MEMORY MAP

ROUTINES

FILES

SUBROUTINES

COLLECTOR'S SPECIAL

The Final Issue of

UPDATE! MAGAZINE

**UPDATE MAGAZINE
PO BOX 17
MEXICO IN 46958**

T/SNUG Information

We wish to support the following platforms : ZX-80/81, TS-1000, Spectrum, TS-2068, Z88 and QL. If you have any questions about any of these fine Sinclairs, contact the:

Chairman
Chief Motivator
Donald S. Lambert (ISTUG)

Vice-Chairmen

Tape & JLO PD Library
D. G. Smith
415 Stone St.
Johnstown, PA 15906
814 535-6998

Z88 Library
Dave Bennett (HATSUG)
329 Walton St. Rear
Lemoyne, PA 17045
717 774-7531

ZX-81 PD Tape Library
Ed Snow
2136 Churchill Downs Cir.
Orlando, FL 32825
407 380-5124

RMG Enterprises
Rod Gowen (CCATS)
14784 S. Quail Grove Cir.
Oregon City, OR 97045
503 655-7484   FAX 503 655-4116

TS-2068
Rod Humphreys (VSUG)
10984 Collins Pl.
Delta, BC V4C 7E6 Canada
604 583-2819

QL PD Library
John Donaldson (CATUG)
835 Foxwood Cir.
Geneva, IL 60134-1631
708 232-6147

AERCO & Z80 Emulator
Keith Watson
41634 Amberly Dr.
Mt. Clemens, MI 48038

BBS --==GATOR==--
Bob Swoger (CATUG)
613 Parkside Cir.
Streamwood, IL 60107-1647
630 837-7957   Work 847 576-8068

Any of the above can also be reached by e-mail through the
MMCC BBS 847 632-5558

ZXir QLive ALive!
Is the newsletter of T/SNUG, the Timex/Sinclair North American User Groups, providing news and software support to the T/S community in a VOLUME of four newsletters per year; beginning with the Spring (March) issue.

T/SNUG's main goal is to preserve and encourage the use of Sinclair computers by providing an open forum for the exchange of knowledge, building and maintaining of software libraries. Providing vendors, repair service and members with free ad space.

It is the user groups and individual subscribers, rather than the vendors, that provide the pecuniary support for this newsletter. Vendors and developers receive this newsletter free of charge, though contribution from vendors and user groups is gratefully accepted. Please support our vendors and service providers whenever possible.

If you have a problem or you have solved a problem, please share it with the rest of us. No problem will be considered unimportant.

Editor/Treasurer
LarKen PD Library

You can keep T/SNUG alive by an annual contribution of $12 for one VOLUME made payable to Abed Kahale. Send check to:-

ABED KAHALE
3343 S FLAT ROCK CT
SIERRA VISTA AZ 85635-6874
520 378-3424

Back copies are available for $0.75 each postpaid.

Trea$ury Note$

As of September 4, 1996, we have a balance of $1204.12

Article Contributions

Send in your articles by tape or disk and your inputs to:—
DONALD LAMBERT
1301 KIBLINGER PL
AUBURN IN 46706-3010
Phone 219 925-1372
By hardcopy or modem (300-14.4) to:
Abed Kahale
E-mail: 103457.2440@compuserve.com

GATOR's
TWISTED PAIR

To better inform the Sinclair Community, four 24-hour a day BBSs are now provided to serve you. You are encouraged to exchange mail and use the files sections of these boards. Bulletins and ads are available to all.

Q-Box BBS	810 254-9878
Utica, Michigan	
SCC BBS	305 945-8274
Miami, Florida	
SOL BBS	520 882-0388
Tucson, Arizona	
MMCC BBS	847 632-5558
Arlington Heights, Illinois	

If you know the Internet E-Mail address of a Sinclair user, but do not have access to Internet, simply address your E-Mail to GATOR Sinclair on the 24-hour MMCC BBS and include the name and E-Mail address of the user you wish to reach. Then check the MMCC BBS from time to time if you expect a reply.

We encourage you to excahange mail and contribute to the UPLOAD section. Call and *register* using your first, last name and phone number along with a password you won't forget. *Write It Down!* Do not try to do anything else at this time.

When you call-in the next time, you will have Level 5 security and be able to enjoy full user privileges. The BBS has smaller sections called conferences. Select "J " for "Join a Conference". Select "TIMEX" to get into the Sinclair Section. The mail you then read will only be from other T/S users. Use extension .ART for articles, .ADS for ads and .NWS for news when UPLOADing.

For help, contact the SYSOP, Bob Swoger, by leaving a message, mail, E-Mail or phone.

Input/Output

by Abed Kahale

Here is one about the TS2068 and the INTERNET. Well, thanks to the encouragement of Frank Davis, we have made contact with the INTERNET by using the TS2068, the Z-SIO, and Larry Kenny's 1200 baud modem. Frank didn't have it quite right, though, as his minimum configuration was a TS2068 at 1200 baud *with extra memory*. That is unnecessary, since we use the memory of the Internet provider on which all our application programs run as clients. As a matter of fact, we gain access to the Internet, even at 300 baud. However, this assumes the use of Larry's modem (at 300 baud) and the Z-SIO. So, we don't know that the TS2068 can talk to the Internet, by using the TS2050 modem. So our minimum configuration is a shell account at $20 monthly, a TS2068 running MaxCom, a Z-SIO, and a 1200 baud modem.

Beyond that, a nice thing to have is familiarity with the UNIX computer language, which runs most of the Internet providers, anyway. The interface is text-based, no graphics, and the interface is fast, no waiting! !

KEEP ON TIMEX'n,

Sender: emanonmailhvscom@mail.hvs.com

David Lassov
Tucson, AZ
CompuServe charges me $9.95 per month.

To: Keith Watson   Rcvd: 07-01-96 23:45
Re: ZQA! Magazine

Keith, while writing the inside cover of ZXir QLive Alive! newsletter, I noticed topics missing from the list of people who could help others with information needed for AERCO disk interfaces and Sinclair emulators. With the passing of IQLR and UPDATE!, by August there will be no magazine published on this continent to support Sinclair platforms. It was for this time that T/SNUG has been preparing as it began publishing ZXir QLive Alive! newsletter. May we publish your name, address and phone number as a person that can help with the above topics?

--=GATOR=-- CENG108@email.mot.com

To: SYSop Re: ZQA! Magazine

Yes, I will try to help out with any questions about the AERCO disk interface and Spectrum/Timex TS2068 emulators. Actually, the only emulator that I know anything about is Z80, written by Gerton Lunter. I know next to nothing about the emulators that run on the QL, since I don't own a QL and I'm not very knowledgeable about the emulators for the ZX81/TIMEX 1000. However, if anyone wants to discuss the Z80 emulator, I'm more than willing.

Keith Watson
41634 Amberly Dr
Mt Clemens, MI 48038

Frank Davis says there is a new magazine that will take the place of IQRL. Dyl went bankrupt again and his subscribers will get what his customers got before. UK's Jones and a German rep will put out two versions from those two Countries to keep QL, users on those continents going. All the particulars will be in the next issue of UPDATE! Oh, yes, the name of the new magazine is QL, Today.

--==GATOR==--

Jon Kaczor sent us a nice bunch of RAMTOPs missing from the CATUG collection!

To: Bob Swoger

I've looked over your "have and have not" list of the back issues of the RAMTOP and I've sent you what I had. I took over production with the Winter 91-92 issues before that time I just checked over my files and made copies of what I had. I included a number of issues from 87-89 that were not on your list although you didn't show them as missing. I'm a little sketchy about the issues from the Summer of '89 to the Summer of '91. I can't tell you for sure if they existed or not. For example I don't have a copy of the Winter of 1990 which you indicated you have. I also included the last two issues which should bring you up to date.

Keep sending your newsletters to my address (see below). We will be sure to mention the T/SNUG BBS in all future issues of the RAMTOP (newsletter).

Now I would like to ask you a favor. I read in one of your newsletters that you had picked up a copy of MultiDraw. If you would be so kind maybe you could make me a copy of the manual. I picked up the program (used) from Paul Holmgren a couple of years ago at Dayton, but there was no manual.

Jon J. Kaczor
4568 Williamston Ave.
Brooklyn, OH 44144
216-398-6480

Re: QL TODAY

At the last CATUG meeting, John Donaldson brought in a copy of QL, Today magazine from Europe. It is their attempt to fill in the hole left by IQLR. I would like to send them a letter on behalf of T/SNUG and make them an offer. Please download the letter from the files section.

Also the DMA ComputerFEST is August 24 & 25. Saturday 9 AM-6 PM, Sunday 10 AM-4 PM. Prices are up 50% from Spring show! I'm out! $50 for a table and $8 more to get in the door, the $8 part isn't bad! If your going as a vender contact:

DMA ComputerFest, PO BOX 2336, Dayton OH 45401, 513-222-3378 venders@dma.org
Has Lambert said if he is going to have a table yet?
-==GATOR==--   *Yes, he is going.*

Thanks for the new cover and Carol says to tell you it is great, and for the article. Will try to get you a copy of mailing lists from UPDATE soon. Best,

Frank Davis
Peru, IN

We thank you both for the time and effort you put in UPDATE! all these years to keep Sinclair alive.

I just received the Summer edition of ZXir QLive Alive! and enjoyed reading the many articles. I hope that you will keep going if and when UPDATE Magazine stops publishing. Bill Jones, Frank and Carol deserve a heartily thank you for all they have done to keep us informed about our Sinclair computers.

On page 24 of this issue, you show my ad. I have received the drives I need and no longer need anymore. Please remove this WANTED ad from future issues. Thank you for running the ad in the past.
Keep up the good work.

John Pegram
Los Angles, CA

I will say that as a contributor to ZQA! that you are most welcome to the articles that I write for the benefit of the QL portion of the Sinclair community.

I found it interesting that Joan Kealy thought that there was "too much about (the) QL in ZXir QLive Alive! and not much else" considering, I think there is way too much 2068 material in ZQA!. I have to interpret Kealy's comments as partially directed at me; but, until she, and other 2068/Z88/ZXnnn users write articles, none of them can complain about the general contents.

Al Feng
Albuquerque, NM

Joan had contributed a great deal to the 2068 in the past, but of course we welcome more programs from her and from any of our members.

I Recently spoke with Don Lambert on the phone and in the course of conversation I discovered that you have not been receiving the RAMTOP. I guess this shouldn't have been a surprise since I wasn't sending it to you. I supposed that Don, or Bob Swoger would be providing you with a copy. At any rate I have enclosed all issues since I got involved in the production. This should bring you up to date.

I have enclosed a check in payment of dues for T/SNUG. I know I am terribly delinquent. Please let me know if it brings me up to date.

Jon Kaczor
Brooklyn, OH

It sure does bring you up to date and thank you for the newsletters.

Dear Bob,
You should know that Apples were in schools long before other computers. I was certified to teach computer literacy in middle schools, hence Mac Performa. Wrote to Mike Carey - no response. We are all busy out of our minds & thank God for that attribute. Still no MIDI.

Buy some used disk system for Doug Wagoner; I spent hours rewriting five disk programs to simple tape loads for him. GERMAN. Last Sinclair buy to be LogiCall 6.0 from FWD. Much!

Joan Kealy
Brackettville, TX

New address for :   **SCC BBS**
JOSE MORENO
1871 N GLADES DR APT 3
NORTH MIAMI BEACH FL 33162

Well, 1 spent the weekend to figure out how to use QMOSAIC and to translate its HTML files. Silly me, but I am not sure that Frank Davis received the translated QMOSPIC text files...

I sent a copy of the translations and program (v.77) to NESQLUG for their PD library since I presumed that QMOSAIC is public domain. There is at least one later version of the program; but I don't have it.

Frank had mentioned receiving a later version of QMOSAIC. I requested a copy of the newer version when I sent Frank the article, but have not heard from him.

I updated both the QLAMBer and QLUSTer, and so you can change my ad to note the re-introduction of the later. Your pal,

Al Feng
Albuquerque, NM

As I just wrote Bob Swoger, the most recent big news in my corner of the T/S world is that I just purchased a used LarKen disk interface for the 2068. Actually, this kit with LKDOS V3 is "new" in the sense that the prior owner never utilized it, but "second-hand" with regard to price (thanks to an Unclassified" ad in ZXir QLive Alive! which nobody else bothered to respond to; apathy does have a cost). Anyway-- just how big this news is, to me at least, is explained by the fact that I have not had any T/S disk interface previously. My access has been "cassette", "cartridge" or "none".

I'm re-reading old issues of ZQA! for words of wisdom on the LarKen. For instance, while every copy of the newsletter has an ad for LogiCall in it, and it is clear LogiCall is Lark-related, I had to go back to your article in the Spring of '94 to find out what the heck LogiCall was. In fact, I may do an article on attaching up a Lark disk interface to a 2068; while this may be "old hat" to a number of users, I don't find any nuts-and-bolts review or description of the LarKen interface in any of the ZQA! issues I have.

I note that you are listed as the LarKen librarian. Might I get a catalog of what is available in the LarKen library, as well as cost/procedure for ordering? (I've got the LarKen hooked to a standard DSDD 5-1/4" drive, if the catalog comes on disk and you need to know the format.) If you have any particular words of wisdom regarding truly outstanding and/or "must have" software in the library for LarKen/2068/Spectrum owners, I'd be interested to hear.

Another cool summer in Sierra Vista, no doubt?

Gil Parrish

Begs, OK

Received your letter today and I would like to be of help. Do you have the LarKen manual? If not, you won't be able to use the system (DOS).
My suggestion will be:

Buy LogiCall from RMG or FWD, it is $15 and is really worth it. You get an updated LarKen manual and LogiCall manual. They are a must have.

The disks contains many software such as word processor, utilities that you will need etc.

Then you have to spend some time with the system and learn the ins-and-outs of it. LogiCall makes it real easy to (surf-the-LarKen).

I have, so does Bob Swoger and Don Lambert, the T/SNUG disk library. About a 100 disks, some of them are elementary and some are advanced like the Toronto TTSUC library. I don't have a complete listing but if you give an idea of what you are interested in, I can give you a list of the available choices. I can make you copies at cost and you should specify what disk type/density you are using, double sided or single. The prevalent choice is double sided, 40 tracks per side (400K).

There will be an article that I am working on right now in the next ZQA! about LogiCall, coming to you in few weeks. I will also send you a TTSUC library list.

True, there never been an article on setting up LarKen in ZQA!, your future article will be welcomed.

You had to ask! ☺
about the weather in Sierra Vista. Well, *I tell ya* !!! It has been beautiful until July when the monsoons arrived, it got hot and humid for the duration and reminded me of Chicago. Lucky for me, I just finished working on the yard planting trees and bushes, *and*, a lawn of colored crushed rocks (no maintenance). I found myself shoveling rocks even in the hot sun, but not when it got humid, not this old guy.
We are now back to normal - sunny and dry — the desert turned **green!** the humming birds visit our young flowers every day.

I **did** get the LarKen manual, although in many places I can't make heads or tails of it. I have already sent my order to FWD to buy LogiCall and get the updated LarKen manual, and I've basically suspended further investigations until it arrives. I hope it will make certain points (like the exact sequence to send a disk directory listing to a 2040 or my Byte-Back-connected full-size printer) much clearer.

