panasonic KX-P1091 9-pin printer that is about 6 years old. It does not have reverse paper feed and only has 1K of buffer. The printer will do the smaller printouts, but hangs up for the larger

ones. The software does not crash - turning off the printer allowed me to break out to Basic. I have not determined what causes the printer to lock up.

For printing out SHREB graphics, this utility is excellent, my one reservation is that it prints one row of pixels at a time. This, I feel, could cause extra wear on the pin that does the printing if you use it a lot.

The software will not work with a FASTEXT 80 because it does not support the full set of Epson escape codes. For this printer and others, including Epson compatibles, we presented a utility in the Sept/Oct 1989 issue of Sinc-Link.

Rene Bruneau, Feb 1992

SHREB -BP (Oliger I/F) Disassembly

(Escape codes)

5609: 1B 40	DB	27,64
560B: 1B 33 0B	DB	27,51,8
560E: 1B 6C 00	DB	27,108,0
5609: 1B 24 00 00	DB	27,36,0,0
560B: 1B 4C 00 03	DB	27,76,0,3
5619: 1B 32 07 07	DB	27,50,7,7,7,7
561D: 07 07		
561F: 1B 6A	DB	27,106
5621: FF	DB	255

(Printer Driver)

	SEND:		
5622: F5		PUSH	AF
	STAT:		
5623: 3A FF FF		LD	A, (FFFF)
5626: FE 1B		CP	1B
5628: 20 F9		JR	NZ, STAT
562A: F1	PRNT:	POP	AF
562B: 32 FF FF		LD	(FFFF), A
562E: C9		RET	
562F: 00		NOP	
5630: 00		NOP	

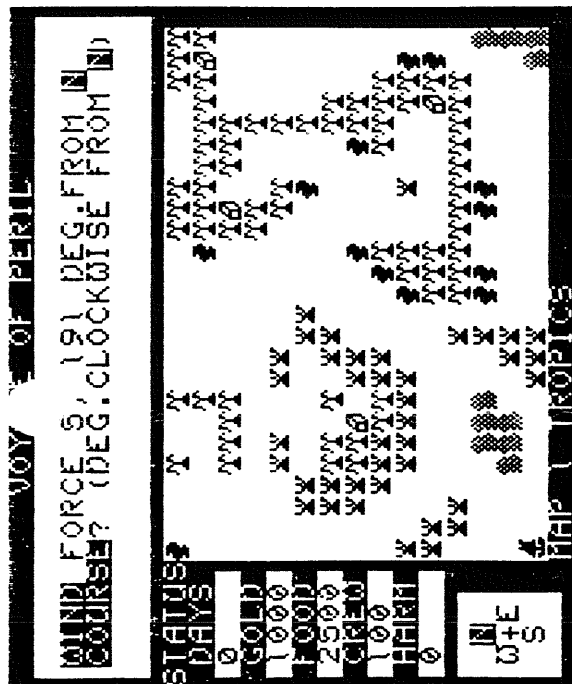
VOYAGE OF PERIL BY N. BROOKS
HI-RES CONVERSION BY G. HARDER

YOU ARE THE CAPTAIN OF THE
AT ANCHOR IN THE
SOUTHWEST CORNER OF MAP 1. YOUR
OBJECTIVE IS TO SAIL WITH AS
MUCH GOLD AS POSSIBLE BACK TO
YOUR HOME PORT, WHERE THE QUEEN
IS WAITING FOR AN ACCOUNTING.

YOU MUST SET A SUITABLE COURSE
AND SAIL AREA AGAINST THE WIND,
WHILE NAVIGATING AROUND HAZARDS.

BE PREPARED FOR ATTACKS BY PIR-
ATES AND SAVAGES. EACH CREWMAN
EATS 1 FOOD RATION PER DAY, BUT
YOU MAY BUY FOOD, REPAIR DAMAGES
AND TAKE ON CREW WHEN YOU LAND,
IF GOLD PERMITS.

YOU WILL FIND MORE GOLD AT THE
TREASURE POINTS MARKED BY A @.



THIS PROGRAM WILL PRODUCE VAR-
IOUS SIZED GRAPHIC SCREEN DUMPS
TO EPSON COMPATIBLE PRINTERS.

IT IS CURRENTLY SET-UP FOR THE
AERCO CENTRONIC INTERFACE.

DO YOU WANT....

1. HORIZONTAL PRINTOUT
2. VERTICAL PRINTOUT
3. STOP

HORIZONTAL PRINTOUT

WHAT SIZE?

1. 1.6" X 2.1" MERGE=128*
2. 2.1" X 2.6" MERGE=128*
3. 2.7" X 4.3"
4. 3.6" X 4.3"
5. 5.3" X 6.4"

VERTICAL PRINTOUT

WHAT SIZE?

1. 1.6" X 1.2" MERGE=96*
2. 1.6" X 2.4" MERGE=96*
3. 3.2" X 3.6" MERGE=192
4. 3.2" X 4.7" MERGE=192
5. 4.8" X 5.9"
6. 4.8" X 7.1"
7. 6.4" X 8.3"
8. 6.4" X 9.5"

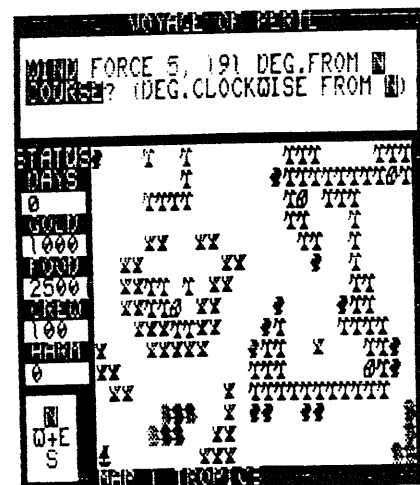


YOU ARE THE CAPTAIN OF THE
AT ANCHOR IN THE
SOUTHWEST CORNER OF MAP 1. YOUR
OBJECTIVE IS TO SAIL WITH AS
MUCH GOLD AS POSSIBLE BACK TO
YOUR HOME PORT, WHERE THE QUEEN
IS WAITING FOR AN ACCOUNTING.

YOU MUST SET A SUITABLE COURSE
AND SAIL AREA AGAINST THE WIND,
WHILE NAVIGATING AROUND HAZARDS.

