

HUNTER VALLEY 99ERS USERS GROUP

HOME COMPUTER NEWSLETTER

Red-tailed
Black
Cockatoo



Sulphur-crested
Cockatoo



Rainbow
Lorikeet



APRIL 1990

REGISTERED BY AUST POST
PUBLICATION No. NBG8023



YOUR COMMITTEE

PRESIDENT

Peter Smith
8 Glebe St.
East Maitland 2322
Phone 336164 V/tl 493261640

VICE PRESIDENT

John Paton
1 Parlen Close
Rutherford 2320
Phone 326014 V/tl 493260140

SECRETARY

Brian Woods
9 Thirlmere Pde.
Tarro 2322
Phone 662307 V/tl 493223070

TREASURER

Noel Cavanagh
378 Morpeth Rd.
Morpeth 2321
Phone 333764

SOFTWARE LIBRARIAN

Stewart Bradley
14 Hughes St.
Birmingham Gardens 2287
Phone 513246

EDITOR

Allen Wright
77 Andrew Rd.
Valentine 2280
Phone 468120

PURCHASING/HARDWARE CO-ORDINATOR

Alan Franks
822 Pacific Highway
Marks Point 2280
Phone 459120

SOCIAL SECRETARY

Robert (Bob) MacClure
75 Deborah St.
Kotara South
Phone 437431

PUBLICATIONS LIBRARIAN

Ken Lynch
9 Hall St.
Edgeworth 2285
Phone 585983

COMMITTEE MEMBERS

Don Dorrington
36 Nelson St.
Barnsley 2301
Phone 531228

Tim Watkins
36 The Ridgeway
Bolton Point 2283
Phone 592836

CONTRIBUTIONS

Members and non members are invited to contribute articles for publication in HV99 News.

Any copy intended for publication may be typed, hand written, or submitted on disc media as files suitable for use with TI WRITER. (ie. DIS/FIX 80 or DIS/VAR 80). A suitable Public Domain word processor program will be supplied if required by the club librarian.

Please include along with your article sufficient information to enable the file to be read by the Editor eg. File name etc. The preferred format is 75 columns and page length 66 lines, right justified.

All articles printed in HV99 NEWS (unless notified otherwise) are considered Public Domain. Other user groups wishing to reproduce material from HV99 News may feel free to do so so long as the source and author are recognised.

Article for publication can be submitted to the Editor, ALL other club related correspondence should be addressed to the Secretary.

DISCLAIMER

The HV99 News is the official newsletter of the HUNTER VALLEY NINETY NINE USER GROUP.

Whilst every effort is made to ensure the correctness and accuracy of the information contained therein, be it of general, technical, or programming nature, no responsibility can be accepted by HV99 News as a result of applying such information.

The views expressed in the articles in this publication are the views of the author/s and are not necessarily the views of the Committee, Editor or members.

TEXAS INSTRUMENTS trademarks, names and logos are all copyright to TEXAS INSTRUMENTS.

a
pa
ti

pr
of
no
ef
of
ce

da
re
ne
co

de
Pl
st
so
yo

so
90
ch
is
yo

in
me
on
yo
ce
se
th

The
even
part
at 5
magp
swim

from President Peter's Quill.

Once again our past president, Joe Wright has shown a remarkable aptitude to do wonders for this club. His efforts in the past have always been for our (the general member's) benefit and this time has proved no exception.

Over the last few months Joe has painstakingly processed disk after disk, program after program to produce a listing of the programs contained in the club's software library. The job is not finished yet (about 60%) and I am sure it will require much more effort to complete, so if you could help Joe, please make him an offer of assistance. I am sure you will learn a lot, as Joe has said he certainly has.

Once again cordial communications have been established with the Sydney group and by all reports a very pleasant day was had by those who visited The Big Smoke for their meeting recently. I look forward to some cooperative developments over the next few months when hopefully our two executives meet for talks which could prove mutually beneficial.

A social function is being organised by Bob McLure in the form of a country dancing night at Buttai Barn on 26th May.

Cost will be \$22.00/person (plus drinks) with a deposit of \$10.00/person to Bob by/at our general meeting on 22nd May. Please support your club and your committee in this venture. We do not stand to make money out of it. We simply want to provide a setting for social exchange between our members. I look forward to seeing you and your friends there.

This committee's time in office is nearing its end so please give some thought to how you see the club functioning in 90/91. Who should lead it and in what direction should it go. Your chance to nominate someone will soon be here so start looking, (There is no reason why you can't nominate yourself, you modest person .. you.)

Al Franks (our hardworking hardware repairer has intimated that he will shortly be starting a scheme whereby club members with RS consoles will be able to exchange them with repaired ones off the shelf for the sum of \$25.00 any postage etc. I am sure you will agree that this is a most generous offer and one that certainly has appeal. If you are not a club member and want this service, the answer is simple. Join our club. It will certainly more than pay for itself.

THE COVER

The newsletter cover this month is a special one to make Bob Carmany miss us even more. During Bob's visit he found the Sulphur crested cockatoos particularly interesting. We consider them something else when they wake us up at 5:00 am having what we call cocky wars. If they are not being chased by magpies then they are in the yard pinching passion fruit or drinking at the swimming pool. No matter what they do it is always done with a lot of noise.

Robert M. Carmany
1504 Larson St.
Greensboro, N.C.
27407

Mar 22, 1990

Hunter Valley 99'ers Users Group
77 Andrew Rd.
Valentine, New South Wales
Australia 2280

Dear Mates:

Here it is almost a week after my return from Oz and the effects of the trip are still lingering. Sandy says I talk funny --"G'day", "mate" and "bloke" seem to have become a part of my vocabulary for the present. The influence wasn't great enough for me to start my day with Vegemite and toast but there is the yearning for a Tooheys Draught now and then and I still refer to supper as "evening Tea". Oz is habit-forming!

Actually, I would like to thank everyone in the Users Group for the effort that went into my visit. Even though I have been writing to several of you for years, it is always difficult to meet someone in person for the first time. At the time that I got to Newcastle, Woodsy and Al had made me feel so welcome that I really didn't feel like someone from halfway round the planet. I would like to thank you one and all for the splendid vacation --- to Brian and Al for starting everything off on the right path and Joe Wright for being the consummate host and to Larry Reid for showing me the wonders of Fraser Island and Queensland. Geez, mates, the list goes on --to Peter Smith for his over-generous introduction, Al Franks for arranging the P-Box cards, Will and Tony for the insight into F'Web Farm, Alby getting me involved with this lot in the first place, and Ron Kleinschafer for making my return after 3 weeks alone in Oz much safer (she liked the gift!!).

Most of all, thanks to all of the ladies who put up with having their daily routines interrupted by a stranger from 12,000 miles away. Marjorie Lawrence and Elizabeth Woods only had to put up with me for a couple of days (I hope that I wasn't too bad of a guest). Bev, I thoroughly enjoyed the tour of Maitland. I even got to meet the long-suffering "computer widow" Val McGovern. Most of all, I would like to thank Bev Wright and Gay Reid for all the extra dishes, meals, and laundry that they had to do while I completely disrupted their daily schedules.

