

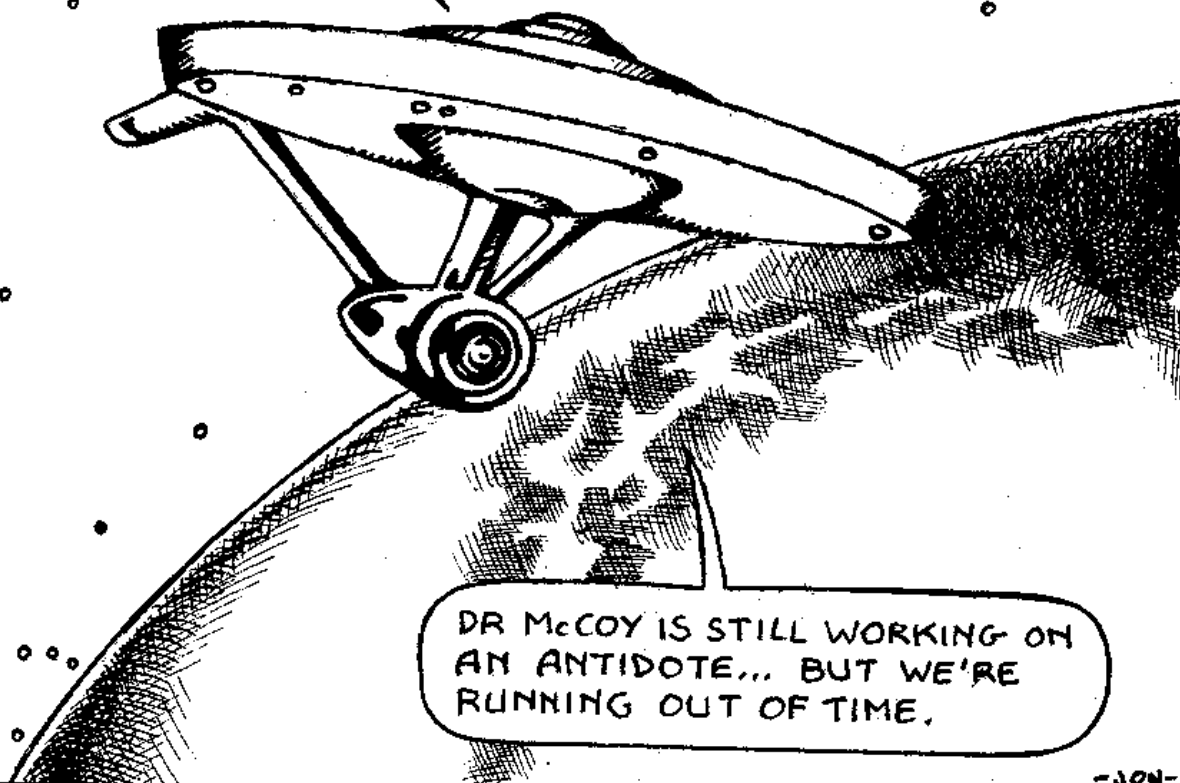
Vol 4 - No 9.

May 1991.

FORMAT

FOR SPECTRUM AND SAM USERS

CAPTAIN'S LOG, STARDATE 23506.2,
MR.SPOCK IS STILL LOCKED IN HIS
CABIN WITH A COPY OF FORMAT.



DR McCOY IS STILL WORKING ON
AN ANTIDOTE... BUT WE'RE
RUNNING OUT OF TIME.

-JON-

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SPECMAKER is constantly being improved and is the simplest Spectrum emulator for SAM. 1000s of programs work without the need for any conversion. Most other programs need only minor changes.

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NEWS ON 4

MORE SAM SOFTWARE

SAM gets its first Danish program this month. Dansoft are selling a Personal Budget Program written by past FORMAT contributor Villy Feltman. For more details contact Dansoft, Postboks 717, 2703 Herlev, Denmark. An English version is coming soon.

IBM PC users may also be interested to hear that SD Software are thinking of launching a package to allow you to read PC disc on you same. Just think, you can bring some of that work home with you.

SPACE INVADERS RETURN

Remember those waves of nasty Space Invaders that trundled back and forth across every home computer screen in the early '80s. Well hold on to your joysticks - them space creatures are on their way back.

Domark are planning a conversion of the new arcade game "Space Invaders '91" and hope to have versions for most home computers ready for Christmas. Could this be a sign of a return to 'playable' games? We can but wait and see.

PALACE & HEWSON SOLD

Palace Software, the company that caused all the controversy with the adverts for BARBARIAN, has been sold to the French company Leisure Holding.

The firm were part of the Palace Film & Video organization who sold the software company in order to aid their restructuring plans for the '90s.

Paris based Leisure Holding, who already publish software under the Titus label, will still run Palace from London.

Also this month, news has arrived that industry veteran Hewson Consultants have been saved from receivership. A new company, 21st Century Entertainment, has been formed and financed by local businessmen to take over Hewson's interests.

At the time of going to press it is unclear what will happen to Hewson's existing titles but Andrew Hewson (co-founder of the company way back in 1982) has been appointed as Managing Director of the new company.

JOYSTICK BOOM

Spectravideo, Britain's largest supplier of Joysticks for the home computer market, has added several new ranges to its list.

First it has signed an exclusive deal to distribute Acemore Joysticks in Europe. Acemore is one of the largest manufactures in the USA.

In addition they are about to launch a new range of British made Joysticks made by a new company called Logic 3.

As Spectravideo already handle Quickjoy - one of Europe's largest, this puts the company firmly in the number one slot.

NINTENDO BACK DOWN OVER PRICE FIXING

Free market forces won a victory in the USA this month as console giant Nintendo agreed an out-of-court settlement. Nintendo were accused, by the Federal Trade Commission and more than thirty state bodies, with artificially maintaining prices. Nintendo had threatened to cut off supplies to retailers who sold at discounted prices.

To prevent a trial, which could have cost over \$10million in legal bills alone, Nintendo have agreed a package of measures worth \$25million including a \$5 refund to anyone who purchased a console, in one of the thirty states party to the law suit, since 1988.

Nintendo are said to be looking at their pricing structures but still do not admit they've done anything wrong.

OCEAN DEAL FOR SAM

Sam Computers new software publishing division - REVELATION - has reached agreement with Ocean Software

to convert several of Ocean's existing titles to the SAM Coupé. Although it will be several months before the first title appears the deal does mark a major breakthrough for SAMCO. Ocean have long been seen as one of the market leaders that other companies follow into new machines.

The deal may also mean that new Ocean titles may appear on SAM later this year.

MORE FILING FOR SAM

A new Suffolk based company - B.S.E. Software - have announced their first package for the SAM Coupé. The disc contains two data filing programs each of which has slightly differing approaches to storing the data.

Supplied on 3.5" disc at a very reasonable price of £6 these programs won't burn a hole in your pocket.

B.S.E. can be contacted at 46, Anderson Walk, Bury St Edmunds, Suffolk, IP32 6QH. Tel: 0284 701104.

VIDEO TITLES

They say that video camcorders are the in things for the nineties and now Spectrum owners can add flashy title screens with this new package from Chris Brown.

The pack consists of three programs, VIDEOMASTER, BORDERS & BACKGROUNDS and DISC DISPLAY, all supplied on tape for £25 with easy instructions for transfer to disc or microdrive. The first two allow you to create screens and titles which can be recorded to your video while DISC DISPLAY allows you to link screens together to create a running display on your computer screen.

The programs are available direct from the address below or Chris Brown is also looking for agents to sell the program for him.

For further details contact Chris Brown, 4 Lavender Close, Witham, Essex, CM8 2YG.

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The Editor Speaks

Last month I hinted at the plans for a Summer'91 membership drive. Well the centre pages contain full details so as soon as you finish reading this editorial (you do read it, dont you?) turn to the centre and find out what's going on.

April has been a busy month for me and for FORMAT. The first All Format Show to be held outside of London took place at the National Motor Cycle Museum on the 21st. It was the best show I've been to in years and it was nice to meet so many people who neve make it to shows in London. I hope that Bruce Everiss will organize more away from the crush of London. Come on Bruce, how about one in Gloucester so I can get up at a reasonable time.

Sticking to the subject of shows I and a couple of the others from FORMAT went to the European Computer Trade Show in London (14th-16th). This was one of those posh shows with expensive stands and guys in expensive suits. SAMCO had a stand at the show and there seemed to be a lot of interest shown by visitors. In speaking to software companies the common reply to the question "When will you start releasing SAM titles?" was "When there is a demand". So come on SAM owners, start writing to software houses, make them realise there is a demand out here. It is no good asking your retailer, he doesn't produce the software - go to the source and badger the software houses.

Test quantities of the long awaited SAM Coupé Demo Tape have been going out since February but we are still having problems. Let me state from the start that I never have problems with tape loading on SAM, but it appears

many of you do. There has been nearly a 50% returns rate from new readers who were sent the tape and about a 20% rate from people who have had there machine longer. Several letters and many many phone calls have pleaded for disc instead of tape. Well, never let it be said that Bob is deaf to his readers pleading, cos he ain't. Discs will cost us extra, but we can also get far more on to a 800k disc than we could on tape, so after talking to a few of you on the phone I've decided to make the following offer - send a stamped addressed envelope so we don't have to pay the postage and we will bear the extra cost of the disc. So far this offer has received 100% acceptance from those of you I have spoken to on the telephone.

If you originally subscribed using the special offer form sent out with SAM then just take a small envelope (as near to the size of a 3.5" disc as you can find so the disc will be held firm) put a stamp and your address on the front and your membership number on the rear. All discs will be sent out within a few days of receipt. Overseas readers send two IRCs. If you are a cassette user (and I know there may be one or two of you left) then just drop us a line to confirm you want a cassette.

Next, recently someone sent me something to do with a SAM wordprocessor written in Basic. I've lost you name and address, so could you give me a ring in the near future to talk about the program.

Finally, remember to turn to the centre pages.

Bob Brenchley. Editor.

SHORT SPOT

By:- John Wase.

Not again! But yes it is: we're starting with a letter from Robert Brady. I really can't do better than quote it...

Dear John, I have written a procedure which I think will put an end to all the PRINT USING programs which seem to have been clogging up "Short Spot" for the last six months. It deals with negative numbers and rounding up or down. It is written for SAM. The listing is as follows.

```
10000 DEF PROC usin num, decplac, total  
      llen  
10010 LOCAL rnum, minus, decpointplac,  
      realdecplac, n  
10020 LET minus=(SGN num=-1), num=ABS  
      num  
10020 LET rnum=INT (num*10^(decplac+.5  
      )), rnum=rnum/10↑decplac  
10040 LET decpoint plac = INSTR (STR$  
      rnum, ".")  
10050 LET zz$=STR$ (rnum)  
10060 IF decpointplac=INSTR(STR$ rnum,  
      ".")  
10070 LET realdecplac = LEN zz$ -decpo  
      intplac  
10080 FOR n=realdecplac+1 TO decplac:  
      LET zz$=zz$+"0"  
10090 NEXT n  
10100 LET zz=STRING$(totalllen-LEN zz$,  
      " ") + zz$  
10110 LET          zz= STRING$  
      (totalllen-LEN zz$, " ") + zz$  
10120 END PROC
```

EXPLANATION:- The procedure "usin" takes three parameters - the number, number of decimal places, and the total length of the string. zz\$ is the final output.

