SPECIAL FEATURES IN THIS ISSUE OF THE SYDNEY NEWS DIGEST INCLUDE...

* EXTENDED TUTORIAL, * BEGINNERS BASIC, * LOGO CORNER,
* JENNY'S YOUGER SET, * TECHO TIME, * J.R'S PAGE,
* TI.S.H.U.G.SHOP, * REGIONAL NEWS, * THE COMMUNICATORS,
* REVIEWS on PLATO & TI-COUNT, * UNSCRAMBLING THE EGGS, and so much more... PLUS our ...

# SPECIAL A.G.M. LIFT-OUT

YES! A 4 PAGE LIFT-OUT FOR YOU TO DETATCH AND BRING ALONG TO THE BIG ANNUAL GENERAL MEETING.

We also have a GIFT VOUCHER for you to cut-out, to save you $2 on any purchase at the A.G.M or either club software Casettes or Diskettes.

## I forgot to renew my MEMBERSHIP

## NEXT MEETING > A.G.M.

**(ANNUAL GENERAL MEETING)**

**And that means ELECTIONS !!!!!**

**SPECIAL GUEST: Don Dennis of IMAGIC**

This is your big opportunity to save yourself $2 on any purchase of either a MONTHLY CLUB SOFTWARE CASSETTE or DISKETTE.

Simply present this voucher at the Club Shop during the big AGM meeting on Saturday 3rd November, (2pm) and only pay $1.

You will find this special GIFT VOUCHER on the back page of this issue of the SND.

$2 ...ent this special $2
GIFT VOUCHER
...the big A.G.M. and save $2 on any club cassette or diskette.
This is only valid if you hand it in at the ... hall, and it must NOT be a photocopy
$2 GIFT VOUCHER ...2

GET YOUR FREE GIFT VOUCHER ON THE BACK PAGE.

GET YOUR FREE GIFT VOUCHER ON THE BACK PAGE.

TISHUG
PO BOX 149
PENNANT HILLS
2120, N.S.W.
REGISTERED BY AUSTRALIA POST
PUBLICATION NO. NBH3833

November 1984

# Sydney News Digest

## inside information

The Texas Instruments Home-computer User's Group, known as TISHUG is a non profit, self supportive group of Texas Instruments computer owners and users. Information regarding membership and payment of dues should be directed to the Secretary, address below.

## DISCLAIMER

The Sydney News Digest (SND) is the official newsletter of TISHUG, and whilst every effort is made to ensure the correctness and accuracy of information contained therein, be it of a general, technical, or programming, nature, no responsibility can be accepted by TISHUG as a result of the applying of such information.

## THE NEWSDIGEST—

The SND is published eleven times per year (no January edition), by voluntry staff, from material provided by group members, other user-groups and other related sources.

Contributions and all correspondence (other than membership) should be addressed to the EDITOR, LIBRARIAN, ADVERTISING, etc., and submitted at the group meetings or posted to the appropriate person at the *general* address, below.

Copy for publication may be typed, hand printed, or be on tape or diskette media as files suitable for use with TI-WRITER (ie, DIS/FIX 80 or DIS/VAR 80). Please include sufficient information to enable the files to be read -filename, etc. Persons wishing to contribute on a regular basis should contact the editor who will make available a suitable public domain word processor program. *The copy deadline for an issue is the first Saturday of the month (ie, meetng date) prior to the month of publication.*

Any material, written or electronic, submitted to SND or Library Service is to be considered TISHUG property and to be used at the committee's discretion.

## SOFTWARE LIBRARY SERVICE

TISHUG operates a Public Domain Software Library, containing programs written by TISHUG members and from other user groups as well as miscellaneous public domain sources.
These programs are made available to members in two ways:—

1) by monthly issue - a selection of programs is made available at general meetings for a production/media cost fee.
(See TISHUG SHOP column elsewhere for details of releases).

2) as a reward for members contribution to the activities of TISHUG by
(a) submission of an original program (own work) members recieve three programs of their choice, and,
(b) submission to SND, or other activity as the committee may otherwise determine, programs of the contributer's choice will be made available.

*As the Library is maintained on a voluntry basis, no individual requests for software (other than for the above reasons) can be honoured at the present time.*

## COURTESY TO YOUR FELLOW TISHUGERS

When you strike a programing problem, require information, or just want to chat (modem or otherwise) please look at the clock before you pick up the 'phone' And always ask if it is a convenient time for your call.

## YOUR COMMITTEE

CLUB CO-ORDINATOR:
Peter Varga 3897025
HON. SECRETARY:
John Robinson 8480956
TREASURER:
Terry Phil[illegible] 7976313
LIBRARIAN:
Terry [illegible] 7976313
ASSTNT [illegible]

THE FUTURE OF THIS GROUP DEPENDS ON YOU BEING AT THE SPECIAL A.G.M.
WILL YOU HELP?

GREG [illegible]PE .6464865
PROGRAMMERS CRISIS LINE:
Graeme Holliss 992229
MUSIC CO-ORD:
Russel Welham 043924000

## IT'S HERE : TI.S.H.U.G.BBS

for SOFTWARE DOWN-LOADING, UP-TO-DATE NEWS & VIEWS, ELECTRONIC MAILING SERVICE, PROGRAMMING HINTS.

You'll see it first on your TI.S.H.U.G.BBS .

TISHUG BBS
(02)5600926

## HELP!

Programmers Crisis Line
992229

## IMPORTANT TISHUG ADDRESSES:—

*General address (for all letters except membership)*

TISHUG,
PO BOX 595,
MARRICKVILLE,
NSW, AUSRALIA, 2204.

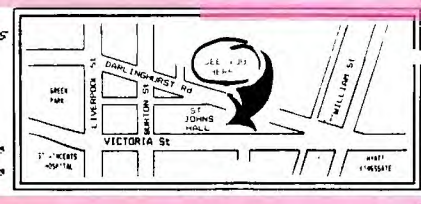
*Membership address*

The SECRETARY,
TISHUG,
PO BOX 149,
PENNANT HILLS,
NSW, AUSTRALIA, 2120.

*Monthly Meetings first Saturday of the month*

2 P.M.

St. John's Hall,
Victoria Street,
DARLINGHURST.



# Secretary's Notebook
with J.R

Hi! I have just returned from the October General Meeting. We had over 300 members attend. Many of those attending missed the presentation of a $50 cheque to John MacDonald for his program Library Search, which was the best entered in the September software competition. This month's winner was Ken Williams, for his educational program FLAGS 1&2. It is the third time Ken has won this calender year so Ken will not be eligible for another prize until 1985. I take this opportunity of congratulating John and Ken for their fine programs.

Your committee held Meeting #31 on September 12th. The monthly software entries were shortlisted. It is interesting to see that, yet again, the top program chosen by the committee was confirmed by those members attending the General meeting. For the record the voting at the committee meeting was as follows:

ADVANCE AUSTRALIA.....39

This lost points because Tasmania had been left out!

CALENDAR .....30.5

This lost points because it could not handle leap years.

DAPTO DOGS.....34
FLAGS 1 AND 2.....44.5
ELISE.....33
METRIC CONVERTER.....23
POLICE SPELL.....24
SHARPHOOTER.....37
WORD JUMBLE.....36.5

46 new members were admitted.

The Librarian reported the production of the Commercial software was now complete.

The minutes of this meeting are available for inspection at any General Meeting.

As most of you will be aware the next meeting will be our Third Annual General Meeting. I have now received nominations for all but three of the Co-ordinating Committee positions. These are Educational Co-ordinator, Assistant Editor, and Secretary. I will be receiving nominations up until 2.00 pm. on November 3rd.

There is a selection from incoming correspondence this month:
Marcello Zannini, the secretary of the TI/99 IT USER'S GROUP, Bologna Italy writes with this advice on converting your television display to that of a monitor:-

In Extended Basic after the prompt type in the following commands: FOR A=0 to 14::CALL COLOR(A,12,2)::NEXT A::CALL SCREEN(2)::RUN
The Basic interpreter will say:

WARNING- NO PROGRAM PRESENT but the colors will stay modified until you turn off the power supply.

Dr. A.N.Greacen from South Tamworth writes: I use personally programmed TI software in the management of my surgery. This software is available for sale to any interested dentists. My system utilises two disk drives and includes many features. Further information available by writing to 16 Robert St., South Tamworth. NSW 2340.
GREASO (Dr. A.N.G's BBS Code) continues in another letter; I recall someone had struck a problem with their PARSEC game. I have found there is an invisible ceiling that descends slightly as the game progresses. On contact it gives the same result as "crash with the ground". Tricky but "Life wasn't meant to be easy!". I find the SND stimulating to read and helpful. Congratulations to those who organise and donate articles.
Re: the request for module requirements and ideas, may I suggest that a "Flight Simulator" would be of interest.

Betty Harvie writes from Warialda, in the bush, asking for more information on interfacing her Brother EP44 typewriter. It is very hard for us to find out anything up here in the bush and I would appreciate any information I could get. I think the Users Group and SND are great. In reply I would suggest you direct your specific queries to Ken Williams,30 Burns Rd, Wahroonga, as Ken has already written an article on this subject and he no doubt will be able to advise you furthur.

Anyone thinking of adding another disk drive? then read on. Daneva Australia Pty Ltd. PO Box 114 Sandringham Victoria 3191 has MPI model 501 slimline drives for $177 including Bob Hawke's Sales Tax, or $147.50 if you qualify for an exemption certificate. This price does not include a power supply. Our Technical group can give you advice on how to put together a suitable power supply. If you are interested please send me a stamped addressed envelope and I will provide you with more details.

Holt-Saunders Pty. Ltd has sent me the latest Hayden and Compute! catalogues. Titles available now are as follows:

COMPUTE!'S Guide to Extended BASIC Home Applications on the TI-99/4A

COMPUTE'S Guide to TI Sound & Graphics

33 Programs for the TI-99/4A

Programmer's Reference Guide to the TI-99/4A.....$25.95

TI Games for Kids

COMPUTE!'S First book of TI Games

Creating Arcade Games on the TI-99/4A

Fun and Games with your TI-99/4A..by Stephen M.Muncy

Art and Graphics with your TI-99/4A by Thomas A. Thompson. Jr.

The TI Playground by Fred D'Ignazio

Unless otherwise stated the recommended retail price for each of the above titles is around 22.95

Want to make a back-up copy of a program which has proprietary protection? Monty Schmidt, Box 8, Markesan, WI 53946 has a program that will do that and more. Called DISKPICKER the program will remove the proprietary protection and links through all extended basic programs on the disk removing the protection code on each one. You can do this work manually with Navarones's DISK FIXER, but if you have alot of programs to process then DISKPICKER may be the answer to speed up the process. The FOB USA price is US$22.95

I am disappointed at not having received even one solution to my cursor problem. For the benefit of our new members the problem is to write an assembly language routine to create a non flashing cursor, with a shape of your own choice. I am extending the closing date to December 31st.

All Sydney based Computer User Groups are to be invited to join an Association, which it is hoped will be established following a special meeting during November. A TISHUG committee member will be going to this meeting to find out what benefits to TISHUG members would flow on from such an Organisation. A Computer Fair is planned for June 1985 in Sydney. More information on this next month.

CONTINUED PAGE 5

# An Introduction to TI-COUNT

TI-COUNT GENERAL LEDGER

THE TI-COUNT BUSINESS ACCOUNTING SYSTEM, DEVELOPED FOR THE TEXAS INSTRUMENTS 99/4 & 4A HOME COMPUTER, IS THE INEXPENSIVE AND COST EFFECTIVE WAY TO STORE, RETRIEVE, DISPLAY AND PRINT FINANCIAL INFORMATION AND DOCUMENTS. EFFICIENT FINANCIAL DECISIONS LEAD TO HIGHER PROFITS AND BETTER CONTROL OF YOUR BUSINESS RESOURCES.

THE GENERAL LEDGER PROGRAM SYSTEM IS THE CENTRAL MODULE OF THE TI-COUNT SYSTEM. ITS PROGRAMS AND PRINTOUTS EASILY ADAPT THE LEDGER ACCOUNTS TO THE INDIVIDUAL SMALL BUSINESS USER. TWENTY-TWO SPECIAL CHARACTERS IN EACH LEDGER ACCOUNT ARE PROGRAMMED TO DEFINE THE FINANCIAL STATEMENTS, AUTOMATIC JOURNAL ENTRIES AND THE CLOSING PROCEDURE. UP TO 650 LEDGER ACCOUNTS (1) CAN BE ENTERED, PRINTED OR EDITED DURING STARTUP AND THE DAILY OPERATION OF THE SYSTEM. A SET OF LEDGER ACCOUNTS ARE PREPROGRAMMED FOR FAST STARTUP OF SMALL BUSINESSES.

THE GENERAL LEDGER SYSTEM OPERATES UP TO FIVE JOURNALS SEPARATING YOUR BUSINESS TRANSACTIONS INTO PURCHASES, SALES, CASH RECEIPTS, CASH PAYMENTS AND GENERAL ENTRIES. EACH JOURNAL ENTRY IS TYPED ONTO THE COLOR SCREEN, SCANNED FOR ERRORS AND EDITED IMMEDIATELY TO SPEED THE PROCESS. UTILITY PROGRAMS ALLOW THE USER AT ANY TIME TO EDIT OR PRINT THE JOURNAL ENTRIES.

THE LEDGER ACCOUNTS ARE UPDATED ON A DAILY BASIS SO THE BUSINESSMAN CAN CONTROL PURCHASES, RECEIVABLES, AND MOST IMPORTANTLY, CASH. INTERIM INCOME STATEMENTS REPORTING MTD AND YTD VALUES AND AN INTERIM BALANCE SHEET DISPLAY THIS INFORMATION.

AS EACH ACOUNTING PERIOD IS CLOSED, THE GENERAL LEDGER SYSTEM SUMMARIZES THE JOURNALS AND PRINTS THE UNADJUSTED, ADJUSTED AND CLOSING BALANCES. THREE FINANCIAL STATEMENTS: THE INCOME STATEMENT FOR THE BUSINESS (OR PROFIT CENTERS) PLUS SPECIAL SCHEDULES, A BALANCE SHEET, AND THE CHANGE IN FINANCIAL POSITION ARE PRINTED DURING THE CLOSING PROCEDURES.

TI-COUNT GENERAL LEDGER SYSTEM IS PROGRAMMED AS A DEBIT AND CREDIT DOUBLE ENTRY BOOKKEEPING SYSTEM. AS MOST BUSINESSES ALREADY OPERATE WITH THIS ACCOUNTING METHOD, THE SAME LEDGER ACCOUNT NAMES, BALANCES, AND POSSIBLY, THE SAME ACCOUNT NUMBERS CAN BE USED.

REPORTS INCLUDE:

- INTERIM REPORTS
  - SPECIAL SCHEDULES(MTD,YTD)
  - INCOME STATEMENTS(MTD,YTD)
  - BALANCE SHEET
- DAILY POSTING TO SUBSIDIARY LEDGER (T ACCOUNT FORMAT)
- CLOSING
  - JOURNAL SUMMARIES
  - UNADJUSTED, ADJUSTED AND CLOSING TRIAL BALANCES
  - ALL POSTING TO LEDGER (T ACCOUNT FORMAT)
- CLOSING REPORTS
  - SPECIAL SCHEDULES
  - INCOME STATEMENTS(% OF SALES)
  - BALANCE SHEET
  - CHANGE IN FINANCIAL POSITION
- JOURNAL ENTRIES
- LEDGER ACCOUNT BALANCES
- LEDGER INPUT FORMS
- LEDGER ACCOUNTS IN FORMS FORMAT

TI-COUNT ACCOUNTS RECEIVABLE

THE TI-COUNT ACCOUNTS RECEIVABLE LEDGER SYSTEM IS AN EXTENSION OF THE TI-COUNT GENERAL LEDGER SYSTEM. IT IS MADE UP OF A NUMBER OF INDIVIDUAL CUSTOMER ACCOUNTS CALLED SUBSIDIARY (OR HELPER) LEDGER ACCOUNTS. THE SUM OF THESE SUBSIDIARY ACCOUNTS IS EQUAL TO A GENERAL LEDGER ACCOUNTS RECEIVABLE CONTROL ACCOUNT.

UP TO 200 CUSTOMER SUBSIDIARY LEDGER ACCOUNTS CAN BE KEPT ON ONE CUSTOMER DISK. EACH ACCOUNT CONTAINS THE CUSTOMER'S NAME, ADDRESS, TELEPHONE NUMBER, TERMS OF SALE, AMOUNT PAID DURING THE YEAR PLUS A LIST OF THE OPEN INVOICES AND CHECKS RECEIVED (1). THE SUM OF THESE IN A CUSTOMER'S FILE IS THE BALANCE IN THAT SUBSIDIARY LEDGER. EACH CUSTOMER DISK HAS ITS OWN GENERAL LEDGER ACCOUNTS RECEIVABLE CONTROL ACCOUNT.

ACCOUNTS RECEIVABLE USES THE SALES AND CASH RECEIPTS JOURNALS FROM THE GENERAL LEDGER SYSTEM. SINCE THESE JOURNALS ARE POSTED BY GENERAL LEDGER'S DAILY BALANCE PROGRAM, THE INTERIM STATEMENTS AND BALANCES INCLUDE ALL OF THE TRANSACTIONS FROM BOTH THE GENERAL LEDGER AND ACCOUNTS RECEIVABLE SYSTEMS.

THE ACCOUNTS RECEIVABLE SYSTEM INSTRUCTS THE USER STEP BY STEP ON THE COLOR MONITOR SCREEN. EACH CUSTOMER INVOICE IS TYPED INTO A FORM ON THE SCREEN, EDITED, VERIFIED AND IMMEDIATELY PRINTED. THE RECEIVABLE REPORT SELECTIVELY LISTS THE BALANCE, THE UNPAID INVOICES, THE DEPOSITED CHECKS IN ALL THE CUSTOMER OR SINGLE CUSTOMER ACCOUNTS. A COMPLETE AGING REPORT IS PRINTED FOR EACH CUSTOMER AND TOTALED FOR THE DISK. CHECKS ARE ENTERED INTO A CUSTOMER'S FILE AS THEY ARE RECEIVED. BILLING STATEMENTS CAN BE PRINTED ON ANY SCHEDULE (MONTHLY OR WEEKLY). EVERY TASK IS MENU DRIVEN AND PROGRAMMED TO MINIMIZE ERRORS AND GUIDE THE USER THROUGH THE DAY'S ACTIVITIES.

A BUSINESS IS USUALLY ACCOUNTED FOR ON EITHER A CASH (COLLECTIONS AND PAYMENTS) OR ON AN ACCRUAL BASIS. ACCRUAL ACCOUNTING REPORTS REVENUES AND EXPENSES AS THEY OCCUR RATHER THAN AS THEY ARE COLLECTED OR PAID. THE ACCOUNTS RECEIVABLE SYSTEM IS CLOSED THE SAME IN EITHER CASE.