I've got a lot of fond memories (and 7 rolls of film) about my trip to Oz. Stuff like Eli Creek and Fraser Island, Al's "magic feather", and Tony deciphering A/L code --in Hex. The surprisingly philosophic Dr. Terry, Bondi Beach, and the raucous Cockatoos are other memories of Oz.

It is really great to have a bunch of true "mates" like I have found in the Hunter Valley 99'ers Users Group. I hope that our correspondence and friendship will continue throughout the years. You all have a place to stay in North Carolina when you come to the States --but please not all at the same time! It was a truly wonderful vacation --thanks to the entire Hunter Valley membership!!

Sincerely,

Bob Carmany

RANDOM BYTES

Bob CARMANY

Most of us (myself included) have a favorite language that they prefer to program in. I'm referring to the actual programming language itself --not the language that programming generates. Think about that for awhile!

For the purposes of this article, BASIC and Extended BASIC will be considered to be the same and discussed under the topic of Extended BASIC. With this limitation in mind, let's take a look at programming languages and what they can and can't do!

Generally, the more "user-friendly" a programming language is, the slower it tends to be. Languages that employ "user-friendly" statements have the advantage of being easier to learn and more like human speech rather than computerese. Ironically, the only language that a computer understands is simple binary code. In the early 50's that is exactly how programs were written ---as a series of 0's and 1's. Try that if you want to go both crazy and blind! Binary is not practical to use any longer and we step up a level to look at our first programming language.

ASSEMBLY LANGUAGE is about as close to binary as programmer's come these days. It is considered to be a "low-level" language because it is closest to pure binary code. One of the major strengths of A/L is sheer, raw speed. In fact, it executes at very nearly the maximum rate for the processor. Some of the very best games for the TI are written in A/L to take advantage of the speed and seemingly immediate execution of the code itself. A/L sort routines are an excellent example of the power and speed of an A/L program. You should remember that humans aren't nearly as fast as the computer ---even your TI. The end result is that often times delay loops must be built into the program to let the human catch up. This is especially true in games. On the "downside", simple tasks often require several lines of code rather than a single line in a "high-level" language like XB. And, A/L programs aren't the easiest to debug (ask Will and Tony).

Extended BASIC is much higher on the ladder. As a "high-level" language, it is relatively easy to work with. The code is in fairly easy to understand English and a single statement takes the place of many A/L lines of code. The problem is that it is relatively SLOW. Debugging an XB program is not all that difficult because you can easily read the lines of code without an interpreter.

Where does this leave us? In some cases, full advantage can be taken of a couple of different programming languages. XB could be used to display screen prompts and general instructions and the drudgery and waiting taken out of a program by using A/L routines to sort and perform other redundant functions. This is done in two ways: 1) Using CALL LINK from XB and 2) Creating hybrid programs that use hidden A/L segments (like F'WEB). Remember, XB has that nice little 8K space for A/L programs and relocatable routines when the 32K is attached. That is one way to maximize your programming effort.

Another is to match the language to the task. Why write an A/L debugger in XB? Take advantage of the speed and power of A/L to plow through the A/L program itself. On the other hand, why write an A/L program to perform a bunch of simple functions when speed is not critical. If you have a lot of user input, the A/L program will have to be slowed down with delay loops anyway and you have lost the advantage of speed.

There are other reasons for choosing a programming language besides speed. A/L handles error conditions better than XB. On the other hand, XB is easier to write code in than A/L.

In the end, it all boils down to: Use what you are the most comfortable with and what suits the purpose of your programming effort. By choosing the correct programming language, you won't have the program generate language of the colorful variety.

I'm still soliciting ideas for future columns in this series. Remember the text-to-speech demo? That idea was stimulated by Paul Mulvaney. It doesn't cost THAT much to send a letter to the States! That's it for another month. The message says 'Buffer Full'.

NX-1000 NOTES

By Bob Carmany

If you have been following the ongoing controversy in MICROpendium about the STAR NX-1000 printer, you are probably about as confused as I am. I really don't understand any of it. The initial review of the printer said that it performed well except for an apparently aberrant EPROM (Vn 1.5, I think).

The latest development in the saga is a letter and plans for a "special cable" to overcome the "problem" with the TI RS232 (the printer is supposed to work fine with MYARC and CORCOMP RS232's). There were references to the "handshake" signal and ways to overcome the incompatibility, etc.

Anyway, I needed a new printer and I thought that I would take a chance on the STAR NX-1000. The price was right and I reasoned that I could always pack it up and send it back if it didn't work.

I found that my fears were unfounded! The most difficult task that I encountered was opening the shipping carton (it has particularly sticky tape on it). It took me all of 2 minutes to put the platen knob on and connect the PIO cable from my TI RS232 (the one that didn't work?). It might be that the EPROM in mine (Vn 2.1) is a "fixed" version but the printer does everything that I want it to and much more. After using the printer for a couple of months, I have begun to question the validity of the reported "problems".

One possibility is simply this! STAR made 3 models of the NX-1000 printer. There is the NX-1000 Rainbow color printer, the NX-1000, and the NX-1000C (for Commodore computers). Now Commodore computers use a strange printer interface --non-standard PIO. Could all of these machinations be the result of a couple of people getting NX-1000C printers either by ordering the wrong printer or through an error in the STAR plant putting the wrong case on the motherboard? It would go a long way to explain some of the problems that some people are having with the printer.

Anyway, I have had no problems with mine and I wouldn't trade it for anything. Four NLQ fonts, 144 CPS, full graphics capability, and alternate IBM character sets. In short, a superior printer!

suprising Forth.

NOTE: The following info comes from the NETWORK-99 NEWSLETTER. Each issue contains 4-6 pages loaded with Forth related articles and code. I recommend it to anyone interrested in the Forth language.

A 12 issue subscription to the newsletter is \$10, back issues are available for \$1 each. Send check or money order to:

BRIAND SANDERSON
C/O LTC MICHAEL G. SANDERSON
HEADQUARTERS 2ND/33RD ARMOR
P.O. BOX 4356
APO NY 09045

HOW TO READ A CARTRIDGE!!!!

First, make sure the cartridge you want to read does not contain any GROM chips. Since many of the TI licensed carts contain GROM and GPL code, it is best to stick with 3rd party carts such as the Atarisoft carts. These are written entirely in TMS9900 Assembly Language, and are easily read. Since there is no automatic reset when one of these carts is inserted, it is very easy to read from Forth! Load -DUMP from Forth's menu. When the cursor returns, gently pull out the E/A cart

and insert a readable one. To read this cart all you have to do is type: HEX 4000 1FFF DUMP and watch the cart's contents print to the screen. To print to a printer, just load the -PRINT commands before you switch carts and type SWCH before the DUMP and UNSWCH after. It is also possible to save to disk using the same procedure, but changing the file attributes on SCR# 72. Of course, getting it to run from disk without the cart is another story! Please let us know if you succeed. You should be able to disassemble the code and check out the source code with one of the disassemblers floating around, or wait for the Forth disassembler in a future issue of the NETWORK-99 NEWSLETTER. Good Luck!

