

FROM OUT OF 'THE ASHES' RISES

>>>> ZXir QLive Alive! <<<<

The Timex/Sinclair NorthAmerican User Groups Newsletter

Timex/Sinclair NorthAmerican User Groups

Auburn, Indiana

Volume I, Number 3

Fall 1991

MEMORY MAP

ROUTINES	ADDRESS
T/SNUG Chairmen	1
T/SNUG Information	2
ZXir QLive Alive! Article Contributions	2
Contributors to this Issue	2
From the Chairmans Disk	2
DMA ComputerFest Report	4
TREASURY NOTES	6
SYSOP's Twisted Pair	6
INPUT/OUTPUT	6
NEWS ITEMS	9
LIBRARY	10
REVIEWS	10
Articles:	
THE PERFECT GIFT or	
How to Assemble or Replace T/S1000 Parts Cheap! ..10	
CASSETTE LOAD/SAVE Problems Solved - PART 2	13
QLUSTER_LITE	16
Ads	17
And now a word from our Venders	19

T/SNUG CHAIRMEN

Here is the list of 1991 T/SNUG Chairmen and how to contact them. We wish to support the following SIGS: ZX80/ZX81, Z88, SPECTRUM/TS2068/TC2068 and QL. If you have questions about any of these fine machines contact the Chairman.

POSITION	NAME	PHONE	PRIMARY FUNCTION
Chairman	Don Lambert	219-925-1372	Chief Motivator
Vice-Chairman	Dave Bennett	717-774-7531	CATS/Z88
Vice-Chairman	Al Feng	708-971-0495	CATUG/QL Library
Vice-Chairman	Dan Smith	814-535-6998	JLO Library
Vice-Chairman	Rod Gowen	503-655-7484	CCATS
Vice-Chairman	Rod Humphreys	604-931-5509	VSUG/TS2068
Vice-Chairman	Bob Swoger	708-837-7957	Newsletter/BBS Sysop
Treasurer	Abed Kahale	708-885-4337	Supporter/Cash Tracker

Copyright (C) 1991 Timex/Sinclair NorthAmerican Users Groups

Volume I, Number 3
ZXir QLive Alive!

1

Fall 1991

T/SNUG Information

ZXir QLive Alive! (pronounced Sir Clive Alive!) is the newsletter of T/SNUG, the new Timex/Sinclair North American User Groups. T/SNUG is not a user group but rather all the user groups. We wish to represent all of the North American TIMEX/SINCLAIR user groups by providing news about all that is going on in the T/S community in at least four newsletters a year.

It is our goal to either build a Public Domain software library or develop a list of available software for all T/S machines showing the source.

We shall try to keep venders alive by offering free space in this newsletter. Venders shall receive this newsletter free so that they may see that we are still out here. If you feel that T/SNUG should perform other tasks, let us know your feelings.

T/SNUG wishes to have one chairman from every T/S North American user group who will take charge of sending us your user groups newsletter and other correspondence.

If you desire to reprint any articles that appear here, please provide credit to the author.

Articles appearing in this newsletter can be obtained by downloading this newsletter from our BBS. We encourage your user group to copy this newsletter and distribute it at your regular meetings to all of your members.

For an annual contribution of \$12.00 for individuals or \$15.00 for user groups, you can keep T/SNUG alive! Send your contribution to:

ABED KAHLE
ZXir QLive Alive! Newsletter
335 W NEWPORT RD
HOFFMAN ESTATES IL 60195

Tele: 708-885-4337

ZXir QLive Alive!

Article Contributions

If you would like to contribute an article to the newsletter, upload a file to our BBS called TSNUG.ART. If you have an AD for the newsletter UPLOAD a file called TSNUG.ADS. If you have NEWS to POST about your group, UPLOAD a file called TSNUG.NWS.

If you need help contact the SYSOP by mail, E-MAIL on the T/SNUG BBS, or by phone:

BOB SWOGER
613 PARKSIDE CIRCLE
STREAMWOOD IL 60107-1647

It is preferred that you call:
H708/837-7957 or W708/576-8068

If you can only contribute hard copy, tape or disk format, send your inputs to:

DON LAMBERT
ZXir QLive Alive! Newsletter
1301 KIBLINGER PL
AUBURN IN 46706

It is not necessary to call before sending articles.

CONTRIBUTORS TO THIS ISSUE

Louis Eisen
EMSoft
Al Feng
Joan Kealy
Don Lambert
John LastNameUnknown
Gil Parrish
Bob Swoger, K9WVY

FROM THE CHAIRMANS DISK

In the last issue, I did make a statement that caused some consternation and I apologize for it. I did make an assumption which I should not have. I have two friends in ISTUG and both are involved in T/S enterprises and from that I made an error. Frank Davis publishes UPDATE MAGAZINE. Frank Davis is the editor and M. Felerski is the Assistant editor and Carol Davis is the

publisher of the ISTUG Newsletter. Paul Holmgren operates the QUANTA Library. Both Paul Holmgren and Frank Davis operate Mechanical Affinity. Somehow, I did not realize that Frank Davis was not involved with the QUANTA Library.

I did attend the Dayton Computerfest. From the time I registered at the Red Roof until I left the Fest around 3:00 PM Sunday, it was all T/Sing. It renewed my prior convictions in the T/S computerists are the most friendly and helpful of all the classic computer users. I could try to list those who were there but I would not want to leave anyone out. Rather, I will refrain from naming names and hit the highlights. Any notes I took would not be decipherable. At its best my hand writing takes imagination and memory to read. 's why I had several write their names and addresses in my notebook with things they wished me to do.

While the quantity of User Groups was small, we represented a dedicated group. No T/Ser found us was given a cold shoulder if they didn't buy anything, in fact, there were lots of back issue newsletters were handed out. And to the few had never heard of T/S user groups it was a very pleasant surprise to them.