BE PREPARED FOR ATTACKS BY PIR-
ATES AND SAVAGES. EACH CREWMAN
EATS 1 FOOD RATION PER DAY, BUT
YOU MAY BUY FOOD, REPAIR DAMAGES
AND TAKE ON CREW WHEN YOU LAND,
IF GOLD PERMITS.

YOU WILL FIND MORE GOLD AT THE
TREASURE POINTS MARKED BY A @.



VOYAGE OF PERIL BY
HI-RES CONVERSION BY
THE CAPTAIN OF
ANCHOR

THINGS TO DO WITH TK2

by Hugh H. Howie

A SHORT LECTURE WITH SOME EXPERIMENTS FOR YOU TO TRY

The first thing I want to make clear is that this little bit of a lecture is not for the guru, but rather for the many who have never really tried a lot of the TK2 tricks available. I do not know them all myself. So lets get on with the job and try a few.

W A R N I N G-----

The following experiments may entail the changing of various components, such as Cumana and TK2 and Trump Card, but is not essential, just so that you understand what is going on. So I must re-issue the warning that every time a component change is made, the QL system should be shut down entirely, and restarted from scratch.

Don't worry if you do not have all the add-ons I mention, just experiment with what you do have and I am sure you will find something of interest somewhere. Good Luck.

IN ALL EXPERIMENTS USE COPY PROGRAMS AND NOT THE ORIGINALS.

To conserve space/time I am not going to use <ENTER> after each command, I am going to presume you know to do this automatically.

We will start with some directory control functions which show where things can be found, and how to find what they are and how to change them.

BARE BONES 128 QL

With the 'bare bones' QL we will find on power-up that mdv1 will spin a few seconds. After all, we only have microdrives to work with.

We will install TK2 in the ROM port at the back, and we know that there are lot of extra commands now available that were not there before, so lets type in EXTRAS, and see what we get; about 120 commands on screen. One of those will be DLIST so we will type in DLIST, and we will see on screen the directory defaults, and they are indeed

MDV2_ MDV1_ SER

The meanings of those defaults are:-

MDV2_ (default directory for data files)
MDV1_ (default directory for executable programs)
SER (default destination)

INSTALL CUMANA

We decide to install DISK drives, so we need an interface, and the first one I came across was Cumana. This fits into the expansion port at the left of the QL, and we do that now, still leaving TK2 in the ROM port, and switch on again (I TOLD YOU TO SWITCH OFF FOR CHANGES!

(TK2 page 1)

DATAD\$
PROGD\$
DESTD\$

If at this point we were to type PRINT DATAD\$ we would be told MDV1_
If we tried PROGD\$ or DESTD\$ we would be told mdv2 or ser. This means
three commands to fine out the three defaults, luckily there is a
command which is easier to use, and tells all at once. No we do NOT have
to type PRINT, just DLIST on its own.

DLIST Type DLIST and we find that we are still defaulting to:-
MDV2 MDV1 SER.....

FLP_EXT Type in the Cumana command FLP_EXT. This activates the 30 or so extra
commands in Cumana, if we then type in DLIST, we now find defaults
of:- FLP1_ FLP1_ SER. So it is not TK2 which has changed the
defaults but Cumana, after all it IS a disk interface!

Have you noticed something there? Cumana on installation defaults to
MDV, but after it has been activated by FLP_EXT the defaults are
changed to FLP. Thus is answered the question someone asked me.

As a matter of interest, if we were to remove TK2 and leave Cumana by
itself we would find that Cumana had about 34 extra commands, and that
in conjunction with TK2 the total command available would be in the
order of 124. So Cumana only adds a couple of commands to TK2.
Conversely, Cumana is basically composed of TK2 commands.

REMOVE CUMANA & INSTALL TRUMP CARD

On power-up we will find that FLP1_ starts to spin, because that is where
Trump Card naturally defaults, but if we ask for DLIST we will find the
command ignored, because with Trump Card the TK2 extra commands are
not available until activated. So type in TK2_EXT, (different from the
Cumana FLP_EXT) but has a similar result as it will bring in all the extra
commands in Trump Card and TK2, but now there are in the region of
140 extras Commands available. Try DLIST now and we are again given:-

FLP1_ FLP1_ SER

The important thing about all this is that TK2 defaults to FLP1_ at all
times unless otherwise designated. Say we want the directory of flp1, we
would normally type DIR FLP1_<ENTER> but now all we require is:-
DIR <ENTER> There are many other TK2 shortcuts available.

CHANGE DEFAULTS

To change defaults we could use the commands:-

DATA_USE device	(where device is new default device required)
PROG_USE device	" " " " " "
DEST_USE device	" " " " " "

Those NEW defaults would remain till a reset, or power was turned off.

DLIST in this case would show the new defaults.

(TK2 page 2)

While we are on this thing about defaults. We know that TK2 defaults to FLP1_ and that the DESTINATION default is ser, so let us assume that your printer is on, check it now, let us see just what happens if we type in WCOPY <ENTER> no more, just that. Answer "Y" to the first question (selection) and your flp1_ will run as also will your printer, and you will have a print out of the LISTING of your selection. Try it. I will have more to say on WCOPY later.

WSTAT
STAT

Those two commands are very similar. The first WSTAT will provide the statistics of all the files on the specified device, including date entered on that device, or copied to that device.

STAT will give you the status of the disk ONLY, in number of sectors. Please remember to specify device if not FLP1_. With STAT you have the status of the device without waiting for a lot of files to flash past, and pounding away at CTRL+F5 when the scroll wants to keep going. (The 'W' means wild card selection)

DIR

Once TK2 has been activated, all commands are directed to FLP1_ so there is no need to type in FLP1_ when a directory is wanted, all that is needed is to DIR <ENTER> and you will get the directory of flp1_. Of course if it is any other device you are addressing then you must designate the device.

When I am writing letters and saving them to disk, I use the two initials of the person I am writing to, so that my letters to George Bernard would all look something like this GB052191 which means George Bernard May 21st 1991. All those letter titles would be jumbled up on the disk, and to sort them out is so easy with TK2: just type DIR FLP2_GB, and a couple of seconds later all files on that disk starting with GB are on screen.