Here is a short routine that allows you to "freeze" a number of rows from the top of the screen. It assumes you are in Text mode, but can be adapted for other needs. Just type DEMO for a demonstration.

DECIMAL

```
: FREEZE ( ROWS --- ) 40 * SCRN_START ! ;
: UNFREEZE 0 SCRN_START ! ; : BORDER 22 0 DO 42 EMIT LOOP ;
: DEMO 0 0 GOTOXY BORDER 0 3 GOTOXY ." THIS SECTION IS FROZEN"
  0 6 GOTOXY BORDER 0 23 GOTOXY 8 FREEZE 20 0 DO I SPACES
```

Screen 72, line 5, change "FAB_ADDR" to "FAB-ADDR" Then change the printer info on lines 3,4, and 5 to match your printer specs.

Screen 58, 11th line down, change 1st exclamation point (!) to a tick ('). Screen 58, swap 11th line down with 10th line down. Screen 22, 6th line down, words: 3800 ' SATR ! should be moved to Screen 23, 3rd line from top. Add it to the end.

Now you can stop pulling out your hair while trying to get sprites to work from Forth.

Forth manual, Appendix D, page 30, 4th definition should be, "ENDOF".

Forth manual, chap 6, page 3, "SCREEN" must follow 2 color values, foreground and background colors, or screen writing becomes transparent.

Forth manual, chap 10, page 3, definition of DOWN should read: : DOWN -100 ALLOT DROP ;

and on the next page, the "83C4" should read: HEX 83C4 ! DECIMAL

Here's a screen to test those sprite routines. It's a simple game. You control the white circle, with the joysticks or arrow keys and try to catch the blinking circle which the computer moves. Just load the screen and type GAME.

```
( SPRITE DEMO NETWORK-99 NEWSLETTER VOL1#6 ) BASE->R HEX GRAPHICS 800
SSDT 0 MAGNIFY
```

```
3C42 8181 8181 423C 1 SPCHAR 003C 7E7E 7E7E 3C00 2 SPCHAR
50 50 F 1 1 SPRITE 50 50 6 2 2 SPRITE
```

DECIMAL

```
: BLINK 1 2 SPRPAT 15 RND 2 SPRCOL 2 2 SPRPAT ;
: ZIGZAG 100 RND 50 - 100 RND 50 - 2 MOTION BLINK ;
: CATCH? 1 2 1 COINC IF BEEP THEN ;
: JOYSTICK 1 JOYST ROT 18 = IF QUIT THEN
  SWAP 10 * SWAP -10 * 1 MOTION ;
: GAME 3 #MOTION BEGIN ZIGZAG JOYSTICK CATCH? AGAIN ;
```

R->BASE

FILLER # 1

WHO'S THE REDHEAD?

This is another work-out-the-answer-from-the-clues thingy. Nothing more than a mild work-out for your analog unit - if you can raise the interest that is.

Its raison d'etre is purely to fill one of those blank areas that seem to occur regularly in the newsletter due to lack of input from SOME members. The alternative to this is another of those carping diatribes from the ED. about blank spaces - so be grateful. And this is just as easy - maybe a tad easier - to skip over knowing that you haven't missed anything of note.

Well - on with the story. Some folks had invited me to a barby - bring the wife (they hadn't met her).

As we drove up to the picknicking spot it looked like we were the last to arrive. George walked over with some dehydration remedy. I introduced the wife and commented

"Looks like we're last here - not late are we?"

"No - most of us have just arrived and the wife is dropping the kids off at her mum's - she'll be along shortly."

"Fine - I think we'll just wander around and I'll intro the wife - catch you later."

("Most unusual for Kate and Nora to be talking together, even though they're neighbours. Nora - she's the one with the long black hair - always seems to have a chip on her shoulder")

"Kate, Nora, this is the wife Jean."

"Betty, Tom, the wife Jean."

("Are they married?")

("Not to each other. Although Tom's just been married a couple of months, he still fancies himself I reckon. He's Kate's brother.")

"Geoff - meet the wife - Jean."

("He looks a lot like George - they must be brothers.")

("Well sort of - twins actually, and their wives are sisters too, but not twins.")

("These next two, Topsy and Irene,

are just the opposite to Kate and Nora. They're great friends even though they have known each other only a couple of months. Both husbands work on that new shopping complex construction site that began about six months ago.")

"Topsy, Irene, this is the wife Jean."

"Debbie - my wife Jean."

("Debbie and her husband took over the newsagency in Bank St. a couple of years ago just after they were married. Debbie's Fred's sister - that's Fred over there with the big hat and shades. Only sister now as it happens - their younger sister was killed in a boating accident last year.")

"Fred, meet the wife Jean."

("Fred and his wife thrive on barbies. Most weekends they're over at the Thompson's for a barby.")

("The Thompson's?")

("Yeah - Irene and her husband.")

("Is that blonde over there George's wife?")

("Which blonde? - the one in the red dress is George's wife ---")

("I thought so - I saw her come across from the car park a few minutes ago.")

("-- and the other is Ron's wife.")

"Charlie, this is the wife Jean."

("Charlie's a commercial traveller.")

("He's a bit older than the others - which is his wife?")

("You probably wouldn't guess - but have a shot anyway.")

("No - I haven't any idea - Nora?")

("I said you wouldn't pick her - it's the redhead.")

("You're right - I wouldn't have picked her as Charlie's wife.")

Well - there it is. More like an episode of Days of Our Drearies - or five episodes perhaps.

Who is the redhead? Who cares?

Hopefully I'll be able to provide an answer to this burning question next month - if I've worked it out by then.

See ya later.


~~~~~  
W-AGE/99 \* NEW-AGE/  
99 \* NEW-AGE/99 \* N  
EW-AGE/99 \* NEW-AGE  
/99 \* NEW-AGE/99 \*  
~~~~~

* by JACK SUGHRUE, Box 459, East Douglas, MA 01516 *

#3

I often chuckle at doomsayers, but sometimes they irk me. I don't think anyone questions the facts that the APPLE, AMIGA, IBM, and clones all have more commercial software and hardware support than the 4A. Walk into any bookstore and look at the magazines. Go into a department store and look at the racks of software packages. Or into an electronics store and peruse the computers, cards, drives, other hardware and software items. And the prices.

No question: the stuff's there. And some of us succumb to those temptations. Don't get me wrong. At work and at the homes of friends and relatives I get plenty of opportunities to play and work with these other machines. And enjoy my time on them, for the most part. But, even then and even when I attend the other computer user groups or fairs, I don't have the feeling that I do with similar TI activities.

The emotion - very much in evidence at TI get-togethers - is absent at Apple and IBM gatherings. There are subtle, important other differences, too.

When I look at the new Other software or Other hardware I wonder if most TIers would pay those humongous prices or whether most TIers would want to trouble to learn these new ways of hi-tech wizardry. For the most part, the TIers don't do that now.

