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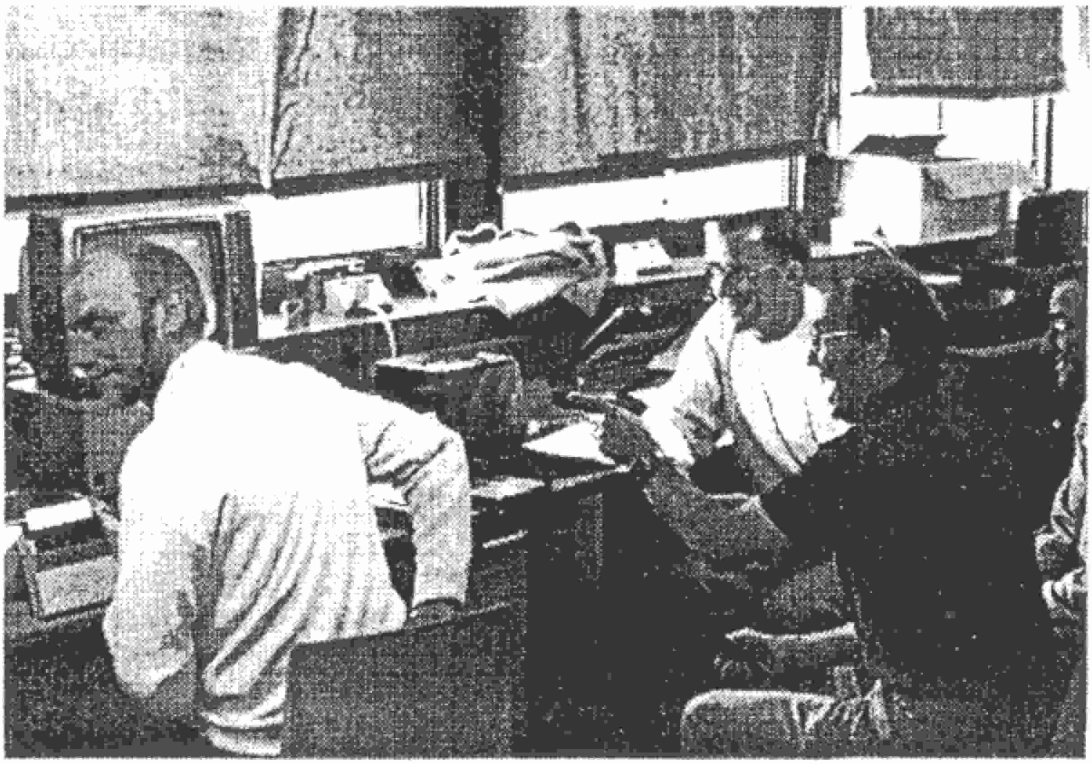

Formerly OXON TI USERS

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WATCH TI-LINES AS IT CHANGES OVER THE COMING MONTHS...

R E A D T H I S F I R S T !

I was in two minds whether to delay publishing this issue until after the Workshop, or to publish early (which entails more work than usual), and in the end was forced by circumstances to go for a later publication and thus be able to give a report on the Workshop.

I have been advised that one possible explanation for some ITUGers not receiving certain issues of IT is that a fire took place some time ago on a mail train, destroying much of its contents. Any post heading to the north of England would have been affected, and that would fit in with my experience. However, post sent from Oxford to the east coast usually goes to Wales first before heading all the way across to the other side, so it's not a safe bet that only the post headed north would be affected!

My apologies for having omitted GORDON PITT's details when publicising the Workshop last issue - hence the need for the information strip which was slotted into each copy!

I had planned a new layout for this issue of IT, but as usual gremlins got into the works and fouled up just about everything! One good thing to come out of this new format was the discovery that the "----------" separator used between items in RTF has been off-centre since it was first used. Ahem.

This is going to sound daft and highly inefficient of me, but would the ITUGer who expressed a desire to own two half-height single-sided disk drives please contact me ? I may be able to grant your wish...

I can't resist this one. Did you know that Scouting founder Baden-Powell anticipated the response from Sinclair's Service Department ?

Beep Repaired ?

OK, I'll shut up now.

My apologies also to the CORTEX User Group - last issue I said that it was a 9900-based machine, an echo of what I wrote in V3.10. Do I get a mark for being less than 1% out...?

))))))

DAVID BAINES would like to borrow a copy of 99er/HCM August 1983 if possible, please. He has also come up with a source of binders for your copies of TI-LINES (and of TI*MES and any other A5 format magazines).

The supplier is "BINDERS", 78 Whalley Road, Wilpshire, BLACKBURN BB1 OLF and there are two types available. One is called WIREX and uses 12 wires, while the other is CORDEX and uses 12 slightly elastic nylon cords. The former is in black, the latter in dark blue.

The telephone number is 0254 47632.

Prices are the same for both: £3.50 including post and packing, with extra wires for WIREX costing 2p each.

David obtained 25p off each binder on an order of 7 binders.

The price is for the 2" binder, and those using them for TI-LINES or TI*MES will find that 1 volume of TI-LINES or 2 volumes of TI*MES will fit into each binder. If using WIREX, additional wires can be added to accommodate the 14 issues of Volume 1 of TI-LINES. The CORDEX binders cannot have extra cords fitted.

DEREK BUCHANAN has an enquiry which the gamesters among you may be able to answer: Is it possible to beat CRAZY CAVER (sounds desperate!) and if so, after how many levels ?

Answers to me - if preferred, leave them on my answering machine - and I will publish the printable solutions...

MARK PLAYLE would like to obtain a FROGGER cartridge - if possible, by trading in for PARSEC which he already has. If anyone can help, contact him on 0992 587507 or at 104 Tudor Way, Sele Farm, Hertford, Herts, SG14 2DS.

Would anyone be willing/able to help TREVOR TABERNER (see also elsewhere for DORTIG details) with the disassembly (GPL ?) of the Music Maker module with a view to rewriting it to enhance its versatility ?

Contact Trevor at the address/phone given elsewhere if you have a serious interest.

MARK HARDY wrote to me in May/June with a request for help, and to my shame I seem to have omitted to pass it on. Mark and a friend are both football fanatics and would like to purchase a football management game to run on the TI. They both own Extended BASIC, should that module be necessary, and you can make contact with Mark at 16 Carleton Close, Sprowston, Norwich NR7 8NP.

››››››

TREVOR TABERNER has sent me a copy of RYTE DATA's News Report which gives more details of the elusive 80 track EPROM set for the TI Disk Controller. It is claimed that just two EPROMs can provide not only full access to 80 tracks (which Disk Manager 2 gives partially) but also the capability of using DOUBLE DENSITY storage. This is confusing, because our TI Oracle (and others) tell me that the TI Disk Controller chip lacks the capability of utilising double density storage which is why companies like MYARC chose another controller chip in the range.

Watch this space...

Talking of MYARC, RICHARD SIERAKOWSKI has passed me a copy of CALL MYARC (a quarterly publication from that firm) with an invitation to publish it as part of TI-LINES. However, although the typesetting is clear, the letter size is too small to be reliably reproduced as part of TI-LINES.

If, at some future date, reproduction facilities permit reliable copy to be produced, then I will gladly reproduce anything which might be of interest to ITUGers.

In the meantime, if anyone would like a straight photocopy of CALL MYARC perhaps Richard would be able to oblige provided all costs are covered.

Contact Richard on 0672 54975.

PETER KILLICK, compiler of the IT Index, has asked if any ITUGer could sell/lend/rent him a copy of BEST OF 99ER. He guarantees to respond to all letters or calls.

Contact him on 043 474 637 or at 4 Frankham Cottages, Fourstones, Hexham, Northumberland, NE47 5DL.

You may remember me harping on about the Data Protection Act and the way that the access charges had leaped from £5 to £50. The Registrar has issued a booklet for Data Users, advising them of the latest developments.

The Home Secretary, no less, has set the maximum fee which Data Users may charge Joe Public for subject access at £10, and has decreed that the fee for registration is to go up from £22 to £40 by November 11th.

It still does nothing to avoid the ludicrous situation whereby Joe will have to regularly poll any suspected data abusers if he is to catch them out.

And I'm still put out that after all the hype (and the to-ing and fro-ing), when ITUG attended the NEC Computer Show this year, the grand Data Protection Stand with its on-line list of Registered Data Users could not find hide nor hair of us on its files. Does this bode well, I ask myself...

))))))

IN THE LIMELIGHT

Forming a small local group and want to get your message across to any and all TI owners living close to you ? Why not put yourselves in the limelight by submitting a feature page describing your fledgeling group and its intentions, and I will publish it.

This issue focusses on DORTIG, and they have also kindly offered a program listing for the enthusiasts to type in (or you can order it from DORTIG direct - details below. If you ask nicely they might even provide a copy on cassette rather than disk).

DORTIG (Dorset TI Group) has recently been formed to act as a focus for TI-99/4A Users in Dorset. At the present time there are six members:-

MIKE BOTTERILL	Portland
GRAHAM BROOMFIELD	Parkstone
JIM DARK	Verwood
HENRY LARKIN	Parkstone
TREVOR TABERNER	Wimborne
MIKE WARREN	Crossways

Current interests include DIY Hardware, programming, graphics, music, and business use.

We want to strengthen the group and invite all Users in Dorset to phone or write to TREVOR TABERNER (0202 880878) or 51, Canford View Drive, Colehill, Wimborne, Dorset, BH21 2UW, with a view to joining the group.

Meetings are held in the Eastern part of the County at present, but other arrangements can be made if new members wish. Readers living on the Western border of Hampshire are also welcome to join.

As a "loss leader" the Group offers the following HANGMAN program in Extended BASIC, published in International TI-LINES by kind permission of Peter Brooks. In this version of the game you play against an opponent and are allowed to type in your own word. If the listing is too long for you to type in, do not miss the excellent program - send a double sided disk, stamped and self addressed mailer (plus a small donation to the Group if you feel so disposed) and state whether you would like the BASIC or the XBASIC version.