There is talk of repeating the event next year at Dayton. I believe the generic Computerfest does attract more T/Sers than one for T/S only. The only suggestion I make is that T/Sers should decide early if they will have a T/S only Fest or go with one like the Dayton Computerfest and if so, get the word out early. Mention one motel (Red Roof?) so all T/Sers will know where most will be. Several didn't know Friday night that most T/Sers were in the Red Roof with them until the next day. This way we can have our own "banquet" at a cost less than those catered

meals but with all the comradery. I wish to thank Gary Ganger and his co-workers in getting the T/Sers involved with the Dayton Computerfest.

We received a letter in which the writer expressed an opinion that all should read everything in the newsletters, even if it doesn't pertain to their particular T/S computer. I will admit I only have the ZX81 series and the T/S2068 but I do read, or at least skim the material and occasionally see concepts and ideas that apply to my computer. I will admit I do not understand much of what does not pertain to my computer but there is a bleed over of concepts.

I had to make a trip to Cedar Rapids, IA the 19th and 20th of September. There were two software houses on the Malls which carried generic software (other than used for IBM). And when I joked that I wouldn't find any software for my computers and mentioned the T/S line, they acknowledged having used the T/S in the past. When I mentioned we still used them, they were interested and one even asked if I would leave my name and address. At the other place which I visited latter, I left my name and address voluntarily. At both places they admitted having received requests for more information about the T/S computers. If everyone left a name at those places, I wonder how many T/Sers struggling alone would be found.

If I get half the material promised me, I will have some great material. I have some material to type in from hard copy and from past experience that is not bad except for getting all the errors out. What do you readers really want? Will any of you help out by sending in articles or suggestions? Until next issue, this is it.

Don Lambert, Chairman
Timex/Sinclair NorthAmerican
Users Group

DNA ComputerFest Report

By John LastNameUnknown

Bob says, "you and your wife, Karen, are the only user couple to attend the last fest, (did you hear that, Annette?) so write your observations." So after 8 years of pounding T/S keys, I have decided it is time to start giving thru-put to NLS, so here goes.

I can't tell the whole story without including the pre-trip tale which was half the adventure.

Not wanting to miss the fest, I had mentioned to Bob during one of our SIG meetings we hold by phone on unannounced week-ends (keeps the cost lower), shouldn't I be getting tickets. No problem, he was going also, just send him the money, he'd get mine when he got his. How many? Three--my son, wife and me. How are you going? Thought I'd drive my VW camper van. Great! My wife, Al Feng and I (Bob) want to go, also. So, why don't we all go together and share costs.

I tell Karen and she freaks out, then calms down and asks how do I expect to get 6 people into a van that seats 5 on a +500 mile trip, especially if Bob is as big as you say. So, we'll rent a full-size van. Now we come to the part that separates us from the more affluent readers who know you need a Major credit card to do this. I report this to Bob and he replies "Al and my wife aren't going now, so I'll drive by myself." We elect to go by car (it's hot--no AC in the camper). But, we still take I-80 thru the crazy repair work in Chicago to Gary and I-65 south to Dayton like we would have with Bob instead of going south out of Moline on I-74 and saving 150 miles, Oh well!

We arrive at Hara Saturday afternoon. The parking is great....don't have to walk far to the door. We ask for Gary, he has our tickets, they ask if

we are the Shepards, WE ARE IMPRESSED! We can't believe the size of the building and the number of vendors...looks like ALL the flea markets we've ever been to all together in one building! The Hara is like the phone box in DOCTOR WHO, much larger on the inside than it appears from the outside.

Just like a flea market, if the price isn't right, do a little old fashioned haggling and you might find a price you'll both like, even on items you wouldn't expect to find at a COMPUTER fest. I found a remote for one of the first TV channel changer-on/off-volume controls for \$2 that would have cost \$55 from any electronic supply house. There were 5.25" uncased drives for \$25 and practically every orphan computer going plus IBM & its clones.

The T/S folks had a nice length of table space all together just down from the Radio Shack booth. Karen wondered why the T/S groups were the only ones not proud enough fly a banner. Al Feng made a small banner proclaiming us as the Sinclair Users Group but most of the folks that saw it thought we were a user group from the local college of the same name!

Anyway, at T/S booth #1 was Steve Spalding offering all kinds of Spectrum programs for those lucky enough to have a Specy emulator. He also had spare TS2068s and keyboards, plus a copy of Derek Ashton's 747 FLIGHT SIMULATOR that he had purchased from the U. K. Bob Swoger put Derek's business card in it, the closest thing to a signed copy. [Bob works with Derek at Motorola] Frank Davis is now the proud owner. I bought a fine NEC color monitor at an excellent price. Swoger bought a spare 2068 and all the software he could find that would fly.

Keith Watson rode to the fest with Steve from Michigan. Keith from Mt. Clemens was showing his TS2068, in which he had installed a standard keyboard.

He was also extolling the praises of RPM ne CPM that he uses with his AERCO FD-68 that he with Dave Hill of FD-68 NL fame wrote TXDOS which is a DOS with less errors than AERCO's and helps the AERCO with CPM run super. Of course, if you wanted CPM why not buy a Commodore, but I'll beat that drum some other time.

Bob Swoger, Steve Cooper, Karen and a guy named John (last name unknown according to E.P.Wannum in the Oct.'91 UPDATE!) Shepard were representing CATUG. Why, that's me! and my last name is SHEPARD! --we were at the next table (me only part of the time - Karen some of the other part) ... Bob was attracting people to our table by playing the Specy's 'EMPIRE STRIKES BACK' theme song with three part harmony and start-up \$creen, demoing the LarKen disc system w/LogiCall Integrated Software Package and handing out this years *Nite-Times News* N/Ls and helping....

Don Lambert, the Chairman of T/SNUG at the next table. Don was signing up folks for the newly formed organization and handing out ZXir QLive Alive! N/Ls as well as N/Ls from all the North American groups. By Sunday afternoon a case of such newsletters were gone!

Ruth Fegley was working the CATS table handing out CATS N/Ls and moving QL goodies. Bob and Audrey Currnutt were along side her at the next table selling T/S goodies for Sharps.

Frank and Carol Davis worked a VERY BUSY table. UPDATE! magazine was sold there, ISTUG was represented there with Mechanical Affinity goodies, both hardware and software, for ZX81/TS1000, TS2068, QL and even ZX88. Yes, even a ZX88 was there for sale.