An example: The Apple IIGS is \$1149. (That's without the 5.0 (NOTE THE CONSTANT UPGRADING THAT SEEMS TO BE A COMPLAINT IN SOME CIRCLES!) \$50 Systems disk that's required to operate the machine. Nothing resides in memory.

Let's say you want a word processor for it, as word processing is the most common use of non-business computers. Appleworks (the most popular WP for all Apples) is another \$250. (No percentage point, folks. It's two-hundred-fifty dollars, plus tax!) Will the WORKS give you 40/80 column for those of us (oldtimers?) who LIKE 40 because the letters are large and clean and easy to read? Nope. Try reading 80 on an Apple monitor.

Can you flip around, as you can with the fairware FUNNELWEB, for example, and load up such utilities as DM-1000, Disk Utilities, ARCHiver, other languages (Assembly, c, FORTH), other sources (tape, cartridge, etc.)? Nope. There are no tapes and cartridges for those Other machines, anyway, but the WORKS doesn't let you configure any possibilities outside the provided environments. How about modified fonts, underlining, doublestrike? All available with FUNNELWEB, even more so if you use the fairware PLUS! within the FWB environment.

And speed? The IIGS is slow, very slow. But for an additional \$399 you can buy a TRANSWARP GS card that'll speed up WORKS and other GS items to reasonable, runnable speed.

Can you slip into graphics with WORKS? Nope, but FWB's TI text can easily emigrate to PAGEPRO for all kinds of graphic/text manipulations (or PP can stand alone for similar structuring).

You must use PRINT SHOP separately to get some graphics; still, not with the page possibilities. For that you'd need the user-UNfriendly

NEWSROOM. Add another \$400. Not counting the graphics. The kind that are Public Domain through TIPS for the TI. Say another \$500, easily. How much is that decidedly inferior wordprocessor now? Still under \$3000? That's not bad as prices go in the computer world out there. Check Other computer prices.

Why would we Tiers consider THAT an upgrade? We certainly wouldn't pay those prices for software for our superior machine: FWE donation \$20; PLUS! donation \$10; TIPS and 5,000 graphics are FREE; PAGEPRO is under \$25. Grand total for us Tiers, maybe 50 bucks at the most.

Most Tiers don't have RAM disks or RAVE keyboards or hard drives or the GENEVE upgrade that includes 640 RAM, truly astounding graphic capabilities, a superb keyboard and all other kinds of great stuff, including TI compatibility (as much as most clones have with IBM). And yet EACH of these things are less than a couple pieces of software for Other computers.

Most Tiers don't (in all honesty) even pay for the fairware they use, so I can't see them spending \$50 to \$800 per piece of software after spending a couple thousand for another system, no matter how great the software is. Look at the magnificent under \$25 commercial software items for the TI: TI-BASE, PAGEPRO, TI ARTIST PLUS, for examples. Do most Tiers who have disk drives own these three items? Not by a long shot!

Have most of the Tiers who use Tony McGovern's FUNNELWEB, Barry Boone's ARCHIVER, John Birdwell's DISK UTILITIES, or Canada's DM-1000 sent decent (or any) fairware contributions to the authors? Or contributions for the constant updates? Nope.

Do most Tiers subscribe to MICROpendium or ASGARD NEWS, the only two magazines we have devoted entirely to the TI? Nope.

Do most Tiers even belong to user groups? Nope. Not even by mail, though that is the best source of disk, tape, and text materials, not to mention the monthly newsletter connection, that money can buy (also under \$25).

Do most Tiers take advantage of the massive sources available across their phone through inexpensive modems? Nope.

My feeling is why, if Tiers are not even taking advantage of all the things that are available NOW and at a lot smaller cost, would they even want to move (up?) to more expensive machines?

It makes me think about a comment by Keith Jarrett, considered by many music critics to be the greatest pianist of this century. Because he plays jazz and classical and newage and a style of improv that is inimitable, he was asked why he didn't play the electronic keyboard. "I haven't learned everything about the acoustic piano, yet," he said. If he hasn't learned everything about the acoustic piano yet, no one in the world has.

But I feel this way about my TI. When people ask me why I don't move up, I first give them my speech about moving to Apples or clones or whatever is not necessarily UP. Then I think of the real reason: I haven't finished learning everything I want to learn and doing everything I want to do with my 4A yet.

Even if everything relating to TI ceased instantly; nothing more being created; all user groups stopped; the complete TI end - even if... most of us would still be using and learning and enjoying our perfectly wonderful computer for a long time to come.

But such a scenario is not heading our way in the near future. There are too of us who care and WANT to stay with this gem of a machine.

I think we all have a long way to go yet, and I am enjoying the journey.

[If you see NEW-AGE/99 please put me on your exchange list.]

USING A MODEM

This article appeared in the March 1990 issue of The Spirit of 99, the newsletter of the Central Ohio 99ers inc. The author is Dick Beery. Parts of the article not relevant to Australian usage have been edited.

Even if you don't own or use one, chances are you're familiar with modems. Basically, a modem allows a computer to send and receive information over a telephone line. This information can consist of messages and other text files, games and other types of programmes, and even graphics images.

As you are probably aware, computers use digital processing, which means that all information is reduced to a series of ones and zeroes. On the other hand, telephone lines transmit audible (sound) information such as voice and music. The modem serves as a 'translator' between one type of information and the other. When you send information over the modem, it translates the computer's digital signals into audible tones, and when you receive information, it converts the audible tones sent by another modem into digital signals that your computer can understand.

Types & prices of modems can vary widely, so it helps if you belong to a computer users group or have one or two friends who are knowledgeable about modems before you run out to buy one. If you purchased a used TI 99/4A system, it may have included Texas Instrument's early acoustic modem. These modems are equipped with a cradle in which you put the telephone handset. The modem creates audible tones that are picked up by the microphone part of the handset and listens for tones coming back through the speaker portion. Although these acoustic modems are no longer made, there's nothing to prevent you from using one. But they do depend upon a tight seal between the telephone handset and the modem to ensure proper data transmission, so you may want to try several of your phones with the modem to see which provides the best fit.

The majority of modems made today are of the direct-connect type—the modem plugs directly into your telephone line and usually has another outlet so that you can plug a standard telephone into the modem. These modems tend to be more reliable, since they generate audio signals internally and don't depend upon a telephone's microphone and speaker. In fact, with the right software for your computer, you can use some of these modems without even having a telephone hooked up to the line.

Modems are usually classified by the maximum speed at which they can send and receive data. This speed is measured in bits of information per second, or "baud". Earlier modems, such as the TI acoustic, could transfer information at 300 baud, which meant that 300 ones and zeroes were going through the phone line every second. To give you an idea of what that means, this article would take about five minutes to send at 300 baud.

Nowadays, many people find that speed much too slow, especially if the call is long distance. Over the past several years, 1200 baud has been the most common transmission speed, and many computer users have gone to 2400 baud. Instead of taking five minutes to send this article at 300 baud, it takes a little over one minute at 1200 baud and only about half a minute at 2400 baud.

