# HUNTER VALLEY 99ERS USERS GROUP
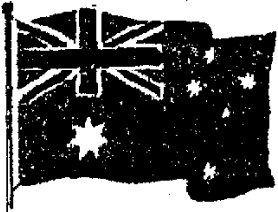# HOME COMPUTER NEWSLETTER
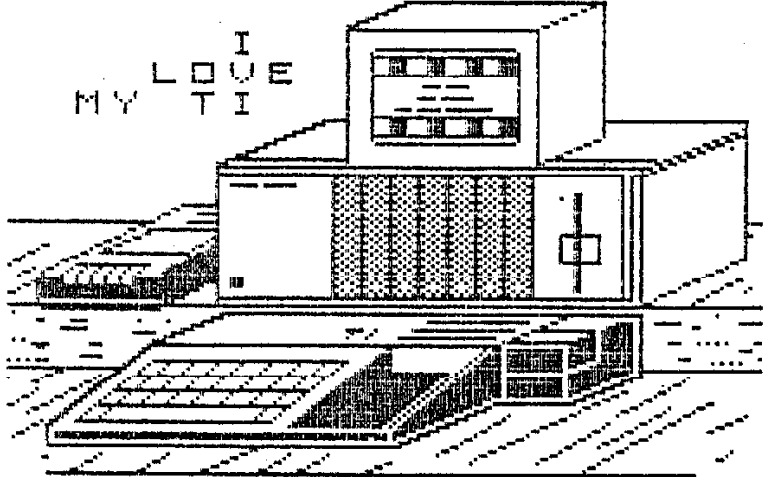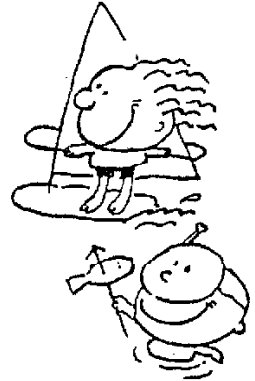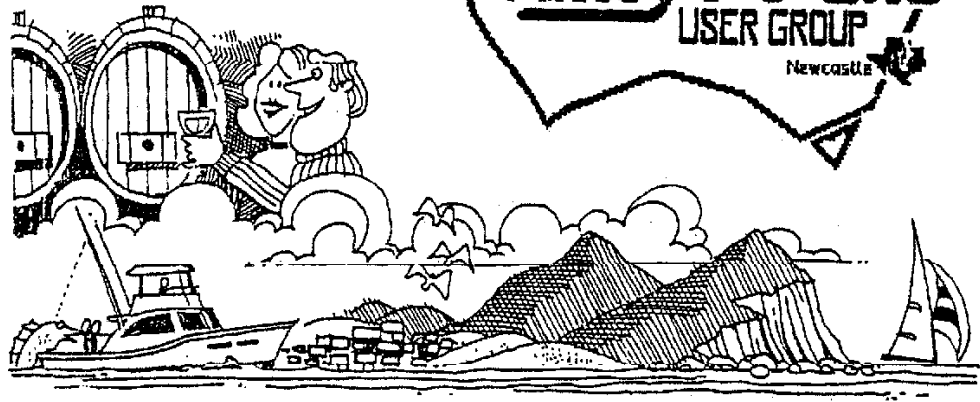
I LOVE MY TI

Hunter

JUNE
1988

ti

Hunter Valley 99ERS USER GROUP
Newcastle

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STD AREA CODE 049

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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 tape/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 35 columns and page length 66 lines, right justified.

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

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# PRESIDENT'S

## with Paul Mulvaney

With the annual general meeting upon us this marks the final President's Pen column from me. I will not be seeking a position on the committee as I have enrolled at the technical college and have class nights of Monday and Tuesday which effectively preclude me from an active role in the group. I am not abandoning the group and look forward to the special interest afternoons etc.

I would like to take this opportunity to thank the outgoing committee and all the group members who have helped me during the last twelve months. In particular I would like to single out Albert Anderson for the tremendous job he has done as Secretary and Brian Woods for the sterling effort in compiling the newsletter each month.

During the month I attended World Expo 88 in Brisbane, a bewildering array of high tech entertainment from around the world. If the expo is an indication of the way the computer world is going then someone will have to develop touch screen control so our TI can stay with the field. I guess there will be a flood of IBM computers on the market when expo closes; Get your latest model computer lovingly pre-tested by 50 million grubby fingers!

While in Brisbane I and six HV99 members represented the group at the Brisbane User Groups TI Faire. Congratulations to Garry Christensen and his group for turning on a top day. The Geneve computer and the Rave 99 keyboard enhancement were demonstrated, Inscebot and Asgard sent software and Micropendium magazines were available. It was heartening to see the overseas suppliers recognising local groups.

Other groups represented were Sydney, Melbourne, Adelaide and Coffs Harbour. Special thanks to members Tony McGovern, Joe Wright and Richard Terry for releasing programs for the Faire. Tony came up with version 4.1 of Funnelweb, the configuration has been made easier by pull down menus or windows - as Tony said "The orphanage now has windows." Joe's Genealogy program is a winner, far surpassing anything else available. Richard's cheque and credit card record keeper provides a handy reference for where your money has gone. It is good to see our group contributing to the survival of the TI community.

# HELP US TO HELP YOU

What would you like the Group to do for you over the next 12 months?

What sort of articles do you want to appear in YOUR newsletter?

Would you like tutorials on some of the software available from the Group's library?

Would you like more social activities organised? What sort?

What sort of things should we have at the Monthly Meetings? More demos? What sort? More discussion time? Any other suggestions?

Any suggestions, ideas, criticisms (constructive or not) are wanted NOW. Get in touch with the Secretary if you have ANY ideas.

# SECRETARYS REPORT



## FROM ALBERT ANDERSON

Hello once again to our readers wherever you may be as we head further into the southern winter. What better excuse to head north for a temporary reprieve than a TI-Faire... that's just what 20 or so devotees of the 4a User Group fraternity from Newcastle, Sydney, Melbourne and Adelaide did on the weekend of May 21.

On behalf of the members of HV99 I would like to sincerely thank the members of the Brisbane Users Group(TIBUG) and in particular Gary Christensen for providing the opportunity for these people to get together in one place and freely exchange information on a person to person basis. I would also like to thank our Chas Bagley(HV99 member from Brisbane) who provided us the use his system for the day. After being torn from its home in Algester it had boards and modules stuffed in and out of it all day, it was force fed disks from all directions and not once did it hic-up or complain... nor did its owner.

Elsewhere in this issue there is a more comprehensive review on the Faire from Pete Smith but there are a couple of things that I would like to go on and mention with relation to HV99's input to it. HV99 members, Richard Terry, Joe Wright and Tony & Will McGovern went to a great deal of effort to provide us with 3 top class software releases just for the Faire. You can stand up and take a bow gentlemen as these

were greatly received by all at the show. Due to time limitations it was not possible to give demonstrations of Richard's Cheque/Card Management System or Joe's Genealogy program however overviews of these were given as the various people purchased the disks. As part of the venue John Paton was asked to do a tutorial on the up-dates of the V4.1 Brisbane Faire release FUNNELWEB. John has never done this sort of thing before however due to his knowledge and confidence with Funnelweb he provided us all with an excellent tutorial on this amazing piece of software. The new CONFIG program was a real dazzler and John presented it with equal gusto.. I heard that just days before the Faire John had found a couple of bugs during his very thorough beta testing of 4.1 and with lots and lots of fix here and patch there and "there go and try that", Tony was able to give John the release version the night before the Faire. In my opinion, Tony could not have picked a better beta tester or presenter in his absence than John and I take my hat off to both of you... Well done, you have both done HV99 proud!!

Before I mentioned person to person contact and in my own opinion this was probably the highlight of a great Faire. There were many really good demos done all day on the many aspects of use of the 4A and these were well appreciated by us all. However the one thing that really came out was the enthusiasm and excitement of actually being and working with people from all over Australia that share the same enthusiasm... this is a special attribute that really comes alive at such meetings. It was really terrific to meet Richard Earl from the ATTIC group in Adelaide who just flew up for the day... why anyone would outlay so much to travel 2500 klms is beyond me but we are glad that he did. The same for Peter Gleed from the Melbourne group who we got to meet once again.. he only travelled 2000 k's and the bus load of guys from Sydney.. now this is a real doosie. We HV99ers live about 180k's(a bit over 2 hours away) from these guys yet we both travel 1000k's north to be at the same meeting... is that crazy or is it

just me???
big message that I get from this and I would hope that members of user groups everywhere get the same message is that the old TI99/4A is well and alive because of its USER GROUP base - SUPPORT YOUR LOCAL USER GROUP WHO IN TURN SUPPORTS OTHER USER GROUPS and YOU the USER CAN'T LOSE...

I couldn't leave the Faire without thanking the Brisbane people for there hospitality over the weekend especially at the night out that we shared at the Redcliffe Hotel... it was terrific. The venue was nice, the food excellent and plentiful as was the liquid refreshments and most of all the company was great. This hospitality was duplicated the next day when the HV99ers sought the abode of Larry & Gay Reid who are also members of our group. A planned short visit didn't exactly end up that way and Gay really went out of her way to make us feel welcome. Thanks a lot guys.

That wraps up what I wanted to say about the Brisbane TI-Faire however I'm not quite finished with Brisbane just yet. While I was up in the sunny state I, like millions of other Aussies and people of all creeds went to visit WORLD EXPO '88 on the shores of the beautiful Brisbane River which meanders through the business centre of Brisbane. In short I and my family were very impressed with the whole exposee'. The site is huge and in a perfect location and at night the Brisbane city skyscape across the river really adds to the exciting atmosphere. It's beautiful... Crowds are massive but are well behaved and well controlled throughout the entire complex. All of the exhibiting countries have really put a lot into there pavilions and welcome all visitors with open arms. It is well worth the effort and I would thoroughly recommended it anyone. My only regret is that 3 full 12 hour days just wasn't enough for us.

Did someone say club business?? OK, club business. First, we welcome a couple of new members this month. Whilst we were up in Brisbane Peter Bourne visited us at the Faire and decided to join HV99. We're glad that you have Peter and we look forward to future contact with you.

From a place called Trois-Rivieres in Quebec, Canada, Francois Gauthier, has sent application for membership to HV99 and recently sent a copy of the MAURICIE 99 groups newsletter called "ti-MOT". Unfortunately this is totally written in French and is being translated by one of Rodney Gainsford's friends. Welcome to HV99 Francois and could could you please pass on our best wishes to the people of MAURICIE 99.