Paul Holmgren was at the next table for QUANTA and ISTUG. He was showing an impressive 'Action' screen of a Vegas dancer to the public available from the QUANTA library[over 55

disks now]. It looked like a movie at first glance. Paul also had MORE ZX81/TS1000, TS2068 and QL goodies. QL Micro-cassettes were going for \$15 per set of four. CATUG purchased 2 sets for shut-in Grant Thomas. QL keyboard contact overlays were going for \$12. A John OLIGER Disk drive/EPROM Burner/Printer Driver interface package was priced to go at \$150 but it didn't. What a shame!

Bill Angle was at the next table selling QLs for \$55.

Bill Heberline represented SMUG. He was 'taking names' of all who came by. I trust he will publish this list in a SMUG newsletter so as to let user groups and T/S people get together.

Finally, Neal Shultz of SMUG manned the Zebra goodies booth. Many things at the Zebra booth couldn't be identified but many could. RS232 interfaces for the TS2050 modem, Dock Port cartridge boards, Zebra Talker boards, Koala pad interface boards just to name a few. There were Timex and Alfacom thermal printers Track-Balls, a kind of mouse that lies up-side-down and you rub its tummy for joy stick action. Getting these thing is good for 'cheap insurance', that is, if you buy a back-up, your original will never go out. [Things just don't last forever. Of my now 6 TS2068s 2 have something wrong with them. My advice to my Sinclair friends is always "buy back-ups and you'll never be down!"]

Of particular interest were dock boards with sockets for \$5. Put Jack Dohany's TS2068 and Spectrum ROMs in these, type OUT 244,3 and enjoy Jacks work without tearing into your machine.

Don said he would avoid naming names, but I won't, people need recognition! Besides those I've named so far, there were also present Dan Smith, the T/SNUG TS2068 JLO Disk Librarian, Carl

Molee, Jud Yalkut, Doug Gillespie, Dave Schwensen, Toby Radloff, Dave Bennett, Andy Hradesky who has breathed new life into Mile-High, Conrad Miller, Bill Bell, John Impellizzeri, Harv Spencer, Jeff Anderson, Carlos Lytle, Mike Konieczny, Mark Martin, John & Tim Schoenharl, just to name the folks that checked in to Karen at the CATUG booth.

The fun wasn't limited to just computer enthusiasts either. There was something for everyone, typical flea market items with an emphasis on electronic goodies. Karen did her favorite fun thing, buying. She returned to our table with two toys for the kids that laugh on cue, wish I had one of these when I was told the cost of van rental. Come to think of it, that lewd comment generator she purchased would have been just the thing when we traveled over those Illinois roads under repair. Karen's message? Bring your spouses next year, it's fun!

TREASURY NOTES

As of October 1, 1991 with \$714 from 8 groups and 38 individuals, with expenses of \$131.17, we have a balance of \$582.83

Please include your ZIP+4 code when you renew your membership. It will speed up the mailing. Thank you!

[Don, I thought we were the User Groups, what are we doing with all the individual supporters?]

Abed Kahale, Treasurer
Timex/Sinclair NorthAmerican
Users Group

SYSOP's TWISTED PAIR

Our 24 Hour BBS has crashed and when it will be back again is unknown. To accomplish any UPLOAD or DOWNLOAD activity, contact Bob Swoger:

H708/837-7957 or W708/576-8068

INPUT/OUTPUT

!!!!!! **H E L P** !!!!!

The need for T/SNUG to compile a list of available software is now evidenced by the request from Rod Gowen for a copy of CARTRIDGE DOCTOR for the QL. A corrupted copy needs repair and no one at CATUG has it. If you can help send a copy to Rod Gowen at RMG.

Gil Parrish writes:

I have newly-arrived into T/S computing, having just acquired a TS1000 with 16K RAM-pak, a TS2068, and a TS2040 printer, books, magazines and some tape based software. I have since learned a great deal about T/S computing, including history, active user groups sources of supply and so forth. Therefore; I was aware of a computer called the Sinclair Spectrum; that the Spectrum is the European version of the TS2068; that the Spectrum has achieved more popularity in Europe than the TS2068 in the U.S.; and that the two machines were incompatible enough that Spectrum software often would not run on the TS2068 unless a ROM switch were used.

But I was still surprised by the May 1991 issue of COMPUTE, which had articles about the current state of computing overseas. I did not realize until then that the Spectrum is still being produced by AMSTRAD, and is still popular in the U.K. and Spain, having previously been popular in France as well. The article states that the "bulk of the Spectrum market is for low-cost games that cost \$6 on cassette tape."

The article mentions, as I believe user group newsletters have also, that the Spectrum is something of a standard in the Soviet Union, with dozens of clones available and with one clone model-- called the Hobbit-- being a candidate for export (although the target country is not mentioned).

All this leads me to believe that the universe of Spectrum software, both commercial and PD, has got to be much larger than the universe of TS2068 software, even if not all of that European software has yet shown up in this country. I also have to believe that new Spectrum software will be created faster than new TS2068 software-- after all, even folks in the Soviet Union will be producing it! While I may not obtain much Spectrum software now, the Spectrum market certainly appears to be "where the future is" in TS2068 computing, and indeed one of the best reasons to support continued use of the TS2068 in this country. So I thought I would investigate what is involved in getting my TS2068 "Spectrum-compatible."

Gil Parrish
Route 1, Box 705
Beggs OK 74421

Two friends visited the U.K. recently and brought back Spectrum game magazines which had cassette programs glued to the front cover! One of these friends, Derek Ashton, developed and marketed the 747 Flight Simulator for the Spectrum while living in the U.K.

If you really wish to use your TS2068 acquisition to the fullest, acquire a LarKen disk drive interface, add a Spectrum ROM to it's DOS board, and get in on the software available for both the TS2068 and the Spectrum. LarKen with LogiCall can run them both. Four of us in the Chicago area group use LarKen DOS, two use Zebra systems, one uses JLO and one uses AERCO.