However, all that speed can sometimes be a liability. When you're trying to read information as it comes across the screen rather than simply saving it to a file, it can be difficult to keep up with the higher baud rates. In fact, you may find 300 baud much more comfortable to use in the beginning. Higher-speed modems usually can operate at lower speeds as well, so you could buy one of these, run it at 300 till your familiarity and reading speed increase, and then utilize the higher baud rates.

Why would anyone want to use a modem in the first place? That's a question that may seem important now, but believe me, when you become familiar with the amount of information available over phone lines, you'll be wondering how you ever got along without one.

Think of it this way. Without a modem, you are restricted entirely to the computer equipment and programs that you own. When you connect to another computer by modem, you have access to the information that computer contains. And when you tie on to a computer service available to many computers, you even call on the resources of every other user of that service.

The range of such computer services is impressive. For instance, some banks now permit savers to get a current balance, transfer funds from one account to another and even make some utilities payments directly by computer. In addition, many libraries are now using computerized card catalogues, and some permit the public to access the catalogue by modem.

The most commonly used computer services, however, are local bulletin board services, so named because they serve as electronic bulletin boards for computer users. These services, usually known as BBSes, are run by computer enthusiasts for computer enthusiasts. They offer areas for users to leave messages for one another and typically include libraries of non-commercial programs that can be "downloaded" right from the BBS to your machine. Interested in getting the latest version of a shareware word processing program for your computer? Just dial up the local BBS and download the program to a disk. Have a question about how to use that program? Leave a message for other users. Chances are, someone else has faced the same question and come up with an answer.

Some BBSes even offer games that you can play "on-line" (while you are connected to the BBS via modem). People who work in specialized areas, such as genealogy, can access the findings of others through on-line databases.

One of the most interesting and fun experiences in modeming, according to many people, is interpersonal contact, one on one, through the computer. I have recently helped several people learn how to do this and invariably they remarked, "This is really fun! I didn't know how much fun it could be!" All we were doing was sending some programs I had and they didn't over the modem (public domain or fairware, of course) and typing messages back and forth. They found it thrilling to type something and have me immediately type a reply to them. While voice communication is in some ways easier, seeing written communication on the screen can clear up any confusion about terminology and correct spelling. But I think the main attraction is finding a whole new way to communicate with others. Many bulletin board services offer users the opportunity to "chat" with the system operator this way.

All right, so now you know some of the things that communicating by modem can do for you. The next question, of course, is how much does it cost?

Your start-up expenses will include the cost of a modem and whatever interface is necessary to connect it to your computer... Communications software is also inexpensive. Fairware programs for the TI typically cost about \$15-\$20.

And it doesn't have to cost you much to use that equipment. Currently, modem access to telephone lines is free of extra charges...

Finally, remember: Using a modem can get you important information to enrich your life and expand your horizons, but it should also be FUN! Plan to enjoy it!

DATA TRANSFER BETWEEN
TI FORTH SCREENS
AND
TI EXTENDED BASIC FILES
TUTORIAL BY LEON TIETZ

If you are a TI Forth programmer or a FORTi music system user, you may be frustrated by the difficulty of sharing your latest creations with other 99/4A users with similar tastes. This problem is brought about by a characteristic of Forth that dates to its inception: that disks are used without a file structure and that the programmer is responsible for tracking his disk contents. This article shows some of the characteristics of how the 99/4A disk system uses the diskette and how Forth's approach maps onto this scheme. This article will not actually present any code, however, after understanding what is presented here, anyone with a programming bent should be able to write an Extended BASIC program to move data between the two formats and the Forth hackers should have an opportunity to try the Forth hooks that have been provided in TI Forth to do file I/O. The programs to perform these functions will be easier for those of you with at least two disk drives, never-the-less, consider it a challenge to write the transfer program to use a single drive and to request the user to swap disks at the necessary times. A quick and dirty solution should not be more than about 1 screen of BASIC or Forth. More elegant solutions with error recovery etc. will undoubtedly be somewhat longer. The solution presented here is based on the Single Sided, Single Density (SSSD) disk format. Those with other formats can either use SSSD for this job or figure out the equivalent structures for your disks, since either you or someone you got Forth from has converted it from SSSD and I don't know how you chose to convert it.

DISK LAYOUT BASICS

A 99/4A SSSD disk has a total of 360 sectors on each diskette. These are arranged with 9 sectors per track and a total of 40 tracks (9 times 40 is 360). Sectors 0 thru 8 are on the track nearest the outside of the diskette, 351 thru 359 are on the track nearest the inside of the diskette. Each sector contains a total of 256 bytes of data. Forth uses the disk as a collection of 90 SCREENS, numbered 0 thru 89, each with 1024 bytes of data. The following correspondence is ALWAYS true: SCREEN 0 is sectors 0 thru 3; SCREEN 1 is sectors 4 thru 7; ... SCREEN 89 is sectors 356 thru 359. Although Forth disks do not require a file structure, your TI Forth system has a file structure on the disk so that the Editor/Assembler can find TI Forth and so that the Disk Manager can be used to Backup the diskette. The Standard TI Forth diskette has 3 files:

FORTH 6 DIS/FIX 80
FORTHSAVE 39 PROGRAM
SYS-SCRNS 313 DIS/FIX 128

The file FORTH is a small boot program that reads the file FORTHSAVE and uses it to load the various parts of the TI FORTH system into the proper memory areas. The remainder of the disk is included in SYS-SCRNS. The FORTi disk layout is basically the same, except the files are named FORTI, FORTISAVE and SYS-SCRNS. Part of the SYS-SCRNS file is devoted to FORTi's own code and bookkeeping. Included with TI Forth is also a utility called DISK-HEAD. This utility is designed to take any formatted disk and by writing a carefully crafted SCREEN 0 to the disk, making the disk look like one large file (named SCREENS). SCREEN 0 thus becomes dedicated to disk file overhead, but the remainder of the disk can be used as Forth screens while retaining Disk Manager and BASIC compatibility. Figures 1 and 2 describe these disk layouts in detail, and should be consulted as you read on.

THE DETAILS

Sectors 0 and 1 are always used for the file system overhead on the 99/4A (that's why the Disk Manager says you have 358 sectors available, not 360). An additional sector of overhead is allocated for each file placed on the disk. These are normally (space permitting) allocated starting with sector 2 for the first file, sector 3 for the second file etc. The actual data portion of the file is stored beginning in the first empty sector found starting with sector 34. If no empty sectors remain between 34 and 359, then the sectors between 1 and 34 are used for data. The information in sector 1 (a list of pointers to other sectors) always keeps the files in alphabetical order. The names of the files on the TI Forth disk have been chosen with this ordering in mind, so that when they are copied with BACKUP, they will always be placed on the new diskette in this same order. The file FORTH first with its header sector in Sector 2 and data in Sectors 34 thru 38 (for a total of 6 sectors). FORTHSAVE next with its header sector in Sector 3 and data in Sectors 39 thru 76 (for a total of 39 sectors). SYS-SCRNS (the one we're really interested in) is last with its header sector in Sector 4 and its data in Sectors 77 thru 359 and Sectors 5 thru 33 (for a total of 313 sectors). Notice that the Forth screens that are usually of interest (2-7 and 20-89) are contained entirely within this file.