Line 10020 checks if the number is negative, if so then "minus" is made 1, this line also makes "num" positive. Line 10030 rounds "num" up or down to the required number of places and stores it in "rnum". Line

10040 finds out where the decimal point is and stores its position in "decpointplac". Line 10050 makes "zz\$" the STR\$ of "rnum". Line 10060 adds the decimal point and lots of zeros to "zz\$" if "rnum" is a whole number. Line 10070 makes "realdecplac" the position of the decimal point in "zz\$". Line 10080 adds additional zeros to "zz\$" as necessary. Line 10100 adds the minus back on. Line 10110 inserts leading spaces.

Yours sincerely, Robert Brady. (PS I'll be 12 in June)

Yes, folks; the sting's in the tail. O.K; I've not tested it, but there appear to be some misprints in line 10110... But will it put an end to all the "PRINT USING" routines? I wonder...

Carol Brooksbank writes that she was very intrigued by Alan Cox's program - you remember; the one which drew an object on the screen and rotated it. It was in the April "Short Spot" Most of the jerkiness in Alan's program, writes Carol, is because it uses KEYIN. KEYIN always slows a program down, because it causes a recompilation of BASIC every time it is used. So it's not too difficult to set up an array holding the equivalent of RECORD TO Z\$(I). First DIM Z\$(24,180), then RECORD TO A\$ and LET Z\$(I)=A\$. BLITZ Z\$(I) will work, too. The actual dimensions of the array will, of course, depend on LEN A\$. The program is printed out in full, because there are a number of changes in it. A particular feature is displayed in lines 285, 360 and 400 which all contain Z\$(I+1) or something similar. As Carol mentions, these have to be Z\$(I+1) and Z\$(I+2) rather than Z\$(I) and Z\$(I+1) because I starts at 0 and there is no such animal as Z\$(0).

Here's the listing...

```
1 REM *****BLITZDEMO*****
2 REM ***CAROL BROOKSBANK***
3 REM ****ALAN COX'S IDEA***
10 SCREEN 1: CLOSE SCREEN 2: OPEN S
    CREEN 2,4
20 DIM Z$(24,180)
30 DIM X(12),Y(12)
40 LET X(1)=128,Y(1)=168,X(7)=128,Y
    (7)=8
50 FOR I=0 TO 23
60 FOR J=2 TO 6
70 LET ANGLE=PI*(72*J+3*I)/180
80 LET X(J)=128+80*COS ANGLE
90 LET Y(J)=120+40*SIN ANGLE
100 LET X(J+6)=256-X(J)
110 LET Y(J+6)=176-Y(J)
120 NEXT J
130 RESTORE 300
140 CLS
150 RECORD TO A$
170 FOR J=1 TO 15
180 READ A,B
190 PLOT X(A),Y(A)
200 DRAW TO X(B),Y(B)
210 LET A=A+6
220 IF A>12 THEN LET A=A-12
230 LET B=B+6
240 IF B>12 THEN LET B=B-12
250 PLOT X(A),Y(A)
260 DRAW TO X(B),Y(B)
270 NEXT J
280 RECORD STOP
285 LET Z$(I+1)=A$
290 NEXT I
300 DATA 1,8,1,9,1,10,1,11,1,12
310 DATA 2,4,4,6,6,3,3,5,5,2
320 DATA 2,12,3,8,4,9,5,10,6,11
330 FOR I=0 TO 22 STEP 2
350 SCREEN 2: CLS
360 BLITZ Z$(I+1)
370 DISPLAY 2
390 SCREEN 1: CLS
400 BLITZ Z$(I+2)
410 DISPLAY 1
420 NEXT I
430 GOTO 330
```

At last! Some Spectrum stuff - and on games, too. Bob Bates of Burton Joyce, Notts, bridges the gap with the following interesting information. In March 1988, FORMAT published a list of games which would not "snap" on the Disciple or +D. Whilst Bob has not been able to test all of them, with the ones he has tried, the problem

seems to centre on the printer routines, which modify some of the addresses in the CHANS area. The following programs will not snap successfully if the printer interface has been initiated, but will happily snap if it has not!

"Chequered Flag" "3D Star Strike"
"Lords of Midnight" "Valhalla"

Indeed, "Lords of Midnight" won't even load if the printer interface is active. Bob mentions that he did try poking the default values back into the CHANS area, but this didn't seem to solve the problem on its own, so clearly the thing is pretty complicated. Anyone care to comment?

Now a comment from Ettrick Thomson, a regular contributor, on sorting. Ettrick noticed that "Short spot" brought up the subject of sorting (looks like I'm going to get into deep waters soon), complaining that this is another thing that Beta Basic provided, but that SAM doesn't (maybe it will come in the new extensions Andy Wright is now writing, Ettrick). Mr Fellowes' program last month uses a "Shell-sort"; a version of the "Shell-Metzner sort" probably best described as a "Shell-shuttle sort" (try that after eight pints on a Friday night)! The three listings which follow will run Mr Fellowes' data under "Shell-sort" (SS), "Shell-delayed exchange sort" (SDE) and "Quicksort" (QS). Disappointingly, the plain SS wins, but if you supply 100 names of random lengths rather than the mere 30 from Mr Fellowes, then SDE and QS are both pretty quick, the latter being a bit quicker, whilst SS takes half as long again. Unfortunately, QS uses recursion, and whilst a Spectrum version is just possible, it aint 'alf tortuous. This test confirms Ettrick's general opinion that the "Shell Delayed Exchange sort" is a good general purpose choice for either Spectrum or SAM.

```
5 REM sortdemol - Ettrick Thomson
10 DIM n$(30,15)
20 DO : CLS : RESTORE 40: LET end=0
```



```

30 FOR n=1 TO 30: READ LINE n$(n):
   NEXT n
40 DATA Vera,Bob,Colin,Barry,Jerry
50 DATA Sally,Ken,Harry,Norman,Lenn
   ie
60 DATA Peter,Richard,Douglass,Nell
   ie,Larry
70 DATA Violet,George,Frank,Keith,J
   ohn
80 DATA Mick,Iris,Dennis,Terry,Shei
   la
90 DATA Debbie,Liz,Basil,Stuart,Gly
   n
100 PRINT "1. Shell Sort""2. Shell
   Delayed-exchange Sort""3. Quick
   sort""4. Stop""Press 1,2,3,
   or 4"
110 GET p
120 ON p:shellsort:shelldesrt:qsort:
   LET end=1
130 LOOP UNTIL end
140 STOP
200 DEF PROC shellsort
210 CLS :clock 0
220 LET t=30: LET c=t
230 LET c=INT (c/2): IF c=0 THEN GOT
   O 300
240 FOR e=1 TO t-c
250 FOR f=e TO 1 STEP -c
260 LET g=f+c
270 IF n$(f)>=n$(g) THEN : LET x$=n$(
   f): LET n$(f)=n$(g): LET n$(g)=
   x$: NEXT f
280 NEXT e
290 GOTO 230
300 show "shellsort"
310 END PROC
400 DEF PROC show q$
410 PRINT q$,"time: ";: clock 1: PRI
   NT
420 FOR n=1 TO 30: PRINT n$(n),: NEX
   T n
430 PRINT ""press a key to continue
   ": PAUSE
440 END PROC
500 DEF PROC shelldesrt
510 CLS :clock 0
520 LET t=30: FOR c=1 TO t-1
530 LET c=3*c: NEXT c
540 FOR c=c-1 TO 1 STEP -1
550 LET c=INT (c/3)
560 FOR z=1 TO c: FOR e=z TO t-c STE
   P c
570 LET x$=n$(e+c)
580 FOR f=e TO 1 STEP -c
590 IF x$<=n$(f) THEN : LET n$(f+c)=
   n$(f): NEXT f
600 LET n$(f+c)=x$
610 NEXT e: NEXT z: NEXT c
620 show "shell d.e. sort"
630 END PROC
700 DEF PROC qsort
710 CLS :clock 0
720 qkst n$( ),1,30
730 show "quicksort"
740 END PROC
800 DEF PROC qkst REF a$( ),lo,hi
810 LOCAL i,j,x$,t$
820 LET i=lo,j=hi,x$=a$((i+j)/2)
830 DO UNTIL i>j
840 DO WHILE a$(i)<x$: LET i=i+1: LO
   OP
850 DO WHILE a$(j)>x$: LET j=j-1: LO
   OP
860 IF i<=j THEN LET t$=a$(i),a$(i)=
   a$(j),a$(j)=t$,i=i+1,j=j-1
870 LOOP
880 IF lo<j THEN qkst a$( ),lo,j
890 IF i<hi THEN qkst a$( ),i,hi
900 END PROC
10000 DEF FN lo=DPEEK SVAR 632
10010 DEF FN hi=65536*PEEK(SVAR 632+2)
10020 DEF PROC clock q
10030 IF NOT q
10040 DPOKE SVAR 632,0: POKE SVAR 632+
   2,0
10050 ELSE
10060 LET lo1=FN lo,hi1=FN hi,lo2=FN l
   o
10070 IF lo1<lo2 THEN LET t=(lo2+FN hi
   )/50: ELSE LET t=(lo1+hi1)/50
10080 PRINT t DIV 60;":":t MOD 60
10090 END IF
10100 END PROC

Ettrick also supplied "sortdemo2"
which is better, except that it's
really just too long for "Short Spot".

Finally Istvan Ordog has sent me a
large parcel from Hungary which
contains full details of how to build
a clock add-on for the Spectrum. I've
not got any time left now (Bob must
have this text for the printer
tomorrow!), but if it's suitable,
we'll ask Bob if we can include it as
a separate article soon.

And that's really all, folks. Please
keep the contributions (especially the
really short ones) coming in to John
Wase, Green Leys Cottage, Bishampton,
Persnore, Worcs WR10 2LX.

See you next month.

```

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ALL FORMATS SHOW REPORT.

ONE MAN'S VISIT TO THESE EVER GROWING LONDON SHOWS

By:- Ken Elston.

On the 23rd of March I set off early in the morning for a visit to London and the latest All Formats Show. This was the first one I had been to in over a year and I was surprised at how the show had grown. By the opening at 10am the throng outside was getting bigger and bigger and everyone was eager to get inside and spend some money.