I am a TS2068 user and plan to use it until the Lord calls me home! I am the TS2068 software librarian for CATUG and the author of LogiCall, the Integrated Software System for LarKen DOS. Prices for the LarKen System look something like this:

LarKen Disk Interface\$125
LarKen 256K RAM-Disk Kit ...\$20
Spectrum ROM\$10
Disk Drive (used)\$45

This is the most complete yet lowest cost disk system available for the TS2068. You need only the interface and the drive to get started. Life is just too short to mess around with tape!

My system includes the TS2068, TS2050 modem, LarKen Disk Drive system using 4 TEAC/DEC 5.25" SSDD disk drives, 256K RAM-DISK, Magnavox Color Monitor, AERCO printer interface and Legend 1080 Dot Matrix printer. I have other items for my system but these are the ones that sit here before me.

There are two other ways to run Spectrum software on your TS2068. One way is to purchase a board from SMUG, the Milwaukee users group and install a Spectrum ROM available from CATUG. Another way is to send your machine to Jack Dohany and have it modified by him for dual operation which he installs inside your machine. This will also fix ROM bugs that were in the original systems.

Welcome to the Timex community,
Bob Swoger K9WVY ---GATOR---

Louis Eisen writes:

I am writing a short article for "ComputerEdge" Magazine about the TIMEX computers and would like to know more about your user groups. I still have my TS1000 but gave up using it some time ago. I have two additions of the magazine "Timex-Sinclair Users" June and July 1983, and also two books about the Timex, one American and one U.K., "Timex Personal Pomputer Made Simple" by Joe Campbell, Jonathan Simonoff and Jean Yates; (Signet) and "Byteing Deeper into Your Timex-Sinclair 1000" by Mark Harrison; (British)

Are there any users in the San

Diego area? Are any of your users still using the old original TS1000? That is what my story will be about. It started out mostly as a nostalgia piece but if users are still active, it would make an interesting finish to the tale. I got the info about you from "Computer Monthly" magazine for October 1991.

Louis H. Eisen
3284 Anchor Circle
Oceanside CA 92056

Well, Louis, some folks are apparently still using the TS1000, look at one of the articles in this newsletter for proof! Some ZX81/TS1000 users added keyboards, disk drives, and EPROMs that provide lower case letters. Still others took it one step further and moved to the TS2068 or Spectrum. The software they wrote for the TS1000 migrated to the TS2068 adding color and sound.

When writing your article remind people that Clive Sinclair invented his machine for folks with "Empty Coal Buckets" who couldn't pay a great deal for a computer and that there are plenty of us still out here and more after a decade!

Clive gave us a machine that would do what the programmer asked without coming back with "SYNTAX ERROR", the favorite retort of other personal computers. I was asked back in 1983 why my group of friends went with Sinclair instead of the COMMODORE, ATARI or TANDY machines. I told them I had a wife, a daughter and a cat at home and I wanted something at home that would do what was asked of it!

The TIMEX SINCLAIR machines are the easiest to program and understand. As for speed, I can go for a cup of coffee and return before my MACINTOSH SE at work is ready to use. Here at home, my TS2068 running LogiCall on LarKen DOS has the second program up and running before the CRT has warmed up

enough to put a picture on the screen!

As for the books and magazines, I've never seen those books. I haveVolume 1 #s 1-7 of "Timex Sinclair User" magazine; no dates are given. I don't know if that's the same thing. I sent them \$20 when I received Vol 1 #7 and never heard from them again. This was the first of the many disappointments I had with the T/S world and from then on I was reluctant, as were others, to part with money to it. We just kept on being 'TAKEN'.

As for California T/S users, Contact:

BILL MILLER
6675 CLIFFORD DR
CUPERTINO CA 95014-4530

Ed Grey
PO BOX #2186
INGLEWOOD CA 90305

WARREN TUCKER
348 IDORA AVE
VALLEJO CA 94591

Joan Kealy writes:

Has my Nite-Times News subscription expired? [I do that one and two others. ed] Don (Lambert) sent a switch that lets me switch my monitor between my two TS2068 systems, [ZEBRA and LarKen] but it's never over. I bought a 5.25" drive to run Z DOS, also a back-up controller. Maybe I could run 8 drives and 2 controllers off Z DOS and 2 LarKens??? Is NTN \$10 or \$15 now?

No, Joan, your subscriptions have not expired yet. I'm just behind again. At this time NTN and ZQA are both \$12 for individuals and both start at the beginning of the year.

Let me mention to the folks out there that the cost of ZQA is unrealistically low at this time because of the way I have been getting it printed. Is there anyone out there who can print it for us? Let us know

what the cost would be.

8 drives on 2 systems? That would be the ultimate!

Rod Humphreys phoned to ask about the failure of LogiCall to preform precisely as written in the documentation. Rod was calling for Marie Kendall who was actually experiencing crashes when trying to go into the terminal mode. Upon hearing of Marie's problem Rod thought he'd try it himself. He found that when he loaded in the BROOKE.C\$ file, his screen went BLACK! Hitting ENTER then put a black and white picture of Brooke Shields on the screen and hitting ENTER again gave her flesh tones. When he tried the GUIDED TOUR instruction to load the ldoc.CT file to read it on the screen without using the WORD PROCESSOR, ldoc.CT was missing!

Any file that ends in .C\$ will be loaded by LogiCall as a SCREEN\$ save. BROOKE.C\$ is an RLE picture and has no attribute file to give it color. If you LOAD vf.C\$ or vc.C\$ you will see a color picture on the screen the first time. When you press ENTER again you get a black and white picture, ENTER again and you get a black and yellow picture. Enter once more and you're back to LogiCall's Main Menu.

I was asked to make MSCRIPT work with LogiCall and in adding it to DISK #2 I wiped out ldoc.CT, the LogiCall Manual. The LogiCall manual is now available on the TSNUG BBS for downloading.

I shall place a readme.CT file on the last available track of LogiCall's DISK #2 and forward it to ROD and MARIE along with LogiCall V4.7 which makes all the Timex DOS keys do as they are labeled. Thanks for helping Marie and me, Rod, as well as T/SNUG!