LarKen

The first thing you have to do is to START your *engine* by RANDDOMIZE USER 100: OPEN #4, "dd"

An AUTOSTART should be on every disk you have; by holding down the ENTER key when you turn on the computer, it boots up to drive "0". LogiCall will do that for you if you so choose. *copy too*

Use LLIST and LPRINT for the 2040 preceeded by either PRINT #4: or RANDOMIZE USER 100:
Every LarKen command must be preceeded by this.

For a large printer, you have to open a channel:
```
10 RANDOMIZE USER 100: OPEN #3, "LP"
```
To set the number of characters per line based on the printer you have: ex. 85 chrs.
```
20 RANDOMIZE USER 100: POKE 16090, 85
```
To prevent an automatic linefeed from your printer if it has one:
```
30 RANDOMIZE USER 100: POKE 16092, 0
```
For left margin: ex. 5 spaces.
```
40 RANDOMIZE USER 100: POKE 16094, 5
```
Then another line with LPRINT or LLIST whatever.

I've wired a standard DSDD 40-track/side half-height disk drive into an external drive case formerly occupied by a Tandy Color Computer full-height, SSDD, 35-track drive. It works fine, and I'll add another drive to the case when I stumble on more $5 drives of that type. As to specific programs-- well, I'm not looking for anything in particular, except perhaps the disk version of that newsletter software (the name eludes me at the moment; is it Pixel Print?) that

72 - 78°
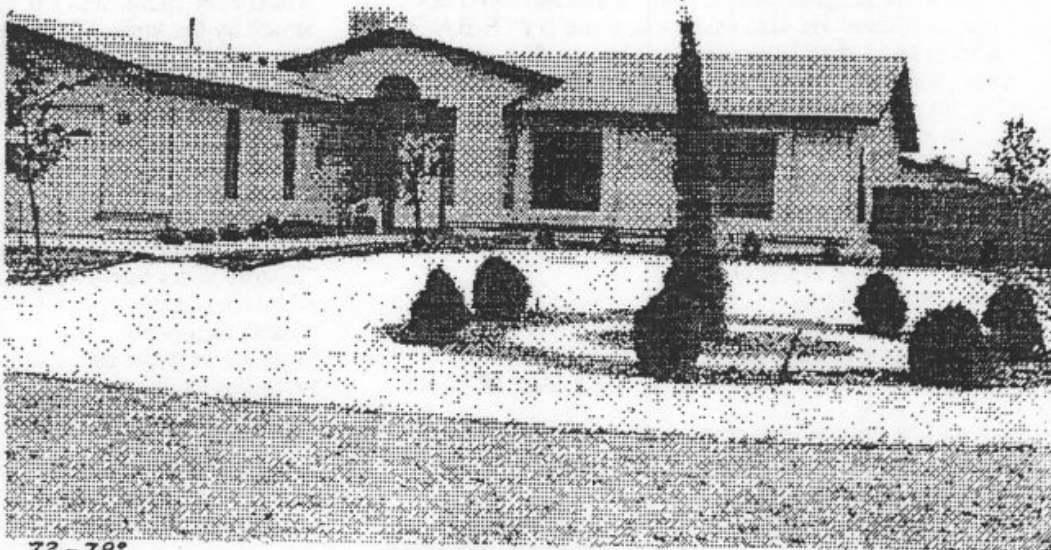
is certainly one of the best programs I've seen for the 2068 (I have the tape version). And as you indicated, some applications software like a disk-based word processor should be supplied with the LogiCall stuff. So I'm largely just looking for a good variety of advanced 2068/Spectrum programs that really show off the system at its best. You mention the TTSUC library of more advanced programs; do you have a listing of those disks? And are some of the good Spectrum games & programs from Europe available somewhere?

Gil Parrish
73430.1546@compuserve.com
E-mailed you the TTSUC library list. I believe it covers all what you are looking for. The only newsletter on disk that I can think of was Byte Power Magazine, unfortunately no longer active.

I noted in my article draft that you previously wrote about LogiCall 5.0 & 5.2. I have no idea how much version 6.0 changed.

Gil Parrish
73430.1546@compuserve.com
Please see GATORs below

Got your e-mail today about your letter to Gil Parrish. I also got a letter from him Saturday requesting the LarKen V2 Spectrum ROM w/socket. He also asked for the 747 Flight Simulator and sent a $22 check. He said he had ordered or was ordering LogiCall from FWD Computing. He asked if LogiCall is really going to be the last version.

Tell Gil that it really looks like it, in that it hasn't been changed one iota since the middle of 1995, that is more than a year. If any changes are made they will probably be given as text in ZQA!

Phillip came up with an interesting possible change for ADDRESS BOOK when he wrote PHONE BOOK, his latest endeavor. Remember that the crucial data was kept in a string that perished (pun intended) if you ran it instead of starting it with a GOTO 1? Well, if line 1 is 1 RANDOMIZE USR 100: LOAD "ADRS.BK", an old copy of the program is LOADed in and run - you don't lose your data! He also asked about the BYTE-BACK modem and I shall have to answer him on that question. Phil and I got our first picture on the digitizer last Sunday. We could not play with it all day long as we had to join Nazir and Sauter on other matters.

--=GATOR=--

You may want to note this and pass it along.

Abed

Subject: W A R N I N G ! ! ! ! !
Sent: 8/16/9611:06
Received: 8/16/9612:20
From: timm@malone.sdlabs.com
>Hello All! Just passing along a VERY IMPORTANT virus warning.
>> VERY IMPORTANT INFORMATION: PLEASE READ! >>>> -- >>>Please distribute this message to all people you care about
>>>>>> Subject: Extremely Destructive Virus <<<<<<
There is a computer virus that is being sent across the Internet. If you receive an Email message with the subject line "Good Times", DO NOT READ the message, DELETE it immediately. Please read the messages below. Some miscreant is sending Email under the title "**Good Times**" nationwide, if you get anything like this, DON'T DOWN LOAD THE FILE.
<<<<<< >It has a virus that rewrites your hard drive, obliterating anything on it. Please be careful and forward this mail to anyone you care about.
> WARNING! ! ! ! ! ! ! INTERNET VIRUS
>>The FCC released a warning last Wednesday concerning a matter of major importance to any regular user of the Internet. Apparently a new computer virus has been engineered by a user of AMERICA ON LINE that is unparalleled in its destructive capability. What makes this virus so terrifying, said the FCC, is the fact that no program needs to be exchanged for a new computer to be infected. It can be spread through the existing Email systems of the Internet. Once a Computer is infected, one of several things can happen. If the computer contains a hard drive, that will most likely be destroyed. If the program is not stopped, the computer's processor will be placed in an nth-complexity infinite binary loop which can severely damage the processor if left running that way too long. Luckily, there is one sure means of detecting what is now known as the "Good Times" virus. It always travels to new computers the same way in a text Email message with the subject line reading "Good Times". Avoiding infection is easy once the file has been received simply by NOT READING IT! The act of LOADing the file into the mail server's ASCII buffer causes the "Good Times mainline program to initialize and execute. The program is highly intelligent- it will send copies of itself to everyone whose Email address is contained in a receive-mail file or a sent-mail file, if it can find one. It will then proceed to trash the computer it is running on. The bottom line is: - if you receive a file with the subject line "Good Times", delete it immediately! Do not read it" Rest assured that whosoever name was on the "From" line was surely struck by the virus. Warn your friends and local system users of this newest threat to the Internet! It could save them a lot of time and money. Could you pass this along to your global mailing list as well?
>George H. Bowers
>Vice President for Information Systems University of Maryland
>Medical System 410-328-2579 (fax)410-328-0572
>glowers@umms_itg.ab.umd.edu"
"History is not history unless it is the truth."
Abraham Lincoln
>Tania Gensemer
>tgensemer@nbn.net
>http://users.nbn.net/~jgensemer/tarua.html
>http://users.nbn net/~jgensemer/journali.html
>WE RECEIVED THIS MESSAGE. WE DO NOT KNOW IF IT IS TRUE. TAKE PRECAUTIONS
Tim Malone Marketing operations Mgr. Sierra Design Labs Phone: (702) 831-7837 Fax (702)831-5710

Thanks for the warming; I won't bother to write a lot on that subject.

I recall this incident when it originally happened. It turned out to be a hoax. Al least as far as PC users are concerned, there is NO WAY that reading an Internet message can introduce a virus into your computer. (Sounds like a challenge to me, GATOR.)   Some

UNIX mainframe users were concerned at the time that such a virus might be possible for UNIX mainframe systems; I do not know if those possible concerns were ever resolved, but (again) no "Good Times" virus was floating around that represented ANY threat to ANY computer user from just reading Internet messages.

This kind of story can scare people off of the Internet altogether; you might want to send a message (or forward a copy of this message) to anyone you sent the original message to, in order to set the record straight.

Gil Parrish
73430.1546@compuserve.com

The enclosed disk has an updated QMOSAIC article which I mentioned, sorry to be tardy in sending it. John Donaldson sent me his copy of QL Today and it is £ 30 per year, six issues. There is/was apparently a £ 15 credit for those who got burned by IQLR.

Bill Cable told me that Stuart Honeyball of Miracle Systems and other QL notables will be producing QL Today.

Bill also mentioned the QPC, a QL software emulator that runs on a 486+ computer. On a 486DX-66 the equivalent approximation is a 16MHz Gold Carded QL based on a prerelease demo at NESQLUG. The projected cost for the QPC is either 199 DM or $200. The buzz is about the viability of having a **portable QL.**

A few weeks ago, I decided that it was time to upgrade my 20 MHz. 386DX chip and replace it with a 486 chip (CPU) ($50 + $7 shipping) from Surplus Direct. It arrived a couple weeks ago, but I have had to resort to the *secondary* initiation syntax since the primary syntax is unstable (approx. 93 MHz. may be with a bigger heat-sink or fan). I am getting the increase of up to 300% that it claimed. Regardless of syntax, the video speed increased by a factor over 8X; so, it was a good enough investment.

That's the news that comes to mind ....

Al Feng
Albuquerque, NM

Form Germany

HELP

For our American friends : I am looking for these programs:

Thrust, SincArtist 1.3, SincArtist HR, ZX-Text, ZX-Calc and ZX-Calendar

HENNING RÄDER
EMMERICHER STR. 35
46147 OBERHAUSEN
GERMANY

You can try:

NEAL SCHULTZ
PO BOX 101
BUTLER WI 53007
USA

The material for the newsletter will be mailed a few days after the Dayton ComputerFest since I am going. Rod Gowen's wife passed away in July.

I won't have anything special for the newsletter since nothing was submitted to me. Just the latest ads from Frank and RMG.

Don Lambert
Auburn, IN

ZX-81 HiRes Graph
by Henning Räder

```
95   RAND USR INIT
100  RAND USR GRAF
105  RAND USR 16609
110  INPUT D
8500 FOR I=0 TO 250 STEP 10
8502 PRINT USR 18557;I,0,1,I,180
8504 NEXT I
8506 FOR I=0 TO 180 STEP 10
8508 PRINT USR 18567,0,I,1,250,I
8510 NEXT I
8512 FOR I=0 TO 180 STEP 10
8515 PRINT USR 16752,0,I,1,STR$
(I/20)
8517 NEXT I
8520 PRINT USR 16752,60,180,1;"S
CHWINDWERTDARSTELLUNG"
8524 PRINT USR 16752,40,160,1;"■
■MAX. SCHW.W. ";" ";8,5;" ";"0/0
0■"
8526 FOR K=D/10 TO D+D/10 STEP D
/10
8528 PRINT USR 16752,D/D*K/D*(K/
(0.5*K))*115,5+(5*SIN ((K*10/D*9
0/180*PI))),1;STR$ K
8530 NEXT K
8535 PRINT USR 16752,20,170,1;"W
IEVIEL SCHWINDWERTE: "
8540 INPUT N
8541 DIM K(30)
8542 DIM A(30)
8545 PRINT USR 16752,20,150,1;"■
N= "+STR$ N
8548 PRINT USR 16752,20,170,1;"Z
EIT+SCHWINDWERTE EINGEBEN:"
8549 FOR Z=1 TO N
8550 INPUT K
8552 LET K(Z)=K
8553 PRINT USR 16752,20,140,1;"■
■■T= "+STR$ K(Z)
8554 IF K(Z)>D THEN LET K(Z)=D
8555 INPUT A
8556 LET A(Z)=A
8557 PRINT USR 16752,100,140,1;"
■■■SCHW.= "+STR$ A(Z)
8558 NEXT Z
8560 FOR Z=1 TO N
8570 PRINT USR 18557,(K(Z))/(0.5
*D))*125,A(Z)*20,1,((K(Z+1))/(0.5
*D))*125,A(Z+1)*20
8575 IF Z=N-1 THEN GOTO 8585
8580 NEXT Z
8585 INPUT N$
8587 IF N$="1" THEN GOTO 9991
9991 RAND USR 16600
9992 SLOW
9994 STOP
9996 SAVE "SCHWINDUNG/HRG■"
9997 GOTO 95
9998 RAND 1
9999 RAND USR 15913
```
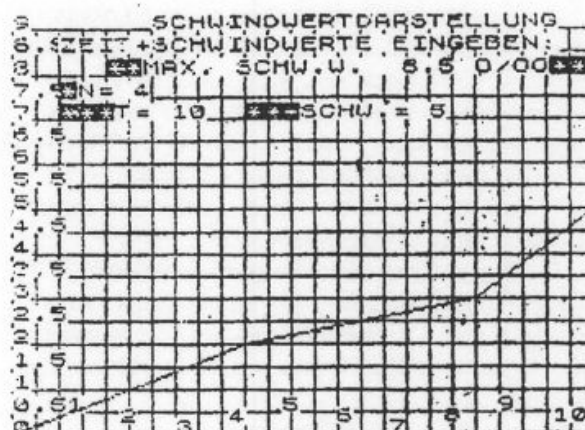
All went pretty well with our FEST weekend. We got the boys home before 10: PM local. We did indeed see the Air Force Museum and stayed the recommended 1 hour. Came back and said good-bye to the SMUG, T/SNUG, FWD Computing and UPDATE! folks and began the long drive home just after 4PM.

Got a loud noise in the front left wheel just before dropping the boys off and had to limp home. Turns out that the wheel became loose on the studs and a simple tightening of the lug nuts fixed it.

One boy, Bob Muth, is having trouble with the $100 dollar hand scanner he bought, it looks like the serial number was scratched off. I'll let you know how it goes.

We sure will miss Tim Swenson!

--==GATOR==--

ComputerFest 96

Bob, Here is the E-Mail I told you I would send. Since the show, I have been unloading the displays and trying to fix the cars so I can get to work next week. I hope you were able to get to the Air Force Museum in time to see some of the displays.

We all went Mon. afternoon. The grandkids all wanted to climb inside all the active displays. I have to get back to the cars and fix the problems. No word on attendance at the Fest yet.

