The Aussie Mag for Amstrad owners

THE AMSTRAD USER

Issue No. 22 $3.75 November 1986

- *Reviews on Disc Utilities for CPC's, Business packages for PCW's and the smart new IBM compatible PC1512*
- *Five type-ins for CPC's and two for PCW owners*
- *Two pre-Christmas bargain software "Specials"*
- *Cheat Mode, User Groups and heaps more !!*

FOR THE NOVICE & EXPERIENCED USER

Registered by Australia Post – Publication No VBP7017

INCLUDES
BEST SELLING BOOK
AND 2 CASSETTES
Amstrad
CPC
Schneider
LORD OF THE RINGS
GAME ONE

LORD OF THE RINGS
GAME ONE

A very special offer for readers of The Amstrad User and from the team who brought you the incredible HOBBIT program comes LORD OF THE RINGS: GAME 1 - based on J.R.R. Tolkien's brilliant fantasy THE FELLOWSHIP OF THE RING.

Live out your wildest fantasies in the mysterious and enchanted world of Middle Earth - a world of boundless imagination where nothing is certain and anything is possible.

THE LORD OF THE RINGS ADVENTURE GAME FEATURES

★ **INGLISH INPUT:** Now you can say virtually anything you want. With INGLISH the computer can recognise intelligent sentences up to 128 characters long.

★ Interact and communicate with the other characters in the game. Now you can tell the other creatures what you want them to do and answer their questions.

★ Just like in real life, all the creatures in this game have lives and wills of their own. Their independence means that nothing is predictable and no game is ever the same twice.

★ **800 WORD VOCABULARY:** The largest choice of words ever offered in any home computer game.

★ Over 200 locations with major locations illustrated.

★ **FIRST EVER MULTI-PLAYER CHOICE:** Enjoy this adventure by yourself of solve it with your friends. Take on any of the roles of Frodo, Sam, Pippin and Merry, or you can play as many of the characters yourself as you wish.

★ Available for the CPC 464, 664 or 6128 and the PCW 8256 and 8512. The tape version for the CPC machines comes in two cassettes with a paperback copy of J.R.R. Tolkien's "FELLOWSHIP OF THE RING" - the ultimate Hint Book. A book is not supplied with the disc version, but all versions contain a detailed user guide.

★ The normal price for this classic adventure is $44.95, but as a pre-Christmas special, it can be purchased through The Amstrad User for just $36.95 including postage. Order early to avoid disappointment as any orders received after 1st December 1986 may not be delivered to you before Christmas. You may order by Bankcard, Mastercard or Visa on (03) 233 9661, or to the address below. Please state on which machine the game will be run.

THE AMSTRAD USER
Suite 1, 245 Springvale Road, Glen Waverley, Victoria 3150.

THE AMSTRAD USER

"Lord of the Rings" - an exclusive Christmas Special ____ 1

Letters - A fair swag of views, hints, tips etc. to hit the Editor's desk ____ 5

Nationwide User Groups
A full list of all the registered User Groups plus contacts ____ 12

Cheat Mode
More tips and pokes including an AIRWOLF map ____ 16

Gossip from the UK ____ 18

Disc Utilities
Transmat and Disc Demon reviewed by Chris Collins ____ 20

A talk with Max Headroom
A zany program with graphic results! ____ 23

Serious Side

Quality without the cost:
A review by Arthur Simenon of the Quest Business Control System for invoicing, stock control and accounting. ____ 26

Help for non-accountants:
We put the spotlight on the Cash Trader package for small traders. ____ 29

Brainstorm
The "ideas processor" reviewed by Arnold Goldman ____ 31

Wordcounter:
A useful program to type in on your PCW to check the number of words you have written. ____ 34

SUPER
Arnold Goldman provides this small program to calculate your lump sum superannuation payout - before tax of course! ____ 36

PCW Software List (and 6128's too)
As distributed by Mitsubishi Electric AWA ____ 40

280 things to do with a straight line
An interesting exercise with LOGO ____ 41

Issue No. 22
November 1986

CP/M Revisited: A primer for beginners from Fred Robertson-Mudie. ____ 46

ELITE: Firebird's famous strategy game reviewed by Darren Robinson. ____ 48

Word Sleuth: from Keith Saw
This well known word puzzle - now for the Amstrad. ____ 49

Where has all the Software gone?
The list is here - by no means complete - but there's a lot of it! ____ 52

Adventurer's Attic: by Philip Riley
Maybe you'll find some answers to your maze problems. ____ 54

Soundex: from Petr Lukes
A routine for encoding names into a four character code. ____ 56

Another Christmas special: Details of software exclusive to The Amstrad User. ____ 57

The new PC1512: A review of Amstrad's IBM compatible by Martin Scragg. ____ 58

Capture: A thinking game from Donald O'Connor. ____ 61

The Book Shop and other Goodies
More than just stocking fillers ____ 63

For Tape subscribers, the programs can be found at the following approximate positions:
Side 1: **GIGO** - 14, **SUPER**- 25, **WORDSLEU** - 68, **SOUNDEX** - 104 Side 2: **CAPTURE** - 14

All enquiries and contacts concerning this Publication should be made in the first instance by writing to The Amstrad User, Suite 1, 245 Springvale Road, Glen Waverley, Victoria 3150, Australia. Urgent matters can be phoned through on (03) 233 9661.
The Amstrad User is normally published on the first working day of each month.

Reprinting of articles published in The Amstrad User is strictly forbidden without written permission. Copyright 1986 by Strategy Publications.

The single copy price of $3.75 is the recommended retail price only.
The subscription rate (for Australia) is $37.50 for 12 issues of the magazine only, or $80.00 for 12 issues of the magazine plus tape (for CPC range only) containing programs appearing in that issue. Postage is included in the above prices. For subscriptions to New Zealand, PNG, Solomon Islands or Vanuatu please add $21 airmail. Other overseas prices available upon application.

Please note that whilst every effort is made to ensure the accuracy of all features and listings herein, we cannot accept any liability whatsoever for any mistakes or misprints.
Contributions are welcome from readers or other interested parties. In most circumstances the following payments will apply to published material: Letters $5.00, Cartoon $5.00 and a rate of $10.00 per page for programs, articles etc. Contributions will not be returned unless specifically requested coupled with a suitable stamped and return addressed padded bag (for tapes or discs).

The Amstrad User is an independent Australian magazine and is not affiliated in any way with Amstrad or their Australian distributors Mitsubishi Electric AWA Pty Ltd., or any other dealer in either software or hardware.

THE AMSTRAD USER

G'day,

So now we know. The PC1512, which before its release we have been calling code name AIRO, has launched itself upon a suspecting market. A lot of the rumours were true and others way off beam. But the most closely guarded secret was the Australian price - just $1499 for the basic mono screen and single disc drive. What makes it even more attractive compared with other IBM clones (especially the low cost ones from our northern neighbours) is the fact that it comes bundled with three operating systems including GEM which runs GEM-Paint and GEM-Desktop. These last two are fascinating pieces of software which may well send mono-screen Macintosh owners and the like 'green' with envy. Before you rush to your dealer to have a look at one, deliveries are not expected until end November/beginning December.

At the same time the PC1512 was announced in the UK, so too was the DMP3000 printer. It's an Epson compatible and IBM character set compatible dot matrix printer with a claimed speed of 105 characters per second. It would seem that Amstrad see this as the companion to the PC.

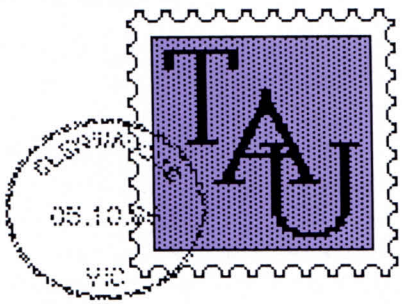
Whilst I always enjoy Christmas, especially with the children, the run-up before the break is always hectic. This year will be no exception. Apart from getting the magazines out a little earlier than normal, we have got a couple of "specials" you may wish to consider as stocking fillers or even treat yourself. The first is the Melbourne House production of "Lord of the Rings" with a saving of $8 on the normal price for all CPC and PCW machines. The second is our Family Fun Pack, an all Australian produced package of software designed to keep most age groups happy over the Christmas period. Like all other offers we provide, stocks are never limitless (as many will have already learnt), so do order early.

Now I must get on with your December magazine . . . . .

See you next month,

Ed

Letters



All correspondence published in this section earns a payment of five dollars.
Letters should be addressed to The Editor, The Amstrad User, Suite 1, 245 Springvale Road, Glen Waverley, Victoria 3150.
We regret that we cannot enter into any personal correspondence.

I should like to make a couple of comments on letters in the September issue, which I hope may be of interest.

Firstly, on Paul Webb's problem:

As you suggest, Arnold makes notes in a little corner of his memory, but the problem goes somewhat further - the Protext ROM cheerfully appropriates 360 bytes of memory for its own use. However, in most instances, removing the ROM board is not necessary. Arnold's Utopia ROM, which provides a host of useful utilities, has provision for turning ROM's on and off. Of course, it costs another £40, but it does solve the problem except for a few programs which somehow manage to turn the ROM's on again as soon as they begin to run.

Secondly, on G. Nebe's problem:

The solution to all this person's troubles is found on page 4.2 of the 6128 User Instructions, a borrowed copy of which I just happen to have handy, "... it has to be emphasised that the 'library discs' that you use, MUST BE COPIES, made from the master discs supplied with the computer." To understand why copying the master disc should make possible that which cannot be done from the master itself, it is necessary to understand what SUBMIT does. When you type in SUBMIT LOGO3 you are NOT loading LOGO.

Instead you are loading a file called LOGO3.SUB, which contains two files. The first one contains keyboard definitions and only after it is loaded, is LOGO SUBMITted to the command processor. To perform its magic, SUBMIT establishes a temporary file, such as SYSIN59.$$$, on the library disc. It cannot do this, if the disc is write protected.

Either, G. Nebe is using the master disc, or he/she has closed the write protect tabs on the copy disc. As the use of control keys is far from standard, not SUBMITting SETKEYS KEYS.DRL, before loading LOGO3, causes all those problems with disobedient keys.

Peter Campbell,(Secretary)
Sthn. Tasmanian Amstrad Club
N.Hobart, TAS.

If the following files are "PIP"ed onto a working LOGO disc from side three of the system software it will be found that not only does SUBMIT LOGO3 work, but that the keys (including ESC and the cursor keys) do all the expected things:-
C10CPM3.EMS, SUBMIT.COM, SETKEYS.COM, KEYS.CCP, KEYS.DRL, LOGO3.SUB and LOGO3.COM
It will be found that LOGO will not load if the disc is write protected.
If, in addition to these files, a suitable PROFILE.SUB file is added, LOGO will automatically be loaded when the command "|CPM" is typed at the keyboard.

Information about creating PROFILE.SUB files can be found on page 5.18 and 5.19 of the CPC6128 manual. A suitable basic program for creating such a file is

as follows:-

```
10 OPENOUT "PROFILE.SUB"
20 PRINT #9, "SUBMIT LOGO3"
30 CLOSEOUT
```

D. Kettlewell, Hornsby, NSW

I have recently purchased an Amstrad PCW8256 from Rampage Computers in South Yarra and was given your leaflet. I have been unable to locate your magazine at a newsagent and so have been unable to determine whether it has anything to offer to the PCW user. I would appreciate it if you could let me know where I can obtain a copy so that I can determine whether to subscribe. Also, the leaflet says that a cassette of each month's programs is available - is there also a disc?

I also have a couple of questions that I am hoping that you can resolve for me.

Firstly, I use tractor feed continuous stationery for most of my printing, and would like it if the default setting for the printer could be set to that rather than single sheet paper. Is this possible?

Secondly, is there a way of printing multiple copies of a document without sitting around to repeatedly press the (P) key?

Adam Houston, Melbourne, VIC

The Amstrad User covers the entire range of Amstrad machines, and since September of this year has included about 16 extra pages for PCW owners (20 this month). The cassettes apply to CPC machines only (although you would be surprised how many PCW owners mistakenly take out a tape subscription for their non-tape machine).

The magazine is distributed by Gordon and Gotch to newsagents and bookshops throughout the country, so you will have to contact them for the name of your local supplier. Alternatively, get your newsagent to order it in.

In answer to your question concerning continuous stationery, once CP/M is loaded and the A> prompt is displayed type in PAPER 11.

As far as printing multiple copies is concerned, we are not aware of a method. Perhaps some other PCW owner has cracked it?

I am writing in answer to a question in last months letters section concerning LOGO troubles. I have also had troubles with LOGO, but seeing I used Apple LOGO at school, I have been able to use some of the Apple commands on the Amstrad. Below I have listed some of the commands which I have been able to use, some in edit some out:-

CONTROL A Moves the Cursor to the start of the line.

CONTROL B Moves the Cursor back.

CONTROL C Confirms the Edit.

CONTROL E Moves the Cursor to the end of the line.

CONTROL F Moves the Cursor forward.

CONTROL G Stops the program.

CONTROL N Moves the cursor down.

CONTROL P Moves the Cursor up.

CONTROL Y Pulls back what you last entered.

P. Graham, Cranbourne, VIC

May I suggest that you use some of the blank spaces in the magazine to acknowledge receipt of letters from your correspondents. I realise that it would be impractical to reply by mail but feel that a list of names (or just initials) and the cut-off date would give writers confirmation that their efforts had reached their destination.

You may be tempted to say that there are no blank spaces but a critical inspection will reveal that the May edition is padded out as tabled:-

Page	Area Taken	Area Printed
2 - Editorial	1 page	2/3 page
3 - Letters Heading	1/6 page	1/23 page
3 - Left column	1/4 page	1/8 page
5 - Eliza Heading	1/6 page	1/23 page
5 - Eliza left column	4/10 page	1/10 page
6 - Left column	1/2 page	3/8 page
17 - Heading	1/6 page	1/12 page
17 - Left column	1/4 page	1/8 page
22 - Heading	1/5 page	1/20 page
22 - Left Column	1/4 page	1/8 page
	3.3 pages	1.7 pages

Pages available = one and a half.

It is my opinion that the subject matter is more important than having a 'pretty' layout.

Less padding and an acknowledgement list would help.

The April issue, page 4 carried a program for print commands for Super 5 EN-P1090 printer.

Line 540 gives the command for release of sub/superscript characters. However it should be remembered that they are formed with double strike mode which should also be released. Lengthening line 540 will achieve this:-

```
540 PRINT#8,CHR$(27)+CHR$(84);
    CHR$(27)+CHR$(72):GOTO 10
```

A.B. Pounsett, (Vice President)
Geelong Amstrad User Club
Norlane, VIC

We have printed this letter for two reasons: firstly for the hint for printer owners and, secondly, to remind readers that in view of the volume of mail we receive, we had to stop providing personal replies in April of this year. Thanks for your tip and comments Arthur, but had we printed the initials of everyone who wrote to us the Mr. J. Smiths and the Mr. J. Scotts would still not be sure whether their letter had reached us. As for the layout of the magazine, it is important to make it easy on the eyes to read

especially when many of our readers are in the senior citizen class. But most of all, if squashed as you suggest, it would become fragmented and confusing.

Thank you for publishing my request for help regarding the "Flight simulator" --- "SPITFIRE 40". I discovered that the program only saves in "COMBAT" mode, although one must land safely and on the same runway as take off.

Instructions are screened for save Yes/No. If yes .... "ENEMY RAID SCRAMBLE" appears giving position etc. of enemy. CAUTION: when taking off again, (1) Flaps up (2) watch your speed, keep nose down so speed is not less than 100mph or you will lose height and CRASH.

Good flying and good hunting!!

Keep up the good work on the magazine.

J.P. Malusa, Hope Valley, S.A

Readers will be interested to hear that George Searl of Campbell Systems (in the UK) advised me last month that they are developing Masterfile 8000 for the PCW range, and hope to have it on the market by the end of this year - I assume from his comments (in reply to questions from me) that it will accept files from existing Masterfile programs, so users of this top value program can "upgrade" to the PCW and stay with Masterfile.

B. Howes, Wagga Wagga, NSW

I have recently purchased the game "Fu-Kung in Las Vagas". I have managed all right, until one night I collected all the cards. The instructions do not say what to do at this point. I am interested to find out what to do next?

R. Baxter, Wellington, N.S.W

Can anyone help?

I keyed in the Batman program that provided infinite lives in cheat mode (The Amstrad User, cheat mode - Issue No. 20, September 1986) and to my dismay, it only worked on cassettes. As I have Batman on disc, I found this to my disadvantage. My problem with it was in line 110 where LOAD"" does not apply to the disc drive.

I am sure many disc drive(s) owners with Batman on disc would appreciate the relevant poke.

S.A. Mah, Willetton , W.A

Cheat Mode deals mainly with tape-based games. We can only print the pokes that are sent in, so please send us some more disc pokes.

Notes on GIANT MULTIPLIER (TAU, September 1986).

I hope that Messrs. Davies and Page will not mind a few

Education CAN be fun !!

Yes! New, fabulous "SCHOOL" educational software is available in Australia at amazing low prices

CASSETTE OR DISC ------ AMSTRAD OR COMMODORE

The programs aimed at the lower age groups are strongly enforced with a visual and audio "fun" element to retain interest. The highest level of programs are presented in quiz-type format, giving two chances to answer each question correctly. At the end of the session you are given the option of receiving a printout of the results. Also hi-res graphics are used to highlight points in each question.

- **Biology** (12-16) - Learn key definitions. *Covers cells, mammals, photosynthesis, respiration, reproduction*
- **Physics** (12-16) - Nine menu options. *Pressure, heat, matter, electricity, magnetism, light.* Excellent graphics
- **Chemistry** (12-16) - Ideal for examinations. Eight menu options. *Oxygen, hydrogen, atoms, acids, carbon.*
- **Geography: Weather/Climate** (13-17) - Menu driven. In depth analysis of weather, pressure, wind, temperature

- **Better Maths** (12-16) - Menu driven. Excellent graphics. Covers wide range
- **Maths Mania** (8-12) - Makes multiplication and division addictive. Excellent graphics.
- **Better Spelling** (9-Adult) - Best spelling program on the market. Endless fun with sixteen menu options
- **Playschool Maths** - For absolute beginners

STOP PRESS !!!

BEEBUGSOFT range of powerful utilities is here! ULTRBASE: Comprehensive and powerful database. LOCKSMITH: Complete backup/transfer utility. TOOLKIT: A programmers dream. Extra commands. REMBRANDT: Graphics and Drawing package. DISCDEMON: Total disc control package.

Available at all Grace Bros stores, Waltons stores, Harvey Norman, BIG W and leading retailers throughout Australia.

For your nearest supplier ring:

NSW:	Pactronics, 3/25 George St, Homebush (02) 734 879
VIC:	A.D.A., 9/57 Robinson St, Dandenong (03) 794 6714
QLD:	CSQ Electronics, 66 Abbotsford Rd, Mayne (07) 52 9633
SA:	F. Szepessy Agencies, "Baringa", Little Hampton (08) 271 1066
WA:	J. Mills Agencies, 3/251 Balcatta Rd, Balcatta (09) 344 1660
NZ:	Alpine Computers, Byron Rd, Takapuni, Auckland 09-493889

suggestions which can make their program run faster.

First of all, all numeric variables should be defined as integers: arithmetic with real numbers involves complex manipulation of five bytes as against a much simpler process with only two for integers. Simply put a statement DEFINT a-z at the start of the program. It will not affect the string variables, since they are explicitly typed. It would be interesting to know the speed improvement.

Rather than using loops to print out the underlines, why not use the STRING$(n,char) function. In line 250 the loop can be replaced by ...:PRINT STRING$ (La,154):... This can also be used when testing: temporarily replace the inputs by a$=STRING$(20,"9"), or whatever.

The WHILE-WEND loop in lines 330 to 370 can be replaced by CA=INT(PP/10):PP=PP-CA*10 (ca=number of tens, pp=units).

Our BASIC also has the integer divide (\=backslash) and MOD functions which can be used:

CA=PP\10:PP=PP MOD 10

These functions will work with real numbers, as long as they fit into the integer limits, but there can be problems with rounding up when a real number is converted to an integer. Try:

pp=63.1:ca=pp\10 :pp=pp mod 10:?ca,pp (ca=6, pp=3, correct)

pp=69.5:ca=pp\10:pp=pp mod 10:?ca,pp (ca=7, pp=0, wrong)

However this problem would not arise in the program, since there are no fractional numbers.

(This is not the only time where the rounding can cause problems: if you enter 6.6 to an INPUT z%, the value is converted to a real number, then rounded to 7 before storage in the integer variable).

The functions are not explained in my (464) User Instructions. They operate in integer mode, i.e. 63\10=6 (the fractional part is dropped), and 63 mod 10=63-(63\10)*10=63-60=3. Note the brackets in the expression: they are necessary because the multiplication is of a higher order of precedence than the integer division. Without them, the multiplication would have been done first, and the expression would have been evaluated as 63-63\100=63-0=63.

Incidentally, the lack of accuracy of large numbers is not the fault of the 8-bit processor, but of the implementation of the arithmetic routines. Mallard BASIC, which can run on the 6128, has double-precision arithmetic, giving about fourteen significant digit accuracy. MicroWorld BASIC, running on the Microbee with the same Z80 processor, can produce up to thirty significant digits, using Binary Coded Decimal arithmetic.

The DDI-1 Manual states that "it is not permitted to include the | (bar) symbol in a REM statement" (p. 2.1), but does not say why. It is just bug buried somewhere in the depths of Version 1.0 The easiest way to overcome it is to jump over the line with a GOTO next-line, rather than disable it by REM.

P. Lukes, Toowoomba, QLD

It annoyed me having a feature on my 6128 that I was unable to use, I'm speaking of the CONTROL + ENTER which produces RUN" + CHR$(13). Great for tape users but not much use to me. However, thanks to Karl Wridgway's letter in the September issue I now use the CONTROL + ENTER feature all the time.

To run any program I type in it's name. I hold down the CONTROL key, press the CURSOR LEFT then the small ENTER key in that order. The CURSOR LEFT and small ENTER key are conveniently side by side. The CTRL+Cursor Left forces the cursor to the start of the program's name and the CTRL+Enter places in the RUN" and automatically hits the ENTER key for me.

A. Trost, Gracemere, QLD

It is hoped to establish a register of Amstrad users on the North Coast of NSW.

The aim of the Register is to establish a list of Amstrad users, rather than to form a club, which can operate as an information exchange.

Those involved may later wish to form a club.

Those Amstrad users interested in joining the register are asked to send the following details, plus one stamp or self-addressed envelope.

Once the information has been compiled a complete list of users details will be sent to each person, using the stamp provided, and individuals may take it from there.