To Bill Ferrebee:

Tell me once again what you need from me, I lost the note. Hooks list and what else? As

for you TASWORD II+, I can't get my TASWORD for LogiCall (original source LarKen) to make multiple copies or move the left margin as you and Rod Gowen do. When I try it, I get infinite line feeds between copies! HELP!

NEWS ITEMS

UPDATE! Magazine Renewal Time

* Frank & Carol want to *
* do it for another year *
Please get your renewals
* to Frank Davis. *
* P.O. Box 1095 *
* PERU IN 46970 *

Welcome our new treasurer, !!! ABED KAHALE !!!

Abed graciously accepted the post of treasurer because he lives so close to the editor. This will be very convenient for bill paying. Abed is a TS2068/LarKen user that found out about the T/S community in his area from Larry Kenny. Abed lives in Hoffman Estates Illinois. He is a retired Electrical Engineer and TS2068 programmer.

??? HARD DISKS for SINCLAIR ???

At an upcoming Motorola Microcomputer Club meeting we will get a demo of a SCSI interface that connects to a computer's parallel printer port. This means that hard disks, scanners and CD ROMS may be interfaced to a printer port. At present it is used on IBM compatible equipment, but perhaps someone will be able to write the firmware needed to run on Sinclair equipment.

>>> EPROMS for the TS2068 <<<

Nazir Pashtoon has made a device to allow us to program 32Kx8 EPROMS on a DATA I/O EPROM copier. A ZEBRA DOCK PORT Board or a Tom Wood 32K NVM RAM Board plugs into his device which is then placed into the EPROM socket of the DATA I/O.

The information is then loaded into the DATA I/O's RAM. The EPROM is then installed into that socket and is programmed with that information.

The EPROMS are then either placed in a ZEBRA DOCK PORT Board in the case of a TS2068 or Spectrum or a modified ZEBRA DOCK PORT Board for system EPROM for the Tom Wood 32K NVM RAM Board development work.

If you have developed a program on a Tom Wood 32K NVM RAM Board, TSNUG can now turn it into an EPROM.

>>> Dohany EPROMS for LarKen <<<

Through the efforts of Nazir we have seen the work of Jack Dohany on the TS2068 and Spectrum system ROMs. None of the Chicago users wanted to venture inside their precious TS2068s and would not try Jacks EPROM for fear of experiencing Fierstien's Foolaround Theorem (FFT). It states 'The more you "FOOL" around with it, the more you "FOUL" it up'.

We now have Jack's efforts on two individual EPROM's that work in the LarKen EPROM socket on the DOS board. Holding the 'K' key down on power-up or giving the command OUT 244,3 and the LarKen user is using Dohany's EPROMs. The TS2068 ROM fix screws up LogiCall a little but the user can fix it. Jack still doesn't have LogiCall to the best of our knowledge. A copy of LogiCall is on its way to him as he will not accept money for this effort.

LIBRARY

TIMEX/SINCLAIR
PUBLIC DOMAIN LIBRARY
AVAILABLE AS OF 01 JUNE 1991

REVIEW

1Meg Printer Buffer from Technologic Systems

Bob Miller, a past member of the Motorola Microcomputer Club visited recently. Bob is now an entrepreneur of printer buffers. Technologic Systems ads can be seen in Computer Monthly where Bill Ferrebee's articles appear.

Bob sent me one of his units, the BF3 with 1 MEG of RAM. The unit can be expanded to 4 MEG. The AERCO printer cable plugs into the BF3 and a provided cable connects the BF3 to the parallel printer. A 9 volt power supply plugs into the BF3. The TS2068 is ready to be used again in about 2 seconds after the ENTER key is pressed to start printing a 300 line TASWORD document.

To get multiple copies just press a button on the front of the unit twice and a second copy is sent to the printer.

If I can get 3 or more names from the T/S community for these buffers, we can get them for \$130 instead of the normal \$160. Contact Bob Swoger, W708-576-8068 or H708-837-7957.

ARTICLES

THE PERFECT GIFT or How to Assemble or Replace TS1000 Parts Cheap! by Gil Parrish

Suppose a local neighborhood kid goes ape every time he sees your computers, but the kid's parents just aren't interested in buying such things. Or suppose you come into contact with a child of a low income family (perhaps through your employer's "Adopt a School"

program, or however) who would benefit from some computer experience but whose folks just couldn't afford it. You could sigh and say what a shame it is; but instead, why not GIVE the kid a computer? Obviously, unless you're particularly wealthy, you can't afford to give a fancy system, but what about a TS1000 with 16K RAM-pak expander, which the kid can use with the family TV and tape recorder? This is a great gift that T/S users are uniquely able to provide, since non-computer types and users of other system brands would not be able to supply programs or know-how for a TS1000. And it's a golden opportunity for whole T/S user groups to do some public service by purchasing or taking donations of T/S equipment and giving the stuff to charities, Sound interesting?

Before you dismiss the idea on cost grounds, consider how small the price might be. It's not unknown to find TS1000 systems at garage sales for \$10. to \$15. That's about a tenth of what hi-tech sneakers cost today, and about the same as a couple of trips to McDonald's. Is that amount really beyond your means, or the resources of your user group?

Unfortunately, at least in my part of the continent (Tulsa, Oklahoma), T/S systems don't show up that often in garage sales and similar locales; and if they do, the seller often assume their systems are worth far more than is reasonable. Commercially, RMG (that all purpose T/S retailer at 1419 1/2 7th Street, OREGON CITY, OR. 97045, Phone (503)655-7434 will sell you a TS1000, without expander but with all the accessories, for \$29.95 plus shipping -- perhaps still too pricey for a "give-away".