REPORTS INCLUDE:

- RECEIVABLE REPORT (FORECASTING CASH RECEIPTS)
  - AGING OF INVOICES
  - DISK AGING SUMMARY
- INVOICES
  - MESSAGE AREA ON FORM
  - UP TO 8 ITEMS/INVOICE
  - SALES TAX OPTION
  - FREIGHT CHARGE
  - AUTOMATICALLY UPDATES CUSTOMER FILE
- CUSTOMER LIST
  - NUMERICAL ORDER
  - ALPHABETICAL ORDER (1)
- BILLING STATEMENTS
  - MESSAGE AREA ON FORM
  - LAST CLOSING BALANCE
  - ALL INVOICES NOT PAID
  - ALL CHECKS RECEIVED SINCE LAST CLOSING

TI-COUNT ACCOUNTS PAYABLE

THE TI-COUNT ACCOUNTS PAYABLE LEDGER SYSTEM IS AN EXTENSION OF THE TI-COUNT GENERAL LEDGER SYSTEM. IT IS MADE UP OF A NUMBER OF INDIVIDUAL VENDOR ACCOUNTS CALLED SUBSIDIARY (OR HELPER) LEDGER ACCOUNTS. THE SUM OF THESE SUBSIDIARY ACCOUNTS IS EQUAL TO A GENERAL LEDGER ACCOUNTS PAYABLE CONTROL ACCOUNT.

UP TO 200 VENDOR SUBSIDIARY LEDGER ACCOUNTS CAN BE KEPT ON ONE VENDOR DISK. EACH ACCOUNT CONTAINS THE VENDOR'S NAME, ADDRESS, TELEPHONE NUMBER, TERMS OF SALE, AMOUNT PAID DURING THE YEAR PLUS A LIST OF ALL OF THE OPEN INVOICES AND THEIR AMOUNTS(1). THE SUM OF THE INVOICES IN A VENDOR'S FILE IS THE BALANCE IN THAT SUBSIDIARY LEDGER. EACH VENDOR DISK HAS ITS OWN GENERAL LEDGER ACCOUNTS PAYABLE CONTROL ACCOUNT.

ACCOUNTS PAYABLE USES THE PURCHASES AND CASH PAYMENTS JOURNALS FROM THE GENERAL LEDGER SYSTEM. SINCE THESE JOURNALS ARE POSTED BY GENERAL LEDGER'S DAILY BALANCE PROGRAM, THE INTERIM STATEMENTS AND BALANCES INCLUDE ALL OF THE TRANSACTIONS FROM BOTH THE GENERAL LEDGER AND ACCOUNTS PAYABLE SYSTEMS.

THE ACCOUNTS PAYABLE SYSTEM INSTRUCTS THE USER STEP BY STEP ON THE COLOR MONITOR SCREEN. EACH VENDOR INVOICE IS TYPED INTO A FORM ON THE SCREEN, SCANNED FOR ERRORS, EDITED IMMEDIATELY, PRINTED ON THE PRINTER AND FILED AWAY IN THE VENDOR'S ACCOUNT. THE PAYABLE REPORT SELECTIVELY LISTS THE INVOICES IN ALL VENDORS OR SINGLE VENDOR ACCOUNTS. A COMPLETE INVOICE AGING REPORT IS PRINTED FOR EACH VENDOR AND TOTALED FOR THE DISK. CHECKS AND STUBS ARE PRINTED FOR SINGLE VENDORS OR FOR ALL VENDORS, SUMMING UP TO 14 INVOICES ON ONE STUB. THE USER CONTROLS THE AUTOMATIC CHECK WRITING FEATURES OF THE SYSTEM. EVERY TASK IS MENU DRIVEN AND PROGRAMMED TO MINIMIZE ERRORS AND GUIDE THE USER THROUGH THE DAY'S ACTIVITIES.

A BUSINESS IS USUALLY ACCOUNTED FOR ON EITHER A CASH (COLLECTIONS AND PAYMENTS) OR ON AN ACCRUAL BASIS. ACCRUAL ACCOUNTING REPORTS REVENUES AND EXPENSES AS THEY OCCUR RATHER THAN AS THEY ARE COLLECTED OR PAID. IF YOUR BUSINESS KEEPS ITS BOOKS ON A CASH BASIS, FOLLOW THE INSTRUCTIONS FOR CLOSING IN THE GENERAL LEDGER MANUAL. FOR BOOKS ON AN ACCRUAL BASIS, FOLLOW THE CLOSING INSTRUCTIONS IN THE ACCOUNTS PAYABLE MANUAL.

REPORTS INCLUDE:

- VENDOR FILE LIST
- CHECK REGISTER
- COPY OF EACH PURCHASES JOURNAL ENTRY (ATTACH TO ACTUAL INVOICE FOR FILING)
- VENDOR INVOICE FILE REPORT (FORECASTING CASH REQUIREMENTS)
  - BY VENDOR (ONE OR ALL)
  - BY AGE (EFFECT OF VENDOR TERMS)
  - BY BANK ACCOUNT
  - BY CODE (U FOR UTILITY, R FOR RENT, ETC.)
- AUTOMATED CHECK WRITING MEANS (1):
  - SUMMING UP TO 14 INVOICES ON ONE CHECK STUB
  - PAYING BY INVOICES (INCLUDING PARTIAL PAYMENT)
  - PAYING INVOICES BY AGE (ONE OR ALL VENDORS)
  - PAYING INVOICES BY CODE (ONE OR ALL VENDORS)
  - PAYING INVOICES LESS THAN A SPECIFIED AMOUNT (ONE OR ALL VENDORS)

TI-COUNT INVENTORY

THE TI-COUNT INVENTORY SYSTEM IS DESIGNED TO BE OPERATED COMPLETELY BY ITSELF OR AS AN EXTENSION OF THE GENERAL LEDGER SYSTEM. IT IS MADE UP OF A NUMBER OF [illegible], ONE FOR EACH ITEM IN THE INVENTORY. THE RECORDS ARE [illegible] AND ARE STORED ON INVENTORY DISKS. THE ACTUAL JOURNAL ENTRIES TO THE GENERAL JOURNAL DEPEND ON THE TYPE OF INVENTORY - EITHER PERPETUAL OR [illegible] - INITIALLY DECLARED BY THE USER. A PERPETUAL INVENTORY WILL REQUIRE "DAILY OR WEEKLY" ENTRIES TO THE INVENTORY LEDGER ACCOUNTS FOR "COST OF GOODS SOLD" ACCOUNTS WHILE A PERIODIC INVENTORY REQUIRES ADJUSTING ENTRIES ONLY AT THE END OF A PERIOD. A COPY OF ALL OF THE INFORMATION REQUIRED BY THESE ENTRIES WILL BE PRINTED.

UP TO 700 ITEMS IN FOUR DEPARTMENTS CAN BE STORED ON ONE INVENTORY DISK. ANY NUMBER OF INVENTORY DISKS MAY BE COMBINED TO INCREASE THE TOTAL NUMBER OF ITEMS IN THE INVENTORY. EACH ITEM'S RECORD CONTAINS "CURRENT","PERIOD TO DATE" AND "VENDOR" INFORMATION. "CURRENT" INCLUDES THE NUMBER OF UNITS IN STOCK, ON ORDER, ON BACK-ORDER AND RESERVE NUMBER, THE AVERAGE UNIT COST OF THE STOCK, THE CURRENT UNIT [illegible] OF THE ITEM, THE LIST AND SELLING PRICE AND THE CURRENT INVENTORY VALUE. THE "PERIOD TO DATE" INFORMATION INCLUDES TOTAL UNITS SOLD AND AMOUNT, AND TOTAL PURCHASES AND AMOUNT. IF A PERPETUAL INVENTORY HAS BEEN DECLARED THE COST OF GOODS SOLD DURING THE PERIOD IS RETAINED; OTHERWISE, THE BEGINNING INVENTORY VALUE IS STORED. THE VENDOR NUMBER, PART NUMBER AND DATE OF LAST PURCHASE ORDER IS STORED FOR EACH ITEM.

THE INVENTORY SYSTEM INST[illegible] THE USER STEP BY STEP ON THE COLOR MONITOR SCREEN. EACH INVE[illegible] TRANSACTION IS TYPED INTO A FORM ON THE SCREEN, EDITED AND IMP[illegible]ATELY PRINTED ON THE PRINTER. SALES TRANSACTIONS CAN BE EN[illegible] DIRECTLY TO THE INVENTORY OR INDIRECTLY THROUGH AN INVOICE [illegible]TING SYSTEM. THE INVOICING SYSTEM CAN BE OPERATED USING ONLY THE INVENTORY SYSTEM OR CAN BE SET UP TO COMBINE TI-COUNT'S ACCOUNTS RECEIVABLE, GENERAL LEDGER AND INVENTORY SYSTEM.

OTHER INVENTORY FEATURES:
1. PERIODIC INVENTORIES CAN BE BASED ON AVERAGE COST OR LAST IN FIRST OUT (LIFO)
2. UP TO 14 LIFO LAYERS
3. P[illegible] INVENTORY LABELS (GROUP LABELS OR ONE FOR EACH ITEM)
4. P[illegible] INVOICE FORMS
5. Up to 8 ITEMS ON AN INVOICE
6. SALES TAX COMPUTED FOR AND FREIGHT [illegible] TO INVOICES
7. INVENTORY REPORT BASIS SELECTED BY [illegible]ATOR

REPORTS INCLUDE:

- EVERY INVENTORY TRANSACTION
  - SALES
  - SALES RETURN
  - PURCHASES
  - PURCHASE RETURNS
- INVENTORY LABELS
- INVOICES (UP TO 8 ITEMS)
  - AUTOMATICALLY UPDATES INVENTORY
- INVENTORY REPORT FOR
  - ALL ITEMS
  - OUT OF STOCK ITEMS
  - ITEMS < REORDER POINT
  - ITEMS ON ORDER
  - BACK-ORDERED ITEMS
- ALL JOURNAL ENTRIES

**TI-COUNT** **PAYROLL**

THE TI-COUNT PAYROLL SYSTEM IS DESIGNED TO BE OPERATED BY ITSELF OR AS AN EXTENSION OF THE TI-COUNT GENERAL LEDGER. IT IS MADE UP OF A NUMBER OF INDIVI[illegible] EMPLOYEE PAYROLL FILES. EACH FILE CONTAINS THE EMPLOYEE'S NAME, [illegible]ESS, SOCIAL SECURITY NUMBER, PERSONAL INFO[illegible]ON, WAGE TYPE AND RATE, TAX INFORMATION, ALL CURRENT AND YTD [illegible]TIONS AND ALL CURRENT, MTD, QTD AND YTD PAYCHECK DATA. A MAXIMUM OF 100 EMPLOYEE FILES CAN BE KEPT ON ONE PAYROLL DISK. ANY NUMBER OF PAYROLL DISKS CAN BE COMBINED TO INCREASE THE TOTAL NUMBER OF EMPLOYEES.

THE PAYROLL SYSTEM INSTRUCTS THE USER STEP-BY-STEP ON THE COLOR MONITOR SCREEN. THE SALARY ROLL AND WAGE ROLL ARE PROCESSED AS SEPARATE GROUPS. EACH PAYROLL TRANSACTION IS TYPED INTO A FORM ON THE SCREEN AND EDITED. THE TAXES ARE INSTANTLY COMPUTED, THE DEDUCTIONS ARE SUMMED AND THE ACTUAL AMOUNT OF THE PAYCHECK IS DISPLAYED. CORRECTIONS CAN BE MADE WHILE TRANSACTIONS ARE BEING DISPLAYED. PAYROLL CHECKS CAN BE PRINTED AFTER THE PAYROLL REPORT IS APPROVED. THE SYSTEM IS INTERLOCKED SO THAT THE PAYROLL CHECKS CAN ONLY BE PRINTED ONCE. THE PAYROLL IS THEN CLOSED. THE ENTIRE SEQUENCE CAN BE REPEATED TO PRINT ADDITIONAL CHECKS.

WITHHOLDING TAXES ARE COMPUTED BY THE SYSTEM. THE FIRST IS ALWAYS [illegible]AL INCOME TAX (FIT) AND TAX #2 ALWAYS SOCIAL SECURITY (FICA). TAX #3 IS COMPUTED FROM FEDERAL INCOME TAX TYPE [illegible]S AND TAX #4 IS FOR SIMPLE PERCENTAGES. TAX #4 CAN ALSO BE EN[illegible] MANUALLY FOR EACH EMPLOYEE. IN ADDITION A FOUR CHARACTER CODE CAN BE PROGRAMMED TO EXEMPT AN EMPLOYEE FROM ANY OF THE FOUR TAXES. THERE IS A PROVISION FOR A SPECIAL TAX COMPUTATION PROGRAM TO BE ADDED TO THE SYSTEM.

OTHER PAYROLL SYSTEM FEATURES:
1. PRINTS W-2 FORMS AT THE END OF THE YEAR
2. PRINTS WAGE AND SALARY ROLLS (OPTIONAL: PRINTS WAGE RATES)
3. COMPLETE EDITING OF EMPLOYEE FILES
4. COMPLETE EDITING OF TAX COMPUTATION FILES
5. EIGHT DIFFERENT DEDUCTIONS ARE POSSIBLE FOR EACH EMPLOYEE
6. COMMISSIONS, BONUSES AND TIPS CAN BE INCLUDED IN EMPLOYEE'S EARNINGS
7. CALCULATES REGULAR AND OVERTIME PAY FOR THE WAGE ROLL

REPORTS INCLUDE:

- PAYROLL REPORT (ALL DATA FOR CURRENT CHECK, MTD, QTD YTD)
  - ALL EMPLOYEES
  - WAGE ROLL
  - SALARY ROLL
- PAYROLL LISTS
  - WAGE ROLL
  - SALARY ROLL
- PAYROLL CHECKS AND STUBS (ON A WEEKLY, BIWEEKLY, SEMIMONTHLY AND MONTHLY TAX BASIS)
- W-2 FORMS

**TI-COUNT** **MAIL SYSTEM**

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THE MAIL SYSTEM PROGRAMS ARE DIVIDED INTO THREE GROUPS: THE DAILY [illegible]NG PROGRAMS, FILE MANAGEMENT PROGRAMS AND THE TEXT PROCESSOR S[illegible]M CALLED SCRIBER.

THE DAILY OPERATING PROGRAMS PERFORM FIVE BASIC FUNCTIONS. ONE PROGRAM ADDS, EDITS AND DELETES NAMES AND ADDRESSES IN THE MAIL FILES. ANOTHER IS USED TO SORT THE NAMES AND ZIP CODES IN THE FILES [illegible]. YET ANOTHER PRINTS THE MAILING LABELS. A REPORT CAN BE COMPILED AND PRINTED FOR EACH MAIL FILE AND MAIL DISK. FINALLY, THE DATE AND PRINTER SYSTEM NAME CAN BE CHANGED. ALL TOGETHER THESE FIVE PROGRAMS ARE CALLED THE DAILY OPERATING PROGRAMS.

THE FILE MANAGEMENT PROGRAMS ARE USED TO START A MAIL FILE, CHANGE THE SIZE OF A MAIL FILE, SELECTIVELY MOVE NAMES FROM ONE MAIL FILE TO ANOTHER AND MERGE TWO MAIL FILES TOGETHER. THESE PROGRAMS WHEN COMBINED WITH TI'S DISK MANAGER COMMAND MODULE PROGRAMS PROVIDES THE USER WITH A COMPLETE MAIL FILE UTILITY SYSTEM.

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# IT'S A.G.M. TIME
# ELECTIONS OF OFFICE BEARERS.

**J.R. CONTINUES from page 3**

I went along the Apple User's Monthly Meeting the other Monday. They had a speaker from Apple Australia talking about new software for the Macintosh. My son Elliott is the owner of a Mac but I still can't keep him from using my old faithful and reliable TI99/4A. Also there were Andrew Nutting and Peter Lynden, who have both recently acquired Apple IIe computers. Peter is still writing the "Your TI" column in YOUR COMPUTER magazine, and has recently renewed his TISHUG membership.

I see TISHUG gets a mention in the latest issue of HCM with belated third birthday greetings.

Hope to see at least 400 members at the AGM. In the meantime send in your nominations.

Running out of memory.....

Happy Computing,

John Robinson.
Hon. Secretary.

## LOGO (Turtle) TUTORIAL
### by Mike Green

HI! Welcome back to LOGO CORNER. This is the second of a series of articles on understanding LOGO. This month I will be looking at Procedures.

Procedures are a means of storing statements for later use either directly or when called by other procedures. Procedures are accesed through the EDIT mode and can be called by "TO (name)" when initially defining the procedure or by either "TO (name)" or "EDIT (name)" once a procedure has been defined.

To see how procedures work, start by typing "TELL TURTLE" and press ENTER. Now type "TO BOX" and press ENTER. The screen will turn green and you will see

```
"TO BOX
 END"
```

at the top of the screen. A red cursor will be seen after the "X" in BOX. Press ENTER. "END" will move down one line and the cursor will now be at the start if the following line. Now type the following

```
REPEAT 4 [ FD 40  RT 90 ]
```

NOTE. If you make a typing error correct as follows: place the cursor under the letter or the number to be changed. Use FNCT S or D to move the cursor. Delete the incorrect character(s) using FNCT 1 and then you type in the correct characters. If you are not on the correct line use FNCT X or E to move to another line. This is quite different to the normal LOGO mode where "ERASE" (FNCT 3) backspaces and erases one space at a time.

When typed in correctly, press "BACK" (FNCT 9). Clear the screen if necessary, type BOX and press ENTER. A box of side 40 will be drawn.

To draw a rectangle, type

```
TO RECT
REPEAT 2  [  FD  30  RT  90  FD  60
  RT 90 ]
END
```

return to the main screen, type RECT and enter it. A rectangle will be drawn. I have abbreviated rectangle to RECT to save typing only. For convenience I suggest you use short names for your procedure names.