I hope to include a short letter with each list so I am asking those interested for any other information they may have, or any thoughts on the Register.

There will be no formal meeting side to the Register, unless individuals wish to do so between themselves.

Please send the following details to: The North Coast Amstrad Register, PO Box 126, Wardell, NSW 2477 :

Name	Address
Telephone	Hardware
Peripherals	Software

(Details will help those with similar interests to contact each other)

Interests: (Machine code, basic programming, games, work etc.) Please enclose a stamped self-addressed envelope to allow a copy of the Register to be posted out.

N. Van Kempen, Wardell, NSW

Recently I purchased Supercalc 2 from Chandlers in Townsville and I am using it on a PCW 8256. At the moment I am having some difficulty in trying to print my spreadsheets in some other format than condensed print. I would appreciate if you would give me some advice on the matter.

I have attempted to change the typestyles through using /0, d, all, setup, and setup. In the 2nd setup, I have started with ALT[M (i.e. ESC M for elite text), and then ALT[E (i.e. ESC E for emphasised text) and then finally entering these codes by pressing RETURN.

It seems that no matter what I try in the setup mode, when I go to print the output is always in condensed print.

I have also tried to alter the typestyles through using the INSTALL program. When coming to save the changes in the SC2 program I am told that the file is READ ONLY and so my efforts end there.

If you can help in any way, I would appreciate if you would set out the exact keystrokes for me especially those involving the ESC codes. If you are unable to assist, perhaps you could refer me to someone that could.

J.P. Kinch, Townsville, QLD

Hands up if you have just bought a printer and have no idea on how to form the 'printer codes', which are on just about every page of the manual? Well, I lost a lot of sleep over this problem because my dealer was not educated enough to explain the ins and outs of printer-computer communications. Eventually, something clicked upstairs and by trial and error I fathomed it out.

The type of printer you have determines what sort of code you must use. The code for my printer which produces Italic font is:-

ESC+4 [(34,B4),[52,180]d] ! First of all, you can discard the jargon which follows the ESC+4. Your manual may or may not have the succeeding characters but these have no importance while you are entering the codes in BASIC. If you now turn to somewhere in the back of the Amstrad manual, (Appendix III pg. 1 for the 464) you will find a table headed ASCII. You will notice it contains the ASCII character set in Decimal, Octal and Hexadecimal notation. You only need be concerned with the decimal notation.

If you take ESC and go down the column titled ASCII characters, you will find that the decimal number is 27. The number for 4 is 52.

Now, take 27 and 52 and put them into a chr$() format:-

```
CHR$(27)+CHR$(52)
```

Add PRINT #8, so that the code should end up as:

```
PRINT #8,CHR$(27)+
CHR$(52)
```


Pactronics announce with Pride..

. . the release in Australia and New Zealand of the great range of AMSTRAD utilities !!

***cassette or disc 464, 664, 6128**

- **System X** - 32 Basic extensions. Power features for Programmers.
- **Oddjob** - The complete disc editing program. Track and sector editor, file copier and more. Total disc control.
- **Printer Pac II** - Screen dump utility for the DMP-1, Epson and DMP-2000 printers. Dump graphics or text in all modes adds enhanced type styles to your printer!
- **Transmat** - Tape to disc utility for DDI-1 disc drive owners. Transfer those slow old cassettes on to your discs!
- **Scriptor** - Improves print-out of your DMP-1. Adds five new fonts. With true descenders, inverse, double width, script, bold italics and more. Includes sub-program "Describe" to produce your own fonts!
- **Zedis II** - Full disassembler and monitor. All commands, address, find, input, load, move, disassemble ROMS.
- **Spirit** - Another tape to disc transfer, handles the latest "headerless" files.
- **Fido** - A database to log all your discs. Continual update. Fully secure, optional password if required. 2,150 program names per disc, sorts into any order!
- **Supersprite** - Design multi-coloured sprites, plus routines to control movement, collision etc.
- **Clock/Alarm** - A real time clock on your monitor, running right alongside your program!

Available at all Grace Bros stores, Waltons stores, Harvey Norman, BIG W and leading retailers throughout Australia.

Trade enquiries welcome.

For your nearest supplier ring:

NSW: Pactronics, 3/25 George St, Homebush (02) 734 879
VIC: A.D.A., 9/57 Robinson St, Dandenong (03) 794 6714
QLD: CSQ Electronics, 66 Abbotsford Rd, Mayne (07) 52 9633
SA: F. Szepessy Agencies, "Baringa", Little Hampton (08) 271 1066
WA: J. Mills Agencies, 3/251 Balcatta Rd, Balcatta (09) 344 1660
NZ: Alpine Computers, Byron Rd, Takapuni, Auckland 09-493889

If you enter this code it should be accepted (provided this is the format which your printer uses) and the printer will signify acceptance by a carriage return or line feed. A semicolon (;) could also be used between the CHR$ instead of a + (plus sign).

Also, a code may be in the format ESC+W [57,D7)h,[87,215]d] +NUL in which case the NUL at the end must be included otherwise the code will not work. Based on what I have said, that code would be:

```
PRINT #8,CHR$(27)+
CHR$(87)+CHR$(0)  or:
PRINT #8,CHR$(27);
CHR$(87);CHR$(0).
```

You can use these codes as direct commands, or in a program to set a certain type of font. They can be compiled to make a utility which will save you looking up the ASCII tables all the time. An example of a utility which I wrote is in the letters section of the April '86 edition of this magazine. The utility can also be merged with a program such as a database so that fonts can be called up when printing a file.

I hope this has helped somebody who was in the dark about printer codes and will allow some owners to sleep better at night, in the knowledge that those strange little codes aren't as impossible as they seem.

P. Mezzavia, Geelong, VIC

Please forgive me if this letter is somewhat terse... I edited a beautiful letter that said everything exactly as I wanted... and I, when editing a Footer, selected "Abandon Edit Altogether", thinking that this meant "Abandon editing of Footer". Aaaaggh! Oh well, the other letter was a bit long anyway....

Your magazine is very, very good. I bought my first copy yesterday, having purchased a PCW8256 about a month ago. Could I offer some suggestions for improvement?

Firstly, how about some reviews of the compilers available for the Amstrad range? (Please forgive me if you have already implemented any of my suggestions in past issues... and, if you have, please tell me which back issues I need to order). I don't mean BASIC compilers: as far as I can see most people who buy them are 14-year olds who have self-delusions of the significance and/or quality of their programming. I mean real compilers: Fortran, C, COBOL, Pascal ! While fully appreciating the fact that there is only one compiler for each of these languages available at the moment (according to your much-welcomed "PCW Software list" in your very much welcomed "Software for the PCW's"), how about reviews of these products so that:

1) People like me who want EVERY compiler available (to help with a University degree) can find out whether the ones available NOW are of sufficient quality to be worth purchasing, or whether we should wait until better ones are available;

2) People who (like me a month ago) are trying to decide between an Amstrad (cheaper) and, say, an IBM-compatible (lots of software) can get independent reviews and thus choose which computer to buy. (Can the software available now match up to MS-DOS?)

Secondly, how does one go about submitting articles for consideration for publication? The information in the mag. is sketchy to say the least.

Thirdly, how about being a bit more discriminating about the listings you publish? The ams-Forth Editor program (TAU Aug,p.28) was absolutely DISGUSTING!

What I really want to say is this. Not all 464,664 and 6128 owners do nothing but play games... and not all PCW owners compute in a business environment. Some of us just like to program the stupid things, you know ! Call us hackers if you like (not that I see why), but there must be a lot of us out here who, stuck for technical information, rely on magazines like yours for info. surely 1 page (both sides) could be "sacrificed" from your mag to make room for a "Programmer's section".

Hints and tips are all very well, but surely they are of more service when they are grouped together ! If you feel really adventurous, why not hire some poor Uni. student (like me) to write a column about my (I mean his) experiences with my (oops! his) computer ... or reviews of compilers ... or even a monthly "Teach yourself" series of various computer languages. While catering to a large field of arcade-game players and business users, I think that your magazine has gone the way of many others in that it fails to recognize the importance of we "professional amateurs" in the marketplace. Sure, we may not gain your mag much advertising revenue (who needs to advertise when you sell the only Pascal compiler on the market?). Economic arguments probably wouldn't work. How about a moral one? Your magazine is the only one on the Australian market that caters exclusively to Amstrads, what about us poor people who bought one because we LOVE programming computers? Sure, I talk in RAMs, bytes and bauds, but so do a lot of people. I am just one of that group who are fascinated by computer technology, but we aren't that small a group. Couldn't just 2 pages a month be devoted to us? I respectfully submit, as self-appointed representative, that this would not be all that hard. I'll even do all the work myself. Publish my address under the heading "Send your tricks/traps

etc. to", I'll organize it all, print it nicely, write a column if you like, and send it to you. All you have to do is typeset it... surely, surely, not so much work for a mag that purports to be of value to its readers?

Sorry the letter's so long ... perhaps I was a bit carried away. This letter is twice as long as the original! but please, don't doubt its sincerity. There are thousands of us here who are starving for interesting, general interest reading about our pet subjects. I really feel that another great increase in sales would be the result.

I wish your magazine every success now and in the future.

Adrian Booth, Orelia, WA

Phew! We thought you'd never make it. The short answer is that The Amstrad User is published for USERS and is supported by contributions from USERS. The more we get, the more we print - so go for your life. Anyone of the same mind can write to Adrian care of these offices and we will pass the info on to him. We look forward to the first article for "Amstrad RAMbos".

Firstly, thank you for a great magazine, most informative, also many thanks to Dennis Shanahan for COPYCAT, just what we needed.

We have made just a couple of changes to the listing so that the printed catalogues could fit into a Grandpa's Photo Brag Book. The changes are as follows:-

Delete Lines 750, 780 and 890

Then insert the following:

```
730 PRINT #8,CHR$(27)+"SO"
+CHR$(15);
731 PRINT #8,CHR$(27)+"S"
CHR$(0);: RETURN
732 PRINT #8,CHR$(27)+"1"
```

These changes will produce a smaller print, (superscript plus condense) so as not to need the "Continued Overleaf" feature.

G. Muscat & A. Gilchrist, Bridgetown, WA

With reference to P. Mezzavia's problem in obtaining a printer dump from "Screen Designer", I have a solution which may not be elegant, but which works, and is very simple.

First you produce your masterpiece on "Screen Designer", and save it to tape or disc under a suitable filename... maybe "Masterpc". This produces two files called "Masterpc.sds" and "Masterpc.scn". You may then reset the computer and you will find that, with the tape rewound as appropriate, "Run MASTERPC.SDS" will dump the picture, in the colours you have used, to the screen. When you have verified this for yourself, there is no need to actually produce the copy in this way.

You now run Mr. Eiberg's (or any other dump RSX) program and type or load in the following :

```
10000  MEMORY 10224:LOAD
"MASTERPC.SDS": CALL 10225
10010 |SCRDMP:
```

Now position your tape containing the two "Masterpc" files and 'RUN'. The picture will appear on the screen and be dumped to the printer, with no prompts appearing on the screen until the hard copy is complete.

The LOAD/CALL bit avoids using the command "RUN" which would wipe the last line. 10225 happens to be the execute address of the .SDS file.

I have typed in the dump Mr. Mezzavia is using, and it works fine. I have also used it with "Tascopy" with line 10010 changed to |copy. For my own use I have the routine merged with my favourite dump program, and that, together with disc operation, makes it all very easy.

J. Rahmann, Wavell Hts, QLD

Micro Accessories of S.A.

THE UTILITY SPECIALISTS

Unit 8, Hewittson Road, Elizabeth West, 5113
Telephone: (08) 287 0191

Disc Wizard

TAPE TO DISC DISC TO DISC

At last a hardware 'device' that will allow you to transfer those tediously slow loading cassettes to disk. "DISK WIZARD" operates on the working memory of the computer, hence it is unaffected by the loading method used. It is brought into operation by the **simple press of a button.**
A working version of the program in memory is then saved to disc and the program will restart. The saved version, when reloaded, will start from **exactly the point the button was pressed (very useful).** In most cases the process is then complete. With some progams it will be necessary to make one or two adjustments to the saved programs using a simple routine supplied. However this will also allow you to make certain custom alterations to the programs, e.g. screen size, windows, etc.
"DISC WIZARD" is a hardware interface that fits the expansion or floppy disc port of the **464/664/6128.** It is equipped with a through port and is supplied with simple instructions.
At the time of going to press we have been unable to find even one, memory resident program that the "WIZARD" has been unable to handle.

ONLY $119.00

Please Note: This product is intended for archival purposes only. Programs transfered require the unit to be present for reloading. Software to enable saved versions to stand alone will be available in the future.

DISCMASTER V1.0

A **powerful disc backup and utility** package for the **464/664/6128** series incorporating the following.

"DUPLICATOR" .. A new standard of protected disc backup for the Amstrad. A very powerful program that will operate with one or two drives. We aren't saying that it will copy every disc available but our extensive tests have been unable to find one that it won't. We are sure that the **DUPLICATOR** is the **best disc backup program available.**
Make no mistake many similar utilities are very limited. Future updates will be available as and when necessary at nominal cost.

"MENU MAKER" .. A tremendously useful utility that allows you to make a menu on all your own discs **completely automatically.** You select which files are to be included on the finished menu and all the rest is done for you.

"RECOVER" .. This program allows you to recover any files that may accidentally be erased from a disc. Very useful in case of accident.

"EXTENDED CATALOGUE" .. Gives an extended CAT that includes the start address and length in bytes of both BASIC and MACHINE CODE files.

ONLY $39.25

Warning: Do not be misled by other adverts. There is only one 'DUPLICATOR'. It is the most powerful of its type.

SPECIAL OFFER
WIZARD & DISCMASTER
FOR ONLY $139
All orders plus $2.00 P&P

NATIONWIDE USER GROUPS

We are now only four short of a half century score of established user groups throughout Australia and New Zealand. If you belong to a group but don't serve on the committee, take time to thank them for their efforts. We certainly applaud them for the voluntary contribution they are making to help Amstrad users nationwide. While in a "thanking" mode - many groups send us copies of their club newsletters. They make interesting reading and may well earn some dollars if we reprint any sections.

Joining the list this month from Queensland is the **Bundaberg Amstrad User's Group**, and from New South Wales the **Fairfield Micro User Group**. South Australia provide a further two; the **South East Amstrad User Group** in Mount Gambier and the **Northern Computing Society Inc.** in Para Hills.

WESTERN AUSTRALIA

AMSWEST (Perth)

President:	Tony Clitheroe	(09 275 1257)
Vice President:	Steve Cushnahan	(09 445 2062)
Secretary:	Mrs. P.T. Ardron	(09 361 8975)
Treasurer:	John Firth	

Regular meetings take place at a venue in Shenton Park on the first and third Tuesdays of each month starting at 7.30p.m.

AMSWEST (Blackwood) USERS GROUP

This small group is affiliated to AMSWEST (Perth). For further details contact George Muscat on (097) 61 1488.

SOUTHSIDE AMSTRAD USER CLUB

President:	John Marshall	(09 390 7335)
Secretary:	Pauline Waghorn	(09 459 8702)
Treasurer:	Eric Tytherleigh	(09 390 8865)
Librarian:	Tom Bird	(09 457 5614)
Junior Rep:	Gary Mottabhoy	(09 457 8086)

SAUC meets from 7.00 p.m. every 2nd and 4th Wednesday of each month at Gosnells Scout Hall on the corner of Verna and Corfield Streets, Gosnells. All meetings are socially oriented with a minimum of business matters and can include software and hardware demonstrations, discussions or lectures which all prove to be helpful for beginners or advanced users alike. The club has an extensive library of tapes, discs, magazines etc. and discounts have been obtained from most local dealers and are available to financial members. The club also owns its own Bulletin Board which is of great benefit to all. Contact can be made with any of the above officers or by writing to The Secretary, Southside Amstrad Users Club, PO Box 324, Gosnells, WA 6110.

SOUTHSIDE AMSTRAD USERS CLUB - North West Branch (Tom Price)

President:	Peter Hoffman	(091 89 1608)
Secretary:	Colin Smith	
Treasurer:	Mark Hedley-Smith	

This recently formed branch of SAUC already has 25 members. It has its own library and meets every second Wednesday night at the Primary School. Contact can be made with the President at any time. The branch is run along the same lines as the parent group and visitors are always welcome.

ROCKINGHAM-KWINANA AMSTRAD USER GROUP

President	Bob Harwood	
Vice-President	Keith Gaisford	
Treasurer	Rob Macilroy	
Secretary	Keith Saw	(095 27 6519)

This group meets at 7.30 p.m. at the Cooloongup Primary School, Westerly Way, Cooloongup (Rockingham), every second Wednesday. Further details can be obtained from Keith Saw on the above number or by writing to 29 Millgrove Avenue, Cooloongup, WA 6168.

ALBANY AMSTRAD USER GROUP

President:	Gerry Barr	(098 41 6884)
Secretary:	Steven Hands	(098 41 5183)
Treasurer:	Gavern Grose	

Regular meetings are held on the first and third Mondays of each month at Priess Street Centre, 14 Priess Street, Albany from 7.00 p.m., and are conducted in a friendly atmosphere with families welcome. An emphasis is placed upon educating and assisting users with their problems. Discounts have been obtained for financial members from certain dealers in the area.

SOUTH AUSTRALIA

AMSTRAD COMPUTER CLUB INC. (SA)

President:	Chris Sowden	(08 295 5923)
Vice Pres:	Frank Matzka	(08 382 2101)
Treasurer:	Les Jamieson	(08 356 9612)

The group now meets each Tuesday at the Church Hall, 15 Clayton Avenue, Plympton between 6.30 p.m. and 9.00 p.m. Any of the above officers can be contacted for further details and correspondence can be addressed to PO Box 210, Parkholme, 5043.

PORT PIRIE AMSTRAD USER GROUP

President:	Rick Cable	(086 32 5967)
Treasurer:	Dave Green	(086 32 6834)
Secretary:	Keith Partridge	(086 32 3919)

The group meets at 7.30 p.m. every first and third Monday of each month at the Way Inn Coffee Lounge, Ellen Street, Port Pirie City Centre. Meetings are well attended with members from Pt. Broughton, Warnertown and even Burra. For further details contact Rick Cable who will advise on the benefits of belonging to this group.

AMSOUTH AMSTRAD USERS GROUP

President	Geoff Martin	(08 384 4796)
Treasurer	Bob Bleachmore	(085 56 2048)

As the name suggests, this group has been established to cater for Amstrad users living south of Adelaide with the emphasis on family involvement. They meet every second Wednesday of each month at Christies Beach High School, Western Section, Beach Road, Christies Downs. Meetings commence at 7.30 pm.

PORT LINCOLN AMSTRAD USERS GROUP

Contact:	Rita Bascombe	(086 82 1633)

This new group currently meets at Rita Bascombe's house on the third Tuesday of each month from 8.00 p.m. until more suitable premises are found. All interested parties should contact Rita on the above number.

NORTHERN COMPUTING SOCIETY INC.

President:	Reg Pye	(08 265 5272)
Treasurer:	Maurice van der Hoeven	(08 258 1722)
Secretary:	Mike Taylor	(08 264 5715)

This group has been in existence for several months and has a steady stream of new members. They meet in the Scout Hall, Bagster Road, Salisbury North every Wednesday from 7.00p.m. For further details contact any of the above officers.

SOUTH EAST AMSTRAD USER GROUP (SA)

Co-ordinator: Neil Taylor (087 25 8086)
Meetings are held on the third Sunday of the month in Mount Gambier from 1.00p.m. to 4.00p.m. The group has sessions on programming and information sharing, with free time for games, business applications or problem solving.

VICTORIA

WESTERN COMPUTER CLUB

The meetings are held on alternate Tuesdays, from 6.30 p.m. to 9.30 p.m., and Sundays from 1.30 p.m. to 4.00 p.m. (to allow for shift workers) at the Fairburn Kindergarten, Fairburn Road, Sunshine. For further information contact PO Box 42, Braybrook 3019 or PO Box 161, Laverton 3028.

CENTRAL AMSTRAD USER SOCIETY

President: Fred Gillen (03 580 9839)
Vice-Pres: Dennis Whelan (03 367 6614)
Treasurer: David King (03 546 3992)
Secretary: John Holmes (03 434 1607)
Meetings are held twice a month in the Hall at the corner of Church and Somerset Streets, Richmond on the first Sunday of each month commencing at 1.00 p.m. and generally twelve days later on a Friday evening starting at 7.00 p.m. All meetings are conducted in a friendly atmosphere - families are welcome.

EASTERN AMSTRAD USER GROUP

President: Tony Blakemore (03 878 6212)
Secretary: Barry Fredrickson (03 846 1340)
Treasurer: Ron Dunn (03 277 7868)
Regular meetings are held on the first Sunday of every month at St. Ninian's Church Hall, cnr. McCracken Avenue and Orchard Grove, South Blackburn. The group organises tutorials in Basic and CP/M for beginners as well as lectures and demonstrations. PCW courses are being planned. Proceedings commence at 2.00 p.m. Their postal address is PO Box 279, Heidelberg, Vic 3084.

SOUTHERN AMSTRAD USER GROUP INC.

President: Peter Bradley (03 786 3953)
Secretary: Bob Patterson
Treasurer: Vickie Finlayson (059 98 8328)
Meetings are held on the third Tuesday of every month (except December when it is the first Tuesday) from 7.30 p.m. to 10.30 p.m. The venue is the Senior Campus at John Paul College, Frankston. Further details can be obtained from any of the above officers or by writing to the Secretary, PO Box 100, Seaford, Vic 3198.

NORTHERN AMSTRAD USER GROUP

Contact: Brian Ellis (03 469 4425)
Meetings are held every second Sunday in Preston. The group has a twofold structure and the alternate meetings are devoted to novice training and systems development. Games are discouraged.

SALE AMSTRAD GROUP

The Group meets informally every Thursday night from 7.00p.m. at the Sale Neighbourhood House in Leslie Street. In addition, small group tutorials are held twice a month.

LATROBE VALLEY AMSTRAD USER GROUP

Contacts: M. G. Donaldson (051 34 5711)
F. Baxter (051 92 4246)
This newly established group meets informally once a month from on a Thursday evening. Their aims are to foster knowledge and a better understanding of the Amstrad computer. Any Amstrad user is welcome to come to the meetings. For more details of dates and venue contact the above.

GEELONG AMSTRAD USER CLUB

President: Ron Butterfield (052 50 2251)
Vice-President: Arthur Pounsett (052 78 2160)
Secretary: Ross Bennett (052 44 1556)
This club now meets at South Barwon Community Services Centre, 33 Mount Pleasant Road, Belmont on the first Wednesday of every month, starting at 7.30 p.m.