FIGURE 1.

----Bootable FORTH Disk----

Forth Scr #	Disk Sector #	BASIC Rec #
	0	xxx
0	1	xxx
	2	xxx
	3	xxx
1	4	xxx
	5	566,567
	6	568,569
	7	570,571
2	8	572,573
	9	574,575
	10	576,577
	11	578,579
~~~~~		
	31	618,619
	32	620,621
8	33	622,623
	34	xxx
	35	xxx

	75	xxx
	76	xxx
19	77	0,1
	78	2,3
	79	4,5
20	80	6,7
	81	8,9
	82	10,11
	83	12,13
21	84	14,15
	85	16,17
	86	18,19
	87	20,21
~~~~~		
	351	548,50
	352	550,551
88	353	552,553
	354	554,555
	355	556,557
	356	558,559
89	357	560,561
	358	562,563
	359	564,565

end of disk

xxx - Can't be read from BASIC

FIGURE 2.

--FORTH "DISK-HEAD" Disk--

Forth Scr #	Disk Sector #	BASIC Rec #
0	0	xxx
	1	xxx
	2	xxx
	3	652,653
1	4	654,655
	5	656,657
	6	658,659
	7	660,661
2	8	662,663
	9	664,665
	10	666,667
	11	668,669

8	31	708,709
	32	710,711
	33	712,713
	34	0,1
9	35	2,3
	36	4,5
	37	6,7
	38	8,9
	39	10,11
~~~~~		
88	351	634,635
	352	636,637
	353	638,639
	354	640,641
89	355	642,643
	356	644,645
	357	646,647
	358	648,649
	359	650,651

end of disk

xxx = can't be read from BASIC

Each Forth Screen is composed of 8 of the 128 byte DIS/FIX 128 records (for a total of 1024 bytes). These records can easily be read or written by opening the file as a RELATIVE file and by using LINPUT #n, REC r: X* to read and PRINI #n, REC r: X* to write, where n is a file number designator and r is the record of interest. Thus reading or writing 8 records will move one screen. For screens from 20 to 89 the first of these 8 records is  $8*(SCREEN\#-19)-2$ . For screens 2 thru 7 the first of the 8 records for a screens is given by  $8*(SCREEN\#+69)+4$ .

To read or write SCREENS 20 thru 22 you would have to read or write each of the records from 6 thru 29. Figure 2 shows the DISK-HEAD diskette arrangement. There is, however, only one file on such a diskette and all SCREENS from 1 thru 89 are accessible. Notice, however that screen 8 will require some special attention and that you can easily derive the formulas for automatic screen# to record# conversion yourself.

To read or write SCREENS 2 thru 7 you would have read or write each of the records from 654 thru 709. Also remember that before you can successfully execute in DISK-HEAD Forth you must perform 0 DISK_LD ! first in order to gain access to write to SCREEN 0.

#### CONCLUSION

The information presented should be adequate to transfer data between TI Forth and other applications on the 99/4A. This should facilitate the exchange of FORTH programs via the SOURCE and in just using your 99/4A to the fullest extent. Even if you are not a Forth programmer (yet) a few of the disk structure basics were presented and can provide you the basis for further exploration. Note that since Forth can read or write anywhere on the disk, it makes an excellent vehicle for such exploration.

# FAR OUT

**Dick SCHAYDEL**

Another load of pigs off to market! That means a trip to Lightning Ridge is in order. After a supply of fuel and tucker has been laid in, the environs of the L/R bowling club have to be explored again. I met a bloke at the Ridge when I was getting the 'roo fencing who reckoned that I might be able to make my own beer. It sounds a good idea. It would sure scare Bondy and the rest of that mob!

I think I'll go on a holiday in a week or so. I've a mate who will come round and check on the automatic feeders and take charge of the place for a fortnight in exchange for a couple of pigs. I think I'll take advantage of the situation and visit one of my mates in the Northern Territory. He has a place near Timber Creek and runs a boat safari operation on the Victoria River. He takes loads of tourists up and down the river to look at the local wildlife. Ever since those "Crocodile" films came out, everybody wants to see a Croc! Gordy reckons that as long as there is money in it, he'll keep it up. He wanted me to chuck my pigs and join him up there. Too much regulation for me, mate! I never did like that touristy stuff.

I was fossickin' about in my pile of disks and I came up with a program that is unique as far as I can tell. She's real beaut, mate! The name of this program is SUPERTRACE and it is written by the bloke who writes these Tigercub things. When I was writing programs in XR, the most difficult thing to do was to use TRACE to track down a program logic error. It all seemed simple enough. Type in TRACE in the command mode and then RUN the program. The trouble is, those flamin' line numbers flash across the screen so fast that you are never really sure where the problem in the program can be found.

SUPERTRACE does better! It works on a program SAVED in MERGE format. It doesn't matter whether the program is BASIC or XR, it will break up the multi-statement lines before executing them. The line numbers are displayed as the program executes. So far, nothing spectacular. Wrong! One of the options of this program is to output to a suitable printer. Let me tell you, seeing something in hard copy is a lot better than squinting at those flamin' numbers flashing on the screen. Everything about the program is simple. All you have to do is follow what's on the screen and you can have a written copy of the program logic as it executes. A good piece of work!!!

A program that I use frequently is one written years ago by Dave Romer and John Clulow called TI-SORT. It works on a TI-Writer text file and will sort each line as if it were a record. There are two sort routines built in to the program and it will sort on two fields in ascending order. Using it, you can create database files with TI-Writer. Mailing lists are the first application that comes to mind. Just enter last name, first name, address, etc. The only thing that you have to keep in mind is to start the various "fields" at the same column. Load your database file and select the "fields" to sort by by entering the column numbers at the appropriate prompt. The file will be sorted and you can save the sorted file back to disk. Another good bit of work!

Living with pigs is always an interesting experience. I keep that lot fed with a high protein diet but they still have an appetite for just about anything that comes along. I have a big boar that I call MacTavish that loves to eat lollies. It doesn't matter what kind they are as long as they are sweet.

They are ALSO especially fond of snakes. Every so often, a snake crawls into the pen and one of the boars will usually get it. I don't know how they do it without getting bitten. I've never actually seen how they catch the flamin' things but I've seen them eating snakes. It's time to go check on the pigs and the rest. With the dingoes about it never hurts to be as cautious as possible. They will take a sucker if they get the opportunity and I had one get into the farrowing stall a while back. I always have to make sure that everything is closed up for the night.



# BEATING AROUND THE BUSH

WITH Ron Klienschafer

FAR OUT? I'LL SAY!

That bloke further up in the bush, Dick by name keeps making constant reference to me. Now after an incident here on the Grawin, a short time back, I dont want it to be thought that I follow his social habits, although I know him well I should relate this little tale in case it should leak out and my own reputation is shot.

Since last July we have been in the grip of a drought and there is not a blade of grass on the ground with the result that all the cattle, sheep and 'roos will eat just about anything they can get their molars on, this happens in the bush, its part of the country, the animals are so poor in condition that they just cant be bothered to use up energy and run fast from any stranger or vehicle etc.