To show how one procedure can access another procedure try the following

```
TO PIN
REPEAT 4 [ BOX RT 90 ]
END
```

and see what happens. Also try the following variations to the command line of PIN

```
1) REPEAT 6 [ BOX RT 60 ]
2) REPEAT 8 [ BOX RT 45 ]
3) REPEAT 4 [ RECT RT 90 ]
```

Naturally the commands can be as complicated as you wish. What do you get with the following?

```
1) TO A
   REPEAT 5 [ BOX FD 15 ]
   END
2) TO B
   REPEAT 7  [  BOX  PU  RT  45  FD  15
   LT 45 PD ]
   END
3) TO C
   REPEAT 6  [  FD  30  BOX  BK  30  PU
   RT 90 FD 40 LT 90 PD ]
   END
```

Try using different BOX or RECT sizes to see what happens. Also try out different shapes such as

```
1) REPEAT 5 [ FD 20 RT 72 ]
2) REPEAT 6 [ FD 20 RT 60 ]
3) REPEAT 9 [ FD 30 RT 40 ]
```

and so on. There is no reasonable limit to the number of procedures you can call on. The hard part is keeping track of them in a complex program. A procedure can call one procedure which calls a second procedure and so on. The following example calls PIN which calls BOX

```
TO DESIGN
REPEAT 5  [  PIN  RT  20  FD  10  ]
END
```

Have a look at the following

```
TO T
REPEAT 10 [ FD 1 RT 27 ]
END

TO TR
SH 300
REPEAT 4 [ T RT 180 ]
PU RT 230 FD 7 RT 10 PD
FD 5  RT  10  FD  10  RT  20  FD  10
END

TO TL
TR PU RT 60 FD 10 RT 90 FD 30 PD
END

TO L
REPEAT 15 [ TL ]
END
```

Note: SH 300 orients the turtle at a heading equivalent to LT 60 from home. It avoids the problem of having to determine the last heading of the turtle.

Note also: LOGO lines can be up to 126 characters (four and a bit screen widths) long, but for easy correction or addition I suggest limiting them to one screen width. There is no difference in speed of execution.

However the presence or absence of the turtle does, especially in executing procedures such as "L". Try L both with and without the turtle showing. The difference is significant.

That is enough for this month. In my next column I will be looking at PROCEDURES WITH INPUTS.

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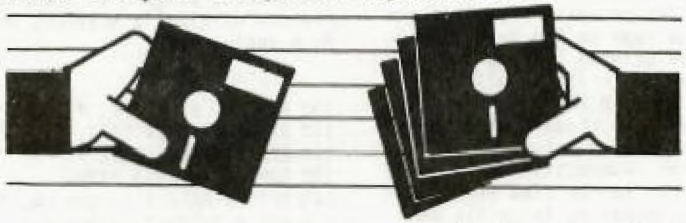

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# Extended Tutorial

HERE IS YET ANOTHER EXTENDED TUTORIAL by TONY McGOVERN

Our next example will be a good start on a non-trivial utility program for printing out TI BASIC or XB listings on a 80 column printer in two side by side columns which preserve the normal screen listing format. If you just LIST "RS232.BA=...." then the computer sends it out in DISPLAY/VARIABLE 80 format and it is up to you to tell the printer how to handle it. Something approaching screen image format is only obtained (with extra paper consumption) with the printer margins set way in. 80-col printout beats none at all by miles but let's try to be fancier. If you don't have disk or printer then this lesson won't be of immediate use, but will still be a good example to work through as a programming exercise. We might as well do something useful.

First we figure out what needs to be done, and work out a set of procedures that can be CALLed as needed. The program will do only the minimum necessary to do the job properly. Bells and whistles can be added later. In one or two places we shall make provision for adding extras (bells and whistles have nothing on speech) by dummy subprograms which can be filled in later. For a good discussion of the use of such "stubs" see the excellent book by R. Mateosian, "Inside Basic Games". The detailed coding examples in this book are in Apple or Trash-80 Basics, but Mateosian develops ideas in a form much more in tune with a TI XB subprogram realisation than with these less capable Basics.

So let's start designing our program by deciding what we want it to do. We want the output nicely formatted on the page with top and bottom margins, in 2 columns each in screen image (28 char/line) format. More columns (assuming the output device will handle them) are no problem — once you can count to 2 then 3 is easy. Lines of Basic are not to be split from from one column to the next or from one page to the next. Some things commonly encountered in printed listings, such as indenting of FOR-NEXT loops don't fit at all well with the multi-statement lines of XB (but might with TI Basic listings) so will not even be thought about here. On the other hand insertion of spaces before REM or SUB statements greatly improves the readability of XB listings, without doing violence to the idea of being screen list compatible. Page numbering is no big deal to add (a console only XB program can fill 6 pages).

At the other end of the business the LISTing to be printed is assumed taken from a disk file such as DSK1.LIST where it has been written by LIST. "DSK1.LIST". A trivial difficulty easily taken care of is the blank first record written by LIST. The real problem is that LIST doesn't care about preserving XB lines as distinct entities. Each XB line starts out as a separate print record and if it is less than 80 characters long stays in one piece. XB lines can easily extend into 2 print records and more (Basic lines much less frequently), but LIST places no markers to show which print records contain the start of XB lines. So if we are going to meet our specification that xB lines be treated exactly as in a screen list then something more subtle than a simple LINPUT is needed. There's one of our most important building blocks identified --- SUB BASICLINE(...).

Any utility program needs title and advice screens so there's SUB TITLES to keep all the details from cluttering the main program. The program will also need SUB OPTIONS(...) to handle file and device name entry and print options which might be offered.

Now the real core of the program is the way in which it must assemble a whole page before printing anything because line feed moves ever on. So we need SUB PAGEBUFFER(....) to take the output of BASICLINES, chop it into screen format hunks and decide where these are to be located on the page. Then we need SUB PRINTPAGE(...) to massage the completed pages and ship them off to the printer. That about sums up the sub-programs that are called directly from the main program, and all that is necessary is to figure out the initialisation -- DIMs, default filenames etc etc, and to write the logic for program flow.

Before we start writing any code we should decide what utility sub-programs are to be used by those already defined. As the list is written into columns SUB WRITECOL(...) is a good candidate for repeated use, and SUB WRITEPAR(...) to take a line of BASIC and return it chopped up into 28 character lines to WRITECOL. Since BASICLINE fetches the input records it is the appropriate place to detect End Of File. We might as well use PRINTPAGE to wipe the slate clean before writing a new page.

Let's dress up the input of filenames and Yes/No responses a little as SUB FILENAME(...) and SUB YN(...) , with SUB MORE(...) to end it all. Other useful utility sub-programs which will be included are SUB TXTCOL(..) to change display colors in one CALL, SUB KEYCON to carry the burden of "press any key to continue", and SUB DELAY(..) is always handy.

That about finishes the roster of procedures necessary to make up the listing program, and now the detailed coding can start after some thought on the necessary chains of parameter passing. The principle that you should plan your programs from the top down and code them from the bottom up is just as valid in Extended Basic as it is in TI-LOGO or TI-FORTH where the form of the language makes it difficult to do otherwise. Sub-programs make it possible to go the same way in XB with ease. Less capable dialects of Basic make it a lot harder to keep your thoughts organised and your code on the rails.

The actual program will now be listed piece by piece and commented on in detail. The listing has been transferred into this TI-Writer file from a working copy of the program using a more elaborate version. The present program is actually a simplified version of the one originally written, but is powerful enough to do a useful job.

```
100 REM **  SIMPLIST  **
110 REM * PRINTER LIST *
120 REM ** FROM  DISK **
130 REM -FUNNELWEB FARM-
140 OPTION BASE 1 :: DIM PRLN$(66,2)
150 REM * DEFAULT VALUES *
160 CALL TITLES :: SFIL$="DSK1.LIST" ::
PDEV$="RS232.BA=4800"
170 CALL KEYCON
```

The first part of the main program shown here sets default values and DIMensions the string array PRLN$ for two columns of 66 lines each. The top and bottom few lines will be left blank so that page format is obtained without sending printer control codes. A 66 line/page, 80 col. printer is assumed.

```
180 REM * NEW FILE ENTRY *
190 CALL OPTIONS(SFIL$,PDEV$):: ENDFILE=0 :: LINPUT
#1:NEW$
200 REM * NEW PAGE ENTRY *
210 CALL PAGEBUFFER(PRLN$(,),ENDFILE)
220 CALL PRINTPAGE(PRLN$(,),PDEV$):: IF ENDFILE=0
THEN 210
230 REM * END OR NEXT *
240 CLOSE #1 :: CLOSE #2 :: CALL MORE(NM)::
IF NM THEN 250 ELSE 190
250 STOP
```

OPTIONS returns file and device names as entered there, and the remainder of line 190 resets the End of File flag, and throws away the first line of the list-file. At new page entry the page buffer is filled and then printed out repeatedly until it runs out of listing, and then it asks if you are finished. That's all there is to the main program folks. And now to the sub-programs that do all the work.

## Extended Tutorial

continued

```
260 SUB TITLES
270 CALL CLEAR :: CALL SCREEN(11):: DISPLAY
AT(12,6)BEEP:"PRINTER LISTING"
280 SUBEND
290 SUB OPTIONS(S$,P$):: DISPLAY ERASE ALL ::
CALL TXTCOL(16,5)
300 CALL FILENAME(1,2,"Edit as needed and ENTER","N?")
310 CALL FILENAME(4,4,"Source file for listing",S$)
320 CALL FILENAME(8,4,"Printer devicename",P$)
330 CALL YN(" Change mind ?","N",22,5,I):: IF
NOT(I)THEN
CALL HCHAR(22,1,32,64):: GOTO 300
340 DISPLAY ERASE ALL :: IF S$="" OR P$="" THEN DISPLAY
AT(1,2)BEEP:"NO INPUT/OUTPUT POSSIBLE" :: CALL
DELAY(500):: GOTO 300
350 OPEN #1:S$,DISPLAY ,INPUT ,VARIABLE 80 ::
OPEN#2:P$,DISPLAY,OUTPUT,VARIABLE 80
360 SUBEND
```

TITLES here is little more than the barest stub, but you can fill that out to your own fancy. OPTIONS takes down the file names, does some checking, and opens the files.

```
370 SUB PAGEBUFFER(PRLN$(,),EFL)
380 REM * NEW COL ENTRY *
390 PLN=6 :: COL=COL+1 :: IF COL>2 THEN COL=0 ::
SUBEXIT
ELSE PRINT "":"** Reading column #";COL:"":""
400 REM * NEW PARA INPUT *
410 IF EFL THEN PRINT "":" *":"*** END of FILE ***":"
*":"" :: SUBEXIT ELSE CALL BASICLINE(NEW$,EFL):: PRINT
NEW$:""
420 CALL WRITECOL(PLN,COL,PRLN$(,),NEW$)
430 IF NEW$="END of COL" THEN 390 ELSE 410
440 SUBEND
```

The new column entry in PAGEBUFFER resets the line counter PLN to top of page with a margin, increments the column count, and exits back to the main program if the page is full. If not it tells BASICLINE to fetch a new program line and WRITECOL to enter it in the page buffer. If BASICLINE says it has read the last line it exits and lets the main program worry about that, otherwise it gets another Basic line or starts a new column. A stub here, CALL SKIPLINE(NEW$,SK), could have uses.

```
450 SUB BASICLINE(N$,E)
460 N$="" :: IF NX$="" THEN LINPUT #1:NX$
470 N$=N$&NX$ :: IF LEN(N$)<80 OR EOF(1)THEN NX$="" ::
E=EOF(1):: SUBEXIT ELSE LINPUT #1:NX$
480 PX=POS(NX$," ",1):: IF PX<2 OR PX>6 THEN 470
490 P=POS(NX$," ",1):: IF PX<P THEN 470
500 NR=-1 :: FOR I=1 TO PX-1 :: C=ASC(SEG$(NX$,1,1)) ::
IN R=NR AND C>47 AND C<58 :: NEXT I :: IF NOT(NR)THEN
470
510 IF SEG$(N$,LEN(N$),1)=" " THEN 470
520 IF VAL(SEG$(NX$,1,PX-1))<VAL(SEG$(N$,1,P-1))THEN
470
540 NQ,I=0
550 I=POS(N$,CHR$(34),I+1):: IF I THEN NQ=NQ+1 :: GOTO
5
50 ELSE IF NQ<>2*INT(NQ/2)THEN 470
560 SUBEND
```

The procedure BASICLINE which retrieves complete lines of Basic code from the LIST-file is the only part of the program with decision flow complex enough to warrant drawing out a flow diagram beforehand. I am not going to reproduce this here, but you can work out your own and see if it leads to similar code. The problem comes when the procedure has read in a line exactly 80 characters long. Does the next LIST record then represent a continuation of the same line of Basic or is it the start of a new Basic line ? This difficulty can't be ignored if screen list format is to be preserved since 28 into 80 does not go exactly. The procedure provides a cascade of tests each of which checks whether the record being scrutinised should be appended as a continuation of the previous Basic line. A few more rare cases could be tested for along the lines of 540-550. There is one (that I know of) unlikely case which BASICLINE cannot resolve even in principle. Can you spot it ? It does seem to work well already though. The intricate input code is needed since a VARIABLE file can only be read sequentially, and if the battery of tests says that the last record LINPUTted does start a new Basic line, then this must be saved till BASICLINE is called the next time.

Just be thankful for static variables in XB subprograms ! You also have to take care not to set off the End of File alarm prematurely.

```
570 SUB WRITECOL(P,C,P$(,),N$):: IF NC THEN P=6 ::
NC=0
580 IF P>=57 THEN N$="END of COL" :: NC=-1 :: SUBEXIT
590 CALL WRITEPAR(P,C,P$(,),N$)
600 SUBEND
```

Now that WRITECOL has the line of Basic it sends it off to be formed into a paragraph. This simplified program handles coming to the end of a column in a slightly wasteful way that is very simple to program. A normal XB program line lists at most on 5 screen lines, and no matter how tricky you are in entering longer lines the program has already limited it to a string variable (max length 255 or 10 screen lines) or has crashed with an error. The simple minded solution is to exit with End of Col message if the proposed starting line for the new paragraph is past a fixed place somewhat short of the end of the column. The value entered, line #57, is a compromise between making the program totally bulletproof or wasting space. A better approach is to print as far as possible, testing each new paragraph to see if it fits, and if not, holding it over for the next column. If you wondered why the string was called NEW$, then spare a thought for OLD$ which which vanished without trace during program simplification for tutorial purposes.

```
610 SUB WRITEPAR(P,C,P$(,),N$)
620 P=P+1 :: IF LEN(N$)>28 THEN P$(P,C)=SEG$(N$,1,28)::
N$=SEG$(N$,29,LEN(N$)-28):: GOTO 620 ELSE P$(P,C)=N$ ::
N$=""
630 SUBEND
```

Sub-program WRITEPAR almost was called SALAMI as it slices up NEW$ and assigns the slices to successive printlines. Once entered line 620 loops on itself recursively until the remaining piece fits on a screen line. It assumes range checking has been done before entry.

```
640 SUB PRINTPAGE(P$(,),D$):: PRINT "":"** Page print
started"
650 PRINT "":"** Assembling printlines":" and printing
to" :: PRINT "":" ";D$
660 FOR I=1 TO 66 :: PRINT
#2:TAB(9);P$(I,1);TAB(45);P$(I,2):: P$(I,1),P$(I,2)=""
:: NEXT I
670 SUBEND
```

Not much needs be said about PRINTPAGE beyond noting that line 660 formats a single print record from the two column entries and erases the page buffer as it goes.

```
680 SUB YN(A$,B$,R,C,X)
690 DISPLAY AT(R,C)BEEP:A$&" (Y/N) "&B$ :: ACCEPT
AT(R,C+LEN(A$)+7)VALIDATE("YN")SIZE(-1)BEEP:A$ ::
X=A$=B$ :: R=R+2 :: SUBEND
700 SUB KEYCON :: DISPLAY AT(24,6)BEEP:"ANY KEY TO
PROCEED"
710 CALL KEY(3,I,ST):: IF ST=0 THEN 710 ELSE DISPLAY
ERASE ALL
720 SUBEND
730 SUB FILENAME(R,C,M$,D$)
740 DISPLAY AT(R+1,C):RPT$("-",LEN(M$)):: DISPLAY
AT(R,C):M$ :: IF D$<>"N?" THEN DISPLAY AT(R+2,C):D$
ELSE SUBEXIT
750 ACCEPT AT(R+2,C)SIZE(-14)BEEP:D$ :: SUBEND
```

## Extended Tutorial

(continued)

```
760 SUB MORE(NM):: DISPLAY ERASE ALL :: CALL
TXTCOL(3,12):: CALL YN("More listings","N",16,2,NM)::
SUBEND
770 SUB DELAY(A):: FOR A=1 TO A :: NEXT A :: SUBEND
780 SUB TXTCOL(A,B):: CALL SCREEN(B):: FOR I=0 TO 12 ::
CALL COLOR(I,A,B):: NEXT I :: SUBEND
```

The FILENAME routine writes an underlined heading, DISPLAYs the default response, and ACCEPTs the reply. If it is asked no question, "N?", it expects no answer. The other SUBs just do their job when called. YN acts like input routines familiar in other TI modules.

```
790 SUB SPEAK(A$):: CALL PEEK(-28672,SP):: IF SP=96
THEN CALL SAY(A$) ELSE CALL DELAY(5*LEN(A$))
800 SUBEND
```

This is a last little goodie tagged on so that you may add speech prompts to your program where desired. A bald CALL SAY has the annoying behaviour that it seems to take forever in giving up the attempt if no speech synthesizer is attached. Line 800 checks that speech is connected and line 820 substitutes a controlled delay if not. CALL SPEAK("....") can then be inserted anywhere it is wanted in the program.

So there we have it, a worked out example of a non-trivial and useful program that makes essential use of the sub-program facility of XB. It shows that the XB programmer can, with a style that finds natural expression in the language without undue contortions, follow the general principles of "structured programming" without getting hung up in the Swiss straight-jacket so beloved by some proponents. The program as presented is a cut-down version of the all-singing, all-dancing model, COLIST, which has now grown to 13.5K and uses 40 subprograms. In all the versions, subprograms have been an essential tool for program development. Now it's time to take retrospective look at what at what we have done and chase a few more subtleties

## NEXT MEETING > A.G.M.

(ANNUAL GENERAL MEETING)

And that means ELECTIONS !!!!!

SPECIAL GUEST: Don Dennis of IMAGIC

I strolled into The CO-OP BOOKSHOP at Broadway, just across the road from Central Station, the other day. You should see all of the books available that they have for the TI-99/4(A). I jotted them down...check out this list...

* GET MORE FROM YOUR TI-99/4A
* PROGRAMMING BASIC WITH YOUR TI
* STIMULATING SIMULATIONS FOR YOUR TI
* THE TI PLAYGROUND
* GETTING STARTED WITH YOUR TI
* SAMS TI-99/4A BASIC PROGRAMS
* 33 PROGRAMS FOR THE TI
* 32 BASIC PROGRAMS FOR YOUR TI
* I SPEAK BASIC TO MY TI-99/4A
* ART & GRAPHICS FOR THE TI-99/4A
* PROGRAMMERS REFERENCE GUIDE TO THE TI-99/4A
* FUNDAMENTALS OF TI-99/4A ASSEMBLY LANGUAGE.

And who said you couldn't get any books for your TI!