MACEDON RANGES AMSTRAD USER GROUP

Contacts: Wayne Urmston (03 744 2719)
Ken McMaster (054 22 2620)
Covering the Gisborne, Sunbury, Kyneton and Woodend areas, this group meets in the Admin. Building of Flexdrive Industries on the second Wednesday of each month from 7.30 p.m.

MARYBOROUGH AMSTRAD USER CLUB

President: Chad Banfield (054 68 1351)
Treasurer: Brendan Severino (054 61 3191)
Secretary: Paul Clark (054 61 2135)
This group consists of a number of students and teachers from Maryborough CCC. Meeting take place each Friday from 12.10 p.m. to 12.45 p.m.

GOULBURN VALLEY AMSTRAD USERS CLUB

President: Shad Aitken (058 52 1001)
Secretary and Treasurer: Bill Brown BH (058 22 1011) AH (058 21 7569)
This group aims "to explore and enjoy all aspects of the Amstrad computers" and meets on the third Wednesday of each month from 7.30p.m. at 98 Nixon Street, Shepparton on the first floor.

ACT

CANBERRA AMSTRAD USER'S GROUP

Convenor: Neale Yardley
Secretary: Steven Walker (062 58 2323)
Treasurer: Roger McLennan (062 82 3064)
The group meets at 7.30 p.m. on the first Wednesday of each month in the Large Lecture Theatre, Canberra TAFE College, Constitution Avenue, Ried. Correspondence should be addressed to the Secretary, PO Box 1789, Canberra , ACT 2601.

NEW SOUTH WALES

JUBOL AMSTRAD USER GROUP of COFFS HARBOUR and DISTRICT

Contacts: Bruce Jones (066 52 8334)
Jim Owen (066 55 6190)
The "JUBOL" User Group is currently a small group covering the Coffs Harbour area. They meet informally on the first Friday of each month. Some members attend external DP courses and it is hoped that the group as a whole will shortly be embarking upon internal machine code tutorials.

SYDNEY AMSTRAD COMPUTER CLUB

President: Raja Vijayenthiran (02 88 3143)
Secretary: Reed Walters (02 560 9487)
Treasurer: Jim Chryss (02 327 7872)
Junior Rep: Daniel Story
This club now meets in a community hall in the Newtown area, on the first Saturday of every month for a normal club meeting and on the third Saturday of each month for the purposes of programming tutorials only. Both meetings commence at 2.00 p.m. Prospective members should contact either the Secretary or Treasurer between 6.00 p.m. and 9 p.m. on the phone numbers above for the exact location. Any enquiries concerning a new division for the PCW 8256/8512 users can be directed to R. Carlsen on 957 2505 (B/H) or 90 5725(A/H).

NEWCASTLE AMSTRAD USER GROUP

President: John Harwood (049 48 5337)
Treasurer: Erica Harwood
Secretary: Chris Hollander (049 67 5864)

Meetings take place on the first Tuesday of each month at Kotara Public School, Park Avenue, Kotara. A Newsletter is produced each month for members. Interested parties should contact John, Erica or Chris on the above numbers.

AM-USER's (North Ryde)

Contact: Lawrence Walters (02 888 1898)

The primary objective of the group is to enhance member's knowledge on both hardware and software available and on the Amstrad computers themselves. Meetings are held in the Meeting Room at 2 Leisure Close, North Ryde from 7.30 p.m. on the first Tuesday of each month. Discounts for members have been established at several stores in the area.

CENTRAL COAST AMSTRAD USERS CLUB

President: Lloyd Mitchell (043 88 2950)
Secretary: Ray Thompson (043 32 9095)

Established in March 1986, this club meets on every second Monday of the month at The Entrance Aquatic Club, Salt Water Reserve, Long Jetty. Proceedings start at 7.30 p.m. sharp. Anybody wishing to attend the meetings is welcome, and further information can be obtained from the above officers.

PORT MACQUARIE AMSTRAD USERS GROUP

This group hopes to produce professional quality hardware add-ons for the Amstrad. The group can be contacted through Craig Tollis, PO Box 584, Port Macquarie, 2444.

BLUE MOUNTAINS AMSTRAD USERS

President: Bob Chapman (047 39 1093)
Vice President: Dennis Shanahan (047 39 4568)
Treasurer: Peter Traish (047 53 6203)
Secretary: Christine Preston (047 51 4391)

Meetings are on the fourth Wednesday of each month at the Springwood Neighbourhood Centre, Macquarie Road, Springwood and start at 8.00 p.m. Activities include interaction of users with exchange of information and resources, a newsletter and tutorial sessions.

ILLAWARRA AMSTRAD USERS CLUB

President: Paul Simpson (042 27 1574)
Secretary: Ken Waegele (042 56 6105)
Publicity Officer: Steve Parsons (042 96 3658)

The Club meets on the third Saturday of the month at the AGA Gremania Club, Berkeley at 2.00p.m. Discounts for members have been arranged at major Amstrad stockists in the area. A Club library is currently being stocked.

FAIRFIELD MICRO USER GROUP

Contact: Arthur Pittard (02 72 2881)

The group meets every third Wednesday of the month from 7.00p.m. in Room 65, Canley Vale High School, Prospect Road, Canley Vale. For more details contact Arthur on the above number.

QUEENSLAND

BRISBANE AMSTRAD COMPUTER CLUB

President: Paul Witsen (07 393 4555)
Secretary: John Roberts (07 283 3349)
Treasurer: John O'Connor (07 271 3350)
Tech. Librarian: Peter Golledge (07 376 1651)

Three meetings are held each month. The main meeting is held on the first Tuesday of each month at Junction Park State School, Waldheim St., Annerley starting at 7.30p.m. in Room 15a. The second is held at Wynnum Central State School, Florence Street, Wynnum Central on the first Saturday of each month at 1.00p.m. The group co-ordinator is Warren Kennedy (07 351 4232). The third is held at Newmarket State School, Banks St., Newmarket on the second Saturday of each month at 1.30p.m. This group's co-ordinator is Cherry Shrier (07 351 6179). Tutorials on Basic and Machine Code are given and a rapidly growing public domain library is available to all members.

SOUTHSIDE AMSTRAD USER GROUP (QLD)

President: Michael Toussaint (07 200 5414)
Vice-President: Peter Incoll (07 208 2332)
Secretary: Ken Henry (07 208 8730)
Treasurer: Tony Reynolds (07 841 4823)

Meetings take place every third Saturday of the month at the Loganlea State High School (in the Communications Room) starting at 2.00 p.m. The group was formed to service the southern outskirts of Brisbane and membership consists of beginners to advanced programmers. Demonstrations of various hardware and software packages are given at meetings and the formation of smaller instruction groups for personal attention is under way. A BASIC programming instruction course is held fortnightly.

WEIPA AMSTRAD USERS CLUB

President Andrew Seaborn
Vice-President Dave Wootton
Treasurer Frances Casey
Secretary Gary Chippendale (070 69 7448)

This new group has already had a few meetings at Noola Court in Weipa. Prospective members should contact Gary on the above telephone number or write to 15 Noola Court, Weipa, 4874.

PENINSULA AMSTRAD CLUB

President Ivan Dowling (07 269 8795)
Treasurer Keith Johnston (07 203 2339)
Secretary Tracie Payne (07 267 6645)

The aims and objectives of this new club are to "further the knowledge, understanding and enjoyment of the Amstrad computer in its entirety". Meetings are held every third Tuesday of each month at 7.30 p.m. in the Kippa-Ring State School Library, Elizabeth Avenue.

THE WARWICK AMSTRAD USER GROUP

President: Adrian Christensen
Secretary: John Wode (076 61 5176)
Treasurer: Neville Christensen

Meetings take place at the Warwick Education Centre on the first and third Saturday of each month from 3.00 p.m. Funds are currently being raised to purchase a printer for all to use. PCW owners also welcome. Discounts for members have been obtained from two local dealers.

TOWNSVILLE AMSTRAD USER GROUP

President: Allan Maddison (077 79 2607)
Vice President: Brett Kettle (077 78 6915)
Treasurer: Shirley Paull (077 78 2318)
Secretary: Alister Buckingham (077 73 3955)

The club meets at 7.30 p.m. on the first and third (only) Tuesdays in each month in the Science Block of the Kirwan High School in Thuringowa Drive. Activities include Basic programming and CP/M sessions, new product reviews, problem solving, competitions and social outings. Club members also receive discounts on software and stationery from selected stores.

MACKAY AMSTRAD USER GROUP

Are newly formed small mixed group with meetings held every second Sunday morning. For further details contact either Des Mulrealiey on 551409 or Ron Coates on 547222.

WESTERN SUBURBS AMSTRAD USERS GROUP

President: Peter Wighton (07 288 4571)
Secretary: Jimmy James (07 376 1137)
Contact: Keith Jarrot (07 376 3385)

At the moment informal monthly meetings are held at Western

District Office Supplies, 500 Seventeen Mile Rocks Road, Jindalee at 9.30 a.m. on the first Saturday in each month. All age groups from 9 to 90 are welcome. Prospective members may contact any of the above or write to Jimmy James, 36 Penong Street, Westlake, Brisbane 4074.

BUNDABERG AMSTRAD USER'S GROUP

President:	Ray Babbidge	(071 72 1223)
Secretary:	Ron Simkin	
Treasurer:	Sheila Cole	(071 72 8884)

Established in May 1986, this group already has over 30 members. They meet on the third Tuesday of the month. For more details contact the above or write to Ron Simkin, PO Box 865, Bundaberg, QLD 4670.

TASMANIA

SOUTHERN TASMANIAN AMSTRAD USER CLUB

President:	Frank Self	(002 49 5499)
Secretary:	Peter Campbell	
Treasurer:	Cindy Campbell	
Publicity Officer	Danny Brittain	(002 47 7070)

Meetings take place on the first Wednesday of each month, commencing at 7.30 p.m. at the Elizabeth Matriculation College. Tutorials and Workshops are held at the Lady Rowallan School at times and dates to suit participants. Emphasis is on the CPC range with meetings kept as informal as possible.

LAUNCESTON AMSTRAD USER GROUP

This is a new group which has provisionally organised meetings at the Launceston Workingman's Club on the last Saturday of each month from 1.30 p.m. onwards. For more details contact Andrew Banfield on (003) 44 3181 after 6.00 p.m.

NEW ZEALAND

AMSTRAD CANTERBURY

Contact:	Christine Linfoot	459 132
	Ian Orchard	524 064

The club meets on the fourth Wednesday of each month at Four Avenues School, cnr. Madras Street and Edgeware Road, Christchurch 1. They are currently running tutorials in Basic for beginners, machine code and general purpose debugging, with ad hoc discussion groups on the working utilities such as Tasword, Masterfile etc. The postal address of the group is: PO Box 23.079 Templeton, Christchurch, NZ.

WELLINGTON AMSTRAD USER GROUP

Contact:	Tony Tebbs	791 072 (evgs)

This group meets at 7.30 p.m. on the last Wednesday of each month. The normal venue is Room 718, Kirk Block, Victoria University. The postal address is PO Box 2575, Wellington, New Zealand.

Once again we have had to exclude a number of changes to the above list because they were received too late. Please make a special note that the closing dates for December '86 and January '87 are 24th October and 14th November respectively.

We'd like to make sure that the contact list is up-to-date and represents a true listof users wishing to form a group. If you haven't written to us recently please advise of your current situation. Thanks.

User Group Contact List

Please note that the following names are listed as contacts for new user groups and should NOT be viewed as a problem solving service. See also Nationwide User Groups list on previous pages.

NSW		
Chris Craven	Canowindra	(063) 44 1150
Trevor Farrell	Coolah/Mudgee area	(063) 77 1374
T.J. Webb	Glossodia	(045) 76 5291
David Higgins	Inverell	(067) 22 1867
John Patterson	Lismore	(066) 21 3345
Paul Wilson	Moruya	(044) 74 3160
Frank Humphreys	Mummulgum	(066) 64 7290
Martin Clift	Narrabri	(067) 92 3077
Bob Hall	Newcastle	(049) 52 6915
Stephen Gribben	Singleton	(065) 72 2732
Ken Needs	St. Ives	(02) 449 5416
Chas Fletcher	Toongabbie	(02) 631 5037
Nick Bruin Snr.	Tweed Valley	(066) 79 3280
Vic		
Stuart McLean	4/304 Albert St. Sebastopol, 3356	
Brian Russell	Ballarat	(053) 31 2058
David Carbone	Burwood	(03) 29 4135
Rod Anderson	Camperdown	(055) 93 2262
Paul Walker	Heathmont	(03) 729 8657
Terry Dovey	Horsham	(053) 82 3353
Andrew Portbury	Leongatha	(056) 62 3694
Sue Kelly	Manangatang	(050) 35 1402
M.G. Donaldson	Morwell	(051) 34 5711
Angela Evans	Mt. Evelyn	(03) 736 1852
Keith McFadden	Numurkah	(058) 62 2069
Lindsay Parker	Wandin North	(059) 64 4837
Maureen Morgan	Warnambool	(055) 67 1140
QLD		
Debbie Topp	Bribie Island	(075) 48 1688
Steven Doyle	Caloundra	(071) 91 3147
Mick O`Regan	Gladstone	(079) 79 2548
Kylie Telford	Goondiwindi	(076) 76 1746 (weekendsonly)
D.F. Read	Ingham	(077) 77 8576
Tim Takken	Ipswich	(07) 202 4039
Alan Laird	Maryborough	(071) 22 1982
R.C. Watterton	Toowoomba	(076) 35 4305
SA		
Lindsay Allen	Murray Bridge	(085) 32 2340
Michael Spurrier	Murray Bridge	(085) 32 6984
Mrs. S. Engler	Penola	(087) 36 6029
Rita Bascombe	Port Lincoln	(086) 82 1633
WA		
Dave Andersen	6 Kitchener Rd Merredin, 6415	
Graeme Worth	Scarborough	(09) 341 5211
P.M. Nuyens	Waroona	(095) 33 1179
TAS		
Conal McClure	Scottsdale	(003) 52 2514
NT		
G.P. Heron	Tiwi	(089) 27 8814

CHEAT MODE

Some Tips, Pokes and Game busting ploys to improve your scores. If you've got any - let's have 'em.

To input the majority of pokes, there are two methods.

Method 1: **Type in the listing. Rewind the game tape. Type RUN followed by pressing enter. Follow on screen prompts to load the game.**
Method 2: **The tape header/loader/title screen, comprising usually of one or two data blocks has to be skipped. Rewind the game tape. Type in CAT followed by enter and play the tape. Watch the screen and a message will come up:**
Found FILENAME block 1 OK
where FILENAME will be replaced by the name of the loading section. The next message that appears will be the main program appearing in the same style:
Found MAINFILE block 1 OK
where MAINFILE will be different for each game. Note the point on the tape counter at which this second file appears. Stop the tape and rewind to just before that point. Type in the program and RUN it. Then press play on the tape deck.

Here are a few tips to help you on your way around the castle in this tough arcade adventure.

1. After killing a guard, pick up his helmet and drop it near a whirlwind to stop him reappearing.
2. After killing an ogre, put a barrel on the spot to stop him reappearing.
3. Place a barrel over the spot where a bubble appears to stop it reappearing when you enter the room again.
4. Guards only attack if you get close - except materialising guards which attack immediately.
5. Dropping gold lures the guards, so if you push it under something where it can't be reached you can move around without being attacked.
6. Watch out for flowers on stalks - if you get too close they reach out and rapidly sap your energy.
7. Don't fall in the well - it's fatal.
8. Keep food for as long as possible, and eat the smaller food first because food is useful for standing on to reach things.
9. Fire depletes Isvar's energy.
10. There are three teleportals: two of them link towers and the third links the tomb with the north side of the chasm.
11. The loading screen is a view from the wizard's chamber, and the bird points to the start.
12. Falling long distances depletes energy.

Beach-Head

If you happen to discover a bug in this program, then pressing the TAB key will take you back to the beginning of the game. You'll still have to start all over again but at least you won't have to reload.

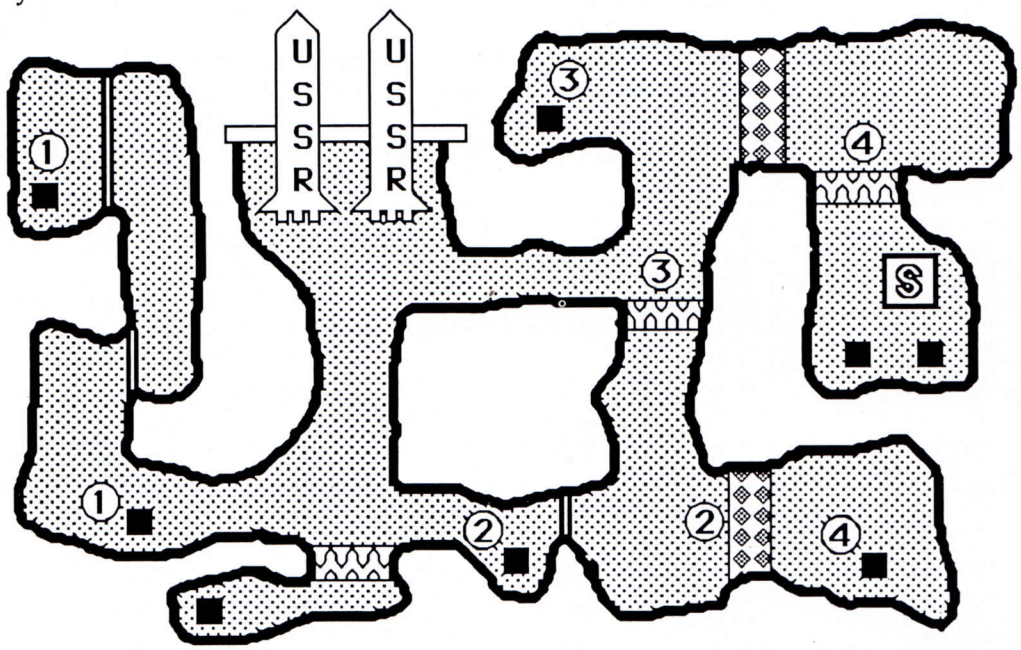
Commando

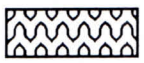
This poke gives 255 lives on the Elite shoot-em-up and is entered using Method 1.

```
10   MEMORY &5BFF:LOAD"commando",&5C00
20   FOR a=&9000 TO &9012:READ b:POKE a,b:NEXT
30   POKE &5C33,&C3:POKE &5C34,&0:POKE &5C35,&90
40   CALL &5C00
50   DATA 205,122,188,175,50,15,78,6,6,33,59,7,119,35,
     16,252,195,54,92
```

Airwolf

This old game still causes people a lot of problems, so here is a map that shows how everything should be done. Shooting the numbered boxes removes the correspondingly numbered barriers. The scientist is indicated by the S.



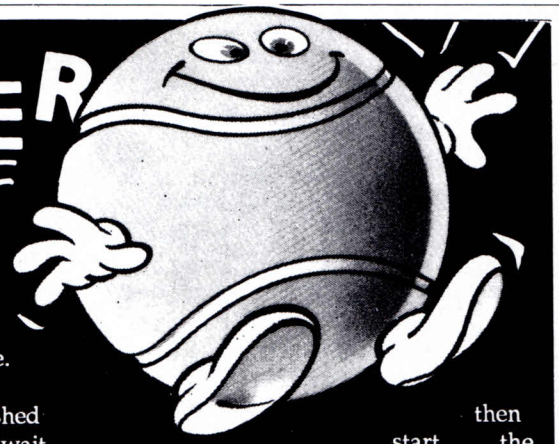


Unshootable Barrier

False Wall

Shoot-through Barrier

BOUNDER



If you're trying to crack Gremlin's wildly addictive Mastergame - here's some help. It's the cheat mode that's mentioned in the scrolling message display, and comes courtesy of Gremlin themselves.

All you have to do is type in POKE 800,201 , press Enter, and then load the game without resetting the machine. When it has finished loading wait for the scrolling message to tell you that the cheat mode is operative, and then start the game. You will have infinite lives and be able to see the whole game.

INTO OBLIVION

There is no way to lose with this poke which removes all the monsters from the Mastertronics game.

```
10  MEMORY 4999
20  LOAD"IO",5000
30  POKE &3232,0
40  CALL 5003
```

SABOTEUR

This poke gives infinite strength on the Durell game and is entered using Method 1.

```
10 MODE 1
20 INK 0,0
30 INK 1,1
40 INK 2,6
50 INK 3,24
60 BORDER 1
70 MEMORY 5000
80 LOAD"!1",49152
90 LOAD"!2",25200
100 LOAD"!3",6000
110 LOAD"!4",16419
120 LOAD"!5",23296
130 BORDER 0
140 LOAD"!6",49152
150 POKE 24210,0
160 CALL 23431
```

Classic Invaders

This poke stops the Aliens dropping bombs (except UFOs) and is entered using Method 2 to skip the first three blocks of the program called "INVADERS":

```
10 MEMORY 16499
20 x=16500
30 FOR f=1 to 12: READ
   a:POKE x,a:x=x+1
40 NEXT f
50 CALL 16500
60 POKE 18658,0
70 CALL 16896
80 DATA 62,22,17,101,
   66,33,0,66,205,
   161,188,201
90 END
```

Gossip from the U.K.

* With all the excitement on the launch of the PC1512, the rumours are raging about which software deals are likely to be closed by Alan Sugar and his henchmen. The most credible is that the new PC will be supported with **SuperCalc3**, **Wordstar** and **Reflex** database - all pretty cheaply priced.

* While on the subject of the PC1512, there is much gnashing of teeth and finger pointing within Amstrad here in the UK. It appears Mr. Sugar is most displeased at the leaking of details of his new baby some six weeks before the official announcement. The leak has been traced back to Taiwan where (another rumour coming) a PCW8256 clone is being developed.

* Ian Sinclair, well known for his books on computers including four for the Amstrad, has produced another for Collins Publishers entitled **"Collins Gem Dictionary of Computing"**. It contains information on over 2000 terms with 100 diagrams and explanatory captions. It is aimed at people using micros at home, office or school but should also appeal to the expert.

* For PCW owners **"Graham Gooch's Test Cricket"** has been released by ASL and Supernova has adapted the classic **"Space Invaders"**.

* Gargoyle Games, famous for their excellent arcade adventures, are moving into arcade games with the launch of a new label called Faster than Light. The first three games on FTL are **Light Force**, **Shockway Rider** and **Samurai Dawn**, which all feature a new technique they call 'Lasermation'.

* The disc version of Doors of Doom has arrived from Amsoft and - surprise, surprise - it's called **Doors of Doom+**. It has three delightful scenery backgrounds, including the one from the cassette. One of the three is picked randomly when you start each new game, so you'll quickly get to know them all. The excellent screen-design facility is there also. Although the gameplay is uncomplicated, the superb graphics and compulsiveness make this a worthy addition to disk software.