To take this one step further, DIR will isolate documents ending in _DOC if that is your desire, or _DBF, or _T87. You will note I use the full extension of underscore plus letters. This is to call emphasis to the correct manner of use in this case. Say you wanted to isolate the _DOC files the command would be DIR FLP2__DOC. Please note that there are two under-scores in that command. Look close -- and try this out for yourself. The reason for this is that when QDOS adds the label to the title it also adds the underscore, so it is essential to add the underscore to the command.

DIR \SER

Here is another dandy. If you wish to get a print-out of the directory, try this:- DIR \SER This will send the directory of FLP1_ to SER. If you play with this a while you will find many strange things going on, and please don't ask me what as I am just playing with it myself!

EXTRAS \ser Will put to the printer all the EXTRA commands available, yes I know it is in one long list, but at least you can see what you really have available.

WDEL

Is the same as DELETE except you are given the selection A/Y/N/Q meaning All Yes No Quit.

VIEW

This is very handy if you wish to have a quick look at a file without loading it. VIEW title or VIEW device title, will put on screen most files, including machine code files.

(TK2 page 3)

WREN

The time may come when you wish to consolidate a number of disks into one to save space, and still be able to say which file came from where, and in some cases you may wish to re-form the original file. This is a simple operation.

To rename a number of files with a prefix of ABC, the command would be:- WREN FLP2_FLP2_ABC_ Watch that last underscore. Also watch out for that comma between the FLP2_ and FLP2, very important. The file mentioned a while back, GB052191, would now be ABC_GB052191.

If you wished to return to the original titles, the command would be :- WREN FLP2_ABC_FLP2 (watch the comma after the second underscore) and the file ABC_GB052191 would now be back to GB052191. All other files with ABC would be changed accordingly.

WCOPY

The same applies to WCOPY, you can copy from one disk to another very quickly, adding the ABC_ as above at the same time. (Don't forget the underscore!) It is also easy to copy SELECTED FILES to be transferred to another disk. To copy all the files you could answer 'A' at the prompt, to copy selected files you would answer 'Y' or 'N' at the prompts. For speeding up the experiments, you could do this in RAM, and get results and see the results very quickly, saving wear and tear on disk and drives.

ALTKEY

Someone mentioned to me the other day that he never could get the ALTKEY to work for him. The problem was that he was not using the " " quotes when trying to set up the Altkey codes. Say you wanted to put DIR FLP2_ on to Altkey D, The way to do it would be to type in:- ALTKEY "D","DIR FLP2_" Then every time you pressed the ALT + D you would get a directory of flp2_. To cancel this command you would type in ALTKEY and that should cancel it. ALTKEY remains till a power off or reset is performed. It is a easy to program a few of the most common used Altkeys into your BOOT program, thus making them available each time you load your program.

I started out to mention a few things and in the course of reading the manual to make sure I had everything as it should be (I think), in the process I found out a lot about TK2 that I did not know before, so while you folks out there are trying those few ideas for yourselves, I am off to other things. There is a lot more good stuff in the TK2 manual, but it is not the easiest thing to read. However, I would like to think you would take another look at it, just for fun.

Sometimes I think we rely too much on someone else telling us How to..... Goodness knows there are enough How To.... books on the market. We should be finding out more for our own selves. This way we would learn the hard way, which is also the best way to remember not to step in a puddle, (you get your feet wet) your mother told you not to do it, and the first thing you did was go out and try it. What happened? you got your feet wet! And Boy! wasn't that wonderful feeling? Getting your feet wet I mean, not in learning your mother was right. So go ahead, try some of that TK2 stuff...Get your feet wet! Have fun.

If you still need some help with TK2, don't ask me, I am just starting to get my own feet wet. !!!!!!

(TK2 page 4)

323 1/2 N. Church Street
Bowling Green, OH 43402
January 30, 1992

Dear George,

I got the January issue of the newsletter today. Naturally, there are some things in it worth mentioning. First, now that I look at them again, those letters to Bob of mine published in this issue seem a little hard to follow, now that I look at them again. Not too much I can do about that, though.

Of more importance right now is your article on printer drivers. Actually, there is only one thing here. It is a simple matter to set up the original AERCO driver for the Fastext 80. Admittedly, that is not one of the options they included in their set-up program. But I had modified my own AERCO driver to work with the Fastext 80, back before I got my current Panasonic printer and LKDOS.

The problem is simply that the set-up program doesn't know the right control codes for the Fastext 80. In my modified printer driver, I have the following codes:

```
645689 3, 27, 65, 8 (sets line spacing to 8/72 inch)
645876 5, 27, 42, 5, 0, 1 (code for graphics mode)
646182 2, 27, 50 (resets line spacing to 1/6 inch)
```

You may wish to check on the addresses of the above. I had moved my driver up for more free room, and may not have converted back correctly. It never hurts to be sure.

As with my revision of Graphics 24, the first number says how many numbers follow. The rest are straight from the printer manual. Note that I am using the "plotter graphics" mode - 72 dpi graphics. If you prefer the other mode, change the "5" at 64586 to a "0". It may be that the menu item for "Epson (All newer models)" would have the right codes, but I am not certain. I would have to look at the original program (which is not handy) to see if one of the other models used the same codes (I know Gemini does not, though).

I also note that line 1000 in listing 1 would not work on my current printer (or possibly several others). I think we have had that discussion before, though. If you look at the important part of the driver code, you see that they only test two bits of the IN 127 byte. I also note that Larry, in the AERCO driver in LKDOS, tests only 1 bit (bit 4, if memory serves). On some of the other signals between the printer and the computer, the Panasonic and Fastext produce different values, but naturally they agree on those two lines (the other being bit 1). If you remember, the AERCO driver had two different error messages, a "PRINT" and a "PAPER" message. It's probably been a long time since you saw them, if you are like me and stick to the LKDOS driver.

Oh, to test only bit 4, try this line:

```
LET pr=PEEK 127: IF INT(pr/16)<>2*INT(pr/32) THEN ...
```

Bit 4 of course is the 16's bit, and the 32 is to remove higher bits. This method could be used (with different powers of 2) to test any single bit. It is more complicated than simply checking for a value of 108 (or whatever), but will work with any printer that LKDOS would work with.

Speaking of LKDOS, that reminds me. It would be convenient if whatever AUTOSTART you use set the width, margin, linefeed, and interface type automatically. For most of us, who have AERCO interfaces, it isn't too important since that is the default. But for people with some other interface, that would be nicer. I set up my own AUTOSTART that way, and have it so that the disk I write my programs on has a margin of 10 and a width of 32, so the listings look right. That way, I don't have to remember to do the POKES all the time.