During one of Dicks visits here to try his luck at the Opal he, like a lot of others, decided to visit the local club to suck the sides in on a few tinnies after the days work, fair enough! one or two maybe but??, some blokes just dont know when they have had enough, it was in the middle of the umpteenth can when a poor delapidated blue flyer 'roo happened to slowly hop near the club and stop to graze on a cardboard carton when Dick along with "Bully" and "Specker" decided it was time that the club had a mascot, you guessed it, the 'roo was going to be that mascot. Faster than I have seen any of the three of them move (except to open a can, which the eyes cant follow, you can hear the hissst of opening AFTER the can has been put to mouth) they tore off after the poor 'roo and finally grabbed it. With a lot of huffing and puffing with dust and stones flying they dragged it back to the club and insisted the Secretary officially make it the mascot, one snag! it had to become a member. Dick immediatly named the 'roo Skippy (what else could come from an addled brain) and offered the cash to memberise the 'roo untill someone pointed out that entry to the club is not permitted without footwear so quick as a flash "Twinkle Toes" offered his size 15" thongs for the 'roo to use, this is the awkward part, getting thongs on a kicking heaving 'roo is no easy task even when it is a small blue flyer, one of them grabbed a wellington boot to put over the 'roos head to try to calm it down but this only exasperated the situation, with several almighty kicks the 'roo sent "Bully" and "Specker" flying and at the same time threw off the wellington boot that smashed a window but Dick, with grim determination, hung on untill the moment the 'roo absolutly shredded Dicks trousers and underwear, and lucky for him did not mark one bit of flesh.

The 'roo quickly left the premises and so did Dick, "Bully" and "Specker", last words heard were "bloody uncooperative animals". I wonder if Dick will mention it in his column???

Ron Kleinschafer.

READ THE FLAMIN DOCS MATE!

Where have I seen the above sentence before?, perhaps I am like a lot of others, IE: stick the Disk with the Program in the bucket of bolts, load it up then get into heaps of trouble trying to get it to do something, sound familiar eh?. Yeh mate, I had Funnelweb right up my sleeve, running just how I wanted it but!!!!!!

If you are burning a Quest Ramdisk or if your 32K memory is battery backed somehow read on, else go check out some other article.

Now because the 32K memory on the Quest Ramdisk is battery backed (dont know about the Horizon, havnt got one) anything in there at power down will be retained, so being a smarty pants I decided that since I was doing an update on the Auto Power up Menu program for the Quest Ramdisk it would make life easier if I could "mark" a file from Show Directory, set up a mailbox, then load the U-Beaut F'web editor and load the file selected, if I wanted to go cut some firewood or sumpin and then return to my masterpiece all I had to do was load the F'WEB editor do a LF and there it was, piece of cake, lets see!, tap tap tap, type in the source code modification and assemble it, the moment arrives, TEST it, strewth it didnt work?.

At about the 20th attempt to get it to work I became desperate, desperate because much longer and there would be no hair left on the old scalp at all, so in exasperation I picked up the jam tin and holding the string tight rang Tony!,

"listen mate F'Web 4.21 is a fizzer, when first loaded, crashes its own mailbox".

Hearing a muffled sigh that sounded something like, "ohh no not again", the response came back.

"Well I use it the way you want all the time and the file is always in the mailbox ready to load".

I hung up by cutting the string then ducked out to the shed and had a couple of slurps on the oxy bottle to remove the red from the cheeks.

After that I nearly wore the ASCII letters out of Superbug trying to work out what was wrong, mate if I sent the mailbox to any other address other than where it was supposed to be everything was there, Drive, number and filename, everything!! so at about the 40th attempt I tied a knot in the string, picked up the jam tin and rang you know who again.

"Mate its not my code! something is crashing the mailbox when FW is first loaded".

"s i g h, what happens?, now slow down, s l o w l y, now does this and that and the other do so so and such and such".

"yeh, yep, yeh, yep, no"

NO?, sheez mate I just had to pretend the string to my jam tin got wet. Read the flamin docs! I thought, I did and there it was in FWD0C/TIWR, paragraph (iii) viz;

(iii) A default Edit filename may be configured with CF/CG into FUNNELWEB, if left blank the default utility pathname of the pre-existing filename will be set.

Got that?, I THINK I have this right, if I havnt maybe "someone" may straighten it out, during configuration, on the Loaders window is an option of "Working Drive", pressing "W" will bring up a display of DSK2. with the cursor waiting for you to do something, what it means is that if you leave it as is or type in something else, whenever F'Web is FIRST loaded whatever is configured there will be the default filename at the Load File command, so if you want a filename etc that may still be in the mailbox to be the default this option at configuration must be cleared out with the space bar.

Got that?, good now you know how to keep on working on that article for the newsletter night after night, just get into the editor and LF the article and keep writing.

Ron K.

## THE MISSING LINK

---

A "DEMO" disk of a new XB program called THE MISSING LINK was sent to the club by Textaments of USA, and Joe gave it to me to have a look at. So I wrote this little review before he got chance to nag me about it.

This is a program of over 30 assembler subroutines that are available to the user in XB through CALL LINK's, much like the ENHANCED DISPLAY PACKAGE BY PARAGON COMPUTING, but much more powerful and with many more features.

There is window drawing routines where the background colour in the window can be different from the screen colour. In fact the main menu on the demo disk has five windows, and each window has a different background colour, with two different colours of text

there is a routine called PAPERSAVER that shows on the screen how files prepared with Funnelweb or TI-Writer will look when they are printed, showing underlining and overstrike at least (they being only things they mention). It does this by showing the layout of the document on the left two thirds of the screen, with all of the words and letters shown as very small asterisks. The other third of the screen is taken up by two windows. The top window shows the file name of the document the number of the page being displayed and the line number that the a little pointer points to on the document, under that there is a list of the commands available. The other window, that is the bottom right window actually shows the text (in green) for the line that the little pointer is pointing to, overstrike as black text and showing any underlining as well. I assume from the display that it was text that was to go through the formatter, and that it reads all of the formatter commands. One other thing about PAPERSAVER is that you don't have to go back to the formatter to print a document, PAPERSAVER has a hard copy command available.

The text commands seem very powerful, through the use of bitmap graphics text can start on any pixel row or column, printing up to 32 rows and sixty columns, also you can have different size fonts on the screen at the same time. In fact on one demonstration screen there is six different window colours with six different text sizes in five different colours. Text input up to 255 bytes long, accept into a window and when text is input or displayed in a window you get automatic word wrap. windows can be placed in graphic designs or graphic designs can be placed in windows.

The graphics are very impressive and fast, with cartesian graphics, points, lines, circles and boxes can be plotted on the screen. TI-ARTIST and TI-ARTIST PLUS full colour pictures may be displayed and saved to and from the screen, with the option of adding sprites and music to the picture. Also a full bitmapped graphics and text screen dump is available.

Logo like Turtle graphics can be generated, in multi-coloured mode, inside or out side windows, with recursive operations allowed.

Sprites you now have four more, to give a total of thirty two, and all thirty two can move at one time, plus precise controll over whole groups of sprites which can be moved as one without drifting apart as they usually do in XB. Also whole groups can change colour at one time. Looks good for the games programers.