**********

* MEMORIESMEMORIES by Ross Mudie *

**********

Further to the item on memories by Tom Arnold (page 5, SND September 1984), the method of storage of program and data when using Extended Basic and Memory Expansion may not be fully appreciated by many. The area of high memory space in the expansion RAM is available to extended basic for storage of program and numeric data, but NOT string data.

This part of memory is identified by the ext basic SIZE command as PROGRAM SPACE which has a maximum size of 24488 bytes. The 13928 bytes of STACK (less the amount occupied by the disk drive files) which is in the console RAM, is the only area available for the storage of your program's string data. The program and numeric data cannot overflow into the 'string' space and conversely the string data cannot overflow into the program space.

Whilst 37364 bytes of RAM are available to extended basic with CALL FILES(1) (if a disk drive is attached) or 38416 bytes (without disk drive), it is not fully available to a large program with a lot of data either numeric or string. If your program has numeric arrays and is running out of space in the program area whilst the stack has ample free space, then some of the numeric data may be converted to string format and stored in a string array. This string storage format may use more memory space than storage in numeric format but may utilise otherwise unused space. Prior to storing your number in the array use STR$ to convert your number to a string e.g., A$(X)=STR$(NUMBER) . When retrieving information from the array use VAL to convert the string format number back into a number e.g., NUMBER=VAL(A$(X)).

The only disadvantage of using a string array is that the computer will occasionally pause to do a 'garbage collection' when it must eliminate no longer used 'tempory' strings. The extra time required for the program to make the conversions will probably be of little consequence.

**BEGINNING BASIC -from page 18**

```
CALL HCHAR(10,10,120)
CALL HCHAR(10,11,121)
CALL HCHAR(11,10,122)
CALL HCHAR(11,11,123)
```

Try this and you will get a box 4 times (2 x 2) larger than the first one we defined.

In EXTENDED BASIC sprites are defined in exactly the same way.

Well, that's all for now. I hope to be back on schedule for next month. In the meantime -

HAPPY PROGRAMMING

PETER

## BEGINNING BASIC

With PETER DAY

## UNSCRAMBLING THE EGG

DIS/ASS from Funnelweb Farm is a program to help you with your assembly language efforts. It translates the binary machine code in the computer's memory back to assembly code, in a more or less standard form with all the usual TMS9900 mnemonics and TI-99/4a system names. What is this good for? If you are writing assembly language programs you can check the program in memory against your source code. The comparisons may well be much easier to follow than from the screen listings of hex bytes produced by EASY BUG or DEBUG. A second application is in sorting out the workings of routines for which the source code is not available. These might include programs which you have as object or program files only, or utility routines as loaded by CALL INIT. Last of all you can go prowling through some of the ROMs.

Why have a disassembler, a utility for working on machine code, written in Basic ? In the 99/4a, Basic programs reside in the VDP RAM using only the 256 byte CPU scratchpad, and remain separate from the CPU RAM containing the machine code programs. Even when XB is used with the Memory Expansion, the XB program resides in high memory and relocatable assembler routines only in low memory. The disassembler can be loaded and run without interfering with normally located assembly code. A machine code disassembler would compete for CPU RAM space. This is mainly of significance for Minimemory users, and this program is dedicated to those hardy souls struggling with Minimemory and console with 4K of RAM only but will be found very useful with Editor/Assembler and Extended Basic also.

Another reason is that a well organized program in a higher level language, even Basic, makes a good starting point for assembly programming of the same function. The quirks of the application can be sorted out thoroughly before becoming confused by the intricacies of assembly language.

The program offers several options for output. Screen is obvious, COLIST file goes to disk in screen format for multi-column printing later, and the others use 80 column format. Then a whole menu of disassembly choices is presented. After one is chosen usually the program asks for start and finish addresses. Suppose you have chosen the first -- Disassemble opcodes. The program will read the word at the first location and interpret it as if it were an opcode, reading succeeding locations if it is a multi-word instruction, or noting it as data if it is an obviously illegal opcode. Here we come to the first great difficulty of disassembling - if a word containing data or text is also a legal opcode then any disassembler will so interpret it (and perhaps the next word or two also) unless it has been forewarned. This is the reason for the next few options which read out hex data or translate it as ASCII codes to make these areas more obvious. Disassembling of unknown code is not straightforward and data and text listings are usually needed to help make sense of supposed opcode listings, or to indicate revised starting points for disassembly. The E/A DEBUG gives a much faster scan through for making text obvious but no printout.

A quicker scan for BL and BLWP branches is provided to give an immediate table of subroutine entry points as a guide to disassembly. You may also choose to list out the REF/DEF table and memory pointers, and this is a good way to start.

The program though written in Basic (MM or E/A), runs without change under XB and automatically adjusts itself to the module being used, recognizing some of the standard data table areas for each one. The program is minimally but clearly commented, and structured about as well as can be done in ordinary Basic. Some effort has been expended to optimize program layout and detailed coding for speed but there are no doubt many more improvements to be made.

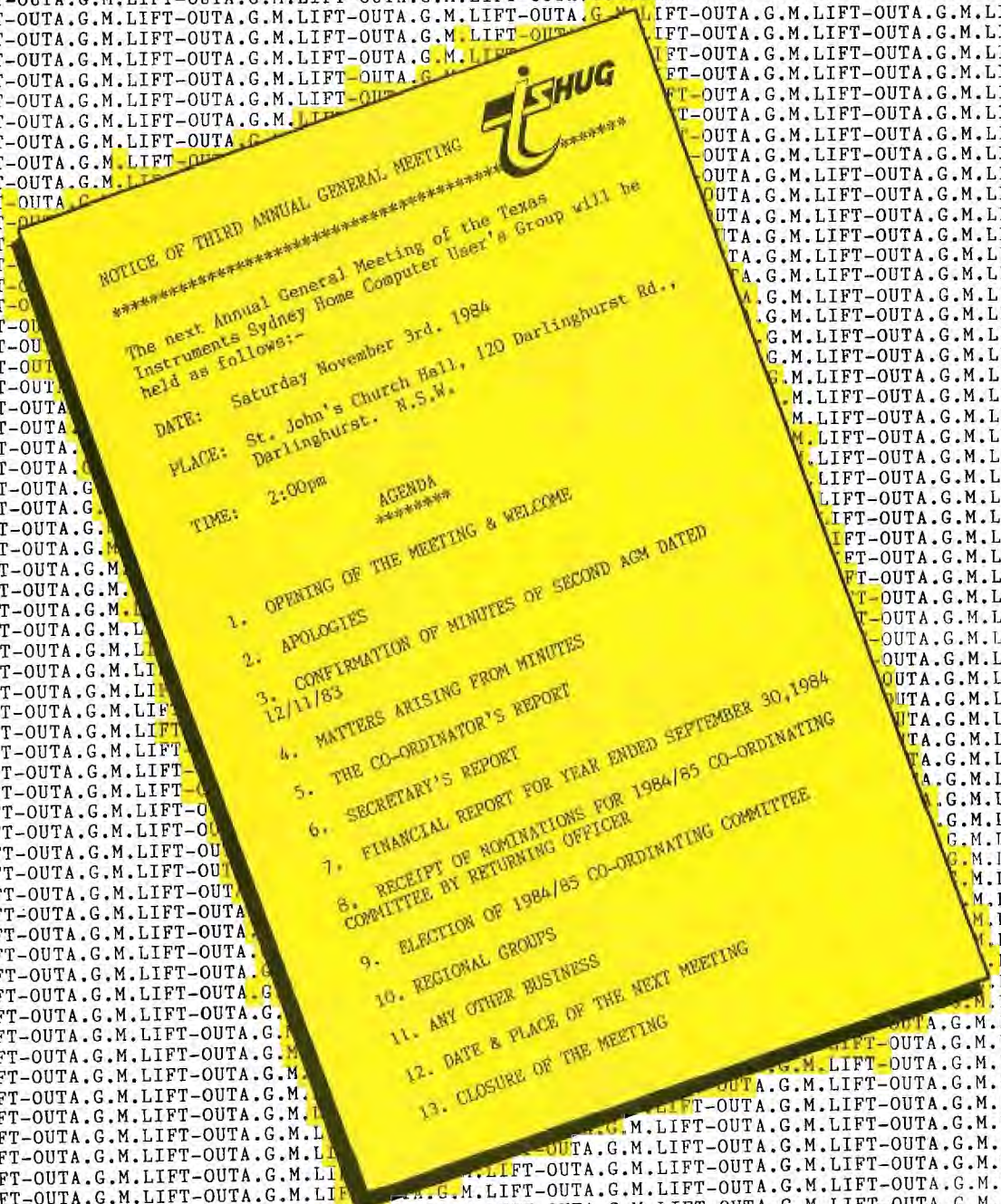
Jump displacements are displayed also. The program does not attempt to assign any labels other than standard utility and address names. To do this would need a more complex program, but it has already reached the limits of size as a Basic program where any increase would cause noticeable hiccups from garbage collection. XB with memory expansion offers more scope for enhanced function. An interesting adjunct would be some short routines accessible by CALL LINK for CRU operations so that DSR ROMS could be examined. An useful extension of this program would be to split it into 2 programs, one containiing only a more sophisticated disassembler which could use a data file of jump and branch targets, text and data areas, to generate something closer to assembly source code with some labels. This file would be generated in another program devoted to recognizing or specifying these.

You can see much work is involved in unscrambling the machine code back to something recognizable. This program provides a Line-by-Line disassembler with some extra frills to help you. Since finishing work on this program I have seen the Navarone SUPER-BUGGER in action as a disassembler. As compared to DIS/ASS its only virtue is speed (watching a Basic disassembler will soon convince you there is virtue in that) and its presentation is otherwise inferior. There is still real need for a good multi-pass disassembler written in assembly language.

```
100 REM ****************
110 REM * MM / EA / XB *
120 REM * DISASSEMBLER *
130 REM ****************
140 REM

150 REM Revised Sept 18/84
160 REM  Funnelweb Farm
170 REM
180 DIM S(16),Z(5),HX$(15),N
B$(15),SP$(3),W$(3)

190 REM TITLES
200 GOSUB 930
210 FOR I=1 TO 12
220 CALL COLOR(I,7,1)
230 NEXT I
240 PRINT TAB(9);"MM / EA /
XB":;:TAB(9);"DISASSEMBLER":
;:TAB(9);"using  BASIC":;:
250 PRINT :;:TAB(13);"from":
;:TAB(8);"FUNNELWEB FARM":;:
;:;:;:
260 GOSUB 960
270 LOC=24576
280 GOSUB 5080
290 EMX=1+(M=170)*(N=0)-2*(R
ND>.8)
300 LOC=3322
310 GOSUB 5110
320 T0=256*M+N
330 LOC=3324
340 GOSUB 5110
350 T1=256*M+N
360 CALL CHAR(128,"00FE18FE1
8187E")
370 CALL COLOR(13,11,1)
```

```
380 REM USEFUL ARRAYS
390 S(0)=32768
400 HD$="0123456789ABCDEF"
410 FOR I=0 TO 15
420 S(I+1)=S(I)/2
430 HX$(I)=SEG$(HD$,I+1,1)
440 NB$(I)=SEG$("00010203101
112132021222330313233",1+2*I
,2)
450 NEXT I
460 SP$(0)=" "
470 SP$(1)=" "
480 SP$(2)="   "
490 SP$(3)="

500 REM RESTART ENTRY
510 GOSUB 930
520 PRINT "PRESS 1 Screen":"
      2 COLIST Diskfile":"
    3 Printer":"       4 Disk
 File":"      5 Quit":::::::
530 GOSUB 960
540 OFST=0
550 UNCHR=128
560 GOSUB 5010
570 IF K=15 THEN 560
580 K=K-49
590 IF (K<0)+(K>4)THEN 560
600 IF K=4 THEN 2460
610 F=K
620 G=F>1
630 IF F=0 THEN 770
640 CALL CLEAR
650 PRINT "Enter CHAR (singl
e char)":" to be used instea
d of":" non-printing chars":
" in TEXT mode"
660 GOSUB 5010
670 UNCHR=K
680 IF F=2 THEN 730
690 PRINT :;:"Disk.file name
 ?":;:
700 INPUT " ":DEVICE$
710 OPEN #F:DEVICE$,OUTPUT,D
ISPLAY ,VARIABLE 80
720 GOTO 770
730 PRINT :;:"Printer name ?
":;:
740 INPUT " ":DEVICE$
750 OPEN #F:DEVICE$

760 REM OPTIONS
770 GOSUB 930
780 PRINT "PRESS 1 Disassemb
le Opcode":"----- 2 Display
 Hex Data":"       3 Read ASCI
I Text"
790 PRINT "       4 Read with
 offset >60":"       5 BL,BLW
P branches":"       6 REF/DEF
 Table"
800 PRINT "       7 Restart":
"       8 End":::::
810 GOSUB 960
820 GOSUB 5010
830 K=K-48
840 IF (K<1)+(K>8)THEN 820
850 CALL CLEAR
860 IF K<6 THEN 880
870 ON K-5 GOTO 1290,2460,24
60
880 GOSUB 1030
890 ON K GOTO 2060,4320,4470
,900,4650
900 OFST=96
910 GOTO 4470

920 REM SCREEN
930 CALL CLEAR
940 CALL SCREEN(7)
950 RETURN
960 CALL SCREEN(15)
970 RETURN

980 REM JOB DONE
990 PRINT :;:
1000 INPUT "Press ENTER to c
ontinue:":CON$
1010 GOTO 770

1020 REM INPUT ADDRESS RANGE
1030 CALL CLEAR
1040 PRINT TAB(8);"ADDRESS R
ANGE":::::" From ?":::
1050 GOSUB 1150
1060 A=DEC
1070 PRINT :" To ?":::
1080 GOSUB 1150
1090 CALL CLEAR
1100 B=DEC
1110 PRINT " PRESS   FOR
ACTION":" -----   ---    ---
---":;:
1120 PRINT " SPACE
PAUSE":;:"  KEY              CO
NTINUE":;:" BACK             R
ESTART":;:;:;:;:;:;:
1130 RETURN

1140 REM GET ADDRESS
1150 INPUT " (Hex address) >
":A$
1160 A$=SEG$("0000"&A$,LEN(A
$)+1,4)
1170 PS=1
1180 FOR I=1 TO 4
1190 PS=PS*POS(HD$,SEG$(A$,I
,1),1)
1200 NEXT I
1210 IF PS=0 THEN 1150
1220 DEC=0
1230 FOR I=1 TO 4
1240 DEC=DEC+S(4*I-1)*(POS(H
D$,SEG$(A$,I,1),1)-1)
1250 NEXT I
1260 DEC=2*INT(DEC/2)
1270 RETURN

1280 REM AVAILABLE MEMORY
1290 PRINT " AVAILABLE MEMOR
Y":" ---------  -------":;:
1300 ON EMX GOTO 1320,1490,1
750

1310 REM EA ADDRESSES
1320 LOC=8228
1330 GOSUB 5080
1340 IF HEX$>"0000" THEN 137
0
1350 PRINT :;:" Not Initiali
zed"
1360 GOTO 990
1370 PRINT "  FSTHI  >";HEX$
1380 LOC=8230
1390 GOSUB 5080
1400 PRINT "  LSTHI  >";HEX$
1410 LOC=8232
1420 GOSUB 5080
1430 PRINT :"  FSTLOW >";HEX
$
1440 LOC=8234
1450 GOSUB 5080
1460 PRINT "  LSTLOW >";HEX$
:;:
1470 GOTO 1880

1480 REM MM ADDRESSES
1490 LOC=28672
1500 GOSUB 5080
1510 IF HEX$="A55A" THEN 154
0
1520 PRINT "  BASIC FILES IN
 MM"
1530 GOTO 990
1540 LOC=28700
1550 GOSUB 5080
1560 PRINT "  FFMM >";HEX$
1570 LOC=28702
1580 GOSUB 5080
1590 PRINT "  LFMM >";HEX$
1600 LOC=28706
1610 GOSUB 5080
1620 PRINT :"  FFHM >";HEX$
1630 LOC=28708
1640 GOSUB 5080
1650 PRINT "  LFHM >";HEX$
1660 LOC=28710
1670 GOSUB 5080
1680 PRINT :"  FFLM >";HEX$
1690 LOC=28712
1700 GOSUB 5080
1710 PRINT "  LFLM >";HEX$:;
:
1720 LOC=28702
1730 GOTO 1880

1740 REM XB ADDRESSES
1750 LOC=-31866
1760 GOSUB 5080
1770 PRINT "  LFHM  >";HEX$
1780 LOC=8194
1790 GOSUB 5080
1800 PRINT :"  FFALM >";HEX$
1810 LOC=8196
1820 GOSUB 5080
1830 PRINT "  LFALM >";HEX$:
;:
1840 IF HEX$>"0000" THEN 188
0
1850 PRINT :;:" Not Initiali
zed"
1860 GOTO 990

1870 REM REF/DEF TABLE
1880 GOSUB 5080
1890 A=256*M+N
1900 B=16383-16384*MM
1910 PRINT " TABLE PROGRAM
ENTRY":" -----  -------  ----
-":;:
1920 FOR U=A TO B STEP 8
1930 GOSUB 5050
1940 LOC$=HEX$
1950 CALL PEEK(U,Z(0),Z(1),Z
(2),Z(3),Z(4),Z(5),M,N)
1960 V$=""
1970 FOR R=0 TO 5
1980 V$=V$&CHR$(Z(R))
1990 NEXT R
2000 GOSUB 5130
2010 PRINT "'>";LOC$;" ";V$;
TAB(17);">"&HEX$
2020 GOSUB 4930
2030 NEXT U
2040 GOTO 990

2050 REM DISASSEMBLER
2060 PRINT #F:;:"Disassemble
r output":;:
2070 FOR LOC=A TO B STEP 2
2080 L=0
2090 U=LOC
2100 GOSUB 5050
2110 LOC$=HEX$
2120 GOSUB 5080
2130 V=M*256+N
2140 V$=HEX$
2150 IF (LOC<14)-(LOC>66)*(L
OC<76)+(LOC=3324)-(LOC>T0-2)
*(LOC<T0+28)-(LOC>T1-2)*(LOC
<T1+24)THEN 2220
2160 IF (LOC>24590)*(LOC<246
56)THEN 2220
2170 GOSUB 3880

2180 REM FORMAT?
2190 IF V>8191 THEN 2210
2200 ON -(V<512)-(V<832)-(V<
1024)-(V<2048)-(V<4096)-(V<8
192)GOTO 2630,3010,3090,3460
,3490,2220
2210 ON 1-(V<11264)-(V<12288
)-(V<14336)-(V<16384)GOTO 25
10,3690,2920,3690,2830
```

# Sydney News Digest



NOTICE OF THIRD ANNUAL GENERAL MEETING

**********

The next Annual General Meeting of the Texas Instruments Sydney Home Computer User's Group will be held as follows:-

DATE: Saturday November 3rd. 1984

PLACE: St. John's Church Hall, 120 Darlinghurst Rd., Darlinghurst. N.S.W.