On other matters, I'm not sure at this time what I would write concerning disks (in response to Hugh's letter). I know about single and double density (though not really quad density), single or double sided, and 40 or 80 tracks. I know that our disks have 10 sectors per track, while IBM only uses 9, I don't know why. I understand that we can theoretically read CP/M and MSDOS disks, but not Apple or Commodore. I could quote the information on single density and double density format from the data sheet I mentioned. Most of those are either uninteresting or too technical.

Likewise, I could tell you anything about LKDOS (at least the versions for the AERCO disk interface). I know that if you write a sequential file that is more than one track long, even if you name it like a CODE file, you'll only be able to load the first track (or block, as the manual usually calls it). I know enough that I could write my own random file routines, if I wanted. And of course all the little quirks of version A3, like the incompatibility between the printer drivers and the disk routines. Again, mostly not interesting.

I note that though IBM uses smaller tracks, they usually can fit more on a disk than we can. This is because their files don't have to take up full tracks. If you are like me, most of your files are letters of about 2 pages each. That means they usually take up less than a full track. (Do most of your files say 001?). Even if you write a file of 100 characters, it will take the same space as 5000 characters - a single track. An IBM can get 4.5 files in the same space, if they are all under 1000 characters. A single IBM 5.25 inch disk can hold over 300 short files (or 1 long file, of course), while we are limited to 79. It's even worse on 80-track disks, and I am not even considering that IBM can use quad density and we can't. (As I've said before, quad density can hold twice as much as a regular 80-track disk, but still has 80 tracks.)

In theory we might sometimes have more on our disks than IBM, if each file is nearly a multiple of 5000 bytes. Our directory takes only 1 track, leaving 395K for files on a 5.25 inch, 40 track/side DSDD disk (795 on an 80 track or 3.5 inch disk). IBM uses 1 sector for the "boot sector", 4 for the file allocation table, and 7 for the directory (14 sectors total, or just over 1.5 tracks). All this means an IBM disk only has 353K left on it. On an 80 track disk, this is more like 711K; these number decrease if you have more than 112 files or have subdirectories. But since we have to use 5K each time, while IBM can use each 1K, the IBM usually comes out ahead.

Well, that's all for this month, though Bob has my MScript compressor as well. Write you again later. Peace!

Sincerely,
Steven V. Cranberry

FAMILY TREES - IS THE GAME

By Hugh H Howie

That's right! The ones we all came out of. How many of us wonder what our own tree would look like if all the weirdos were back in it? Well we can now take a look at that tree.

There is a program now available that I have been looking at recently that can make this tree grow as easy as ABC or 123 depends on what you want. QL_GENEALOGIST is the name of this little gem.

For some time I have been trying to make Relations work, (watch it bub) but I have had little success, when along comes this Genealogist and off we go. It is easy to operate, and easy to read the result.

The Manual is adequate, more so than the average, as this one includes a tutorial all ready for you to key in, with the result that by the time you read the manual, and key in the tutorial, you are well on your way to getting your house (tree) in order.

In use there are lots of on-screen menus to follow. The first selection from the main menu produces another, and another, and another on occasion. There is a minimum of typing required except for the entry of names and data.

Basically what happens is that when a name is entered the program gives that name a number, and all relationships are controlled by that number. On entering a name you are asked for the first and last name, and date of birth, and also the parents. If all this is not known don't worry, just let the entry stand. Corrections and additions may be made at a later date.

Should you happen to have a name listed and later on the parents of that name appear, then it is a matter of entering the names just discovered, and getting their numbers, then go to the name first entered and correct it with the number of the new names. Correct relationship and position on the chart is now established.

A tree can be printed out starting from anywhere in the chart. Should you wish to start with the paternal side of the

family branch then that is what you get, and if you decide you would like to see the maternal branch that is what you get.

A list of all names can be printed, with dates, or showing actual relationship to others. All sorts of data can be stored such as Births, Deaths, Marriages and other important dates.

Corrections of entries is simple, and efficient. There is an export option for use in Archive. A spelling option is also provided to assist in tracing names as passing time may have changed them.

One thing I feel could be improved on is that in some tree printouts it takes a lot of paper, also this paper could be utilised more efficiently. In the print-out all you get is the date of birth and death, just a plain -- Joseph Blow (1850-1925) -- and no more. No actual dates. Those dates can be available from the NOTES section.

The program requires an extra 256K installed, although there is an MDV version which is cut down quite a bit, and which will work on 128K, but I feel that to get any less program would be a loss.

To sum up, the program is good, and the manner in which you are led from one option to another is excellent. The manual is first class, and the tutorial is such that many software houses could do well to emulate. Too often we get a good program and the manual is so obscure, that a few examples would be in order.

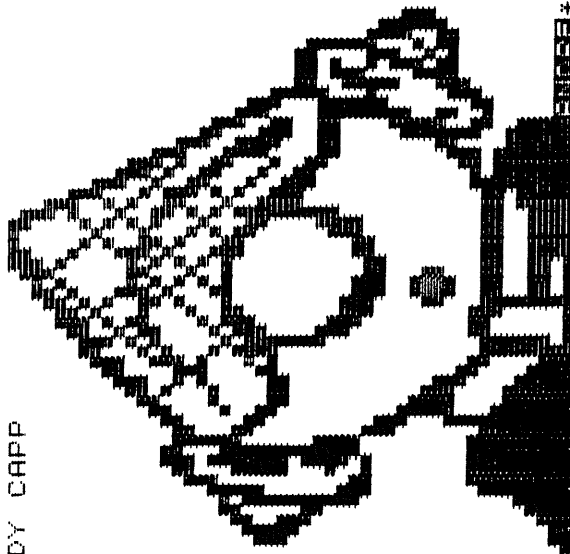
With QL_GENEALOGIST you get the lot. A good program. A good manual. A good tutorial.

Program by Chris Boutal in England, who has done an excellent job. And is available from EMsoft, P.O. Box 8763, Boston, MA 02114-8763. Phone (617) 889 0830
Cost ? \$40.95. A Blue Spruce for the garden can cost more. 1/11/91

(I hear an upgrade is on the way, may cost slightly more. Phone EMSOFT for details. I don't see how they hoped to improve much on this one!) HHH.