Renewal of membership has commenced and I am happy to report that they are coming in in droves. Its great to open the letter box each day and see the yellow forms come in. Thank you to all those that have done so at this stage and may I just remind everyone that renewal is due as of 1st JULY '88. If you have misplaced the yellow renewal form just send your renewal fee and details and I'll fix the rest. If you want another form just let me know and I'll send it. Maybe you know someone that has a TI and wants to join!!!

Whilst on this particular subject of membership renewal, this month I will be sending the HV99 newsletter with an accompanying letter to previous members of HV99 with whom we have lost contact. The aim of this is to regenerate interest in the use of their computer if they still have it and if not ask them to consider selling it to current members or people who we know are looking to buy them. If you know of any 'past users' that fall into this category you may be able to assist me in re-establishing contact.

I received a letter from Doug Moller from Aitkenvale in Northern Queensland this month with comment on the Exchange Newsletter Mailout that HV99 has been providing for our non-local members. Doug has received the first two newsletter packages but hasn't got the last two as yet. Doug is concerned that this service may have been withdrawn and that we have not made mention of its demise in the newsletter.
Well in answer to Doug and our non-local members that may not be getting the mailout this service is still being provided and will continue whilst ever the interest remains from our non-local members. As this system works on a

"chain-mail" type system unfortunately it has a built in weak link in that it relies on one person sending to the next in line and that person to the next until the end of the chain. So if you are involved in the "chain" please, for the benefit of the others in your chain, don't hoard the parcel. Have a good look through the info, copy what you want and then get it in the mail to the next person. We have had quite a bit of positive feedback from people about this service and as there are 6 chains with 5 or 6 people on each one we would like to hear more. Please contact Joe or myself with your comments. Thank you Doug for your letter as without it we would assume that everything was going along without a hitch and the system was working fine. Hopefully one of your chain members will read this and the chain will jump out of its loop and onto the next statement..."send parcel Doug Moller".

That's about it locally and now to our overseas contacts. While I was on holidays my terrific neighbours had the joy of picking up the mail that goes through 6 Arcot Close. Because of all of the overseas newsletters, letters and disks, particularly from the USA. coming in they now think that I have a part time job with the CIA or KGB or something. Yes, the exchange newsletters are coming in and have been processed for the Publication Library. There's lots in this months reading so as usual get onto Joe for your share.

Ennio Medici from Italy has once again sent us a nice letter complimenting HV99 on the quality of the newsletter and he has also sent 2 fairware disks for us to included in the library. One is called TI-EXAM which I believe is a utility that can be used to look at memory locations etc. anywhere within the system and the other is a very fast assembly language space invaders type game called GALAXIA.

From our prolific writer, Bob Carmany from North Carolina comes an accusation that "the dirty dozen" (that's us) has corrupted his computing in that his XB cartridge has been relegated to the back shelf as a program loader since we sent him the QED 32k supercart. Well,

this is the bush, and things are tough in the bush, ehh!! Bob plans to put the module through its paces at the next Guilford group meeting hopefully using Ron Kleinschafers latest loader software for the QED. Good to see you putting it to good use Bob.

Onto our friends from West Germany. Haven't heard from them in quite a while and then all of a sudden Mike Heuser from Workshop Rheinland sends a parcel with letters and disks and a thing called a GRAM-LOADER-MODULE. Now I don't know what this module is or does and unfortunately everything with it is in pure German. Now I've only been learning English for the last 30 years or so and I can't handle it very well so what chance have I got with German??? OK I thought, well this thing has travelled about 14000 k's to get here so what's another 600. I have packed it up and sent it to Ron Kleinschafer (geez I wish he had a shorter name!!!) for his GPL's to interperet . GPL is Ron's pneumonic for German Program Language. When its all desciphered I expect that we will get a full rundown on its use and capability from CHOAS MANOR. In the letter Mike says that the GRAM-LOADER-MODULE is available from Workshop Rheinland for 350 deutshe-mark plus 25 DM post and handling via Airmail and with the first orders they are supplying 30 disks of software support with the module with such things as special versions of TI-Writer, Multiplan,E/A, Logo etc, etc. Mike also included in the package a disk of 80 column software for use with the Geneve or Mechatronics 80 Column Card and that has gone into the library. The name of the disk is 80 COLUMN. In the package as well were some brochures which give us an insight into Mikes home town of Cologne which he describes as "the most astonishing city of the universe". Nice to hear from people that are proud of where they live! Thank you very much for everything to our friends in Germany.

Well, that's about it from me for the time being. There's probably stuff that I've forgotten to rave on about...Oh yes!! RAVE! I didn't tell you about the demo of the RAVE keyboard that John from TIBUG gave at the Faire.... all right, all right I'll get off and let someone else have a go....

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A POT POURRI OF LOCAL
AND INTERNATIONAL NEWS
COMPILED BY

## joe wright

Hello again. You will have noticed
that I have taken to starting this
article with a quotation. This is
one of my many favourites!;

In time take time while time
doth last, for time
Is no time when time is past.

ANONYMOUS

## FLOPPY COPY.
************
Jack Sughrue writing in the MAY 1988
issue of the Guilford 99'er
Newsletter reviews this disk copying
programme. Here is part of that
review;

"Floppy Copy copies quickly. With
two drives it is capable of copying
some disks completely in 24 seconds.
It will copy ALL disks within three
passes at 138 sectors per sweep.
FC can be loaded with any of the
following: MINI MEMORY, EXTENDED
BASIC or EDITOR ASSEMBLER modules.
(M-M E/A load 24 seconds; XB takes
50 seconds.)
If all FC could do is make back up
copies super fast, it would be worth
the price. But that is not all it
can do.
It catalogs: displaying the complete

status of the disk, including disk
name and file index.
It validates the duplicating
process. Error messages will appear
if the disk is not transferring
data.
It initialises. And it does that
faster than DISK MANAGER, too.
It has REDO functions (great for
intialising or duplicating a number
of disks).
It has an immediate menu. Ease of
back-and-forthing among the
functions is just right.
Within larger functions, there are
other menus: you can take just files
for a quicker copy, or you can copy
the entire disk (including the blank
sectors), for an example. You can
copy SSSD or any other configuration
established by the DM or CORCOMP.
So far I've found that FC will copy
everything but itself."

Jack has more good things to say
about FC in the remainder of the
article. It is available from:

SOFTSPOT,
P.O. BOX 8786,
SILVER SPRING, MD
USA.

Price is US$24.95 plus S  H.

## PICTURE-IT.
***********
Another software review, this time
from Steve Mehr writing in the March
TILT 99'ers.

"PICTURE-IT companions PRINT-IT
beautifully with a wealth of
features designed for use with
TI-ARTIST instances. Picture-It
contains these features; BANNERS.
Converts TI-ARTIST instances to be
included in your banners. Converts
TI-ARTIST fonts to be used in your
banners as text! Much more! VIEW
INSTANCES converts TI-ARTIST
instances to view on screen in
either character or sprite mode.
Character mode allows saving
instances in Merge format to allow
use of CALL LOAD's included with
Picture-It, to move entire instances
all at once! Create that 112
character space ship and slooowly
move it across the screen! (How's
that Orsen Wells)? Much more!
TI-WRITER this is where Picture-It
really excels in performance and
usefulness! Converts instances so
that can be output through the

# RANDOM BYTES

### from
### BOB CARMANY

Just when I was lamenting the lack of substantive new programs, two outstanding contributions have come out in the past several months. The first of these is ARCHIVER Vn 2.4 by Barry Boone.

Until recently, those of us who are still using the "orphan" were left out when it came to a compressing archive program. All at once, there were two available. One, by Al Beard, was FORTRAN-based. It did a good job of compressing and archiving files but it was very cumbersome to use. Almost simultaneously, Barry Boone came out with his version. Version 2.3 was obviously a "rush" job and even at that, it was superior to Beard's entry. Anyway, he released Vn 2.4 in early February as "what it would have been had it not been released prematurely". It is in the UG library and, if you haven't tried it, you certainly should! It makes sending program intrastate (or intercontinental) much more economical. By archiving and compressing a group of related files, you can save up to 70% of disk space. In fact, I recently, reduced 6 SSSD disks (nearly full) to a single "flippy"!!

The best part of it is that there is a corresponding SAVINGS in $$$ when downloading files from a BBS. In fact, we have archived and compressed our entire set of TI files on our local BBS. Imagine taking less than half the normal time to download (or upload) a set of files to your BBS.

And, for those of you who can't do without F'WEB, it is F'WEB "aware". That doesn't mean that it can recognize a spider at 50 paces but it has a menu selection to re-load F'WEB through the UTIL1 file. It works quite flawlessly. Besides that, the buffer size has been increased and a set of disk utilities has been added to allow you to manipulate files without leaving the ARCHIVER environment.

The second outstanding program to be released in recent months is TELCO by Charles Earl in Canada. This little "gem" is a terminal (modem) program that will make you forget all about MASSTRANSFER, FAST-TERM or whatever it is that you are using. It has been described as "better than sex" and the best thing since sliced bread". I don't know about that, sliced bread is hard to beat!

The program is written as a series of overlays and it will run on BOTH the 99/4A AND Geneve!! The sections of code are run in as needed and, when loaded into a RAMdisk it is a truly neat package. It will emulate a couple of different terminals, has auto-dial and auto-redial, and supports xmodem file transfers with CRC error checking. Everything is so nice and "user-friendly" that documentation is scarcely necessary --- but there is some, anyway.

Both of these programs are available in the UG library --I sent them along with this lot of articles.

After touting those two programs, I guess I had better get on to a few "goodies". Let's talk about a couple of F'WEB tricks that you can use from the Editor and the PF function. The Editor will accept some print commands just as if they were entered and printed out of the Formatter. Everyone should know by now, that CHR$(14) sets most printers to expanded print and CHR$(20) cancels it. CHR$(15) sets condensed print and, likewise CHR$(18) cancels it. Quite by accident, I discovered that you can send most of your printer codes that begin with ESC CHR$(27) in the text and the printer will recognize them when printed through the Editor. All you have to do is enter the "Special Character Mode" by pressing <CTRL-U> and the appropriate conbination of keys (see page 146 in the TI-Writer manual). For example, my Star NP-10 will print emphasized print if I send it ESC "E". That translates to <CTRL-U>, SHIFT R, <CTRL-U> (to exit Special Character Mode) and "E" followed by a carriage return <CR>. It just takes a line or two at the top of the document to get your printer to do the job for which it was intended.