* Vanguard Leisure the people behind the Maestro package (amplifier, twin speakers and headphones) have just released a collection of ten digitised tunes for the CPC entitled "Easy Listening". They include TV and film themes and works from Abba, Queen and Bach. There are five tunes on each of two cassettes or all ten on one disc.

* Looking ahead, Martech plan to release **W.A.R.** which, according to the press release, is a very fast, smooth-scrolling, addictive shoot-em-up, with clever underlying strategy. Also in their pipeline is **Uchi-Mata**, another martial-arts game but this time based on Judo, and **Cosmic Shock Absorber** described as a "fast'n'furious 3D shoot-em-up, down, left, right and any other way possible. Even further ahead is **Catch 23** featuring 'total environment representation' and **SDI** a Star Wars program starring Ronald "Bedtime for Bonzo" Reagan. It all sounds very frightening.

CROSS COMPUTERS

WE CARE

CHRISTMAS STAR BARGAINS

Distributed by ISD

STAR BARGAIN 1

Paxman Gift Pack
4 Great Games

$29.95

STAR BARGAIN 2

Super Silver Saver
3 Pack - Normal RRP
$49.95 - save $24.00

$25.95
WOW!

STAR BARGAIN 3

Viatel Kit
Includes dedicated RS232 and software.
Normally $299.

$199.00

STAR BARGAIN 4

DK'TRONICS 256k Memory Expansion for the CPC464.
Normally $299.95
- Save $100

$199.95

STAR BARGAIN 5

KONIX Joystick Pack
Top quality Joystick plus a Super Silver Game. Save $15

$39.95

Send a self-addressed envelope for details of more great savings on software and hardware

Please send me STAR BARGAINS
1...❒ 2..❒ 3...❒ 4...❒ 5...❒
Please tick appropriate box ☑

AMSTRAD FAMILY COMPUTER CENTRE
Christmas Order Form

To: **CROSS COMPUTERS**
Shop 1, Boronia Village, Boronia,
Vic 3155. Telephone: (03) 762 8566

I am enclosing my ❒ cheque,
❒ money order or
Please debit my ❒ Bankcard,
❒ Visa card ❒ Mastercard for the sum of $.....

IMPORTANT: Please add $3 to each order to cover post and packing

Card No. Expiry Date _____

Signature _____

Name _____
Address _____
_____ Post Code _____
Telephone _____

Disc Utilities

by C.J. Collins

Chris gives us the benefit of his experience in using two Disc Utilities namely Transmat and Disc Demon.

TRANSMAT

Transmat is one of the many tape-to-disc copy programs that are available on the market today. There are many others available for the Amstrad range, but I have found that Transmat, although it has been around for a fair while, is as good as most and better than some.

Before we get into this too far, be very wary of copy programs that claim they will copy any program available on tape and then put it onto disc. To try and combat software piracy the software companies these days sell programs on tapes that usually run their own loader software which plays around with the internals of your computer and no program that I have yet come across will transfer them to disc. More on this later.

For those of you that think it will be easy to transfer your favourite programs onto disc, forget it! Some programs go over very simply, others take a bit of work to get over and some are damn near impossible Apart from all this, just because you can transfer a program to disc does not mean that it will automatically work.

Some of the early programs that were available for our computers made funny use of the memory and may try to address the page of memory that the disc drive interface uses and these will have to be relocated. Transmat will ask you if you want it to relocate the offending program to overcome the problem.

Into Transmat itself. Transmat operates in two modes, auto and non-auto. Both modes have their uses.

Auto mode is very useful for copying lots of programs off the one cassette where you will be looking at them later and sorting them out. I find it very useful for copying the monthly cassette from this magazine to disc. Auto mode has the following features;

*\ It will force the cassette filename to a legal disc filename,

*\ It will not relocate any program that overlays the disc drive interface,

*\ If you insert 0 as the number of programs to copy, Transmat will keep copying until such time as you press the ESC key. Useful if you don't know how may programs there are to transfer.

*\ Using 0 as the number of programs, this mode will attempt to transfer any program on the cassette until told to do otherwise, so if there is more than one program with the same name you will end up with .BAK files.

Non-Auto mode is the other way to use Transmat. This is a totally manual way to use Transmat and requires that you tell it what to do. It will allow you to have the following options when transferring programs;

*\ Allows you to give all programs a legal filename, so avoiding .BAK files.

*\ Allows relocation of offending code that wishes to overlay the disc drive interface.

*\ If you press the CLR key when asked for a filename, the program will not be transferred,

Other options available from the command level of Transmat are as follows;

*\ Selecting disc drives,

*\ Information on the files on the selected drive, useful when trying to get programs to work,

*\ Ability to enter CP/M,

*\ Renaming, erasing, directory and change of user number for any file on default drive, and

*\ Return to Basic.

Once a program has been transferred to disc, it is then up to you to get it working. Transmat will have removed the protection on any basic loader, so you can LOAD and LIST it to possibly find that all you have to do is insert a filename into a RUN or LOAD command for the program to work. If not you could be in for a lot of work to get it going.

Ever since I have had my 6128, I have been using Transmat and to write this review I went back over

my transfers and also tried to transfer some newer programs with it. The result was a lot better than I had hoped for. I was given three tapes to transfer and managed to get two of them transferred and then up and running on my 6128. This might not sound like much, but one of the programs that I got working was the original version of Mini Office by Database Software, which is in effect 4 separate programs.

Like a lot of programs of this type, Transmat must never be used to invade a manufacturers copyright on a program. It is to be used only to transfer programs that you have bought yourself for your own personal use. Piracy of commercial software is rife and for that reason manufacturers are using very devious methods to try and protect their products, which makes it very difficult for those of us that buy a program on tape and then wish to transfer it.

There are other programs of this type available on the market that will claim to transfer any program to disc. Don't believe it! The only program that I am led to believe that will transfer any programs available are "Disc Wizard" and "Doubler+" both available from Evesham Micros in the UK. *(The Disc Wizard is produced in Australia by Micro Accessories of SA. Enquiries can be made on (08) 287 0191- Ed.)* But both of these work in a different way to a normal tape-disc copier. What they do is to look at the program to be transferred and then generate a machine code program that will do the same thing.

However, I have not tried either program so I cannot swear to their success.

The word for Transmat is that it will do the job on all normal format loaders and a few of the odd ones available for the Amstrad that I have come across and for that reason alone I would have to recommend it if you need to transfer your cassette based programs to disc. Just don't expect it to do everything.

DISC DEMON (by Beebugsoft)

Disc Demon is another one of the many disc utility programs that are now available for the Amstrad range. It has the usual commands that all the others have, plus it also has a few of its own. Another difference is the way in which they are implemented. This will be explained more clearly as this review continues.

Disc Demon is available in two forms. It is one of only two programs of this type, that I know of, that come in a ROM as well as on disc. These comments apply to the disc version, although I believe that there are no differences between the two. The manual does mention one point regarding the ROM version. If at any time you find that Disc Demon's commands clash with the command set of another ROM in your board, it is possible to precede the Disc Demon command with a 'b' for BEEBUGSOFT. Therefore a command such as |helped would become |bhelped. I would think that this should cure any possible problem.

Disc Demon is rather unusual for the reason that it can operate as a normal utility from a menu, or you can use any of the commands that are available on the menu as RSX commands. To those of you not quite sure what I mean by this, a RSX is a command preceded by a |, as in |demon.

On the disc version of this program are four files. These are called disc, discx, Version1.0, and demon.

There are two ways of loading Disc Demon, although the manual only lists one. The manual says to RUN"disc. This is similar to the method used in LOCKSMITH, as it loads the program into memory as an RSX file and then waits there until you call it to the foreground with the command |demon.

I find it easier to use method two. The choice is yours.

The commands that are available from the opening menu include helped, access, cats, catb, copy, dedit, direct, dis, dmap, disccopy, dsearch, dump, enable, fedit, fmap, form info, load, mdump, medit, msearch, recover, tdisc, verify and wipe.

As you can see, there are a lot of commands in there. However, if you look closely you will find that some of them seem very similar to the normal commands that your computer uses. There is very good reason for this. They do exactly the same job as you could do under AMSDOS, using the exact same command. Why these have been included in this package, I do not know. I suppose that the programmer had a good reason.

When called into being, Disc Demon sets up the function keys on your keypad to emulate some of the commands that you would use most commonly. These include selecting modes, cata, printer on/off, recalling Disc Demon, and 3 help commands. All of these are listed in the documentation.

To recall Disc Demon at any time after leaving it, simply press 9 on the keypad and you will be back at the main menu. Now to the list of new commands that are listed on that almighty main menu.

ACCESS	allows for the locking and unlocking of any file on a disc. Also referred to as changing files to Read/Only.
CATA	simple, catalogue of the disc in drive A.
CATB	ditto, except that it operates on drive B.
COPY	copies individual files or groups of files from one disc to another or one drive to another.
DEDIT	used to examine and modify a disc sector. Can have a display in either hex or

ASCII.

DIRECT	allows for editing of the disc catalogue.
DIS	used to disassemble a block of memory.
DISCCOPY	used to copy the entire contents of a disc to another disc. Will not copy disc with funny formatting patterns.
DMAP	gives you a visual display of the way in which the disc sectors are being used.
DSEARCH	allows you to search an entire disc for a specified string. I must admit that I cannot see a use for this.
DUMP	dumps the contents of a disc file to the screen in either hex or ASCII. Anything outside the printable range is shown as dots.
ENABLE	enables a ROM so that you can examine it with either MEDIT or DIS.
FEDIT	gives the ability to examine and then edit a file, sector by sector.
FMAP	displays user numbers and the active state of files on the disc. Includes erased files.
FORM	format all or part of a disc. Very selective formatting.
INFO	reads the header on a disc file and then displays the information.
LOAD	similar to the BASIC LOAD command, but will load any file anywhere in memory.
MDUMP	used to dump a block of memory to the printer.
MEDIT	examine and edit blocks of memory.
MSEARCH	search through memory for a specified string.
PON	direct output from commands to printer. Not available on main menu.
POFF	switch off printer output. Also not available on main menu.
RECOVER	allows selective recovery of erased files. Only useful if the file has not been written over.
REN	renaming of files. Selective or not. Same as AMSDOS command. Not available from the main menu.
SAVE	save a block of memory with a different load address. Use with LOAD.
TDISC	transfer tape files onto disc.
VERIFY	checks to see if a disc is correctly formatted.
WIPE	selective erasing of disc files.

Almost all the above commands require different parameters to work. If not supplied when the command is called, they will be asked for. Also, as is stated in the manual, three of these commands will destroy any program that resides in memory when they are called. Read your manual!

Two further commands are available that are not listed on the menu. These are demon and demon off.

The first is used to call Disc Demon into being if loaded as an RSX file. The second is used to clear Disc Demon from memory if you require the space for basic programs. On the ROM version, this completely disables the ROM. The computer will need to be reset if you require Disc Demon again. Also asks you if you are sure that you want to clear it.

If like me you keep an auto-loader on your games discs, Disc Demon will also help us even further. When run, it resets the CONTROL/Small ENTER combination to give RUN"DISC instead of just RUN". Just rename your auto-loader to DISC.BAS. Much simpler.

After all that, what do I really think of DISC DEMON? I am afraid that I am not quite sure. It seems to offer a few extras on top of the other disc utilities that are available, but it would greatly depend on whether you require those extras as to whether it will be useful to you.

As far as I personally am concerned, it offers little more than some other disc utilities that I could name, apart from two major attractions:

The first would have to be the resetting of the function keys, which I could do under BASIC anyway, and the second and most important is the ability to remain co-resident with other basic programs while I work on them. This second ability is the best reason that I could think of for buying Disc Demon. If you already have a disc utility program, keep it and learn how to get the best out of it. However, if you don't, then by all means have a look at DISC DEMON.

NEXT MONTH

We plan to take a close look at the all Australian made "Disc Wizard", a piece of hardware which claims to be able to back-up your software, regardless of the loading method.

We also plan to provide details of more disc utilities to hit these shores recently.

If that's not enough, for music fans we shall tell you all about music composers, a 'drumkit' and other packages.

Don't miss them !!

A talk with Max Headroom

by J.C. Ablett

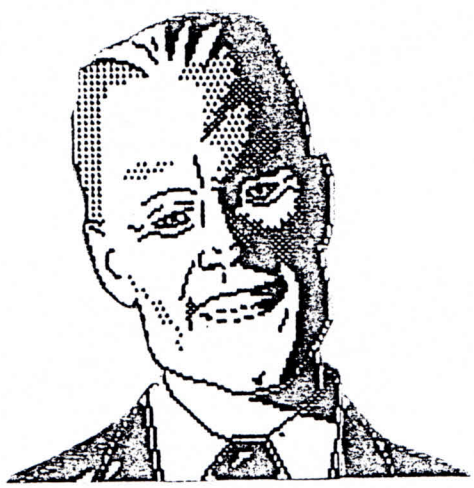
If you despaired over "ELIZA" the 37K conversation piece a couple of months ago, then a talk with Max Headroom in this 6K program may restore your sanity. On the other hand it could send you off into a loop forever.

The program is called "GIGO" (which, for the benefit of those new to computing terms, means Garbage In, Garbage Out). The name is very apt, although you may have to use it for a while to see why.

Where it differs from ELIZA (apart from the length) is in the graphics. You can hold a conversation with a little Max Headroom character who moves his lips as a message prints up on the screen. His vocabulary is limited, however this doesn't mean he has to repeat himself. He will learn your replies and throw them back at you when you least expect them. So don't be rude to him or eventually you will get as good as you give.

Max's comments are stored in the array r$() and line 90 selects from them at random. When the chosen answer is displayed it is replaced in the array by the comment you've just entered. This means that he forgets each comment so can't repeat himself unless you do.

One obvious development you could make would be to get Max talking through a speech synthesiser. The relevant routine runs from line 330 onwards and at present just moves Max's lips.



```
10 REM 'GIGO De-luxe'. Copyright J.C. Ab
lett, July 1986
20 MODE 1:PAPER 2:BORDER 11:SYMBOL AFTER
 0:PRINT CHR$(23);CHR$(0);
30 FOR a=0 TO 3:READ b:INK a,b:NEXT a:FO
R a = 1 TO 7:READ b,c,d,e,f,g:WINDOW #a,
b,c,d,e:PAPER #a,f:PEN #a,g:NEXT a:FOR a
= 1 TO 8:READ b:CLS #b:NEXT a:DATA 0,26,
11,1,19,22,3,7,0,0,18,21,2,6,1,0,2,39,9,
24,1,3,3,40,10,25,0,0,2,15,2,6,1,0,3,16,
3,7,0,0
40 DATA 25,40,3,7,0,0,0,4,3,1,2,6,5,7
50 WINDOW #1,24,39,2,6:PAPER #1,1:CLS #1
:WINDOW #3,3,38,10,23
60 LOCATE #1,1,2:LOCATE #5,1,2:PRINT #5,
" GIGO De-Luxe "+ CHR$(164)+" J.C. Ablet
t   July 1986":PRINT #1,"  WATCH  THIS
      SPACE":LOCATE #1,5,4:PEN #1,2:PRI
NT #1,CHR$(242)+"     "+CHR$(242)
70 FOR a = 1 TO 3: READ c,d:PLOT c,385,0
:DRAWR d,0:DRAWR 0,-82:DRAWR -d,0:DRAWR
0,82:NEXT a:PLOT 15,272:DRAWR 0,-258:DRA
WR 610,0:DRAWR 0,258:DRAWR -610,0:DATA 1
5,226,271,66,367,257
80 DIM r$(100):FOR a=0 TO 100:READ r$(a)
:NEXT a:GOSUB 230:a$="hi !, what do you
want to talk about today ?":GOSUB 330:PR
INT #3
90 r=INT(RND*101):a$=r$(r):LINE INPUT#3,
r$(r):GOSUB 330:PRINT #3:GOTO 90
100 DATA please,thankyou, bonjour, I don
't know,yes,no,possibly...,that's rather
 a rash statement to make-can you prove
it ?,what's that got to do with me ?,I d
on't care, are you trying to be sarcasti
c ?,is that meant to be a rhetorical que
stion ?
110 DATA how should I know ?,what's that
 supposed to mean ?,I beg your pardon ?,
well you see doctor - it's like this ...
, was that supposed to be funny ?,you lo
ve me really,I've run out of things to s
ay - it's your turn now, do you come her
e often ?
120 DATA have you ever wondered what we'
re doing here ?,nice weather we've been
having lately, let's talk about marmoset
s, you aren't making a lot of sense, ple
ase don't contradict me - I don't like i
```

```
t,I have this fear of being replaced by
a human
130 DATA pass the salt,ho-hum,gibber...g
ibber,can I flog you a musical toilet se
at ?,you don't say,well I never,who woul
d have thought it ?,you're only saying t
hat to make me feel better,that's not a
very nice thing to say,I fink you spelt
dat rong
140 DATA you don't know the half of it,i
f only you knew,je ne comprends pas,spra
ken sie deutsch,I heard rumours that the
y were teaching a computer to have intel
ligent conversations,what's new ?,I won'
t answer that,rubbish,utter waffle,well.
....
150 DATA I'll see what I can do for you,
but....,this is a recorded mesdsage.,can
 I help you ?,stop trying to change the
subject,good question,I never could get
to grips with humour,I cannot tell a lie
.....
160 DATA it makes you feel really silly
when you realise that you are talking to
 a computer.(or a human in my case),I tr
y my best,please could you type that in
again ? slowly,you're twisting my words,
no comment,I think I'm in love with you
170 DATA I like you - you're cute,that's
 the nicest thing anybody's said to me a
ll day,it makes me very happy to hear yo
u type that,you don't really mean that,h
onestly ?,you wouldn't be telling fibs b
y any chance ?,that sounds interesting
180 DATA could you explain that to me ?,
that's facinating,I'd love to,you must b
e joking,you can't be seroius,I quite ag
ree,my sentiments exactly,never !,I woul
dn't mind learning to do that,sorry if I
 don't make a lot of sense
190 DATA I'll bear that in mind in futur
e,parlez-vous franglais ?,I like a perso
n with a sense of humour, it's no laughi
ng matter, I'm bored with this - let's t
alk about something else,O.K.,ignorance
is bliss,neccessity is the mother of inv
ention
200 DATA great minds think alike,time an
d tide wait for no man,a fool and his ho
ney are soon parted,monday is the root o
f all evil,amazing how I can come up wit
h such intelligent responses isn't it ?
210 DATA there's no money to be made fro
m max headroom impersonations,have you e
ver considered being a wally full time ?
,I'm feeling depressed,oh dear - that is
 dismal,personally speaking - I prefer m
armosets,can I go home now ?,oh please -
 just for me
220 DATA the mind boggles,I see,but of c
ourse,help-I'm a prisoner in an Amstrad
computer factory typing out silly commen
ts
230 FOR a=1 TO 20:READ b,c:m$(0)=m$(0)+C
HR$(b):m$(1)=m$(1)+CHR$(c):NEXT a:DATA 3
2,218,234,219,235,220,32,32,236,221,237,
222,238,223,239,32,240,224,241,225,242,2
26,243,32,32,227,244,228,245,229,32,32,2
46,230,247,231,248,232,249,233
240 FOR a=1 TO 3:a$(a)=" "+CHR$(a*2+248)
+CHR$(a*2+249)+" ":NEXT a:a$(0)=MID$(m$(
0),13,4):b$(0)="MBP":b$(1)="CDGKNRSTHZLF
V":b$(2)="OAEIY":b$(3)="WQU":FOR a=37 TO
 0 STEP-1:READ b,c,d,e,f,g,h,i:SYMBOL 25
5-a,b,c,d,e,f,g,h,i:NEXT a
250 DATA 0,0,1,6,15,24,55,46,0,63,197,50
,136,100,20,200,0,0,0,192,96,32,16,16,11
6,103,239,249,234,245,238,111,98,136,34,
72,162,81,255,223,16,8,8,30,62,250,124,1
24
260 DATA 124,126,62,63,63,31,31,15,190,1
86,116,122,229,233,232,235,58,50,18,146,
234,130,114,146,15,7,7,7,3,3,1,1,230,209
,232,216,228,251,245,254,34,194,18,98,2,
4,216,160
270 DATA 1,2,7,7,15,15,31,31,255,127,159
,195,224,208,204,216,216,151,39,115,187,
93,91,185,0,192,248,252,254,254,255,255
280 DATA 0,0,7,60,114,137,196,160,0,0,24
0,156,38,75,23,79,1,1,1,1,1,1,3,2,1,0,12
,66,1,121,255,242,47,87,47,31,35,31,255,
253,128,128,128,128,128,128,192,64
290 DATA 2,2,2,1,0,0,0,0,236,124,50,4,13
8,137,144,144,251,221,237,227,115,183,95
,15,192,192,128,128,0,0,0,0,151,128,67,4
0,16,25,55,80,230,22,238,108,28,60,254,2
55
300 DATA 1,7,31,127,255,255,255,255,232,
228,242,241,243,253,249,253,127,63,99,19
7,100,119,207,223,128,192,248,252,255,25
5,255,255
310 DATA 139,140,67,32,19,24,55,80,230,5
4,206,44,220,60,254,255,147,135,70,34,17
,24,55,80,198,230,110,76,156,60,254,255,
147,135,67,32,19,24,55,80,134,198,142,76
,156,60,254,255
320 RETURN
330 LOCATE #2,1,1:PRINT #2,m$(0);:FOR m=
1 TO LEN(a$):LOCATE#2,1,4:PRINT#2,a$(L):
FOR b=0 TO 3:IF INSTR(b$(b),UPPER$(MID$(
a$,m,1)))<>0 THEN L=b
340 NEXT b:PRINT #3,UPPER$(MID$(a$,m,1))
;:NEXT m:IF L<>0 THEN FOR a=0 TO 500:NEX
T a:LOCATE #2,1,4:PRINT #2,a$(0):FOR a=0
 TO 200:NEXT a
350 IF INSTR(a$,"?")=0 THEN LOCATE #2,1,
1:PRINT #2,m$(1);
360 RETURN
```

TURN YOUR PCW8256/8512 INTO A BUSINESS WORKSTATION

SANDPIPER ACCOUNTS

A SIMPLIFIED INTEGRATED ACCOUNTING SYSTEM

Each transaction need only to be entered once,
all relevant ledger postings happen automatically at the time of posting.

Specially written for PCW8256
Utilizes the RAM Disk to eliminate the need for changing disks during the day.

Personalized invoices/ statements/remittances
Produces Professional Documents with Full Business Details on Inexpensive blank paper thus improving your company's image. Designed to fit standard window envelopes.