››››››

```
100 !*** HANGMAN  ****
110 !*       BY       *
120 !*      MIKE      *
130 !*     WARREN     *
140 !*                *
150 !*  originally    *
160 !*  written in    *
170 !*     BASIC      *
180 !*       &        *
190 !*  revised to    *
200 !*     run in     *
210 !*EXTENDED  BASIC*
220 !*      by        *
230 !*Trevor Taberner*
240 !******************
250 CALL CLEAR
260 PRINT "-LOADING-  PLEASE
 BE PATIENT"
270 RANDOMIZE
280 OPTION BASE 1 :: DIM FB(
3):: DIM LW0(26),L(25),F1(25
),V1(25),F2(25),V2(25),F3(25
),V3(25)
290 GOSUB 3370
300 RESTORE 4140
310 FOR N=1 TO 25 :: READ L(
N),F1(N),V1(N),F2(N),V2(N),F
3(N),V3(N):: IF N=13 THEN 32
0 ELSE 330
320 RESTORE 4140
330 IF N=23 THEN 340 ELSE 35
0
340 RESTORE 4190
350 NEXT N :: FOR I=1 TO 3 :
: READ FB(I):: NEXT I
360 CALL CHAR(96,"1818181818
181818")
370 CALL CHAR(97,"FFFF")
380 CALL CHAR(98,"0000000000
00FFFF")
390 CALL CHAR(99,"0C0C0C6CFC
E4FFFF")
400 CALL CHAR(100,"303030363
F27FFFF")
410 CALL CHAR(101,"1C0C0C0C0
C0C0C0C")
420 CALL CHAR(102,"383030303
0303030")
430 CALL CHAR(103,"0C0C0C0C0
C0C0C1C")
440 CALL CHAR(104,"303030303
0303038")
450 CALL CHAR(105,"DFDFCFCFE
FAFCF0F")
460 CALL CHAR(106,"FBFBF3F3F
7F5F3F0")
470 CALL CHAR(107,"DFDFDFDFD
FDFDFDF")
480 CALL CHAR(108,"FBFBFBFBF
BFBFBFB")
490 CALL CHAR(109,"3F7FFFFFF
FFFDFDF")
500 CALL CHAR(110,"FCFEFFFFF
FFFFBFB")
510 CALL CHAR(111,"03070F0F1
F517F7E")
520 CALL CHAR(112,"5E1713180
C0F0703")
530 CALL CHAR(113,"C0E0F0F0F
88AFE7E")
540 CALL CHAR(114,"7AE8C8183
0F0E0C0")
550 CALL CHAR(115,"040804020
4080402")
560 CALL CHAR(116,"007E")
570 CALL CHAR(117,"303030307
0701C0C")
580 CALL CHAR(118,"0C0C0C0C0
E0E3830")
590 CALL CHAR(119,"020202020
2020202")
600 CALL CHAR(120,"1B1B1B1B1
B1B1B18")
610 CALL CHAR(121,"D8D8D8D8D
8D8D818")
620 CALL CHAR(122,"5E1F1C090
F070303")
630 CALL CHAR(123,"7AF83890F
0E0C0C0")
640 CALL CHAR(124,"7AF83895F
AE0C0C0")
650 CALL CHAR(125,"00000055A
A")
660 CALL CHAR(126,"000000030
70C0818")
670 CALL CHAR(127,"000000FF"
)
680 CALL CHAR(128,"000000C0E
0301018")
690 CALL CHAR(129,"080C04040
4040C08")
700 CALL CHAR(130,"103060C0C
0603010")
710 CALL CHAR(131,"18080C070
3")
720 CALL CHAR(132,"00000000F
F")
730 CALL CHAR(133,"181030E0C
0")
740 CALL CHAR(134,"183C7E7E3
C18FFFF")
750 CALL CHAR(135,"000183C7
E7E3C18")
760 HSC=0 :: NSC=0 :: K=0
770 CALL CLEAR
780 GOSUB 3520

))))))
```

```
790 GOSUB 3570
800 INPUT SK
810 TP=100*SK :: DEL=13+(6-S
K)*20
820 GOSUB 3520
830 BALL=0 :: GF=1 :: SPC=0
:: IF SK<>1 THEN 870
840 PRINT : : :"  PLEASE ENT
ER YOUR HIDDEN": :"  WORD.
IT CAN BE AS LONG": :"
AS YOU LIKE, BUT MAKE"
850 PRINT :"  SURE IT IS AT
LEAST FIVE": :"  LETTERS LON
G.  AND DON'T": :"  LET
YOUR OPPONENT SEE IT!": : :
860 GOTO 890
870 PRINT : : :"  PLEASE ENT
ER YOUR HIDDEN": :"  WORD OR
 PHRASE.  IT CAN BE": :"  AS
 LONG AS YOU LIKE WITHIN": :
880 PRINT "  THE LIMITS SHOW
N BY THE": :"  ARROWS.  AND
DON'T LET": :"  YOUR OPPONEN
T SEE IT!": : :
890 PRINT "  MINIMUM LENGTH"
:" )-----(": :"  MAXIMUM LEN
GTH":" )-------------------
-----(": : :
900 GOSUB 3630
910 INPUT H$
920 GOTO 3730
930 IF SK>1 THEN 1010
940 FOR I=1 TO LEN(H$)
950 IF ASC(SEG$(H$,I,1))<>32
 THEN 1000
960 CALL CLEAR
970 GOSUB 3520
980 PRINT : : :"  SORRY!  YO
U'RE NOT ALLOWED": :"  SPACE
S AT THIS SKILL LEVEL":
:"  PLEASE GIVE ANOTHER WORD
": : :
990 GOTO 890
1000 NEXT I
1010 PEN=INT(TP/LEN(H$)):: F
UJ=1+(1/(LEN(H$)-1))
1020 FOR I=1 TO LEN(H$)
1030 IF ASC(SEG$(H$,I,1))=32
 THEN 1040 :: WWO=WWO+LWO(AS
C(SEG$(H$,I,1))-64)
1040 NEXT I
1050 UN=1000/WWO
1060 CALL CLEAR
1070 A$="ABCDEFGHIJKLMNOPQRS
TUVWXYZ" :: R=2 :: COL=3
1080 GOSUB 3210
1090 A$="SKILL LEVEL: "&STR$
(SK)
1100 R=4 :: COL=16
1110 GOSUB 3210
1120 A$="   SCORES   " :: R=
12 :: COL=17
1130 GOSUB 3210
1140 A$=" HIGH  YOUR " :: R=
13
1150 GOSUB 3210
1160 CALL HCHAR(11,17,98,14)
1170 CALL HCHAR(14,18,132,12
)
1180 CALL HCHAR(17,17,97,14)
1190 CALL VCHAR(12,17,96,5)
1200 CALL VCHAR(12,30,96,5)
1210 CALL HCHAR(21,4,116,LEN
(H$))
1220 IF SK=1 THEN 1250
1230 A$="PRESS SPACE OR UNUS
ED LETTER"
1240 GOTO 1260
1250 A$="PRESS ANY UNUSED LE
TTER     "
1260 R=23 :: COL=3
1270 GOSUB 3210
1280 B$="" :: SC=HSC :: CSC=
22 ::
1290 GOSUB 3280
1300 C=0 :: X=0 :: TB=0 :: P
=0 :: G=0 :: SC=0 :: CSC=28
1310 GOSUB 3280
1320 CNT=0
1330 CALL HCHAR(20,4+LEN(H$)
,63)
1340 CALL KEY(0,KEY,ST)
1350 CNT=CNT+1
1360 IF ST=0 THEN 1340
1370 IF ASC(CHR$(KEY))=32 TH
EN 1400
1380 IF ASC(CHR$(KEY))>64 TH
EN 1390 ELSE 1340
1390 IF ASC(CHR$(KEY))<91 TH
EN 1400 ELSE 1340
1400 CALL HCHAR(20,4+LEN(H$)
,32)
1410 F=0
1420 IF G=0 THEN 1530
1430 IF CNT>DEL THEN 1440 EL
SE 1530
1440 SC=SC-PEN
1450 TB=TB+1
1460 GOSUB 3420
1470 IF TB=15 THEN 1650
1480 IF CNT>2*DEL THEN 1500
1490 GOTO 1530
1500 TB=TB+1
1510 GOSUB 3420
1520 IF TB=15 THEN 1650
1530 G=1

>>>
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```
1540 FOR I=1 TO LEN(B$)
1550 IF CHR$(KEY)=SEG$(B$,I,
1)THEN 1560 ELSE 1610
1560 A$="YOU'VE TRIED THAT O
NE BEFORE"
1570 GOSUB 3210
1580 A$="YES! ANY UNUSED LET
TER      "
1590 P=1
1600 GOTO 1320
1610 NEXT I
1620 IF P=1 THEN 1630 ELSE 1
650
1630 GOSUB 3210
1640 P=0
1650 B$=B$&CHR$(KEY)
1660 FOR I=1 TO LEN(H$)
1670 IF CHR$(KEY)=SEG$(H$,I,
1)THEN 1680 ELSE 1800
1680 F=1
1690 IF (ASC(CHR$(KEY))=32)*
(SK(5)THEN 1700 ELSE 1710
1700 CALL HCHAR(21,3+I,32)
1710 IF ASC(CHR$(KEY))=32 TH
EN 1720 ELSE 1740
1720 SC=SC+INT(UN*GF)
1730 GOTO 1750
1740 SC=SC+INT(UN*LWO(ASC(CH
R$(KEY))-64)*GF)
1750 GOSUB 3280
1760 C=1+C
1770 GF=GF*FUJ
1780 GOSUB 4240
1790 CALL HCHAR(20,3+I,ASC(C
HR$(KEY)),1)
1800 NEXT I
1810 IF ASC(CHR$(KEY))=32 TH
EN 1820 ELSE 1840
1820 A$="TRY ANY UNUSED LETT
ER       "
1830 GOSUB 3210
1840 IF ASC(CHR$(KEY))=32 TH
EN 1860
1850 CALL HCHAR(2,(ASC(CHR$(
KEY))-61),1)
1860 CALL GCHAR(16,16,BALL)
1870 IF F=0 THEN 1880 ELSE 1
980
1880 X=X+1
1890 IF BALL=108 THEN 1970
1900 IF ASC(CHR$(KEY))=32 TH
EN 1910 ELSE 1930
1910 SC=SC-INT(0.5*UN*GF)
1920 GOTO 1940
1930 SC=SC-INT(0.5*UN*LWO(AS
C(CHR$(KEY))-64)*GF)
1940 GF=GF/FUJ
1950 GOSUB 3280
1960 GOSUB 4200
1970 ON X GOTO 2010,2030,205
0,2070,2090,2120,2150,2190,2
250,2290,2330,2370,2430,2460
1980 IF C=LEN(H$)THEN 2920
1990 IF (BALL=108)*(X(14)THE
N 1880
2000 IF X=14 THEN 2460 ELSE
1320
2010 CALL HCHAR(17,4,97,13)
2020 GOTO 1990
2030 CALL VCHAR(5,6,96,12)
2040 GOTO 1990
2050 CALL VCHAR(15,11,96,2)
2060 GOTO 1990
2070 CALL VCHAR(15,14,96,2)
2080 GOTO 1990
2090 CALL HCHAR(14,11,98,4)
2100 IF SK)5 THEN 2120
2110 GOTO 1990
2120 CALL HCHAR(4,6,98,7)
2130 IF SK)4 THEN 2150
2140 GOTO 1990