While we are on that subject, *you*

probably didn't realize that, in most cases, your printer will retain the pitch and type style that you set until it is either turned off (which resets it) or gets the reset code. The reset code for most is CHR$(27) followed by CHR$(64). That's one reason that some of these printer set-up programs come in handy when you are working with a word processor.

Well, the 'ol "BUFFER FULL" message is about to come up so I had best close this column for this month. Next time, we will look at some CALL LOADs, CALL PEEKs, and maybe even a little FORTH.

# QED CPU PAD MODIFICATION

## by
## NEIL QUIGG

BACKGROUND:
As many interested TI faithful may have noticed TI in their infinite wisdom managed to waste a considerable amount of the available 9900 address map in the area >8000 to >9FFF, one section of this area is dedicated to the CPU PAD RAM. This small block of 256 bytes is decoded into a 1Kbyte block and responds to the address bases of >8000, >8100, >8200 and >8300 and it is noted in various instruction manuals that software should be written to conform to the base of >8300.

THE DETAILS:
For the intrepid user club hackers with the do it yourself bug and a little practice with the soldering iron this 256bytes of PAD can be very simply increased to 512 bytes. All that is required is two 6810 memory chips some fine insulated wire a soldering iron and solder and a little patience.

THE METHOD:
Step 1. Open the console and remove the main circuit board in its tin casing, take care not to damage the keyboard connection.

Step 2. Remove the casing from the board to give access to the electronics.
Step 3. Locate the two existing 6810 memory chips, near the cartridge port connector, and unsolder pin 12 of each chip.
Step 4. Carefully remove the pin from the circuit board and bend clear of any contact.
Step 5. Bend pins 10 and 12 of the new 6810 chips so that they will be clear of contact and then place the chips in piggy back fashion on top of the existing 6810 chips, solder the remaining 22 pins of each chip to the original chips.
Step 6. With some of the fine wire connect pin 12 of the new chips to the hole in the circuit board from which pin 12 of the original chips was removed.
Step 7. Connect pin 10 of the new chips to pin 12 of the original chips and also to pin one of either of the system ROM chips on the circuit board. These are the two 24 pin chips located adjacent to the 6810 chips.
Step 8. Visually check all connections and then reassemble the console taking special care to align the metal casing correctly on the circuit board.
FINAL NOTES: The modification can now be tested by using a debug program or any program that allows direct acces to memory locations. If the operation has been a success you will be able to load different data into the memory at >8200 to that at >8300.
The extra PAD memory can now be used for such things as return vector stacks and work space area and presumably many other handy little things.
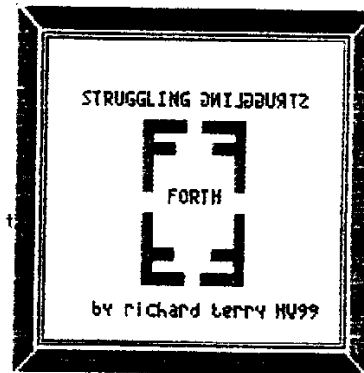
Good luck and happy hacking.
N Q

A COMPUTERS MEMORY SPAN
IS ONLY AS LONG
AS ITS POWER CORD.

```
SCR #34
   0   RHT06Jne88
   1   --------------------------------------------
   2   -
   3   -
   4   -     STRUGGLING FORTH
   5   -
   6   -     HV99ERS   JUNE ARTICLE 1988
   7   -
   8   -     :The trouble with EXPECT...
   9   -     :A Superforth screen print utilit
  10   -
  11   -
  12   -
  13   -
  14   -
  15   --------------------------------------------
```

Life is whirling past in quite a blur at the moment. There never seem to be enough days in the week or hours in the day at the best of times, but currently we seem to be more shortchanged than normal. Our days are getting shorter, and in my case the work load getting heavier. There are alot of nasty viral beasties down here ravaging the population (people virus's not computer virus's). I've embarked upon a 3 month study of an ancient chinese practice needing my body to somehow appear 100 miles away in Sydney two evenings a week, where in deference to everyones timidity I've somehow assumed the role of class model - a pseudonym for "pin cushion"

After my brief foray into Extended Basic, a territory into which I've vowed never to return unless dragged there screaming by a blind demented E/B programmer; and a similarly brief flirtation with assembler, much joy was experienced in returning to the land of Forth, like returning to the comforting arms of a long lost friend.

For the last couple of months I've been on a "get organized" binge. My non-forth disks being relatively sorted out and labelled, it was Forths turn. Those of you familiar with Forth will recognize that one of its strenghs, ie that of a sector editor, is also one of its weakness's, for in the hands of the disorganized programmer (not me of course!!) code is quickly lost. As the disks are not in file format like basic, and some applications may cover only a dozen sectors or screens, it is easy to "lose" your code amongst the 1400 odd sectors on a floppy.

So I thought I'd hard copy much of my code, and wanted something pleasing to the eye, and compact. Hence this little program which produces the printout in this magazine.

It is unashamably code for SUPERFORTH. This version of forth which is well worth you purchasing has six disk buffers as opposed to five for TI-FORTH. As this program works by utilizing these buffers, you cannot run this code unchanged in TI-FORTH, but with a little imagination you can change it.

It IS NOT good code. I whipped it up off the end of my pen, rather than organise or optimize it. It is SLOW but it works. I wouldn't recommend using it for routine printouts, just for archival type material or to peruse a long printout.

After I'd whipped this up I decided to put it into a whole program, complete with titlescreen, menu's etc, which I quickly did.

Once again I was hit with two repeatedly troublesome problems I've previously encountered. Lockup on autoboot which either no-one world wide seems to experience, or they just won't help me with, and an irritating property of the word EXPECT.

THE TROUBLE WITH EXPECT.
------------------------

I've always been annoyed with this word. It has, as supplied, two irritating properties. Firstly it accepts data up to the requested input without requiring a positive <ENTER> from the user to finish the

FORTH SCOURCE CODE          Program:          Date:

(left margin fragments, partially visible)

```
h  of
thing
pact.
which
  this

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---

## Screen #35

```
\ Superforth print utility    RHT28May88


   0 VAR FROMSCREEN            \ start screen to print
   0 VAR TOSCREEN             \ last  screen to print
   0 VAR PAGES               \ total number of pages
   0 VAR CPAGE               \ current page being printed
1028 CONSTANT 1K             \ constant for 1000 bytes

\ calculates loop index for screen load
: LOOP-INDEX                 \ expects fromscrn
        TOSCREEN @ 1+ SWAP - \ total screens left
        6 /MOD               \ I=6 0 =<6
        IF DROP 6 THEN ;     \ leaves index on stack
                 -->
```

## Screen #36

```
\ Superforth print utility     28May88


: MSG1 ." FORTH SCOURCE CODE" ;
: MSG2 ." Program:" ;
: MSG3 ." Date:"   ;
: MSG4 ." Screen #" ;
: MSG5 ." *** Forth screen print utility -fairware- by Richard
Terry Hv99ers ***" ;
: MSG7 ." Page " ;




                 -->
```

## Screen #37

```
\ Superforth print utility    RHT28May88

: A$          27 EMIT   ;
: NORMAL      A$ 64 EMIT ;
: COMPRESS-ON  A$ 15 EMIT ; : COMPRESS-OFF  A$ 18 EMIT ;
: DOUBLESTK-ON A$ 71 EMIT ; : DOUBLESTK-OFF A$ 72 EMIT ;
: EMPH-ON     A$ 69 EMIT ; : EMPH-OFF      A$ 70 EMIT ;
: TOP-OF-FORM A$ 12 EMIT ;
: 1/8"-LINES  A$ 48 EMIT ;

: PAGE-HEADING  DOUBLESTK-ON  EMPH-ON
                4 SPACES MSG1 22 SPACES
                MSG2 12 SPACES MSG3 CR CR
                DOUBLESTK-OFF EMPH-OFF ;

: PAGE-FOOTER   EMPH-ON 7 SPACES MSG5 EMPH-OFF ;
                 -->
```

## Screen #38

```
\ Superforth print utility    RHT28May88


\ Setup parameters for printout
: SETUP                      \ expects from scrn,toscreen
                2DUP         \ F,T,F,T
                1+ SWAP -    \ F,T,F,T+1
                6 /MOD SWAP  \ F,T,div,remainder
                IF 1+ THEN   \ F,T,total page numbers
                PAGES !      \ save to variable
                TOSCREEN  !  \ end screen number stored
                FROMSCREEN ! \ start screen number stored
                ;            \ leaves nothing on stack
\ Increment starting screen at top of next page
: INCPAGE                    \ expects nil,leaves nil
                FROMSCREEN DUP \ dup address of buffer
                @ 3 + SWAP ! ; --> \ add 3 and re-store
```

## Screen #39

```
\ Superforth print utility    RHT28May88


\ Get blocks to print into memory
: LOADSCREENS                \ expects nothing on stack
                EBS          \ clear buffer area
                FROMSCREEN @ DUP
                LOOP-INDEX 0 \ calc no screens to load
                DO
                   DUP
                   I + BLOCK DROP \ inc for next scrn to load
                LOOP            \ and do the lot
                ;               \ leaves nothing on stack
\ Print complete line of printout
: .LINE
                7 SPACES 64 TYPE
                7 SPACES 64 TYPE ; -->
```

## Screen #40

```
\ Superforth print utility    RHT28May88

\ increment adress by equiv of 1 line
: +LINE    64 @ + ;          \ expt adr,leaves adr+64