Large file capacity
Sufficient Sales, Purchase, and Nominal Ledger Records may be kept for most businesses on 1 data disk.

Easy to use - Designed for Inexperienced Users
Full instructions for use appear on the screen. The comprehensive manual need only be used for reference.
Full customer telephone support - available if required.

Sales Ledger
Invoice Posting
Cash Receipts
Debtors List
Statements
View Account

Purchase Ledger
Bill Posting
Cash Payments
Creditors List
Remittances
View Account

Name & Address Labels

Nominal Ledger
Lists of Accounts
Reports
Periodic Transactions
N L. History

Cashbook
Bank Statement Entry
Full Reconcilliation
Periodic Transaction View
(gives TRUE cash status)

Single Drive System:
200 Accounts
(Sale, Purchase)
1000 Transactions
200 Nominal Accounts

Dual Drive System:
1000 Accounts
(Sales, Purchase)
4000 Transactions
200 Nominal Accounts

Management Reports
1) Stock Report
Value of Stock
Cost of Sales
2) Assets including Depreciation
3) Prepayments & Postpayments
4) Expenses
5) Profit & Loss
6) Balance Sheets

*** ONE SYSTEM NOW SUITS SINGLE OR DUAL DRIVE PCW - $385 * PC1512 SYSTEM SOON AVAILABLE FROM ALL GOOD COMPUTER DEALERS OR DIRECT FROM THE IMPORTERS**

AMSNET International
Pty. Ltd. (Aust.) Limited (U.K.)
Australian Microcomputer and Software NETwork

THE PEOPLE-SERVING-PEOPLE MARKETING NETWORK

To **AMSNET International Pty Ltd.** 075-531734
49 Riversdale Rd., OXENFORD, Qld 4210
Please supply SANDPIPER ACCOUNTS to me. I enclose CASH/ CHQ, MO, B'kcard, M'card, Visa No _____
Expiry Date _____ Card Signature _____
From _____
Address _____
_____ Post Code _____
Phone Number _____ Best time _____ am/pm

BUNYIP SOFTWARE

Announces the release in Mid November of an Australian designed suite of programs on disc for the Amstrad CPC computers.

SCREEN GRAPHICS PACKAGE 6

This has a powerful Screen designer type program with the ability to save an area/full screen and later merge it with another screen, or with compatible Inks, swap pictures between Screen Modes.
It also contains a Character Editor/Graphics string producer program that can save data or a Basic program, and an Epson compatible shaded printer dump program, and a selection of mergeable pictures.

For more details, send a S.A.E. to:
BUNYIP SOFTWARE, PO Box 591, Murray Bridge, SA 5253

Quality without the cost

A review by Arthur Simenon

The Quest Business Control System (QBCS) offers excellent value for money. It is an inexpensive, comprehensive, simple-to-use program, useful for stock control, invoicing and double-entry accounting in a small or medium-sized business.

Originally written for the Amstrad PCW8256 micro, its developer, Quest International, has recently announced versions for virtually any MS-DOS or CP/M micro, including IBM and compatible machines and Apricots. These new versions offer the same straightforward features as the Amstrad for a similar low price.

QBCS has three modules, which can be supplied together on one disc for $550. This price includes an option called File Expander, which allows QBCS to be used to its fullest potential on MS-DOS and CP/M machines.

Alternatively, you can buy the modules separately. Module One includes sales ledger, sales invoicing and stock control, and costs $325. Modules Two and Three have the nominal and purchase ledgers respectively, and each costs $120.

QBCS with File Expander can handle up to 9,999 accounts in each of the ledgers, plus 32,000 stock items and 32,000 transactions, provided the disc memory space is available. Without File Expander, the smaller versions of QBCS only offer 500 accounts per ledger and 2,000 transactions per month.

The reason for this approach is the problem of achieving credibility in the 'serious' business market. As a marketer of low-priced Amstrad software, Quest is trying to go 'up-market' into the full business MS-DOS and CP/M areas, and is facing the problem of trying to serve two markets with the same produce.

STRAIGHTFORWARD

The Quest Business Control System does have limitations, but the restrictions are few and not a problem for users with straightforward and routine demands. Cosmetically the program looks slightly old-fashioned, with any frills or enhancements. The on-screen parameters of the ledgers and invoices are largely predefined and unalterable, but the outlines provided are sensible and should suit many business.

There is no system of security or passwords protecting the system from unauthorised users, but as QBCS is primarily aimed at small businesses Quest does not see this as a necessity.

The suite is very simple to operate. The inclusion of stock control and invoicing is a bonus - many expensive accounting products do not have these features built in the ledgers, offering them instead as optional extras to the main package.

The purchase ledger module has a cheque-writing feature which allows company cheques to be produced on the computer, although the small businesses that are likely to use QBCS are unlikely to have large quantities of cheques to raise, and manual cheque writing may be faster and easier if requirements are small.

The Quest Business Control System has one manual in the form of a tutorial. An hour's session going through the program in conjunction with the documentation gives a good understanding of the basic accounting and business

management functions which QBCS provides.

WORDLINK

An additional program called Wordlink allows QBCS to integrate with any other software which uses ASCII files. This means the majority of word processing, spreadsheet and database programs. Wordlink allows data from within QBCS to be included in letters reports, database files or mailmerge routines, and costs.

INVOICE SPOOLER

Another optional program is Invoice Spooler which allows invoices to be designed individually to suit different businesses - perhaps so that invoices fit neatly onto pre-printed headed paper. Invoice Spooler copes with invoices which have more than the QBCS limit of 15 lines per invoice, and takes them onto continuation sheets. It will also act as a buffer, storing invoices on disc for printing later. The number of invoices which can be stored depends on how many items are on each invoice and how much free disc space is available for storage.

The QBCS software is not copy-protected, but the first time it is used the new purchaser is obliged to register the company name with Quest. In return they are given an individual code which allows them to run the software. For multiple companies, or those users who wish to use different trading names or even clients, additional names can be registered.

IN USE

QBCS is completely menu-driven. The screen presents a list of options and the user chooses one by typing the number of the function or routine required.

The main menu is called the Suite Menu from which the three ledgers, sales invoicing and stock control modules are selected.

The ledgers and invoicing modules each have a single menu screen.

The opening menus of the sales and purchase ledger modules are very similar in the choices they offer. Both have 14 options, covering all possible applications or intended uses. The options include seven print commands as well as several different types of transaction posting options.

In the sales module these transaction posting options include invoices, credit notes, payments, cash sales, journal entries to cancel invoices, journal entries to cancel cash, credit with cheque and/or cash, and assigning of unallocated cash.

The purchase ledger options are very similar, but the statement option in the sales ledger is replaced by the cheque-writing option in the purchase ledger.

The sales ledger module, which includes the invoicing and stock control, is updated automatically from the invoices and linked to the nominal ledger via a batch system.

The purchase ledger module can also be linked to the nominal ledger, and both purchase and sales can be linked to stock control.

From both sales of purchase modules you can print a list of accounts, with addresses, phone numbers, turnover and any outstanding balances over the current, and one-, two-, or three-month periods. These can be printed alphabetically or in account number order.

Both sales and purchase customer account details can include special discounts or discounts for quick payments, which are automatically taken into account when the transactions are posted.

REPORTS

As well as an option which allows for all postings to be listed, reports can be printed for nominal and daybook audits. There are aged debtor lists for customers and suppliers, and these can be broken into current, 30-day, 60-day or 90-day periods. The facility to have an aged creditor list as well as an aged debtors' list is another feature which is frequently absent from more expensive programs, and is a welcome sight in such a low-cost one. It is also possible to produce a lit of those customers who have not made a purchase since any date selected by the user.

Customer statements are produced by making a selection from the sales ledger menu. To enhance the output, these would preferably be on pre-printed stationery.

The equivalent option in the purchase ledger module produces cheques, again on specifically printed continuous stationery.

Having finished a task in any one of the modules, you have to exit to the main menu and then re-select the appropriate ledger before making a new selection. The menu-driven approach does not allow the user to go from one task within a module to another in the same module without exiting to the main suite menu. This is a small inconvenience, and one which is common in far more expensive programs than this.

The system automatically generates two reference numbers - one is used as the invoice number which automatically goes to the next unused one when new accounts are being created, and the reference number for the delivery note number.

For analysis, the program allows up to 94 columns to be created in both the sales and purchase ledgers. Transactions can be allocated to any one of 94 different headings. A single item can also be allocated to one or several different headings. In the purchase ledger these headings will relate to specific areas of the

business to which purchases are to be assigned or costed, and in the sales ledger the analysis columns can be assigned to salesmen or departments.

PAYMENTS

Payments can be allocated against current or aged accounts, although cash payments can only be allocated to aged accounts if they are exactly equal to a month total or the total outstanding - the program cannot cope with irregular amounts allocated against such accounts.

There is a fair amount of space in the sales and purchase ledgers to allow the user to input the accounts details. One 30-character line is allocated to the name, and four 30-character lines are given over to the address, with an overall maximum of 95 characters for the name and address. There is also a line for the phone number.

Customers and suppliers can be given a user-definable classification code between 1 and 99, which denotes the type of account, and an alpha-code which offers 26 groupings. When the program is instructed to print out an alphabetical list of accounts, it looks at the alpha-code rather than the name of the client.

The classification code of 1 to 99 can also be used to print reports, and these classifications can be defined and displayed by making a selection from the main sales or purchase ledger option list. The user can make these definitions independently - you need not call in the dealer.

STOCK CONTROL

The stock control section is accessed from the main Suite Menu, and again the user must enter the date before going into the stock program. Once the date is entered satisfactorily, another 14-option menu is brought on to the screen. This looks very similar to the sales and purchase ledger option menus.

The program allows the user to enter stock movements according to nine different types of postings, including orders from customers or to suppliers. In addition, the sales module will automatically down/up-date physical stock with quantities entered on invoices and credit notes.

Details of stock products can include a 25-character description, the product group or classification, the number of units in which the product is sold and the unit price, the cost price, and percentage discount, and the VAT code. The number of units held in stock - up to 99,999 - are shown, along with the minimum level and re-ordering levels.

The program also displays the last issue date, the turnover quantity and the turnover value, and the cost of sales up to 999,999,999. The percentage gross profit per unit is shown, together with gross profit and percentage gross profit.

You can also see the value of the physical stock at the selling price and the cost price, a useful gesture which lets you see the wholesale and retail values of the stock in hand at any time you wish.

MOVING STOCK

There are nine different types of stock movement transactions, including debit and credit adjustment and the ability to write stock off if it is lost or cannot be accounted for.

As with the ledgers, the stock level adjustment area is another where it would be nice to see some sort of security password system.

The program will print reports from the stock file, based on various user-defined criteria. These fall into two main categories, one which concerns itself with historic and future financial information, and the second with the actual stock position of each item and the need to re-order. All this information can be displayed on one report.

Stock reports will always show the stock code, description, prices, free stock, minimum stock level, re-order level and the orders situation, imported from the sales and purchase ledgers. You can opt for reports to show the turnover by quantity, sales value or cost value, the gross profit and percentage gross profit on each unit and on turnover and the valuation of stock at cost and selling prices. Reports can also show the sales orders which are still outstanding.

The main stock control menu allows cumulative information to be given a zero value. In this way the turnover quantity, turnover value and cost of items sold can be cleared off at the end of periods. Of course, it would be good practise to print out this information first.

Price lists can be printed direct from the stock data held, and if you have the Wordlink option then this data can be incorporated into a variety of other software programs and word processing documents.

NOMINAL LEDGER

The nominal ledger is selected from the main Suite Menu in the same way as the sales and purchase ledgers, and will produce trial balances, profit and loss accounts and balance sheets. Entries in the sales and purchase ledgers are reflected in the nominal ledger, and the nominal ledger can be updated after every session on the other ledgers with data transferred across automatically.

The nominal ledger can have up to 999 analysis codes which can be spread between the profit and loss account, the trading account and the balance sheet section. These codes can be registered and stored within the suite's memory, and printed out at any time that the

user wants. The nominal summary not only shows the analysis codes but also the individual transactions for each nominal account and the balance for the period, year to date or last year.

At the end of each period, transactions can be consolidated which delete all transactions for the period and transfer profit and loss for the period to the balance sheet.

At the end of year, the program also saves all account balances as 'last year' comparatives, and sets up all balance sheet account balances as the opening ones for the new financial year. It also checks that the nominal ledger balances - if the total debits do not equal the total credits then an error message is displayed on the screen and the run is aborted.

QBCS has an excellent and non-cryptic system of error messages, which explain whenever the user tries to do anything irregular. The error message system gives an on-screen explanation, re-enforced with a fuller explanation in the back of the manual. Whenever the user tries to exceed the pre-defined limits to a field or perform an irregular accounting routine, the system will stop, display a message and suggest the correct course of action.

CONCLUSION

For a basic unsophisticated, easy-to-use program which includes accounting, stock control and invoicing, stock control and invoicing, the Quest Business Control System will take some beating.

Any failings, such as the lack of passwords and the pre-defined presentation of the ledgers and screens, are unlikely to be a problem for the small or medium business person at whom the package is aimed. The program cannot be expanded to a network or multi-user application, but any criticism is hard to take seriously in the light of the under $600 price tag. For QBCS, inexpensive does not mean cheap.

Help for non-accountants

A review of Cash Trader

Small traders have traditionally ruined their Sunday afternoons trying to keep the paperwork in order. Cash Trader is a package which claims to reduce their burdens. PC user Mark Needham sets you on the road to a smoother running business.

Cash Trader is an accountancy package for non-accountants. It is intended to satisfy auditing requirements and provide management information for businesses with few staff and few credit accounts. For the small business, it will make a welcome change from the traditional accountancy package with a multitude of different ledger modules and half a bookshelf of operating instructions.

The package gives maximum gratification for minimum effort. A transaction does not have to be entered in date order, or in any other order for that matter. You simply enter the following: information:

1. What kind of transaction is taking place, for example receipt or sale.
2. Where the money is going, for example bank account, customer account.
3. The analysis heading under which the transaction should be recorded, for example, motor expenses.
4. The transaction value.
5. Whether tax is included or must be added.

After each transaction, the profit and loss account and balance sheet are instantly updated. At almost any point in the proceedings you can press ? to request a report of the current amounts registered against each heading, including sales cost of sales, overheads.

This instant picture of the company's trading position can even bring accounting sessions to life!

Much of the data is entered by a multiple choice method, where you use the cursor keys to choose between options. Cash Trader is forgiving enough to allow you to go back to the previous entry if you make a mistake, a point frequently over-looked by system designers.

The transactions can be classified under two hierarchical headings. Under the main heading sales and income, you can have sub-headings such as hardware sales and software sales. These headings are used in management reports, and for audits.

One of the stated aims of the package is to reduce audit fees by making the auditor's task simpler, but beware, this does not mean that you can dispense with an accountant altogether. It is much better to get professional advice when you first set up these analysis headings.

Despite the name Cash Trader, the package allows 10 credit sales

accounts and 10 purchase accounts, and can be coaxed into handling more. It is, however, designed for businesses which do not extend much credit to their customer, so there is not the same emphasis on invoicing, credit control and reminders which characterise many accounting systems, nor does the system handle stock or raise invoices on pre-printed stationery.

There is, however, an optional Analyzer module, which allows the accounts to be searched and sorted for report purposes. The commands for the Analyzer are similar to those you might expect from a simple data-base program.

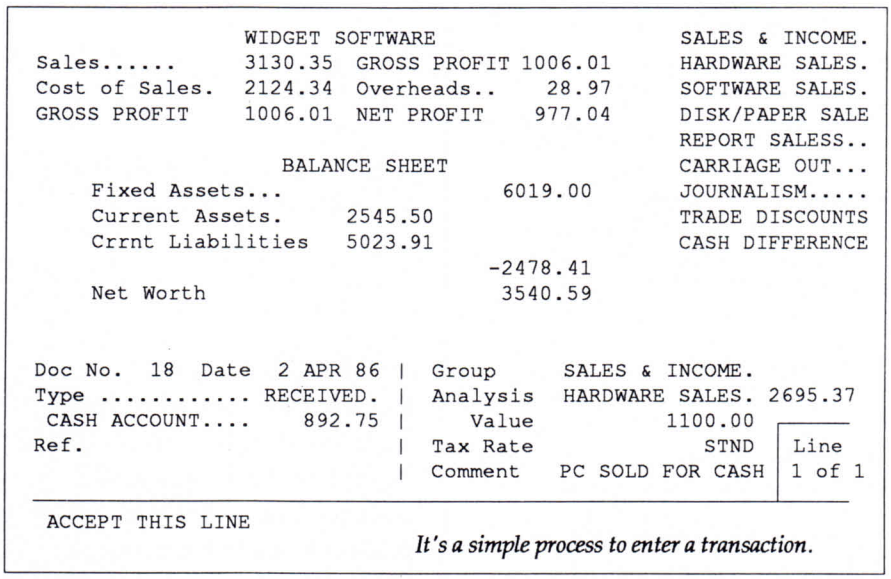
For example, you could use the search commands to find and print a statement of expenses paid to directors and employees earning over a certain limit, as the Tax Authority requires each limited company to do.

The Analyzer can also sort the transactions into date order, so that you can investigate those which lie between any given dates.

Software support is offered by AMSNET for a modest $100 per annum. This fee entitles you to obtain advice and guidance on the operation of the program, including assistance with particularly difficult data entries and assistance in running the software with additional peripherals.

Quest inform me that: "We have written this software to run on a standard computer and make no guarantees that it will work with any particular add-on extras or with any changes in the version for that particular computer." If you are thinking of upgrading your system in any way, you would need to have strong nerves not to join the support service.

When I phoned up, I was answered quickly and in a friendly manner. I was left with a favourable impression, although I must admit, I did not ask any particularly testing questions.



It's a simple process to enter a transaction.

Other support services I have used were far less efficient.

The basic Cash Trader program costs $325 and with the Analyzer module it is $475. Quest also supply a demonstration disc for $80, which can be converted to a full system if you pay the balance between the demonstration disc price and the price of a full system.

Cash Trader first appeared as a package for home or small business computers such as the QL and the Amstrad range. Even now, this is reflected in the way the package is marketed. The price is lower and you can buy directly from the suppliers on a cash with order basis.

The other side to this coin is that you have to pay separately for support, but even after adding on the price for the Analyzer module and the support service, the total cost is refreshingly low.

I imagine that the package will sell more copies on home and CP/M computers like the Apple II than on PC companies.

On the other hand, businesses which already have a PC should find that it pays for itself, either in reduced book-keeping costs or in time liberated for other activities.

This package deserves high marks for the way it explains accountancy to the layman. Accounts are rarely straightforward to computerize but its data entry procedures are reasonable in the strictest sense, and forgiving enough for the error prone to use without ruining their accounts permanently. The reports it produces should make records less arduous to keep and the management information it gives should, in the long run, lead to a better run business.

REGISTER YOUR DISCS

I have always imagined that the typical user greets a new software package by ripping the disc out of its packaging, slotting it into drive A, and ignoring as many as possible of the bits of paper which form the other half of the package. Quest have taken a strong line against such practices. Like a bank cash dispenser card, your Cash Trader disc cannot be used to get at your money until you are given a secret number. The disc works only as an evaluation disc until you perform an initialisation routine which uses your number.
This number is only given to you after you have sent in your registration card, and phoned the Quest Software Support Desk. They may ask you if you have read the training manual and done the exercises provided before they give you your number.
Quest can be contacted on 075 - 531734

Brainstorm

Reviewed by Arnold Goldman

Brainstorm is advertised in the English Amstrad magazine in glowing terms, with an impressive list of users. With an introduction like this I was quite prepared to be impressed. What a let-down! I can only assume some of the corporate users listed in the advertisement bought the package without an extensive trial. Let me explain what BRAINSTORM does and you can decide for yourselves whether it could be of use.

The first step is to decide what form of complex organisation you wish to develop. This can be a complicated holiday program, a multi-branched industrial operation, a structured computer program, or, as shown in the accompanying book, a complicated appointment diary. Having done this, give it a title. This is the first entry to the program.

Next, set out the task into a number of sections each having a title. Then break down each section into sub-sections, and then into sub-sub-sections. This can go on for several levels, and if two of the sections contain identical sub-sections, then whatever you do to one of these sub-sections occurs to all other identical sub-sections. Any amount of text may be inserted at any of these levels, and then repeated anywhere else by use of simple codes. "So what", I can almost hear you cry, "doesn't LOCOSCRIPT do all this?". Well, yes it does.

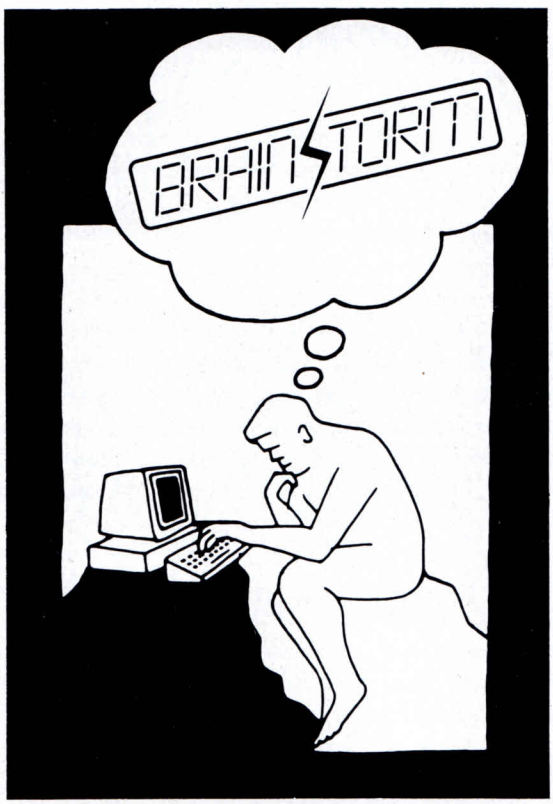
The main advantage of BRAINSTORM over LOCO-SCRIPT is that any or all of these different levels may be printed out independently of other levels. This is particularly useful in computer program development, where the steps can be set out with numerous comments at one level, and the actual program listing at another level. For documentation all levels could be printed, and for program storage on disc just the listing would be used.

I can see the benefit in using this approach to computer programming, but there are some traps if it is used to write programs in languages having line numbers on every line. The first that I came across was the way BRAINSTORM used the same line number if the same statement appeared more than once in a program. I accept that it would be fairly easy to go through later and edit out these problems, but it is an annoyance. The other drawback I found was the continual jumping back and forth to to other areas to see what line number a sub-routine was on. I find it easier to work with a piece of paper and the editing facilities in the PCW8256 BASIC, but then I am probably too set in my ways and well beyond redemption. .