Gary Ganger
gangerg@dmapub.dma.org@INTERNET

TTSUC Disk Library

The oddball disk,

For some reason, I got the impression it had to do with quad-density disk drives (80 tracks per side), which may explain why you can't read it. I've only run into quad density drives on the old Commodore PET line, which had some quad single sided and even some double sided (over a meg. per disk) drives. Strangely, you were better off using standard DSDD disks in such a drive rather than the HD 1.2 meg disks made now; they don't make genuine quad floppies any more.

>>Disk #2 is a must have

Well, then I must add disk #2 (Utilities) to the list!

Do I need to send you blank floppies, or an advance check, or how do you want to do this?

>>Yes please, send formated blank disks for two reasons; 1. It speeds up copying. 2. I don't have a local source for reasonalbly priced disks.

>> As far as the printer driver, if the selections of AERCO, Tasman or A+J didn't do it for you.....

They didn't, but of course I may have botched it somehow. If you know something is SUPPOSED to work, it's easier to concentrate on it until it DOES work.

>>You may have to hack it. I am not clear on what Bob's reply to you was!!!

Nothing yet; just asked the question yesterday. If he says something of particular note (and I suspect I'm not the only guy with a Byte-Back interface trying to use a LarKen/LogiCall setup), I'll pass it along to you for ZQA! Sincerely,

Gil Parrish

I did get the original LarKen manual and have the basics, at least enough to get a disk directory and such.

LogiCall just arrived on Friday; it really is an improvement over ordinary LarKen DOS. The AUTOSTART with ENTER held, and the start-up disk menu that can be used to load the appropriate files are my major favorites, but the utilities built into the start-up disk menu and the seamlessness of going from one application and back to the menu without rebooting are a close second!

I've hacked it and gotten nothing. I have a Byte-Back parallel printer interface, and it isn't on the (short) list of supported interfaces. It may be that it's compatible with another listed driver, or that it can be hacked, but it doesn't seem to work "out of the box".

Yeah, I've contacted Bob Swoger directly, and he stated since it hasn't (LogiCall) changed in a year or so, and since it appears to be bug free, he likely won't mess with it any more. I've asked him the printer question, so with luck I'll get an expert answer.
As always. Thanks!
Sincerely,

Gil Parrish 73430.1546@compuserve.com
ROUTE 1 BOX 705
BEGGS OK 74421

Anyone out there who had experience with the Byte-Back printer interface using the LarKen DOS,

We need your HELP

To: Bob Swoger

I was away from the office yesterday. I was attending the COMDEX exposition downtown.

It's good to hear that you are getting responses for LogiCall and that there is still interest in the 2068 and the disk systems.

I will certainly forward the software. I know that George still corresponds with a few of the out-of-town users so I will make sure he gets it as well.

The core group of TTSUC still get together every 4 to 6 weeks. Mostly we talk about the computing world in general although each of us has brought in Timex-Sinclair tidbits.

Ex-pres Rene Bruneau still tinkers with the ZX-81 and is in contact with a developer in Holland and the old VSUG group. They continue to do amazing things with the ZX-81/TS1000.

I still have boxes of T/S stuff. Is anyone from your group coming this way this summer? I would still like to find a home for it and as I am moving to a new house early in September I would like not to have to pack it.

As to the order, please let me know what you still want so I can separate that stuff from all the rest. It occurs to me that we still owe you one working drive. Let me know. Regards

Jeff Taylor   TTSUC - Canada

Hey all,

Well, as you may or may not know by now, I'm planning to take my SCC BBS on-line to the Internet, an **Internet version of my BBS.**

Well, I'm about %75 done with configuring the server system, and I would like to know if any of you Sinclair users would like to add any material or anything to **scc.org** before it goes on-line.

It will be about 2 to 3 months before it does go on-line so, take your time. But I would like to know if you all have anything you would like to add to the server.

Thanks

Jose Moreno
North Miami Beach, FL

FROM THE CHAIRMAN'S DISK 🔒

Donald Lambert

Dayton ComputerFest 1996 is now history. As far as the TS'ers go there were fewer of us there than last year. This time I did not have a huge want list to take with me. I did leave home with a warning "DON'T BRING ANYTHING BACK!" Well I did bring a few things back but they were very small and did not raise the ire of my wife. I brought back a book, 100 used 3.5 disks and an IBM power supply. My wife only saw the book.

This is the first time that setting up was easier to do since we were closer to the door. Always before we had to go in through the first room to the room we had tables in. I met Paul Holmgren and Frank and Carol Davis at Red Roof and then we went over to Hara Arena to set up before we went out for dinner. And since I helped them, I had an Exhibitor Pass that allowed me to enter before the doors were open.

The weather was milder but it still got hot and sticky inside. But not as bad as last year. This is the first year that they had two ComputerFest in one year and I think that the attendance was less this year than it was last year at this time. But I did notice that very few walked around with empty hands. Seems I saw more wheelchairs and strollers this year. And they paged a name and said "You are wanted at home right now!" That does make one wonder why?

I learned of still more software for the T/S 2068. One is for the Oliger disk interface, it to loads IBM snapshots into the T/S 2068 and the other is a way to LOAD the Oliger, LarKen disks, into the AERCO disk system. There is a lot of stuff out there if someone learns that it is there. Now if there were a program to allow one to LOAD any of the three 2068 DOS into the IBM PC using the 2068 Emulator, then that conversion would be so much easier.

> I am entertaining offers to buy out all of my TS inventory. If you are interested, please get in touch. I'm also looking to sell all of the new/used IBM clone hardware/software that I have in stock.
>
> Thank you for your continued support.
>
> **Rod Gowen**

Rod Gowen of RMG ENTERPRISES may go out of business since his wife passed away in July. She has been in poor health for years so it was not completely unexpected but not expected at this time. Since Rod has a vision problem that slowly gets worse and worse and he reads by using a closed circuit TV that magnifies the images, that makes it hard to do business without help. He will do whatever he can do but, he no longer has his wife to help him in his business as in the past.

Tim Swenson is leaving the Ohio area and is now interviewing for a place to go to. He was not satisfied with the future at the Air Force. He will still be with the same computers but in a new location.

Paul Holmgren and family are still not into their house since the fire, right after Christmas 1995. Maybe, hopefully by November they will be back into their house. Cause of fire was not fully determined except that it points to a two year old furnace.

Frank Davis reported that there are as many people that he has learned of through the Internet than he knew of before who are TS'ers. Almost everyday he gets orders from someone that he has not heard of before by way of the Internet. And at $20 a month, that is the cheapest rate for advertising he has paid for the business it had generated.

I have started to learn and relearn electronics to better understand these computers that we use. I will never be able to fully understand how they work but will know more. With the HeathKit ET3200 and the ET3600 training modules, I am able to do experiment easily in either digital or analog circuits. I had picked up those two units at HamFest for about a thirtieth of the original price but with no documentation, but I have recently gotten that. As soon as I get some household projects completed, I will get back to learning more about electronics. At the Dayton ComputeFest I did pick up a Heathkit book on "Semiconductor Devices" which is a book heavy on theory and very little hands-on experience. But it will explain what the other text material that is very much hands-on material does not explain fully.

With the summer getting close to the end, I will be getting back to typing the tutorials again and also to getting all of my T/S 2068 software (cassette based) onto disk. And I will be experimenting with transferring programs directly from computer to computer. I will have plenty to do if I get the chance to do it without a new household project getting put on a priority basis. 0/0

To Frank and Carol Davis

Scott Adams has had a lot of fun with the word DownSizing lately in his Dilbert comic strip. In a way downsizing may describe what is going on right here in the Sinclair community. Magazines all over the world exist only when it is profitable for the hard working publishers to expend their valuable time and energy. The profits of most magazines come mainly from the advertisers rather than from subscribers. Certainly our advertisers can't afford that expense any more when they are no longer getting a return on their investment. To continue, we have to downsize by giving up our magazine.

Though the magazines are gone, the Sinclair platforms and their users are not. Sir Clive Sinclair introduced his first computer to the world SIXTEEN years ago and changed the lives of many whether they bought a Sinclair platform or any other by making a computer for the home that is affordable. Clive's machine drove the price down on all the other platforms. If you couldn't get your price down, you were out of business. Our UK friends said it this way, "Sir Clive made computers for people with empty coal buckets at home".

Now people selling computers and related products, would tell you today that in the home there are only the main stream computers of today's market and the obsolete computers of yesteryears. We often find them both in the home but we prefer to call them the APPLIANCES and the PROGRAMMABLES. Can you really imagine yourself trying to program an IBM or Macintosh? The thing these APPLIANCES do best is run canned programs and applications. Go out and buy one, take it home and stick it in the appliance. If you don't like it, either get over it and get used to it or go out and buy another.

A PROGRAMMABLE, you go out and buy it at less cost if you feel you must start that way. If you don't like it, get into it and make it better or start over and write your own programs. PROGRAMMABLES are the Sinclairs, Commodores, and Tandy Color computers. They stay alive because they remain useful to their owners as PROGRAMMABLE computers.

The loss of our magazines which allowed us to stay in contact with vendors and others is hard to take but we can move on and still be supported by newsletters, BBSs and perhaps the Internet.

In the end, it was more than making money that kept UPDATE! Magazine alive, it was the charitable hearts of you both, Frank and Carol Davis, doing it for the Sinclair community. Though this phase of your life comes to a conclusion, we will look forward to seeing FWD Computing going on to help the Sinclair community as well as the communities of other computer platforms. Thanks for your efforts, you did it for us so long and so well!!

--==GATOR==--

Disk Doctor

by George Chambers

Disk Doctor (doctor.Bl) is a program which will be found useful in the inspection, analysis, and correction of errors on disks used on the LarKen Disk Drive System (DSK400). The following notes will explain the various features of this program and describe how to make best use of theme

The program is menu-driven. That is to say, there is a main menu to which one can always return to at any point in the operation of the program.

As each of the menu items are in use a sub-menu will appear at the bottom of the screen indicating what options are now available. Usually they offer the opportunity to COPY the screen, or to return to the main menu. The sub-menu of Option 4 is more extensive, and will be described elsewhere

We shall review the options on the main menu:

Option 1. "TRACKS USED/FREE". By selecting this item you will obtain a display of the 'Used/Free' status of each of the 80 or 160 tracks of the disk.

Option 2. "Program Header Reader" Does a track by track inspection of the disk and outputs an screen details of the program segment on each track. The information includes the Track Number, the program/file name, the starting address in memory of that particular track, and the full length of the program. It also gives the starting address if it is a program.

Option 3. "DIRectory ANALYSIS" Will provide information an each program contained on the disk, such as program name, tracks used.

Option 4. "EXAMINE/MODIFY A TRACK" This is really the heart of the DOCTOR program. With this option you can inspect the contents of each track, modify the data as desired, and save the modified track contents to the same track or to another track.

Option 5. "PROGRAM START/LENGTHS" This option provides details on each program on the disk. Details include program/ file name, it's starting address and length, and the starting line Number, if a program.

Option 6. "RENAME A PROGRAM" Is a subroutine which enables one to rename a program. This routine will rename the program on the directory track, and also the name label on each track where the program is stored.

Option 7. "SELECT DRIVE" Lets one select a drive 0 to 3. It initially reflects the system default drive value of "0".

Option 8. "RETURN TO RAMDISK MENU" Allows you to exit from this program.

Option 9. "SAVE THIS PROGRAM" A way of saving this program to disk or optionally to tape. Select the correct drive first.

HEADER READER (Menu Option 2)

The Header information displayed onscreen includes the track number, the program name, the program starting address (START), program length (LENGTH), and starting line Number. The Starting address can be either the start of a BASIC program or the start of a block of codes -

The LENGTH refers to the length of the program, whether it be a BASIC program, code, or arrays.

The ST refers to the starting line of the program. Where the entry shows a figure of -1 this is an indication it is not an AUTOSTART program.

EXAMINE/MODIFY A TRACK (Menu Option 4)

Track 0 in the LarKen system is the DIRectory track; that is to say, it is the track which contains all the information required by the LarKen system to manage the storage and retrieval of programs/data an the disk. The make-up of this track is shown in the LarKen operating manual.

When menu Option 4 (EXAMINE/MODIFY TRACK) is selected you will be asked which track you wish to have LOADed into the computer memory. Usually this will be track 0, and initially we shall confine our discussion to the procedures likely to be used on this track.

As soon as track selection has been made you will be presented with a display of the contents of track 0 (assuming track 0 was selected), starting at byte "0" of the track. The first part of the directory track has no immediate interest, so press the "N" key.

Now, before proceeding any further let us explore the sub-menu that appears at the bottom of your screen. Although the menu on the screen has been arranged in alphabetical order we shall discuss them in the sequence they are most likely to be used.

Name — we have already pressed this command in the previous paragraph. Pressing the "N" key advances the scan to the start of the program name cell area.

Cont — Pressing the "C" key will advance the display by 17 addresses, or exactly half of a name cell of 34 addresses as stored in the directory track.

Etc — The "E" key advances the scan by exactly 34 bytes or a full name cell. Because the first 17 line screen contains the most-often wanted data, pressing the "E" key expedites movement through the file.

Jump5 — Pressing the "J" key advances the scan by six name blocks, Most useful when the desired program name cell is far along the directory.

Back — The "B" key permits a backwards movement of one frame of 17 addresses (one half a name cell)

Dirc — The "D" key moves the scan forward to where the disk name is stored on the directory track. Useful when it is desired to change the disk name.

Zend — The DIRectory track has a marker "250" to indicate the end of the file name area. Pressing the Z key moves the scan to that point in the file.

Top —.Pressing the "T" key will restore the scan to its initial position; at the start of the buffer.

Alter — The "A" key is pressed when it is desired to make a change in the contents of the buffer.

Save — Pressing the "S" key is done when it is

desired to save the buffer to a disk track.

Load — The "L" key is used to call up another track for inspection. You will be asked to input the new track number. Using this key avoids the need to return to the main menu to select a new track.

Menu — The "M" key is used to return to the main menu.

When the buffer is being displayed per Option 4 there are some column headers which bear explanation. addr refers to the address in the computer memory where the buffer is being stored. There are circumstances where it is desirable to break into the "doctor" program to make a direct POKE into the buffer. The information in this column will help to locate the desired address.

Map — is a buffer address, which somewhat parallels the address information, but represents the address where this data is held on the disk track. Do not confuse a 'map' address with the address in the computer memory where this track data is being temporarily stored.

Byte — The value contained in the corresponding address.

**CHR$** — The character corresponding to the byte. Also, where the byte number corresponds to a file marker, the program prints out an asterisk as a visual signal. Primarily, this column is useful in displaying the program name; the CHR$ elsewhere serve no useful purpose.

@track — Shows the track number selected.

TRACK "0" (DIRectory Track)

It is probably appropriate at this time to talk about the make-up of the DIRectory track "0". In the operation of the LarKen Disk Operating System (LKDOS), track 0 contains all the information required to store and retrieve data from the other 79 tracks on the disk. The make-up of track 0 follows very precise rules, and this makes it possible to go into the track and make changes/corrections if necessary.

There are 5128 bytes on a track. Of these, the first 20 bytes (0 to 19) are reserved and used for DOS variables and as DOS work space. These bytes are not significant for our purposes.

At address 20 we start the Track Map Area. This address holds figure of 1 or 2 corresponding to the number of sides that have been FORMATted. The next address, 21, holds a value corresponding to the numb4r of tracks formatted per side on this disk.