The final thing on the DEMO disk is an analog clock with a sweep second hand, it may be all right for showing some of the capabilities, but before the clock is drawn you are ask to input the time, it then takes about twenty seconds to draw the clock and get it under way.

How did they do it? I don't know, but the LOAD program is only about twelve lines long, which shows up as thirty three sectors long on the disk directory, which means it is about 8k long, and must have a heap of assembler code tacked on to the top end of it. To have fitted all that into 8k seems incredible. The "DEMO" program is 97 sectors long, which translates to about 24k, and sizing after loading the LOAD program (with the imbeded assembler code) and then loading the DEMO program shows 11840 bytes of stack left and 474 bytes of program space left, but how much stack space gets eaten up with bitmap manipulation I do not know, and that is the one thing they do not tell you in the pamphlets, how much room it actually leaves you for your programs. I realize that you seem to still have the 24k in high memory, but what about the VDP where all your strings are stored.

That is a quick run down of THE MISSING LINK, the demo disk has some brilliant stuff on it for our little orphan, and I think that for anybody who wants to program in XB and have advanced graphics and text control, it may be the way to go for them, but don't take my word get a copy of the disk from the library, as the disk can be freely distributed as long as there are no changes made to it.

## TETRIS

A REVIEW BY KEN LYNCH

An amazing Assembly Language game. Written by Alexander Hulpke. It requires disc drive, x-basic, memory expansion. It comes with documentation written in German and translated into english. The game is a game of skill in which you have to form complete lines with shapes either squares, l shapes or long rectangles to form complete lines as they are completed they dissappear.

To complete the lines you use keys to shift the shapes .

KEY 6 Pauses the game KEY 7 Moves the shape to the left

KEY 8 Rotates the shape to get it in position

KEY 9 Moves the shape to the right Press the SPACE BAR and it drops the shape into position

the game is FAIRWARE .Written by ALEXANDER HULPKE

SADOWASTRASSE 68

D-5600 WUPPERTAL 1

WEST GERMANY

When you read the docs on this disk it gives a warning that you might not be able to stop playing the game.

How true it is after being asked to do a review on this game i find it hard to stop. Only one fault sometimes the shapes are the same color as the game screen but he mentions in the docs how to change it. .

AN EXCELLENT GAME

## SOFTWARE LIBRARY

*****

Software library report. Well I have to report that I have seen the latest 80 col version of Funelweb demonstrated a couple of weeks ago. It is absolutely remarkable. Makes me wish I could afford and 80 col card for my machine. Oh well, I will just have to live with 40 col.

Ron Klienschafer has just sent me his latest update to his programmes for the QUEST ramdisk. A new version of AUTO is on the disk, (this is the menu programme) The configuration programme QUEST is also updated as well as ROK. I have now put them in the library. Please contact me for a copy.

Onto my favourite topic of recent times, the Software library. It is very interesting to see just how much software is available for our machine. While our library is quite extensive I am sure that there is much much more software around that we have not yet sighted. Even so our software listing when you get it will come as a surprise to see how big it is.

Over the last couple of nights I have found Spanish and French language tests, many mortgage analysis programmes and heaps of simple maths programmes for the youngsters.

I am now starting a collection of loaders and disk catalogers. As I find a new one I place it on a separate disc. When I am through the library this disc will also become part of the library.

Alan Franks our hard working hardware repairer has come to my rescue and taken a box of library discs home to catalog this will save me a power of time. Thank you very much Al. I am sure that Al will pay me in kind at some later date. He is already saying I sold him a pup. He discovered that the box he took home is from the early days of the library and contains many of the discs of software converted from cassette to disc. I have found a lot of these myself and I can assure you that they are a slow and tedious task to catalog for the library. Each programme has to be run to see what it does, it's operating environment and it's category. Thanks again Al!

Brian Rutherford thanks!. Brian's review of THE MISSING LINK is on the previous page. I must add to Brian's words and say how impressed I was with this package. If you would like to have a look at this package either drop me a line or ring and I will send it out to you to have a look at (particularly our out-of-towners).

I have had a couple of phone calls from out-of-town members recently about discs from the library. If you are from out-of-town and would like something from the library please give me a ring. I find that it is much easier on the phone than just sending a letter. You can ask me about what is in the library and I can make suggestions on software to you. If ring after 10:00 pm or sundays it is not all that expensive. Also adds a personal touch to the club.

Second last thing. I have received some information from some very kind people who have been testing my new GENEALOGY RECORD KEEPER for me. Especially Jean Hall of the SPIRIT of 99 from Columbus Ohio, the information she has forwarded is very valuable indeed. The suggestions made are really useful and have caused me to consider a major reshuffle of the programme. I will not be able to do that until I have this library bashed into some shape hopefully in the next 5 weeks. Then all members will get a complete listing of what it in the library. So I will be working flat out on RECORD KEEPER from the end of May on. Hope we can find a new librarian by then.

Best wishes  
Joe Wright

# THE INFORMATION PAGE

## GENERAL MEETING FOR MAY.

*****

The May general meeting will be held on 22nd at Jesmond Community Centre. The activities for that night have not yet been finalised. I will be showing more of the goodies that I have found in the software library. Also hope to be able to present to that meeting the COMPLETE software listing for our library.

## COMMITTEE MEETING.

*****

Good to see full attendance at our meetings recently. Next committee meeting is on 8 th May at Peter Smith's house again. Hope that further considerations will be made about our links with the Sydney user group. We will also be looking at preparing for the AGM in June. Hope that we have a really good number of members nominate for the committee.

## EXTENDED BASIC CLASS.

*****

At Bob McClure's house on 15 th May. I am told that the Lotto selector is nearing completion. Look forward to seeing it demonstrated at a meeting soon. The Club will be buying the MISSING LINK so hopefully Gary and his gang can start programming using it's remarkable features.

## FORTH.

*****

All activity on Forth has stopped at my house because of the work on the library listing. I am really wanting to get back programming again to finish off all the features I want to add to Genealogy Record Keeper II. So after May I will be in a position to get some classes going for those interested.

## CALENDER 1990.

*****

Hope you all read Peter Smith's note about the Bush Barn on the 26 th May. Please feel free to bring along non members. Children are also welcome at this venue. Price is \$22:00 per head. Deposit payable to Bob McClure. For any of our members who have not yet had the pleasure of a night out with Woods, Smith and Co. then I must tell you that you have not yet lived. I can assure you that it will be a night you won't quickly forget. ( maybe you MIGHT WANT to forget afterwards). So please make the effort, bring the kids and have a good night out.

Couple of other things in the wind, firstly the AGM in June, please nominate for a position if you can. The other is the Computer exhibition in September at Newcastle University. We would like ideas for our display and also helpers to assist on the saturday.