TIME: 2:00pm

AGENDA

1. OPENING OF THE MEETING & WELCOME
2. APOLOGIES
3. CONFIRMATION OF MINUTES OF SECOND AGM DATED 12/11/83
4. MATTERS ARISING FROM MINUTES
5. THE CO-ORDINATOR'S REPORT
6. SECRETARY'S REPORT
7. FINANCIAL REPORT FOR YEAR ENDED SEPTEMBER 30,1984
8. RECEIPT OF NOMINATIONS FOR 1984/85 CO-ORDINATING COMMITTEE BY RETURNING OFFICER
9. ELECTION OF 1984/85 CO-ORDINATING COMMITTEE
10. REGIONAL GROUPS
11. ANY OTHER BUSINESS
12. DATE & PLACE OF THE NEXT MEETING
13. CLOSURE OF THE MEETING

# MINUTES OF THE TI SYDNEY HOME COMPUTER USERS' GROUP SECOND ANNUAL GENERAL MEETING

**********

DATE: NOVEMBER 12,1983
PLACE: ST. JOHNS CHURCH HALL
120 DARLINGHURST ROAD
DARLINGHURST, N.S.W.

TIME: 2.10 pm.

MEMBERS PRESENT:

Brian Lewis (Chairman)
John Robinson
Terry Phillips
Shane Andersen
Graeme Hollis
Antony Lewis
Members (per attached list)

VISITORS:

Per attached list

## 1.0 OPENING OF THE MEETING APOLOGIES

The Chairman opened the meeting at 2.10 pm. and welcomed members and visitors. Each person present announced their name and suburb.
A number of past members renewed their subscriptions.
The Chairman reminded the audience that only financial members would be eligible to vote at the meeting. Shane Andersen outlined the implications of the recent announcement by TI to withdraw from the Home Computer market.

Apologies were received from the following:

C.Ryan, R.Welham, Elliott Robinson.

It was moved by the Chairman and seconded by Shane Andersen that the apologies be received.

## 2.0 CONFIRMATION OF THE MINUTES OF 1982 AGM

The minutes were circulated to all members present. B.Lewis invited a motion from the floor that the minutes be accepted. Moved by Brian Rutherford seconded by Michael Ball. Passed unanimously. The Chairman signed the minutes.

## 3.0 MATTERS ARISING FROM MINUTES (NOT SUBJECT TO AGENDA ITEM)

None.

## 4.0 ACTING CO-ORDINATOR'S REPORT

B. Lewis advised he was not seeking re-election and had sold his computer. His son Anthony would continue as a club member. He thanked all committee members for their help and support throughout a successful year.

## 5.0 FINANCIAL REPORT FOR YEAR ENDED SEPTEMBER 30,1983

T.Phillips presented audited accounts. The Secretary advised that the Auditor, Denis Halpin had remarked on the meticulous accounts, which had been kept during the year. As a result of this, the task of auditing the accounts had been easy and straight foreward. The financial report was accepted by acclaimation.

## 6.0 SECRETARY'S REPORT

John Robinson outlined the activities held during the past year and thanked the committee and members for their support. Membership had grown to 400 plus at September 30th. There had been a heavy influx of new members. He outlined the resignations from the committee during the year. Shane Andersen relinquished his Sydney Co-ordinator's job which was filled by Brian Lewis. Antony Lewis resigned as librarian because of schoolwork. Richard Hayes resigned for similar reasons and Terry Phillips became Advertising Executive folowing the resignation of Manuel Constantinidis.

## 7.0 RECEIPT OF NOMINATIONS FOR 1983/84 CO-ORDINATING COMMITTEE BY RETURNING OFFICER

Brian Lewis as returning officer invited nominations from the floor. None were forthcoming. J.Robinson advised M. Constantinidis had withdrawn his nomination as Public Relations Officer.

## 8.0 ELECTION OF 1983/84 CO-ORDINATING COMMITTEE

The following were elected:

1. PETER VARGA.....Sydney Co-ordinator
2. JOHN ROBINSON...Secretary
3. TERRY PHILLIPS..Treasurer
4. PETER LYNDEN....Educational Co-ordinator
5. RUSSELL WELHAM..Music Co-ordinator
6. TERYY PHILLIPS..Librarian
7. ANDREW NUTTING..Assistant Librarian
8. FRED MORRIS.....2nd Assistant Librarian
9. SHANE ANDERSEN..Editor
10. PAUL MANSELL....Advertising Executive
11. CHRIS RYAN......Public Relations Officer
12. GRAEME HOLLIS...Program Advisor

## 9.0 GENERAL BUSINESS

I. Krimotat asked if disks were to be sold at the club meetings. The Secretary advised Memorex had won the recent tender for the supply of disks. S. Andersen asked those persons present, who had a disk system, to raise their hands. Approximately half the group responded.

It was suggested a petition be organised to be presented to Texas Instruments Australia expressing concern with the decision taken by their parent company to withdraw from the Home Computer market. Discussion followed and it was generally agreed the club should make it known to TI USA of the concern of members.

## 10.0 DATE & PLACE OF NEXT MEETING

The next AGM would be held on November 3rd. 1984. The next committee meeting date to be decided by the incoming Committee.

## 11.0 CLOSURE OF MEETING

There being no further business Shane Andersen invited everyone to have refreshments and the meeting closed at 3.15 pm.

INITIALLED

CONFIRMED

23/11/83

23/11/83

## TREASURERS REPORT - 1983/84

It is with pleasure that I am again able to report to members with this my third financial statement.

1983/84 has been a year of spectaculor growth for TISHUG - both in membership and sales of items from the TISHUG Shop.
Figures on the annual balance sheets will bear testimony to this.

During the past year your committee approved the purchase of a wide range of goods. Notable large purchases were the equipment necessary to set up the TISHUG BBS, the Brother printer used in preparation of the SND, our new high speed tape duplicator, the answering service for the Secretary and the overhead projector used at club meetings.

Throughout the year items at the Tishug Shop have proved popular, notably Cartridge Expanders where it is often difficult to supply the demand, Best of 99'ers,

Home Computer Magazines and of course club software tapes.

Members have welcomed the introduction of Bankcard facilities and soon those members with Mastercard will be able to use it for all club purchases inluding membership renewals. The agreement with Mastercard has been signed and we are merely waiting on documentation.

725 new members joined us during 1983/84, and this together with "old" members has pushed us towards the 1000 paid up financial membership. Undoubtably we are the largest group in this country and would be far larger than many in the USA and other countries.

Managing the finances of a group this size is not easy and I feel special thanks should go to Shane, John and Peter for the assistance they have given me in both my roles - Treasurer and Librarian throughout the past year. I look forward to working with them again during 1984/85 as I look forward to seeing you all again at the club meetings.

Terry Phillips
Hon. Treasurer

BALANCE SHEET AS AT 30 SEPTEMBER 1984

| | |
|---|---|
| Accumulated Funds: | |
| Balance - 1 October 1983 | $2800.87 |
| Add excess of Income over Expenditure 1983/84 | 8774.19 |
| | $11575.06 |
| Balance at Bank | $6575.06 |
| Investment: | |
| Term Deposit | 5000.00 |
| | $11575.06 |

INCOME & EXPENDITURE STATEMENT - 1983/84

INCOME

| | |
|---|---|
| Membership Fees (New) | $21772.00 |
| Membership Fees (Rnwl) | 3296.00 |
| Software Sales | 7373.00 |
| Imported Software | 405.00 |
| Licenced Software | 365.00 |
| TIMP/Source/De-Bug | 182.00 |
| 99'er/HCM Sales | 4128.00 |
| Smart Guides | 813.80 |
| Softies Tutors | 193.70 |
| Softex Magazines | 586.50 |
| Best of 99'er | 2479.00 |
| Assembly Books | 1202.50 |
| Program Books | 680.00 |
| Book - Misc. | 19.95 |
| Software Directories | 122.00 |
| Schematic Diagrams | 13.00 |
| TI Forth | 782.00 |
| Advertising SND | 1310.00 |
| Classified Ads | 30.70 |
| Dust Covers | 312.00 |
| Diskette Sales | 2359.00 |
| Disk Containers | 387.00 |
| Disk Boxes | 54.00 |
| Disk Cleaning Kit | 50.00 |
| Cartridge Expanders | 2215.40 |
| Disk Fixers | 80.00 |
| Grom Busters | 80.00 |
| Donations | 207.66 |
| Donations BBS | 89.00 |
| Repay Club Advance | 237.80 |
| Refund O'seas Software | 85.28 |
| Entry Fees Workshop | 367.00 |
| TAB Subscriptions | 150.00 |
| Interest IBD | 261.00 |
| | $52689.29 |

EXPENDITURE

| | |
|---|---|
| Printing SND | $7323.40 |
| Other Printing * | 3446.19 |
| Letrasets | 109.45 |
| Photographs | 105.67 |
| Mailing Labels | 102.00 |
| Postage SND | 1730.81 |
| Postage (Misc) | 992.72 |
| Reg. Publication Fee | 30.00 |
| Airfreight Charges | 2032.52 |
| 99'er/HCM/Best 99'er | 2752.06 |
| Diskettes/File Boxes | 4920.91 |
| Assem/Program Books | 2734.50 |
| Cassettes | 2518.62 |
| Tape Head Cleaners | 15.18 |
| Refreshments Meetings | 114.54 |
| Photocopies | 2.32 |
| Software Awards | 200.00 |
| Meeting Prizes | 384.40 |
| Peripherals ** | 3410.00 |
| Softex Magazine | 525.00 |
| Smart Guides | 902.09 |
| Gift Auditor | 23.79 |
| Printer Ribbons | 83.67 |
| TAB Accounts | 136.55 |
| Parking Fee | 8.00 |
| Power Board | 9.40 |
| Dual Cass. Copier *** | 238.00 |
| Name Tags | 12.68 |
| Rubber Stamp | 20.00 |
| Printout Binders | 45.36 |
| Hall Hire | 390.00 |
| Imported Software | 363.57 |
| Wizware Software | 24.00 |
| Cartridge Expanders | 2391.71 |
| TIBBS BBS | 122.88 |
| Customs Duties | 928.29 |
| Mailing Bags | 46.25 |
| Refund S'ware Order | 20.00 |
| Printer Paper | 43.50 |
| Printer Daisy Wheel | 28.00 |
| Printer Cartridges | 15.00 |
| Dust Covers | 305.00 |
| BBS Telephone Inst. | 178.75 |
| BBS Phone Bill | 71.87 |
| Cashbox | 20.75 |
| Stationery | 19.45 |
| Subs. I.U.G. | 20.89 |
| Subs. Smart Program | 32.06 |
| Hire O'Head Proj. | 96.13 |
| O'Head Projector | 960.00 |
| Begin Forth Books | 57.00 |
| Rental Box 149 | 20.00 |
| Answering Service | 294.00 |
| Tape Duplicator | 1643.85 |
| Fee - Pewterware | 50.90 |
| Fee - Challenger | 62.88 |
| Club Advances | 438.00 |
| Gift Voucher | 30.00 |
| Bank Fees | 91.94 |
| Bankcard Fees | 218.60 |
| Excess Income over Expenditure | 8774.19 |
| | $52689.29 |

* Other Printing Costs - Membership Applications, SND Inserts Disassembler Programs, Music Sheets, BBS News, BC Authorities Schematics, Membership Cards, Envelopes SND,Work Books Questionnaires, Letterheads, Software Directories, Tickets Super Debug Documentation, Forth Manuals and Misc.

** Peripherals - 2 External Drives, Brother Printer, Modem, 128k Card, PE Box, RS232 Card, 2 Internal Disk Drives, Disk Controller Card and TI Console.

*** Traded for Amber Monitor.

# NOMINATION FORM

1984 ELECTION BALLOT
CO-ORDINATING COMMITTEE 1984 - 1985

VOTE FOR ONLY ONE CHOICE IN EACH CATEGORY -- INDICATE YOUR CHOICE BY MARKING AN "X" IN THE APPROPRIATE BOX.

1. SYDNEY CO-ORDINATOR
   VARGA, Peter [ ]
   Write in:.....

2. SECRETARY
   ROBINSON, John [ ]
   Write in:.....

3. TREASURER
   PHILLIPS, Terry [ ]
   Write in:.....

4. EDUCATIONAL CO-ORDINATOR
   Write in:.....

5. BULLETIN BOARD SYSOP
   ANDERSEN, Shane [ ]
   Write in:.....

6. BULLETIN BOARD CO-ORDINATOR
   NEILSEN, Mark [ ]
   Write in:.....

7. MUSIC CO-ORDINATOR
   WELHAM, Russell L.[ ]
   Write in:.....

8. LIBRARIAN
   PHILLIPS, Terry [ ]
   Write in:.....

9. ASSISTANT LIBRARIAN
   MORRIS, Fred [ ]
   Write in:.....

10. EDITOR
    ANDERSEN, Shane [ ]
    Write in:.....

11. ASSISTANT EDITOR
    Write in:.....

12. ADVERTISING EXECUTIVE
    HOPE, Greg [ ]
    Write in:.....

13. PUBLIC RELATIONS OFFICER
    RYAN, Chris [ ]
    Write in:.....

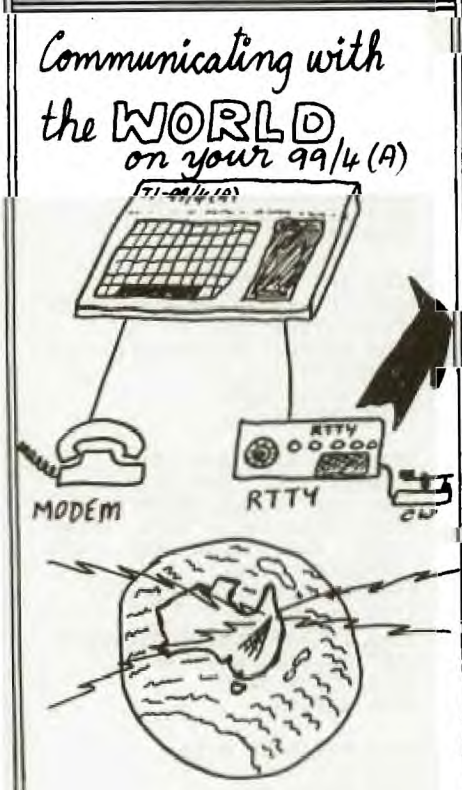
14. PROGRAM ADVISER (PROGRAMMERS CRISIS LINE)
    HOLLIS, Graeme [ ]
    Write in:.....