2150 CALL HCHAR(14,12,99,1)
2160 CALL HCHAR(14,13,100,1)
2170 IF SK)4 THEN 2190
2180 GOTO 1990
2190 CALL HCHAR(13,12,101,1)
2200 CALL HCHAR(13,13,102,1)
2210 CALL HCHAR(12,12,103,1)
2220 CALL HCHAR(12,13,104,1)
2230 IF SK)3 THEN 2250
2240 GOTO 1990
2250 CALL HCHAR(11,12,105,1)
2260 CALL HCHAR(11,13,106,1)
2270 IF SK)3 THEN 2290
2280 GOTO 1990
2290 CALL HCHAR(10,12,107,1)
2300 CALL HCHAR(10,13,108,1)
2310 IF SK)2 THEN 2330
2320 GOTO 1990
2330 CALL HCHAR(9,12,109,1)
2340 CALL HCHAR(9,13,110,1)
2350 IF SK)2 THEN 2370
2360 GOTO 1990
2370 CALL HCHAR(8,12,112,1)
2380 CALL HCHAR(8,13,114,1)
2390 CALL HCHAR(7,12,111,1)
2400 CALL HCHAR(7,13,113,1)
2410 IF SK)1 THEN 2430
2420 GOTO 1990
2430 CALL VCHAR(5,12,115,2)
2440 IF SK)1 THEN 2460
2450 GOTO 1990
2460 IF BALL=108 THEN 2470 E
LSE 2580
2470 FOR I=1 TO 8
2480 CALL HCHAR(16,17-I,32,1

))))))
```

```
)
2490 CALL HCHAR(16,16-I,135,
1)
2500 NEXT I
2510 CALL HCHAR(15,11,32,1)
2520 CALL HCHAR(16,11,96,1)
2530 CALL HCHAR(15,14,32,1)
2540 CALL HCHAR(16,14,96,1)
2550 CALL HCHAR(14,11,32,4)
2560 CALL HCHAR(15,11,98,4)
2570 GOTO 2600
2580 CALL VCHAR(15,11,120,1)
2590 CALL VCHAR(15,14,121,1)
2600 CALL HCHAR(14,13,117,1)
2610 CALL HCHAR(14,12,118,1)
2620 CALL VCHAR(5,12,119,2)
2630 CALL HCHAR(8,12,122,1)
2640 CALL HCHAR(8,13,124,1)
2650 CALL HCHAR(8,14,125,1)
2660 CALL HCHAR(8,15,130,1)
2670 CALL HCHAR(7,15,126,1)
2680 CALL HCHAR(9,15,131,1)
2690 H$=H$&CHR$(33)
2700 IF LEN(H$)>15 THEN 2710
 ELSE 2770
2710 COL=3
2720 R=20
2730 A$=H$
2740 GOSUB 3210
2750 R=22
2760 H$="TRY HARDER!!!"
2770 CALL HCHAR(7,16,127,LEN
(H$))
2780 CALL HCHAR(9,16,132,LEN
(H$))
2790 WL=16+LEN(H$)
2800 CALL HCHAR(7,WL,128,1)
2810 CALL HCHAR(8,WL,129,1)
2820 CALL HCHAR(9,WL,133,1)
2830 FOR N=1 TO LEN(H$)
2840 CALL HCHAR(8,15+N,ASC(S
EG$(H$,N,1)))
2850 NEXT N
2860 GOSUB 3950
2870 A$="OH DEAR! THE GALLOW
S GOT YOU"
2880 SC=0
2890 GOSUB 3210
2900 GOSUB 3300
2910 GOTO 3030
2920 GOSUB 4080
2930 IF BALL<>108 THEN 3010
2940 A$="CLEVER! YOU FOUND T
HE ANSWER"
2950 GOSUB 3210
2960 FOR T=1 TO 200
2970 NEXT T
2980 A$="BUT YOU RAN OUT OF
 TIME!     "
2990 GOSUB 3210
3000 GOTO 1990
3010 A$="WHO'S A CLEVER CLOG
S THEN!   "
3020 GOSUB 3210
3030 FOR T=1 TO 200
3040 NEXT T
3050 A$="DO YOU WANT ANOTHER
 GO (Y/N)"
3060 GOSUB 3210
3070 CALL KEY(0,K,S)
3080 IF S=0 THEN 3070
3090 IF CHR$(K)="N" THEN 326
0
3100 IF CHR$(K)<>"Y" THEN 30
70
3110 IF SC>HSC THEN 3120 ELS
E 3130
3120 HSC=SC
3130 A$="AT SAME SKILL LEVEL
 (Y/N)    "
3140 GOSUB 3210
3150 CALL KEY(0,K,S)
3160 IF S=0 THEN 3150
3170 IF CHR$(K)="Y" THEN 319
0
3180 IF CHR$(K)<>"N" THEN 31
50 ELSE 770
3190 CALL CLEAR
3200 GOTO 820
3210 CALL HCHAR(R,COL,32,30)
3220 FOR N=1 TO LEN(A$)
3230 CALL HCHAR(R,COL+N,ASC(
SEG$(A$,N,1)))
3240 NEXT N
3250 RETURN
3260 CALL CLEAR
3270 STOP
3280 SC1=10*INT(SC/10)
3290 CALL HCHAR(15,24,32,6)
3300 SC$=STR$(SC1)
3310 FOR N=LEN(SC$)TO 1 STEP
 -1
3320 K=LEN(SC$)
3330 CALL HCHAR(15,CSC+N-K,A
SC(SEG$(SC$,N,1)))
3340 NEXT N
3350 NSC=SC
3360 RETURN
3370 FOR I=1 TO 26
3380 READ LWO(I)
3390 NEXT I
3400 RETURN
3410 DATA 1,3,3,2,1,4,2,4,1,
6,5,1,3,1,1,3,7,1,1,1,1,4,4,
6,4,7
3420 IF TB<>1 THEN 3430 ELSE

>>>
```

```
 3440
3430 CALL HCHAR(11,32-TB,98,
1)
3440 CALL HCHAR(11,31-TB,134
,1)
3450 IF TB)14 THEN 3460 ELSE
 3510
3460 FOR I=11 TO 16
3470 IF I)11 THEN 3480 ELSE
3490
3480 CALL HCHAR(I-1,16,32,1)
3490 CALL HCHAR(I,16,135,1)
3500 NEXT I
3510 RETURN
3520 CALL SCREEN(14)
3530 FOR I=1 TO 8
3540 CALL COLOR(I,14,14)
3550 NEXT I
3560 RETURN
3570 PRINT "        SKILL LEV
ELS":"   1   2   3   4   5
   6":" --------------------
   "
3580 PRINT :"  GUESSES ALLOW
ED":"  13  11   9   7   5
4":" ------------------------
-":"  TIME ALLOWED (SECS)"
3590 PRINT "  17  14  11   8
   5   2":" ----------------
--------":"  MAX. TIME PENAL
TIES"
3600 PRINT "  20  40  60  80
 100 120":" ----------------
--------":"  SPACES ALLOWED?
"
3610 PRINT "  NO YES YES YES
 YES YES":" ----------------
--------":"  SPACES SEEN?":"
   - YES YES YES  NO  NO"
3620 PRINT :"  WHICH SKILL L
EVEL (1-6)": :
3630 FOR I=1 TO 8
3640 CALL COLOR(I,12,14)
3650 NEXT I
3660 FOR I=9 TO 16  ![See note*]
3670 CALL COLOR(I,5,14)
3680 NEXT I
3690 FOR I=3 TO 4
3700 CALL COLOR(I,2,13)
3710 NEXT I
3720 RETURN
3730 WWO=0
3740 IF LEN(H$)(5 THEN 3750
ELSE 3800
3750 CALL CLEAR
3760 GOSUB 3520
3770 PRINT : : :"  SORRY!  B
UT YOU ARE NOT": :"  ALLOWED
 TO MAKE IT THAT": :"  SHORT
.  IT MAKES IT A MUCH"
3780 PRINT :"  FAIRER GAME I
F THE WORD": :"  OR PHRASE H
AS A LENGTH OF": :"  AT
LEAST FIVE CHARACTERS!": : :
3790 GOTO 890
3800 IF LEN(H$))25 THEN 3810
 ELSE 3860
3810 CALL CLEAR
3820 GOSUB 3520
3830 PRINT : : :"  SORRY!  B
UT YOU ARE NOT": :"  ALLOWED
 TO MAKE IT THAT": :"  LONG.
  IT MAKES IT MUCH"
3840 PRINT :"  TOO EASY TO S
OLVE IF IT IS": :"  LONGER T
HAN 25 CHARACTERS!": : :3850
 GOTO 890
3860 FOR I=1 TO LEN(H$)
3870 IF ASC(SEG$(H$,I,1))=32
 THEN 3930
3880 IF (ASC(SEG$(H$,I,1))(6
5)+(ASC(SEG$(H$,I,1)))90)THE
N 3890 ELSE 3930
3890 CALL CLEAR
3900 GOSUB 3520
3910 PRINT : : :"  SORRY!  O
NLY CAPITAL": :"  LETTERS AN
D SPACES ARE": :"  ALLOWED."
: : :
3920 GOTO 890
3930 NEXT I
3940 GOTO 930
3950 D=0
3960 E=16
3970 RESTORE 4040
3980 D=D+1
3990 READ LA,N1,V4,N2,V5,N3,
V6
4000 CALL SOUND(LA*500,N1,V4
,N2,V5,N3,V6)
4010 IF D=3 THEN 3970
4020 IF D=E THEN 4030 ELSE 3
980
4030 RETURN
4040 DATA 2,185,3,147,3,123,
11,2,247,5,185,5,123,11,4,27
7,7,233,7,185,11
4050 DATA 2,294,8,147,8,123,
13,1,277,8,165,8,123,13,1,27
7,9,185,9,123,15,2,247,10,19
6,10,123,16
4060 DATA 1,277,11,185,11,12
3,17,1,294,12,185,12,123,18,
2,330,10,165,10,123,16,1,294
,8,185,8,123,13
4070 DATA 1,294,6,208,6,123,

))))))
```

```
10,3,277,3,233,3,139,7
4080 FOR T=1 TO 2
4090 FOR I=1 TO 25
4100 CALL SOUND(160*L(I),T*F
1(I),V1(I),T*F2(I),V2(I),T*F
3(I),V3(I))
4110 NEXT I
4120 NEXT T
4130 RETURN
4140 DATA 1,370,9,22000,30,2
2000,30,1,415,8,22000,30,220
00,30,1,466,6,370,6,22000,30
4150 DATA 1,370,5,494,5,2200
0,30
4160 DATA 1,554,1,22000,30,2
2000,30,1,466,5,22000,30,220
00,30,2,554,3,466,3,370,3
4170 DATA 1,587,1,22000,30,2
2000,30,1,466,5,22000,30,220
00,30,2,587,3,466,3,370,3
4180 DATA 1,554,1,22000,30,2
2000,30,1,466,5,22000,30,220
00,30,2,554,3,466,3,370,3
4190 DATA 2,554,0,22000,30,2
2000,30,4,554,0,466,2,370,2,
262,247,185
4200 FOR T=1 TO 3
4210 CALL SOUND(160,FB(T),2)
4220 NEXT T
4230 RETURN
4240 FOR T=1 TO 3
4250 CALL SOUND(160*L(T),F1(
T),V1(T),F2(T),V2(T),F3(T),V
3(T))
4260 NEXT T
4270 RETURN
4280 GOSUB 4290
4290 M=M+8
4300 GOTO 4280

>>>
```