Now as many of you will know I have been an irregular contributor to **FORMAT** for several years, I have actually read **FORMAT** since issue 4 and completed my set with the back issues long ago. So I headed to the **FORMAT** stand to have a quick word with Bob Brenchley - before he got bogged down with all those technical queries he seems to be able to answer off the top of his head. While on the stand I picked up an advance copy of the April edition so I would have something to read as I laid in bed Sunday morning. Glancing through I caught note of the mention of Sinclair & Sam Computing in the news column so, eager as ever for more reading matter, I tracked down the Garner Designs stand and parted

with £1.75 of my hard earned cash for a copy of the new mag. This then is my review. All opinions are of course my own and I have tried to be as unbiased as possible.

The magazine I obtained was photocopied in black & white on A3 paper and then folded to produce an A4 magazine. The front cover had bold text hinting at the content of the mag and across the top a bar containing the words "THE MONTHLY MAGAZINE FOR SPECTRUM, SAM COUPE AND SINCLAIR QL USERS", there was also a block containing the claim to "Unsurpassed coverage of the Spectrum, SAM Coupé and Sinclair QL".

Inside the 48 page mag the layout was very confused and messy. Lots of different type styles used in gay abandon with articles switching from four columns to three columns at the turn of a page. On several pages there was an attempt to use shaded background to text, something a photocopy just can't reproduce without an awful lot of care. The same can be said of the photographs that the magazine attempted to reproduce, both of those on the News page were only just short of a black mess.

There were however a few good articles, although less than 50% of the pages are devoted to editorial (articles, news etc). There was a reasonable review of MasterDOS by a Paul Wallace, a very good article on the 128K Spectrum's sound chip by Garry Rowland and an article on RAM Paging on the Spectrums and SAM (also by Paul Wallace) which although interesting was just a rehash of things that have been printed before. Including a short article on Sam PD only 14 pages were devoted to articles on Spectrum or SAM - hardly the "Unsurpassed coverage" foretold on the

THE MONTHLY MAGAZINE FOR SPECTRUM, SAM COUPE AND SINCLAIR QL USERS
Sinclair & SAM
MAY 1 1987 PUBLISHED BY GARNER DESIGNS
COMPUTING

Unsurpassed coverage of the
*Spectrum, SAM Coupé and
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Reviews:

- MasterDOS reviewed
- TRACEY mouse digitiser reviewed
- QL keyboard interface

The Sound of Music

Daily Rowland's subscriber of Master
Keyboard shows Spectrum 128 users
how to get the best from the QL
sound chip.

ALSO:
RAM Paging
Public Domain
Latest news
All Formats Fair report
On-Line
Mail order bargains
QL Corner

New!

front cover. A little space was allocated to the QL and there was a promise of a Z88 column in future issues.

There was very little advertising in this first issue, unless you count the nearly 25% of the magazine that was taken up with promoting Garner Designs' other products. But I did notice FORMAT managed to get an advert into print (how did you manage that one Bob?).

So, what - if any - are my conclusions on S&SC. Given that this was a first issue, and therefore the publisher has had longer to produce it, I was very disappointed. I have read many small magazines, most produced on a shoe-string budget by small groups of enthusiasts, and some of these have been very well produced and very reasonably priced. Sinclair & Sam Computing on the other hand is rather amateurish in presentation and, at £1.75 per issue, somewhat expensive. Still, having said that, things might improve with time so it would be worth while picking up an issue at the next show and judging for yourself.



Next I sidled up to the SAMCO stand for a copy of their new QUIZBALL game. They were running a demo of the program which is, as its name cries

out, a quiz game with balls - as in snooker balls that is. Now I love quiz shows on TV (FIFTEEN TO ONE on channel 4 being my current favourite) and I have also spent many a long hour with a snooker cue in my hand. So I handed over my £11 and played the game as soon as I got home, which was about 10.30pm, so my question answering abilities were not on top par after the long day.

The idea of the game is to answer questions (you never guessed did you?) and if you get them right you pot a ball. There is no option for a 'hard' or 'soft' question but the time you have to answer gets shorter if you select the higher valued colours after potting a red. Speed is therefore the main requirement, it is not a game for slow readers and by 1.30am I had only managed a best break of 35. Still it is addictive, it is and 'intelligent' mans game (which lets me out) and at under £11 it is great value for money. By the way there is also a program on the disc that lets you create your own question files so you could make up some easy files for the younger kids to play.

Enigma had a large throng around their stand so I couldn't get close. Just up from them Steve's Software had their excellent mix of SAM utilities on show, I hope you did well Steve - your assembler is the one thing I couldn't live without (other than my SAM and Spectrum that is).

The ever excellent SAM SUPPLEMENT reached issue number seven at the show. This disc based mix goes from strength to strength and I always look forward to getting my copy. On the subject of DISCZINES (as the editor calls them) I did discover a new one at the show. Well new to me that is as they are already on issue nine. The enterprise goes under the name of FRED and comes all the way from Scotland. FRED #9 was packed with useful demos and at only £1 is a must for SAM owners.

Blue Alpha were present with their new Sound Sampler for SAM, I've done a

full review (which will either be somewhere in this issue or next months depending on Bob) so I will just tell you GET IT, it is well worth the money.

Back on the FORMAT stand Bob was acting as agent for SD Software who couldn't make the show due to other commitments. I was pleased to see SPECMAKER now handles Opus Discovery discs as well as DISCiPLE/PLUS D ones, it was a pity my Discovery passed away years ago. There were also some of the superb UNI-DOS systems available which, as you will know from my recent review, I consider to be the best thing to happen to the Spectrum for several years.

The S.C.P.D.S.A. stand was under siege, that is the only word for it. I was going to get a few discs but the crush was too much for a mere mortal like me. Next time I must make an appointment - got any spare Brent, or are you booked until Christmas 1993?

The show got very quiet after 1.30pm mainly because everyone wanted to get away before London came to a standstill with the Poll Tax Rally. Still it did mean I could get round to buying some disc labels and a printer stand that I was in urgent need of. I also managed to get back to the S.C.P.D.S.A. stand in the end.

All in all the show was well worth getting up so early for. I came home armed with lots of discs for SAM and a couple of tapes for my beloved Speccy (by the way, does anyone else find that their Spectrum gets the sulks if you play with SAM for too long? There must be female blood in mine because sulking just isn't the word for it). I also managed to pick up a couple of cheap books and an 80-track 5.25" drive (cased with power supply) for just £20. That in itself made the journey to London worth while. But I did miss getting a set of PC expansion cards because I was polite and said "after you" to some guy who took then me literally and picked up the last six. Still, it wont be long to the next show.

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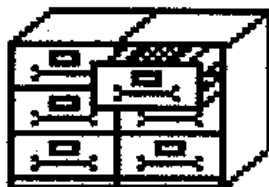
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NEV'S

HELP PAGE

By:- Nev Young.

I shall begin this month with a problem that I can explain but not fix. John Hall uses a Silver Reed Exp 400 printer with Filemaster. Everything works but when the underline is used during the printout it stays on until the printer is turned off. The problem is that Filemaster sends the Epson control codes and your printer isn't understanding all the codes.

The simplest fix would be to alter the program not to use special printer features at all, but it is protected so that you can not break in to make the change. (Well you could but its not simple enough to explain here, and one mistake and the program would be knackered).

Harry Connell also has a printer problem. This one is more common, and also harder to explain. In the ASCII table there are two codes that cause many problems. These are CR (Carrage Return, Hex 0D, Decimal 13) and LF (Line Feed, Hex 0A, Decimal 10).

Now in days of old, when things were simple, LF moved the paper up by one line, and CR moved the print head to the left margin. So the norm was to send CR LF at the end of every printed line. This is still the norm on IBM PCs and I always use this method (although the editor does not).

However some bright spark had a really good (or was it bad) idea. He thought that instead of sending CR LF he would program his printer so that when it saw a CR it would add the LF itself. As a result most printers now allow you to chose which you are going to do.

The problem comes when you want to do a CR but NOT a LF. Some programs do this, eg. the DTP by PGC and FLASH!.

They do it to make the printer overprint the same line. Now you will see that if your printer adds LF when it gets a CR then the printer will not overprint but will move the paper up by one line and print the next 'pass' of data on the line below where it is wanted. It is possible to send a code to the printer to tell it that when it does an LF to move the paper by nothing. So the LF added by the printer does nothing. But then you have to send another code when you really do want to move the paper.

If you rarely need to overprint then set your printer to give an LF by itself. However if like me, you need to use both then set your printer NOT to add LF. Now you will find another problem. When you print from the Spectrum it send CR but no LF so everything gets printed on one line.

There is a way out of this for DISCiPLE & PLUS D users, POKE @8 lets you enter the number of LFs to be sent after a CR so the system adds the LF but only when printing text. If you are sending binary data (ie POKE @6,1) then no LF is sent. That is how my system is set up and it works fine. Bob and I agreed to differ on this point as he firmly believes it is better for the printer to add the LF. [Too true. Ed.] In the end it is really a matter of personal choice.

Another printer problem this time from Ewen Wilby. He can not get his NEC PC- 8023BE-C printer to produce a screen dump with his DISCiPLE. Here we have problem of compatibility. To get a screen dump from the DISCiPLE you need to have an Epson FX80 compatible printer. The codes for graphics on the Epson are (in decimal) 27, 75, n1, n2, d1, d2, d3 etc. Here 27, 75 set normal density graphics. n1, n2 are the number of data bytes and d1, d2, d3

etc are the data bytes. Now the problem is that although you can alter the 27, 75 to any other codes you can not change n1 n2. Both n1 and n2 are 8 bit numbers between 0 and 255 giving a final number of $n1 + 256 * n2$. Fine, good, no problem.

Oh yes there is. You can change the codes but NOT the way it is done. Ewen's printer does it differently. It expects 27, 83 followed by 4 bytes instead of n1, n2. These 4 bytes have to be, not 8 bit values but, ASCII numbers between 0 and 9 to produce a number between 0 and 9999. Then you send the graphics data. The DISCiPLE won't do this.

Solutions are, switch the printer to Epson mode (if it has one), buy an Epson compatible printer or write your own routine. The small is beautiful program by Carol Brooksbank printed in FORMAT ages ago (issue 2/5) should be able to be modified. I don't have your type of printer but I think changing a few lines as follows may work.

```
45 LET D$= STR$ DOTS
46 IF LEN D$<4 THEN LET D$="0"+D$
200 LPRINT CHR$ 27;"S";D$(3);D$(4);D$
(1);D$(2);
```

I don't know how your printer will handle the margin. It may be as well to not bother with it to start with.

Another screen dump problem this time from Malcom Jones of Ladybarn (I think he's trying to take over this page). This time its SAM that won't do a dump. It does nothing he says. Quite right too I say. Before the DUMP command will work on SAM you have to load the dump utility from the SAMDOS disc. Or if you prefer you can use the SAM small is beautiful as published in issue 3/9.