\ draw a straight line across the page
: DASH-LINE   4 SPACES       \ expects nothing on stack
              76 0           \ print width=76 columns
              DO
                 157 EMITS   \ dash code for my printer
              LOOP
              ;              \ leaves nothing on stack
\ check if screen number is in range
: CHECKOK                    \ expects fromscreen
              TOSCREEN @ 1+   \ to plus 1
              < ;       -->   \ leaves 1=valid 0=invalid
```

---

*** Forth screen print utility -fairware- by Richard Terry Hv99ers ***

# STRUGGLING
## FORTH
### continued

accept, and secondly, something not
so obvious until you get a
non-typist using your program, that
of accepting and EMITING the down
arrow key ASCII 10 which is in fact
the key code for a vertical tab.
This is what will happen if the user
inadvertently or on purpose hits
this key - your entire screen
display will be scrolled vertically
off the screen never to be returned.
Sounds ridiculous - well just try
it!

There are many ways to fix this. In
forth the monitor or printer or
whatever all seem to be treated the
same way, depending where the output
is being pointed. If ones
application did not involve using
the printer and 10 EMIT one could
modify EMIT. Alternatively one can
rewrite EXPECT to not allow the down
arrow to interfere.

Just out of interest I took the
second course of action. (see
following screens). This does not
work entirely the same way as the
original version, all I've done is
make it output a blank space in lieu
of a vertical tabulation, but it
seems to work ok.

Letters and correspondence to:

RICHARD TERRY
141 DUDLEY RD
WHITEBRIDGE
NSW 2290
AUSTRALIA
049 436511/292450

---
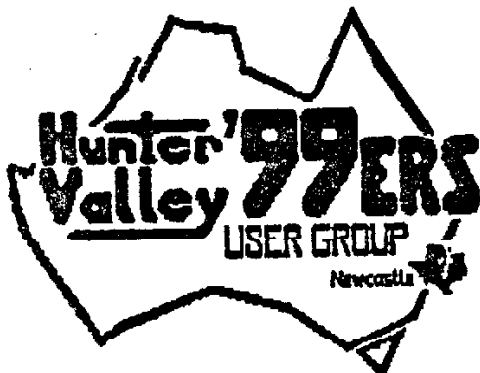
## ** FOR SALE **

1 * TI.PE.SYSTEM

with 1 * Internal SSSD Drive
and  1 * External DSSD Drive
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         board E/A and 40K GRAM
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         8K DSR RAM
         32k Memory Expansion
         128K Card control Software
         16K Bankswitched Cart RAM
     1 * Widget
     2 * TI Extended Basic
     2 * Mini-mem
     2 * TE-2
     1 * TI-Writer
     1 * TOD Editor Cartridge
     1 * Navarone Super-Duper Crt
     1 * Naverone Diskfixer Cart
        all with manuals etc.

     47 Disks with various
        software.
     Heaps of TI related books
     and magazines.

## PRICE ~~~ $700
   for the lot including post

CONTACT:-
        JASON WINTER
        8 Pattinson Cres,
        FLYNN - ACT.
        2615

     Phone > 062-581734

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     FOR SALE   FOR SALE   FOR SALE

     1 * Amust PIO Printer -- $200

Contact :-
        JASON WINTER as above

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# the
# BRISBANE
# TI- FAIRE

### a report by
### PETER SMITH

Scene..10.00 am Sunday Morning, 22nd May.

"Tic.....tic.....tic.....tic... tic BLOODY tic.."

"That bloody heart of mine is still going and the rotten thing keeps making my brain pound." moaned our esteemed editor.

You guessed it. We had a great time on Saturday night at the Norfolk Room in the Redcliffe Hotel north of Brisbane. As a matter of fact I believe we have kept up a tradition of showing others how to enjoy ourselves at such goings on as TI shows.

Three of us travelled to Brisbane by bus on Friday night to be met at the wonderful Roma Street passenger terminal by Albert who took us, ably assisted by my terrific (?) navigation, to our motel near the campus of the Brisbane CAE at Carseldine.

After finally finding the site of the Brisbane TI-Faire we began unloading gear from Albert's and Paul's (our illustrious president who also had his family with him) vehicles.

We were given a great welcome by the Faire's organiser, Garry Christensen, who allocated areas and introduced people as they arrived.

Numerous TI groups were represented, many in large numbers and others by single travellers who had travelled many ks to attend.

Our Sydney friends arrived in force and had numerous displays, of which Peter Schubert's AT series of hardware items took pride of place.

The Mini-PE card with its various options sure looked professional and each time I see it I am amazed at its capabilities. The same can be said about the multifunction card and the new mini ram card which fits the AT mini-PE card and the Cor-Comp expansion system.

Great work Peter. They are a credit to you.

Also of great interest was the RGB modulator created, once again by Peter, which was demonstrated driving monitors which, believe it or not, were obtained for $100.00 each. (Boy couldn't we do with a truck load of them!).

Along with these goodies were numerous ram-cards and modems... all offering great great value and interest for prospective purchasers.

Ben Tachak (also in the TIShug group) displayed many Mechatronics items of hardware including a mouse, a gram card and an 80 column card. Also in his bundle of exotic hardware was a very intriguing plotter from, I think, a British source. All very mouth watering and interesting.

(At this point I apologise to any of the people whose display I mis-represent. I assure you any errors are completely unintentional, but this report is only from my memory and hence prone to much corruption and error. Please forgive me for any omission).

A RAVE99 keyboard was demonstrated by John from the Brisbane group. This device certainly had many fine points and one keyboard was sold at the Faire to a discerning TI'er.

Among other displays by the Brisbane group were the 9640 "GENEVE" machine, and numerous programs running on 99/4a's around the place.

Of great interest was a new data-base called **TI-BASE** which was put through its paces after lunch. It was so popular that it sold out before I could get a copy. Oh well! That's my luck for you. The program and the demonstration certainly were first-rate. I guess I'll have to save my sheckles and send US for a copy.

Peter Gleed from Melbourne, after having driven from his home town South-Of-The-Border, represented his club with his usual panache. He had many interesting anecdotes to relay and his knowledge of the American scene was found to be of great interest to all.

Peter also brought along a program dealing with semaphore, in case your telephone is cut off. (Albert's arms would fall off and Viatel would go broke.)

The editor of the Adelaide TI magazine, Richard Earl was the sole soul to travel from our Festival city to the Faire. He demonstrated

a new language which one of his club members has written by demonstrating "The Game Of Life", written using this language.

A large table on which were placed items for sale by anyone attending the day, drew continued patronage. Many bargains were had by those keen enough to make enquiries.

Our club was well represented with a total of 9 members appearing during the day. Many of our members were combining a visit to **WONDERFUL EXPO** with a visit to the Faire. Thanks to those who took the time to support our club and our machine. It was great to see your interest.

We offered Tony and Will's new version of FUNNELWEB (much to the delight of attenders); details of how to install reset switches; the QED module for display along with Joe Wright's fabulous **GENEALOGY** program & Richard Terry's Cheque Book manager program, all of which were well received.

The day was punctuated with various demonstrations of... Rave 99 keyboard, Geneve, RGB cards and various testing software, a new data-base, Mechatronics gear, and the highlight of the day..... our own JOHN PATON strutted his stuff and did a marvelous demonstration of the new Funnelweb - boy has he got some talent to use during this coming year!

A disappointment to all who attended was the non-appearance of Lou Phillips and the latest version of 9640 along with MDOS, but this soon faded with the fine social interchange and friendships being developed while learning about our surprising machine.

One of the many highlights of our trip north was meeting so many keen TIers, not the least our far-away members.

Into that category definitely fits Larry Reid, with whom we visited on the Sunday (sore heads and all).

He certainly made us welcome and demonstrated his commitment to the TI and some of his fine library. His filing system is still being developed but it certainly gave us something to think about for our own collection of disks. Thanks for the hospitality Larry and Gay, we really enjoyed it.

Congratulations to the organisers... you took many risks but were not put-off by the obstacles. The faire, as far as I am concerned, was a great success and a credit to all. Queensland hospitality is second to none and I look forward to the next one, hopefully a little closer to Newcastle.( Hint!Hint!) (about 100k away would be nice.)

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Ask Brian Woods if its true that he is considering buying a turban just so that he can ride in a stretched-limo (Taxi variety) in style.

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Talk about long bridges in Queensland - you need to pack a picnic lunch just to visit people north of Morton Bay.

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

John Paton has outgrown security-blankets - it's the tears and the screams when he discovers his pillow is missing that upsets fellow travellers now.

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Albert should not be able to sneak-up on anyone these days. I believe he has taken to wearing wooden clogs.(Seems the fashion around Redcliffe).

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Who are the meenies who took their kids to **EXPO** and didn't take them on any of the "Whoopy" rides?

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

# an

# interesting

# observation

*This poem was brought to my attention by my wife, as it originally appeared in a womens magazine. There was no mention of the author's name.*

Some members keep a club so strong,
While others join just to belong.
Some dig right in, some serve with pride,
Some go along just for the ride.
Some volunteer to do their share,
While some lie back & just don't care.
Some always pay their dues ahead,
Some get behind for weeks instead.
Some do their best, some build, some make,
Some do neither, but only take.
Some lag behind & let things go,
Some never help their club to grow,
Some drag, some pull, some don't, some do,
CONSIDER WHICH OF THESE ARE YOU!!

# P L U S !

This Fairware wordprocessing companion and utilities disk of  templates,
tutorials,  articles,  codes, and programs for the various versions of TI
WRITER (particularly the Australian FUNNELWEB),  was  created,  edited,
adapted,  rewritten,  and/or collected especially by ME for the FAIRWARE
marketplace. I hope you enjoy this disk, make backups, and pass it on
to other TI people in this identical form . If you like PLUS! please
send $10 to Jack Sughrue, Box 459, East Douglas, MA 01515.  Thank you.

The PLUS! files will perform OK with any versions of FUNNELWEB.  If  you
have  DSDD  or  RAMDISK  (or  similar bulk capacity), load up the newest
version and ALL the PLUS! files all  together.  LOAD  your  FORMATter,
download  the  docs  to  your Star-compatible printer (OK for all Epson
except BOX stuff) starting with "READ/2ND." While  still  in  FORMATTER
(after  your  first printout), just press ENTER and 2 (FORMATTER) again.
Now you will see "DSK2.READ/2ND" in the filename spot.  Change  that  to
whatever other files you like (such as "QUICK/REF") until you've printed
out all docs which should take you easily  through  all  the  marvelous
 PLUS! items described in detail below

DON'T FORMAT ALL THE DV/80 FILES!! The IFFING/TL file is prepared to run
through the XB program MULTCOLUMN to print in 2 columns.  Read the  docs
and  follow program prompts and defaults (Epsons change 24/216 to 36/216
at prompt). DON'T FORMAT THE FOLLOWING FILES TO HARDCOPY: 1 2 3 4 5 7 8
9  C1  C2  C3  C4  C5  C7 C8 C9 M1 M2 G G1 G2 G3, as they are screen and
format codes.  The T codes and BOX files will  print  properly  on  Star
printers  but require changes in accessing codes for other printers, but
they are just a tiny part of the  66-file  powerhouse  of PLUS!,  which
includes  instant DV/80 text graphic printer; screendump; banner program
to create your own designs;  desk  and  yearly  calendar  programs  to
personalize  your  calendars;  instant  labelmaker;  multiple-column
printing;  tinyteeny  wordprocessing;  condensed  envelope  3-column
cataloguer;  caligraphy  printing;  templates for TI's built-in graphics;
codes that create IFfing with TransLiteration; Mnemonic Reference  Chart
for  built-in  TL codes; an active cataloguer to print, leap from and to
Drives 1, 2 & 3 (and back into FUNNELWEB),  delete, reenter XB auto load
programs; mini screen dump; Pig-Latin writer, etc.  All on  ONE  disk!!!

PLUS  single-stroke  autocoding,  the  most  popular  feature  of  all
PLUS-series  disks!  PLUS!  just  might  be  the  best  wordprocessing
companion/utility disk you'll ever own!

NOTE:If  your  disk  did  not  come with a printout of all the filenames
(necessary for FORMATting above), LOAD CAT in XB, pick your  drive,  and