Map addresses 24 to 187 are used to store the track used/free status. When first formatted addresses starting at 24 are filled with values starting with 1. The numerical sequence continues until the number of tracks the disk has been formatted to is reached, 80 in the case of a DSDD format. The remaining addresses are filled with a value of 245.

Whenever a program is SAVEd or erased a "245" marker is placed in the appropriate location by the DOS. The DOS checks this Track Map area to locate free tracks to hold a program to be SAVEd. Likewise, Option 1 of "doctor.Bl" Main Menu inspects this area to determine track status.

When we get to map address 188 we find the start of the DIRectory Name Cell area. Each name cell consists of 34 bytes of information. The first byte contains a marker, "255". Then follows the familiar 6-character program name/3-character suffix in the next 9 addresses. Note that if a name is less than 6 characters long the empty spaces after the 3-character suffix are occupied by values of 32.

An end-of-name marker "253" follows the name. The next map addresses contain the track numbers assigned to this program. The last assigned track number is followed by a (floating) end-of-tracks file marker "249". In an unused Name Cell the "249" immediately follows the "253" marker (since no tracks have been assigned to this name cell).

When a program has been removed from the disk by the DOS "erase" command the material on the disk is not removed. Instead, a marker "254" is placed in the address succeeding the name cell marker "255".

A name cell is designed to hold a maximum record of 22 tracks. If a program occupies less than 22 tracks, the unused map addresses remain in place unused.

There are 100 Name Cells in Track 0. At the end of the track, at map address, you will find a value of 250. This is the end-of-DIRectory marker, and indicates to the DOS that the search of Name Cells has finished.

Once a track has been loaded into memory using Option 4, one can then scan through it using the sub-menu options 'c', 'e', 'j', and 'b'. When it is desired to change a value in a particular address press key 'a'. This will bring up the query "Change Number or Char". If it is a numerical value to be changed press the "N" keys. If it is a name change (characters) then press the "C" key.

You will see a black cursor opposite the bytes column, at the top of the screen. The position of this cursor can be controlled by the "Q" and "A" keys. An instruction to this effect will appear on the lower section of the screen. Using the Q and A keys position the cursor opposite the first address (byte) to be altered, then press the ENTER key.

When the ENTER key is pressed you will be asked for an input. If a name change is required enter the required string, it can be anything from 1 to 9 characters as desired. When the string is ENTERed the screen will be recycled showing the changes that have been effected.

In the event that a numerical input was requested, i.e. the "T" key was pressed you will be asked to input one or more numerical values. These of course must fall within the range of 2 to 255. When working on the track information on track 1 the numerical sequence will normally terminate with a "249". The program when it senses an input of 249 will automatically terminate the sequence, recycling the screen to show revision.

Now, there doubtless will be occasions when you wish to terminate a numerical sequence without the number 249. In this case, ENTERing the number 2068 will terminate the sequence. The 2068 is treated as an indicator and is not used in the sequence,

There may be other occasions when you wish to enter the 249 outside it's use as a program marker. On these relatively rare occasions it will be necessary to break into

the program, POKE the number into place, then continue by pressing the "C", then the ENTER keys.

When all the changes required have been made to the track, you will want to re-save the corrected version. Keep in mind you will be replacing the existing track record with your new copy; the original will be lost. Press key 'S'. You will see on screen the message 'Save to same track or new track'. Normally you will want to save it to the same track. In this event press the 'S' key. The drive will run momentarily, and the track is SAVEd. This presumes that you have removed the write protect label!

If you wish to save the data to another track, enter 'n' and you will be asked for a new track number. Enter the new track number and the SAVE will proceed as before, but to the designated track.

While most of your efforts with DOCTOR will be directed to track 0, it is possible to perform the same functions on any track. Mostly the information on the other tracks will not be intelligible. However it is possible, by pressing the 'T' key to get to the start of the track, and

at map addresses 2 to 11 see the program name stored on that track. Also, at map addresses 12 and 13 you will find the starting address of this track's portion of the program (where it is placed in the 2068 memory). For

a BASIC program these addresses will hold values of 104 and 86, representing 26710. For Spectrum programs the corresponding values would be 203 and 92 (23755). For an NMI-type program they would be 218 and 87 (22490)

We noted earlier that one could find the name of the program at the start of every track map #1 to #79. This information is not used by the DOS in any particular way but it is useful to be able to look at a track to see if the program name on that track corresponds to the record in the DIRectory track>

QMOSAIC CHRONICLES by Al Feng

In Albuquerque, patrons (i.e., library card holders) can have one free hour of INTERNET access per week (Email is not allowed). After my hour on the NET, I had the opportunity to see how NETSCAPE (v2.2) compared with Omar Valenti's QMOSAIC (v0.77) web browsing program for QDOS users.

While QMOSAIC is subordinate to the Pointer Environment, it does not take full advantage of it at the present time. QMOSAIC is further at a disadvantage for being based on XMOSAIC instead of contemporary (i.e., Windows) web browser like NETSCAPE.

Since I don't telecommunicate, I will not be discussing the actual performance since performance is dependent on your MODEM and CPU speed. My local library branch has a Pentium-75MHz computer; and probably has a very fast MODEM too.

CHE COS 'E' UN'HTML?

First, kudos to Omar Valenti for his efforts at providing a QL program to filter the HTML (Hyper Text Markup Language) which can link sites using FTP (File Transfer Protocol).

While the HTML standard is evolving, basic aspects remain the same. I don't know what made NETSCAPE's implementation superior to others which are no longer being updated (the fact that early versions of NETSCAPE were "free" might have been significant with NETSCAPE hoping that the INTRANET implementers would "buy" their server software). From what I gather (and, this could be wrong),MicroSoft (the last remaining player in the web browser arena)would eventually like to implement their own language script even though their EXPLORER program currently reads HTML. Long live NETSCAPE!

HTML IMPLEMENTATION

The HTML script information is included in angle-brackets. Besides structuring the page, it determines such

things as, BOLD face <B>, BOLD off </B>, underline <UL>, underline off </UL>, line feeds <LI>and breaks <BR>, et cetera. Site addresses are HREFed.

I cannot tell you what all the bracketed codes mean, but for you to better appreciate what QMOSAIC (and, NETSCAPE, et al) does let's look at a sample input/output.
<title> FTP Sites </title>
<h1><IMG SRC="/icons/cannoc.gif" align=bottom >
<h2>FTP: <h3>File Transfer Protocol and ARCHIE</h3>
<hr size=40>

Here are some <B>File Transfer Protocol </B>sites useful for downloading <BR> software or other information.

<LI>
To that end, ARCHIE is a tool for an open search of a file within the <BR> scope of the available public domain software via anonymous FTP.

<LI><LI></UL>In other words, don't be discouraged if the sites provided are not <BR> enough: seaMAC software on the Net </A>
<LI> <A HREF = http://www.compuserve.com/isd/ftp_faq.html"> FTP: Questions and Answers</A>
<LI> <A HREF = "http://tesuque.cs.sandia.gov/mac_ftpsites.html">MA C FTP sites </A>
<LI> <A HREF ="http://coyote.csusm.edu/cwis/winworld/winworld.html" > Windows Shareware Arvhive </A>
<LI> <A HREF = "ftp://ftp.microsoft.com"> MicroSoft Site </A>
<LI> <A HREF = "http://www.sanger.ac.uk/ftp-starting.html">Anonymous FTP sites </A>
<LI> <A HREF = "http://www.ripco.com:7unSITE Software Information and Technology Exchange</A>

<LI><A HREF = "http://sunsite.unc.edu"> WWW - SunSITESoftware, Information and Technology Exchange</A>
<LI><A HREF = "http://ricotta.ucs.ubc.ca/cgi-bin/AA"><aname=" ARCHIE Search</A>
<LI><A HREF = "http://alpha.acast.nova.edu/software/find.html">Finding Software</A>
<h3>Per Cercare nella Rete (Search Engines)
[<ahref="http://webcrawler.cs.washington.edu/WebCrawler/WebQuery.html"-><b> WebCrawler | <

The screen output to (my translation to English):

FTP: File Transfer Protocol and ARCHIE

Here are some File Transfer Protocol sites useful for downloading software or other information.

To that end, ARCHIE is a tool for an open search of a file within the scope of the available public domain software via anonymous FTP.

In other words, don't be discourage if the sites provided are not enough: (launch a) search for the filename (or, a sub-string of the name) which interests your through ARCHIE, and pre-supposing the software title exists as named by the specific string, here is a list of FTP ndoes, addresses and directories ... [to get you started]

_[1] FTP : Questions and Answers
_[2]_MAC software on the Net
_[3]_Windows Shareware Arvhive
_[4]_Microsoft site
_[5]_Anonymous FTP sites
_[6]_WWW = SunSITE Software, Information and Technology Exchange
_[7]_Archie Search
_[8]_Finding Software
Cercare nella Rete (Search Engines)
_[9]_Webcrawler |

The example is a truncated version of the "ftp1_htm" file which came with the v0.77 which I translated from Italian to English. As you can see, Omar has made a significant effort in the versions that he has already produced.

RUNNING THE PROGRAM

Okay, so the first trick was to actually LOAD the program.

Before trying to run the program, I first read the "history_txt"(which was in Italian) and ascertain that there was a short teething period, but that the version I had (0.77) was "pretty good" (or, was that "good enough"?).

Most of the other files were "_htm" suffixed, and generally in Italian.

After numerous failed attempts to LOAD the program, it occurred tome in a lucid moment that program might run under the all-too-popular-in-Europe POINTER ENVIRONMENT. Eureka!

So, to run the QMOSAIC program you will need to activate the POINTER ENVIRONMENT files (NOT INCLUDED), and minimally have a BOOT program that looks like this:

```
100 TK2_EXT
110 lrespr flp1_ptrgen: lrespr flp1_wman: lrespr flp1_hotrext
120 EXEC flp1_qmosaic_flp
```

The qmosaic_flp program is simply the QMOSAIC program wherein I converted the default "win1" to "flp1" for my own convenience. Of course, there was no "qmosaic_flp" file in the QMOSAIC_zip that I received.

When you run the program, you will find that it is anticipated that the "_htm" files will be found in a default sub_DIRectory named "qmosaic." You can change this.

RUNNING THE PROGRAM

To effectively run the program, you must be running your QL in monitor mode.

The first thing you will see when you run the program is a "welcome" screen. The screen has a top bar with four "black box" options -- two of the options are for sizing and moving the POINTER ENVIRONMENT window, and the other two are for the actual program ("File" and "ESC").

The "ESC" option is redundant; and, you can ESCape from within the "File" option.

The "File" option has the following branches:

Open _html
  Change directory
   Print page
    Links..
     About
      Exit to SMSQ

After you open the "File" option, you can either use the pointer or simply press the key which corresponds to the underlined character.

OPEN HTML

This, at first, seems like a pretty silly option since it defaults to the name of the "_htm" file that is (probably) already open. I found that this option allowed me to verify which "_htm" file I was editing. It can also be used to access a file that is not readily available via the "Change directory" option.

CHANGE DIRectory

As stated above, the program default is for a sub_DIRectory named "qmosaic." When you first select this option, you will be presented with a small box announcing the "_htm path" and a user re-definable "win1_qmosaic_" default. Either press the ENTER key to accept, or change (of course, if "win1_" is not your default DIRectory, you may want to use the converted qmosaic_flp version).

Depending on the number of files in the sub_DIRectory, it appears that you will be presented with a maximum of 18 filenames (3columns by 6 rows). If you have more than 18 filenames, the 19thand beyond cannot (apparently) be accessed. If the filename does not have an "_htm" suffix, it will not be recognized.

You select the name of the file you want to open by moving your pointer until the name is framed, and then press ENTER.

The file will be opened, and you will likely see multi-colored, variably sized text. The original files seemed to make heavy use of green text (the background is white),

as Peter Hale once remarked to me, this is very difficult to read on a color monitor.

These have been changed in the English language files.

PRINT PAGE

This option did not work for me and was excluded from version0.80a. Hopefully it will be "fixed" and implemented subsequent versions.

Having used NETSCAPE, it clearly is designed to echo the material on the screen as printer output.

LINKS

This is apparently the activating part of the hypertext feature of the program. It appears that the program defaults to presenting six other _htm files in the sub_DIRectory. It can be used for linking to other "_htm" files or for "jumping" (connecting) to an INTERNET address.

If you open the "FTP1_htm" and then access the LINKS, you will be given the following, truncated options:

http://hoohoo.ncsa.u
http://mtmis1.mis.se
http://rever.nmsu.ed
http://www.compuserv
http://tesuque.cs.sa
http://coyote.csusm.

These are partial addresses (I'm surprised that some are "located" in New Mexico!), and the full address can be seen when you view the "FTP1_htm" file through a text editor.

There wasn't any apparent way to scroll the list to access the other 18 options provided "Onion Communications & Technologies"[NB: at this point I should point out that you will find that the ampersand has been changed {by me} to "and" because "&" is apparently a valid script symbol, but an invalid text symbol. Using an ampersand within a text will cause QMOSAIC (0.77) to freeze.

Although it appears that you cannot scroll through the LINKS, you can circumvent this limitation by segregating the additional addresses on different "_htm" pages.

You can also "jump" to the desired web-site by pressing numbers "1" to "9" (that is, the number keys). Onion Communications has listed more files than you can immediately access (i.e., you can't press a double digit since the jump occurs automatically).Circumvent this by only including 9 sites per "_htm" page.

ABOUT

This is simply a box which states the program name, version number, 'Hypertext for Sinclair QL', and copyright information. It also notes that the program is SMSQ compatible. Its only option is to exit by pressing the red bar "OK". EXIT

This is, as you might suggest, the method by which you exit the program. The option is to exit, or to resume "No".

DOES IT WORK?

Of course, I am not hooked up to the INTERNET at the

current time, so I cannot report as to how well it works; or even, how it functions once you are hooked up. I perceive limitations, but ... Presumably, once you are ON_LINE (dialed into your provider),

1) you would simply run the program
2) access the "File" option
3) access a page similar to the "FTP1_htm" file
4) access the "LINKS" option
5) select a web-sites (?) available via your HTML script
6) browse

You cannot prematurely exit a file read.

EDITING?

At some point you need a standard text editor. The various codes for the script size and color used are obviously standardized, but I only know what some of them are by having edited the various Italian "_htm" files.

It is perhaps little help at the current time to simply state that you should look at the various examples and edit/amend them. As I have noted, HTML is apparently an evolving standard; but, the information is undoubtedly available somewhere on the WEB.

FUTURE CHANGES?

While it is certainly easy to say, I suspect/expect that better implementation of the Pointer Environment will eventuate by the time the program reaches integer enumeration.

NETSCAPE only presented the viewer with a half-dozen HREFed sites per screen page. Although it is easier said than done, if Omar modifies the program to show only a fixed number of sites per screen, then it shouldn't be too difficult to implement the POINTER ENVIRONMENT instead of the number-key-press method currently employed.

ABOUT THE ENGLISH TRANSLATION

I will note that I have not translated all the text because my knowledge of Italian is really limited to using The Oxford Paperback Italian Dictionary [ISBN 0-19-282184-9 (pbk.)].