However, an interesting opportunity has presented itself in the form of a comment in the Sept/Oct issue of SWYM, newsletter of the Seattle Area

Timex Users Group. Editor Chuck Kereluck noted that Hacker Electronics (21016 Devonshire St. Charsworth, CA 91311, Phone (818) 882-7980) was selling untested TS1000 units for \$1 each, and untested tested ones for \$2.00 each! Of course, those figures were for the CPU's alone -- no power supplies, no TV switch box and cables, no cables to the tape recorder, no RAM expanders, and no Manuals, but that kind of price nevertheless offers all T/S users a chance to stock up cheaply -- IF the other needed parts can be obtained inexpensively enough. I decided to get some CPU's and see how cheaply complete systems could be assembled.

My first call was to the folks at Hacker Electronics. At that time at least (September 5, and confirmed again October 2), they still had plenty of CPU's left. I asked what they did with the CPU's that turned out to be defective; they indicated they threw those in a separate pile for 50 cents apiece! (Most of the defects seem to be traceable to the keyboard, so the "bad" ones might still be useful to you if just need a controller or other non-keyboard application.) They also said that of the units they tested, more than 50% turned out to be defective. (On bulk orders, they include an extra CPU or two just in case a defective one slips through inspection.) So, I decided to order the \$2 tested units; total cost (for ten) including shipping was \$2.50 per unit.

Next, I dealt with the problem of parts that are really T/S specific. Obviously, the RAM expanders fit that category. The power supplies are sort of T/S specific; while Radio Shack and lots of mail order electronics firms will sell you 9 volt supplies, most are 300ma to 500ma, which is not even close to the supplies that originally came with the TS1000s. Most power packs will not have the correct connector for the computer (which is

variously called an 1/8th inch or 3.5mm mini plug, mono plug, or mini phono plug). And power supplies can be expensive -- \$4 to \$5 each, even mail order. But RMG had the answers here. It sells the "Magic Bridge" brand of 16K RAM expander; while normally \$3.00, I caught them on sale for \$1.50. (If you're buying on sale, be sure and specify the sale piece with your order; otherwise, RMG's computer charges the regular price.) Magic Bridge expanders can be a bit flaky; RMG now tests the ones it sells to weed out the expanders that won't even power up correctly. But you may still find that an "ok" unit after a bit of time will start putting random characters on the screen; this means the entire memory is being slowly scrambled. The culprit is apparently lack of adequate shielding against stray radio frequency signals broadcast by the computer -- the Timex 1016 expanders are encased in metal, while Magic Bridge units are plastic only. I "cured" my problem units by prying each one out of the case (they're just held in with glue), wrapping each in a plastic bag as an insulator, and then wrapping in two to three layers of aluminium foil. It looks a bit "homemade", but it gets the job done. As to power supplies, RMG has for \$2.00 lots of 650ma power supplies which were originally made for use with T/S units, but which for some inexplicable reason ended up having the wrong sized plug on them. You'll have to change the plug yourself, but that's not hard if you've done any soldering. (Cut off the old plug and strip a little insulation off the two wires. You'll find the silver-colored wire is positive and the copper wire is negative. Solder positive to the center lead and negative to the outside lead.) (Tip is positive and barrel is negative (Don)). Mini-plugs are 2/\$1.49 at Radio Shack, but a local electronics store here sells them for 50 cents apiece, so look around. And if you need at least \$20.00 worth of stuff,

the mail-order firm Mouser Electronics (several addresses but one order line at 800 346-6873) will sell you red or black ones (items 17PP101 and 17PP102 respectively) for 35 cents each (minimum of ten). (Incidentally, Mouser is the fastest mail order firm with which I've ever done business; I ordered one afternoon for delivery by normal UPS ground, and I got the order the next day!) So, cost for a RAM expander, power supply and a replacement connector worked out to be about \$4.50 per unit including shipping.

Then came the TV/computer switch and the cable between the TV and computer. The original cables are listed in books as being three to four feet long; that sounds ridiculously short to me and I'd recommend more like ten feet. They should have RCA plugs (also known as phono plugs) at both ends. RMG can sell you the switches for \$2.50 apiece; and, I got ten foot cables at the mail order firm American Design Components (P. O. Box 520, Fairview, NJ 07022, phone 800 776-3700; minimum order of \$15.00) for 89 cents apiece (item 32810). However, both of these items are the most common and generic of electronic game hardware, and if you attend any flea markets, garage sales or such, you can likely pick up at least the TV switch for a fraction of the retail cost. I found a used TV switch for 99 cents at the first place I looked. For my calculation, I'll use \$3 as the total cost of the switch and TV cable together.

Strangely, the hardest item to acquire or inexpensively replace is the short (two foot or less) cable from the recorder to the computer. It is a dual cable (two separate cables running side by side) with mini plugs (the exact same type of connector as on the power supply) on each end (a total of four). There appears to be no use for such a cable except for this specific

purpose, hence no ready supply. What do you do? Two alternatives. One, you can find dual cables with RCA plug on them (frequently, for less than the cost of plain wire). American Design Components has 8-foot dual RCA to RCA cables (item 34483) at 5/\$5.95. Cut off the ends, chop the cable in three parts, add the four on each section. With wire cost per section at about 40 cents, and \$1.00 for the four plugs, you could produce nice long dual cables in the \$2.00 range. Or, you can "cheat" and substitute a single cable for the dual cable. The T/S manual advises you to not have both sets of plugs on the dual cable attached to the equipment at the same time, because of the possibility of "feedback". So, if you have to readjust the cable between SAVES and LOADS anyway, why do you really need a dual cable? Get a few of those 10-foot RCA to RCA cables from American Designs Components. Chop each cable in four parts, and add a mini-plug at each end. Wire cost per section would be around 22 cents, and the cost of the plugs from (Mouser) would be 70 cents, so for around one buck you'd have a nice single cable that's longer than the original dual cable you're replacing. For the purpose of my calculation, I'll split the difference and use \$1.50.

Speaking of the T/S manuals -- what do you do for one here? They can be purchased used, but they tend to cost several dollars apiece. I decided to solve this problem by ignoring it. The manual isn't a "part" that's permanently required; you could loan a user a copy of the manual, or point the user toward your local library which (if like mine) has a number of T/S books on the shelves. Supplying a manual really isn't a "must".