If the package were a lot cheaper then I might be inclined to suggest that it could be a useful addition to the PCW8256 owner's library, but at $125 I would suggest that you would need to be a professional programmer to justify its purchase.

The other uses suggested for BRAINSTORM could be adequately carried out using LOCOSCRIPT or whatever brand of word-processor is in use on your CPC6128.

Please try BRAINSTORM before you buy it. It may be ideal for the way you work, but it certainly isn't a program I shall bother to use.



Perhaps not such a good ideas processor?

Our Software w
to end your paper

If you run a small business you'll know, only too well, how much unproductive time you spend on that necessary evil, paperwork.

Quest Business Software for the AMSTRAD, IBM and COMPATIBLES and most CP/M micros will, quite simply, relieve you of the paperwork millstone and can PAY FOR ITSELF in as little as ONE MONTH by dramatically increasing your efficiency and profitability.

Since our award winning CASH TRADER was published last year we've considerably expanded our range of Business Software to save you time on accounting, searching through files, typing letters and producing reports.

As many of our packages are available for evaluation prior to outright purchase, you've everything to gain by ordering today. Just because our software costs less it doesn't mean that we've cut corners or skimped on detail – thousands of users, world wide, will testify to that!

All Quest Business Software is very easy to use and we've paid particular attention to provide detailed documentation, and, should you need it, Ongoing support.

You could say that we haven't slept . . .
. . . So you can.

AMSTRAD BUSINESS CONTROL SYSTEM†
QUEST BUSINESS CONTROL SYSTEM*

THE LOW-COST FULLY INTEGRATED ACCOUNTING SYSTEM WITH OVER 30,000 USERS WORLDWIDE!

"Behaves like much more expensive software, and is well structured" - 'What Micro' Feb. '86.

These accounting systems designed for the Amstrad, IBM (and compatibles) and most CP/M micros put the power of fully integrated accounting within even the smallest budget. The three modules, of which the system comprises, are Sales Ledger/Invoicing/Stock Control : Purchase Ledger : Nominal Ledger. Modules may be purchased independently if required and full software support is available.

All packages are fully documented and an evaluation suite for ALL THREE modules is available.

EVALUATION COPY ONLY $80! (14 day Money Back Guarantee)

CASH TRADER*†

"If your paper work tends to be somewhat haphazard, Cash Trader is brilliant at creating order out of chaos" - 'What Micro' Feb. '86.

Cash Trader has sold over 5,500 copies since its launch last year and has been universally acclaimed. Designed for business people - not accountants - Cash Trader is as easy to use as a Cashbook with the added advantages of automatic totalling and cross casting, the ability to produce printed reports for Auditors' requirements and the tremendous benefit of accepting ANY TYPE OF ENTRY in ANY ORDER - eliminating tedious manual paperwork sorting.

Additional reports from CASH TRADER may be simply produced with ANALYSER - a low cost add-on module.

Cash Trader and Analyser are supplied with full documentation and software support, if required.

. . ."an outstanding and original contribution to business profitability and efficiency" - The Standard Micro Business Awards. Sept. 1985.

EVALUATION COPY ONLY $80! (14 day Money Back Guarantee)

†For Amstrad PCW8256, CPC6128, 664 and 464 (Twin Drive)
*IBM, Compatibles and most MS/DOS or CP/M micros, Cash Trader can run on a single drive.

orks like a dream
work nightmares.

AMSNET International
Pty. Ltd. (Aust.) Limited (U.K.)
Australian Microcomputer and Software NETwork

THE PEOPLE-SERVING-PEOPLE MARKETING NETWORK

OFFICE HOURS
10 am to 4 pm MONDAY - FRIDAY
075 - 531734
Phone and Mail Orders only

Users of handwritten ledgers, "three in one" systems and Cashbooks will rapidly feel at home with Quest Business Software. You will find that the same fundamental principles used in those manual systems are followed in these powerful computerised systems, except that:

the SCREEN replaces the paper
the KEYBOARD replaces the pen.

Three utility programs are available to expand the power and the flexibility of Quest Business Software.

File expander: Increases the number of accounts and entries subject to hard disc capacity.

Invoice Spooler: Allows unlimited design and format for invoices.

Word Link: Can be used to transfer supplier and N/L details to Wordstar for reports, Mailings, Price Lists etc.

MATCHBOX

The stand-alone Electronic Card Index you can't afford to be without!

Only $110

MATCHBOX is one of the easiest to use software packages ever designed. It allows you both to store information (e.g. customer records, product specifications etc.) and then to sort it in a variety of forms that may then be used, if required, to print out lists or labels.

Features include:
Up to 32000 Records per File
Up to 30 Alpha or Numeric fields per record
Sorts on any selected field
MATCHBOX is equally valuable for business or private use!

Amstrad 8256, 6128. Can run on a single drive.

SOFTWARE FOR SOLICITORS

CASHIER - a simple to operate but comprehensive accounting system designed to meet the Law Society rules and incorporating both a Client and a Nominal Ledger on an 'open item' basis and handling up to 1000 matters.
An optional Time Recorder module is available as well as an upgrade to increase the number of matters and port the system to Hard Disc.
Designed for Amstrad PCW's or IBM's.

$1850
Evaluation Copy $180

Runs on Amstrad PCW8256, CPC6128, 664 and 464

SOFTWARE FOR ACCOUNTANTS*+

SHOEBOX. A powerful Incomplete Records Program produces Trial Balance, Profit and Loss A/C and Balance Sheet, simple to use, rapid entry routine, automatic tax extraction. Links to Wordstar for tailored reporting, comprehensive audit trail, up to 300 Nominal Accounts with 99 sub analysis codes in each.

Evaluation Copy only $80

TIME RECORDER record Time and Disbursements. Caters for up to 200 clients with 150* charge rates, produces comprehensive WIP reports.

*Volumes for Amstrad, IBM and compatibles accommodate more
*+Amstrad PCW8256, CPC6128, 664 and 464 with Twin Drives and most dot matrix or daisy wheel printers.

AMSTRAD BUSINESS CONTROL SYSTEM AND QUEST BUSINESS CONTROL SYSTEMS

Please send me **Sales Ledger, Invoicing and Stock Control**	$325	☐
Please send me **Purchase Ledger**	$120	☐
Please send me **Nominal Ledger**	$120	☐
Please send me **Evaluation/Demonstration Suite**	$80	☐
CASH TRADER WITH ANALYSER		
Please send me **Evaluation Copy**	$80	☐
Please send me **Cash Trader** - full working copy	$325	☐
Please send me **Cash Trader with Analyser**	$475	☐
SOFTWARE FOR ACCOUNTANTS		
Please send me **Shoebox**	$475	☐
Please send me **Time Recorder**	$225	☐
Please send me **Evaluation Shoebox/Time Recorder**	$80	☐
Please send me **Matchbox**	$110	☐
Please send me **Cashier** (Evaluation)	$80	☐

*All programs require Disc Drives
*Some programs up to 3 weeks delivery

AMSNET International Pty Ltd
49 Riversdale Road
OXENFORD, QLD 4210

Evaluation Copies
Evaluation copies are usable but a restriction on the number of entries exists.
On payment of the balance you will be given a password to remove the restriction and enable full use to be made.

AMERICAN EXPRESS VISA

I enclose my cheque made payable to AMSNET International

Total _____ Please debit my Bankcard/Visa/American Exp. Card No

Expiry Date _____ Signature _____

Microcomputer used _____ Name _____

Address _____

Tel _____ Type of Business _____

>> RETAIL DISTRIBUTOR ENQUIRIES WELCOME <<

WORDCOUNTER

A valuable LocoScript aid anyone can type in

One of the most often repeated complaints about LocoScript is that there is no way of telling how many words you have written. This is particularly important for professional journalists or authors, who often have to write to a strict word limit. But a word-count can be an invaluable aid for other users too.

Usually you would have to invest in a commercial word-processor package to be able to get a word counter, but here's a way of adding that ability to LocoScript for free! All it takes is a simple program which anyone can type in by following the instructions on these pages. It will count the actual number of words, rather than "typists' words" of six characters each.

If you've never used your PCW for anything other than running LocoScript then prepare yourself for an illuminating experience - it can also operate as a powerful computer running the programming language BASIC and an operating system called CP/M. Maybe you've had a quick look at the discs that came with the PCW, or the last half of the LocoScript manual where it talks about CP/M, and hastily put them in the back of a cupboard with a shudder. Well, while this isn't the time or place for a lengthy tutorial, we're going to describe everything that you need to do to get the word counter up and running, even if you've never heard of BASIC or CP/M before.

Loading BASIC

First of all, here's how to get the PCW to run BASIC.

Find the discs that originally came with the PCW, or your copies of them if you have taken back-ups as you should have done, and look for side 2 which is labelled "CP/M PLUS". Now turn the PCW on, or press **[SHIFT]+[EXTRA]+[EXIT]** to reset it, and insert the disc into the top disc drive with the "CP/M PLUS" label facing towards the screen. After a few seconds, the disc will stop whirring and the screen will say "A>". In case you haven't realised, you are now inside CP/M - and you never knew how easy it was. Now type **BASIC [RETURN]**, and the disc will whirr again, print out a message about "Mallard-80 BASIC", and eventually stop with the message "OK". Now you are inside BASIC; try typing

PRINT "Hello world!" [RETURN] and you will see

Hello world!

OK

appear on the screen. If you know something about BASIC, feel free to play around a little. You can

leave BASIC at any time by typing **SYSTEM [RETURN]**. This will return to the CP/M prompt "A>".

The word counter program

If you don't understand BASIC, don't want to either, and just want to get a working word counter that you can use, then here's what to do.

Start BASIC up as described above, and you'll be at the familiar "OK" prompt again. Now type in the program listing itself (see box for instructions on typing in).

Once the listing is complete, before you do anything else find a work disc that you can write to and put it in the disc drive. It's not a bad idea to use one of your LocoScript discs, so you can keep the word count program with your documents, and it cuts down the number of different discs you have floating around too.

Type **SAVE "WRDCOUNT" [RETURN].** Now your typing is safely saved on disc. Incidentally, if you are using a LocoScript disc, you will see the program appear as the document WRDCOUNT.BAS in the first group of the disc when you run LocoScript, and you mustn't move it from that first group.

Now it's time to check that you typed in the program properly. Read the section below on using the word counter, and try it out with any small LocoScript document that you have. After this, make sure you have saved any corrections you may have made to your listing, and type **SYSTEM [RETURN]** to finish with BASIC.

Using the word counter

You'll be relieved to know that you won't have to go through all that typing again every time you want to run the word counter. However, there is a catch: BASIC runs from CP/M, and LocoScript doesn't, so you can't run the word-counter directly from LocoScript. Here's what you should do. The process starts from the Disc Management Screen in LocoScript, so start up LocoScript if you haven't already. Place the document selection highlight bar over the document that you wish to word count, and press [f7] (the "Modes" menu). Select the *Make ASCII file* option, press **[ENTER]**, and you are prompted to pick a document group for the result. Put the highlight bar in the first group of the A: disc, and press **[ENTER]**. On the menu that now pops up, name the file, select *Page image file,* and press **[ENTER]** again. Now you will see the new document appear on the document index.

Now remove the LocoScript disc and start up BASIC as you did earlier. Put the disc that you saved the word count program on back in the disc drive, and type

RUN "WRDCOUNT"

You will see the prompt asking you for the name of the file to be word counted - if your LocoScript document is on a different disc put that disc into the drive and type the name that you gave the ASCII file when you created it (NOT the original LocoScript document). Press **[RETURN]**, and the program will complete the process.

Finally, next time that you run LocoScript don't forget to delete the ASCII file that you have just created. This isn't needed any more, and only eats up valuable disc space.

```
B>basic

Mallard-80  BASIC with Jetsam   Version 1.29
(c) Copyright 1984  Locomotive Software Ltd
All rights reserved

31597 free bytes

Ok
run "wrdcount"
File name? myfile.bas

Line 18

 65 words counted in myfile.bas
Ok
system

B>
```

What the screen should look like after a successful run.

HOW TO TYPE IN A LISTING

First you have to load in Mallard BASIC, instructions for which we've printed elsewhere. Then copy out each line in the listing very carefully, including the line number, and press **[RETURN]** at the end of each line.

When you've finished, type **LIST [RETURN]** and the whole program will appear on the screen. Check it, and if any lines are wrong you can correct them with the line editor. For example, if the mistake was in line 100 you would type **EDIT 100 [RETURN]**, and use the cursor keys and delete keys to fix the line. Press **[RETURN]** when the line is correct. If you have mistyped a line number, so that a line appears in the wrong sequence, just type the incorrect line number, then **[RETURN]**, which effectively deletes the line. Then retype the line with the correct number.

WHAT TO DO IF IT GOES WRONG

It's more than likely, no matter how meticulously you copied the listing out, that the first time you run the program it won't work as just described. If something strange happens, read the error message carefully: it probably says something like "Syntax error in 100". List the program out (using **LIST**), and carefully check the screen listing against the original in the magazine. the line number, 100 in the example, tells you which line is wrong. Correct the error either by retyping the line wholesale or by using the line editor as described in the "How to type a listing in" box, and then type **RUN** again. Hopefully this time everything should have worked as planned but if not go on correcting lines and re-RUNning until it works. Finally, save the correct version again (with **SAVE "WRDCOUNT"**).

THE PROGRAM LISTING

```
10   INPUT "FILE name";file$
20   OPEN "I",1,file$
30   PRINT
40   wds%=0:Lno%=0
50   WHILE NOT EOF(1)
60   inwd%=0: Lno%=Lno%+1
70   LINE INPUT #1,line$
80   PRINT CHR$(13);"Line";Lno%;
90   FOR i=1 TO LEN(line$)
100  c$=MID$(line$,i,1)
110  IF c$=" " AND inwd% THEN
     wds%=wd%+1: inwd%=0
120  IF c$<>" " THEN inwd%=-1
130  NEXT i
140  IF inwd% THEN wds%=wds%+1
150  WEND
160  PRINT:PRINT
170  PRINT wds%;"words counted in ";
     file$
180  CLOSE
```

Boffin Note

You've seen WRDCOUNT totting up ordinary ASCII files, but if you've understood the program listing you will see that it can process any characters that are accepted by the BASIC LINE INPUT statement. This means that you can count Wordstar document files, for instance, although the resulting word total may be an overestimate by a few percent. The problem is caused by input lines longer than 255 characters - fairly common for WordStar document paragraph.

SUPER

A program to calculate Superannuation

from Arnold Goldman

This simple program will calculate the lump sum receivable after any number of years for a superannuation scheme where the monthly contribution is based on current salary. The user enters the current value of investment, several other intitial conditions and the date of retirement. I have deliberately left our comment statements to reduce the amount of typing and storage space. I believe it will also run faster without them. This increase in speed is hardly noticeable, but there is a matter of principle involved. It is for this reason I have also used the minimum length of name for most of the variables.

HOW IT WORKS

Please do not feel insulted if I go into detail at too basic a level for you, but the editor did say that some readers are very new to computers and may appreciate some explanations. I also should apologise for the lack of sophistication in the program. I had thought of providing options for input of savings instead of superannuation payments but the program would quickly become very lengthy with all manner of IF and GOTO statements to cover the choices.

Lines 10 - 130 This is the explanation that appears on the screen at the start to inform the user what is required. The PRINT commands on their own are there to provide a space between instructions.

Lines 140 - 210 These are the INPUT statements where the user enters the information required by the program.

Lines 220 This is a command sending the computer off to a subroutine to effectively clear the screen. The subroutine is at line 550 and simply carries out 40 blank PRINT commands before returning to the original point in the program.

Lines 230 - 250 These lines print out on the screen the initial equity and salary at the date entered.

Line 260 Converts the Y/N input in line 210 to upper case. This allows for either form of input.

Lines 270 - 280 Are directions to two subroutines which convert the names of the months into numbers which can be used to determine the end of the year,

and for comparison, the retirement date. Both subroutines are similar and make use of the INSTR command which searches the long string for the first three letters of the month entered. The subroutine also converts to upper case to allow for entry variations.

Lines 290 - 380 This is the main part of the program which loops round and round calculating the increasing equity for each month as the interest rate is added. It also awards the pay increase expected each January. Line 290 resets the month count when it gets to 12. Lines 300 and 310 print out the annual amounts if requested. Line 320 increases the year whenever the month count is reset, and provides the increase in salary. Line 330 is the monthly calculation of equity. Lines 350 and 360 check the current year and month against the retirement date, and redirect the program accordingly.

If you require the results to be printed out on the printer instead of the screen, then all the statements with the PRINT command will need changing to LPRINT. Alternatively, some may be changed, or duplicated, to appear on both output devices.

I have not included any error traps to allow for incorrect typing-in errors, but Amstrad users don't make those sort of mistakes, do they?

```
10 PRINT"     Program to calculate super
annuation equity at a time in"
20 PRINT"     the future for initial equ
ity E, interest rate I, "
30 PRINT"     annual salary S, and perce
ntage super. payment P"
40 PRINT
50 PRINT"     Do not type in the $ sign
or the % sign."
60 PRINT
70 PRINT"     Enter month by name  (e.g.
 NOV) in either upper or lower case lett
ers,"
80 PRINT"     and year in full (1986 for
 example)."
90 PRINT
100 PRINT"     Remember to separate mont
h and year by a comma."
110 PRINT
120 PRINT"     All inputs must be entere
d by pressing RETURN key."
130 PRINT:PRINT
140 INPUT "Input Equity in fund at prese
nt time"; E
150 INPUT "Input interest rate earned by
 fund"; I
160 INPUT "Input current Annual Salary";
S
170 INPUT "Input percentage contribution
";P
180 INPUT "Input expected percentage ann
ual pay increase";R
190 INPUT "Input present month and Year
with a comma between";M1$,Y1
200 INPUT "Input Month and Year balance
required for";M$,Y
210 INPUT "Are annual balances required?
 Y/N";A$
220 GOSUB 550
230 PRINT "At ";M1$,Y1
240 PRINT "Present Equity = $";E
250 PRINT "Present Salary = $";S
260 A$=UPPER$(A$)
270 GOSUB 500
280 GOSUB 450
290 IF A=12 THEN A=0
300 IF A$="N" THEN GOTO 320
310 IF A=0 THEN PRINT "at Dec ";Y1;" you
r equity = $";E;" and your salary = $";S
320 IF A=0 THEN Y1=Y1+1:S=INT(S+S*R/100)
330 E=INT((E+S*P/1200)*(1+I/1200))
340 A=A+1
350 IF Y1<Y GOTO 290
360 IF A<B GOTO 290
370 PRINT
380 PRINT"  At month ";M$;" of year ";Y;
" your equity will be $";E
390 PRINT" and your salary will be $";S
400 PRINT
410 INPUT"     Further calculations? Y/N
";F$
420 F$=UPPER$(F$)
430 IF F$="Y" THEN GOSUB 550: GOTO 140
440 STOP
450 MON$=LEFT$(M$,3)
460 MON$=UPPER$(MON$)
470 x=INSTR(1,"AAAJANFEBMARAPRMAYJUNJULA
UGSEPOCTNOVDEC",NOW$)
480 B=(x-1)/3
490 RETURN
500 NOW$=LEFT$(M1$,3)
510 NOW$=UPPER$(NOW$)
520 w=INSTR(1,"AAAJANFEBMARAPRMAYJUNJULA
UGSEPOCTNOVDEC",NOW$)
530 A=(w-1)/3
540 RETURN
550 FOR j=1 TO 40
560 PRINT
570 NEXT j
580 RETURN
```

The above "SUPER" program can be run on the CPC range, more suitably in Mode 2, and is supplied on this months tape for tape subscribers.

"NO!" I said "AUSTRALIA MUST HAVE IT FIRST!"

Have you ever stumbled upon an idea for business that is so good, you dared not to tell a soul?

You keep any mention of it under your hat until you're absolutely sure you are right.

But then.....maybe many months later you really do know how good the idea is, you're busting to **TELL SOMEONE** who will understand the full impact of it.

Well **EXACTLY THAT** has happened to me.

I've just finished working on an idea that's so good, it will literally turn around the way thinking people do business.

For those who dare to use it, it will mean a new way of life, more friends with a wide range of interests, long term satisfaction, but most importantly --- more money, through savings and bonuses.

The idea began about 18 months ago when I met Don Failla --- a guru on this new wave of marketing. Don impressed me right off as an innovator and thinker.

More importantly for you though, was what happened as a result of that meeting. I was so convinced my idea was very good, I went to the U.K. the home of Amstrad, and spoke with business leaders and marketers in the software industry. They were so enthusiastic about "it", they wanted to license it from me and use it on the U.K. market.

But, I said "NO, Australia must have it first!"

In fact, they were so confident of our marketing system, I came home with exclusive rights to some of their prime software packages designed for the Amstrad..... and, I'm adding new programs every week.

Like software for small businesses of all types, software for Accountants or Authors. You can buy word processors, top games, data bases, accounting systems, videotext and communications packages.....just about anything at all in hardware or software for your Amstrad (including the IBM compatible).

In fact, you'll be so happy with your results, you're going to tell your friends and business associates. That means more business for me..... and for you.

How's that? Well, it works like this. Everybody who buys something from me automatically becomes a distributor. You see I believe that the greatest salesperson for any product is the person using it. In this case.....**YOU.** What's more, I'll reward you.....very well.....for doing it.

Incidently, you're fully protected by my fantastic new approach to doing business. Every product carries a money back guarantee --- so you can be confident in recommending me to your friends, and ..... you'll never have to buy or hold stock.... so naturally, you can't lose.

But a word of warning though. This terrific marketing concept is for everyone, including retailers who want new and increased business opportunities.

Perhaps you are wondering..... How much does it cost?

Would you believe..... you will pay a mere $60 and that will include a full years subscription to "The Amstrad User", the magazine that includes all the information on new products and USER GROUPS, a free CF2 3" disc and a $25 registration fee.

If you already subscribe to "The Amstrad User" then send only $25 and we will still send your **FREE CF2 3"** disc along with all the information for you to become a distributor.

No, I don't have any shares in "The Amstrad User" or with Mitsubishi Electric AWA, but I do believe that by working together as a family, we'll give you better service and better value for your money.

Now that you're an **AMSTRAD** owner, you're going to need more information from me on the wide range of fantastic software and hardware I stock and on our terrific business opportunity.

I invite you to complete the coupon and post it to me right now for more information. Don't forget, you receive 12 months subscription to "The Amstrad User", a FREE CF2 3" disc and you gain entry to a world of easy to use software ....all guaranteed and carrying rebates and bonuses, plus monthly updates on prices and new products and a terrific business opportunity.