Yet another non Epson printer is owned by N.Mason who uses a SAM with Lerm's SAMTAPE. But no way can he get a screen dump using the COPY command. I expect (but I do not know for sure) that SAMTAPE has the same problem as SPECMAKER with the COPY command - it expects an Epson printer. The Brother

does not recognise the graphics command ESC *. You will have to find the printer dump routine and poke the correct codes in. (If Lerm is reading perhaps you could drop me a line and I'll publish it). My own SPECMAKER emulator can be altered with a few pokes. As discovered by Alan Cox.

One of the three phantom SAM owners of Middlesbrough it trying to get a colour dump from FLASH! and he says it don't work. Well I can't afford such a thing as a colour printer but anyway FLASH! will only do B&W dumps as supplied. However if your printer is Epson standard then the Colour Dump software sold by P.B.T.Electronics for their Citizen printers should do the job.

Holy SH...ugar lumps another printer problem. (I really wanted to be a hairdresser).

Nigel Kettelwell is having probs with his Citizen 120D serial printer. And once more I'm groping in the dark. His problem is that the SAM sends the data to the printer faster than the printer can print it. The result is parts of the print out are lost.

With all peripheral devices you need a signal from the device to the computer to say that the device is ready to receive or send data. On the Centronics parallel interface this is the 'ready' signal on pin 11.

On a serial interface there are two standard ways of performing this function. The two methods are XON/XOFF and RTS/CTS. Briefly the XON/XOFF method works by the printer sending the XOFF character (ASCII 19) to tell the computer its buffer is full. When the buffer is empty the printer sends an XON (ASCII 17) and the computer starts to send once more.

SAM expects the simpler RTS/CTS method. Here the printer puts a voltage on pin 8 of the serial connector when it can accept data and removes the voltage when its buffer is full. If your printer can be switched into either mode then select

the correct one.

Tony Jeenes has made a very popular mistake with his SAM. He thought it was a Spectrum. To try and briefly state his query. He has started looking for variables in memory. Naturally enough he started at NVARs but couldn't find anything that looked like variables.

The reason for this is he was looking for Spectrum variables. SAM holds its variables in a very different way to make the machine much faster. The numeric variables start at an address calculated as PEEK (SVAR 135) * 16384 + DPEEK (SVAR 136) - 16384. But here you do not find the numeric variables. This is the start of a table of offsets 52 bytes in length. One, two byte long, offset for each letter of the alphabet.

If the offset is 65535 then there are no variables starting with that letter otherwise adding the offset to the address of the offset points to the first numeric variable of that letter. The format of these variables is one byte of Type/length, two bytes to add to the current address to find the next variable, or 65535 if there are no more. Then upto 31 characters that are the rest of the variable name, and finally 5 bytes for the floating point representation of the number or 25 bytes if this is the variable used in a FOR NEXT loop.

I think it is best seen by using the following procedure that will list all the numeric variables in memory. There is also a second procedure to do the same for the string variables.

```
10 REM procedures to list string/array & numeric variables
20 REM (c) Andy Wright.
70 DEF PROC nvars z0
80 DEFAULT z0=2
90 LET z1 = FN tpeek(SVAR 135)
100 FOR z2=z1 TO z1+51 STEP 2
110 LET z3=z2
120 DO
130 LET z3=z3+ DPEEK (z3)+1
140 EXIT IF z3>65535
150 LET z$=CHR$ ((z2-z1)/2+97)
```

```
160 FOR z4=1 TO PEEK z3 BAND 31
170 LET z$=z$+CHR$ PEEK (z3+z4+2)
180 NEXT z4
190 PRINT #z0;z$;TAB 10;: KEYIN "print "+z$
200 LET z3=z3+1
210 LOOP
220 NEXT z2
230 END PROC
240 DEF PROC svars z0
250 DEFAULT z0=2
260 LET z1=FN tpeek (SVAR 129)
270 DO UNTIL PEEK z1=255
280 LET z$=""
290 FOR z2=1 TO PEEK z1 BAND 15
300 LET z$=z$+CHR$ PEEK (z1+z2)
310 NEXT z2
320 LET z3=(PEEK z1 BAND 96)/32*3+1
330 LET z$=z$+"$ () $"(z3 TO z3+2)
340 PRINT #z0;z$
350 LET z1=z1+FN tpeek(z1+11)+16384+1
360 LOOP
370 END PROC
380 DEF FN tpeek(a)=PEEK a*16384+DPEEK (a+1)-16384
```

A few letters have arrived asking about the keywords PATH\$, MOVE, PTR and EOF. These are all only used with MasterDOS and are fully explained in the MasterDOS manual.

Briefly PATH\$ returns a string that is the name of the current sub-directory. MOVE moves an opentype file to another or to a stream. PTR returns the position within a random access file. EOF returns 1 if the last character of a file has been read.

You may recall I asked if anybody had tried and tested ways of calling basic from machine code. Yep you sure do. Thanks for all the replies. I'm still sorting them and should have something to publish soon.

Meanwhile thats all I have space for this month. So if you have any little problems send them to Format Help Line Megadodo Publications, Alpha Centuri. Or, if you really must, to me at:-

FORMAT Help Page,
70 Rainhall Rd, Barnoldswick,
Colne, Lancashire, BB8 6AB,
England.

SAM'S PUBLIC

MONTHLY LOOK AT PUBLIC DOMAIN SOFTWARE FOR THE SAM COUPE

By:- Brent Stevens.

If you ever wonder what its like here at the SCPDSA, then the answer you're looking for is BUSY. Every day, we get letters, orders or subscriptions, that all have to be processed on the same day. The letters are very supportive, and I thought I would include one here, to give an indication of how everyone has responded to the SCPDSA.

This comes from a certain Phil Glover. "Thanks for the SCPDSA form which I received with the SAMCO newsletter. The idea of the SCPDSA sounds very good. Even in these early days of SAM PD material, confusion is setting in, and if you can create some sort of order, that would be invaluable! Good luck, and I hope you get plenty of support."

Well, I must say, that SAMSational Software (our PD catalogue) has provided the answers as to what software items are where and the SCPDSA has been operating at full steam, getting orders sent out to the PD producers. As far as support goes, I believe that almost every active SAM Coupé user in the UK will subscribe, and quite a from overseas as well.

Other comments are along the lines of "Thank you for taking the initiative to produce a distribution service", or just "What a good idea". It is your support that has enabled the SCPDSA to become a new large component of after sales service to the Coupé, and I expect that the SCPDSA will be running for a long time to come.

When the SCPDSA was being set up, we took every suggestion put forward to us into account, and the form it has now taken, has been because of this. We have also made the definition of SAM PD to be slightly different from

normal, in that software is now exclusive to the producer, unless rights are distributed elsewhere. This means that any new disc you order, is most probably going to contain all new PD material, rather than the same stuff on almost every disc as happens with PD on some machines. This has been widely welcomed by producers and users alike, especially now that PD software is offering such improved value for money.

Enough about that. I know what you all want. Software reviews! So here's the latest low down on what's new.

FRED Issue 9 is now available, It is an SCPDSA award winner, and offers the usual high quality mix of programs. On this disc, is the informative FRED magazine part. This never has a scope quite near to that of FORMAT, but covers general news, and various editorial comments are added.

A game is included called Light Cycles. If you ever saw the Walt Disney film TRON, you should remember the light cycles that produced a jet stream, fatal to the opposition crossing it, or even to yourself. The graphical brilliance of the film is obviously left out, but the game is reasonably fast, with a line, representing the jet stream. Two other simple games, Fruit machine, and SUM game are included, as well.

The second part to "INSERT" is also featured, this used to be a successful Multiface POKE manual for the Spectrum. Now SAM users have no excuse not to finish an emulated game, especially as hundreds of games are listed, with around 1500 POKES. Who could have done all these? (Yes, me).

Unusual features often creep in to FRED disc, this time in the form of a

program called Encounters. Bob Brenchley loves this program, but won't let me tell you much about it, he says you should buy a copy of FRED and see for yourselves. Still I can say that it involves the Astronaut screen from the original SAM demo.

Yet another part of the popular Machine Code Tutorial is included, and the price is the usual £1.25. The order code through SAMSational Software is M-FRED009. Fred 10 should also be out by the time you read this and I will review it soon.

The Masters Of Magic (Neil Holmes, and Stuart Leonardi), have just started producing discs. They have made five available already including a much improved version of NO WAY BACK that first appeared in Issue 8 of FRED. This BASIC Shoot-em-up game now comes with more levels, and different graphics. Software like this is really beginning to prove how powerful good programming can be on the Coupé. You would be fooled into thinking this version was a machine code game. Even Amiga owners are now jealous of this power, as they have to spend tens of pounds on programs like AMOS, to do the same sort of thing.

Two more discs from M.o.M. feature a mix of Atari ST digitised screens & SAM artwork. The Best of FRED also is another disc, featuring exactly what what it says, but up to issue 8, and another disc is full of various demos, ranging from fast text scrollers, to graphics demos. More details next month, as the order codes and prices for these discs still have to be worked out.

SAM SUPPLEMENT produce a high quality disc mag. I haven't actually seen a copy yet, but I will try to get hold of some for review. They pride themselves on offering a same day dispatch service, (there is a 2 day delay in discs from the SCPDSA, as orders are forwarded to the actual producers), so these discs would have to be ordered separately. I promise to give the address as well if I get any discs.

OUTLET produce around 45 or so discs, with the occasional item of PD software included. They are soon to compile a disc with all the PD software they have produced, so watch this space.

A word of warning:- if, with exception of OUTLET, SAM SUPPLEMENT, and any other new producers who are mentioned in these reviews, you don't see a PD company who is in SAMSational Software, it has probably been left out due to the producer having a bad service or the software not being worthy enough. That is why the SCPDSA is here, to help out in areas like these. However it could also be because I don't know about them, so if you come across someone new (or you set up yourself) then let me know and I can tell the world about it in a future issue of FORMAT.

That's about it for this month. Next month, I will be doing a special on the new animation demos that have become available from FASTLINE and GUY MIDDLETON. I also expect to hear news on the developments of new TURBO, SAM DISK, FASTLINE, and RELOIN discs any day now. If you want any past items reviewed, let me know, and I will put them into print.

If you are writing software items then please contact FORMAT, or get in touch with one of the PD libraries / disc magazines. Then other people can enjoy your creation.

If you want to write to me the address is:-

Brent Stevens,
SCPDSA (FORMAT EDITORIAL),
42, Eaton Drive,
Kingston Upon Thames,
Surrey, KT2 7QT.

If you have any other problems, such as in orders, address them to Hannah Nieuwoudt, also at the SCPDSA. If you are not already a member then see the special offer form printed in last months FORMAT.

See you all next month.

SUMMER '91 CHARITY MEMBERSHIP DRIVE

INDUG now has over 3000 members on its records and that represents nearly 5000 FORMAT readers. This makes us, by far, the largest Spectrum and SAM Coupé users group in the world. But as large and wide spread as we are there are still T H O U S A N D s of SAM and Spectrum owners who are not enjoying the benefits our group has to offer. They are missing out, and YOU need to help them.