While some of the translation is verbatim, some is not. Some of the words (e.g., "possono") were too obscure, and sometimes I wasn't quite sure what the intent of the author was (as with the comments about QITALY and Jochen Merz <presumably grateful>), and so that text was not translated. Apologies for any omissions, and certainly for errors (!), to what the author(s) of the original "_htm" files intended.

My understanding is that QMOSAIC is in the public domain, and version 0.77 with "_htm" files translated from Italian to English are available from both NESQLUG and TSNUG's PD library.

HAPPY TRAILS ...

AND COMPUTING, TO YOU ...

WYATT EARP: Was known to change history to suit himself and since he outlived all the others he said he could tell the true story.

LogiCall LOGIC

Explanation By The Author

LarKen users who have not yet tried LogiCall have told me that ads and articles had not clearly explained how the LogiCall Ensemble could help them. They had, therefore, not taken the opportunity to buy and use it. After sending them a copy of LogiCall, however, they were pleased with not only the speed but also the new and easier way to execute LarKen file management functions as well as the added utilities and improvements made to the BASIC drivers of many popular TS2068 programs.

LogiCall reduces the number of keystrokes required for LarKen's LKDOS. All the keys labeled by TIMEX for DOS operation, now work without being preceded by RANDOMIZE USR 100: or PRINT #4: The best reason to use LogiCall is the EASE OF USE and the GREATLY IMPROVED SPEED of all the features of LarKen DOS.

The LogiCall Concept

LogiCall was developed after observing how the integrated software package MASS-11 ran on both a Digital Equipment Corp. mini-computer and an IBM PC. MASS is the acronym for Management Administrative System Software. MASS-11 contained a word processor, data base, spread sheet, terminal package, date planner, FAX and network applications tied all together with help files and supporting utilities. When you turned on the computer, a menu of application choices was presented on the screen. You could call up the application you wished to use by pressing two keys followed by <ENTER>. Furthermore, the utilities included with the package allowed the files to be passed from one application to another. However, unless you worked for an aerospace, pharmaceutical, chemical company, research lab or bank, you probably would have never seen this software in action for yourself because the cost of MASS-11 was too high for home use.

It was disturbing to me that LKDOS required the user to type RANDOMIZE USR 100: LOAD "filename.ex" to load in a program from a menu seen only after typing RANDOMIZE USR 100: CAT "". I noted that quite a bit of computer time in front of the TS2068 was lost doing menial disk management. RANDOMIZE USR 100: or PRINT #4: always had to be keyed in ahead of the DOS management task calls for execution. Why should this be when the TS2068 has them on the keyboard - all the keys necessary for the DOS functions?

The Added Enhancements

The first thing I decided to do was to make all those DOS keys work without the RANDOMIZE USR 100: or PRINT #4: requirement. I also decided to write LogiCall to permit all the file management task calls EXEcutable by pressing just one key followed by <ENTER>, if one wished, rather than the TIMEX key sequence, like <E> <ENTER> or <7> <ENTER> instead of <SS> <CS> <ERASE> <ENTER>. Also, at the appropriate time the disk menu is displayed automatically on the screen. LogiCall can accommodate this. Furthermore, LogiCall is as transparent as possible. It shows no menus of its own, it looks to the user much like the LKDOS you were already used to.

Larry's CATalog screen looked very professional, all I added was a line to show which drive the system was pointing to and two prompts.

When you power up the TS2068 while holding down the <Enter> key, the CATalog of the disk in Drive 0 appears on the screen. At the bottom of the screen, you are given the 'Drive?' prompt to allow you to select any other drive on your system including the Tape drive. If another disk drive is selected, the CATalog of that disk is displayed. The 'Drive?' Prompt is then replaced by the 'Program?' Prompt.

Since many files on a disk are related to application support such as start-up screens and application machine code files, the concept of a Brief screen and Verbose screen was developed to make the disk CATalog easier to peruse.

The default disk CATalog displays only the basic files hiding the code and array files from view unless the V key is pressed at the 'Program?' Prompt. The user can return to the Brief CATalog by pressing the B key at the 'Program?' Prompt. The next logical thing to do is to either load in a program or perform some disk management functions.

Logically, the first time out, you may not know exactly how to proceed.

You may now press <?> <ENTER> or <H> <ENTER> to display a 'HELP' script on your screen. This two page help script provides a brief description of all the LogiCall functions. Brief means that although a key is given for every possible function, not all of the other key possibilities are given. You should read the manual through once to learn them all! Adding AUTOSTART to a disk is also briefly described here.

This HELP script may be accessed at either the Drive? or the Program? prompt and will always return to the proper prompt.

Not only is one key provided for all the disk management functions possible in LKDOS but there are several logical possibilities to perform that same function depending on your feeling of what that logic should be. For instance, to call the format routine you might use the keystroke sequence suggested by TIMEX, <SS> <CS> <0> <ENTER> to obtain the FORMAT key word. Though this is handled by LogiCall, the format routine can also be called with the sequences <F> <ENTER> and <0> <ENTER>, <0> being the key that has FORMAT under it.

To set the drive pointer, <D>, <G> or <8> returns the DRIVE? prompt to the screen, as does the POINT keyword sequence, when the Program? prompt is on the screen.

Don't Quite Get It Yet? To activate the LKDOS function in the chart below, LogiCall allows you to press any of the following sequences or keys below followed by <ENTER>. Look at your TS2068 keyboard and see if you can follow the Logic of LogiCall by studying the chart below:

To Key Activate:	Key Sequence	Key Labeled	Logical Letter or
AUTOSTART		N	
VERIFY		VERIFY	R

RENAME	5 (Sorry, this one isn't logical)
MOVE	MOVE 6 M
ERASE	ERASE 7 E
POINT	POINT 8 D G
CATALOG	CAT 9
FORMAT	FORMAT 0 F

Are you beginning to understand the Logic now?

To create an AUTOSTART on a disk press <A> <ENTER>. To save the LogiCall Exec. to a disk press <S> <ENTER>. AUTOSTART and the LogiCall Exec., L.Bl, should be on all your disks including the RAMDISK. They need only one track for each!

If you wish the system pointer to point to a new drive, you can press 0, 1, 2, 3, 4 or T at the Drive? prompt. When you do this the catalog of that drive and the Program? prompt will be displayed. Also, at the Program? prompt you can now press 1, 2, 3 or 4 to select yet another drive, see The Logic? Note that 0 is missing from the list. This is because 0 calls the FORMAT program at the Program prompt. If, however, the FORMAT program is not on the current drive, pressing 0 will select Drive 0 rather than the FORMAT program, see The Logic?

LogiCall changes its logic to suit your logic. You knew that if FORMAT.Bl was not present on the displayed catalog then pressing 0, the key labeled FORMAT, would only produce a 'NO FILE' message. LogiCall changed its logic because it assumed you knew what you wanted to do, change the drive pointer to Drive 0. And if you inadvertently press 6 instead of 5 at the Program? prompt to RENAME a file and the MOVE program which contains a RENAME routine is not on the current drive, the LogiCall RENAME routine will launch as though 5 had been pressed, do you see The Logic? LogiCall again changed its logic to suit your logic. You knew that if MOVE.Bl was not present on the displayed catalog, then pressing 6, the key labeled MOVE, would only produce a 'NO FILE' message. LogiCall changed its logic because it assumed you knew what you wanted to do, RENAME a file, a utility option of the MOVE program.

<T> and <W> call in the Terminal software and the Word processor software respectively. The terminal software can be MTERM II, LOADER V or MaxCom - in that order. If you have to briefly leave MTERM II for some reason, pressing <Y> will immediately return you to MTERM II if you haven't overwritten the machine code. The word processor can be TASWORD II, MSCRIPT or Spectral Writer - in that order. Of course, you may change LogiCall to call whatever you wish - it is written in BASIC.

The ability to peruse word processor files without first putting them into a word processor and displaying screen files on the monitor without first LOADing in a graphics application were features added for further speed and convenience. Also, LogiCall V6.0 automatically displays word processor files in 64 column mode if TASWIDE is also present on the disk. If TASWIDE isn't present on the current disk the files are displayed in 32 column mode.

The Ultimate AUTOSTART

To save a great deal of time, the feature of installing AUTOSTART to a disk by pressing 'A' <ENTER> was added instead of the user modifying some previously written menu program and copying it to another disk. Previous AUTOSTART programs sometimes took more than one disk track to store. AUTOSTART really needs to do little more than switch the right System ROM into service and call the next program to run. This makes Menu programs easier to write. Please take the time to read a previous article entitled "The Ultimate AUTOSTART" to better understand this concept. An updated version of this article is also included in the LogiCall V6.0 Manual.

Swap ROMS on The Fly

The AUTOSTART created by LogiCall V6.0 is capable of switching system ROMs. How that is done was discovered in the original LarKen manual but few people fully understood how to make it work. Thanks to the wisdom of a yet unknown Toronto area programmer, the LarKen user no longer has to hold the K key down at boot up or use the OUT 244,3 call to turn on the Spectrum ROM. Switching between the Timex ROM and the Spectrum ROM is accomplished by first pointing to a disk with the proper AUTOSTART and then pressing 'N' <ENTER> at the 'Program?' prompt. If you call what Les Cottrell calls 'The guilder Lilly' version of NMI-F.Bl from AUTOSTART, then pressing the LarKen NMI button followed by F will re-boot the system on the last drive you ran NMI-F.Bl, allowing you to exit gracefully from those otherwise exit-less Spectrum programs.

Improved Basic Drivers

BASIC drivers have been modified to provide better menus, easy SAVE and LOAD routines for both the complete application program and the data files they use. When data files are about to be SAVEd or LOADed, a brief disk CATalog is presented on the screen.

TASWORD II was modified to load and save files typing the filename only once and without typing the extension. LOADing and SAVEing to tape was also added back to the LarKenized version of TASWORD II. VU-CALC now has a HELP script!

The New Manuals

LogiCall V6.0 comes with two NEW manuals, an updated more complete easy to read LarKen LKDOS Version 3 manual and an updated LogiCall Version 6.0 manual with sections on the utilities and BASIC drivers for the modified commercial software. Even if you have older versions of LogiCall, these two new manuals are worth the price of V6 ownership. The new LarKen manual includes all known missing information related to operation with the JLO interface and the TASMAN B CPI printer interface. Use of the Commodore 1520 compatible mouse is also covered. These manuals were developed over an eight month period and the masters printed on a laser printer.

The LogiCall Package

Besides the two NEW manuals mentioned above, the LogiCall ensemble includes the following utilities and modified BASIC drivers for your most popular software:

Address Book containing over 400 known Sinclair users, Basic to Text, TS2068 phone directory dials your phone for you, Disk Library, FORMAT.Bl, Tape Header Reader, the LogiCall Exec, MOVE.BL, MSCRIPT &

MTERM for LogiCall, MSDOS Disk Reader, NMI-F reboots same disk you originally booted up on, Head Step Rate change, Tape Library, TASWORD II for LogiCall, VU-CALC for LogiCall, VU-FILE for LogiCall, VU-3D for LogiCall, Print VU- CALC files to large printer, Change VU-CALC files to TASWORD files, Hunt The Wumpus, Change screen files to TASWORD files, QCHART for LogiCall.

Modifications to the commercial software covered in the LogiCall manual explain only changes to that software and not any of the standard operating features of that software. If you do not own manuals for the commercial software listed above, you must purchase the tape version of that software from your software vender to legally use that software.

A Mere Pittance
This is no doubt the final version of LogiCall as all the desired features are in with nothing more planned. All the shortcomings and bugs have been eliminated. The price of the entire LogiCall package is $15, every bit of which goes to the vendors to help them stay around to supply the needs of the Sinclair community. Frank and Carol Davis travel to many computer shows to provide us with products for our machines and Rod Gowen has for years provided us with much needed Sinclair items. Please help support these vendors by purchasing a copy of LogiCall V6.0 for your LarKen System now. The **New Manuals** alone are worth the investment.

QL Hacker's Journal

by Tim Swenson

The QL Hacker's Journal (QHJ) is published by Tim Swenson as a service to the QL Community. The QHJ is freely distributable. Past issues are available on disk, via e-mail, or via the Anon-FTP server, garbo.uwasa.fi. The QHJ is always on the look out for article submissions.

Editor's Forum
I don't have much to say for an introduction to this issue. I do want to thank Peter Tillier for contributing two articles. He really filled a few pages for me. The more articles I get the easier it is on me and the more often I can publish. I hate it when I have programming dry spells.

In QHJ #22, was a Day of the Week program. Mel Laverne found out one small bug in the program that did not make it work. Then translating from C to superBASIC, I forgot that the original program was done with Integer arithmetic. SuperBASIC defaults to floating point, so the program was off fairly often. So change all variables to integers and the whole thing should work out.

While browsing the Internet recently, I came across an article that I had heard about but had not read; The Tao of Programming. The Tao of Programming is written in a very Eastern way of writing, with formal sounding wisdom, but sprinkled lightly with modern humor. Here is an example:

"The Tao gave birth to machine language. Machine language gave birth to the Assembler.

The Assembler gave birth to the compiler. Now their are ten thousand languages.

Each language has its purpose, however humble. Each language expresses the Yin and Yany of software. Each language has its place within the Tao.

But do not program in COBOL if you can avoid it. If you find the Tao of Programming, give it a read. I hope you like this issue, and I'll see you on the 'Net.

Boot Up Reminder
Productivity tools for the QL are far and few between. On the PC, there is a dirth of these tools; Meeting Maker, Lotus Organizer, Maximizer, etc. One feature of most productivity tools is the ability to remind you of special days, such as birthdays, anniversaries, appointments, and so on.

Without doing much development work, a simple day reminder can be written for the QL. A good way to setup a reminder program is to have it check for special days when the QL boots up. During boot up, the program reads in the reminder data file and outputs any special days that are set for today. These special days can be set up to appear yearly (a birthday), weekly (trash day), or monthly (bills, bills, and more bills). Of course, this program will only work well if you boot up your QL at least once a day. If you boot it up less than that, you will need to set your reminders to appear days before the special day.

The format of the reminder file (reminder_dat) is as follows: T:XXXXXX:....................

Where T is the type of reminder, W for weekly, M for monthly, and Y for yearly. XXXXXX is the date of the reminder. ...... is the text of the reminder. Colons separate each field.

The program is case insensitive. There are three types of reminders, weekly, monthly, and yearly. A weekly reminder is based on the day of the week. If you must take out the trash every Wednesday night, then you could set a reminder for Wed to say "Take out Trash." The first field has a W and the second field has a three letter abbreviation for the day of the week. Mon for Monday, Tue, etc. This is all based on the format returned from DAY$.

A Monthly reminder is based only on the day of the month. If you have to pay a bill on the 1st of each month, you could set a monthly reminder to "Pay Bill" for the 1st. The first field has an M and the second field is the day of the month in a two number format. The 6th of the month would be listed as 06.

A yearly reminder is based on the month and day. This is for reminding you of things like birthdays. The first field has a Y and the second field has a three letter abbreviation for the month (Jun), a space, and the day of the month listed as two digits (06 for the 6th). The 4th of Jul. would be listed as "Jul 04".