15. TECHNICAL ADVISER
    PEVERILL, Robert [ ]
    Write in:.....

16. COMMITTEE MEMBER
    DOCHERTY, Ian [ ]
    Write in:.....

```
2220 E$="DATA >"&HEX$
2230 GOTO 2300

2240 REM PRINT OPCODE
2250 S$=""
2260 IF LEN(E$)<19 THEN 2300
2270 V=POS(E$,",",3)
2280 S$=SEG$(E$,V+1,LEN(E$)-
V)
2290 E$=SEG$(E$,1,V)
2300 PRINT #F:LOC$;SP$(F);V$
;" ";E$
2310 IF L=0 THEN 2330
2320 ON L GOSUB 2380,2400,24
30
2330 GOSUB 4930
2340 IF K=15 THEN 2460
2350 NEXT LOC
2360 GOTO 990

2370 REM PRINT MULTILINES
2380 PRINT #F:LO$(1);SP$(F);
W$(1);TAB(28-LEN(S$));S$
2390 RETURN
2400 GOSUB 2380
2410 PRINT #F:LO$(2);SP$(F);
W$(2)
2420 RETURN
2430 PRINT #F:LO$(3);SP$(F);
W$(3);SP$(F);C$
2440 RETURN

2450 REM ORDERLY FINISH
2460 IF F=0 THEN 2480
2470 CLOSE #F
2480 IF (K=15)+(K=7)THEN 510
2490 CALL CLEAR
2500 STOP

2510 REM FORMAT I
2520 E$=SEG$("SZC SZCBS   SB
  C   CB  A   AB  MOV MOVBSO
C SOCB",1+4*(INT((V-16384)/4
096)),4)
2530 GOSUB 3830
2540 GOSUB 3910
2550 S$=R$
2560 T$=SEG$(NYB$,3,1)
2570 R$=SEG$(NYB$,4,2)
2580 GOSUB 3850
2590 GOSUB 3910
2600 E$=E$&" "&S$&","&R$
2610 GOTO 2250

2620 REM FORMAT II
2630 E$=SEG$("JMPJLTJLEJEQJH
EJGTJNEJNCJNOJOCJL JH JOPSBO
SBZTB ",1+3*INT((V-4096)/256
),3)&" "
2640 DISP$=SEG$(NYB$,5,4)
2650 DIS=0
2660 FOR I=1 TO 4
2670 DIS=DIS+VAL(SEG$(DISP$,
I,1))*S(7+2*I)
2680 NEXT I
2690 IF DIS<128 THEN 2710
2700 DIS=DIS-256
2710 IF SEG$(E$,2,1)="B" THE
N 2810
2720 IF DIS=0 THEN 2790
2730 DS=DIS*2+2
2740 DS$="$"&SEG$("- +",2+SG
N(DS),1)
2750 U=DIS*2+LOC+2
2760 GOSUB 5050
2770 E$=E$&" >"&HEX$&" ["&DS
$&STR$(ABS(DS))&"]"
2780 GOTO 2250
2790 E$="NOP"
2800 GOTO 2250
2810 E$=E$&" "&STR$(DIS)
2820 GOTO 2250

2830 REM  FORMAT III
2840 E$=SEG$("COC CZC XOR ",
1+4*INT((V-8192)/1024),4)
2850 GOSUB 3830
2860 GOSUB 3910
2870 S$=R$
2880 R$=SEG$(NYB$,4,2)
2890 GOSUB 3850
2900 E$=E$&" "&S$&",R"&STR$(
R)
2910 GOTO 2250

2920 REM  FORMAT IV
2930 E$=SEG$("LDCRSTCR",1+4*
INT((V-12288)/1024),4)
2940 R$=SEG$(NYB$,4,2)
2950 GOSUB 3850
2960 C$=STR$(R)
2970 GOSUB 3830
2980 GOSUB 3910
2990 E$=E$&" "&R$&","&C$
3000 GOTO 2250

3010 REM  ** FORMAT V  **
3020 E$=SEG$("SRASRLSLASRC",
1+3*INT((V-2048)/256),3)&" "
3030 IF V>3071 THEN 2220
3040 GOSUB 3840
3050 R$=SEG$(NYB$,5,2)
3060 GOSUB 3850
3070 E$=E$&" "&"R"&STR$(R)&"
","&STR$(R)
3080 GOTO 2250

3090 REM FORMAT VI
3100 E$=SEG$("BLWPB   X   CL
R NEG INV INC INCTDEC DECTBL
  SWPBSETOABS ",1+4*INT((V-1
024)/64),4)
3110 GOSUB 3830
3120 GOSUB 3910
3130 IF E$<>"BLWP" THEN 3160
3140 A$=SEG$(R$,5,2)
3150 ON EMX GOSUB 3190,3240,
3290
3160 E$=E$&" "&R$
3170 GOTO 2250

3180 REM E/A UTILITIES
3190 IF (R$<"@>2100")+(R$>"@
>2124")THEN 3220
3200 PS=POS("--  --  04080C1
014181C--002024",A$,1)
3210 GOSUB 3330
3220 RETURN

3230 REM  MM UTILITIES
3240 IF (R$<"@>6018")+(R$>"@
>6050")THEN 3270
3250 PS=POS("4044484C1C20242
82C303450183B3C",A$,1)
3260 GOSUB 3330
3270 RETURN

3280 REM XB UTILITIES
3290 IF (R$<"@>2008")+(R$>"@
>2034")THEN 3320
3300 PS=POS("080C1014181C202
4282C3034",A$,1)
3310 GOSUB 3330
3320 RETURN

3330 REM NAME UTILITY
3340 IF PS=0 THEN 3400
3350 B$="NUMASGNUMREFSTRASGS
TRREFXMLLNKKSCAN VSBW  VMBW
 VSBR  VMBR  VWTR  ERR   GPL
LNKDSRLNKLOADER"
3360 B$=SEG$(B$,3*PS-2,6)
3370 R$="@"&B$
3380 IF POS("XMLLNKDSRLNKGPL
LNK",B$,1)=0 THEN 3400
3390 GOSUB 3420
3400 RETURN

3410 REM BLWP DATA
3420 L=2
3430 GOSUB 4060
3440 C$="DATA >"&HEX$
3450 RETURN

3460 REM FORMAT VII
3470 E$=SEG$("IDLERSETRTWPCK
ONCKOFLREX",1+4*INT((V-832)/
32),4)
3480 GOTO 2250

3490 REM FORMAT VIII
3500 V=INT((V-512)/32)
3510 E$=SEG$("LI  AI  ANDIOR
I CI  STWPSTSTLWPILIMI",1+4*
V,4)
3520 ON 1+V GOTO 3640,3640,3
640,3640,3640,3530,3530,3560
,3600
3530 GOSUB 3840
3540 E$=E$&" R"&STR$(R)
3550 GOTO 2250
3560 GOSUB 4060
3570 GOSUB 4150
3580 E$=E$&" "&HEX$
3590 GOTO 2250
3600 GOSUB 4060
3610 E$=E$&" "&SEG$(HEX$,4,1
)
3620 W$(2)=""
3630 GOTO 2250
3640 GOSUB 3840
3650 GOSUB 4060
3660 GOSUB 4150
3670 E$=E$&" R"&STR$(R)&","&
HEX$
3680 GOTO 2250

3690 REM FORMAT IX
3700 E$=SEG$("XOP MPY DIV ",
1+4*INT((V-11264)/4096),4)
3710 GOSUB 3830
3720 GOSUB 3910
3730 S$=R$
3740 R$=SEG$(NYB$,4,2)
3750 GOSUB 3850
3760 IF E$<>"XOP " THEN 3790
3770 D$=STR$(R)
3780 GOTO 3800
3790 D$="R"&STR$(R)
3800 E$=E$&" "&S$&","&D$
3810 GOTO 2250

3820 REM REGISTER #
3830 T=VAL(SEG$(NYB$,6,1))
3840 R$=SEG$(NYB$,7,2)
3850 R=4*VAL(SEG$(R$,1,1))+V
AL(SEG$(R$,2,1))
3860 RETURN

3870 REM NYBBLES
3880 NYB$=NB$(INT(M/16))&NB$
(M-16*INT(M/16))&NB$(INT(N/1
6))&NB$(N-16*INT(N/16))
3890 RETURN

3900 REM T-FIELD
3910 ON 1+T GOTO 3920,3940,3
980,3960
3920 R$="R"&STR$(R)
3930 RETURN
3940 R$="*R"&STR$(R)
3950 RETURN
3960 R$="*R"&STR$(R)&"+"
3970 RETURN
3980 GOSUB 4060
3990 GOSUB 4150
4000 IF R THEN 4030
4010 R$="@"&HEX$
4020 RETURN
4030 R$="@"&HEX$&"(R"&STR$(R
)&")"
4040 RETURN

4050 REM NEXT WORD
4060 LOC=LOC+2
4070 L=L+1
4080 U=LOC
4090 GOSUB 5050
4100 LO$(L)=HEX$
4110 GOSUB 5080
```

```
4120 W$(L)=HEX$
4130 RETURN

4140 REM DEFINED ADDRESSES
4150 PD$=""
4160 PS=POS("8300_834A_835C_
836E_837C_83E0_8400_8800_880
2_8C02_9000_9400_9800_9802_9
C00_9C02",HEX$,1)
4170 IF PS>0 THEN 4210
4180 GOSUB 4270
4190 HEX$=">"&HEX$
4200 RETURN
4210 PD$=SEG$("PAD  FAC  ARG
  STACKGPLSTGPLWSSOUNDVDPRDV
DPSTVDPWDVDPWASPCHRSPCHWGRMR
DGRMRAGRMWDGRMWA",PS,5)
4220 IF HEX$>"835C" THEN 424
0
4230 PD$=SEG$(PD$,1,3)
4240 HEX$=PD$
4250 RETURN

4260 REM LEADING ZEROS
4270 IF (SEG$(HEX$,1,1)>"0")
+(LEN(HEX$)=1)THEN 4300
4280 HEX$=SEG$(HEX$,2,LEN(HE
X$)-1)
4290 GOTO 4270
4300 RETURN

4310 REM DISPLAY DATA
4320 FOR U=A TO B STEP 8-8*G
4330 GOSUB 5050
4340 PRINT #F:HEX$;TAB(5-G*6
);
4350 IF F<2 THEN 4370
4360 PRINT #F:"DATA ";
4370 FOR LOC=U TO U+6-G*8 ST
EP 2
4380 GOSUB 5080
4390 PRINT #F:" >";HEX$;
4400 NEXT LOC
4410 PRINT #F:
4420 GOSUB 4930
4430 IF K=15 THEN 2460
4440 NEXT U
4450 GOTO 990

4460 REM DISPLAY TEXT
4470 FOR U=A TO B STEP 16-G*
38
4480 GOSUB 5050
4490 PRINT #F:TAB(1-G);HEX$;
TAB(6-G*2);"TEXT '";
4500 FOR LOC=U TO U+15-G*48
4510 GOSUB 5080
4520 M=M-OFST
4530 IF (M<127)+(M>31)=-2 TH
EN 4550
4540 M=UNCHR
4550 PRINT #F:CHR$(M);
4560 IF LOC=B THEN 4620
4570 NEXT LOC
4580 PRINT #F:"'"
4590 GOSUB 4930
4600 IF K=15 THEN 2460
4610 NEXT U
4620 PRINT #F:"'"
4630 GOTO 990

4640 REM BL,BLWP TARGETS
4650 PRINT #F:"Locn Inst Trg
t Wksp Pgct";"_____ _____ ____
_____ _____
";;;;;
4660 FOR U=A TO B STEP 2
4670 LOC=U
4680 GOSUB 5080
4690 PS=POS("0420_06A0",HEX$
,1)
4700 IF PS=0 THEN 4880
4710 E$=SEG$("BLWP BL   ",PS
,5)
4720 PC$=""
4730 R$=""
4740 GOSUB 5050
4750 LOC$=HEX$
4760 U=U+2
4770 LOC=U
4780 GOSUB 5080
4790 T$=HEX$
4800 IF PS=6 THEN 4870
4810 LOC=256*M+N
4820 GOSUB 5080
4830 R$=HEX$
4840 LOC=LOC+2
4850 GOSUB 5080
4860 PC$=HEX$
4870 PRINT #F:LOC$;" ";E$;T$
;" ";R$;" ";PC$
4880 GOSUB 4930
4890 IF K=15 THEN 2460
4900 NEXT U
4910 GOTO 990

4920 REM EXIT/HOLD LOOP
4930 CALL KEY(3,K,ST)
4940 IF K<>32 THEN 4990
4950 CALL SCREEN(12)
4960 CALL KEY(3,K,ST)
4970 IF ST<=0 THEN 4960
4980 CALL SCREEN(15)
4990 RETURN

5000 REM KEY LOOP
5010 CALL KEY(3,K,ST)
5020 IF ST=0 THEN 5010
5030 RETURN

5040 REM PEEK/HEX ROUTINE
5050 M=INT(U/256)
5060 N=U-256*M
5070 GOTO 5130
5080 IF LOC<32768 THEN 5110
5090 LOCX=LOC-65536
5100 GOTO 5120
5110 LOCX=LOC
5120 CALL PEEK(LOCX,M,N)
5130 HEX$=HX$(INT(M/16))&HX$
(M-16*INT(M/16))&HX$(INT(N/1
6))&HX$(N-16*INT(N/16))
5140 RETURN
5150 END
```




## RTTY interface

A number of members have asked me if there was an RTTY INTERFACE available for the TI-99/4(A) computer. At the time, I knew of none, but told them that I would look into it. GOOD NEWS all you AMATEUR RADIO GUYS AND GALS out there!

I have found information on the new MFJ-1224 RTTY/CW COMPUTER INTERFACE.

MFJ Enterprises of Mississippi U.S.A recently released a new RTTY/CW computer interface, the MFJ-1224. It is designed to interface to a wide range of personal computers including the TI-99/4(A).

The MFJ1224 is available for operation over a wide range of shifts including 850 Hz,425 Hz 170 Hz as well as all shifts between and beyond. A sharp 8-pole active filter is included for 170 Hz shift and CW(Morse Code). It will also operate 5 to 100 Word Per Minute on RTTY/CW and up to 300 baud on ASCII.

A convenient normal/reverse switch eliminates retuning when stepping through various shifts and a built-in automatic noise limiter helps improve copy under noisy conditions.

Tuning is made relatively easy by a two LED tuning indicator wich provides for fast positive tuning. RTTY signals are copied on both the mark and space tones, not mark only or space only. If either the mark or space are lost the MFJ1224 maintains copy on the remaining tone.

A range of transmitter keying outputs are provided including AFSK, FSK, with PTT. High voltage grid block and direct keying are also included for CW. There is also an external hand key or electronic keyer input socket for your convenience.

PRICE: for the MFJ-1224 is $240 plus $12 Packing & Postage.

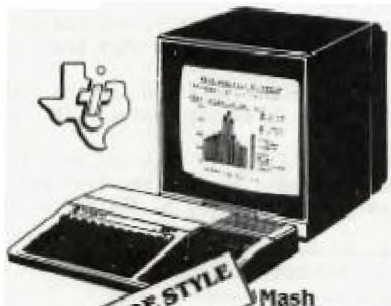
For further details...contact the distributors, GFS ELECTRONIC IMPORTS, 17 McKeon Road, MITCHAM,Victoria 3132.

How about one of you getting this unit and give all of us a demo of what RTTY & CW is all about at one of our monthly meetings.

This is yet another way in which your TI-99/4(A) can be put intouch with others via the airways.
73's and 181's from Shane.

# Radio Despatch Service

ESTABLISHED 1934



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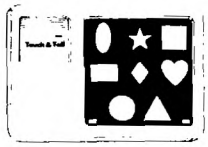

Prices quoted include tax. We reserve the right to alter prices quoted without notice.

**YES! WE HAVE MAIL AND PHONE ORDERS (PAULA JENKINS) AND USE BANKCARD, MASTERCARD AND AGC FINANCE. OR VISIT OUR STORE.**

# Radio Despatch Service

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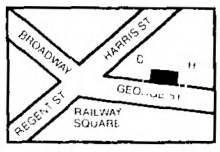


# The Communicators

We humans are basically social animals with an inherent desire to communicate with each other. From that desire and need has evolved the fantastic technology which has made possible Modem communication as we know it today. Modem communication, in its own way, is also assisting technology to get on with the job. Every year it spawns new forms, such as World-wide communicating via satellite.

A growing interest in this form of contact with others, has pushed our 1,000 strong membership of TI.S.H.U.G another world. In the four or so months that the TI.S.H.U.G.BBS has been in operation, we have seen over 70 members register to use this special and unique way of making new friends.

Last month, a party was conducted at my home, which was hoped would serve a two-fold purpose...(1) To get modem users together, to get to know each other and hense use the Electronic Mail section of the BBS more often. (2) To provide demonstrations of both our BBS, and other systems they could link into.

We had a huge crowd, and my home was full. We had two computer systems, both with their own telephone lines. Representatives from the APPLE USER GROUP BBS and the DATE BBS came along and showed their systems. Greg from Canberra User Group (TICHUG) showed how the BROTHER EP-44 can be used as a terminal and printer, and we linked by direct cable, both the TI's there, so that the members could see both sides of the TI.S.H.U.G.BBS(User and System Operators side).

This party was catered for by CAMILLA who spent hours the day before, preparing special delights. And some of the wives and/or girlfriends, decided to help out by passing around those goodies.

Members were shown some of the new features of our BBS, and told of new features soon to be introduced to this system.
Already, we have the only BBS wich welcomes you with the spoken word, and this feature will be expanded as time goes on. One feature that has been added to the BBS, thanks to Steven, is...When you sign on by giving your USERNAME, the system will automatically search for any Electronic Mail wich has been posted to disk for you, and then display that Mail on your screen even before you go to the main menu.

Version#3,of our BBS software, I have been told, will feature some surprises.

Here are some hints for those beginners, on how to use the TI.S.H.U.G.BBS...

<CTRL> H will enable you to corect your typing mistakes. Do not use <FCTN> S or 1.

<CTRL> 1 with the speech systhesizer plugged in, will make the TI Speak the entire screen. Try it on the Jokes section for a good laugh.

<CTRL> 2 will tell the computer that you wish to save a screen of information to either PRINTER or DISK. If you save it to Disk, you will require a RECALL-DATA program either from the TE#2 manual or from your System Operator.

When you sign on, please only use UPPERCASE. And the same applies when sending Electronic Mail to another member.

When chatting to the SYSOP, you can use COMMAS and QUOTES, but DON'T use them when sending Mail.

TO EXIT CHAT MODE: Both you and the SYSOP can cansel the chat mode by simply typing <CTRL> Z

TO END YOUR ELECTRONIC MAIL and post it to the BBS Disk system...: Simply go to a new line and only type ** two asterisks followed by <ENTER> or <RETURN>.

---

SENDING PROGRAMS TO EACH OTHER

---

BUT SHANE, HOW DO I DOWN-LOAD A PROGRAM TO ANOTHER TI USER, WHEN THE BBS IS BUISY, OR DOWN FOR UPDATING NEWS ETC.?

Well here is a step-by-step set of instructions which should help you do just that.

There are two ways inwhich you can do that. (1)In BASIC or EXTENDED BASIC...When chatting to a friend on the phone, you can load the program you want to share with them, into your computer by cassette or disk, then, making sure that their modem is switched to the opposite mode to you(either ANSWER or ORIGINATE)...you friend types OLD RS232 and you type SAVE RS232 then switch your modem to MODEM/DATA mode and press <ENTER> at the same time. You will get the figure 255 on the top-middle of your sreen, which will then count down to Zero or until your Cursor returns to you.

IT IS IMPORTANT TO NOTE THAT WHEN THE RECEIVER HAS RECEIVED ALL OF THE PROGRAM, THAT HE/SHE SWITCHES THE MODEM/DATA SWITCH BACK TO PHONE/VOICE TO CUT THE CARRIER LIGHT AT THE SENDERS END.

When the sender see's the Carrier light go out, then and only then must the sender switch over to voice mode. The reason for this is that the computer at the Receivers end, checks to see that all of the program was sent to it, before returning the flashing cursor.

The only trouble with sending via BASIC or EXTENDED BASIC, is that you cannot send FILES.
THE ALTERNATIVE TO THIS IS:
Use your Terminal Emulator.

When you TE is plugged in, go to the menu and press #2. Then only change the DUPLEX to HALF.
So now we go onto option (2):

When you get your cursor sitting at the top left-hand corner of your screen, making sure that once again, you have your modem switched to the opposite mode to your friend (ANSWER or ORIGINATE) you can now switch your Modems to MODEM/DATA mode and start typing a message to each other.

After you have had your fun typing to each other, TELL THE RECEIVER the name of the program you are going to DOWN-LOAD to him/her and then press <CTRL> 4 Your computer will ask you what drive you want to get a program from,for TRANSMISSION, so type DSK1 (don't use the period '.' just press <ENTER>.)The compute will ask you what is the FILENAME, type in that name then press <ENTER>

CONTINUED PAGE: INSIDE BACK

# PLATO

## Education made exciting

This is the beginning of the Zeiss Planetarium, one of Plato's more popular learning programs. Filenamed 0Zeiss, this model planetarium displays star maps and other celestial information for the northern skies at any hour of any year from 950 A.D. to 2950 A.D.

After Plato has loaded the program, you are presented with a menu, which includes an introduction, a catalog of 500 celestial objects available, star charts and a model planetarium—which fills an 8-inch by 5-inch oval window on your screen with graphics of stars, nebulae, galaxies and planets.

Plato's Planetarium has more information than is easily viewed on a standard monitor. This is an opportunity for you to use the joystick: the button will zoom in your view of the screen, and the joystick moves the close-up window around.

The Zeiss planetarium gives you a library of astronomical information at your fingertips and adds a new dimension to star gazing.

Parents and younger Plato users will find 0bees an excellent beginning math game to teach subtraction. You are presented with a beehive, which you fill with two to nine bees. You let bees in and out of the hive as Plato asks you how many are left inside. The catch: you can't see inside the hive unless you use "X-ray" device to peek in and help yourself.

One of Plato's vocabulary drills, 0voc0, teaches Latin roots and English vocabulary. The computer congratulates you for correct answers and won't let you proceed until you make the right choice. Help is always available, and you can flip back to prior pages of notes and information.

More advanced technical lessons, 0digestion and 0osmosis, use animation, detailed graphics and text. Diagrams illustrate the duodenum or a semipermeable membrane. You can choose introductory lessons, experiments or quizzes from the menu.

Plato's most popular computer science lesson is called 0roboint, an introduction to the Robocar programming language devised for teaching introductory computer programming. Designed for newcomers to programming, Robocar teaches simple commands which will move a robot car around a city. With the car, you see the immediate results of your programming while learning the fundamental principles of programming.