L E T T E R S

GEORGE CLARK wrote to me recently concerning number manipulations:

"In the MARCH 87 (V3.10) TI-LINES, you asked for feedback on your thought-provoking article on Concatenation of Strings. You may like to consider the following for publication.

Reading your article started me on the re-examination of an old problem which I encountered some 30 years ago - long before calculators and micros.

'What is the LEAST whole number such that if the FIRST DIGIT is moved to the rear, to become the LAST DIGIT, the resulting number is one and a half times greater than the original number ?'

That is, 1234...X = 2/3 * 234...X1 - but using different digits.

I wondered whether the number could be generated by writing a TI BASIC program for my 99/4A, utilising string concatenation and some simple arithmetic.

Since the number in question is a string of digits with a value greater than 10E+15, it seemed debatable that it could be done - due to the fact that the computer only operates to 10 digits before displaying in scientific notation.

It can be done - and so I did it.

Perhaps some of TI-LINES' readers may care to try it. Although the following is NOT the solution, it illustrates a way to start thinking about it:

```
100  FOR X = 1 TO (a very large number)
110  B$ = STR$(X)
120  C$ = SEG$(B$,2,255)&SEG$(B$,1,1)
130  IF VAL(C$)=3/2*VAL(B$) THEN 140 ELSE 150
140  PRINT C$:B$
150  NEXT X
```

Logically, the above MUST generate the answer on a machine capable of sufficient accuracy (and if you had the time to sample EVERY number!).

I can also envisage an Adventure program which incorporates something similar: 'You are a Hacker locked in the computer room with a bomb set to go off unless you enter the correct number into the computer' i.e., solve the problem before the bomb goes off!

Anyway, it might be of interest to find out just how many kinds of solutions other people can devise. I enclose a listing (see later) in case you wish to publish something in TI-LINES.

)))))))

Associated with this puzzle are a whole series of numbers, depending on the ratio between them. I also know the case where the second number is half as big, etc., etc. Maybe there is a general solution of academic interest to cover all cases and I am working on the listing below to follow up this idea."

```
100  A$="1"
110  FOR X=1 TO 9
120  T$=R$&A$
130  P$=SEG$(T$,2,255)&SEG$(T$,1,1)
140  IF VAL(T$)+10E1=2/3*VAL(P$) THEN 150 ELSE 170
150  PRINT "THE NUMBER IS ";SEG$(T$,2,255):SEG$(T$,1,(LEN(T$)-1))
160  STOP
170  B$=STR$(X)
180  C$=A$&B$
190  D$=SEG$(C$,2,255)&SEG$(C$,1,1)
200  IF INT(2/3*(VAL(D$)))>VAL(C$) THEN 210 ELSE 260
210  A$=STR$(VAL(C$)-1)
220  X=0
230  IF LEN(A$)=10 THEN 240 ELSE 260
240  R$=A$
250  A$="2"
260  IF X=9 THEN 270 ELSE 290
270  A$=STR$(VAL(C$))
280  X=0
290  NEXT X
```

If there is sufficient demand, I might be able to run a Mathematic Puzzle column - especially if someone would like to co-ordinate it. PB

In NORTHWEST OHIO's 99ER NEWS there was a warning, taken from LONG ISLAND 99ER's RAndY's RumOR RaG (Randy Ainsworth) concerning a nasty bit of software which has been floating around the Stateside BBSs. It is called SUPERTRACK and purports to be a fast track copier. In fact, it is a disk-cruncher, and also has pretensions in the area of mechanical drive damage.

Quite why any individual who has pursued a programming interest should spend time and effort writing a low-level program with nothing but malicious intent is beyond me.

Anyway, be warned. Any piece of software which is supposed to be READING your master disks, but asks you to remove the read/write protection tab before it will proceed, should be placed at barge pole distance immediately and regarded with considerable suspicion. PB

Recent pressure of work has left me with a backlog of letters to answer, so bear with me while I work through them (slowly).

I will publish/reply as soon as I can.

>>>

* ADVENTURE HELP * ADVENTURE HELP *

ADVENTURE HELP * ADVENTURE HELP

ADVENTURE HELP

* ADVENTURE HELP *

By JO ANN COPELAND

Hi again! I've been off Adventuring to Cornwall, Wales and the infinite Universe... Back again (forgot my towel) to answer those questions sent in! There are all those groans again... Any one working on Discovery at June Lake? It's a goody!

VOODOO CASTLE:

"I have everything I need for the ritual, but can't perform it!"...

Are you sure ?... Make sure you have a knife, stick, lamp, and doll. With knife in hand, take a stand. Circle the coffin and wave the stick; hold the lamp and don't forget to chant! Did you find both pieces of paper for the chant?

THE COUNT:

"I seem to have found everything I need, but can't open the coffin! - What do I use or does it open under certain conditions?"

The dreaded coughin' (sic)... can't get it open? The item you require is in the Solar Oven (yes, that's right). Ignore the lens... Smoking a cigarette is actually good for your health in this Adventure... in the appropriate place, that is...

Remember, most vampires sleep during the day and wake at night. Use the item you found in the oven during the night, and attack during the day. No-Doz helps you get through this ordeal...

GOLDEN VOYAGE:

"How do you move the stone in the room behind the Altar?"

You don't... Being devout might help (pray)... but the stone will only do something when you have put both tablets in their respective places. One tablet in the right place makes one PLOOSH. The second tablet in the right place makes two PLOOSHES (they go in different places). After doing this, strange things happen...

After you make your way through the hidden passage, be sure you have: a rope, a chalice, a mask, and a globe. GOOD LUCK with the Cyclops!

))))))

ADVENTURELAND:

"Where do I find the firebrick in Adventureland? And once I've got it, to hopefully unbrick the window, will I find out where the dratted Blue Ox disappears to?"...

You will obtain the Fire Bricks in the Royal Chamber. You don't use the bricks to open or break the window... you'll need a distended gas bladder in this location to get the Fire Bricks (that's the wine bladder plus an appropriate item, then light it and see what happens).

You'll use the Fire Bricks in another location to obtain the FIRESTONE.

Remember the story about Paul Bunyon and his Blue Ox? Check out Paul's Place. Didn't Paul create an apple 'Grove'? You might find something else of interest also...13 treasures abound in this Adventure.

GOOD LUCK with those Adventures and keep an eye on this spot for further Adventure Hints... Please post your questions to: Jo Ann Copeland, 13 Elm Walk, Lakenheath, Suffolk, IP27 9QR. Now, back to Discovery at June Lake -)READ SIGN
)The Sign Says "GONE FISHIN'"!
You do realise you're out of bait?

REVIEWS:

Adventure Mania strikes again! Have you heard about the new Fairware and Public Domain Adventures ?

GARDEN OF EDEN, a two-part story - Complete the first part to find the combination to part two. Religiously based and very informative. This one gets "Most Productive Adventure of the Year Award".

DISCOVERY AT JUNE LAKE - Search for Treasure! Start off with a fishing rod and empty reel. Fill your reel, obtain sinkers, bait, etc., and drive off in your car for a fishing Adventure! Getting into this one!

LOST GOLD - you've inherited the Lost Dutchman Mine - but can you find it? Die of thirst, get bitten by a rattler, etc., while you search for the mine and its treasure!

ON THE LOOSE - (PG rated) - Find the evidence to prove conviction of the person who murdered your sister and recover her possessions while you're at it. (May not want children playing this one...)

(These imitate the Scott Adams Series and run from an Extended Basic loader!)

RINGWRAITH - Extended Basic (Disk) - Combination of Tunnels of Doom and the Hobbit ? Find where great riches lie... Don't leave the lair without Princess Aralon and the Great Staff of Power! The Dungeon Master laughs as he anticipates an easy kill! Can change level of difficulty, strength, dexterity, charisma, and skill. Be the first to return from Ringwraith's Lair!

)))))))

N O T I C E B O A R D

WANTED / 4 SALE / WANTED / 4 SALE / WANTED / 4 SALE / WANTED / 4 SALE /

MAURICE RYMILL has a number of items up for sale. Contact him on 021 458 4970 with serious offers.

MUSIC MAKER MODULE * 2 @ £6.00 EACH

PERSONAL RECORD KEEPING MODULE * 2 @ £6.50 EACH

TERMINAL EMULATOR II @ £13.50

HOUSEHOLD BUDGET MANAGEMENT @ £3.50

PARSEC * 2 @ £5.00 EACH

ALPINER @ £6.50

TI INVADERS @ £4.50

MUNCHMAN @ £4.50

INDOOR SOCCER @ £5.00

YAHTZEE @ £4.50

TI LOGO @ £12.50

SUPER SKETCH @ £20.00

SPEECH SYNTHESIZER @ £20.00

I have FOUR half-height single-sided drives for sale. They are £50 each or £90 per pair. If you want to have a self-contained twin drive system and do not particularly want double-sided drives, then these could be for you. Contact me on Oxford (0865) 510822 to reserve one or more.

I can supply disks (double-sided, double density, 96tpi format but can be used single-sided, single density, 40 track without problems) at only £7 per pack of ten. No library cases, I'm afraid, but the price is inclusive of post and packing.

I have two speech synthesizers at £20 each inclusive of post & packing.

)))))))

I have three Extended BASIC modules and two Mini-Memories, all at £27 each inclusive of post and packing.

Just a reminder (see READ THIS FIRST!) that PETER KILLICK would like to buy/borrow/rent a copy of BEST OF 99ER. Details on page 5.

))))))

TUG (UK)), yours truly was rushed off his bald patch, and several enquirers began their conversations with me early in the day and only managed to complete them much later in the afternoon!

Because of this frenetic activity, I was only able to hop out twice to take pictures (using special 1000 ASA colour film): once, very early in the day just after the doors had officially opened, and then later when I grabbed two minutes early in the afternoon (I think...).