How! By persuading them to become INDUG members - thats how. Why keep it a secret? Spread the news about INDUG and FORMAT. Make your friends happy and make new friends by spreading the word.

This month sees the start of our SUMMER'91 Membership Drive and we want to see all of you out there introducing new members. No excuses now, the Spectrum is the most widely owned machine in the UK (and is very popular in many overseas areas as well) and SAM is the logical heir to the crown. Every single FORMAT reader, will know someone with a Spectrum or SAM who is currently underprivileged - because they are not INDUG members YET...

Its not only the new members that will be the winners. The SUMMER'91 Membership Drive will also benefit charity. What we are going to do is place £1 for every new member, introduced using the form on the next page, into a special Building Society Account. All the names and membership numbers of those who introduce new members will go into the computer. At the end of September we will, at random select a lucky winner who will be able to nominate a charity of their choice to receive the entire content

of the special account - including all the interest accrued in that time. In addition the lucky winner will also receive a LIFETIME subscription to INDUG and FORMAT, just think - no more renewal notices EVER.

And if that's not enough to get you all out signing up new members then we have something else in store. Each month, one lucky introducer will win a YEARS FREE SUBSCRIPTION. And, if even that wasn't enough, there will also be a running league table of people who introduce the most new members - we wont tell you what the prize is going to be now, but keep reading FORMAT and you will find out soon.

So what do you need to do. Well the form printed on the next page can be photocopied as many time as you like. This page could also be copied so people know what's going on. Write your name and membership number in the space provided and hand the form to your friend. All they have to do is fill it in and send it to us together with their membership fee and we do the rest - no work on your part.

Over the coming months we will keep you informed on how the Membership Drive is going and will pass on some ideas of how to contact Spectrum and SAM users in your area, keep reading.

Finally a word to those who are subscribing through this membership drive. You too could be one of our luck prize winners. Just copy the form and write your name, postcode and the words NEW MEMBER in the box provided. In the meantime we look forward to welcoming you to INDUG and FORMAT.

Jenny Bundock. Membership Secretary.

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SAM SAMPLER

THE SOUND SAMPLER FOR THE SAM COUPE

Reviewed By:- Ken Elston.

OK, so I've had my Coupé now for well over a year, pretty happy with it, got my S.P.I. interface and printer connected with my 1 Megabyte memory expansion via my SamBus running under MasterDOS, what else could I possibly need?

These were my thoughts as I approached London at the end of March for the All Formats Show. Having paid my money and found the SAM Computer Village in its usual spot, I was wandering around the various stands - FORMAT, Sam Computers, GM Software etc., when all sound was obliterated as Whitney Houston blasted out of a loudspeaker nearby. What the...? was the immediate reaction, which turned to one of interest when it became obvious that the sound was originating from a Coupé on the Blue Alpha stand.

This was the official launch of the 'SAM Sound Sampler', the second Coupé product from Blue Alpha Electronics of Swansea. After being suitably impressed by the demonstrations of the sampler, I handed over my £42.00 (Introductory price - see advert elsewhere in this magazine) and scurried home to see what I could do with it.

The sampler comes (as most Coupé interfaces) in the usual white plastic box, but with two 1/4 inch jacks at the rear labelled 'Audio In' and 'Audio Out'. There is also a blue microphone supplied for direct audio input, although other sound sources can be connected.

Not being one for reading the manual first, I connected up the interface into my SamBus, switched on, put in the disc and pressed F9. After the initial titles, a control screen appeared, informing me that I had 1Mb of external memory and just over 300K

free internally (on my 512K system). Great, so now the real test. Putting the system into record mode, I exercised my dulcet tones in a song from my youth. However, upon attempting to replay the sound, all I had was a hiss and a faint reproduction of my voice. After a few attempts, I found that by putting the microphone very close to my mouth, the Coupé could now speak (or sing) in my own voice. Not only that, but the sampler software enables you to play the sampler faster, slower, forwards, backwards, or only the first part of it!

Right, having established that the sampler worked, I now set about connecting to my hi-fi. Now was the time to read the manual, which indicated that I might have to alter some screws inside the box (it also said that I might have to do this to make my microphone work in the first place - I must have been lucky!). With trepidation I opened the two retaining screws. The adjustments inside were as described in the manual, and with the aid of the 'monitor' function and the clock setting program, I adjusted my sampling rate, and adjusted the input so that the sampler could cope with my stereo.

So here goes, I recorded as much as I could (about 75secs on a 1.5Mb machine) of one of my favourite pieces into my Coupé. Upon replaying it, I found that as the input sound had been at a much louder volume than my voice via the microphone, I now had a much better quality sample. Saving this to disc (it saved as 4 files spread across 2 discs - someone do a hard disc please) I then set about trying to access my sample from BASIC.

The manual gives several pokes which enable any of the selections from the

sampler program to be selected from BASIC on a pre-recorded sample. The sample is loaded as a simple CODE file if you do not have any external memory, and via a special (and very complicated) loader program supplied on the diss if you are also using external memory.

All in all, the sampler is an excellent product for those people who enjoy messing about with sounds, or who simply would like realistic sound effects from their computer. It is easy to use and the sounds are of a quality unrivalled on any home computer that I have heard, with the possible exception of the AMIGA. A very valuable addition to your SAM Coupé, and one which apparently is

being used by SAMCO (or so their latest newsletter assures me) in their future games.

The Sound Sampler is available from:-

Blue Alpha Electronics,
Ynysforgan Farm,
Morrison,
Swansea,
SA6 6QL.

RRP £49.99 + £2 p&p.

STOP PRESS:- The 'Masters of Magic' are producing demos with the sampler. The new flight simulator from SAMCO will use samples produced with this sampler. All of Edwin Blinks' future demos will be produced using this sampler.



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ASTRUM+

NOW AVAILABLE
FOR THE
DISCIPLE
AND
PLUS D.

Reviewed By:- Carol Brooksbank.

I have met quite a number of Spectrum 48K machine code packages in my time as a reviewer. Most of them are competent, easy-to-use programs which I am able to review favourably, but until this week there has never been one which would have persuaded me to desert my old favourite, LASER GENIUS. Now I have come across such a one - ASTRUM+. The program has been around for a year or two, but Bradway have just brought out the DISCIPLE/PLUS D version.

My first reaction to the Editor/Assembler was disbelief - there are no line numbers. You can't write source code without line numbers, I thought. But, in fact, you can - very easily. And very quickly, too, when you don't have to worry about them.

Want to insert a line somewhere? Just insert a blank line and write on it. No worries about using an odd-numbered line and then having to renumber.

But what about block manipulation - surely you cannot copy, move, delete or save blocks, with no line numbers to specify the start and end? Again, you can. There are various ways of doing it. You can either insert a block marker at the end of the block (the "-" is used as a block marker), put the cursor at the start of the block and instruct the program to manipulate the lines from the cursor to the marker; use two block markers; or put the cursor where you want to start and define so many lines from the cursor as a block. Fig.1 shows source code, with block markers, and

```

START          00000000  DELETED
               00000000  MOVE
               00000000  COPY
               00000000  JOIN
               00000000  WRITE
               00000000  MISTAKE
               00000000
               00000000
               00000000 ; line feeds
               00000000
               00000000 ; bottom
LAB 15         00000000
               00000000
               00000000 ; send codes
               00000000
               00000000 ; "*"
               00000000
               00000000 ; graphics "*"
CAPS ON,     MODE OVER,   COL 1
FILENAME:    SHADDUMP.1   PAGE 0
    
```

some of the pull-down menus which access the program's options.

The program is very strong on block manipulation, in fact. Pre-written library routines can be joined into your existing source code, and any section of your source can be saved out to disc for use as a library routine. Routines can also be linked in at the assembly stage. The program can handle about 8K of source code, but when writing longer programs, you save the first 8K to disc and then start a new 'page'. The last page must have END in it somewhere, and the assembler then assembles the whole program up to and including the page with END in it, fetching each page from the disc in turn.

There is an excellent search option. Strings of any length can be found anywhere in the file, including notes, and there is also a search and replace option which works very quickly. An INFO menu handles what the publishers call a rag-bag of options which won't fit in anywhere else - a display of memory used and remaining, number conversion between hex, denary, binary and octal, and tape backups.

As well as all the usual opcodes and pseudo-ops, the editor/assembler recognises some extra commands of its own which call up predefined macro command routines. Below is a listing of a normal section of source code, opening stream 3 and sending bytes to the printer.

```

ORG 50000
START LD A,3
      CALL 5633 ;print to printer
      LD A,27 ;send codes for ESC
      RST 16
      LD A,65 ;"A"
      RST 16
      LD A,6 ;line feeds of 6/72 in.
      RST 16
      LD HL,22496 ;bottom left-hand
byte of screen
      LD B,128
      LD C,8
LAB15 PUSH BC
      PUSH HL
      LD A,27 ;send codes for ESC

```

```

RST 16
LD A,42 ;"*"
RST 16
LD A,4 ;graphics "*", mode 4 (
can be 5 if your printer supports it)
RST 16
LD A,64 ;bit-image data
RST 16
LD A,2 ;for dots per line
RST 16
LD B,24

```

The listing below shows the same piece of source code, but this time using the program's macro-commands CHAN 3, which opens the stream number given, and VDU followed by the bytes to be sent to the current stream. These commands generate exactly the same bytes when assembled as the usual commands did. There are a number of these macro commands, including some calling floating point calculator routines and some using the DOS hook codes. They not only shorten the source code, but make it easier to read and follow.

```

ORG 50000
START CHAN 3
      VDU 27,65,6 ;send codes for ES
C, "A",6 = 6/72 in. line feeds
      LD HL,22496 ;bottom left-hand
byte of screen
      LD B,128
      LD C,8
LAB15 PUSH BC
      PUSH HL
      VDU 27,42,4,64,2 ;send codes f
or ESC "*" 4=graphics "*" mode 4 (can
be 5 if your printer supports it)
      LD B,24

```

The editor uses a 256 character line, with the screen scrolling as you write, so copious notes can be added. Sadly, with such a long line, only 8 characters are set aside for labels. When the program is assembled with screen listing, the individual source code lines are given up to 8 screen lines each, so that all notes are readable.

All listing can be sent to screen or printer, or assembly can be speeded up by using no listings. The program can stop at each error, or list errors and

continue to assemble. Object code can be saved to disc or not as required. Object code can be RUN, to test it, but only if it is ORG to 56000, the address at which object code is stored during assembly.

The accompanying monitor comes in three versions, loading at 26000, 46000 and 58000 respectively, so that there is a version suitable for examining code in any area of memory.

The monitor includes a disassembler, outputting in decimal or hex, and printing to screen or printer. Memory dumps, block fill, search for a byte or a word, single or double peek and poke, and a memory dump are all available.