GENEALOGIST IS THE NAME

ALL MADE ON ZX81/TIMEX 1000
ANDY CAPP



I will send (FREE) to you the PROGRAM and DATA of the picture(s) seen in this issue if you send me the name of the character depicted. See also bottom of page 2.

[illegible]

10 YEARS LATER

ALL : THE NEW NEWSLETTER FOR THE
SINCLAIR ZX81 / TIMEX 1000.

ALL YOU SEE, AND WILL SEE, HAS
BEEN CREATED WITH, AND ONLY, A
ZX81, A 16K RAMPACK AND A TIMEX
2040 PRINTER.

RESEARCH

What a response to that first newsletter! Admiration for the quality of the work! Interest for the articles! Amusement at the pictures! And above all, stupefaction to see something completely new coming up for the ZX81 and the Timex 1000!

Well if you liked the first one, sit down to look at this issue #2. First the front titles were improved: I am a fan-

33-38861-1000

IF YOU WISH TO RECEIVE
A PRINT-OUT, A CASSETTE,
AN INFORMATION, A REPLY
OR THE NEXT MONTH ISSUE
OF THIS NEWSLETTER SEND
A SELF-ADDRESSED ENVELOPE

TO: ANDRE BAUNE
304 SCOTT,
CHATEAUGUAY, QUEBEC
CANADA J6J 4H5

tic for details. Continuing with... HD
Have you seen my ZX-RATED graphic on page
12? Hold on! Keep reading here, you will
have time later, I was saying... a new
series named X-TRA BASIC beginning on page
5. A new series which will give you
(without any extra hardware or software,
the commands and functions not directly
available from Sinclair BASIC.

A dynamite new series called T N T appears on page 4. Also a lengthier list of OUR SUPPORTERS who are well equipped to please you and your computer. I added 'GAMEWARD' to tickle your brain because I know that Sinclair/TimeX users have more than the other computer users. Right? More of the excellent graphics to lighten this heavy 12 pages of material. You may look at page 12 now.

Figure 1 is a schematic diagram of the experimental setup. It shows a subject sitting at a table, viewing a video screen. A camera is positioned above the screen. The screen displays a target (a small circle) and a starting point (a larger circle). The subject's hand is positioned at the starting point. The distance between the starting point and the target is labeled as 'D'. The distance between the starting point and the video screen is labeled as 'L'. The distance between the video screen and the camera is labeled as 'L'.

In this issue two types of gameword will appear: The CRYPTOGRAPH in which the letters have been replaced by another letter. Each cryptogram is unique, so each cryptogram has its own code.

In the other type you must use the letters from the bottom column and place them at the proper place in the upper column in order to make a significant sentence in the upper grid.

NSJGES FG FKS NGATSUBOJW

NGUJI GR NGWIDTESC GA HGEXOFESU.

[illegible]

DNW ODCRNFZJ SW FBZ ZUWSZUF

CU0850Z FD TZUHQ L5FB.

TNT

An explosive new series which will help beginners and experts to cut corners, to speed up their work and enjoy more their computer. T.N.T. stands for Tips 'N' Tricks. Though it is well loaded it will not blow up your computer. So ahead plug your computer, try these tips and write back to me what you think about them.

TIP # 1:

The bottom of your screen is all clogged up and the computer refuses to ENTER your command or instruction. Your only way out of this mess is to unplug the computer. But you already have typed in part of your program which would be lost if you unplug the computer. Here is the tip:

```
EDIT (SHIFT 1)
```

```
ENTER
```

These two commands in this order one after the other will clean up the bottom of the screen without losing the part of your program already typed in.

TIP # 2:

When debugging a program in FAST mode the constant jumping of the picture as you move the cursor is annoying. Here is the tip:

```
Bring the line cursor ( )  
next to the faulty line.
```

```
CLS
```

```
EDIT (SHIFT 1)
```

This will bring the faulty line at the bottom of an empty screen. Only the faulty line will flicker not the whole picture. A good improvement not mentioning the added speed in the cursor movement.

You have some tips to share? Send them in.

ANDRE***

N-TRN BASIC

This series will give you that little extra which is not directly available from the keyboard. This little extra which will allow you to adapt more easily programs from other BASIC languages. This little extra that will allow you to create better programs...FASTER running programs.

No hardware to add, no program to load first, no list of machine code to type in. Just new methods of using what is already there in our Sinclair BASIC.

In this issue #2 of ZX-81, I give you my version of the famous READ-DATA-RESTORE.

Its main features are 1) written in simple BASIC, 2) the READ subroutine can read strings, numbers, mathematical expressions, graphics etc..., 3) there is no limit to the amount of DATA, 4) the DATA can be a mixture of words and numbers, 5) the DATA can be divided in any amount of program lines, 6) the DATA is limited only by your computer total memory, 7) you can RESTORE (the pointer) to any program line.

THE READ ROUTINE

For better results, the READ subroutine must be at the beginning of the program and the DATA at the end. Even if you don't follow the preceding procedure the program will run. But with our Sinclair/Timex every ounce of speed is a must.

The READ subroutine is made of only 4 lines of program. It includes one pointer (D), one counter (I), one user variable (U\$) and the shortest and the fastest FOR-NEXT loop ever made: only two consecutive lines. See for yourself.

```
1 FOR I = 0 TO LEN D$  
2 IF D$(I) < " " THEN NEXT I  
3 LET U$ = D$(I TO I-1)  
4 LET D = I+1
```

→ PAGE 6

THE DATA

The 'D\$' holds the DATA. Not to confuse nor to re-invent something already existing, I use the comma (,) as separator between each element of data.