Those who attended were well served. Although RICHARD SIERAKOWSKI still had not been sent the PAL 9640 card from MYARC, he still had the keyboard and lots of technical bumph. Incidentally, as usual I owe a special vote of thanks to Richard, because without his invaluable assistance - in this case on his wedding anniversary (gulp) - I could never make it to any of these affairs "tooled up". Next time I can see I am going to have to bring even more equipment than I have to date, based on enquiries which were received at this Workshop - I wonder just how much more of this the Mobile Massage Parlour can take...?

Between them, GORDON PITT and TREVOR DAVIES demonstrated some of the equipment which they have in everyday use - such as the MYARC and the NEW HORIZONS RAMDISKS, the MYARC DISK CONTROLLER, and the impressive third party Operating System for the New Horizons units.

They also ran demonstrations of some of the products made by the West German firm MECHATRONICS, and although I did no more than catch a glimpse of the 80 column card in operation (running MultiPlan) I am very, very impressed with what I have already seen. Even their mouse was running around on my system for a while when I was otherwise engaged in hands-off discussion (i.e., not using my system!).

I didn't get a chance to see who else had a system up and running, or what was being demonstrated, such was the pace. If you have never been to one of these Workshops you can have no idea of what you are missing.

The UK CORTEX USER GROUP under TED SERWA were demonstrating some of their image-grabbing capabilities, but again I had so little time spare I was unable to do more than gawp for a few seconds.

What we could really do with is someone who can manage NOT to get deeply involved in a Workshop and thus stand back and make copious notes and take innumerable photos, to the benefit of us all. However, from what I have seen so far, I cannot see ANYONE being able to resist chipping in with their four penn'orth and this losing their spectator status!

This time I handled hardly any enquiries about programming problems - which is what I went primarily prepared to do - and yet I was still rushed off my feet for 99.999% of the day.

Many thanks to Gordon, not only for organising the Workshop (and to his dimunitive assistants, drawn from his family and Scott and Jo Ann's), but also for ensuring that yours baldly managed to at least get a couple of sandwiches down his gullet!

Incidentally, I omitted in previous issues of TI-LINES to inform ITUGers that during Gordon's attendance at the Community School's Fayre this Summer, more than 6000 visitors were exposed to the TI-99/4A and some new subscribers were taken on.

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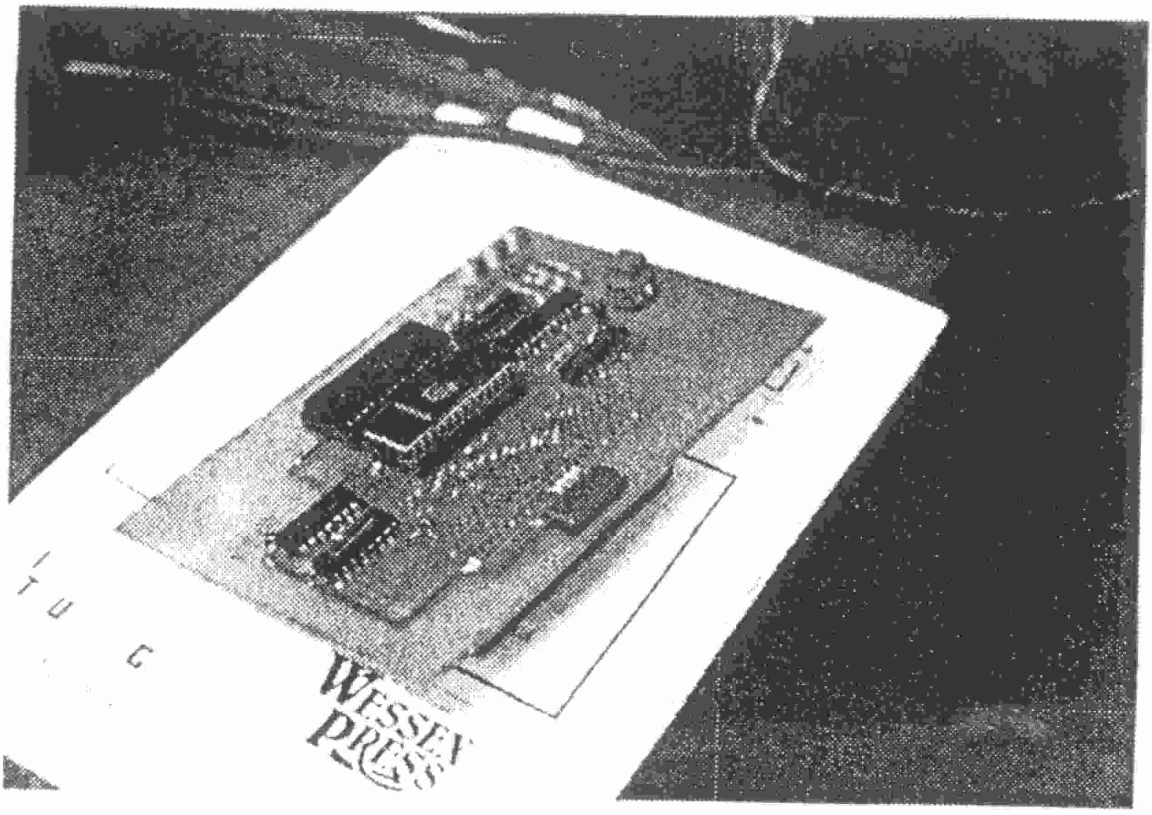
Descriptions of the pictures can be found on Page 29 ->