The text of the reminder is the last field. It goes from the second colon to the end of the line. You can put anything in this text, as it is copied from the reminder file and printed to the screen.

This program can easily be included into a Boot program or it can be called from the Boot program. It simply prints

out the reminders, but you can liven it up with flashing letters or beeping noises, what ever will get your attention.

```
100 OPEN #3,scr_350x75a75x50
110 PAPER #3,0: INK #3,2: BORDER #3,3,4
120 CLS #3
130 month$ = DATE$
140 month$=upper$(month$(6 TO 11))
150 daym$ = DATE$
160 daym$=upper$(daym$(10 TO 11))
170 dayw$=upper$(DAY$)
180 OPEN_IN #4,flp1_reminder_dat
190 REPeat loop
200   IF EOF(#4) THEN EXIT loop
210   INPUT #4,in$
220   IF LEN(in$) < 3 THEN END REPeat loop
230   colon = ":" INSTR in$
240   type$ = upper$(in$(1 TO colon-1))
250   in$ = in$(colon+1 TO )
260   colon = ":" INSTR in$
270   remind$ = upper$(in$(1 TO colon-1))
280   reminder$ = in$(colon+1 TO )
290   IF type$ = "W" THEN
300       IF remind$ = dayw$ THEN
310           BEEP 1000,10
320           PRINT #3,dayw$;" ";reminder$
330       END IF
340   END IF
350   IF type$ = "M" THEN
360       IF remind$ = daym$ THEN
370           BEEP 1000,10
380           PRINT #3,daym$;" ";reminder$
390       END IF
400   END IF
410   IF type$ = "Y" THEN
420       IF remind$ = month$ THEN
430           BEEP 1000,10
440           PRINT #3,month$;" ";reminder$
450       END IF
460   END IF
470 END REPeat loop
480 CLOSE #4
490 CLOSE #3
500 DEFine FuNction upper$(up$)
510 LOCal x, temp
520 FOR x = 1 TO LEN(up$)
530   temp = CODE(up$(x))
540   IF temp > 96 AND temp < 123 THEN
up$(x)=CHR$(temp-32)
550 NEXT x
560 RETurn up$
570 END DEFine upper$
```

Example Reminder File:

w:tue:This is a Tuesday Reminder

w:wed:This is a Wednesday Reminder

m:04:This is a 4th day of the month Reminder

m:13:This is a 13th day of the month reminder

y:jun 04:This is a June 4th reminder

y:jul 19:This is a July 19th reminder

Some Thoughts On Programming Style

By Peter Tillier

In QHJ #24 Tim talks about a colleague's style of writing Perl and contrasts it with his own. I have spent several years as a programming and system development lecturer within my company's internal training department and nothing seems to cause more grief/criticism/etc., etc., as differences of programming style.

I tend to use procedure calls in preference to the use of deep nesting of 'if..then..else..endif' structures as does Tim's colleague. I do this for a number of reasons and even if the procedure may only be called once in the entire program (incidentally this approach is taken by Kernighan and Ritchie in 'The C Programming Language' and by Kernighan and Plauger in 'Software Tools in Pascal').

My reasons are these: It is sometimes inconvenient to read deeply nested 'if..else..endif' or 'while..endwhile' constructions; this approach works very well with the program design method that I prefer to use (Jackson Structured Programming, aka. JSP); if suitable procedure names are chosen the clarity of the code is often improved; the style is closer to the object-oriented programming approach that I would prefer to use; the arguments about inefficiency ("It's wasteful to set up a stack frame and call code that could have been inline.") take little account of the maintenance benefits that can accrue from well-designed and named procedures.

I find something like this much easier to follow (and debug!),

```
procedure DoLotsOfThingsTo(var A : AType); var
    i : integer;
    procedure DoOneThingTo(var A : AType );
    begin
        A.A := ...;
        A.B := ...;
    end {DoOneThingTo};
    begin
        for i := 1 to SizeOfAType do
            DoOneThingTo(A);
    ...
end {DoLotsOfThingsTo};
```

(the above also shows one reason that I like Pascal - the ability to nest procedure declarations - I miss it a lot when I use C, C++ or things like Visual Basic).

Incidentally, Question: can you nest procedure definitions in SuperBASIC?

Answer: Yes you can:

```
1000 define procedure testa
1010 :
1020 define procedure testb
1030 print "In testb"
1040 end define testb
1050 :
1060 print "In testa (1)"
1070 testb
1080 print "In testa (2)"
1090 :
1100 end define testa
```

works perfectly, printing out,

In testa (1)

In testb

In testa (2)

as expected.

As I said in my article on parameters and parameter passing mechanisms I think that most languages would be better if they were designed so that procedures and functions (in the SB or Pascal sense) could only access local variables or parameters - even for read access only.

Software Reuse

For years I've reading articles on Software Reuse and how it can increase the productivity of programming shops. Since I program alone, as most QLers programmers do, I have never given it much thought for my programming. For some reason, a recent article on software reuse sparked a new thought about software reuse and the QL.

Before I go into my sparked thought, I want repeat here one sideline from the article. The Eight Commandments of Reuse:

1. Golden rule of reuse: encourage individuals and teams to behave in ways that support reuse.
2. Keep an inventory of reusable artifacts.
3. Provide a catalog with descriptors and search support.
4. Designate a reuse administrator/facilitator who keeps the catalog and helps users.
5. Develop a methodology outlining how and when to re-use software components.
6. Have a measurement program to track reuse and adherence to the methodology.
7. Design standards that specify how artifacts are constructed.
8. Adhere to a quality-assurance program to guarantee the integrity of artifacts.

Now that you have read the above, set it aside for the moment (for you Assembly programmers, PUSH it. You will need to POP it later).

I think one of the most difficult areas of writing programs for the QL is dealing with the Pointer Environment. You either buy a PE Toolkit (such as EasyPointer) and a SuperBasic Compiler (QLiberator) for a fair amount of dollars, or, you can program in C with C68 and the Pointer libraries. Being cheap, I would opt out for C68, but I am very weak with full C (OK, I write a few hacks in C, but I am no where near calling myself a C programmer). Using C68 and the Pointer Environment is not trivial. It's not something for the fledgling C programmer.

For those that do program in C and the Pointer Environment, each programmer is writing a lot of the same display routines to get output to the screen. For some this is not easy and takes up some significant time and effort.

OK, now POP what you had PUSHed earlier; software reuse. What if a number of C68 programmers were to get together (just like they do in the development of C68) and started collecting a library of C68 PE routines that could be used by other programmers? Kind of sounds like software reuse.

If QLers where to use the 8 Commandments of Reuse, we would only need to use commandments 2, 3, 4, 5, and 7. We would not need to track who uses reuse or who does not. If someone was to volunteer to be the administrator (they would need to be a C68 programmer), other C68 programmers could send in their functions and procedures to be added to a library. This could be documented and then distributed back out to C68 programmers.

Submitting functions and procedures may require some code changes on the part of the submitting programmers. The functions and procedures would have to be written in a more portable "black box". No use of global variables.

I don't know if the time and effort put into this would save any programmer time in the long run. The time saver for the programmer would be the time saving in having to re-write code that has been written before. Would this time savings be enough to warrant the cost of organizing the library? Again, I don't know. I just thought it might be worth considering. Any takers?

DBAS

For most database programming, the QL programmer has been pretty much stuck with Archive. Archive is a fine language and is fairly similar to dBase III in programming feel. It has many advantages: editing of records built in, easy screen creation, a well structured language. But it also has a few weak points: limited functions, little control over end user accessing code, relatively slow.

If you are looking for a database development system that allows you to create stand-alone code, full access to features of QDOS, relatively fast, and free, then DBAS is something that you should look into.

DBAS, also called Database Handler, is a library of database handling routines for SuperBasic, C68, or Machine Code. DBAS is not a database language system like Archive, so it is not a true replacement for Archive.

The core part of DBAS resides in DATA_BIN. It is loaded by LRESPR. DATA_BIN contains the main routines for database handling, but only for Machine Code programs. If you use SuperBasic, DBAS_BIN contains the SuperBasic interface to DATA_BIN, and it too is LRESPRed. For C68 programmers, there is a library of database routines that access DATA_BIN.

Programming with DBAS is not as easy as programming with Archive. You are using DBAS for database function calls, but you still have your programming control constructs (looping, branching, etc.) in SuperBasic or C68. What you loose in ease of programming from Archive, you gain in power of programming. Since you are using SuperBasic or C68 to program in, you still have the full power of either language and all that they can do.

DBAS has both procedures and functions. A sampling of procedures is:

ADD_FIELD	Add a field
APPEND	Add a new record
CREATE	Create a database
EXCLUDE	Deselect records
FIND	Find by INSTR
INCLUDE	Select records
LOCATE	Find by ORDER parameters
OPEN_DATA	Open a database
ORDER	Order a database
REMOVE	Delete a record
SEARCH	Find by INCLUDE parameters
UPDATE	Update a record

A sample list of functions is:
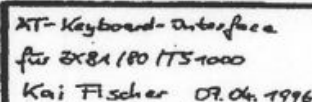
COUNT	Get record count
FETCH	Get record contents
FLLEN	Get field length
FLNAME	Get field name

Databases are treaded like files and are opened with the OPEN_DATA procedure. After that they are referred to by their channel number. Fields do not specifically have

names - they are referenced by field number - but field names can be implemented with some work arounds. DBAS does not seem to prohibit opening more than one database at one time, but I do not see in any of the commands where you can specify a JOIN (selecting records from two databases/tables with a common equality). By doing a couple of searches on each database, you should be able to rig up the equivalency of a JOIN.

Since DBAS does not have a front-end for doing database creating, editing databases, etc., two utilities come with DBAS to make maintaining individual records easier. DBPTR_BIN is a Pointer Environment program for editing, adding, and deleting records. For non-PE users, there is ALTER_BIN. Both of these programs are executables.

DBAS has a lot of potential. Since it is LRESPRed, it is compatible with SuperBasic compilers, like QLiberator. You can compile your code and create a stand alone application. The _BIN files are freeware and can be distributed with your program.

DBAS comes with full documentation for all of its features, including the SuperBasic, C68, and Machine Code interfaces. It comes with example programs that help in learning how to use DBAS.

If you are new to databases and you want to learn how to program them, stay with Archive. If already know how databases work and want to develop your own stand-alone applications, then DBAS is worth the look.

DBAS should be available on most QL BBS's worldwide. For North American QL users, you can get it from QHJ Freeware (me) (just send a disk with return postage). See the Unclassified Ads for address.

Few Useful Z88 CLI Routines

By Dave Bennett

From: dbennett@epix.net

I apologize for the lack of Z88 articles from myself over the last few years. I am not a programmer. I mostly just use Pipedream. I tend to create databases putting data in Pipedream spreadsheet cells.

However I have experimented a bit with the Z88's Command Line Interpreter or CLI. For those of you not familiar with the Z88, the CLI is sort of like batch files in MSDOS. Every keystroke on the Z88 can be interpreted into a sequence of characters. You can program these characters into a file. But the Z88 also includes a facility to record your keystrokes. You press []+K, do the desired operation on the Z88, then press []-K. The [] is the square key. The file will be in :RAM.-. Copy this file to :RAM.1 or :RAM.0. then erase the file in :RAM.-. One of the CLI routines here does this operation.

There is a bug in versions 3.0 and earlier of OZ which will cause the Z88 to become confused if you do a soft reset with a file in :RAM.-

You may have to edit the resulting file to get it to work properly. You can do this in Pipedream then save it as plain text. I would give it a name such as ????.CLI. To execute the file in the Filer, highlight it with the marker then type <> EX. The <> is the diamond key. All the operations that you performed will be performed again. It will be faster too because there is no delay between keystrokes. It looks like some robot has taken control of the Z88. For more information on CLI files, look in "The BBCBASIC (Z80) Reference Manual for the Z88" by DJ Mounter.

Here are a few CLI files that I have come up with. Type these into Pipedream and save as plain text.

This CLI file will copy a file in :Ram.- into a file called :RAM.1\s.txt. It will erase the :RAM.- file and load s.txt into Pipedream.

You can also use []+S and []-S which will save any character that appear on the screen into a :RAM.- file. This is especially useful to save your on-line session with a modem.

```
s.cli
~A-S
|SV~R~R~R~R~R~R~X-
~E~R~E~L|CO:RAM.1/s.txt~E~E~R~E~L|ER~E
|SV~R~R~R~R~R~R~X1~E
#P|FLs.txt~E|W80~Dya~E
```

The e.cli in my article is by Keith Winsor.

This cli file will erase any :RAM.- file.

```
e.cli
#F|ER:RAM.-/*~EN~E|[
```

This CLI file will set your baud rate. Substitute any baud rate that you choose.

```
9600.cli
~As~Un~U~U9600~U9600~E
```

This CLI file changes the default :RAM device. Note that you must change this in both the Filer and the Panel. This CLI does it for you. Note that it does not return you to the Filer, it is designed to be run from BASIC or Pipedream. You press [] F to go to the Filer. Execute the CLI and it returns you to your application. But now you have access to the other :RAM device. Put 0.cli in :RAM.1 and 1.cli in :RAM.0

```
0.cli
~Csv~R~R~R~R~R~R~X0~E~As~D~D~D~R~R~R~R~R
~R~X0~E
```

Finally I wanted to be able to run a program from the Filer. It was a pain in the neck to go to BASIC then type the filename in. Substitute the name of your BASIC program and put the same name in the CLI file. The following example is for zfu.bas.

```
zfu.cli
#BRUN ":RAM.1/zfu.bas"~E
```

Have fun with the Command Line Interpreter and the Z88 !