Some of the items I sell are:

(a) * Computers 8 and 16 bit
(b) * Printers
(c) * Disc Drives
(d) * Ribbons
(e) * Serial & parallel Ports
(f) * Modems
(g) * Joy Sticks
(h) * Speech Synthesisers
(i) * Light Pens
(j) * Plotters
(k) * Mice or is it Mouse
(l) * Graphics
(m) * Word Processors
(n) * Spread Sheets
(o) * Communications
(p) * Utilities
(r) * Games Chess & Bridge
(s) * Data Bases
(t) * Accounting Packages
(u) * Stock Control
(v) * Typing Tutors
(w) * Graphics programs
(x) * LernLoco Tutorial
(y) * Idea Processors

Neville Wright.
Managing Director.

THE PEOPLE-SERVING-PEOPLE MARKETING NETWORK

IMPORTERS & DISTRIBUTORS

of fine products for AMSTRAD and IBM compatible computers. Some famous suppliers are QUEST, SANDPIPER, New Star, AMX, CPSoft, Digital Research and Database.

075 - 531734

To **Neville Wright at AMSNET International P/L, 49 Riversdale Road, OXENFORD 4210 QLD. (07 - 553 1734)**

Nev, please send me more information on the following products.
(Please circle:) a b c d e f g h i j k l m n o p r s t u v w x y
and I wish to become a Distributor ( )

I enclose cheque or M/O payable to Amsnet International or charge my Credit Card No:

_____

Card type (Bank) (Visa) (Amex) (Access) (Euro) (Master)
Expiry date on card is ..../....

Signature on card is _____

Please send (my Magazine) and (my **FREE CF2 3"** disc) to me:-

My name is _____

My address is _____

_____

_____

Post Code _____

My Computer is a model _____ and I use it mainly for Business ( ), Games ( ), Education ( )

I am interested in Games ( ), Accounting ( ), Word Processors ( ), Spreadsheets ( ), Communications ( ), Utilities ( ), Tutorials ( ), Graphics ( ), Databases ( ), Hardware & Accessories ( ).

I am a member of the _____ User Group

My phone number is ____/_____

P.S. You can join now by phone.

DON'T GO LOCO LEARNING LOCOSCRIPT!

LERNLOCO is a step by step tutorial on disc which takes you through the various functions of the wordprocessor. Included throughout the tutorial are various exercises designed to give you full working experience in the creation and manipulation of documents. The tutorial teaches and tests the user from within the Locoscript wordprocessor and covers many features which many users probably didn't even realise existed. Users will become so confident that they will even print their own personalised manual.

LERNLOCO functions include:-
* Key functions and Editing * System, Data discs and copies
* The Disc Management screen, movement and remaining files and the memory drive.
* Printer styles, pitch & width * Direct commands and options
* Justification, centring and reverse video
* Replace existing text with new text using the exchange function
* Block movements, Search and Replace * Templates, Rulers and Decimal tabs
* Layouts, tabulations & alterations to documents
* Headers, Footers, Pagination and page numbering
* Blocks and phrases and how to save them * Books, Manuscripts and labels.

Written in plain English by a qualified Further Education Teacher this tutorial is used in Resident Schools in England to teach and master Locoscript. It is available from us for just $39.95 for one copy on a CF2 3" disc.

FOR THE PCW8256 AND 8512

* It's new! 3D CLOCK CHESS. Created in consultation with International Grand Master Jon Speelman, this superb program has outstanding 3-D graphics, with Chess Clock, combined with exceptional strength and speed. Many exclusive features including the exciting "Play against the clock" mode. Terrific value at $49.95.

* Another new one! 8256 BRIDGE PLAYER continues the very successful range of bridge games. This Bridge Player offers all the usual features PLUS self play, rebid/replay and the ability to specify point count dealt to your hand. Detailed manual with special section on bidding. Ideal for both the beginner and the more experienced player. Fantastic value at $49.95.

* SPECIAL OFFER. Buy both and we will throw in a FREE CF2 3" disc.
Available only from AMSNET.
Phone 075 531734 to order by any CREDIT CARD.

THE PROGRAM THAT'S MAKING FRONT PAGE NEWS.

A revolutionary new program that will produce newspapers, brochures, posters, leaflets -- in fact, just about anything where text & graphics are required, to an extraordinary standard. You can type directly onto the screen with any of 16 typefaces and load any ASCII file from your other word processor with full, automatic on screen formatting while loading. Full pixel resolution over text & graphics. Cut and paste along with a fantastic zoom, copy, move, stretch & rotate are just a few of the facilities available. Combine it with the AMX Digitiser and you have the AMX Magazine Maker with 256 by 256 dot resolution for any picture from a video source such as a camera or recorder and a 32 grey scale output to most printers.

AMX Pagemaker costs $175. AMX Digitiser $295.
AMX Magazine Maker (both) $425

PCW Software List

WORD PROCESSING

Newword 2 (incl Spell Check)	*	275.00
Wordstar PCW		225.00
Wordstar 6128		275.00
Star Index	*	329.00
MicroWord/ MicroFile	*	142.50
Tasword 8000		88.50
Tasprint 8000		60.40

FINANCIAL MODELLING

Supercalc 2	*	141.50
The Cracker	*	159.00
Planner Calc	*	97.50
Master Planner		175.00

UTILITIES

Catalog	**	50.50
Write Hand Man	*	94.50
The Knife	**	50.50
The Torch	**	50.50

PROGRAMMING LANGUAGES

HiSoft C	**	125.00
C Basic		215.00
Nevada Basic	**	141.50
Nevada Fortran	**	125.00
Nevada Cobol	**	125.00
Nevada Pilot	**	125.00
Microprolog	*	257.50
Pascal/MT+	*	149.00
Mallard Basic	**	249.00
CBasic compiler	*	149.00
Turbo Pascal	**	249.00
Hisoft Devpac 80	**	125.00

GRAPHICS

Dr. Draw	*	167.50
Dr. Graph	*	167.50
Polyprint/Polyword/ Polyplot/Polymail		216.00
Polytype		149.00

DATABASE MANAGEMENT

Cambase	*	142.50
dBase 2	*	699.00
Sage Retrieve	*	409.50
Sage Magicfiler	*	331.50
MicroWord/File	*	142.50

COMMUNICATIONS

Sage Chit Chat Combo Pack	*	409.50

ACCOUNTS

Sage Popular Accounts	*	357.50
Sage Invoicing	*	289.00
Cash Book		97.50
Accounting 1		695.00
Camsoft Stock Control		142.50

TRAINING

Guide to Locos'pt (Audio tapes)		39.50
CP/M+ Handbook		89.00

PROJECT PLANNING

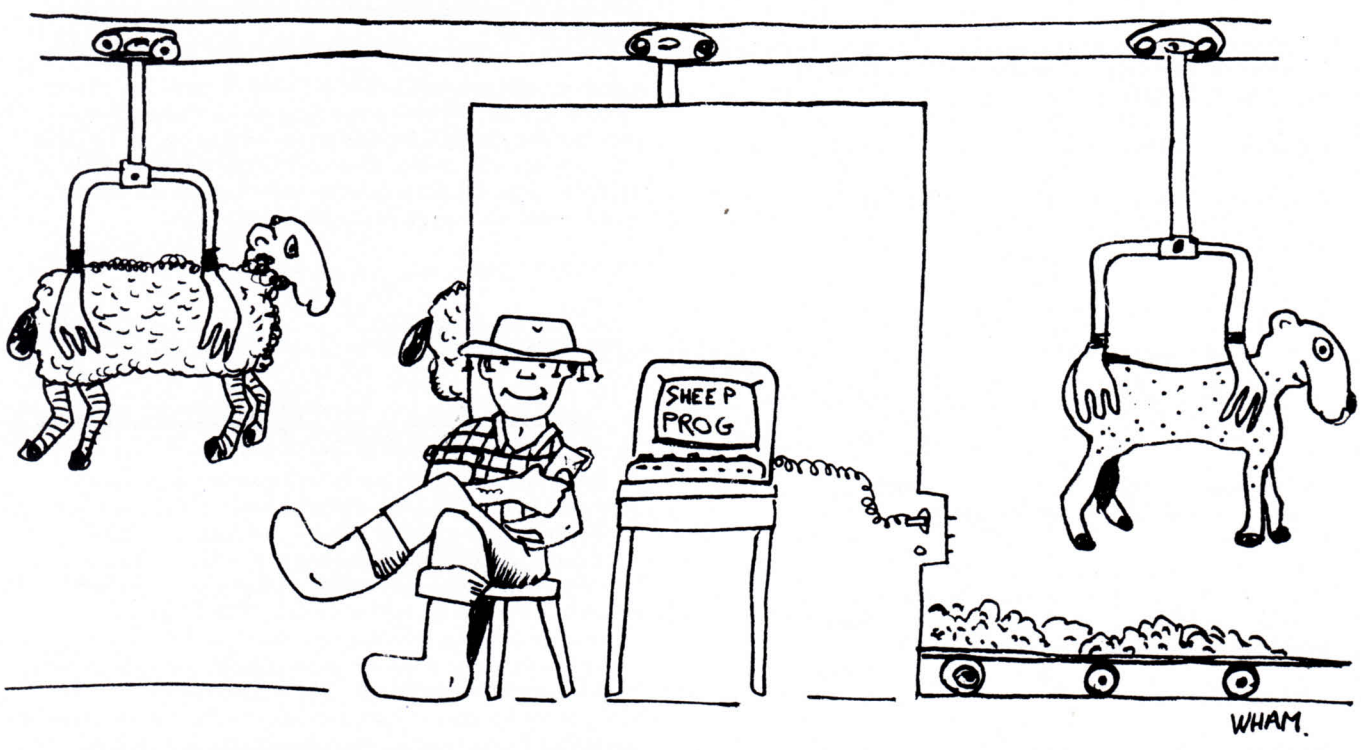
Brainstorm	*	149.50
Target Task		245.00

GAMES

Classic Adventure plus Mordens Quest (1 disc)	*	TBA
Cyrus II Chess		44.50

Note
We have been advised that items marked * can also be run on the 6128.
Items marked ** can be purchased to run on the 464/664/6128 and PCW machines.

For more details consult your Amstrad dealer.



280 things to do with a straight line

from Arnold Goldman

This program has been around for many years and the designs possibly pre-date computers, or maybe computer graphics were used to inspire the fad, some years ago, for wall hangings using nails and coloured string.

The program makes the Logo turtle draw a straight line, turn through a set angle, and draw another line slightly longer than the previous one. The turtle repeats this 180 times, or until it tries to get out of the frame.

I have written the program to make use of the 'go' and 'label' functions. It could be rewritten to draw the frame first and use '[go "frame]' in the repeat statement. I have also used long variable names to assist with the understanding of the program. 'Number', 'angle', and 'length' could be replaced by 'n', 'a', and 'l' to save some typing time and possible errors. The use of 40 added to 'number' to make 'angle' ensures that some very uninteresting patterns are avoided. These may be examined by using input numbers between 280 and 320. Number 140 has been precluded. If you want to see why, remove the 'it' statement that checks for 'number=140', and try 140. The 'repeat 180' was chosen to satisfy my choice for pattern 139, shown in Fig.1, and the '+2.2' added to 'length' combines with the 180 to limit the pattern to the 420 square I have used for the frame.

The only problem you will encounter when typing in the program should be in the long repeat statement when a 'beep' will sound and further entries will not be accepted. Don't worry, press RETURN and continue on with the other statements. When the screen says 'design defined' use 'ed "design' to return to the program and enter in the rest of the statement. Ignore

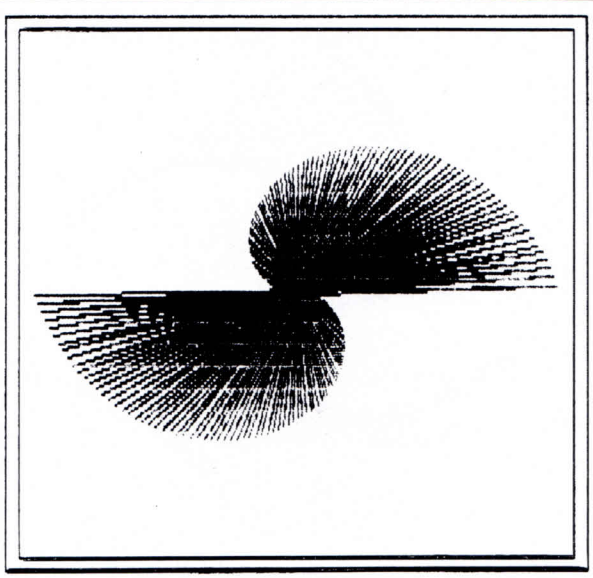


FIGURE 1 - DESIGN 139

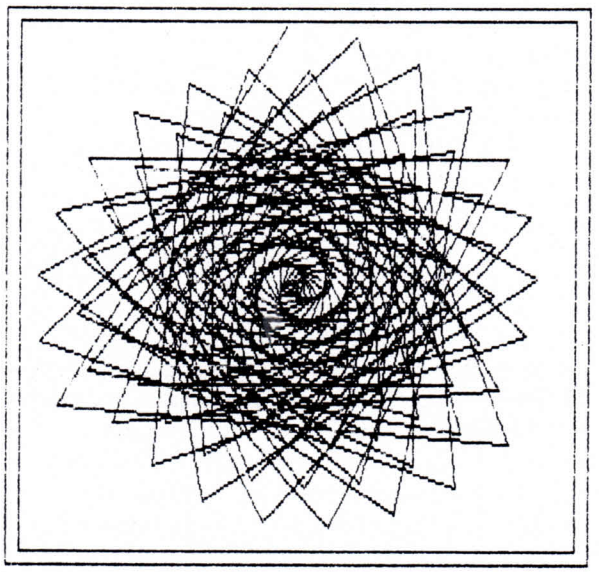


FIGURE 2 - DESIGN 75

the '!' that appears where the line wraps around to the next line. Do not type this in. Having entered the program as shown, save it on your disc with the 'save' command and run the program by typing in 'design' in response to the '?' prompt.

Items to fiddle with if you want to make some interesting changes are the '180' and '2.2' in the repeat statement. Another interesting change will occur if a 'setcrunch' command is placed after the 'setsplit' command. Changes in both these areas lead to a whole new range of patterns. The frame may need changing though, or perhaps omitting.

After you have obtained the pattern of your choice, print it out on your PCW8256 printer by pressing [EXTRA] + [PTR]. Figs.2,3, &4 provide examples from the range.

I first stumbled on this program by accident when learning Fortran graphics programming on a Data General NOVA computer, and have since used it in BASIC on a Hewlett-Packard computer and plotter to produce patterns at a school fete for a very appreciative audience who paid 20 cents to type in the number of their choice.

```
to square :side
repeat 4 [fd :side rt 90]
end
to design
setsplit 2
label "more pr [Enter a number between 1
  and 280, and press RETURN. To stop,
  enter 0]
make "number rl
```

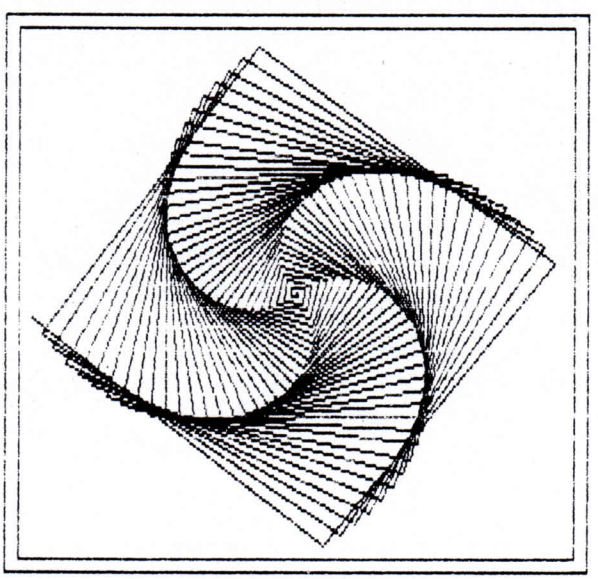


FIGURE 3 - DESIGN 51

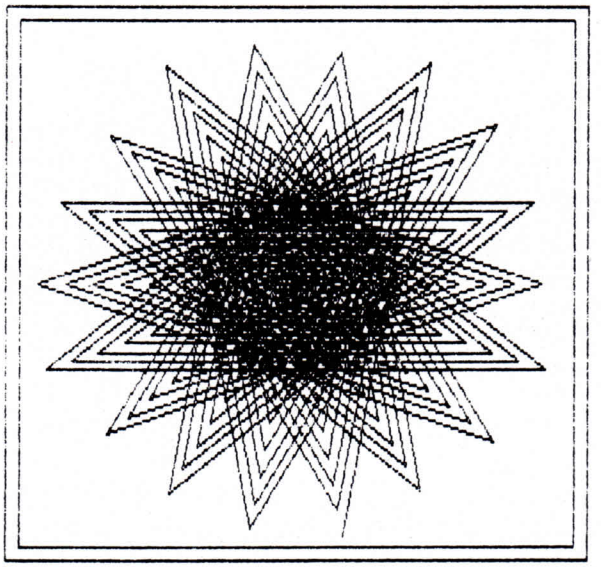


FIGURE 4 - DESIGN 100

```
make "number first :number
if :number = 0 [stop]
if :number = 140 [pr [Number 140 is not
  recommended] go "more]
pu setpos [0 0] seth 90 pd
clean ht
make "length 1
make "angle :number + 40
repeat 180 [fd :length rt :angle make
  "length :length + 2.2 make "pos tf make
  "x first :pos make "y item 2 :pos if :x
  > 200 [go "frame] if :x < -200 [go
  "frame] if :y > 200 [go "frame] if :y < -
  200 [go "frame]]
label "frame pu setpos [-210 210]
seth 90 pd square 420
pu setpos [-220 220]
seth 90 pd square 440
go "more
end
```

PC BUSINESS WISE SOFTWARE FROM SAGE

Just add an Amstrad

But first you need the incredibly low-priced, high performance range of PC business software from Sage. The leading British software house with the intelligence to take the financial sting out of computerisation.

Sage - famous for state-of-the-art bookkeeping and accounting programs - now also offers Britain's biggest range of top quality business software. From a Lotus style spreadsheet to a really slick Sidekick type desk top organiser.

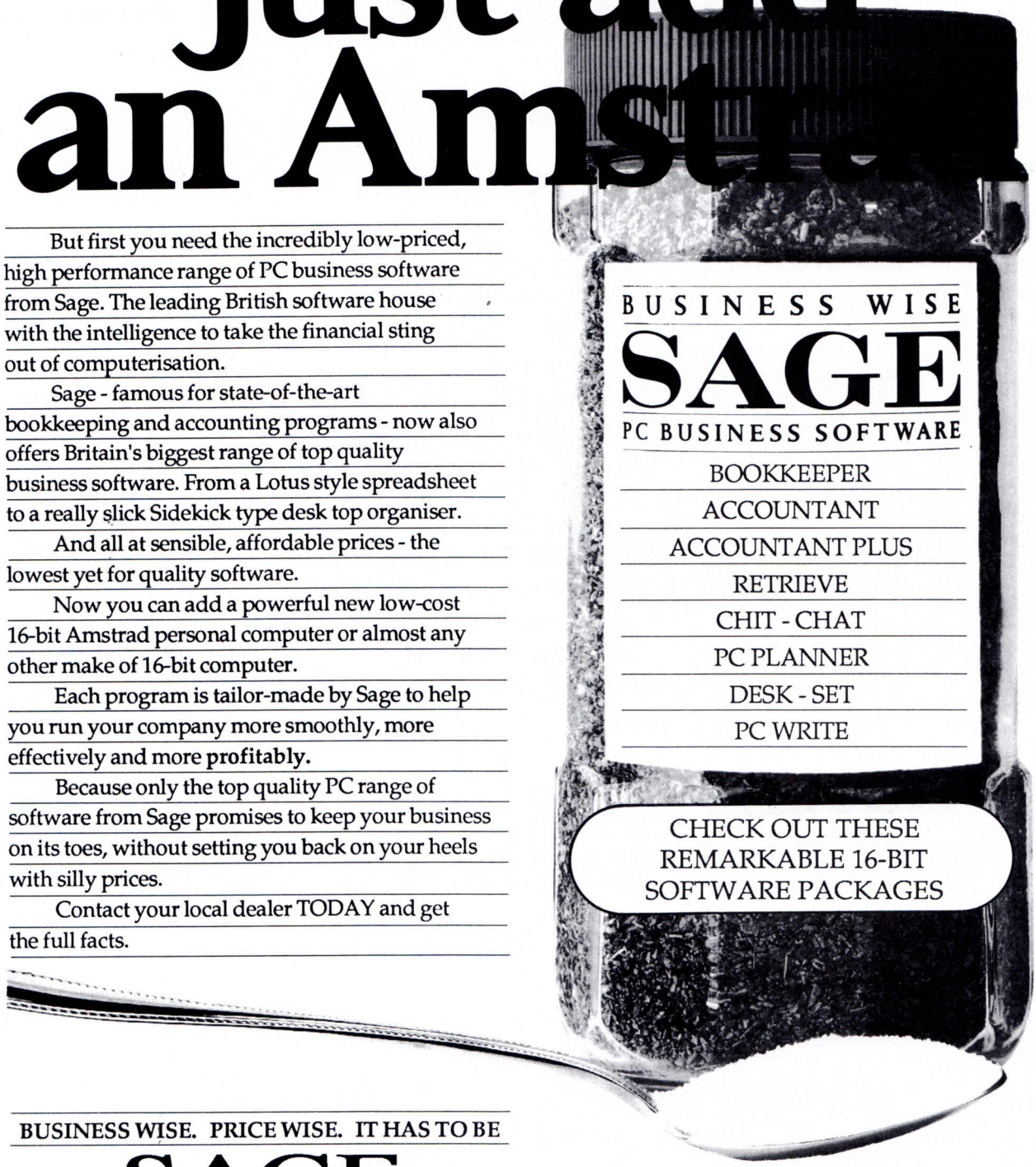
And all at sensible, affordable prices - the lowest yet for quality software.

Now you can add a powerful new low-cost 16-bit Amstrad personal computer or almost any other make of 16-bit computer.

Each program is tailor-made by Sage to help you run your company more smoothly, more effectively and more **profitably.**

Because only the top quality PC range of software from Sage promises to keep your business on its toes, without setting you back on your heels with silly prices.

Contact your local dealer TODAY and get the full facts.



BUSINESS WISE. PRICE WISE. IT HAS TO BE

SAGE

PC BUSINESS SOFTWARE

If you're a PCW owner and reading The Amstrad User for the first time, this is what you've missed since July . . .