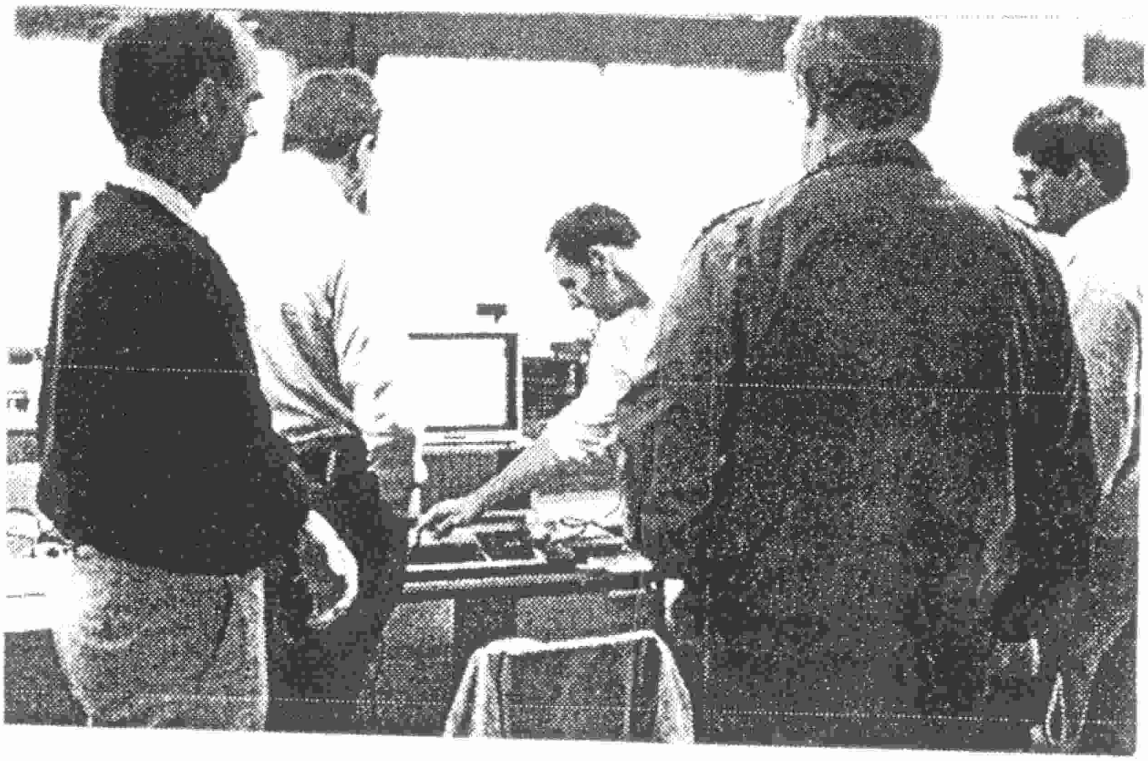
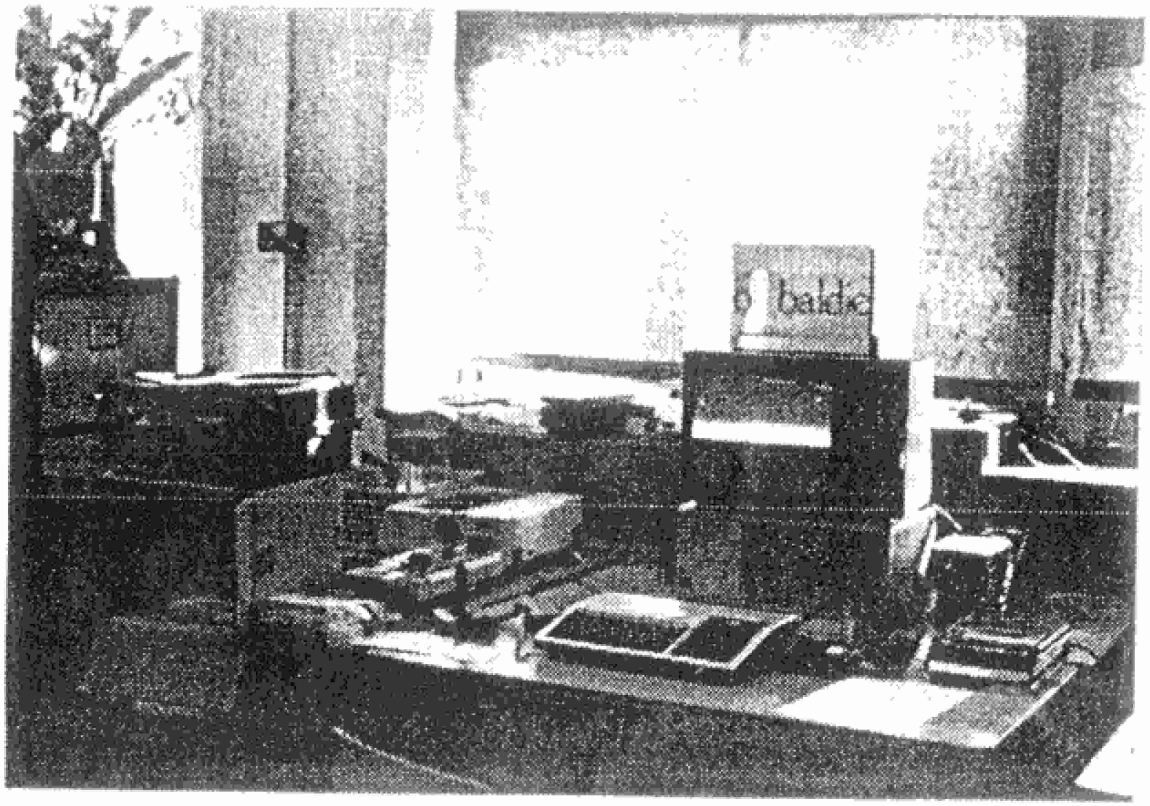
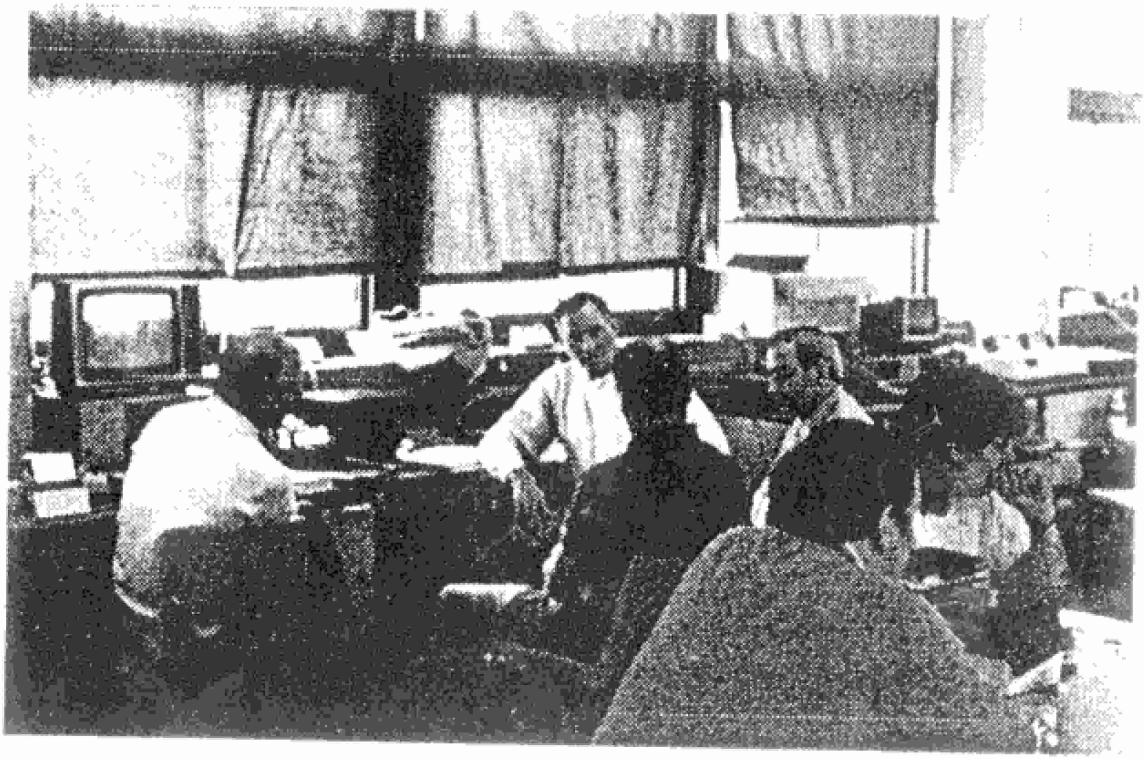
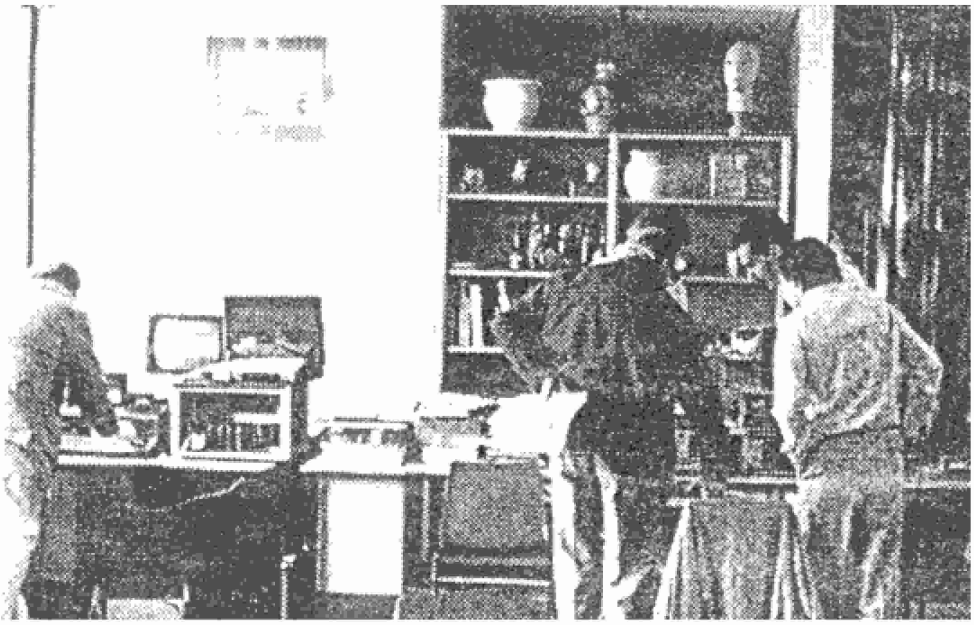
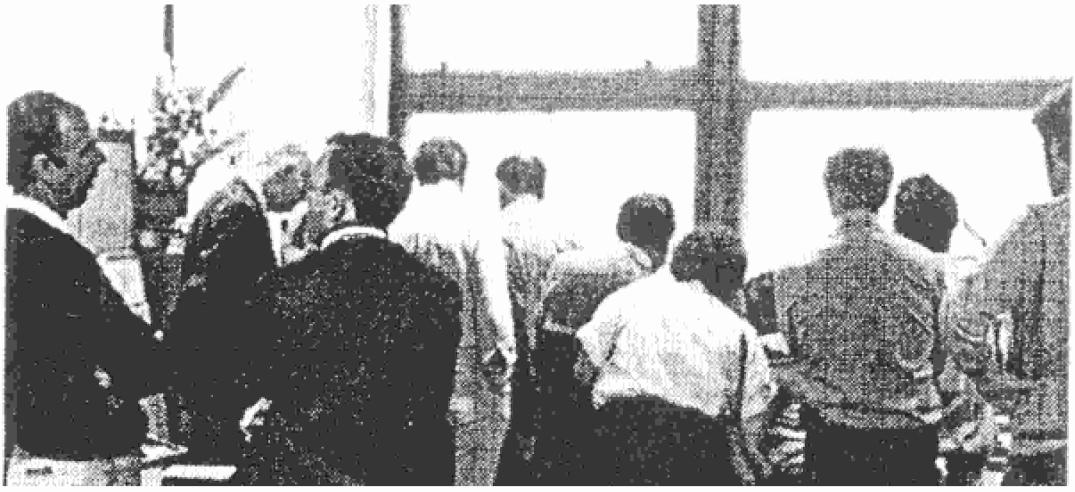