When testing code, slow running and single step execution are available, and the command PANEL brings up a continuously updated display of the register status, the contents of the address pointed to by each register, the flags, and the top of the stack. The values of registers may be altered directly, and numbers can be fetched from and sent to ports. Breakpoints can be inserted to help in debugging.

The program also comes with a source code creator. Like the monitor, it comes in three versions to reside at different addresses so that you can choose one which does not clash with the code being examined. Unlike the disassembler, it inserts labels at all addresses called - labels being "L" + the hex address - and prompts you for the start and end addresses of areas known to be data bytes which are then listed as bytes and not as nonsensical instructions. The source creator output is always in hex, and like all the program's output may be sent to screen or printer.

As a final bonus, the program comes with a 'library' file of useful Spectrum addresses and labels which can be used in your own programs, saving a lot of looking up; a program to convert the output of several other popular assemblers so that their listings may be used in ASTRUM+ ; an

installation program, which I did not need to use with the PLUS D and an Epson printer; and a program for copying ASTRUM+ files from disc to disc.

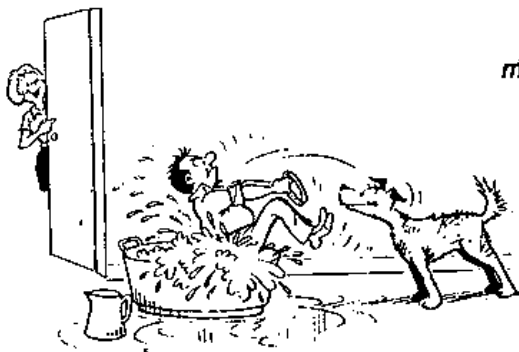
Only two things about this package disappointed me. I should have liked longer labels - 16 characters out of the 256 character line perhaps, instead of 8. And I could not find any way of printing the symbol table as an orderly list. On screen it is fine, but when you send the symbols to the printer. there seems to be no attempt at tabulation and the result is a bit of a mess.

But those two points apart, I felt really comfortable with this package. You can even turn off the auto-formatter which lines up the labels and mnemonics in your source code, and use it as a simple word processor. The manual is clear and simple, and the error messages make sense. It has all the facilities needed to write and test code, without filling up the memory with all sorts of extra options that you will hardly ever use. It comes in versions for Microdrive, Opus Discovery, and now for DISCiPLE/PLUS D. If you are just venturing into machine code, or if you don't feel quite at home with your present assembler/monitor, take a look at this one.

ASTRUM+ is available from:-

BRADWAY SOFTWARE,
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THOUGHT SPOT.

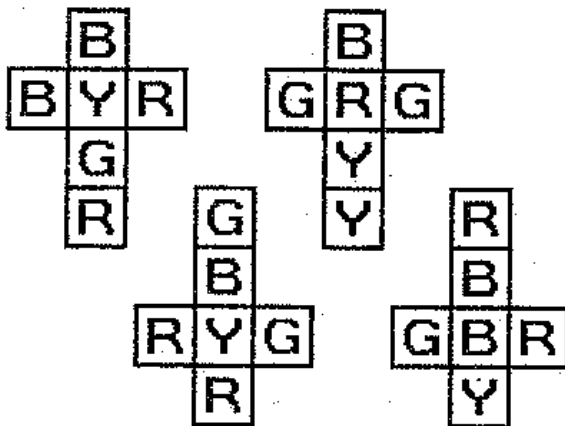
By:- Jeremy Cook.

Welcome to this month's Thought Spot. As ever there is a selection of puzzles of various kinds with which you can exercise your brain muscles.

First we have the by now famous, or should that be infamous, prize puzzle, for which the winner is awarded ONE YEARS FREE SUBSCRIPTION to FORMAT! So, even if it looks a little daunting to start with, have a think and give it a go - you might surprise yourself!

PRIZE PUZZLE NO.7: POWER CUBES

You have four cubes, which you know are capable of generating power if stacked on top of each other correctly. Each cube is coloured differently with four colours as shown the diagram below (Red, Green, Blue, Yellow). You also know that power is only obtained when each side of the stack has all four reference colours. Since you can't afford to make mistakes, write a short program to find for you one set of correct orientations for the cubes.



Having stacked the cubes, and used all the power, you find that a different set of orientations gives you another load of power. How many times can power be obtained from the cubes? (this is optional). (Note that the orientations have to be different,

and not just rotations of the stack). Send your program to arrive by 1st July 1991 to:-

Jeremy Cook (Thought Spot),
Wainbody House,
135 Kenilworth Road,
Coventry,
CV4 7AF,

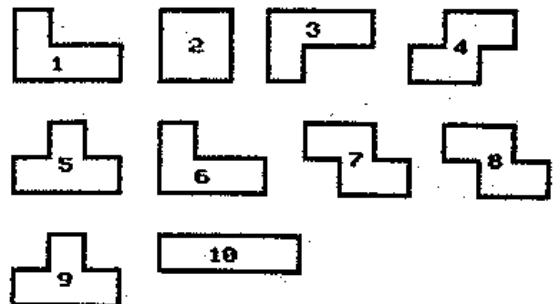
(Note that discs and cassettes will only be returned if an SAE is enclosed).

Even if you can't do all of any particular puzzle, I am still interested in what you have done and what ideas you have.

Next, some easier problems for fun.

TETRIS

Tetris is an old computer game where "a variety of different shaped blocks fall, one by one, from the top of the screen or playfield. You can manipulate these shapes left/right and rotate them before they land at the bottom of the playfield. The idea is to create complete horizontal lines of blocks across the playfield. When one of these unbroken lines is completed it disappears, and any blocks above fall into the now vacant area." The aim is to create as many complete lines as possible, especially with the placing of just one shape. What is the best way of placing the shapes shown below in the order given?



ANAGRAMS

Can you think of one-word anagrams for the words below. For example, given MONDAY, the answer is DYNAMO.

- | | |
|-----------|-----------|
| 1. ASSORT | 5. ETHICS |
| 2. CLERIC | 6. LANCED |
| 3. DECREE | 7. WOLVES |
| 4. HATTER | 8. SLOPPY |

DRAW YOUR OWN CONCLUSIONS

Consider these statements:-

No misers are unselfish.

None but misers save goldfish bowls.

It is not difficult to draw the conclusion that:-

No unselfish people save goldfish bowls.

What conclusion, if any, can you draw from the following groups of statements? (Note that the truth (or otherwise) of the statements is of no concern)

- 1a. Everyone who is sane can do arithmetic.
- b. No lunatics are fit to serve on a jury.
- c. None of your sons can do arithmetic.

- 2a. No experienced person is incompetent.
- b. No competent person is always blundering.
- c. Mr. Smith is always blundering.

- 3a. No boys under the age of 14 are admitted to this school as boarders.
- b. All the industrious boys have eight brothers.
- c. None of the day boys learns Greek.
- d. None but those under 14 is idle.

- 4a. I own no birds less than eight feet high.
- b. There are no birds in this aviary that belong to anyone but me.
- c. No ostrich lives on coconuts.
- d. No birds, except ostriches, are eight feet high.

Those were Taken from "Puzzles and Teasers for Everyone" compiled by Darryl Francis.

This is the end of another Thought Spot. If you are thinking "How the hell are you supposed to do that?", or "Yawn, that was easy, I think I'll calculate the square root of -1", then perhaps you should tell me, and I might be able to make some improvements. If nobody tells me anything I shall assume that what I'm producing is liked by most people.

- * - * - * - * -

SOLUTIONS TO JANUARY'S PUZZLES

Letter Sum:- 14952
29522

44474

Complete the word:-
finesse, florescent, flunkey, fatuous, figment, ferruginous, felicitous, foreboding, fraternize, facetious.

Pentominoes:- nothing to say here, except that I will probably come back to this problem.

= = = = =

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By:- Paul Rigby.

This month sees the second part of the Distant Voices series of views and opinions of the future of thinking-computer-games (adventures, RPGs, etc) plus another game review. This is the third game review featured within the Corner. What do you think? Is this what you wish to see? Would you rather see the space devoted to more general discussion or other features? Write and tell me, via the editorial address at the front of the mag. I will only know what you want to see if you write to me, so come on - put pen to paper.

REVIEW

GAME:- GORDELLO'S DEMISE

SUPPLIER:- TARTAN SOFTWARE,
61 BAILIE NORRIE CRESCENT,
MONTROSE, ANGUS,
SCOTLAND, DD10 9DT.

PRICE:- £2.95

The sequel to the wonderful Gordello Incident (GI), Gordello's Demise (GD) is rather frustrating for those adventurers who've struggled through GI. Why? Because it turns out that GI was nothing but a dream! Aaarrgh!

The task is to kill Dr Gordello and destroy his Clonotron. GD, created using Tom's own adventure system, re-uses the now classic horizontally split screen. Clone AA is the "super-clone". You can give Clone AA individual commands and, once Clone AA has met another character, can CALL and control that secondary character (eg: gardener, strongman, locksmith).

This is an excellent method of

creating an adventure that fully utilises NPCs in an interactive manner as well as providing an adventure that can never be accused of being linear. In addition, each character has individual skills. For example, the boxer will be an ideal character to open certain, stubborn doors while the gardener will be your vote to do a spot of digging. How Tom has squeezed all of this into 48K is beyond me!

Because of the advanced use of interactive characters the variety and type of puzzles are extended beyond the norm.

You are also given part three of GI on the flip side of the cassette plus the solution if you have never played the original and don't wish to purchase it. My advice, though, would be to buy the original and buy the sequel if you want to fully appreciate the storyline.

There is no doubt that the author, Tom Frost, is the most inventive and innovative independent adventure author around. He confirms that status with the release of GD. While not quite having the oomph of the original, Gordello's Demise is still a worthy sequel.

DISTANT VOICES

Without further ado let's hear what the legendary Issac Asimov has to say about computer games and the future of gaming - the so called "virtual realities". Asimov, the creator of the "Three Laws of Robotics" and the Foundation series, isn't certain he likes the idea of artificial realities, "It may not be a

possibility," he says, "[and] I don't approve... we already do that in a small way. People get drunk so that they can live in a world that is a little different from what they must face when they're sober...anything which offers you a more exciting life, but then forces you to return to your own, is going to leave you more dissatisfied than before."

Steven Brust (Jhreg) sides with Dr. Asimov, but for different reasons, "I would venture to guess that 95+% of our fantasies we would not care to live. I've done it when I've been on trips, wandering around an airport with my briefcase and my three-piece suit, bored out of my skull, and I pretend to be a spy. I wouldn't want to be a spy; I can't think of anything more boring. And when it isn't boring it scares the s..t out of you. You simulate reality until you have someone shooting at you and you can smell the smoke, and hear the bullet go by your ear, and at that point it becomes too real."

For better or worse, however, simulated realities may well be the direction in which we're headed. Douglas Adams (Hitchhiker's Guide to the Galaxy, etc) suggests that for artificial environments to be effective, "...we'll have to wait for the advent of usable artificial intelligence, whereby the machine is really able to understand what you intend and what you mean."