press  5 to get your quick mini catalog.  When finished printout press 3
(AGAIN) and continue cataloguing.

 BIGCAT  PLUS's active cataloguer lists disk contents of Drives 1, 2  or
3 (including RAM).  Screen breaks files into program and other.  To load
program files (if in XB only [or BASIC that is supported by XB  or  uses
Jim  Peterson's  great  BXB sub]) press the corresponding letter.  Files
list type and number of sectors used; disk title and total sectors  used
are also displayed.  SCREEN OPTIONS:
1)  CONTINUE  -  If  there are too many files for the screen, pressing 1
displays the next batch of files.
2) QUIT - Press to quit back to TI screen.
3) AGAIN - Reloads to catalogue another disk in same or different  drive
or back to FUNNELWEB,
4)  DELETE  -  Delete by answering  PROGRAM (P) or FILE (F)  Then letter
corresponding to line of File or Program.  Computer  will  double  check
that you are still okay by asking if you are sure you want ____ deleted.
5)  PRINT  -  Will print the catalogue as shown in condensed format on a
PIO printer.  (GEMENI 10X is what I use for this).  These configurations
may be changed by LISTing the XB program.

INSTALABEL is FAST, will print up to six lines on a label in condensed (default) or normal. Type what you want on the lines and number needed. When labels are done the program lets you immediately create another. And so on. Typing 99 will escapes to FWB.

CALENDAR PROGRAMS These drastically-modified programs let you create personalized desk and yearly calendars suitable for writing in daily notices (with additional blocks for other important monthly announcements). You are led through the processes and may print out text in upper or lower case. Be sure you have your printer on and ready to go with paper lined right up to printer head. After you have typed your heading and chosen year and month, you will be asked (on DESK/CAL only) if you want messages for specific dates. If Y, the computer will ask which date. Type number. Then type message which will be printed on that date. You must press ENTER after each 10-letter (maximum) line. There are 6 lines in each box. After the last line is ENTERed you will be asked if you want any more messages (Y/N). If N the calendar will print instantly. If Y you can continue to put in messages (including in boxes before and after month by giving -3 or 35 [or whatever] as before or after dates). When the calendar has printed, you'll be asked if you want one exactly the same or if you wish to change some messages on an otherwise identical calendar or if you want to go on. Then you'll be asked if you want another month to print. An N here will return you to FWB. A Y will ask you for title, year, month again and print another desk calendar out for you. And so on.

INSTAPRINT prints any DV80 text or graphic file instantly without using EDITOR or FORMATTER. It prints just as if you did PF in EDIT mode. Give DSKn.FILENAME as asked. Be sure your PRINTER IS ON! Like all tiny INSTA XB programs, this is FAST!

BANNER PROGRAM is a much-modified PDer operating off two menus. When the first screen comes up choose:
N - Normal. Normal TI character set.
R - Reformed. New character set (which will remain in effect even when returning to PLUS! unless you return to normal with the last menu [S - Start Over]).
C - Create. Design your own characters, numbers, or pictures by using the 8X8 grid. Type the Row # then the Column #. This will be automatic without a need to ENTER each time. S will store (for later retrieval or embellishment) and Print. You'll be given a magnification option to make your special creations up to 8 inches high.
Q - Quits you to PLUS! The second menu of each above set lets you select the height of the items you are going to print. ( Note: All letters will be enlarged using a collection of the small letters selected [except in C] and will all be printed sideways. ) Lastly, you'll be asked to print the words you want bannered.

3/COL Based on a program by Jack E. Evans Sr. which originally appeared in the SPIRIT OF 99, this program has been reduced and modified to permit envelope-sized catalog printouts with the maximum number of files and to automatically print your name on each hardcopy.

INSTADUMP Is a 2-sector program that dumps any non-redefined characters directly from the screen to printer. Put your printer on and run the program. Easily adaptable to GOSUBs, for printing partial LISTs, for tiny wordprocessing duties, for printing character-graphic screens. Experiment. You'll be surprised what it can do.

IG!PAY Type any words, phrases, or sentences you want in English. The computer converts English to Pig Latin. If you want multiple phrases continue to press Y when offered option. The percent sign lets you print directly. N will quit program (still in memory for another RUN or LISTing).

BOX stuff The BOX/REF, BOX/DOC, and T templates are for accessing the built-in graphics codes of the Star printers (like Gemini). If you have

a different printer, refer to your manual

G loads are templates for TL graphing. (see tutorials)

L loads are templates for letters. Using these, it is easy to design your own. L1 uses the BOX codes above and gives all the directions for creating such a template. L2 is a smaller, modified version of the same. Both G and L files include all the active TL keys described in the tutorial. Both L files use the Define Prompts, so the dates and names have to be typed in during FORMATting. These DPs can be eliminated if you have no use for this sort of thing. (Many users requested this feature.)

M loads prepare formatting structure for MULTCOLUMN.

INSTAMAIL is a very quick hardcopy address maker, handy for people who need printouts for maillists without going through a database.

SETUP is a sophisticated Gemini-compatible printer setup. Load up whatever codes you want in your printer. Then use your wordprocessor [or whatever] without shutting off the printer. What you established will come out in the hardcopy.

MAX/DOC explains how to use the wonderful MAX/RLE. MICKEY is a graphic to test it out.

tinyteeny Is the world's smallest wordprocessor! Using subscript, this short program even lets you print on normal adding machine paper! Though many of the features of TIW are missing, tinyteeny does let you print your whole novel on a dozen pages (or half-a-dozen feet of adding machine paper). What other word processor can make that claim?

FWFLOW is a marvelous flowchart reprinted here with permission of author Charles Good (of Lima Users) which step-by-steps the FWB processes (especially CONFIG). These files, the absolute best on the subject, were an immense help to me.

SMALL/DOCS explain how to use PLUS's SMALLIFICATION program which reduces XB programs considerably to save space and run faster and more efficiently. (Change drive # in Line 360 if Smallify 1 & 2 are not in Drive 1.) One SSSD disk of programs I wrote for school was reduced by 112 sectors when run through SMALLIFICATION!

SLASH/Ø encodes your printer to make slashed zeros.

tinypro is a tiny wordprocessor with a built-in tutorial.

PLUS!VIEW is a workshop/presentation, music/graphic tool. This program (which is used here to explain the features of PLUS!) can be adapted to any business or user-group application. Make your point clearly and succinctly. This could be one of your most important business or user-group files.

P! is a program that brings up the PLUS! logo as a cursor. Thanks to Jim Peterson for yet one more idea. If you'd like to customize it for yourself LIST the program and make the substitutions. [While on the subject of Jim (of TIGERCUB fame), his NUTS & BOLTS disks - 3 disks of over 300 subroutines - exceed some of the most powerful super XBs out there. Send $1 for his catalog: 156 Collingwood Ave., Columbus, OH. 43213. Returned with first order. Superb stuff from "Mr. TI."]

THE # & C FILES are the autoloaders in the EDIT mode (see DECODING). Each number when used as the single-keystroke filename in LoadFile, will automatically set your TABs to 1 & 38 (screen size) to eliminate windowing. It will also automatically set the FORMATting "IF" codes. Leave the codes in the opening lines. When your text is run through the FORMATter, all hardcopies will contain those particular code functions.

For example, LF DSKn.4 will load C4. That will give you term-paper formatting (wide margins, double spacing, name headers, auto page numbering, NLQ, etc.) and, like ALL of these codes, complete access to the TL templates for the full range of fonts, size, graphics, and other printer commands through the TL key. There are Tutorials for IFfing and TLing on IFFING/TL, REDEF/TL, IMPLANT/TL, GRAPHS/TL, and ALLCODING. Here is what each autoload number will do: C1 - the basic TL coding with normal margins; C2 - condensed coding (118-columns wide) with built-in spacing; C3 - normal mode (what I use 90% of the time) with graphics (Heart/N; Goose/Y) and narrow lines (J) in conjunction with condensed and superscript; C4 - term paper mode; C5 - full 80 columns;

C6 is empty for your own personalization; C7 - full non-spaced TL that includes an arrow pointer and a copyright symbol; C8 - loads up a fully-spaced, compressed, superscripted, narrow-lined text mode to type 134 columns by 134 rows, about 18,000 characters per page!; C9 - (see ALLCODING). On MOST of these templates the WXYZ keys are for my special redefinitions or are left open for redefining by you. G files redefine WXYZ into graphics, while maintaining the standard TLing.

DECODING and ALLCODING are comprehensive tutorials with detailed examples on the use of all the codes and templates. IMPORTANT DOCS!

QUICK/REF is a comprehensive, one page quick reference chart for any form of TI WRITER (best for FUNNELWEB). This chart also includes the standard TLing. Keep this handy guide near your computer.

FNLSTRIP makes a 4-line console strip that includes the double-line commands for TI WRITER, the single-line for DM-1000 (which is within FUNNELWEB), and another line for manually filling in commands for other software. This file can also be a template for any needed strips.

MULTCOLUMN is a hybrid with lots of history. Years ago programs were developed to convert TI WRITER files into two-column printouts (for newsletter and other uses). Many TI users developed such programs. Probably the best of the lot is Jim Peterson's PRINTALL (which even prints up to five columns). The first I saw was from a New Jersey newsletter years ago. I haven't been able to locate the author's name. Then within months, it seems, there were dozens of variations, each with improvements and additions (such as more than two columns) MICROpendium, for example, recently published another, much-improved version by William Brown (which, itself, was REVISED in 1985!) The LA Users (particularly Tom Freeman, Mike Dodd, and George Steffan) improved upon the earlier variations and added more selection screens (similar to Peterson's PRINTALL) and Bartholomew Punch's peculiar version written specifically for my class to make a 5th-grade newspaper in 1982!!! This small PLUS! program with auto-templating owes a debt of thanks to all these people mentioned above and to all those unnamed persons whose efforts contributed to this "final" result. M1 & M2 are the autoloaders for setting up the structure for this conversion. MULTCOLDOC is essential for operating the three files. A newsletter editor's dream come true.

GOTHIC prints out beautiful Gothic letter in upper and/or lower case. Great for awards, etc. Loads in E/A (or FUNNELWEB Loaders). This is a PD program that's been in group libraries for a long time. I do not know the author and have asked lots of people. If anyone knows, please write me so I can give credit. ###########################

We assume no responsibilities for improper use or malfunction of any files contained on this disk. Please contact me with suggestions, comments, improvements.

THERE ARE 64 FILES AND 720 SECTORS (and a lot of work!) ON THIS DSSD (OR FLIPPY SSSD) DISK. WHEN SHARING THIS DISK, PLEASE MAINTAIN THE INTEGRITY OF THIS WORD-PROCESSING COMPANION/UTILITY BY KEEPING ALL THE FILES INTACT. - I appreciate your support, Jack Sughrue.

# how to get YOURS!

Copies of Jack Sughrue's amazing package - PLUS! - are available from the Software Librarian. If you want a copy please send $5 for a DSSD disk or $6 for 2 SSSD disks.

Jack, an overseas member of our group has asked that the HV99ers distribute this disk in Australia for him, so instead of sending your fairware donations to him individually, send your money to our Software Librarian who will pass all monies he recieves on to Jack in one cheque, as well as the names and addresses of those who have contributed.

# CALL FILES 3 by bob carmany

You will probably recognize the lines of code that we are using as an example from the FILE/READ program that appeared in the July '87 issue of the newsletter. To conserve space, most of the program will be omitted and just those lines that deal with how the files are read in and processed are going to be explained. For clarity, the constants have been replaced with their corresponding variables once again.