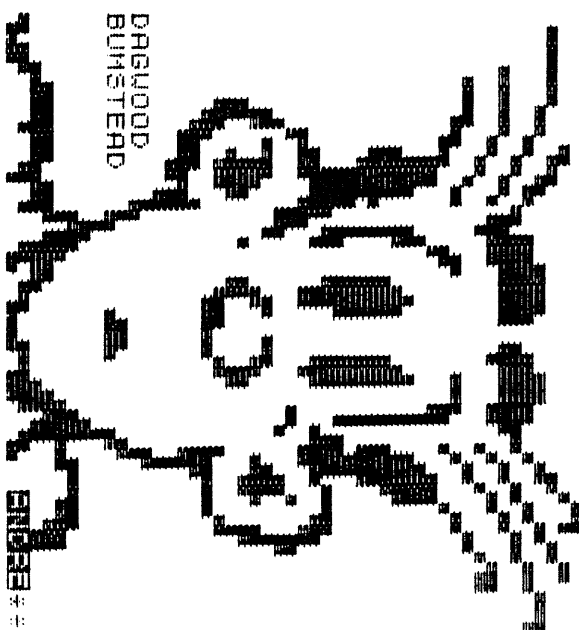
The DATA can include numbers, graphics and words but each data must be followed by a comma (,) except the very last one.

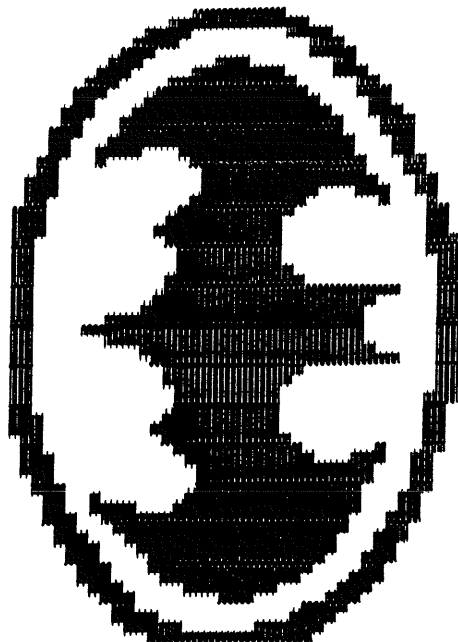
Here is an example of DATA:

```
5000 LET D$="EUROPE,4,FRANCE,PAR  
IS,ENGLAND,LONDON,"  
510 LET D$=D$+"ITALY,ROME,SPAIN  
,MADRID,"  
512 REM STOP  
514 REM GET " "LEN D$+1" " HERE  
520 LET D$=D$+"AMERICA,3,CANADA  
,OTTAWA,MEXICO,MEXICO CITY,"  
530 LET D$=D$+"U.S.A.,WASHINGTON  
N"
```

I could have added more to the list. The limit being the total memory of your computer. Lines 512 and 514 are explained in the next chapter. Have you notice the numbers are mixed with words? And there is no comma after Washington?

→ PAGE 7





BATMAN

ENERG***

You like this Graphic? See page 1 to get it FREE.

SINCLAIR/TIMEX SUPPORTERS

Computer Monthly, MAGAZINE
P.O. Box 7062,
Atlanta, GA 30357-0062

Computer Classics, REPAIR
RT 1, BOX 117,
Cahoon, MO 65609

The John Dinger Co., DEALER
11601 Whiskey DR.,
Cumberland, IN 46229

EMSOFT division, DEALER
Estate Management Services
P.O. Box 8763,
Boston, MA 02114-8763

Toronto Timex Sinclair Users Club,
14 Richmond Court.,
Scarborough, Ontario,
CANADA M1K 2V1

RMS Enterprises, DEALER 4#
1419 1/2 7th ST.,
Oregon City, OR 97045

Mechanical Affinity DEALER
513 E. Main ST.,
Peru, IN 46970

---PAGE 11

FROM PAGE 10

Timex Sinclair N.-American Users Club,
c/o Donald S. Lambert,
1301 Kiblinger PL.,
Auburn, IN 46706

Sinclair Information exchange,
c/o William W. Miller,
6675 Clifford DR.,
Cupertino, CA 95014-4530

ZX Users Group of New York,
BOX 560 Wall ST.,
New York, NY 10005

Long Island Sinclair Timex Users Group
c/o Harvey Rait,
5 Peri LN.,
Valley Stream, NY 11581

Update Magazine
BOX 1095,
Peru, IN 46970

Indiana Sinclair Timex Users Club,
c/o Frank and Carol Davis,
513 E. Main ST.,
Peru, IN 46970

Mountainer Software,
749 Hill Street # 9,
Parkerburg, WV 2604

Sunset Electronics,
2254 Taraval st.,
San Francisco, CA 94116

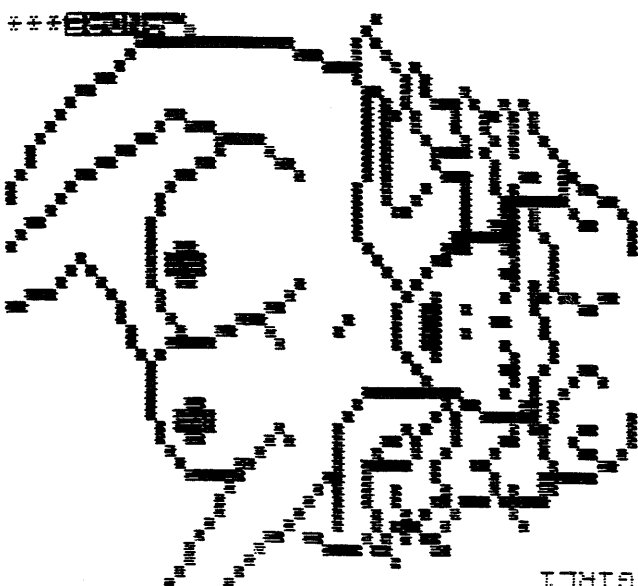
This list was verified last month. All are existing. If you wish to receive information about a club or a catalog from a dealer please send one (1\$) dollar and a self-addressed stamped letter to the addresses listed above. Send a letter to these people asking them what they have for you and your computer. Remember the more we write each other, user to club, user to dealer, club to dealer the more we will benefit.

Hey! Have you bought a new hardware or software lately? Go for it now! Did you think about joining a club? Other users need you, join now!

As I gather more supporters' names of the ZX81/TIMEX 1000, I will include them in this column. So if you are a dealer who still carry Sinclair/Timex product or a users club, send me your name and address and I will add them to this list in next issue of ZX-91.

ENERG***

ZX-81



GIRLL1

SINC-LINK

ZX-81

You can have it on your screen. See page 1 to receive it FREE.

NEXT ISSUE #3

PRUSE: The many different ways of doing it. ZX = #1: Why it is the best computer to learn with. Also programs listing, Gameworld, our Supporters' List and... the best graphics.