Bottom line. T/S systems with 16 expanders can be obtained in quantity for about \$11.50 -- perhaps less if you have luck finding used systems or parts,

perhaps more if have to buy everything retail. Again, that's not a lot of money to spend to get a kid firmly into the world of computing. And it puts TS1000s to work, not to mention putting all that fine TS1000 software that's gathering dust in T/S user group libraries. Isn't it worth giving the idea a try?

CASSETTE LOAD/SAVE ROUTINE AND PROBLEMS FOR THE ZX81 PART 2

Compiled by Donald S. Lambert.

SYNCHRO-SETTE VOL. 1 # 4

JULY 1982

CASSETTE LOADING PROBLEMS.

THE CASSETTE RECORDER

As you know, many types of cassette recorders are on the market. The better ones can give a better sound quality to the computer. Some have valuable features such as a tape counter so that the user can identify the location of a particular program on the tape and/or a bass/treble adjustment that allows the user to raise the amount of high pitched sounds while the amount of low pitched sounds are automatically being lowered by the control at the same time.

The computer program pulses were produced by the computer as a high pitched sound and must be received back at the same pitch if the program is to load properly.

If the recorder only allows a mid range sound, then the high pitches are of lower intensity and any low pitched sounds that may be on the tape can over ride the high pitched pulses with interference and cause irregular transfer of data.

However, a recorder with a bass/treble adjustment must be set to allow maximum treble with no bass.

Even with these precautions, problems still can arise. If a program won't load from tape, try removing the cord that goes

from the MIC jack of the recorder to the MIC jack of the computer leaving only the cord to the EAR jacks. This prevents many of the unwanted signals from bleeding into the computer and causing audio distortion of the program pulses.

When saving programs on tape, do the reverse. Leave the MIC plugs plugged in and the EAR plugs disconnected. I personally test each tape before it is shipped to see that the programs load. One of the tests is to listen to the program's audio pulses through a headset with ceramic earphones for noise distortion. One time while listening to a master tape that I had prepared, I noticed a background noise that wasn't supposed to be there. I checked all my equipment and finally discovered that my headphones were still plugged into the circuit between the computer and the recorder. I unplugged the headset and made another master tape. The background was now gone.

What had probably happened was this:

Earphones can operate as microphones in certain situations, picking up sounds from the surrounding environment. In many electronic project books it is shown how to use this effect to create an intercom device that uses a speaker that can act as both a microphone and a speaker. My headset had picked up background noise and sent it to the master tape. The recorder has a speaker for audio output when not used with the EAR jack. It is possible that background noise in the room may be picked up by this microphone and distorting your programs while you are trying to save them. Why leave them in when it is easy to disconnect this cord completely.

Try this test yourself by simply turning your TV volume up and listen to the sound as you slowly pull the plugs from

the EAR and MIC jacks of the recorder. You can easily hear that the recorder itself is outputting a signal that shows up as the audio output of the TV changes.

Make your own test tape with at least two programs on the side you are testing and listen to it the same way. You will hear a lot more static and distortion before and between the programs than on the ones we sent you. Always, of course, make sure that you have run the tape beyond the leader that is on most cassette tapes before you start recording and turn the recorder on in its recording mode before you press the enter key on the computer.

If you still are dubious as to whether the slight amount of static is causing the loading problem, advance the tape beyond that segment and try loading again.

VOLUME CONTROL

This is one of the more critical areas of getting a proper load of a program. I have discovered a method of determining what I consider to be the exact volume setting for any one given program. Unfortunately for 1K machine owners, this method only works on 16K machines.

Sinclair suggests that your volume control should be set at 80% maximum volume and this is a good rule of thumb for the most part. Some tapes have the ability to produce a much stronger audio output signal at that setting than other tapes.

This results in a screen blitz where the computer hangs up and has to be reset. On the other hand, some tapes produce a lower audio output that results in the screen going white and the cursor returning to the bottom of the screen.

Try this following method on a program tape:

A. Type in LOAD"XXX" but don't enter it yet.

B. Now select one of our 16K program tapes, put it into the recorder but don't start the recorder.

C. Turn the volume of the TV up so that you will be able to hear the audio pulses.

D. Press play on the recorder and Press ENTER on the computer.

E. Find the portion of the program that has the even sounding pulses. It is usually the last part of the program. There are 24 pulses and this segment lasts 17 seconds.

F. If you have a tape counter, note the location where these pulses begin and where they end. If you don't have a tape counter, time the seconds from the beginning of the tape to the first pulse. You are going to have to return to this segment a few times with the recorders fast forward and reverse keys (do not worry about the computer blitzing while you are stopping, starting and reversing the recorder. The computer is searching in vain for program "XXX" and will not bomb).

G. When you are comfortable with finding the location of the pulses, at the point where the pulses begin, there should be 5 horizontal bars that are very steady. This situation will only last 17 seconds. Before these pulses, the bars do a lot of moving around so you are now going to adjust the volume so that these bars have very straight and clean edges.

H. Start turning the volume up until the bars start getting fuzzy edges (if you turn the volume too high, the bars may get wider and wider). When this happens, stop and turn the volume down slightly until the edges become crisp and straight again.

I. Make a notation on the cassette case itself of the volume level for future reference.

J. At this point, the volume is set as good as it can be. Hit the BREAK key. Rewind the program and reload it in the normal fashion. The program should now load OK.

LOW QUALITY TAPES

Many of us (myself included) have purchased cassette tapes at bargain prices and have used them on our computers with virtually no problems.

These non computer tapes are designed for sound input where high pitch or fidelity may not be important, such as for vocal or some music applications. The attempt to have the tape capture the high frequency sounds may not be successful and the replaying of the tape will easily evidence this effect, especially when we listen to the sounds directly and compare the same output on a quality tape.

This does not mean that you can not use them. Sometimes however, the tape has the effect of capturing the sounds in an irregular fashion. If we were to listen to the output of this type of tape we may hear some of the following undesirable effects:

A. Pulses that correspond with the position of the reel of tape as if a magnetic knife had cut through the reel.

B. Drop outs. The sound may be uniform in intensity and all of a sudden, the volume drops noticeably resulting in program blitzes. This can be the result of a lack of magnetic particles in that section of the tape caused by inferior manufacturing methods.