```
220 DISPLAY AT(8,1)BEEP:"Device.Fil
lename":">" :: ACCEPT AT(9,2)SIZE(1
5):FILE$ :: CALL ERASE
```

```
230 DISPLAY AT(16,1):"Device.Filena
me" :: DISPLAY AT(17,1):">"&FILE$
```

These two lines prompt you for the device (ie. DSK1, DSK2, etc.) and the actual filename (ie. TEXT/1, DOCS,etc.)

```
240 DISPLAY AT(8,1)BEEP:"File Descr
iptors (Choose 1)" :: DISPLAY AT(9,
1):"1) DISPLAY ,VARIABLE":"2)  DISPL
AY ,FIXED"
```

```
250  DISPLAY AT(11,1):"3) INTERNAL ,
VARIABLE":"4) INTERNAL ,FIXED" :: D
ISPLAY AT(13,20):"1" :: ACCEPT AT(1
3,20)VALIDATE("1234")SIZE (1):A ::
CALL ERASE
```

```
260  DISPLAY AT(8,1)BEEP:"Record Len
gth" :: DISPLAY AT(9,6):"80" ::  ACC
EPT AT(9,6)VALIDATE(DIGIT)SIZE(3):L
:: CALL ERASE
```

```
270 ON A GOTO 280,290,300,310
```

These next four lines prompt the user to enter the actual file descriptors (ie.  DISPLAY/VARIABLE, DISPLAY/FIXED, INTERNAL, VARIABLE, and INTERNAL FIXED).  The user is also prompted for the record length (ie.  80, 128, etc.).  Control is then passed to the appropriate line in the program based on the user's choice.

```
280  ON ERROR 610 :: DISPLAY AT(20,1
):"DISPLAY ,VARIABLE" :: DISPLAY  AT
(20,19):L  :: OPEN #1:FILE$,INPUT ,D
ISPLAY ,VARIABLE L :: GOTO 320
```

```
290 ON ERROR 610 :: DISPLAY  AT(20,1
):"DISPLAY ,FIXED" :: DISPLAY AT(20
,16):L :: OPEN # 1:FILE$,INPUT  ,DIS
PLAY ,FIXED L :: GOTO 320
```

```
300  ON ERROR 610 :: DISPLAY AT(20,1
):"INTERNAL ,VARIABLE" :: DISPLAY  A
T(20,20):L  :: OPEN #1:FILE$,INPUT ,
INTERNAL ,VARIABLE L :: GOTO 320
```

```
310 ON ERROR 610 :: DISPLAY  AT(20,1
):"INTERNAL  ,FIXED" :: DISPLAY AT(2
0,17):L :: OPEN #1:FILE$,INPUT  ,INT
ERNAL ,FIXED L :: GOTO 320
```

The next four lines are the actual OPEN statements for the files.  For example, line 280 OPENs FILE$ (which is DSKx.filename) as [Sequential] , INPUT , DISPLAY , VARIABLE L. Sequential does not  appear because the computer has designated it by default and the variable "L" is the file length in characters that the user input earlier in the program.

At the beginning of each line is an ON ERROR statement to aid in error trapping and the file type is displayed at the bottom of the screen to make the program more

"User friendly".

320 DISPLAY AT(8,1):"Parameter Flag ":"1 For DISPLAY Files":"2 For INTE RNAL Files" :: DISPLAY AT(10,22):"1 " :: ACCEPT AT(10,22)VALIDATE("12") SIZE(1):Z :: CALL ERASE


Line 320 does an interesting thing, it adds a "parameter" flag. This is just a way of being able to use LINPUT (for DISPLAY type files) or INPUT (for INTERNAL type files). By selecting either "1" or "2", we can keep track of each file and switch control to the appropriate line in the program to do the file reading.


330 F=Z

Simply puts the parameter flag into the variable "F".


340 DISPLAY AT(8,1)BEEP:"Printout o f file? (Y/N) N"" :: ACCEPT AT(8,25 VALIDATE("YyNn")SIZE(-1):F$

350 IF P$="N" OR P$="n" THEN 450

360 DISPLAY AT(8,1)BEEP:"Printer de vicename " :: DISPLAY AT(10,16) :">PIO" :: ACCEPT AT(10,17)SIZE(-3) :PRINT$

370 DISPLAY AT(23,1):"Printer >"& PR RINT$ :: CALL ERASE

380 ON ERROR 610 :: OPEN #2:PRINT$, OUTPUT ,DISPLAY

390 IF EOF(1)THEN 510

400 ON F GOTO 410,420

410 LINPUT #1:A$ :: GOTO 430

420 INPUT #1:A$

430 CALL KEY(0,K,S):: IF S<>0 THEN 430 ELSE PRINT A$ :: PRINT #2:A$ 440 GOTO 390

450 IF EOF(1)then 520

These lines ask the user if he wants a printout and then prompt the user for a printer device name (ie. PIO). The printer is then OPENed in line 380 for file printing in [Sequential], OUTPUT DISPLAY [80] mode. The information in the

brackets is supplied by default by the computer. Line 390 looks for an EOF marker and closes the file when it is found (as does line 450). Lines 430 and 440 simply test to see if a key has been pressed and halt printing if one has been pressed.

460 ON F GOTO 470,480

470 LINPUT #1:A$ :: GOTO 490

480 INPUT #1:A$

490 CALL KEY(0,K,S):: IF S<>0 THEN 490 ELSE PRINT A$

500 GOTO 450

510 CLOSE #2

520 CLOSE #1

This set of lines does the same thing as the ones that control the printer except that they display the file information of the screen. Lines 510 and 520 simply close the files when the EOF marker is encountered.

Those are the "guts" of the program. The actual file handling is straightforward and relatively simple. Just remember that you don't have to enter all of the file descriptors --- some of them are supplied by default.

# FOR SALE

# FUNNELWEB
# version 4- 10
# an outline

## AL LAWRENCE

Exposed at Brisbane TI FAIRE was a Special Version of Funnelweb. Its release timed almost to the last second after months of late night programing and testing.

This article is only a small window into V 4.1 to highlight some of the great improvements , made due to the numerous requests, criticisms & miscellaneous positive feedback the authors have received over the last few years.
In answer to Stephen Shaw's great difficulty in configuring F'WEB 4, Tony and Will have developed a 58 sector program (CF/CG) from 500 sectors of source code that is SHEER MAGIC to use (or play with!). This is what you would expect to see on an IBM not a TI. Pity is most people will only need to use it once, after all the time and hard programming packed into it.

** FWEB 4.10 and 4.0 ARE NOT COMPATABLE so 'Mix 'n' Match' IS NOT RECOMMENDED **

As usual make a backup after making sure that the original has a write protect tab on it first!!!

HINT...put only the files that you need to work with while configuring Fweb on a freshly formatted disk to save unnecessary head movement, eg LOAD,UTIL1,CF/CG, DS,EA,UL,SYSCON.

FUNNELWEB is more than an enhanced TI WRITER but that is the area about which most tips and hints one reads are about. Maybe a reviewer will do an indepth review of the numerous other assets and programming tools offered on it?

Select CONFIGURE from the XB MENU, Opt 3 or Opt 8 in UTIL1 then Opt 8.

Entry Screen proclaims:-

```
-------------------------
!FUNNELWEB   Vn  4.10 !
!    Configuration    !
-------------------------
```

Bottom line in Inverse Video.

<?> Help.   <ctrl C>Back.   <fct 7>Dir

Pressing  any key and along the top 2nd screen you get.

```
_____
! Sysinfo     Quit       Install !
---------------------------------------
```

Select by first letter.

Press S to select Sysinfo and a box with 3 choices pops up.

```
---------
! Load !   Select L if not loaded
! Edit !   Select E when loaded
! Save !   Select S when finished
---------
```

NB...you must LOAD to EDIT!! and SAVE before Exiting to INSTALL.

Press L and default DSK1.SYSCON pops up, if correct press enter and when loaded select E to Edit.