**PLATO courseware is a comprehensive educational program specially designed for people who seek to enrich their educational experience or who need more assistance in certain subject areas.**

With PLATO courseware, you interact with the computer on a one-to-one basis. The educational programs are self-paced and provide reinforcement that is both positive and immediate. The material is screen directed, so the computer tells you exactly what to do as you progress through a curriculum. In addition to these advantages, PLATO courseware is an exciting adventure intended to make learning a successful and enjoyable challenge.

The following PLATO courseware curriculums are available.

**Basic Skills Courseware**
(Grades 3-8)

- Mathematics
- Reading
- Grammar

**High School Skills Courseware**
(Grades 9-12)

- Mathematics
- Reading
- Writing
- Science
- Social Studies

With the Interpreter cartridge, you now have access to all the exciting PLATO courseware. To use PLATO courseware with the TI-99/4A Home Computer, you need.

- TI Memory Expansion unit
- TI Disk Memory System (Disk Drive Controller and Disk Memory Drive)
- Peripheral Expansion System (if you have card-type peripherals)
- PLATO Interpreter Solid State Cartridge
- PLATO courseware packages and or Survey Diskettes

**for further information and pricing ring peter varga 3897025**

# T.I.S.H.U.G. SHOP with Terry

Wow! Did we ever have a busy time at the last meeting. Shop Staff were run off their feet trying to help out the (it seems thousands) of members who thronged the counter after their tapes and other assorted goodies. Never before have I seen a copy of Home Computer Magazine snapped up so quickly. The 90 copies on sale at the meeting were all gone by the time we pulled the shutters down. It looks like I will have to up the order to around 150 copies each issue to cover the demand but I am reluctant to do this unless enought members tell me they want a copy. See me at the next meeting please.

Members still after a copy of the Best of 99'er will be pleased to know that 25 copies have arrived. The cost for this excellent publication remains at $25 at meetings. Those ordering by mail should add an additional $2 to cover postage etc.

A few copies of the booklet Smart Programmers Guide to Sprites remain at a cost of $8 at meetings or $9 by post.

Plenty of Introduction to Assembly and Programs for the TI are available at a cost of $23 and $21 respectively. Add $2 to the cost of each for mail orders.

A further 20 Cartridge Expanders (Widgets) are on order together with some more Disk Fixers and a quantity of Super Duper diskette copying programs. All of this material when it arrives will retail for around $42 each.

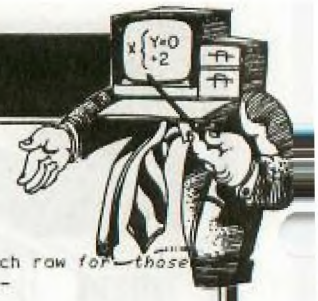
This Months Tape
---

Will be number Tape 19 and will contain 24 programs - 12 on each side of the tape. Side A will be in Basic and Side B in extended Basic. The programs will be a mixture of games and educational.

By the number of phone calls I have received it appears quite a few members had problems loading Tape 17. It appears there may have been a problem with the master tape for this issue so it has been redone and now works fine according to my testing. Any member who has a faulty Tape 17 may return it and it will be exchanged.

Space does not permit in this issue to allow a complete listing of all past tapes that are available by mail order. The listing will now appear in the December issue of SND.

Remember tapes are $3 each at meetings or $4 each by mail order.




# BEGINNING BASIC

With PETER DAY

Hello, again. Another episode in the (not so) regular series on the basics of BASIC. Last time I talked about the VCHAR and HCHAR sub-programs for placing characters anywhere on the screen and said I would show you how to define your own graphics shapes. Well, here we go.

We saw that characters are made up from 64 dots arranged in 8 rows of 8 dots each, like so -

```
o o o o o o o o
o o o o o o o o
o o o o o o o o
o o o o o o o o
o o o o o o o o
o o o o o o o o
o o o o o o o o
o o o o o o o o
```

- and that to show a particular character some dots are turned on and some turned off like so -

```
. . . O . . . .
. . O . O . . .
. O . . . O . .
O . . . . . O .
O . . . . . O .
O O O O O O O .
O . . . . . O .
O . . . . . O .
```

- which might represent the letter 'A'.

All we need, therefore, is a way to tell BASIC which character it is we wish to define and which dots of that character we want to be turned on and those we wish to leave off.

As we saw, many of the possible codes are already used for the letters and other symbols we normally use, but there are some 'spare' ones which are usually undefined and we can use these for special shapes, and so on. We can also redefine the codes used for letters *provided we dont want to use them as letters* at the same time. For instance, if we redefine code 65, which is the letter 'A', to be, say, a space invader, if we then print the word 'Above' the 'A' will display as the space invader character. This can be OK but be careful. To specify the shape we must first of all work out which dots are to be on and this can best be done on graph paper or something similar. For instance, we might draw something like this -

```
X X X X X X X X
X . . . . . . X
X . X X X X . X
X . X . . X . X
X . X . . X . X
X . X X X X . X
X . . . . . . X
X X X X X X X X
```

which will draw a small box inside a larger box.

We then split this down the middle -

```
X X X X       X X X X
X . . .       . . . X
X . X X       X X . X
X . X .       . X . X
X . X .       . X . X
X . X X       X X . X
X . . .       . . . X
X X X X       X X X X
```

and assign values to the dots in each column like this

```
8 4 2 1
X X X X
X . . .
```

etc. Then we add up the values in each row for those dots that are to be on only like this -

```
8 4 2 1

X X X X     = 15  ( 8 + 4 + 2 + 1 )
X . . .     = 8   ( 8 only )
X . X X     = 11  ( 8 + 2 + 1 )
```

etc. We do this first for the left column and then for the right column and then write down the numbers from each column alternately - top left, top right, 2nd left, 2nd right, and so on. Do this for the pattern above and you should get -

```
15 15  8 1  11 13  10 5  10 5  11 13  8 1  15 15
```

The last step is to turn these numbers into single characters. For the single digits 1, 2, 3, etc. this is no problem since they do not change. However, the numbers above 9 must be replaced using the following equivalents -

```
for  10  put  A
     11       B
     12       C
     13       D
     14       E
     15       F
```

If we do this for the numbers above we get -

```
F F  8 1  B D  A 5  A 5  B D  8 1  F F
```

and this is the code we give to BASIC to define the character.

The instruction we use is -

```
CALL CHAR( char-number , " code-for-char ),
```

which, for our example, would look like -

```
CALL CHAR(120,"FF818DA5A5BD81FF")
```

If we then use -

```
CALL HCHAR(10,10,120,10)
```

we will get a row of boxes drawn on the screen. (Since they are next to each other they will 'touch' and will look more like a ladder!).

If this all sounds very confusing don't worry. Persevere and you'll get used to it. Everybody has the same initial response but with a little practice it 'comes easy'.

(If you are interested, what we have done is to work out the 'hexadecimal' values for each row of dots in the character).

As you might guess, this can be a tiresome process to go through if you are not quite sure what shape will look best and you have to try many different codes. A better way, obviously, is to enlist the help of the computer. Page 186 of the *Users Reference Manual* has a very useful program to help you in this way. Key it in and try it and you'll see what I mean.

The characters defined as above will be the same size as normal characters on the screen. If we need something bigger we have to define it in parts, each one character in size, and then display them in the right places for the effect we want. For a larger box we could do the following -

```
CALL CHAR(120,"FF80808080808080")   [ top left
CALL CHAR(121,"FF01010101010101")   [ top right
CALL CHAR(122,"8080808080808080FF") [ bottom left
CALL CHAR(123,"0101010101010101FF") [ bottom right
```

CONTINUED BACK TO PAGE 10

# TECHO TIME

WITH ROBERT

Last month, in the SND INTERNATIONAL page, mention was made of a new and very powerful AVDP CHIP.

Since then, the Editor has been in touch with the Semi Conductor division of TI, and spoken with David Cartright in the hope of getting more info on this chip. The results of this chat is as follows...

FIRSTLY, this chip will not be available until the second quarter of 1985, and will only be produced in NTSC (American Colour Standart), but will probably be made in the PAL version at a later date.

SECONDLY, a 64 page manual of the AVDP CHIP was sent to the Editor and passed on to me the next day, for our Technical group go do some research and Review work on. But before we nuckle down to that, here are some more features of this chip, as described in that manual...

The AVDP is an upgrade and enhanced version the TMS91XX 99XX family of video display processors with the following features

* Improved Speed
* SOFTWARE COMPATABLE WITH THE TMS91XX/99XX FAMILY WITH THE EXCEPTION OF MULTICOLOUR MODE AND FIFTH SPRITE FLAG.
* 10 sprites per horizontal line.
* HORIZONTAL AND VERTICAL SCROLLING PIXEL BY PIXEL.
* High Resolution Graphics Mode (512 * 192).
* 80 X 24 CHARACTOR COLOR TEXT MODE.
* 256 x 210 bit mapped graphics mode.
* INTERFACES TO 4416 & 4164 DYNAMIC RAMS.
* Selectable RGB & Colour Difference outputs.
* EXTERNAL VIDEO CAPABILITY.
* Block move command.
* ON CHIP COLOUR PALETTE.
* Programmable interrupt on horizontal line.
* IMPROVED SPRITE COLLISION.
* On chip complex sound generator.
* DMA CAPABILITY TO VIDEO RAM.

Oh boy, with those features, I for one can hardly wait to replace my Graphics chip in my TI-99/4(A) with this one.

The AVDP is a single chip video display processor using N-Channel silicon-gate SMOS technology. The AVDP provides new features to the existing family of 91XX and 99XX video products. Texas Instruments manufactures a complete set of MOS and TTL integrated circuits to provide memory and logic support functions for the AVDP video display processor.

Check out these other features

* SINGLE +5 VOLT SUPPLY.
* Directly addresses up to 65,536 bytes of video memory
* 8.77 MEGA HERTZ MEMORY SPEED
* Independently refreshes television screen.

Now all we have to do is hold on,till this TMS9228 AVDP chip gets here. I know that there are a large number of NTSC TI's out there who won't need to wait until the PAL version is produced, so now watch out as our 99/4(A)'s run rings around the other Personal computers.

Here's a letter from Robert of Umina...

Dear Robert,

I've heard that there is a simple way to convert my computer from UHF to VHF. As I need to use my computer while the family watches TV. I have to convert it for use on our old TV which doen't have UHF. Can you help?

HELLO ROBERT,

You have two options...(1)Get yourself a copy of the Sydney News Digest on page 10 of the Birthday issue (the one with the Fireworks on the front cover in colour) and you will find details of how you can convert your modulator.
(2)Send it to CHRIS (Service Manager at Texas Instruments) ad he can do it for you. This used to be a free service, but I'm not sure if they are still doing it for free. You can either call him on (02)8871122 Service Dept/Calculator Division, or post it to him at 6/12 Talavera St, Nth Ryde.

Here's another letter from RON at Grawin Via Walgett.
Ron was the one who wrote, saying that my pin-outs were incorrect for the Monitor socket at the back of his TI. He mentioned in his letter that he found I was right, and with further discussion with the previous owner of his TI, found that the computer had been dropped with the monitor plugged in, and he writes to say that all is now well. He went on to say..."IT SHOWS HOW EASY YOU CAN BE CAUGHT SOMETIMES."

In his letter, also went on to say..."I DON'T KNOW IF YOU HAVE RUN ACROSS THIS BEFORE, BUT IT MAY INTEREST SOME MEMBERS. I HAD ABOUT FOUR CASSETTES (DIFFERENT BRANDS) BUT NONE OF THEM WOULD OPERATE VERY WELL WITH THE COMPUTER REMOTE CONTROL"..."

Thank you Ron, we are aware of the problem with the remote, and the club sells a small and effective switchable adaptor you simply plug on the end of the Remote plug. It sells for just under $5 from the club shop, and is made by Russell, our Music Co-Ordinator
Cheers for now,
ROBERT.

For anyone wishing to make or having trouble with the joysticks as described in Vol. 1 No. 1 of SOFTEX Magazine, page 9. I have found that the Mini 'D' type plug pin identification was incorrect for my 99/4A.

This is the orientation I found necessary to operate them correctly:

Pin 1 - N.C.
2 - Common Joystick 2
3 - Up
4 - Fire
5 - Left
6 - N.C.
7 - Common Joystick 1
8 - Down
9 - Right

By Cyril Bohlson.

*NOTE THE PIN No. SHOWN *
*IN "SOFTEX" ARE REVERSED.*

If anyone has a technical problem or wishes to contribute technical articles then contact me (ROBERT) on 602-4168 between 5.00-8.30 PM or send a letter to "TECHO TIME" P.O. BOX 595 MARRACKVILLE 2204.

I'm running out of space, but I should just simply answer two more letters sent to me... TO:JOHN of Gulgong, H! To answer the first part of your letter, YES, that Electronics Australia MODEM should work on your TI-99/4(A) but you DO NEED an RS232 Interface, and YES you will need your Terminal Emulator software. I will go more into your letter next month.

Keep those letters and hints coming in.
Cheers.
ROBERT
---

# REGIONAL NEWS

A report of meetings and times of our Regional Home Groups around Sydney and New South Wales.

NEWCASTLE COMMITTEE MEETING
TUESDAY 02/10/84

MEETING DECLARED OPEN AT 7PM BY A. WRIGHT.

PERSONS IN ATTENDANCE:- A. WRIGHT, A. LAWRENCE, G. JONES, T. McGOVERN.

APOLOGIES:- P. COXON, G. BRYDEN

1. Treasurer's book will be made available to any member at the General Meeting who wishes to check balances etc.

A proposed budget for the next financial year is being prepared. This will be published in the next Committee Meeting notes, together with costs so far incurred in the running of the club.

2. The budget is being prepared to enable us to receive a subsidy from TISHUG. Any monies received will go towards covering the club's expenses, and hopefully with the money collected at our meetings, we envisage the purchase of a printer and RS232 so that we can obtain hard copies of programmes, help debug programmes as well as being able to put out the committee meeting notes and use by our members at the general meetings.

**3. THINGS TO LOOK FORWARD TO TONIGHT:-**

Logo, Assembly Group, Basic & Extended Basic Tutorials.

4. Brian will also be debugging programmes this evening. If you have your program with your, see him.

5. Next month (November) Anne Worthington from the Co-op Bookshop will be back once again. We are also trying to arrange for a representative from one of the Software Manufacturer's to come along and demonstrate some new games and add on's. Purchases may be made on the night (Cash or Bankcard).

**6 END OF YEAR ARRANGEMENTS.**

The committee would like to hear from general members as to whether or not they would like to meet for the final time this year on the second Tuesday of December, or on Satuday 8th December AFTERNOON. This would be a get together, most members to bring their machines with games etc., if possible. A plate would also be appreciated..preferably a full one **!! Any spare cash will be used for the supply of drink, a sausage sandwich, or better. ALL THE FAMILY ARE MOST WELCOME.

**7. NOTE**

We will be starting up again in February/85, and hope to give a bigger and better service to all.

Committee Meeting Date:- 5th February, 1985.

General Meeting Date:- 12th February, 1985.

November is a big month for the group here in the North, at the General Meeting we will be having a visit from our good friends at the Uni Co-op Book Shop with some new products together with a whole range of books which are available for the T.I.

We also hope to have some demonstrations of software, including games and the latest add on's. Try to come along you never know, you may even find a Christmas present for that special person.

Garry will be continuing his basic lessons, and would like you to know that if you happen to have a friend with a different computer who would like to learn basic, they are welcome to attend..the more the merrier.

Assembler group is now holding their get together on the last Tuesday of the month. The newcomers to this group are really keen and have already started a small competition between themselves.

Last but not least, we hope to have a report on TISHUG'S offer to the regional groups, as a few of our committee members will be attending their November meeting.

See you all on the 8th.

Dates To Remember:-
November 1st COMMITTEE MEETING
November 8th GENERAL MEETING..
EVERYONE WELCOME.

**ILLAWARRA REGIONAL GROUP**

This group has organised Assembly Language and Basic tutorials. Assembly Language tutorials are held on the second Thursday following our monthly meeting where the date and venue is decided. Basic tutorials are held before each monthly meeting.

Our major event for the year is a half-day tutorial on the 10th November 1984 from 12.30 - 4.30. The venue is the E R & S clubroom Port Kembla.

Subject titles are:- Sprites, Sounds, Speech and Print. Local members - Lou Amadis, Chris Wilder, Rolf Schreiber and Bob Montgomery will be the tutors. To cover costs a charge of $2.50 per family will be made.

Our monthly meetings are held on the Monday following the TISHUG meeting.

Venue: The Shop 4 Home Computers, Waters Walkway Corrimal.

Time: 7.30PM for Basic Tutorial
8.00PM for Monthly Meeting.

**Contact: Bob Montgomery 28-6463.**

LIVERPOOL REGIONAL NEWS

Liverpool Regional Group met at Norm Norton's place at Wentworthville on 8th September 1984 with an attendance of 16 members.

The meeting mainly involved the filling out of a questionaire and discussion of the future of the regional group.

It is proposed that future meetings will have a theme involving interaction amongst members.

Members are encouraged to prepare tutorials or demonstrations for a particular theme. The theme for the November meeting will be Communications.

Also during the meeting one of the younger members Marcel Zaia demonstrated his own Version of Tic Tac Toe and must be congratulated for a job well done.

**Dates of coming meeting are:-** Saturday 10th Nov 1984 1PM.

Ross Hardy
18 Excelsior St Merrylands.
Phone: 637-6772.

Saturday 8th Dec 84 1PM.
15 Richmond Cr Campbelltown.
Phone: 046 256157

Please contact above members a week before meeting to advise whether able to attend.

## REGIONAL NEWS

CENTRAL COAST REGIONAL GROUP

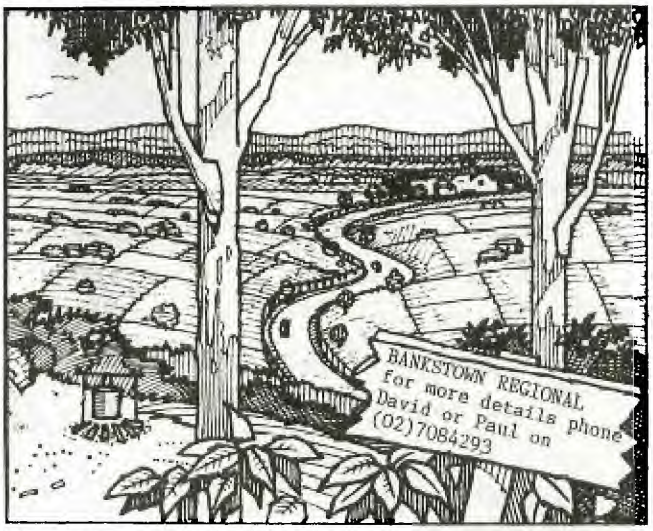
Last month, we conducted our first FULL DAY TUTORIAL Workshop at Goroken High School. We had around 20 members in attendance with guests from the main TISHUG Sydney Committee with Terry, John and Shane.