IBM-AT Keyboard Interface for the ZX-81
by Kai Fischer

XT-Keyboard-Interface
für ZX81/80/TS1000
Kai Fischer 09.04.1996

Adr	Code (dez.)	Befehl	Kommentar	Adr	Code (dez.)	Befehl	Kommentar	Adr	Code (dez.)	Befehl	Kommentar
30	39	CLR A	(URSTART)	40			(HAUPTPROG.)	95	39	CLR A	(WAITROUTINE)
31	57	OUTL P1,A	Port löschen	40	191 00	MOV R7,0	Shift löschen	96	98	MOV T,A	
32	20 08	CALL BYTE	Resetmeldg.	42	20 08	CALL BYTE	Taste lesen	97	187 07	MOV R3,7	Ausgabefrequenz
04	20 08	CALL BYTE	überlesen	44	03 84	ADD A,84	Shift rechts?	99	85	START T	
06	04 40	JP HAUPT		46	150 52	JNZ		100	22 104	JTF	
08	186 00	MOV R2,0	(UP BYTE)	48	191 128	MOV R7,128	Shift setzen	102	04 100	JP	
10	39	CLR A	auf Taste	50	04 85	JP		104	233 100	DJNZ R3	
11	54 11	JT0	warten.	52	250	MOV A,R2		106	131	RET	
13	151	CLR C		53	03 119	ADD A,119	Shift links?	110	170	MOV R2,A	(MAKROAUSGABE)
14	70 17	JNT1	Datenbit	55	198 48	JZ		111	03 174	ADD A,174	F12
16	167	CPLC	einlesen	57	250	MOV A,R2		113	150 121	JNZ	
17	103	RRCA	und in	58	03 08	ADD A,08	Taste losgelassen?	115	184 200	MOV R0, 200	Tabelle
18	42	XCH A,R2	16 bit-Zahl	60	198 74	JZ		117	185 10	MOV R1, 10	10 Codes
19	103	RRCA	schieben	62	250	MOV A,R2		119	04 160	JP OUT	
20	42	XCH A,R2		63	03 208	ADD A,208	Code >487	121	250	MOV A,R2	
21	38 21	JNT0	Clk=H?	65	246 68	JC	Code= alter Code-48	122	03 173	ADD A, 173	F27
23	188 40	MOV R4,40	Timeout	67	250	MOV A,R2		124	150 132	JNZ	
25	38 13	JNT0	nächstes Bit	68	20 110	CALL MAKRO	Makro testen	126	184 210	MOV R0, 210	Tabelle
27	236 25	DJNZ R4	Schleife	70	111	ADD A,R7	Shift addieren	128	185 04	MOV R1, 4	4 Codes
29	42	XCH A,R2	12 bit zu	71	57	OUTL P1,A	Taste ausgeben	130	04 160	JP OUT	
30	247	RLCA	8 bit	72	04 42	JP		132	250	MOV A, R2	
31	42	XCH A,R2	umformen	74	20 08	CALL BYTE	Folgebyte	133	03 254	ADD A, 254	F37
32	247	RLCA		76	03 84	ADD A,84	Shift re.?	135	150 143	JNZ	
33	170	MOV R2,A	Taste in R2	78	198 88	JZ		137	184 215	MOV R0, 215	Tabelle
34	131	RET		80	250	MOV A,R2		139	185 03	MOV R1, 3	3 Codes
				81	03 119	ADD A,119	Shift li.?	141	04 160	JP OUT	
				83	198 88	JZ		143	250	MOV A, R2	
				85	39	CLR A	norm. T. losgelassen	144	03 170	ADD A, 170	F47
				86	04 70	JP		146	150 172	JNZ	
				88	191 00	MOV R7,0	Shift losgelassen	148	184 220	MOV R0, 220	Tabelle
				90	04 85	JP		150	185 03	MOV R1, 3	3 Codes
								152	04 160	JP OUT	

Adr.	Code (dez.)	Befehl	Kommentar	Makrotabellen:
			(UP Out)	F1 → Adr.200: 118/253/117/11/95/95/31/31/112/246
160	39	Clr A	keine Taste	Makro: PRINT/Shift Enter/USR/1/2/2/8/8/↲
161	57	Outl P1,A	gedrückt (ZX)	
162	20 95	Call Wait	warten	F2 → Adr.210: 22/253/117/31
164	248	Mov A, R0	nächsten	Makro: RAND/Shift Enter/USR/8
165	163	Mov A, (A)	Code aus der	
166	57	Outl P1,A	Tab. holen	F3 → Adr.215: 114/31/112
167	20 95	Call Wait	warten	Makro: POKE/8/,
169	24	Inc R0	nächste Zelle	
170	233 160	DJNZ R1	fertig?	F4 → Adr.220: 118/253/114
172	250	Mov A, R2	alten Code	Makro: PRINT/Shift Enter/PEEK
173	131	RET	herstellen	

Any AT keyboard can be connected to the ZX81. The interface receives the 12-bit serial data from the keyboard and transforms it into 7-bit-Code plus one bit for Shiftkey. The 2716-EPROM E2 presents the ZX keyboard matrix and matches the ZX leads A8 ... A15 with the 8-bit from the 8049 to data DO ... D4. Remember, the ZX reads the keyboard by pulling one of A8 ... A15 to low and reading the port SFE.

Just before finishing the AT-interface, I heard that a ZX-user from USA (*see IKI by Jack Dohany, ZAQ! Spring '96*) developed a similar interface, but using XT-keyboards. Due to the 8049 microcontroller my interface is programmable; you can press one function key (F 1 ... F12) at the keyboard and the interface gives a sequence of some keys to the ZX81!

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The failure of the compiled data entry routine to run properly, plus the fact that as of this date I am not yet a machine code programmer, meant that if I wanted to continue to develop the whole package of program units, my only option was to divide the data entry routines into two parts. Part #1 is a block of compiled machine code above RAMTOP. This block of machine code is composed of all the TIMEX BASIC operations of the data entry routines which the 'TIMACHINE' compiler did compile correctly and do run properly. Part #2 is composed of all the TIMEX & LKDOS extended BASIC window operations needed by the data entry routines. I added Part #2 of the data entry routine to the Core Routines which start at lines 9800. The program lines provided for Part #2 of the data entry routines in the Core Routines are for the pseudo three window demo lines 9889 to 9904, 16 program lines, and for the true three window demo lines 9889 to 9926, 36 program lines. Because the data entry routine is divided with Part #1 in compiled machine code and Part #2 in TIMEX & LKDOS extended BASIC I had to add POKEs & PEEKs to and from a parameters buffer above RAMTOP so both Part #1 & Part #2 of the data entry routine can share parameters and keep synchronized with each other. The data entry routines are ENTERed from the Implementation Program with a RANDOMIZE USR jump to Part #1 of the data entry routine, Part #1 of the data entry routine sets the parameters for Part#2 of the data entry routine and then Part#1 makes a jump to Part#2 of the data entry routine, in the Core Routines section, which does the LKDOS extended BASIC windows operations. When Part#2 of the data entry routine has completed the LKDOS extended BASIC windows operations Part#2 makes a jump back to Part #1 of the data entry routine or if data entry into that line has been completed Part#2 makes a jump back to the Implementation Program. These POKEing & PEEKing operations cause delays, and would not be needed if the data entry routine were all in one block of machine code as originally planned. It is the POKEing & PEEKing and slower running TIMEX & LKDOS-extended BASIC window operations of Part #2 of the data entry routines which slows down the typing speed, especially for the true three window demo which has 20 more lines of TIMEX & LKDOS extended BASIC to labor through.

The help I seek is, that you put me in touch with a machine code programmer who is capable of putting the LKDOS extended BASIC window functions, Needed by the data entry routines, into one or more relocatable machine code modules.

I would like to have the LKDOS extended-BASIC window functions setup as a stand alone reloc4table machine code module just like the one that Jack Dohany wrote for the LKDOS disk drive functions. I could then locate this machine code module anywhere above RAMTOP. Then using the base address of the module plus several fixed numbers I could calculate the addresses where specific parameters are stored within the module. I could setup Part #1 of the data entry routine to POKE those parameters numbers, needed to control the module's LKDOS extended BASIC windows operations, directly into the address where the module looks for them. The parameters that would be POKEd into the LKDOS extended BASIC window operations machine code module would be <1> The specific window number (5, 6 and 7). <2> Printable characters ("^", "_" & "\"). <3> CHR$ ('B'). The module could be used to store the current parameters set by Part#1 of the data entry routine instead of POKEing them-to a separate parameters buffer. This would cut out "the PEEKing of the parameters buffer now done by Part#2 of the data entry routine. I would rewrite Part#1, the TIMEX BASIC Partof the data entry routines, to accommodate the use of the LKDOS extended BASIC windows operations machine code module then compile the new version of Part#1 of the data entry routine to machine code with the 'TIMACHINE' compiler as before. The details of exactly how to setup the LKDOS extended ª BASIC window operations machine code module must be worked out between the machine code programmer and myself directly.

I believe the program master plan I have worked out which uses the DELETE/MERGE LOADER, the Implementation Programs & the Core Routines plus the machine code routines above RAMTOP is a sound programming methodology. I believe my demos show great promise with respect to the development of both versatile and sophisticated programs, using the many useful functions provided for these demos as their foundation. I believe that in time I will be able to work out the LKDOS extended BASIC windows operations machine code module on my own in my spare time I do not have much spare time in which to do this kind of work. I also believe that by the time I do get this project completed most everyone will have left the TS-2068 computer behind. I want to complete these demos, with the LKDOS extended BASIC window operations machine code module before the Withdrawal happens. If I get the help I need, the finished programs I have already been working on for some time,-will be done before everyone-else but you and I gives up on the TS-2068 computer. I hope you can find a machine code programmer it this-late date that is capable of getting this job done properly.

If you have any information concerning the use of machine code to access the routines of the LKDOS version 3 firmware's extended BASIC operations that might help me to complete the development of an LKDOS extended BASIC window operations machine code module on my own please send it to me. If there is a fee for that information please let me know the amount of that fee and I will send you my check in that amount. Feel free to give out any software or the program listings to

anyone who shows an interest. Especially if they happen to be a machine code programmer.
_____

Timex & LKDOS Extended Basic Pseudo Three Windows
Demo Programs Excerpted Timex & LKDOS Extended
BASIC
(Part #2 Of) Data Entry Routine

```
9889 RANDOMIZE USR RN
9890 LET BG=PEEK 62383: LET CU=PEEK
62385: LET CS=PEEK 62377: LE T A=PEEK
6237!: LET B=PEEK 62380 9891  PRINT #4:
POKE 16045,A: PRINT #4: POKE 16046,B
9892 IF BG=1 THEN GO TO 9901 9893 LET
F=PEEK 62380: LET H=PEEK 62382: PLOT
INK H;A,F: LET DL =PEEK 62384
9894 PRINT #4: DRAW (4*DL),8,0
9896 IF BG=2 THEN    LET B=PEEK 62375:
PRINT #7;CHR$ B;: GO TO 9901
9897 IF BG=3 THEN    LET RN=61872: GO
TO 9889
 9898 IF BG=5 THEN LET RN=60899: GO TO
DR
 9899 IF CU=O THEN PRINT #7;NAN: GO TO
9904
 9900 IF CU=1 THEN PRINT #7;'.': GO TO
9904
 9901 IF CS=O AND CU=0 THEN PRINT #7;
"^"
 9902 IF CS=O AND CU=1 OR CS=1 THEN
PRINT #7;'_"
 9903 IF CS=2 THEN PRINT #7; "\": GO TO
9904
 9904 LET RN=62141: GO TO 9889
```

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DAISY BE GOOD VIII

by David Lassov

The entry point for the daisy code that manages "Screen Macros" is line 2443. That's where the particular menu is. There are six entries.

What Bill Jones refers to as "Screen Macros" are stored by the 2068 as screen strings. When we use this code to create "Screen Macros", it is usually just a menu, with color stripes on it. Very attractive, as they say, and seductively expressive, as they don't say! So, let's enter "1", in order to "Create Macro". Up comes the following message:

Build a Screen Macro. Line 2443

You may input up to 22 Lines. 2447

The Screen File will be SAVEd with the file name that you input, with a ".C4" extension.

ENTER WHEN READY

Then, we proceed to ENTER as many as 32 characters in response to 22 prompts, as described above. 2448

Next, we are shown the screen, as ENTERed, and offered the choice to either escape back to the menu or edit the 22 lines of 32 characters, just ENTERed. 2449 2450

So, let's edit !! The foregoing entries scroll by as two screens of eleven labeled lines each. We now are asked to either ENTER "q" to escape back to the menu, or ENTER the line number, from 1 to 22, of any line to correct. This takes us back to the preceding paragraph, where we are shown the screen, as corrected, and offered the choice to either escape back to the menu or edit 2451

Well, when we are satisfied with this viewing and re-editing process, then we escape back to the menu, where we can choose to "SAVE Macro." 2443

First we are asked for the of a disk drive, to which to SAVE the screen string, which we created, above. Next, we ENTER the name of the macro, without extension. 2453 :4

The screen CLEARs, and the text of the screen macro is displayed on-screen in black and white, prior to being SAVEd as a screen string. The "screen macro" has just been SAVEd with the given name and with an extension of ".C4" , and we return to the menu. 2453 :11

Now, that our "screen macro" is on disk, there are several ways to go. Suppose we "PRINT Disk Macro File." Then, we have to ENTER the disk drive , containing the screen macro, we want to PRINT on the printer. There is a CAT of all the files with an extension of .C^, and we are asked to ENTER the screen file title and extension. The screen displays the screen string, and we are asked for the left margin (TAB) of the desired printout. 2444 :7 2444 :8

Then, the printer springs to life, listing out 22 lines of 32 characters, each, text which was initially ENTERed, as above, while creating the "macro". 2444 :11
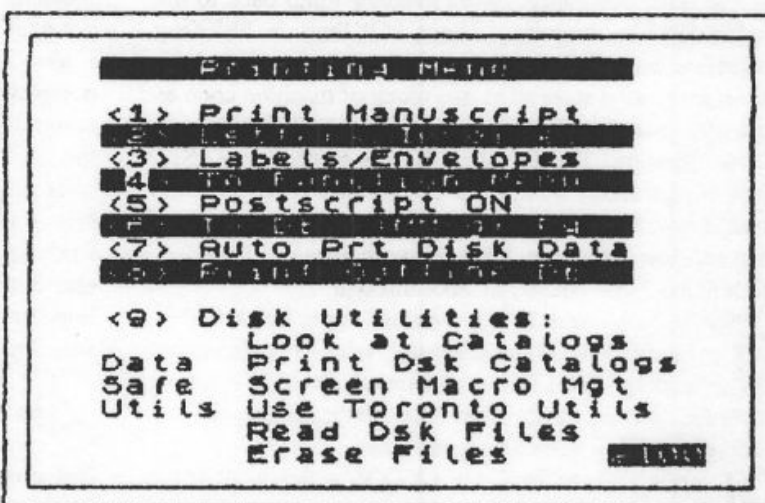
Interesting, how the screen be *read*. Remember, the screen is just a graphic display of little pixels. Well, the function SCREEN$(I,J) assumes the string value of the character (of 8*8 pixels), located at line I, column J. So, we just treat the screen as a matrix of 22 lines and 32 columns.