Roger Zelazny (Nine Princes in Amber, etc) sees the necessary technology on the horizon, "...an upcoming generation of devices of the CAP scan variety (Computerised Automated Psychophysical) will hit it big within the next decade," he says, "combining gaming with computerised electroencephalography and biofeedback, both for pleasure and educational purposes."

The result? What Harry Harrison (Stainless Steel Rat, etc) calls the "living wall", "In the home it's incredible to see! You're right in the screen there...they'll tie that in

with molecular memories and everything will get smaller and smaller...You'll never leave your house! [You'll have] interactive games played by a number of people across the country, like Dungeons and Dragons, maybe with graphics from videodisc or CD. The hardware isn't here yet, but it will be and all these things will get cheaper."

There is also no doubt but that computer entertainment will branch out into other fields as well. Alan Dean Foster (Spellsinger, etc), "I can see all kinds of possibilities for interaction." says Foster, "At Disneyland for instance. We're all so used to going on pre-programmed rides: you go on a ride, it starts and it ends, you get back on it and it does the same thing again...[now] there could be a system that would provide variable rides, so that when you got back on the same ride, something different happened."

Foster also predicts that future movies will use more computer animated characters, "To completely simulate an artificial environment the people in Hollywood want to do it for real." Asimov thinks that robots may be the way to go instead (surprise, surprise), "It may be that we will be using real robots as comedians in movies. Think of the pratfalls they could take!" "With all due respect to Isaac," Foster replies, "he's prejudiced on behalf of his robots. With computer animation you have no expense in the sense of building anything."

As usual, however, Asimov has the last word, "A robot in a movie might not be as funny as a human being, but he'd be funnier than a cartoon character."

Next month I'll cover the third, and final, part of Distant Voices with more input from Brust and also Jerry Pournelle, SF writer and regular contributor to serious US mag, Byte. Look out for another game review, too.

Until then, may-you-never-begin-a-

MONEY

MANAGER

By:- Carol Brooksbank.

Welcome to the final part of Money Manager. We start with the last option 6 sub-menu, CHANGE CALENDAR ENTRIES, menu9.

```
6300 LABEL menu9: CLS : LET togflag=0
      : CSIZE 8,16: PRINT " CHANGE CA
      LENDAR ENTRIES MENU": CSIZE 8,8:
      PRINT : PRINT : PRINT INVERSE 1
      ;"1) CHANGE MONTHLY PAYMENTS": P
      RINT : PRINT INVERSE 1;"2) CHANG
      E OCCASIONAL PAYMENTS": PRINT :
      PRINT : PRINT : PRINT INVERSE 1;
      "9) EXIT TO PREVIOUS MENU"
6301 PRINT AT 20,0; INVERSE 1;"Keys D
      /E toggle funds display": PRINT
      AT 21,0; PAPER 6; PEN 0;"SELECT
      OPTION NUMBER OR D/E"
6302 LABEL men9: GET opt
6303 IF opt=0 THEN wrongoption: GOTO
      menu8
6304 IF opt>2 AND opt<9 THEN wrongopt
      ion: GOTO menu9
6305 IF opt>9 AND opt<13 THEN wrongop
      tion: GOTO menu8
6306 IF opt>14 THEN wrongoption: GOTO
      menu9
6307 IF opt=13 OR opt=14 THEN LET men
      no=9:toggle
6308 GOTO 6300+(opt*10)
```

Its exit option is:- 6390 GOTO menu6

```
11695 DEF PROC changeinstr
11700 CLS : PRINT "You will be asked f
      irst if the new payment is to b
      e made on the same date as the ol
      d. When the date is changed, th
      e delay while the amendments are
      made will be a little longer."
11705 PRINT : PRINT "You will be asked
      for the existing payment
      details. They must match the ca
      lendar entry EXACTLY, with dat
      e, amount, payee's name and
      upper/lower case letters matc
      hing. Please view the calendar
      if you need to check these detai
      ls."
11710 PRINT : PRINT "You will then be
```

```
asked for the amended details."
11715 PRINT : PRINT "Do you need to vi
      ew the calendar?"
11720 yes_no
11725 END PROC
```

changeinstr is an instruction screen, very similar to others that we have written. It returns with Y\$ holding Y or N, depending on whether you need to view the calendar to check the exact form of the entry to be changed.

```
11730 DEF PROC changemonth
11735 LOCAL D: LOCAL Q: LOCAL QS: LOCA
      L N: LOCAL N$: LOCAL B: LOCAL J:
      LOCAL Z: LOCAL AS: LOCAL X: LOC
      AL X$: LOCAL H
11740 CLS : PRINT "You will be prompte
      d for the date (day of the mo
      nth) on which the present payment
      s are made."
11745 PRINT : PRINT "Please reply "0"
      " when you have no more payment
      s to change."
11750 PRINT : PRINT "You will then be
      asked whether the date is to ch
      ange, and for the new payment d
      etails."
11755 PRINT : PRINT "There will be a d
      elay while the changes are made
      - longer if the date is changing.
      "
11760 presskey
11765 CLS : PRINT "Any months in which
      the present payment did not app
      ear will be listed, but the new
      payment will be entered into tha
      t month."
11770 PRINT : PRINT "Use MENU 6, DELET
      E ENTRIES and DELETE OCCASIONAL
      PAYMENTS if the payment is no
      t to be made every month."
11775 presskey
11780 CLS : PRINT "Is the new payment
      to be made on the same date of ea
      ch month as the present one?"
11785 yes_no
11790 IF Y$="N" THEN GOTO newmondate
```

```

11795 CLS : INPUT "Date of present ent
ry? (0 IF FINISHED) ";D: I
F D<>INT (D) THEN CLS : PRINT "Y
OU HAVE NOT ENTERED A PROPER D
ATE":presskey: CLS : GOTO 11795
11800 IF D=0 THEN GOTO endmonchange
11805 LET B=D
11810 INPUT "Amount in figures - no #
or p signs - which is paid";A:
LET Q=A
11815 INPUT "Payee? - EXACTLY AS LISTE
D IN CALENDAR";P$: LET Q$=P$
11820 INPUT "New amount in figures - n
o # or p signs";N
11825 INPUT "New payee";N$
11830 RESTORE 105
11835 LET J=1,H=1
11840 WINDOW 6,28,15,16: PRINT PAPER 6
; PEN 0;"CHANGING THE DATA"
11845 DO UNTIL J=13
11850 LET A=Q,P$=Q$
11855 READ A$,Z
11860 IF D>Z THEN LET D=Z
11865 findate
11870 LET A$=STR$ A+"↑"+P$+"\ "
11875 LET X=INSTR(6,G$,A$)
11880 IF X=0 THEN WINDOW 1,31,1,13: PR
INT AT H,0;"THIS ENTRY DOES NOT
APPEAR ON ": PRINT G$(1 TO 3);"
";G$(4 TO 5): LET H=H+2: GOTO 11
890
11885 crossoff
11890 LET A=N,P$=N$,year=year+A
11895 putincal
11900 LET D=B,J=J+1
11905 LOOP
11910 WINDOW : CLS : GOTO 11795
11915 LABEL newmondate
11920 CLS : PRINT "You should first de
lete all the monthly entries whi
ch are to be changed."
11925 PRINT : PRINT "You will then be
asked to enter new monthly entri
es, and you should enter the
amended versions."
11930 PRINT : PRINT "The new entries w
ill be made forevery month. Use
MENU 6, DELETE ENTRIES and DELET
E OCCASIONAL PAYMENTS if there
are any monthsin which payments
are not to be made."
11935 presskey
11940 delmonth
11945 entermonth
11950 LABEL endmonchange
11955 END PROC

```

This is one of the program's more

complex procedures. It handles changing calendar monthly entries, perhaps because the amount to be paid needs altering, as when mortgage interest rates change.

It is in two distinct parts. If the date on which the payment is to be made is to change, the program jumps to 11915, and the entries are treated as an entry to be deleted followed by a new entry to be inserted. So this part is pretty straightforward, an instruction screen, followed by delmonth and entermonth.

If the date is to be the same, it would be a terrible waste of time to go through the calendar, fetch the dates, delete the entries, and then go through the calendar again, fetching the same dates to enter a new set of payments. So if the date is not changing, you are asked for the date, the existing payment details, and the amended details.

In the loop starting at 11845, the old payment details are transferred to A and P\$, the variables always used to find, add or delete calendar entries. If the details do not appear in any month, a message is printed on screen, and the program jumps forward to enter the new payment. If the payment is there, crossoff is called to delete it and deduct the value from year. The new payment details are then transferred to A and P\$, the amount added to year and putincal is called to enter it. The program then loops back to do the next month.

```

6310 changeinstr
6312 IF Y$="Y" THEN GOTO menu6
6314 changemonth
6316 update
6318 GOTO menu9

```

The option which calls the two previous procedures is very simple. If you need to view the calendar it jumps to menu6, otherwise it calls changemonth, update and then returns to menu9.

```

11960 DEF PROC changeocc
11965 LOCAL X: LOCAL A$:

```

```

11970 CLS : PRINT "Please enter the mo
nth, first three letters in ca
pitals, in which the present p
ayment is made."
11975 PRINT : PRINT "If no more paymen
ts to change, enter "END"."
11980 POKE SVAR 618,8: INPUT "Month? -
END if finished";A$
11985 IF A$="END" THEN GOTO endchangeo
cc
11990 INPUT "Date?";D:findate
11995 CLS : PRINT "Please enter the am
ount paid, and the payee, exac
tly as it appears in the cale
ndar."
12000 INPUT "Amount paid?";A
12005 INPUT "Payee? - as listed in cal
endar";P$.
12010 LET A$=STR$ A+"↑"+P$+"\ "
12015 LET X=INSTR(6,G$,A$)
12020 IF X=0 THEN CLS : PRINT "THIS EN
TRY DOES NOT APPEAR ON THE DAT
E GIVEN":presskey: GOTO 11970
12025 crossoff
12030 CLS : PRINT "Is the new payment
to be paid onthe same date?"
12035 yes_no
12040 IF Y$="Y" THEN GOTO gotdate
12045 CLS : PRINT "Please give the dat
e on which the revised payment
is to be made."
12050 POKE SVAR 618,8: INPUT "Month? -
first three letters";A$
12055 INPUT "Date?";D
12060 findate
12065 LABEL gotdate
12070 INPUT "Amount in figures - no #
or p signs";A
12075 INPUT "Payee - ONE WORD, NO SPAC
ES";P$.
12080 LET year=year+A
12085 putincal
12090 GOTO 11970
12095 LABEL endchangeocc
12100 END PROC

```

The procedure which changes occasional payments is not so complex. It calls first for the existing details. If they are not found on the date given it jumps back for them to be re-entered, unlike changemonth. This is because monthly payments may be missing legitimately, if the payment is made over 10 months of the year, like Community Charge monthly payments, but if an occasional payment cannot be found with the details

given, there must be a mistake.