The next meeting will be on November 10th (2nd Sat) at the home of Ebel Commins, 48 Manoa Rd, Budgewoi, at 1:30pm.
If you live in or around the Central Coast region, why not come along and join in the family atmosphere.

Russell Welham.

MARRICKVILLE REGIONAL MEETING

Once again, we had a good turn-out at our recent Regional meetings with demonstrations of new and unusual products.
Don 't miss the next meeting on WEDNESDAY 7th NOVEMBER at Shane's home, as there are some vital things to share with this group.
SEE YOU THERE.




## T.I.S.H.U.G. REVIEW

BACKGAMMON

This is another game on cassette from Not-Polyoptics. According to the instructions Backgammon is the second most popular board game in the world after chess.

As with any card or board game it is probably a good idea to have some slight knowledge of the game before attempting to play. However in this particular case the computer will teach you the rules by not accepting incorrect plays.

The game can be played by one player against the computer which is useful for learning the rules and practice game stratergy.

When playing against the computer the computer is not difficult to beat, only one level of plays possible. The computer makes its moves quickly.

The game can also be played by two players in which case the computer game provides an inexpensive backgammon board. There can be no arguments between the players as again the computer will not accept incorrect plays.

In summary a useful game for learning a social skill. Runs in Extended Basic. Cost about $18.

Howard Sharp.

## EDITORIAL with Shane

### A final comment before we put this publication to bed

Hi! fellow TI.S.H.U.G'ers, I hope that you enjoy yet another issue of our monthly Sydney News Digest. As has been mentioned throughout this issue, it's A.G.M time. This, infact, is the most important time of the year for both this group, and you, the members. The ANNUAL GENERAL MEETING is a once a year only meeting, when we look at what has happened in the last 12 months, in repect to the running of this group by your elected Committee. If you have not been happy with the way this group has been run, this is YOUR opportunity to change the Committee by either nominating yourself, or another member for that position. If you are happy with the way this group has been run, then this is the time that you support your committee by re-electing them, and/or getting involved on a committee level to assist the group in its future advancement. What this all boils down to, is that this group is YOU !!!!!

To give you a greater understanding of how this group is run, I have created, with the help of John & Terry, a special 4 page LIFT-OUT. This lift-out, shoud be brought along to the Annual General Meeting on Saturday the 3rd of November (2pm), to be used as both a program for that afternoon, and an opportunity for you to use it's NOMINATION FORM to vote for the Committee member of your choice, remembering that ONLY financial members can vote at this meeting.

If you want to get into the Politics of this group, spare copies of our Constitution will be available at that meeting.

Because this issue of our publication is mostly dedicated to the A.G.M, and tutorials etc, there is hardly any programs for you to type in. In the next issue, the last one for this your (CHRISTMAS ISSUE), we plan to provide you with some goodies, in the area of programs.

During the Annual General Meeting, we will have as our guest, Don Dennis of IMAGIC (Australia). Don will be the CHAIRPERSON and during the time that the old Committee step down, and the new committee is elected, this club will be in his hands. If you have never met Don, you are in for a nice treat. He, and the team at Imagic, are great supporters of the TI-99/4(A) computer and TI.S.H.U.G. and we thank him for that support, and for being able to attend the A.G.M.

MESSAGE TO REGIONAL GROUP LEADERS:

Let's see a good representation of your group at the next meeting. How about banners with your group name on it, just like the OLYMPIC GAMES...Think about it!

Well, that's it for another SND, see you at St.John's Church Hall, Victoria St Darlinghurst on THE day.
Cheers for now,

Shane

SHANE (EDITOR)

```
10 CALL VCHAR(1,1,32,790)
12 CALL SCREEN(2)
14 CALL COLOR(1,16,1)
16 CALL COLOR(2,16,1)
18 CALL COLOR(3,16,1)
20 CALL COLOR(4,16,1)
22 CALL COLOR(5,16,1)
24 CALL COLOR(6,16,1)
26 CALL COLOR(7,16,1)
28 CALL COLOR(8,16,1)
30 PRINT "PERHAPS YOU'VE BEE
N          HORRIFIED BY HOROS
COPE       COMPATABILITY
CHARTS.":::
40 PRINT "WELL,THERE IS AN A
LTERNATIVETO FINDING COMPATA
BILITY     WITH ANOTHER P
ERSON-BY BIORH-YTHEMS,OF COU
RSE"
50 PRINT "THIS PROGRAM WILL
GIVE YOU  YOUR COMPATABILITY
          PERCENTAGE":::
60 PRINT "WITH ANYONE YOU CH
OOSE.      SO PREPAIR TO BE P
LEASANTLY SURPRISED !":::
65 INPUT "PRESS <ENTER> TO C
ONTINUE":Z$
68 CALL VCHAR(1,1,32,790)
70 PRINT "COMPAT FROM COMPUT
ER GAMES  TRS-80 EDITION. TI
 99/4      VERSION BY":::
80 PRINT "JOHN J. VOLK RT. 3
 VAN,BURENARKANSAS U.S.A.,72
956        PH-(501) 474-5
981"
90 INPUT "PRESS <ENTER> TO B
EGIN":Z$
95 CALL VCHAR(1,1,32,790)
100 DIM A1(30),B1(30)
110 DIM A(12)
120 FOR I=1 TO 12
122 READ A(I)
124 NEXT I
130 DATA 0,31,59,90,120,151,
181,212,243,273,304,334
140 Y=0
150 Y=Y+1
155 CALL VCHAR(1,1,32,790)
180 INPUT "WHAT'S THE NAME O
F PERSON#1 ":W$
182 PRINT
184 PRINT
190 INPUT "WHAT'S PERSON ONE
'S BIRTHDAY(MM,DD,YYYY)":M,D
,Y
200 E1=M
210 F1=D
215 G1=Y
220 GOSUB 770
230 Z2=T
232 K1=J+1
240 PRINT
242 PRINT
250 INPUT "WHAT'S THE NAME O
F PERSON#2?":X$
260 PRINT
270 PRINT
280 INPUT "WHAT'S PERSON #2'
S BIRTHDAY?(MM,DD,YYYY)":M,D
,Y
290 E2=M
300 D2=D
310 G2=Y
340 GOSUB 770
350 P2=ABS(Z2-T)
360 K2=J+1
370 FOR I=1 TO 6
380 PRINT
382 NEXT I
385 CALL VCHAR(1,1,32,790)
390 PRINT "COMPATABILITY ANA
LYSIS"
400 PRINT "_____
_____"
410 PRINT
420 PRINT "COMPATABILITY ANA
LYSIS OF ";W$;" AND ";X$;"."
450 PRINT
470 PRINT W$;"WAS BORN ON ";
472 M=E1
474 GOSUB 950
480 PRINT F1;",";G1;". IT WA
S A ";
482 J=K1
490 GOSUB 1080
500 PRINT "."
510 PRINT
530 PRINT X$;" WAS BORN ON "
;
532 M=E2
535 GOSUB 950
540 PRINT D2;",";G2;". IT WA
S A ";
542 J=K2
550 GOSUB 1080
560 PRINT "."
570 PRINT
580 Z=P2
590 P3=ABS(INT(((Z/23)-INT(Z
/23))*23))
600 S3=ABS(INT(((Z/28)-INT(Z
/28))*28))
610 C3=ABS(INT(((Z/33)-INT(Z
/33))*33))
620 P5=ABS(100-((2*P3)*(100/
23)))
630 S5=ABS(100-((2*S3)*(100/
28)))
640 C5=ABS(100-((2*C3)*(100/
33)))
650 PRINT "PHYSICAL CYCLE CO
MPATABILITY(23 DAY) IS     "
;
660 PRINT INT(P5*1000)/1000;
"%"
670 PRINT "SENSITIVITY CYCLE
          COMPATABILITY (28
 DAY) IS    ";
680 PRINT INT(S5*1000)/1000;
"%"
690 PRINT "COGNITIVE CYCLE
          COMPATABILITY(33
DAY)IS     ";
700 PRINT INT(C5*1000)/1000;
"%"
710 PRINT ,,"_____"
720 PRINT "AVERAGE COMPATABI
LITY IS",," ";
730 A5=(P5+S5+C5)/3
740 PRINT INT(A5*1000)/1000;
"%"
760 INPUT "PRESS <ENTER> TO
END":Z$
762 GOTO 1140
770 Y1=Y-1800
780 Q1=INT(Y1/4)
790 Q2=INT(Q1/25)
800 Q3=INT((Y1+200)/400)
810 K=0
820 IF Q1*4<>Y1 THEN 860
830 IF Q2*100<>Y1 THEN 860
840 IF Q3*400-200<>Y1 THEN 8
60
850 K=1
860 T=365*Y1+Q1-Q2+Q3-K
870 T=T+A(M)+D-1
880 IF M<3 THEN 900
890 T=T+K
900 IF INT(Y1/4)<>Y1/4 THEN
930
910 IF M>2 THEN 930
920 T=T-1
930 J=T-7*INT(T/7)
940 RETURN
950 IF M=1 THEN 952 ELSE 960
952 PRINT "JANUARY";
954 RETURN
960 IF M=2 THEN 962 ELSE 970
962 PRINT "FEBRUARY";
964 RETURN
970 IF M=3 THEN 972 ELSE 980
972 PRINT "MARCH";
974 RETURN
980 IF M=4 THEN 982 ELSE 990
982 PRINT "APRIL";
984 RETURN
990 IF M=5 THEN 992 ELSE 100
0
992 PRINT "MAY";
994 RETURN
1000 IF M=6 THEN 1002 ELSE 1
010
1002 PRINT "JUNE";
1004 RETURN
1010 IF M=7 THEN 1012 ELSE 1
020
1012 PRINT "JULY";
1014 RETURN
1020 IF M=8 THEN 1022 ELSE 1
030
1022 PRINT "AUGUST";
1024 RETURN
1030 IF M=9 THEN 1032 ELSE 1
040
1032 PRINT "SEPTEMBER";
1034 RETURN
1040 IF M=10 THEN 1042 ELSE
1050
1042 PRINT "OCTOBER";
1044 RETURN
1050 IF M=11 THEN 1052 ELSE
1060
1052 PRINT "NOVEMBER";
1054 RETURN
1060 PRINT "DECEMBER";
1062 RETURN
1070 IF J=1 THEN 1072 ELSE 1
080
1072 PRINT "WEDNESDAY";
1074 RETURN
1080 IF J=2 THEN 1082 ELSE 1
090
1082 PRINT "THURSDAY";
1084 RETURN
1090 IF J=3 THEN 1092 ELSE 1
100
1092 PRINT "FRIDAY";
1094 RETURN
1100 IF J=4 THEN 1102 ELSE 1
110
1102 PRINT "SATURDAY";
1104 RETURN
1110 IF J=5 THEN 1112 ELSE 1
120
1112 PRINT "SUNDAY";
1114 RETURN
1120 IF J=6 THEN 1122 ELSE 1
130
1122 PRINT "MONDAY";
1124 RETURN
1130 PRINT "TUESDAY";
1132 RETURN
1140 END
```

## Jenny's YOUNGER SET under 18's page

Hi! once again kids, as others have mentioned in this Sydney New Digest, this is the end of our Financial Year. This means that many of you have to decide to renew your membership, and continue on with the fun activities of TI.S.H.U.G.

I hope that you stay with us, and send in those HIGH SCORES & PROGRAMS to share with other Younger Set members. Here is the latest results in high scores for the official HALL OF FAME...

| GAME TITLE | HIGH SCORE | YOUNGERSET MEMBER |
|---|---|---|
| PINBALL VG#1 | 1,068,460 | ANTONY LEWIS |
| BLASTO | 33,640 | JUSTIN CHAMBERS |
| MUNCHER | 11,600 | JUSTIN CHAMBERS |
| CATERPILLER | 195 | JUSTIN CHAMBERS |
| BURGERTIME | 225,500 | L.MANSELL |
| ALPINER | 72,517 | STEPHEN HUNT |
| PARSEC | 3,870,000 | CRAIG SHEEHAN |
| STAR TREK | 938,200 | STEPHEN HUNT |
| TI INVADERS | 34,868 | ANTONY LEWIS |
| MUNCHMAN | 187,770 | RICK TURANSKY |
| CAR WARS | 79,490 | PHILLIP DOBE |
| TOMBSTONE CITY | 386,600 | ADAM McHUGH |
| CHISHOLM TRAIL | 47,400 | ANTONY LEWIS |
| RABBIT TRAIL | 3,900 | ARON HARDY |
| ATTACK | 109,400 | ANTONY LEWIS |

Well, there you have them. Every one of these high scores sent to me, have been verified by the parents with their signature. Let's see if you can beat them, or give me your high score on the other new modules like FATHUM, MICRO SURGEON, SUPER DEMON ATTACK, and 3D TENNIS etc.

O.K. Now, Christmas is coming up next month, and we may be getting some new module games in. To ensure that at least half of the titles I'm about to list will come in, why not phone DON DENNIS at IMAGIC and ask him if we will see the following titles by Christmas or New Year...CHECK THESE OUT...

SPACE BANDIT, SEWERMANIE, BIGFOOT, METEOR BELT, SUPER FLY, HONEY HUNT, SOUND TRACK TROLLEY, TREASURE ISLAND, and BURGERTIME. Let's keep your computer alive. Let's see those new titles here in Australia. We can, you know, if YOU do something about it. When you phone Don, don't forget to tell him you are a TI.S.H.U.G YOUNGER SET Member. If you show enough interest in getting these new titles in, I'm sure that IMAGIC will do their uttmost to help us out.

### YOUNGER SET COMPETITION

Yes, you can win $50 cash, and be presented with it at the DECEMBER Club Meeting (Saturday **8th** December-2pm). All you have to do is simply attend the next Club meeting,(THE A.G.M. MEETING on Saturday 3rd November) and jot down the names of the newly elected TI.S.H.U.G. COMMITTEE and their positions each Committee member holds.

The correct answer must be either sent to me by mail, or given to Shane, no later than SATURDAY **8th** December at the club meeting. The lucky winner will be drawn at that meeting.

Here is the address to send to...

JENNY'S YOUNGER SET COMPETITION,
Post Office Box 595,
Marrickville, N.S.W. 2204.

Good luck gang, come on, let's here from you soon.

Jenny

### COMMUNICATORS PAGE-Continued

At the RECEIEVERS END...do the same when prompted by your computer, then sit back and watch your TI's transfer that program directly into the RECEIVERS Disk Drive. The computer will check that the line is clear at all times during this transmission, and if noise interupts the transmission, your computer will automatically re-transmit that block of data until it sees that the RECEIVER has got it all. Clever isn't it!

Then you can return to typing messages to each other or prepare to exchange or send another program.

WHEN DOWN-LOADING PROGRAMS FROM THE BBS, FOLLOW THE INSTRUCTIONS ON THAT BBS.

### COMPUTER CONFERENCE ...

Tuesday 6th November will be the date of the 11th AUSTRALIAN COMPUTER CONFERENCE which includes an exhibition under the auspices of the Commonwealth Department of Trade and Industry.
This is a chance for all the most prominent computer people to show their wares and talk about their plans.

RAS SHOWGROUND, Driver Avenue, Moore Park, Sydney 'till Novembr 9th. The hours:
Tues-Thurs 10am-8pm, Wed-Fri 10am-6pm.
For further details phone(02) 331 9111.

### DATA COMMUNICATION SPECIAL

In the current issue of the National computer magazine called "YOUR COMPUTER" (OCTOBER '84), they have dedicated much of this publication to DATA COMMUNICATION - Talking to the World, and also features DATABAES, MIDAS and MINERVA.

This is one issue that I highly recommend to all TI.S.H.U.G.BBS users.

There is also another feature article for TI USERS by Peter Lynden worthy of reading.

Bye 4 now.
SHANE

See you at the AGM

# THE CUT-UP PAGE

ON THIS PAGE YOU WILL FIND SEVERAL USEFUL CLUB FORMS. IF YOU DO NOT WISH TO CUT YOUR NEWS DIGEST YOU MAY USE A PHOTO COPY. MAIL-ORDERS, CLASSIFIED ADS AND BANKCARD AUTHORISATION MUST BE ON THE APPROPRIATE FORM.

## APPLICATION FOR TISHUG MEMBERSHIP

TO : The Secretary,
TISHUG,
PO Box 149,
PENNANT HILLS,
N.S.W., 2120

I/we wish to become a member of the Texas Instruments Sydney Homecomputer User's Group (TISHUG) and will abide by the constitution of TISHUG, a copy of which will be forwarded to me/us. I/we understand that I/we will receive eleven issues of the club magazine (the Sydney News Digest) and access to the club Software Library, TISHUG Shop, Group meeting, specialty workshops, and other group activities.

I/we enclose:-

| | |
|---|---|
| JOINING FEE | $ 8 |
| ANNUAL SUBSCRIPTION | $22 |
| TOTAL AMOUNT DUE | $30 |

NAME:.....

ADDRESS:.....

PHONE(home):.....(work):.....

SIGNATURE:.....

—FOR OFFICE USE ONLY—

| Date Rcd | Reciept No | SND |
|---|---|---|
| | | |

## Classified Ads.

Please insert the following advertisement in the next issue of the SND (space permitting) under the classification indicated. I declare the content to be in accordance with the Trade Practices Act, and resolve TISHUG of any liability arising from the publishing of the advertisment. P.O.BOX 595, MARRICKVILLE,2204

☐ BUY ☐ SWAP ☐ SELL
☐ PROGRAMS ☐ MODULES ☐ HARDWARE
☐ GET AQUAINTED (pen pals,etc)

*(ONE character per square - including SPACES)*

FEE = $2.00

FEE = $2.00

FEE = $2.00

(additional text at #0.20 per line)

FEE = $2.20

FEE = $2.40

FEE = $2.60

I enclose $_____ being $2.00 insertion fee and $0.20 per 30 character line (or part thereof) in excess of the first 90 characters (included in the insertion fee).

SIGNED:_____

## TISHUG SHOP MAIL-ORDER FORM

P.O.BOX 595,
MARRICVILLE,2204

Please fowarc the listed items to:-

name:_____

address:_____

_____p'code____

I enclose:-
bank-cheque
or money-order
or bankcard-authority

for the sum of _____

$_____

SIGNED:-_____

| ITEM | COST |
|---|---|
| | |
| | |
| | |
| | |
| | |
| | |
| TOTAL AMOUNT | $ |

## bankcard TISHUG Minimum Purchase $5

Complete ALL details using block CAPITALS

Account Number 4 9 6 - _ _ _ _ - _ _ _ _ _ _ Expiry Date __/__

Mr Mrs Miss
first name surname

Address:_____

Postcode:_____

I HEREBY AUTHORISE TISHUG TO CHARGE TO MY BANKCARD ACCOUNT THE SUM OF _____ (words) $_____

Signature:_____