And, we *print-out the matrix*. That Bill Jones is really clever, although we have seen that technique before. 2444

Suppose we are going through a disk, full of screen strings, cleaning up the disk. Then, we use "View/Edit Disk Macro File". First, we ENTER the disk's drive, getting a CAT of all the .C^ files. ENTERing the screen file title and extension, the screen string is LOADed, color and all, and we are offered three options. 2445

First, we can escape back to the menu, if everything looks all right. 2443

In case the screen string be garbled or something, then we can ERASE it from disk, by just Pressing "2". 2461

Suppose it were garbled, BUT we can at least work with it. Then, we PRESS "1", in order to EDIT it. Now, we have to wait, as the graphic pixels of the screen be read by function SCREEN$, as above, converting the 176 x 256 screenful of pixels into a 22 x 32 matrix of characters. 2446

Then, we bounce back to the screen display of paragraph 5, above, where we can correct the text, line by line, for all 22 lines of 32 characters. After editing, we ENTER "q", to escape back to the menu. 2451

To be safe, we should ENTER "3", in order to "SAVE our Macro". But, it is only in black and white. So, let's add a little color, by ENTERing "5". 2443

We get a message, that "This Program Colors Screen Strings on Disk," and we can either escape back to the menu or "Get the File," to be colored. So we "Get File," by ENTERing its disk drive. The screen string, to be colored, is then LOADed onto the screen, and we can now see why we should always STORE our screen strings, even if they be only in black and white. Because, in order to color them, they have to be LOADed in from disk. 2445 2446

Anyway, we are presented with the screen string and asked, whether we wish to color the lines, yes or no. 2457

Suppose we want more color. Then, we ENTER "1," and we are asked for a starting line. This is anything from 0 to 21, whichever character line we desire to color. Then, an ending line (from 0 to 21.) Then, PAPER color (between 0 and 7). The as the specified PAPER and INK be applied to the screen from the starting line to the ending line. Again, we are asked, whether we wish to color the lines, yes or no. 2458 2457

Otherwise, we are finished applying color to our screen string. So, we ENTER "2," and are asked whether we wish to RE-SAVE the screen string, as colored on the current screen. 2459

If no, then we escape back to the menu. 2460

If so, then the formerly black and white screen is SAVEd, back onto the same disk, whence it came. 2459 :6

One way or another, we're gonna get back to the menu, the last Entry of which takes us back to one of the Daisy menus. 2462

2442: ON ERROR: GO TO fm

2443 CLS : PRINT AT op,oo;"[I1 Create a Macro" ' "[2] PRINT disk macro File" ' "[3] SAVE the macro" ' "[4] View Ed disk Macro File" ' " [5] Paint a disk SCREEN$ File " ' "[6] To Program Menu": GO SUB il : GO TO (z<oa OR of<z)*VAL "2443"+(z=oa)*VAL "2447"+(z=ob)*VAL " 2444"+(z=oc)*VAL

"2453"+(z=od)"VAL "2444"+(z=oe)*VAL "2455"+(z=of)*VAL "2462"

2444 CLS : GO SUB il+ob: RANDOMIZE USR ml: CAT ".C^",: INPUT " INPUT SCREEN$ File Title+EXT "; LINE z$: RANDOMIZE USR ml: LOAD z$SCREEN$: IF z=ob THEN INPUT " INPUT Tab : ";tb: LPRINT : LPRINT : FOR n=oo TO ov: LPRINT TAB tb;"";: FOR y=oo TO t3+oa: LPRINT SCREEN$ (n,y);: NEXT y: LPRINT : NEXT n: LPRINT ; GO TO k2+m4+t4+oc

2445 INPUT ;: PRINT #RND;"<1> Edit <2> ERASE <3> Menu ": PAUSE o o: LET Y=CODE INKEY$-CODE "0": GO TO (y=oa)*VAL "2446"+(y=ob)*VA L "2461"+(y=oc)*VAL "2443"+(y<oa OR oc<y)*VAL "2445"

2446 INPUT ;: PRINT #RND;"Uno Momento. Moving TO P$.   .": DIM p$(ow,t3+ob); FOR n=oa TO ow: FOR y=oa TO t3+ob; LET p$(n,y)=SCREEN$ (n-oa,y-oa): NEXT y: NEXT n: GO TO k2+m4+t5+oa

2447 CLS : PRINT AT oe,ob;"Build a SCREEN$ Macro" ' ''TAB oa;"You may INPUT up to 22 LINE s." ' 'TAS oa;"The SCREEN$ File will be SAVED"'TAB oa;"with the file name that you INPUT with a "".C 4"" extension."'''TAB oa;" INPUT when ready": PAUSE oo: CLS

2448 DIM p$(ow,t3+ob): FOR n=oa TO ow: PRINT AT ov,oo; INVERSE oa;" : INPUT LINE p$(n): PRINT AT ov,oo;"..............................";AT n-oa,oo;p$(n): NEXT n

2449 CLS : FOR n=oa TO ow: PRINT AT n-oa,oo;p$(n): NEXT n: PAUSE OO

2450 INPUT ;: PRINT #RND; INVERSE oa;"<1> Edit <2> Menu ";: GOSUB sq: PAUSE oo: LET Y=CODE INKEY$-CODE "0 ": PRINT #RND;y: GO TO (y>oa OR ob<y)*VAL "2450"+(y=oa)*VAL "2451"+(y=ob)*VAL "2443"

2451 CLS : FOR n=oa TO ow: PRINT " LINE # ";n'p$(n): NEXT n: INPUT " INPUT Line # to Corr or <q> QUIT"; LINE m$: IF m$<>"q" AND m$<>"Q" THEN INPUT " INPUT NEW LINE "; LINE p$(VAL m$): GO TO k2+m4+t4+oi

2452 GO TO k2+m4+t4+oc

2453 INPUT ;: PRINT #RND;"DD # TO SAVE TO ? ";: GO SUB il+oa: INPUT " INPUT Name ONLY of Macro: "; LINE w$: LET w$=w$+".C4": C LS : FOR n=oa TO ow: PRINT p$(n): NEXT n: RANDOMIZE USR ml: SAVE w$ SCREEN$: CLS : GO TO k2+m4+t4+oc

2455 CLS : PRINT #RND;"This Pgm colors Disk SCREEN$ file<1> Get File <2> QUIT ";: GO SUB il: IF z=ob THEN CLS : GO TO k2+m4+t4+oc

2456 CLS : GO SUB il+ob: RANDOMIZE USR ml: CAT ".C^",: INPUT "file name + EXT : "; LINE z$: RANDOMIZE USR ml: LOAD z$SCREEN$

2457 INPUT ;: PRINT #RND;"Color LINE s ? 1 yes 2 no ?? ";: GOSUB il: IF z=ob THEN GO TO k2+m4+t5+oi

2458: INPUT " LINE # (Start) ? ";x1: INPUT " LINE # (end) ? ";x2 : PRINT #RND;AT oo,oo; " PAPER # ? ";: PAUSE oo: LET p=CODE INKEY$-CODE "0": PRINT #RND;p: PRINT #RND;" INK # ?;: PAUSE oo: LET i=CODE INKEY$-CODE "0": PRINT #RND;i: PAUSE oo: ON ERROR: GO TO k2+m4+t5+oh: FOR n=xl TO x2: FOR y=oo TO t3+oa: OVER oa: PAPER p: INK I: PRINT,AT

```
n;y;" ";: NEXT y: NEXT n:: INK og: PAPER
oo: OVER oo: GO TO k2+m4+t5+og
 2459 INPUT ;: PRINT #RND;"RE SAVE ? <1>
Yes <2> No ? ";: GO SUB il: IF z=oa THEN
INPUT ;: RANDOMIZE USR ml: SAVE z$SCREEN$
 2460 GO TO k2+m4+t5+oe
 2461 RANDOMIZE USR ml: ERASE z$,: GO TO
k2+m4+t4+oc
 2462 DIM p$(oa): IF gg THEN RETURN
 9998: CLS : BEEP 0.02,20: PRINT
*RND;"Data disk ? ";: PAUSE-0 : LET d=CODE
INKEY$-CODE "O": PRINT #RND;d: RANDOMIZE
USR 100: GO TO d: RANDOMIZE USR 100: CAT
"",: BEEP 0.2,24: INPUT "Entire File Name ?
"; LINE z$: RANDOMIZE USR 100: OPEN #2, z$(
TO LEN z$-2)+ "CX"+" OUT ": LIST :
RANDOMIZE USR 100: CLOSE #2: STOP : REM
MERGE in order to generate text file (.CX)
```

OK, guys: Time to continue with our word processing primer of the best single such program for the 2068. So, get out and install your daisy disk 1. after Bill's broadside banner loads, a little tune plays, and a key is requested (dared??) to be pressed. Anyway, 3,2,1,y,y,y (presses) initialize the printer software the way we like it, and the Function Menu springs to the screen. In the last six issues of ZQA, we have discussed entries 1 thru 6. So, unless there be an objection, we consider item 7 on the Function Menu this time. It is entitled "Auto Print" and invokes the automatic printing facilities of Daisy. So, we press "7" . This is like navigating gopherspace on the Internet. as *another menu* comes up! We choose between "Print a Selected Memory File". "Word Proc With User Pgm Gp", and "Word Proc 1-50 Disk Files" . Consider the "memory files" : 21 selections include all of h$(1) through h$(7), i(1) through i$(7), strings a$, b$, c$, d$, and e$, the typing buffer u$ (see last issue's discussion), and a choice for "abort" that brings us back to the Function Menu, without printing anything. For example, suppose we put some typing into the typing buffer u$, according to last issue's discussion of daisy's "typing mode." Then, by ENTERing "15" in order to print u$ as "a selected memory file", the program drive begins to load the relevant menus and the printer drivers, climaxing in the printer's printing of whatever we put into u$! Then, program disk grinds again, leading us back to the Function Menu.

Suppose we choose to word process 1-50 disk files. Then, all data is lost. including memory files, as program Uptr.B6 be LOADed in from the program disk. Well, that's all right, since the only data of interest, now, reside in ASCII files on disk. We proceed to specify up to 50 character files for printout in one pass of the printer!

Now, the BIG choice remains, *to word process with the user program group of commands.*

These instructions, between lines 2180 and 2277 constitute The Heart of Daisy. For, by customizing these lines, Bill Jones was able to publish three years' worth of UPDATE Magazine ! That is, each issue contained articles of one, two, and three columns, graphs, graphic pictures, menus, maximizing the capabilities of 24-pin printers and, of course, 9- pin printers, too.

In any case, the pertinent menu (Printing Menu) offers nine options. Please refer to the accompanying picture.

Option 1. (Print Manuscript) performs a simple GOTO to the above "group of user program commands."

Option 2. (Letters/Invoices) calls up another menu, to choose between Manual Addressing and Mail List Addressing.

Manual addressing asks for today's date; the addressee's first name; his company's name; department; street address; city, state, and zip; and, lastly, number of copies. And, away goes the printer!

Mail list addressing implements mail MERGE, by referring to a previously stored mail list as a source of addresses. For example, choice of mail list addressing asks for today's date, the starting record number of the mail list, the ending such record number, and the number of copies desired. And, away goes the printer, merging word processing and mail list, as many times as desired. Sure wears out our printer ribbon, though!!

Option 3. Labels/Envelopes, asks for formatting information, so that Bill can mail out all his magazines.

Option 4. To Function Menu, escapes to the main daisy menu.

Option 5. Postscript ON, sets a flag, so that u$ be printed as a postscript, three lines following the signature line of the letter.

Option 6. To Dbx (MMrg) Pg, calls in the Dbx program to manage a mail list as a data base, either by MERGE or LOAD, depending on whether we desire to retain data in memory.

Option 7. Automatic Print of Disk Data, prints out a sequence of character files, either manuscripts or mail lists. There is also an escape (abort) option.

Option 8. prints out an outline data base. Lastly, Option 9. calls up a variety of disk utilities with a menu, Disk Management.

Item 1. Create or Print Screen Macro, calls on a block of BASIC Code between 2440 and 2466, which prints screen strings and creates/prints colorful menus as screen strings. This code is so interesting as to deserve its own
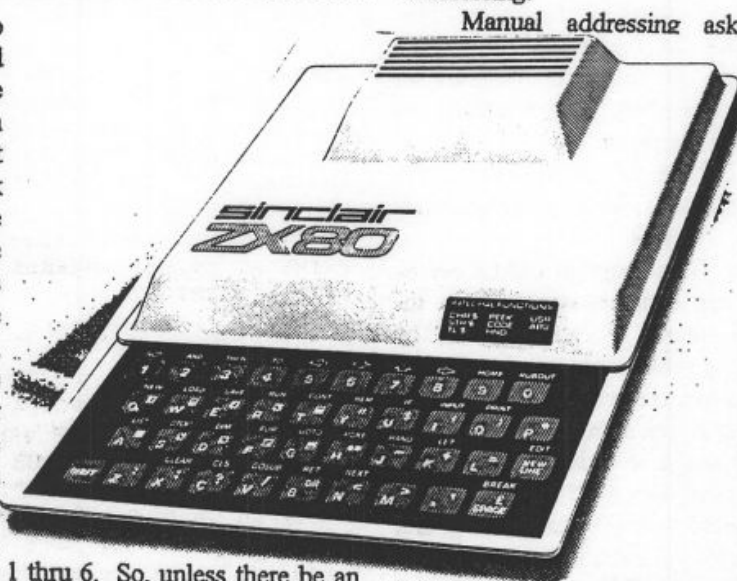
article.

Item 2. prints disk catalogs to the screen.
Item 3. prints disk catalogs to the on-line printer.
Item 4. performs a LarKen NEW on whatever disk drive is specified, as holding "The Toronto LarKen Utilities" of George Chambers.

Item 5. READ a Disk Data File, does a screen print of an arbitrary character file on disk. We use *this all the time*, in order to verify the integrity of letters, being readied for printout, ERASEing any corrupt files.
Item 6. escapes to the Function Menu.

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ftp://oak.oakland.edu/pub/msdos/emulators
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http://www.cs.umd.edu/users/fms/comp
http://www.maths.nott.ac.uk/personal/cpg/zx81/
http://whirligig.ecs.soton.ac.uk/~p93/Coupe/home.html

http://jumper.mcc.ac.uk/~simonc/ys/ys83
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RAMTOP

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9. Graphics - G. Chambers
10. Pixel Print Plus DTP - Stan Lemke
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22. Spectrum Artist - G. Chambers
23. Calendars - G. Chambers
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26. Spectrum Languages - D. Solly
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28. Pixel Print Professional - Stan Lemke
30. Interbank DataBase - Larry Crawford (2 disks)
31. Electronics - R. Ginardi

32. Disk Utilities Docs. (Byte Power) - Kristian Boisvert
33. Omnibus Pull Down Menus - Chambers & Mitchell
34. TS-2068 ROM Disassembly - Bob Mitchell
35. 24-Pin Printer Bit Image - Larry Crawford
36. Utilities Assort. - Mcbrine - Jack Dohany
37. Pixel Print - Icons, Fonts - S. Spalding - G. Chambers-
        Les Cottrell - Matt Kiddo (2 disks)
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38. Math, Science & Education -Bob Mitchell
39. Omnibus for DSDD Drives - Bob Mitchell
40. NMI SAVEs Disk to Tape - G. Chambers
41. LogiCall (buy latest from RMG or FWD)
42. TASWORD Refined - Larry Crawford
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53. User/Crash Music from Spectrum Games
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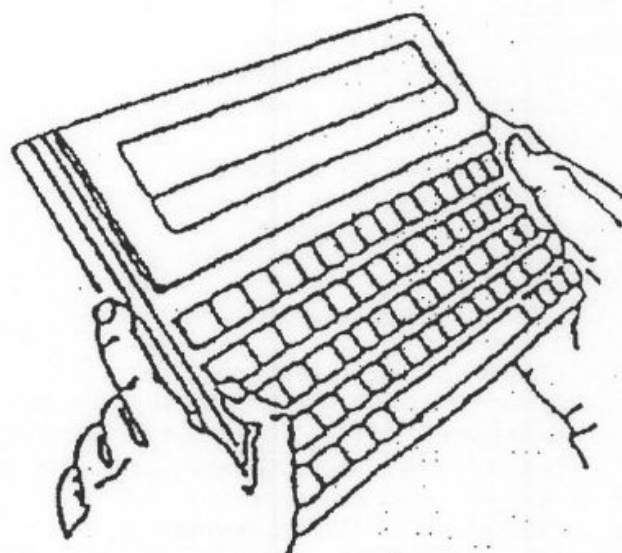
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