---ACHTUNG---

The content of the newsletter ZX-91 is the sole ownership of ENERG***. It may be reproduced in part or in whole providing that a copy of whatever it is reproduced in is sent to me and that credit is mention. ZX-91 is free and cannot be used in any remunerative way.

The word processor used in these pages is 'WORD SINC II' of P. Hargrave/Manaimo, B.C. Canada.

TORONTO TIMEX-SINCLAIR USERS CLUB

THE QL SECTION OF THE TORONTO TIMEX-SINCLAIR USERS CLUB MET AT MR. H.HOWIE RESIDENCE AT THE END OF JANUARY 1992 FOR A DISCUSSION OF THE QL AS WELL AS A DEMONSTRATION OF VARIOUS FEATURES OF THE MACHINE.

TOOLKIT II

THE FIRST ITEM FOR DISCUSSION WAS THE ARTICLE BY HUGH ON TOOLKIT II JUST PUBLISHED IN ISSUE JAN-FEB 1992 , VOLUME 10, NO 1 . SOME ONE LINERS IDENTIFIED BY HUGH, WORK QUITE WELL WITH EITHER GOLD CARD OR EVEN TRUMPCARD, THE VERSION OF TK2 IS USUALLY 2.21 . HOWEVER , SOME OF US WITH THE ROM TOOLKIT 2, PLUGGED INTO THE BACK OF THE QL HAVE VERSION 2.09, AND SOME OF THE COMMANDS " ONE LINERS " ARE NOT AVAILABLE. THIS WILL BE EXPLAINED FURTHER IN A SUBSEQUENT ARTICLE.

NETWORK

SOME FURTHER DEMONSTRATION OF THE FLEXIBILITY OF THE QL WHEN USED IN A LOCAL AREA NETWORK . THIS IS ONLY POSSIBLE WHEN THE EQUIPMENT IS AVAILABLE SUCH AS HUGH'S LAB. ETC.

THE INSTRUCTIONS , BOTH IN THE QL MANUAL AND IN THE TOOLKIT 2 MANUAL FOR NETWORKING LEAVE A LOT TO BE DESIRED. HOWEVER WITH HUGH'S HELP AND DEMONSTRATION, WE ALL HAVE A BETTER UNDERSTANDING OF NETWORKING.

ATTENDANCE

IN FUTURE, IF THE PARTIES INTERESTED IN ATTENDING OTHER DEMONSTRATIONS WILL CONTACT EITHER THE UNDERSIGNED OR HUGH AND INDICATE THE CHOICE OF DATES AND EVENING OR DAYTIME PRESENTATION WOULD BE GREATLY APPRECIATED.

LOUIS LAFERRIERE
2305 SOUTH MILLWAY, APT. 409,
MISSISSAUGA, ONTARIO,
CANADA,
L5L 3P8
416 820 3725

HUGH HOWIE
586 ONEIDA DR.,
BURLINGTON, ONTARIO,
CANADA,
L7T 3V3
416 634 4929



graphic from IMAGIX QL program



COCHRAN IN OMNI MAGAZINE

QUILL -- SAVE -- Same Document?---

Flashed through my memory the other day that some time ago I was asked a question I never did answer, and now I can't remember who asked me. Here is my answer with my apologies to the asker---

The question was "What does the "Same document?" mean in Quill after you have saved the document?"

Are you still with me? Read on.

This is the way in which Quill allows you to save a document and then asks you if you wish to edit or make changes to the document.

You may answer "Y" <enter> and work more on the document and resave with overwrite option. Or you may press <enter> and go on with the next task.

Hugh Howie

Vendor Listing

Known T/S Vendors as of Feb 91
Please Notify VISTA of any and
all additions for future lists!

LEASE support our Vendors--
OR ELSE!

UPDATE! Computer Systems
PO BOX 1095
PERU, IN 46970
317-473-8031

*** OUR ONLY MAGAZINE! ***
*** PLEASE SUBSCRIBE!! ***

AERCO
BOX 18093
AUSTIN, TX 78760
512-451-5874

*** DISC DRIVE SYSTEMS ***
*** PRINTER INTERFACES ***

JOHN OLIGER CO.
11601 WHIDBEY DR.
CUMBERLAND, IN 46229

*** DISC DRIVE SYSTEMS ***
*** PRINTER INTERFACES ***

RMG ENTERPRISES
ROD GOVEN
1419 1/2 7TH STREET
OREGON CITY, OR 97045
503-655-7484


*** LARGEST T/S VENDOR ***
*** VISA/MC ACCEPTED ***

ED GREY
PO BOX 2186
INGLEWOOD, CA 90305
213-759-7406

*** HARDWARE & SOFTWARE ***
*** MODEM ACCESSORIES ***

T AND C SERVICES
20 LIBERTY TERRACE
BUFFALO, NY 14215
716-834-1716

*** CALL OR WRITE FOR ***
*** FOR FREE CATALOG ***

 BUY A DISC SYSTEM TODAY--
LIFE'S TOO SHORT TO WAIT ON
A TAPE RECORDER!

VENDOR LISTING (CON'T)

LARKEN ELECTRONICS
LARRY KENNEY
LKDOS & DOS SOFTWARE

*** SOLD BY ED GREY & ***
*** RMG ENTERPRISES ***

EMSOFT DIVISION
PETER HALE
PO BOX 8763
BOSTON, MA 02114-8763
617-889-0830

WOOD AND WIND COMPUTING
BILL CABLE
RR3 BOX 92
CORNISH, NH 03745
603-675-2218

ZX REPAIR
DAN ELLIOTT
RT. 1 BOX 117
CABOOL, MO 65689
417-469-4571 8AM-8PM CST

*** VISA/MC ACCEPTED ***
*** FAST, FAIR REPAIR ***

SHARP'S INC.
BOX 326
MECHANICSVILLE, VA 23111
804-730-9697 FAX 804-746-1978

MOUNTAINEER SOFTWARE
BILL FERREBEE
749 HILL ST. #9
PARKERSBURG, WV 26104
304-424-7272

RUSSELL ELECTRONICS
RD1 BOX 539
CENTER HALL, PA 16828

ZUNK (SOFTWARE)
1419 FERRIS
WAXAHACHIE, TX 75165

JOHN MCMICHAEL
1710 PALMER DR
LARAMIE, WY 82070
307-742-4530

*** COLOR PRINTER S/U ***

SUNSET ELECTRONICS
2254 TARAVAL ST.
SAN FRANCISCO, CA 94116

NEWSLETTER AND INFORMATION EXCHANGE

As promised last issue, here is a list of the user groups and individuals with which the TTSUC exchanges newsletters and/or information on a regular basis. If I have omitted your group or if you know of a group that we should correspond with please inform us at the address on the inside cover. J.T.