Image captions are on page 29 -->

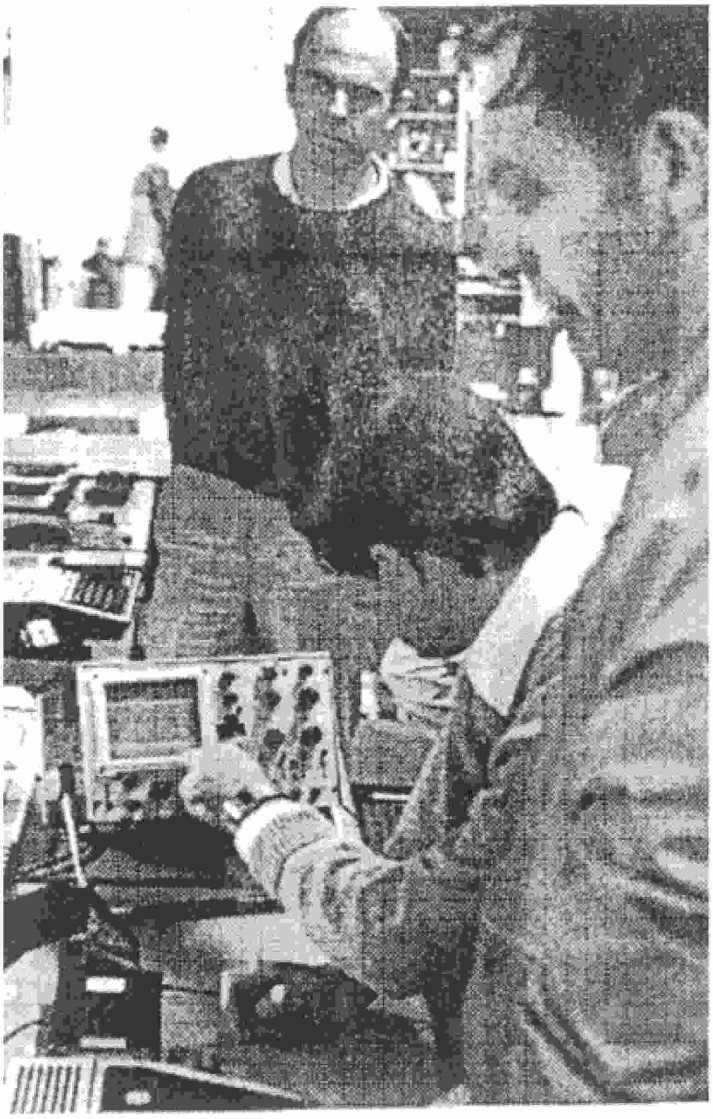


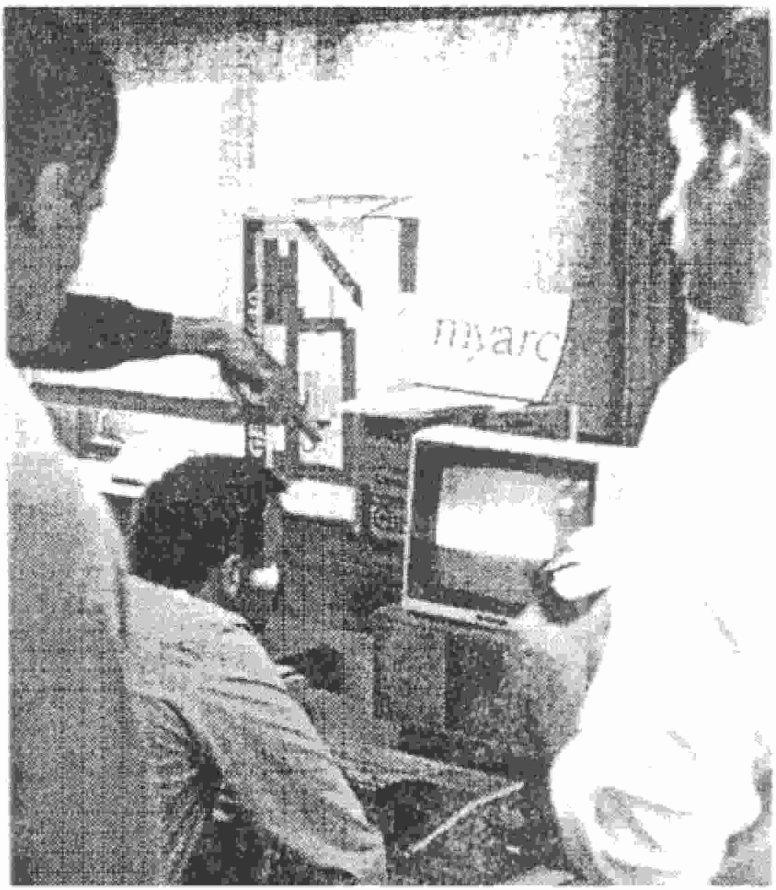


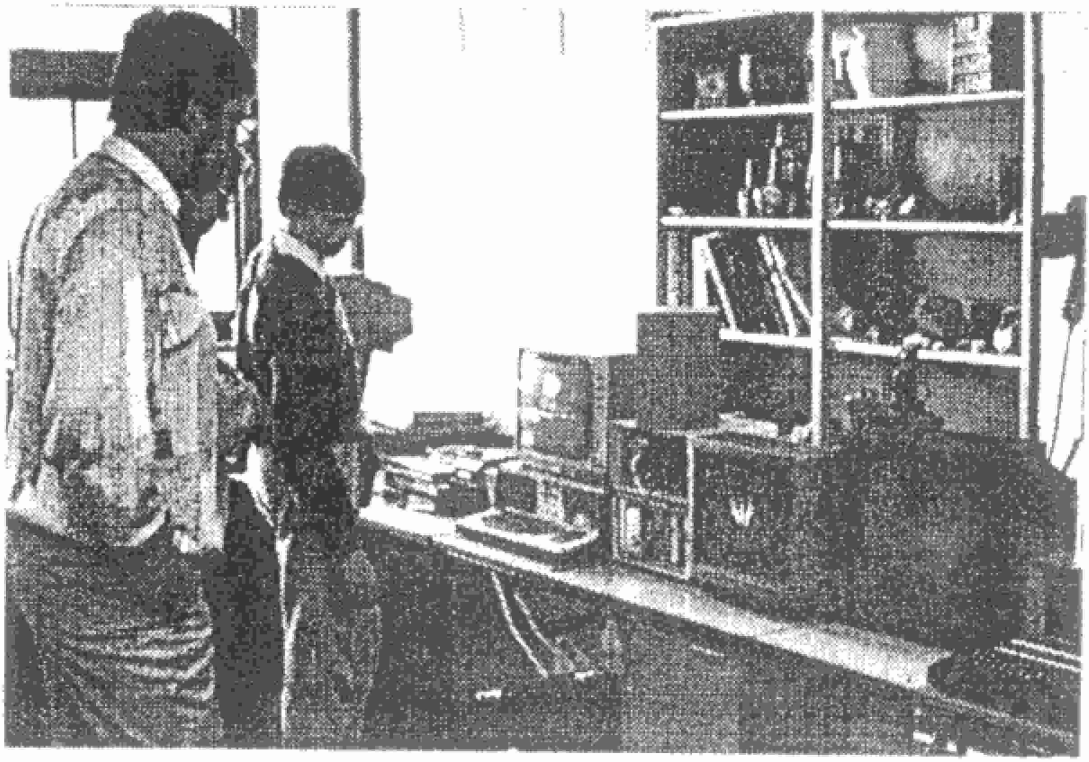


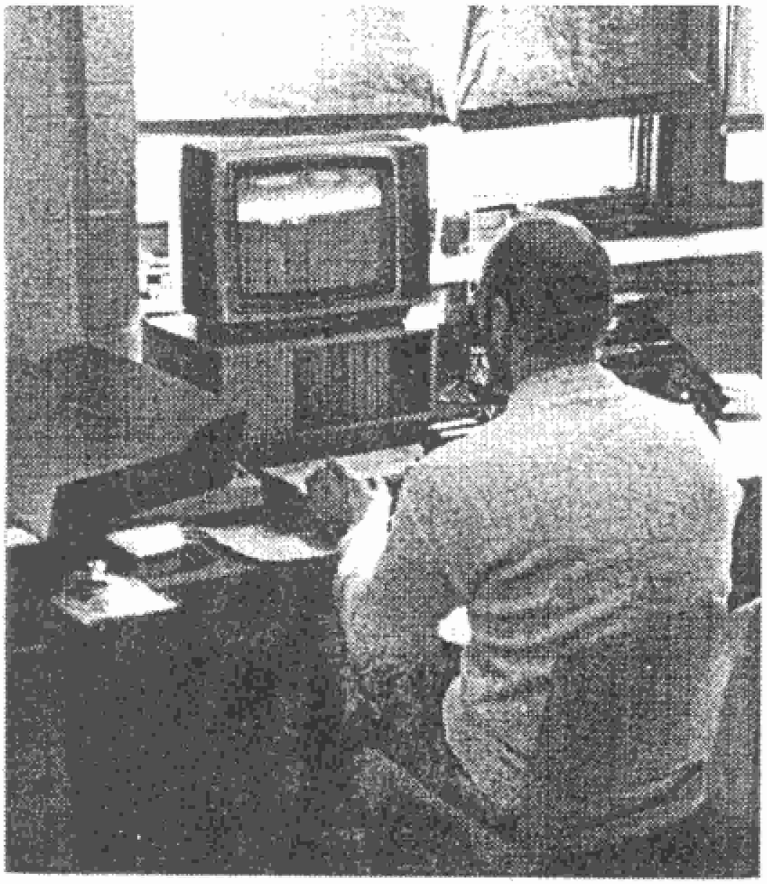


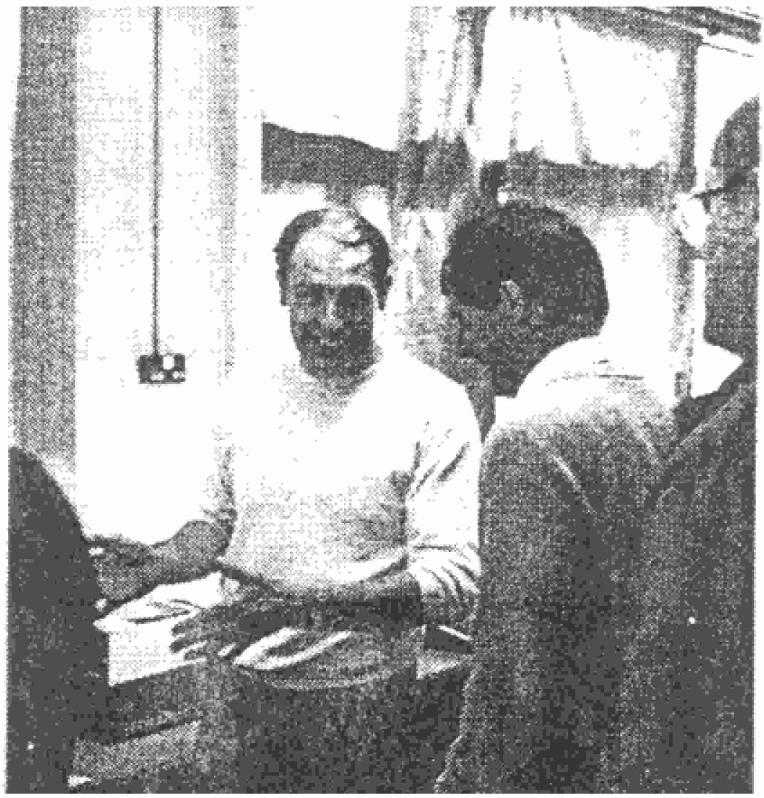
2022 note: the cross hatch pattern
is in the original magazine images
and not introduced by the modern scan.