```
            ------
           !      !
           ! E ----------
           !  !         !
      -----!   to     !
           !          !
           ! EDIT     !
           !          !
           ! box 1    !
           !          !
           ! below    !
           !          !
-------------------------------------
!Keys now in use throughout Fweb.!
!                                !
!Ctrl C / Fctn 9 BACK.           !
!                                !
!B / N pages fwd/back or up/down.!
!                                !
!Window in use_Box line thickens.!
!                                !
!<?> on screen HELP.             !
!                                !
!Commands active are shown in    !
!        REVERSE VIDEO           !
!                                !
!Enter to PROCEED.               !
-------------------------------------
```

```
-----------------------------------
!At certain stages it is  possible !
!to  have 7 interlaced boxes pop up!
!on the screen while Editing......!
-----------------------------------
```

```
                        ---------------
            ---    !    pressing !
-----------!1!     !             !
            ---    !      E      !
! Loading   !     ! pops up box !
! Devices   !     !             !
! Colors    !     !      1      !
! Menu      !     !-------------!
! XB list   !
! UL list---------------
!          ! Edit DS list !
--------!      here ---------
        !if required! save  !
--------------! DS/UL !
              ! before !
              ! exiting!
              !       !
--------------------!       !----
!            ---------    !
!When  Customising  the Menu you now
!have 4 choices each side  (TIW/EA)!
!to  add to the 4 already installed!
--------------------------------------
```

        I   will   not   insult   the
intelligence of the readers by going
any further here, as you are (dare I
say   it?)  'led  Letter  by Letter in
each stage.

        After  you  have  finished  the
Editing  mode  and  saved the SYSCON
file Ctrl C out and select Install
mode where the choices are:

```
        -------------------
        ! LOAD -XB / XBII!
        !                !
        ! FW-UTIL1 other !
        -------------------
```

        You  can  rename UTIL1-FW if it
is also another program on the disk.

        Again select by letter and when
Load  and  FW/UTIL1 are installed
(Fweb does all the work) press  Ctrl
C and then Quit.

        Reset  and Quit then reload and
the screens will be as you set  them
up.  If you have made an error it is
a pleasure to Redo it again!

SOME OTHER IMPROVEMENTS
        DM-1000  has  been   modified,
slimmed  and  updated  to  V4 status
with BELLS  added  so  the  user is
aware  when  the  task  in  hand has
finished - A MOST welcome  addition.

It also copies more sectors per pass
(added after the faire release,  and
suggested by Larry Reid).
        Also  included  is  on-screen
warning (and in the docs)  if  Myarc
Disk  Controller  card  is  in  use
(regarding Sector 0 reading  and
16/18  track  formatting)  or Backup
copying  onto  1  to  4  Drives  if
Ramdisk on board.

        LINEHUNTER  is an added feature
by  young  Will  that  will  be  a
valuable tool in program de-bugging.
This  is  an  Assembly  Source  Line
Locator  and  uses  the  computer to
search  out  the  line  numbers  (or
label)  with  errors  or  needing
modification.

        The  file  name  is  carried
through  in  the  mailbox,  enter
line/label number and sit  back  and
watch the numbers flash past similar
to  the  verifying  when  a  disk  has
been  formatted.   When the line has
been  located  it  appears  at  the
bottom  of  the  page to read.  When
finished press Ctrl = to  return  to
F'WEB.

Notes
1)  Some  features  are missing that
were on V 4.0 so if you  USED  them,
do not trash your old copy until you
know what they  are!!  If  you  used
them write and let Tony and Will how
useful you found them.

2)   c-COMPILER   loader   fully
compatable  with  V  4  of  Clint
Pulley's c99 and returns to FWEB  on
completion if desired.

3) DPATCH now has alternate  key
press functions so if you  are  used
to Birdwell's DSKU style (Ctrl H=
Hex, Ctrl A= Ascii) it's there,  as
are  the  original TI keystrokes.
Both are listed on the entry screen.

4) DS is a suggested  list  of  Disk
Utilities file  similar  to  UL and
they are no longer loaded  in  UTIL1
but may be customised if not to your
requirements .

Triple AAA Credit ratings  in  all
sectors  of  this  Value  for Dollar
FAIRWARE offering.  If you have  not
made  any donation before, make sure
you do NOW.

# modified lower case
## CHARACTER SET REVISITED
see article next page

```
          DEF   ZCHARS
   VMBW   EQU   >2024

   *
   *   CALL LINK("ZCHARS")
   *   -------------------
   *   ASSEMBLE WITH R OPTION ONLY
   *


   LWCASE DATA >0000,>0070,>0838,>4874,>0040,>4078,>4444,>4478
          DATA >0000,>0038,>4040,>4438,>0040,>4078,>4444,>4478
          DATA >0000,>0038,>4478,>403C,>0004,>043C,>4444,>443C
          DATA >0000,>0438,>4438,>047C,>0018,>2420,>7020,>2020
          DATA >0010,>0030,>1010,>1038,>0040,>4078,>4444,>4444
          DATA >0040,>4048,>5070,>4844,>0030,>1010,>1010,>1018
          DATA >0000,>0078,>5454,>5454,>0000,>0058,>2424,>2424
          DATA >0000,>0038,>4444,>4438,>0000,>00B8,>4478,>4040
          DATA >0000,>0038,>4454,>4834,>0000,>0058,>6440,>4040
          DATA >0000,>003C,>4038,>0478,>0010,>3810,>1010,>1408
          DATA >0000,>0048,>4848,>4824,>0000,>0044,>4428,>2810
          DATA >0000,>0044,>5454,>5428,>0000,>0044,>2810,>2844
          DATA >0000,>0044,>2418,>1060,>0000,>007C,>0810,>207C
          DATA >0000,>00F8,>0808,>0808,>0000,>00FF,>0000,>0000
          DATA >0000,>0000,>FF00,>0000,>1010,>1010,>1F00,>0000
          DATA >0808,>0808,>F800,>0000,>1010,>1010,>1010,>1010


   BORDER DATA >0000,>001F,>1010,>1010,>0000,>00FF,>FF00,>0000
          DATA >1818,>1818,>1818,>1818,>0000,>001F,>1F18,>1818
          DATA >0000,>00F8,>F818,>1818,>1818,>181F,>1F00,>0000
          DATA >1818,>18F8,>F800,>0000,>0808,>0808,>0808,>0808

   MYREGS BSS   >20
   SAVRET DATA  >0
   ZCHARS MOV   R11,@SAVRET
          LWPI  MYREGS


          LI    R0,>0608
          LI    R1,LWCASE
          LI    R2,260
          BLWP  @VMBW

   BORD   LI    R0,1800
          LI    R1,BORDER
          LI    R2,64
          BLWP  @VMBW

          LWPI  >83E0
          SB    @>837C,@>837C
          MOV   @SAVRET,R11
          RT
          END
```

This routine is a slight modification of the one published in last months issue. Some of the character codes have been altered. It is necessary to assemble this using the R option and to save as file say ZCHARS/O. The other three routines herein use these characters to display the boxes, frames etc.

# A FORTH PROGRAMMERS FLIRTATION WITH ASSEMBLY

## RICHARD TERRY

Needing some routines to use in my last and never to be repeated extended basic program, I decided to tackle some simple assembler. My experience in Forth helped alot, speeded up by numerous phone calls to Will and Tony and Joe. I only had a matter of hours till the program deadline, so what was needed was a functional result - ie the code had to do the job, not be elegant or pretty. What I wanted was a series of routines to speed up the screen displays - to draw the equivalent of windows where needed, and to clear parts of the screen quickly. My first effort was what I have left as the FRAME routine below, which I have used to "frame" my documentation as it is being presented from within the program. The others were a slight modification of Tony's descender character set with a few added characters, and the two general routines to clear part of the screen (PCLS) and draw the window boxes (BOX).

If your going to use these then it goes without saying you probably know not a skerrick about assembler code or compiling it, because if you did you wouldn't be contemplating their use. Load the Editor part of Ti-writer or the Assembler and type in EXACTLY what you see. You don't have to understand it. Then save each example as an individual file name Eg ZCHARS/S the S standing for source code. Next load the assembler and follow the prompts, saving the output as eg ZCHARS/O, O standing for object code. Hit enter at the prompt for list device, and leave only R in the options prompt. If you've typed them correctly you'll be presented by a prompt saying 0000 errors. I've double checked them today and they all work, so if they won't assemble its definately your typing.

These are undoubtedly bad assembler and not code efficient, but they work. They won't take up any extra space in your extended basic program because they occupy a spot in the computer not used by basic program space or stack. To use them all in your program simply use the following code to load them at the start. They are offered without any commentry or explanation as to how they work. Brian Rutherford popped in today and tells me he has finished a similar routine, which does all this but exists as a single program instead of multiple files, so you may prefer to use his instead.

```
10 CALL INIT::CALL LOAD("DSK1.ZCHARS
/O","DSK1.FRAME/O", "DSK1.BOX/O","DS
K1.PCLS/O")
```

## BOX ROUTINE.
------------

This draws a box of any size on the screen. There is NO ERROR VALIDATION, so if you write a column or row etc outside of the normal 1-32 cols, or 1-24 rows, or incorrect heights, widths, you will get erratic results or lockup. This of course will not happen in your program if you pass the correct parameters. Note that this routine works on the same screen area as that used by HCHAR,VCHAR etc, ie col 1 for these routines is same as for these subprograms.

To use include the following:

Eg 100 CALL LINK("BOX",5,5 20,10) will draw a box starting at row 5,col 5 (of 32) being 20 wide and 10 high.

## PART CLEAR SCREEN
------------------

This clears a box sized area within the screen display area as used by the DISPLAY AT(X,Y) subprogram ie will clear from column 1 to 28, the same area you can display text in, in extended basic. To call it use:

```
CALL
LINK("PCLS",row,col,width,height).
```

## FRAME ROUTINE.
--------------

This was written as an aid to presentation of documentation. The program docs can be written using ti-writer, right justified etc, and then loaded in as pages 22 lines at a time. The frame routine is used first as:

CALL LINK("FRAME")

Before subsequent pages are displayed the PCLS routine can be used to clear the inside of the framed area quickly as opposed to very slowly in basic. Here is a sample subprogram to acheive this:

```
100 SUB HELP
110 GO TO 120 :: B,X,A$,K,S ::!@P-
120 ON ERROR 230
130 OPEN #1:"DSK1.DOCUMENT",DISPLAY
,INPUT ,VARIABLE 80
140 CALL CLEAR :: CALL
LINK("FRAME")
150 FOR B=1 TO 6 ::REM 6 PAGES
160 CALL LINK("PCLS",2,1,22,28)
170 FOR X=2 TO 23
180 LINPUT #1:A$ :: DISPLAY
AT(X,1)SIZE(28):A$
190 NEXT X
200 CALL KEY(0,K,S):: IF S=0 THEN
200 ELSE IF K=15 THEN CLOSE #1 ::
SUBEXIT
210 NEXT B
220 CLOSE #1 :: SUBEXIT
230 CALL CLEAR :: DISPLAY
AT(11,1)SIZE(28):" Doc file error -
Redo/Back" :: CALL
LINK("BOX",10,2,3,30):: ON ERROR 240
:: CLOSE #1
240 CALL KEY(0,K,S):: IF S=0 THEN
240 ELSE IF K=6 THEN 120 ELSE
SUBEXIT
250 !@P+
260 SUBEND
```

## ZCHARS ROUTINE
--------------

Once loaded before using any of these routines you must link to the new character set, which contains descenders and the necessary graphics characters to allow display of the boxes etc, by:

CALL LINK("ZCHARS")

```
            DEF   BOX
VMBW        EQU   >2024
VSBW        EQU   >2020
NUMREF      EQU   >200C
FAC         EQU   >834A
MYREGS      BSS   >20
SAVRTN      DATA  >0
ROW         DATA  >0000
COL         DATA  >0000
WIDTH       DATA  >0000
HEIGHT      DATA  >0000

*
* CALL LINK
* ("BOX",Row,col,height,width)
* for col 1->32,row 1->24
* ASSEMBLE WITH R OPTION ONLY
*

BOX         MOV   R11,@SAVRTN
            LWPI  MYREGS

            LI    R2,1
            BL    @GETNUM
            MOV   R3.@ROW

            INC   R2
            BL    @GETNUM
            DEC   R3
            MOV   R3,@COL

            INC   R2
            BL    @GETNUM
            MOV   R3,@HEIGHT

            INC   R2
            BL    @GETNUM
            MOV   R3,@WIDTH
            CLR   R3

SETUP       MOV   @ROW,R3
            DEC   R3
            SLA   R3,5
            A     @COL,R3

ULC         LI    R1,129
            MOV   R3,R0
            DEC   R0
            BL    @CORNER

TOPLIN      MOV   @WIDTH,R2
            LI    R6,124
            BL    @LINE

URC         LI    R1,123
            BL    @CORNER

RSIDE       MOV   @HEIGHT,R2
            LI    R6,136
            BL    @SIDES

LSIDE       MOV   R3,R0
            LI    R6,128
            MOV   @HEIGHT,R2
            BL    @SIDES
```

```
        LLC      AI    RO,32              ROW      DATA  >0000
                 DEC   RO                 COL      DATA  >0000
                 LI    R1,126             WIDTH    DATA  >0000
                 BL    @CORNER            HEIGHT   DATA  >0000

        BOTLIN   MOV   @WIDTH,R2          *
                 LI    R6,125             * CALL LINK
                 BL    @LINE              * ("PCLS",row,col,height,width)
                                          * NOT as in "BOX" routine
        LRC      LI    R1,127             * these ~ EB display at(r,c)
                 BL    @CORNER            * assemble with R option
                 JMP   FINISH             *

        RETURN   B     *R11               PCLS     MOV   R11,@SAVRTN
                                                   LWPI  MYREGS
        CORNER   INC   RO
                 MOV   R11,R10                      LI    R2,1
                 BL    @PUTCHR                      BL    @GETNUM
                 MOV   R10,R11                      DEC   R3
                 B     *R11                         MOV   R3,@ROW

        LINE     INC   RO                           INC   R2
                 MOV   R6,R1                         BL    @GETNUM
                 MOV   R11,R10                       MOV   R3,@COL
                 BL    @PUTCHR
                 MOV   R10,R11                       INC   R2
                 DEC   R2                            BL    @GETNUM
                 CI    R2,2                          MOV   R3,@HEIGHT
                 JGT   LINE
                 B     *R11                          INC   R2
                                                     BL    @GETNUM
        PUTCHR   SWPB  R1                            MOV   R3,@WIDTH
                 AI    R1,>6000                      CLR   R3
                 BLWP  @VSBW
                 B     *R11               SETUP     MOV   @ROW,R3
                                                    SLA   R3,5
        GETNUM   CLR   RO                            AI    R3,-32
                 MOV   R2,R1                         A     @COL,R3
                 BLWP  @NUMREF                       MOV   @HEIGHT,R5
                 MOV   @FAC,R3
                 ANDI  R3,>00FF           TOPLIN    MOV   @WIDTH,R2
                 B     *R11                          LI    R6,32
                                                     AI    R3,32
        SIDES    MOV   R6,R1                         MOV   R3,RO
                 AI    RO,32                         BL    @LINE
                 MOV   R11,R10                       DEC   R5
                 BL    @PUTCHR                       CI    R5,0
                 MOV   R10,R11                       JGT   TOPLIN
                 DEC   R2                            JMP   FINISH
                 CI    R2,2
                 JGT   SIDES              LINE      INC   RO
                 B     *R11                          MOV   R6,R1
                                                     SWPB  R1
        FINISH   LWPI  >83E0                         AI    R1,>6000
                 SB    @>837C,@>837C                 BLWP  @VSBW
                 MOV   @SAVRTN,R11                   DEC   R2
                 RT                                  CI    R2,0
                 END                                 JGT   LINE
                                                     B     *R11

                 DEF   PCLS              GETNUM     CLR   RO
        VSBW     EQU   >2020                         MOV   R2,R1
        NUMREF   EQU   >200C                         BLWP  @NUMREF
        FAC      EQU   >834A                         MOV   @FAC,R3
        MYREGS   BSS   >20                           ANDI  R3,>00FF
        SAVRTN   DATA  >0                            B     *R11
```

```
FINISH      LWPI  >93E0
            SB    @>837C,@>837C
            MOV   @SAVRTN,R11
            RT
            END




            DEF   FRAME
VMBW        EQU   >2024
VSBW        EQU   >2020
MYREGS      BSS   >20
SAVRTN      DATA  >0

*
* DRAWS HEAVY FRAME AROUND
* WHOLE SCREEN used as
* CALL LINK("FRAME")
* ASSEMBLE WITH R OPTION
*

FRAME       MOV   R11,@SAVRTN
            LWPI  MYREGS
            JMP   CORNRS


CORNRS      LI    R0,0
            LI    R1,>8400
            AI    R1,>6000
            BLWP  @VSBW

            LI    R0,31
            LI    R1,>8500
            AI    R1,>6000
            BLWP  @VSBW

            LI    R0,736
            LI    R1,>8600
            AI    R1,>6000
            BLWP  @VSBW

            LI    R0,767
            LI    R1,>8700
            AI    R1,>6000
            BLWP  @VSBW

            LI    R0,1
            LI    R1,>8200
            AI    R1,>6000
TOPLIN      BLWP  @VSBW
            CI    R0,30
            JEQ   ADJ1
            INC   R0
            JMP   TOPLIN

ADJ1        LI    R0,737

BOTLIN      BLWP  @VSBW
            CI    R0,766
            JEQ   ADJ2
            INC   R0
            JMP   BOTLIN
```

```
ADJ2        LI    R0,32
            LI    R1,>8300
            AI    R1,>6000

REDGE       BLWP  @VSBW
            CI    R0,704
            JEQ   ADJ3
            AI    R0,32
            JMP   REDGE


ADJ3        LI    R0,63
            LI    R1,>8300
            AI    R1,>6000

LEDGE       BLWP  @VSBW
            CI    R0,735
            JEQ   FINISH
            AI    R0,32
            JMP   LEDGE


FINISH      LWPI  >83E0
            SB    @>837C,@>837C
            MOV   @SAVRTN,R11
            RT
            END
```

## SAMPLE PROGRAM ON USE
------------------------

To illustrate the use of all these above, just type in the short sample program below, and it will show you how quick these things can be done.

```
10 CALL INIT :: CALL
LOAD("DSK1.CHARS/O","DSK1.BOX/O",
"DSK1.FRAME/O","DSK1.PCLS/O")
20 CALL LINK("ZCHARS")
30 CALL SCREEN(5):: FOR A=1 TO 14 ::
CALL COLOR(A,16,5):: NEXT A
40 CALL CLEAR :: CALL
CHAR(34,"FFFFFFFFFFFFFFFF"):: CALL
HCHAR(1,1,34,768)
50 GOSUB 100
60 CALL LINK("PCLS",8,10,10,10)
70 GOSUB 100
80 CALL
CHAR(34,"0000000000000000"):: CALL
LINK("FRAME"):: CALL
LINK("BOX",8,12, 10,10)
90 GO TO 90

100 DISPLAY AT(1,8)SIZE(14):"Press
any key" :: CALL KEYCON :: RETURN

110 SUB KEYCON
120 CALL KEY(0,I,S):: IF S=0 THEN
120
130 SUBEND
```

R.Terry

# THE INFORMATION PAGE

## IN YOUR NEWSLETTER THIS MONTH

| | |
|---|---|
| In the News - a round-up of TI happenings | A.  Wright |
| Random Bytes | B.  Carmany |
| QED CPU PAD Modification | N.  Quigg |
| Struggling FORTH - Super Forth screen print | R.  Terry |
| Brisbane TI-Faire | P.  Smith |
| PLUS! - details of the Fairware package | J.  Sughrue |
| Call Files-(3) | B.  Carmany |
| FUNNELWEB 4.10 -what its all about | A.  Lawrence |
| Character Set revisited | R.  Terry |
| Assembly Language Box routines | R.  Terry |

PLUS MUCH MUCH MORE!!!!!

## COMING EVENTS
Next Committee Meeting: Tuesday 5th July, 1988
General Meeting: Tuesday 19TH JULY, 1988 (3rd Tueday in month)

## AGENDA FOR JULY MEETING
BASIC games demonstrations
Drawing of Multiplan Raffle

## CLASSES AVAILABLE FOR MEMBERS
Genealogy (TYFA) Group - Thursday 23rd June at Warners Bay

## ANNUAL SUBSCRIPTIONS
Subscriptions to the Group cover the period 1 July to 30 June
following year.  Membership enquiries are welcome; please address
all enquiries to the Secretary.

The annual subscription is:
Australian Residents...$25
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