C. Uneven dispersion of magnetic particles in the tape causing drop-outs, uneven pulses, distortion, etc.

D. Left over sound pulses from old recordings that were not overlaid by the new program recording.

Many problems can be overcome with a bulk magnetic tape eraser but some are so stubborn as to defy the most rigorous attempts.

COMPUTER MALFUNCTION

This problem is more common with those of us who built our computers from a kit. I have however, heard of some of our subscribers that have received defective computers from the manufacturer.

If your computer was built from a kit and is not loading or saving programs properly, check all of the connections for weak solder joints. If the solder joints are good, there might be a defective kit component. If you suspect a defective kit component or if your ready-built machine does not load the programs and you suspect the machine itself, it probably is best to have an experienced electronics service check it out or send it back to Sinclair for service.

QLUSTER LITE

by Al Feng

Perhaps, the REMark that "all programs are obsolete as soon as they are run" has some truth in it.

QLUSTER v4.350 (aka "LITE") is the latest version of the program which evolved from QLUTter and began with the QL_AutoDirectory (v1.9).

The sequence of the program's "options" on the COMMAND page has been altered to:

```
CHANGE_DEVICE
AUTO_EXEC
UTILITIES
CLOCK
EXIT
```

These options appear in a "line" near the top of the COMMAND page. A highlighted bar is moved to the right by pressing the 'TAB' key or using a 'shift TAB' key combination to move the bar to the left. The 'Space_Bar' is then pressed to "open" the option.

Those familiar with the program will note that the "HELP" page is no longer available from the COMMAND page. The HELP page has been removed to reduce the program size, but is still available in an expanded form by EXEC_Wing the HELP_EXE program from within QLUSTER or as a stand-alone program.

Removal of the "HELP" page and re-coding has resulted in a program whose TURBO-compiled size is 5K smaller than the more recent versions. At the same time, an additional ERROR TRAP for insufficient disk space has also been incorporated.

"FLIST_imp" (FileLIST_imp) file replaces the "FILE.DIRECTory" as the dynamic, program file and can be IMPORTed directly into QLWP/Quill for printing in a columnar and/or condensed format; thus, eliminating the need for the supplemental SNAPSHOT program.

Unlike other utility programs, QLUSTER uses the "full" screen for displaying filenames; so, instead of watching ten-or-so files scroll by, you can view up to 76 filenames per page (608 total capacity). While this number may be overwhelming at first, you will probably find it more convenient to review a lot of filenames at a time when scanning a "mystery" disk.

QLUSTER's "VIEWing" feature is "full" screen rather than a small "bunker" window. This makes "reading" true txt files convenient compared with COPYng to screen, or IMPORTing into Quill (a very slow process for long document_txt files).

The "VIEWing" feature can be interrupted prior to reaching the end of the file. Any file can be "VIEWed"; but, non-text files will have less meaning.

QLUSTER provides a fast and convenient DATE\$ setting mechanism. (W)COPYing, (W)DELeting, "PRINTing"/SPooling & RENAMing files is equally convenient.

Any medium can be easily FORMatted. Determining file "WSTATUS" is provided as an as needed feature, rather than occupying the directory window.

QLUSTER provides access to all drives via either the cursor keys or a few easy key strokes.

QLUSTER can be used to EXEC W or EXECute (as within QRAM); but, TASKMASTER users must sacrifice 32K for a screen-save or LOAD via FILES after the TASKMASTER's autoloading sequence.

QLUSTER is designed to be convenient for everyone; and, touch-typists should find it particularly convenient when compared with most other utilities.

Does this mean that QLUSTER is a "perfect" program?

Well, it is still possible to CRASH (!!!) the program if you encounter a failed FORMAT; or, if you try to LOAD (i.e., EXEC W or EXEC) an invalid filetype.

Not convinced that QLUSTER is the utility for you to use? If you want to get a sense of where QLUSTER came from, you can preview an older version of QLUTter (v3.105) intended for use on a TV or "short" monitor is on the CATUG PDL Disk 1 (this is also T/SNUG Disk 01). Send a \$2.00 check made out to "Al Feng" and you will get not only the disk (specify format), but a coupon for \$2.00 off either QLUSTER or QLUMSi; or, a future CATUG PDL disk (if we ever expand our QL library, that is!).

All current and previous versions of QLUSTER (and, QLUTter) are compatible with the MINERVA ROM code, so no excuses. QLUSTER is still available from EMSOFT for \$12.95 (P.O. Box 8763, Boston, MA 02114-8763).

All "registered" QLUSTER and/or QLUTter users can get the most recent copy of QLUSTER by sending only \$2.00 [\$12.00 for "new" orders] to:

Al Feng
15 Wake Robin Court
Woodridge, IL 60517

Don't forget to specify your disk format (5.25" or 3.5").

[NOTE: Microdrive users should (1) send a check for \$2.50; (2) supply a good microcart; (3) specify the disk format that you think you may use in the future].

HAPPY TRAILS,
AND COMPUTING,
TO YOU ...

ADS

To put an AD in the BBS and newsletter, upload a file with the filename.filetype:

TSNUGX.ADS

!!!! FEEL FREE TO PUT THESE ADS
IN YOUR NEWSLETTERS !!!!

WANTED: ON 911122
%%
%
% USED Z-88 %
%
% Offering \$350 Negotiable %
%
% Call John Shepard %
% RT 3 Box 143 %
% Ogden IA 50212 %
% (515) 846-6378 %
%
%%

WANTED: ON 911122
%%
Trump Card or other memory
expansion and/or disk inter-
face for the QL.
D. G. Smith, R.415 Stone St.,
Johnstown, PA 15906.

FOR SALE: ON 911025
%%
FOR SALE: TIMEX 2068, excellent
condition, \$65.00. Oliger disk
interface, controller and
expansion board with manual,
\$11.00. Both for \$165.00.
D. G. Smith, R.415 Stone St.,
Johnstown, PA 15906.

FOR SALE: ON 911025
%%
I have a Sinclair ZX81 with