Capital Area Timex/Sinclair Users Group (CATS), CATS Newsletter
P.O. Box 11017, Takoma Park, MD 20913 Attn: Tim Swenson

Clackamas Computer Applied Training Society (CCATS), the Plotter Newsletter
1419 1/2 7th St., Oregon City, OR 97045 Attn: Rod Gowen

Chicago Area Timex Users Group (CATUG), Nite-Times Newsletter
613 Parkside Circle, Streamwood, IL 60107-1647 Attn: Bob Swoger

FDD Newsletter
1274 49th St., #821, Brooklyn, NY 11219-3011 Attn: Jay Siegel

Mountineer Software
749 Hill St., #6, Parkersburg, WV 26104 Attn: Bill Ferrabee

Indiana Sinclair Timex Users Group (ISTUG), ISTUG Newsletter
513 East Main St., Peru, IN 46970 Attn: Frank Davis

International QL Report (c/o SeaCoast Services)
15 Kilburn Court, Newport, RI 02840 Attn: Robert Dyl

Larken Electronics
1756 Bantree Cres., Ottawa, ON K1B 3W4 Attn: Larry Kenny

Mile High Timex/Sinclair Users Group, Mile High Newsletter
601 S. Grant St., Denver, CO 80209 Attn: Curt Carlson

New England Sinclair QL Users Group (NESQLUG), NESQLUG Newsletter
1681 Cambridge St., #21, Cambridge, MA 02138 Attn: Mike Jonas

Personal Computer Club of Toronto (PCCT), PCCT Newsletter
P.O. Box 5429, Station A, Toronto, ON M5W 1N6

Sinclair Desktop Publishing Journal (SDPJ)
1284 Brushwood Ave., Cincinnati, OH 45224 Attn: Mike Felerski

Seattle Area Timex Users Group (SEATUG), SWYM Newsletter
601 E. Roy St. #102, Seattle, WA 98102-4646 Attn: Robert Cazares

Sinclair Milwaukee Users Group (SMUG), SMUG BYTES Newsletter
5052 N. 91st St., Milwaukee, WI 53225-4129 Attn: Bill Heberlein

Timex/Sinclair NorthAmerican Users Group (T/SNUG), ZXir QLive Alive! Newsletter
1301 Kiblinger Place, Auburn, IN 46706 Attn: Don Lambert

TIMELINEZ Newsletter
P.O. Box 1312, Pacifica, CA 94044 Attn: George Mockridge

TS Bulletin Newsletter
97 Ruskin St., Ottawa, ON K1Y 4B3 Attn: Bill Harmer

Vashon Island Sinclair Timex Association (VISTA), VISTA Newsletter
P.O. Box 199, Vashon, WA 98070 Attn: Tony Willing

MAR/APR 1992

March 10, 1992

Dear Out-of-town Members,

I'm sure I've caught up with the backlog of members requests now. A grand flourish or activity has pretty well done it! Anybody feel neglected? Please write.

I'm impressed with our newsletter when I look through it! This issue we have really come through with the ZX81. Many issues have been quite weak in this respect. Well, no members seemed to write material about the ZX81. Are ZX81 users less active than others? Would seem like it. We have included the four pages (or 12 pages, depending on how you look at it) of the newsletter ZX-91, put out by Andre Baune. And Rene Bruneau has a 2-page article on ZX81 Hi-Res graphics. And we have a new contributor, Ron Campbell. I'm pleased.

I have been looking at several members' problems lately. I shall have to write them up as short articles for the next newsletter. One of them is about making Pixel Print compatible with certain printers. A couple of members have printers that seem to be incompatible with PIXEL PRINT. I have located the printer control codes which you could change to suit your printer.

Also, with the help of Steven Gunhouse and Rene Bruneau, I have just about got the Aerco 'LPRINT CHR\$ 1' instruction to work with my Fasttext 80 printer. More in the next issue.

Then, a member from Quebec mentioned not knowing how to put French accents into the Mscript font. I found some interesting things about that, when looking into it. I'll discuss in next issue. No solution, mind you, but a possible way to go.

A couple of things. I have decided to clear out my collection of ZX81 tapes. One of our local ZX81 members has expressed an interest in taking them. But I wonder if any other ZX81 types would be interested in some of them. They are a mixed bag; an accumulation made in the early years. There's about 250 short tapes in all, a program per tape, to give you an idea.

Also, Bob Mitchell has moved from the 2068 to an IBM clone. Has sold nearly all his 2068 stuff. At last week's club meeting he offered his magazine collection to anyone interested. I said I would like to get it to fill in gaps in my collection. There will be some surplus after that. Any interest?

No charge for any of this stuff, but you would have to pay the postage.

I'm getting off easy, this letter. Yesterday I came across the material on the back of this newsletter. It is from the Saturday March 8, 1992 issue of the Toronto Star. Seems like Clive Sinclair can't get his mind off transportation! Oh Dear! And I thought he might have been working on a new computer for us!

Some of you have noticed that my printer has a flawed letter 'l'. It showed up in the last issue of the newsletter. I have a plastic printwheel on the Smith Corona L1000 printer. The letter 'l' had collapsed. You will notice a different 'l' now. I took an 'l' from another printwheel and glued it onto the offending printwheel. It is unfortunately a different font. But beggars can't be choosers. Printwheels are out of stock for this printer, so that is the alternative. Well, one could always buy another printer, couldn't one!

I wrote to BytePower as I mentioned in the last letter. Jeff Taylor had written a few days earlier on the topic, and Kristian Boisvert replied to me. Our letters crossed in the mail. Kris's letter was rather embittered. Said that all orders would be honored; that he wasn't going to do a "Tim Woods" act. But that people should write to him first about missing orders, not complain to their computer club. I have not replied yet. But I'd like it if you would let me know when you receive satisfaction; Robert, Dennis, and Mike. And any others.

Shall close off now. Sincerely,

George Chambers.