If the payment is found, crossoff is called. If the new payment is to be on the same date, this procedure simply jumps past the prompt for date in the section calling for the revised details.

```

6320 changeinstr
6322 IF Y$="Y" THEN GOTO menu6
6324 changeocc
6326 update
6328 GOTO menu9

```

This is the option which calls the previous procedure. Strictly speaking, changemonth and changeocc need not have been procedures, because they are only called once each. But we have only 10 lines per option with the sub-menus unless we change the convention we have been using. Making these routines into procedures enables us to keep the program structure constant.

```

6400 CLS :screencal
6405 presskey
6410 GOTO menu6

```

The VIEW CALENDAR option simply calls the routine used to view the calendar which we wrote in the set-up part of the program.

```

6500 printcal
6505 GOTO menu6

```

An even shorter option, again using an old procedure, which gives a printout of the full calendar.

```

6600 CLS :disptotals
6605 WINDOW 0,31,9,18
6610 PRINT "Your year's bills total":
PRINT "#";year: PRINT
6615 IF I$="W" THEN PRINT "#"; week:
PRINT "is set aside for the bill
s on pay day"
6620 IF I$="M" THEN PRINT "#"; month:
PRINT "is set aside for the bil
ls on pay day"
6625 PRINT : PRINT "Do you wish to tr
ansfer funds?"
6630 yes_no
6635 IF Y$="Y" THEN WINDOW :transfund
s

```

This last menu6 option allows you to check on the amount set aside on pay day for the calendar bills, and transfer money between the funds if you wish to do so. It is on menu6 because it is after calendar changes that you may need to look again at the 'assigned' fund state.

And there we have it - that is the end of MONEY MANAGER BASIC. But, I hear you say, what about main menu options 7 and 8? That is up to you. In a program like this, there are bound to be things you would like the program to do that I haven't thought of - keep a running account of car expenses, perhaps, or a separate income and expenditure accounting for a money-making hobby. Whatever makes you say "if only the program did so-and-so", options 7 and 8 are there to let you transform your "if onlies" into BASIC. And do share your ideas with the rest of us through FORMAT's letter page - or even write an article about them.

So all that remains now is to put the program and loader together. Save the finished version of MANAGER for a moment. You will need two new tapes or discs - three if you mean to make backup copies. Disc users should FORMAT the discs and put SAMDOS2 or MasterDOS on them.

Load the LOADER program we wrote in part 1 (oh so long ago). Disc users should SAVE "AUTOMONEY" LINE 10, Tape users SAVE "MONEY" LINE 10

Now load MANAGER again. On one of your tapes/discs, SAVE "ACCOUNTS" LINE 10. (after "MONEY" on tape).

This is now your master copy. Write protect it and put it away safely. Now RUN the program, to set up your personal calendar and financial details, and this time, when the program prompts you to SAVE, use the other tape/disc and the backup one if you are sensible and use backups.

Tape users who want to save a little time in saving and loading may wish to

look back to part 4, where we discussed which lines could be deleted once the calendar is set up.

For disc users, both the master copy and the working ones will auto-load and run when you press key F9. Tape and disc users must always run the program starting with the loader, because that opens the pages to BASIC. If you try to load "ACCOUNTS" by itself, you will get an 'out of memory' message.

I suggest that you run the program on pay day, to enter your main wage and have the deductions made, and if you are paid monthly, also run it weekly to get a list of this week's bills, make a note of what you withdraw for day-to-day expenses and so on.

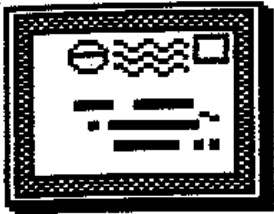
If you keep the program accurate and up-to-date, it will help you to manage your money and pay all the bills on time. There will be no excuse in future for SAM users who are late paying their FORMAT subs!

And so we come to the end of MONEY MANAGER. Thank you for sticking with me all these months. I hope that typing in almost 35K of BASIC has not been too painful an exercise, and that you now feel at ease with many of SAM's new commands. Of course, there are some we did not use, notably many of the graphics ones like RECORD, BLITZ, XOS, XRG, YOS, YRG, ROLL, SCROLL and so on, and the mathematical functions like COS, SIN, TAN, ABS etc. And there are some general commands too, like TRUNC\$ and EXIT. Those will have to be for another day.

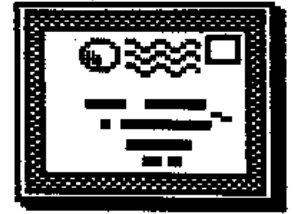
So now I am off to put my feet up while you do all of the work. I look forward to hearing about your ideas and routines for options 7 and 8. Cheers!

£ £ £ £ £ £ £ £

Editor's Note: I know from your telephone calls and letters how many of you have enjoyed this series. I would like to add my personal thanks to Carol for the wonderful job she has done with Money Manager. Bob.



YOUR LETTERS



Dear Editor,

I have been a FORMAT subscriber for TWO years now, and would like to thank you for the wonderful work you have done so far. I started in 1983 with a 48K Spectrum from which I upgraded first to a BETA disc interface, and then to a DISCiPLE disc interface. Recently I have upgraded to a SAM.

I would like to congratulate MGT/SAMCO for their excellent service. In the same breath I would also like to ask why LERM and Enigma are so in comparison. (I ordered SAMTAPE and SAM Assembler form LERM - for which I waited 7 months, For DEFENDERS OF THE EARTH from Enigma I have been waiting 3 months. Products ordered from SAMCO rarely takes more than a month.)

I have converted OPERATION WOLF to work on the SAM Coupe - It should work without a disc drive as all the levels are loaded into RAM. Is there a way of passing such a converted program on to other SAM users without infringing the Copyright?

Yours sincerely, A.J.Erasmus.

I wouldn't rush to blame the companies you mention, after all South Africa is a long way away. Surface mail often takes a long time. I have had problems of this nature in the past, especially with computer software as this is often stopped for customs examination. Add to this the reluctance of the British Post Office to investigate missing items in overseas mail and you will understand the problems faced by mail order companies. I must say that I have had many letters praising every company that advertise in FORMAT.

I can answer your question on copyright but only from the UK standpoint. Provided someone purchased the software outright, i.e. there was no license that limited their rights, clearly displayed on the outside of the packaging, then they have the

right to copy software for their own use. They must not part with copies, nor use a copy while passing on the original. In your case however you cannot give a copy to anyone who does not prove to you that they have an original copy in their possession.

My advice would be to write up how you did the conversion and send it to us for publishing in FORMAT. That way you will have no problems and people who don't own OPERATION WOLF might get hints on how to convert other progs. Ed.

Dear Editor,

This letter is being typed with SAM Tasword 2, a much improved program to Spectrum TW2, which I purchased as I was unable to transfer Spectrum TW2 to work on SAM, as well as many other Spectrum tape or PLUS D "SNAP" programs.

I am sure I am not the only SAM owner who has spent many wasted hours trying to transfer files so I have made the following arrangements which enables me to use either my Spectrum or SAM.

As I only have one 13 amp socket in the small room in which I have SET-UP my computer etc., I purchased two (2) FOUR OUTLET SWITCHED SOCKETS. (You can get them from Woolworths & cheaper if you shop around a bit). I have put a THREE WAY ADAPTOR in the 13 Amp socket. The TV plugs into one outlet and the Spectrum etc., into another and the SAM etc., into the third outlet. Thus all I have to do is to switch on the appropriate FOUR-WAY socket and change over the TV lead. Hours of time saved and I can use my Spectrum and/or SAM as I wish. Perhaps other members may be interested.

Yours sincerely, Eric M.Day.

Well I dont think many people would agree that the SAM version of TW2 is

better than the Speccy version. It's keyboard scanning leaves a lot to be desired. If you ran the Spectrum version under one of the commercial emulators everything is fine. There are very few programs that cant be run, with a few minor changes here and there, under SPECMAKER, SAMTAPE or SC_SPECLONE. Still you electrical ideas will help someone I'm sure. Ed.

Dear Editor,

It is amusing just how much problem a few digits can cause but personally I have no difficulty in recalling my membership number.

It does seem to have passed without positive comment that the membership records of 3000 people are kept on the Spectrum and I can vouch for the speed of the system once the membership number has been supplied. It must have saved me a lot in telephone bills.

It is nice to see the Spectrum/DISCiPLE used for serious business use. If the database is a "homebrew" program, why not publish it in FORMAT? Come on - don't be modest!

Yours sincerely, Bob Bates.

Thanks Bob, I might just do that one day. Ed.

Dear Editor,

I am thinking of upgrading to a SAM Coupé, but there are a couple of things I would like to know first.

Two of my most used programs apart from graphics software, are PCB DESIGNER by Kemsoft and FASTWORD PLUS by Betterbytes, I have written to both of these to ask if the programs will run on SAM, or if they intend to produce a SAM version, as yet I have had no reply.

This brings me to various Graphics Software I use. At the moment I use a PLUS D and a printer that is not totally Epson compatible, and can do large and small screen dumps using FORMAT's LCOPY 2. What I would like to know is, assuming SAM and FLASH can do small and large sideways screen dumps like the PLUS D's screens 1 and 2, and that it uses the same escape codes as the PLUS D, and not "Esc L". Will FORMAT be producing a version of LCOPY

2 for SAM. I cannot afford both a SAM and a new Printer. I would be grateful if you have any ideas on this.

Yours sincerely, J.Murphy.

Sorry but no. Most printers in use today have Epson FX80 compatability so the call for LCOPY 2 fell to the level were we stopped doing it. A version for SAM is therefore very unlikely. However see Nev's Help Page this month for a few ideas. Ed.

Dear Editor,

I have enjoyed your magazine and have only one criticism to make.

I have a Spectrum 128 as well as a 256K SAM and one disc drive and, I wish you covered more for the SAM for non programmers like me.

I am a Senior Citizen in my late 70's and would like more to type in, particularly music programs.

Yours sincerely, C.Wright.

I know lots of readers like programs to type in and there are some nice ones to come in the next few months. However if anyone has any more they would like to send in I will welcome them with open arms. Ed.

Dear Editor,

I am writing in response to Simon Minchin's letter in Vol 4 No. 6. As I work in a newsagents, I have a chance to flick through the computer magazines each month and would like to point out to him that Crash and Your Sinclair both publish a page dedicated to the SAM each month. Also a rare occurrence, Sinclair User for March had a game for the SAM on the front Cover! p.s. I also treated myself to a SAM!

Yours sincerely, Andrew Hall.

Well if people want to pay large sums of money for just one page I wont stop them. But FORMAT is the only magazine to cover SAM in such depth. Ed.

* - * - * - * - * - *

Letters may be shortened or edited to fit on these pages.

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