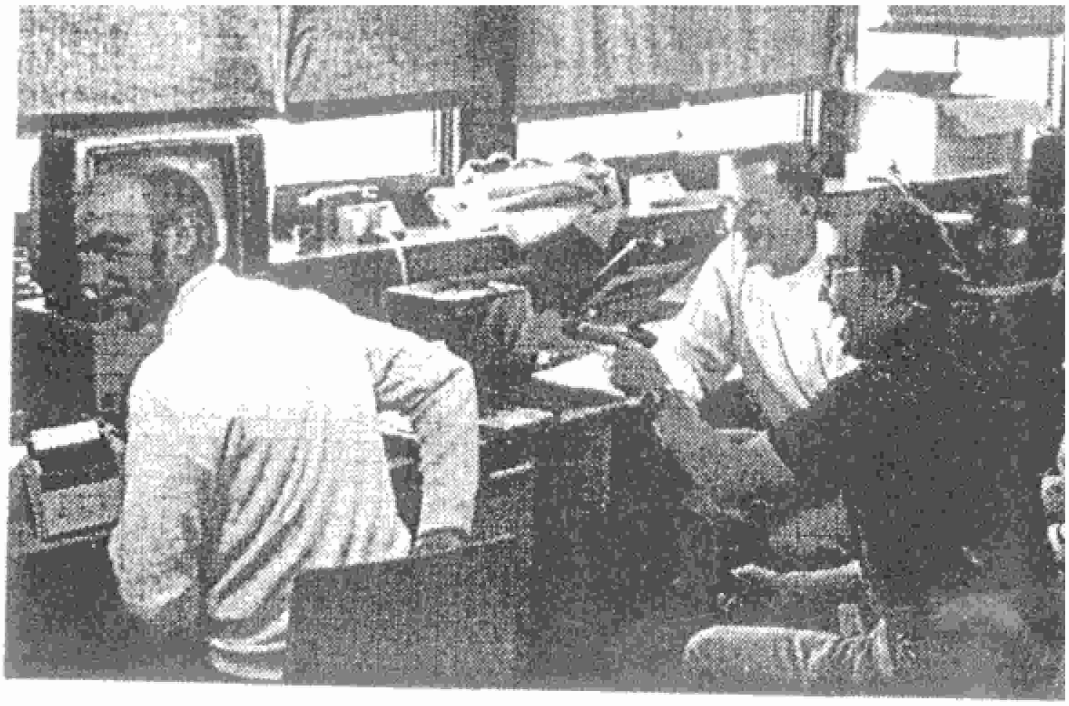


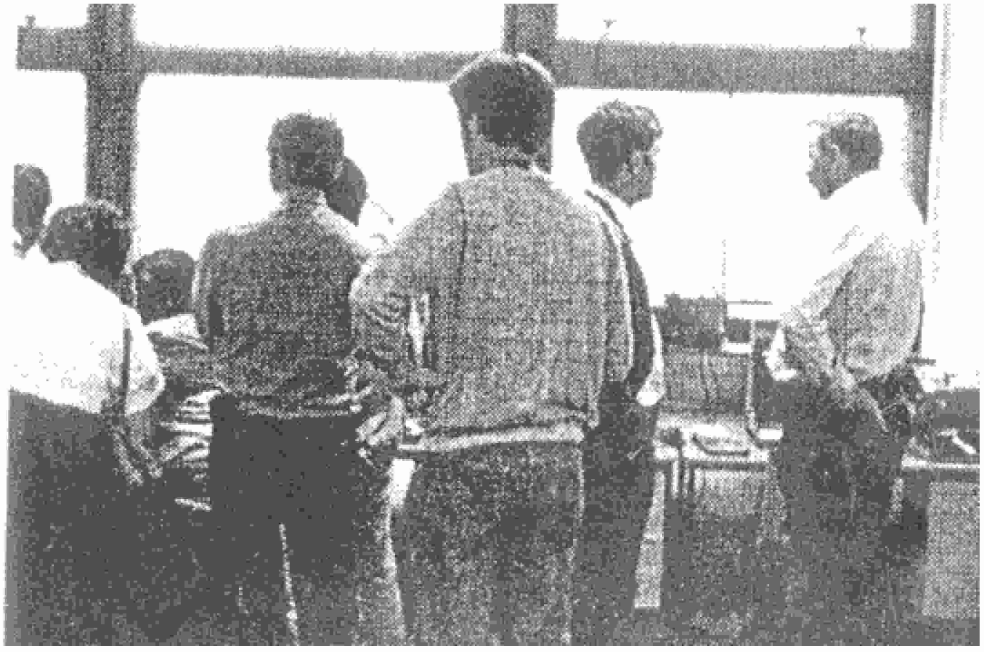












W O R K S H O P C A P T I O N S

Captions to the photographs taken at the Workshop on Saturday, September 5th., 1987, arranged in no particular sequence:

Page 20: Above: GEOFF TROTT's gizmo. Plug it into the side port and leave it to provide the answer to Life, The Universe, and Everything's Gorn Blank On Me Console.
Below: From left to right, GEOFF TROTT, RICHARD SIERAKOWSKI, GORDON PITT, (unknown), and COLIN HINSON watch as Gordon's system goes through its paces.

Page 21: Above: Extreme left of the picture catches TONY BOWDEN, JIM STRINGFELLOW and MIKE BRICK, while in the foreground JO ANN COPELAND holds court with MIKE GODDARD, MARK PLAYLE, IAN JAMES, and two other visitors. In the background, new subscriber RAY BROWN looks over the CORTEX USERS stand.
Below: Rotate your head for a view from the other side.

Page 22: Above: Deserted oasis, prior to the arrival of the hordes...
Below: A focus on TREVOR DAVIES with JIM, TONY, and MIKE, with JO ANN and another MIKE in the foreground.

Page 23: Above: GEOFF, COLIN, and GORDON wrestling with my system with a view to operating the MECHATRONICS EPROMMER on the ROMOX cartridges.
Below: A quick shot of the CORTEX USERS spread.

Page 24: Above: When the EPROMming starts, everyone wants to have a butchers...
Below: GORDON and RICHARD invite the visitors to look at what could have been a breathtaking MYARC demo if only Uncle Lou had got his finger out.

Page 25: Above: GEOFF, COLIN, and GORDON running a quick check on the system prior to setting up the EPROMMER.
Below: Colin and Gordon watch as Richard is mysteriously scanned by a rogue TI system, while Geoff's digit is poised for action.

Page 26: Above: PHIL MARSDEN watches CORTEX USERS (I think) operating their system.
Below: Ray and others watching a wire frame goblet being generated on a CORTEX system.

Page 27: Above: A rare moment of solitude as TREVOR DAVIES taps away.
Below: Gordon and Colin share a joke as Gordon indicates how big something is. I didn't know Gordon was an angler.

Page 28: Above: It's all too much for Trevor, as Jim, Tony, and Mike spot the deliberately accidental mistake.
Below: While the frenzy over EPROMming continues unabated, SCOTT COPELAND and Richard take time out to compare notes.

››END

A BASIC BOOK COLLECTION

By PETER KILLICK

Originally intended as an appendix to the subject index, this has now taken the form of a short overview because a bare listing of books doesn't help much, especially newcomers for whom I hope it may be of some use.

At the outset your main aim will probably be to be able to program in BASIC. There appear to be excellent arguments for not having to learn BASIC before going on to anything else, but strangely nearly all the authors of books on other languages are deaf to them and therefore assume prior knowledge of BASIC on your part.

TI would have you follow the route of "BEGINNER'S BASIC" and then HERBERT D. PECKHAM's "PROGRAMMING BASIC WITH THE TI HOME COMPUTER". Unfortunately Mr Peckham's book is far removed from "BEGINNER'S BASIC" in both style and ease of assimilation and in these respects it in no way comes near the better non machine-specific books that are available. There are hundreds of these - ranging from beyond compare to beneath contempt - but luckily you can simplify the whole choice process enormously by just getting "INSTANT BASIC - 2ND ASTOUNDING EDITION" by JERALD BROWN (pub. DILITHIUM PRESS). This represents American style simplified teaching at its absolute best in a book that bulges with very well chosen marginal artwork and jokey comments (which for a change complement rather than obtrude upon the text; definitely not to be confused with one of those dreadful "ethnic BASIC" books that looks like the author handwrote it on a duplicator stencil!).

Work through this with the assistance of "BEGINNER'S BASIC" to cover the machine-specific items like graphics, sound and punctuation and the "USER'S REFERENCE GUIDE" to illustrate the detailed differences of how the various commands and statements work in TI BASIC. Note that the "USER'S REFERENCE GUIDE" is in the main quite clearly written but it is a reference book and so you already have to know what subject you need to look up before consulting it; it is not intended to be any sort of structured course in BASIC programming.

Another kind of book that can be useful in the early stages is the general-introduction-to-all-things-TI type. Nearly all of these actually fail to teach anything because they try to cover too many subjects in not enough space or detail. There is, however, one that does succeed in providing a lot of very useful information and ideas for further development and that is "GETTING STARTED WITH THE TEXAS TI-99/4A" by STEPHEN SHAW.

Having battled through some or all of these books you will have become aware of procedures specific to the TI that need further detailed explanation and examples. There are two invaluable books that cover this stage: "MASTERING THE TI-99" by PETER BROOKS (I haven't paid him to say this, honest I haven't! PB) which is particularly good at showing how your TI manages things that are done differently on most

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other machines like file handling, logical operators and graphics plotting; and "PROGRAMMER'S REFERENCE GUIDE TO THE TI-99/4A" by CHERYL REGENA who is probably the world's best teacher with just the basic console.

From this point you can decide which way you want to go; perhaps this will be in the direction of TI's Extended BASIC (XB) module and not a plunge into the mists and murks of Assembly, c-99, Forth or Pascal (from which there appears to be no return!). An advantage of XB is that you still do not need to spend large sums expanding your system with disk drive, essential for the other languages.

Only one book appears to have been written specifically for XB and luckily it is an excellent one: "THE LAST WORD ON THE TI-99/4A" by LINDA SCHREIBER and published by TAB. Ignoring the obviously untrue title, all the other featres of the book are superb:

55 sample programs, each one fully flowcharted
(i.e., the structure is explained)

An explanation of what EVERY line in each program does
(most other books, if they explain at all, take giant hunks of the program at a time and add a useless blanket comment like 'routine for filling screen with 24 exploding sprite gorillas')

Explanations of all XB statements and commands starting at a very easy level, in fact much lower down the scale than you have already reached.

Your TI book collection can still be enormously expanded; TI books have even been written and published since the machine went off the market in November 1983, and there is the added advantage that many shops have the books at greatly reduced prices because of their supposed obsolescence. Here are some possible additions to your collection which all contain excellent and useful examples of TIB and XB programs; the usual advice is to try and learn by adding to them and adapting them to suit your own applications.

COMPUTE! PUBLICATIONS INC.

GUIDE TO TI-99/4A SOUND AND GRAPHICS (almost a required book on Extended BASIC, with thorough explanation of sprite control and the use of the Speech Synthesizer with the text-to-speech diskette).

GUIDE TO EXTENDED BASIC HOME APPLICATIONS (not strong on programming instruction but does contain a complete suite of home office application programs and a very useful section on the bete noire of many TI owners, File Management).

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CREATING ARCADE GAMES ON THE TI-99/4A (very good for furthering your programming knowledge, and you only need XB for one of the fourteen chapters).

FIRST BOOK OF TI GAMES (a lot of C Regena's work in here; two dozen BASIC games and 7 requiring XB).

HOWARD W. SAMS AND CO. INC.

TI-99/4A: 24 BASIC PROGRAMS (very well-written games and useful utilities; unusually it includes a quick-ref. list of all the TIB commands, statements and functions, essential if you've got a second hand rig and the original reference card is missing).

PRENTICE HALL INC.

PROGRAMS FOR THE TI HOME COMPUTER by STEVE DAVIS (with quite some help from well-known names in the TI field, resulting in a book containing nearly fifty really meaty programs).

The three publishers above are American, and their books have the great advantage, in my experience at any rate, that the programs are totally bug free. This is not always the case, regrettably! There are quite a few other books available from COMPUTE! and SAMS and I am sure that they will all be good, except for SAMS "TOOLKIT SERIES : TI-99/4A EDITION" which is very trite and really hardly enlarges upon "BEGINNER'S BASIC".

(As a general rule, shun any "series" books that include a TI "version" - the TI is so different from most home computers that it leaves the potboiler type author who sets his word processor to 'FindString/Oric Atmos' and 'ReplaceString/TI-99/4A' absolutely floundering.)

Finally, if your TI BEGINNER'S BASIC book is missing, an excellent and cheaper alternative (still available through ITUG) is the COLLINS STARTER PACK I & II (two books and two cassettes). My only gripe with this concept is that the books and cassettes are not properly interative but this remains a very undeveloped area with ALL computer and software manufacturers and does not detract from the fact that author P. K. McBRIDE has presented all the right information and in a very attractive manner.

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