Reviews on:
DR DRAW
DR GRAPH
THE CRACKER
POLYWORD/POLYMAIL
POLYPRINT/POLYPLOT
DBASE II
TASWORD 8000
CARDBOX
OXFORD PASCAL
PASCAL 80
CAMBASE
CP/M PLUS HANDBOOK
LIGHT PEN FOR THE PCW'S
and overviews on
SUPERCALC2
SAGE POPULAR INVOICING
ACCOUNTING ONE

Nearly $3000 worth of software/hardware for less than $15* !!

Coming major attractions:

Summary of over 50 pieces of software
Tips to avoid hair-tearing
CP/M and your PCW

Appearing at your Newsagent soon!

*Four magazines at $3.50 each

The Amstrad User Hall Of Fame

GAME	SCORE/TIME	ACHIEVER
Airwolf	1500/25 mins	Heath Corcoran
Android One	5700/7 mins	Robert Baxter
Atom Smasher	940/6 mins	John Baxter
Battle for Midway	8 carriers:speed 1:level 3	Steve Alatakis
Beach Head	132500/16 mins	Anthony Eden
Bomb Jack	1235960/15 mins	John Dawson
Chuckie Egg	395960/45 mins	Tony Barberi
Codename Mat	20470/90 mins	Brett Hallen
Combat Lynx	81450/no time specified	Steve Alatakis
Commando	92850/no time specified	Brett Hallen
Decathalon	1232800/178 mins	Dale Derksen
Defend or Die	59400/8 mins	Bev Palfrey
Dragons Gold	1610/4 mins	Robert Baxter
Er-Bert	68350/21 mins	Anthony Eden
Galactic Plague	118690/80 mins	B. Weich/G.Cherry
Gilligan's Gold	107403/9.75 mins	Alex Smyth
Grand Prix Rally II	47984/10.5 mins	Justin McShane
Harrier Attack	337600/14.5 mins	Michael Hopkirk
Haunted Hedges	466460/35 mins	Lorraine Martin
Hunchback	552600/no time specified	Tony Barberi
Hunter Killer	17/67 mins	Chris Catalfamo
Jet Set Willy	35 items/11 mins	Phillip Nicol
Knight Lore	98%/44 mins	Umut Akcelik
Kong Strikes Back	284600/40 mins	Malcolm Fraser
Minder	$17749/no time specified	Steve Alatakis
Moonbuggy	160110/no time specified	A. Kippenberger
Raid	416950/26 mins	Allan Etherington
Roland in the Caves	9748815/6 mins	Anthony Eden
Roland goes Digging	$805.65/45 mins	David Thomas
Roland on the Ropes	738900/92 mins	Allison Pilbeam
Roland in Time	72/18 mins	Paul Azzopardi
Scout Steps Out	7737/10 mins	Robert Baxter
Sorcery	92500/15 mins	Mike Nicolai
Sorcery +	136880/no time specified	Keith Watmough
Space Hawks	74100/5 mins	Andrew Coppens
Spannerman	55200/15 mins	Andrew Craddock
Splat	7280/45 mins	Neil Campbell
Star Commando	193810/133 mins	Alex Smyth
Survivor	223160/19.5 mins	Alex Smyth
Way of Exp. Fist	558900/66 mins	Gavern Cherry
Wild Bunch	10539/no time specified	Steve Alatakis
Yie Ar Kung Fu	7065940/3 hours	Gavern Cherry
Zorro	999900/32 mins	Jason Scott
3-D Monster Chase	1320:7 keys/7 mins	Adam Broadway

To get your name in our "HALL OF FAME" register on the form below, or a copy, and if possible, send a photo of the screen.

Name_____
Address_____
_____
Telephone Number_____
Game_____
Score Achieved (date)_____
Game lasted (mins)_____

Signed_____

THIS NEXT PART MUST BE COMPLETED

Witness' Name_____
Address_____
_____
Telephone Number_____
Occupation_____
I confirm that the above claimed score is accurate and genuine

Signed_____

Post this form (or a copy) along with your tips for playing the game to:

Amstrad Achievers,
The Amstrad User,
Suite 1,245 Springvale Road,
Glen Waverley, Vic 3150

CP/M Revisited

A Primer for beginners - Part 1

by Fred Robertson-Mudie

If you jumped in at the deep end and are floundering or are plucking up courage to dip your toe in the CP/M pool, you must have missed our articles on this subject published earlier this year. To put that right, Fred Robertson-Mudie has passed on his articles, previously published in the Canberra User's Group News-letters, which by all accounts, saved a lot of programmers from drowning.

This primer is being presented in the form of a short series of articles to assist the beginner in using the CP/M 2.2 operating system and some of the more useful CP/M 2.2 programs that are available. It is not intended to cover all aspects of CP/M nor, as a primer, is it intended to be an expert treatise on the subject.

The CP/M operating system, version 2.2. in the case of the CPC464 with disc drive, and version 2.2 and 3.0 (or CP/M Plus) in the case of the CPC6128, is included with the machine when purchased. Whilst this primer is intended mainly for CP/M 2.2, it may cover some CP/M 3.0 material at a later date. CP/M may appear rather daunting and of limited value at first sight but it can be a very useful tool for computer enthusiasts - provided it is known how to utilise it. There is also a vast amount of Public Domain (i.e. free) software available for CP/M 2.2 Unfortunately, the information on the system, as provided with the Amstrad manual is, to say the least, limited.

As can be seen from the manual, booting CP/M 2.2 from Basic on the Amstrad is done by entering the following:

|CPM <enter> where the "|" is the shifted "@"

The screen will then change to 80 column with, in the case of a colour screen, black writing on a white background, and a sign-on message "CP/M 2.2 - Amstrad Consumer Electronics plc" followed by the prompt "A>" You are now ready to go on CP/M.

At the prompt, i.e. A> (where "A: is the disc drive in use, and ">" is the prompt), type DIR and enter. This will give a directory of the contents of the disc (just like CAT in Basic). Included in the contents of the supplied CPM disc is a program called SETUP.COM, and this is the one which is used to change colours and various other parameters. So, to proceed, at the prompt type SETUP then enter; i.e. A>SETUP <enter>

This will give the following message:

** Initial command buffer empty
is this correct (Y/N) :_

Answer N <enter> at this point and the machine will ask you to enter the correct initial command buffer. Now, type DIR^M (where the "^" is an unshifted £) and then enter. The machine will then put your new instruction on screen and ask if it is correct, so type Y <enter>. What you have done with this change is to ensure that when CP/M is first booted, a directory of the disc will automatically appear on screen. If you have the program CAT.COM on a particular disc you could, of course, type in CAT^M instead of DIR^M so that when that particular disc is first booted the CAT.COM program will run.

The next step involves the colours, in the case of those with a colour screen, and the method to change these colours. The black writing on a white background when CP/M is first booted is a bit wearing on the eyes. So, to change

the colours and the sign-on data, use the method outlined below.

As soon as the initial command buffer has been dealt with, as outlined above, the machine will come up with the following message:

Sign-on string:
^\@mm^\a@@^]mmCP/M 2.2 - Amstrad Consumer
Electronics Plc^J^M
is this correct (Y/N) :_

Answer N <enter>aa at this point and the machine will ask you to enter the correct sign-on string. This is where the choice can be made about the colours you require for your screen.

Looking at the sign-on string, it can be broken up into three sections or strings, each preceded by the control symbol "^". The first deals with the screen colour, i.e. ^\@mm meaning a white screen where the mm denotes the colour; the second with the writing, i.e. ^\a@@ meaning Black writing where the @@ denotes the colour; and the third with the border colour, i.e. ^]mm where the mm denotes a border colour, also white.

The question of deciding which double letter code denotes which colour can easily be answered by looking at the Master Colour Chart in the Amstrad User Manual, and making a direct comparison with the table below.

Basic Ink No.	CPM Ink No.	Colour
0	@@	Black
1	aa	Blue
2	bb	Bright Blue
3	cc	Red
4	dd	Magenta
5	ee	Mauve
6	ff	Bright Red
7	gg	Purple
8	hh	Bright Magenta
9	ii	Green
10	jj	Cyan
11	kk	Sky Blue
12	ll	Yellow
13	mm	White
14	nn	Pastel Blue
15	oo	Orange
16	pp	Pink
17	qq	Pastel Magenta
18	rr	Bright Green
19	ss	Sea Green
20	tt	Bright Cyan
21	uu	Lime Green
22	vv	Pastel Green
23	ww	Pastel Cyan
24	xx	Bright Yellow
25	yy	Pastel Yellow
26	zz	Bright White

Using these colour codes, it can be seen that should you wish, for example, to change the CP/M colour to a Black background with Orange writing and a Black border, the sign-on string would be entered as:

^\@@@^\aoo^]@@

Whereas a Black background with Green writing and a Black border would be entered as:

^\@@@^\aii^]@@

And, for a Blue background with Bright White writing and a Blue Border (just like CPM Plus) it would be entered as:

^\@aa^\azz^]aa

You could, of course, have Pink writing on a Magenta background with a pastel Green border, it's really a case of whatever turns you on!

The sign-on string can be followed by a disc tile or whatever you wish, e.g. CP/M 2.2 - Fred's Utility Disc^J^M, where the ^J is a line feed and ^M is a carriage return (a carriage return is identical to pressing the Enter key). Again, whatever turns you on.

Having entered your choice of sign-on string, and confirmed it by answering Y <enter> when the computer asks if this new string is correct, just answer Y <enter> to all other questions for the moment (there are about another 14 questions), including the last two where you are asked if you wish to update your system disc, and if you wish to restart CP/M. Some of the other questions will be dealt with in the next part of this series.

If you are a bit wary about trying this out, do it the easy way by formatting a blank disc and copying the program SETUP.COM onto it, then practice with this disc alone. You cannot damage the computer or anything else by playing about with a practice disc, so no harm will be done.

ELITE

FIREBIRD'S FAMOUS STRATEGY/ARCADE GAME

Reviewed by Darren Robinson

The much hailed BBC space battle and trading game has arrived on the Amstrad. Few programs in the history of the micro have had the coverage and rave reviews of Elite, so I had to find out - does this version live up to the hype?

Elite is set on a large scale area comprising 8 galaxies. Each galaxy has 250 planets to visit, and each world has a screen of general information and market prices. There are also 2 star charts to call up. The Galactic chart shows the entire galaxy and is useful for information on planets outside your range. The local cluster chart shows mainly the planets within the fuel range.

Commander Jameson (that's you) pilots a Cobra MkIII trader ship. On screen features include foward, rear, left or right views, two radars, front pulse laser and numerous bar graphs of craft functions, the main ones being 4 defence shields and speed control.

When deciding which system to visit, the political classification should be taken into account. If visiting a corporate state or democracy you'll be fairly safe. However, if travelling to a fuedal or anarchy world, attack by pirates wanting your cargo is certain.

Whilst meandering in space you will come across other craft either attacking or ignoring you. These craft consist of line graphics like the DD Atari Battlezone. There is very little flicker as they fly past at high speed. The more space craft you blow up, the higher your combat rating will go, beginning from the initial Harmless, then Mostly Harmless, right through to Deadly and Elite. There is also a legal status which goes from Clean to Offender to Fugitive if you shoot at Police, Vipers, or trade in illegal goods, such as slaves and narcotics. A criminal record means the Police will join the pirates in trying to kill you.

Inside the box containing Elite can also be found a colour poster of spacecraft in the game, a short space adventure book entitled 'The Dark Wheel', a comprehensive training manual, a quick key control guide and a form for a U.K. Elite club. The training manual is probably the best documentation I've seen for any game. This informs you of things like navigation, the political structure of the universe, docking, trading, market prices, weaponry and more.

The key control guide shows which keys do what.

If working entirely from the keyboard you have a grand total of 48 functions to think of, therefore a joystick is recommended, mainly to make combat manoeuvers easier.

Blasting other craft such as pirates will boost the number of credits that you own. With these credits, cargo or ship modifications can be purchased. However shooting at a space station will only make it angry, and several fighters will be launched to sort you out.

The status of Commander Jameson may be saved to tape if you die or decide to quit.

There is an aspect of the game that I didn't like. Upon arrival in a system you head towards the planet, shooting or ignoring craft in the area. Once the space station is in sight, even at full speed you must wait and wait for it to get close enough to begin docking. The approach is boring to say the least and is unnecessarily time consuming in a game of already massive proportions. Docking itself is extremely tricky as there is little margin for error and it isn't that easy to point the Cobra in the right direction anyway.

Once safely inside the space station you can buy and sell cargo at the local prices, hopefully making a food profit. A good strategy is to check the general data on a nearby planet and buy cargo that you think will fetch a high price.

SUMMARY - While it is undoubtedly the most sophisticated space game on the Amstrad to date, Elite is initially very difficult and much practise is required before you can be successfully fighting and trading between planets.

Assessment (out of 8)	
Ability to hold interest:	8
Documentation	8
Originality	7
Graphics	6
Entertainment Value	6
Speed	3
Ease of Use	3
TAU INDEX	**73%**

Word Sleuth

from Keith Saw

Have you ever wondered how long it takes the word puzzle compilers to put together a matrix of letters containing hidden words? I always thought they spent hours fitting everything in until Word Sleuth from Keith Saw arrived.

Word Sleuth allows you to put words into the matrix and randomly surround them with letters. The computer places the words into a square, and prints out the finished product, complete with answers, ready for duplicating if required.

You choose the level of complexity and the words for which to search and circle. They can be written in any direction, including backwards.

The program determines the size and complexity of the puzzle by your answers to the initial questions. Limits have been set so that it will fit on to an A4 size paper.

You will notice that the program was originally written for pupils at the Cooloongup Primary School in WA, so you may wish to alter lines 1970 and 1980 to personalise it.

HOW IT RUNS

10 - 60	REM statements
70 - 330	Windows, questions asked
340 - 990	Initialization, handles word entry
1000 - 1110	Puzzle routine starts, answers handled
1120 - 1370	Word routine, random selection of direction
1380 - 1550	Random selection of start point
1560 - 1880	Entry of word into puzzle
1890 - 1960	Fill remaining positions with a random selection of letters
1970 - 2090	Print hard copy of words to find
2100 - 2370	Check for errors and correction routine

VARIABLES USED

C	Number of columns
R	Number of rows
N	Number of words
L$( )	Letter array
W$( )	Words
A$( )	Letter array
Y	Random number
LO	Length of word
QO,P,Q,PO	Word directions
Z1,Z2,X1,X2	Random rows and columns
ANS	Answer selection
WORD$	Corrected word

```
10 REM ** WORDGAME PROGRAMME **
20 REM **    WORD SLEUTH     **
30 REM **    FOR AMSTRAD     **
40 REM **   by KEITH SAW     **
50 INK 1,0:INK 0,13:BORDER 9:PEN 1:PAPER
 0:MODE 1
60 INK 2,3:INK 3,1
70 WINDOW #3,1,40,1,25
80 PAPER  #3,1:CLS #3
90 WINDOW #4,2,39,2,24
100 PAPER  #4,0:PEN #4,2:CLS #4
110 ANS=1
120 PRINT#4:PRINT#4,"       WORDGAME
    PROGRAMME"
130 PRINT#4:PRINT#4
140 PRINT#4,"      ENTER THE NUMBER OF C
OLUMNS"
150 PRINT#4,"           IN YOUR WORD GAM
E"
160 PRINT#4:PRINT#4, "            (Maxim
um of 39)"
170 INPUT #4,C
180 PRINT #4
190 IF c>39 THEN GOTO 10
200 PRINT #4," ENTER THE NUMBER OF ROWS
IN THE GAME"
210 PRINT #4:PRINT#4, "            (Maxi
mum of 22)"
220 INPUT #4,R
230 PRINT #4
240 IF R>22 THEN GOTO 10
250 PRINT #4,"   ENTER THE NUMBER OF WOR
DS TO FIND"
260 PRINT#4
```

```
270 INPUT #4, N
280 PEN #4,3
290 BORDER 13
300 PRINT#4:PRINT#4,"                PLEAS
E WAIT"
310 PEN 3
320 REM **** DATA INITIALIZATION ****
330 DIM L$(C,R)
340 DIM W$(N)
350 DIM A$(26)
360 LET A$(1)="A"
370 A$(2)="B"
380 A$(3)="C"
390 A$(4)="D"
400 A$(5)="E"
410 A$(6)="F"
420 A$(7)="G"
430 A$(8)="H"
440 A$(9)="I"
450 A$(10)="J"
460 A$(11)="K"
470 A$(12)="L"
480 A$(13)="M"
490 A$(14)="N"
500 A$(15)="O"
510 A$(16)="P"
520 A$(17)="Q"
530 A$(18)="R"
540 A$(19)="S"
550 A$(20)="T"
560 A$(21)="U"
570 A$(22)="V"
580 A$(23)="W"
590 A$(24)="X"
600 A$(25)="Y"
610 A$(26)="Z"
620 Y=1
630 FOR I=1 TO C
640   FOR J=1 TO R
650 L$(I,J)="."
660   NEXT J
670 NEXT I
680 CLS
690 FOR K=1 TO N
700 PRINT "ENTER WORD NUMBER ";K
710   INPUT W$(K)
720 W$(K)=UPPER$(W$(K))
730 NEXT K
740 GOSUB 2080
750 CLS
760 PRINT "YOUR WORDS ARE:-":PRINT
770 FOR K=1 TO N
780 PRINT K;".   ";W$(K)
790 GOSUB 1100
800 NEXT K
810 PRINT:PRINT"I'LL  SHOW  YOU  WHERE
I'VE  HIDDEN THE       WORDS IF YOU SAY
PLEASE !"
820 INPUT G$
830 MODE 2
840 G$=UPPER$(G$)
850 IF G$<>"PLEASE" THEN 900
860 GOSUB 990
870 PRINT:PRINT:INPUT " PRESS   <<<ENTER
>>>   TO PRINT WORD SEARCH ";K
880 PEN 1
890 PRINT:PRINT:PRINT "       PLEASE WAI
T"
900 GOSUB 1880
910 PRINT
920 PRINT#8:PRINT#8
930 PRINT
940 GOSUB 990
950 REM **** TERMINATION POINT ***
960 CLEAR
970 END
980 REM *** PUZZLE POINT ROUTINE ***
990 IF ANS=1 THEN PRINT#8, "  ANSWERS":P
RINT#8:GOTO 1000
1000 FOR J=1 TO R
1010   FOR I=1 TO C
1020 PRINT L$(I,J)" ";
1030 PRINT#8, L$(I,J)" ";
1040   NEXT I
1050   PRINT
1060 PRINT#8
1070 NEXT J
1080 ANS=2
1090 RETURN
1100 REM **** WORD BREAKDOWN ROUTINE ***
1110 REM SOME LANGUAGE DEPENDENCE IN THI
S    ROUTINE ****
1120 REM
1130 L0=LEN(W$(K))
1140 REM **** RANDOM SELECTION OF DIRECT
ION ****
1150 LET T=1
1160 IF T<100 THEN 1190
1170 PRINT"I COULDN'T FIT THE WORDS IN -
 SORRY TRY AGAIN"
1180 GOTO 970
1190 P=1
1200 P0=1
1210 Q=-1
1220 IF RND(Y)<=0.5 THEN 1240
1230 LET Q=1
1240 Q0=-1
1250 IF RND(Y)<=0.5 THEN 1270
1260 Q0=1
1270 D=2
1280 IF Q<>1 THEN 1300
1290 P=0
1300 IF Q0<>1 THEN 1320
1310 P0=0
1320 IF RND(Y)<0.75 THEN 1340
1330 D=1
1340 IF RND(Y)>0.25 THEN 1360
1350 D=0
1360 REM *** RANDOM SELECTION OF START P
OINT ***
1370 C0=C
1380 R0=R
1390 IF D<>1 THEN 1410
1400 R0=R-L0
1410 IF D<>0 THEN 1430
1420 C0=C-L0
1430 IF D<=1 THEN 1460
1440 R0=R-L0
1450 C0=C-L0
1460 IF C0<>C THEN 1480
```

```
1470 P0=0
1480 IF R0<>R THEN 1500
1490 P=0
1500 Z1=(RND(Y)*R0/100+0.01)*100+P*L0
1510 Z2=(RND(Y)*C0/100+0.01)*100+P0*L0
1520 X1=INT(Z1)
1530 X2=INT(Z2)
1540 REM****ENTRY OF WORD IN THE PUZZLE
1550 IF D=1 THEN 1770
1560 IF D=0 THEN 1670
1570 FOR I=1 TO L0
1580 IF L$(X2+(I-1)*Q0,X1+(I-1)*Q)="." T
HEN 1600
1590 IF L$(X2+(I-1)*Q0,X1+(I-1)*Q)<>MID$
(W$(K),I,1) THEN 1140
1600 NEXT I
1610 T=0
1620 FOR I=1 TO L0-1
1630 LET L$(X2+I*Q0,X1+I*Q)=MID$(W$(K),I
+1,1)
1640 NEXT I
1650 L$(X2,X1)=MID$(W$(K),1,1)
1660 GOTO 1860
1670 FOR I=1 TO L0
1680 IF L$(X2+(I-1)*Q0,X1)="." THEN 1700
1690 IF L$(X2+(I-1)*Q0,X1)<>MID$(W$(K),I
,1) THEN 1140
1700 NEXT I
1710 T=0
1720 FOR I=1 TO L0-1
1730 L$(X2+I*Q0,X1)=MID$(W$(K),I+1,1)
1740 NEXT I
1750 L$(X2,X1)=MID$(W$(K),1,1)
1760 GOTO 1860
1770 FOR I=1 TO L0
1780 IF L$(X2,X1+(I-1)*Q)="." THEN 1800
1790 IF L$(X2,X1+(I-1)*Q)<>MID$(W$(K),I,
1) THEN 1140
1800 NEXT I
1810 T=0
1820 FOR I=1 TO L0-1
1830 L$(X2,X1+I*Q)=MID$(W$(K),I+1,1)
1840 NEXT I
1850 L$(X2,X1)=MID$(W$(K),1,1)
1860 RETURN
1870 REM *** FILL OF REMAINING POSITIONS
***
1880 FOR I=1 TO C
1890 FOR J=1 TO R
1900 IF L$(I,J)<>"." THEN 1930
1910 Z1=(RND(Y)*0.26+0.01)*100
1920 L$(I,J)=A$(INT(Z1))
1930 NEXT J
1940 NEXT I
1950 REM***PRINT OF THE WORDS TO FIND
1960 PRINT
1970 PRINT#8, CHR$(14);"     COOLOONGUP P
RIMARY SCHOOL":PRINT#8
1980 PRINT#8," NAME.....
.....        YEAR.....        ROOM.....":P
RINT#8
1990 PRINT#8
2000 PRINT"       WORD LIST"
2010 PRINT#8, "       WORD LIST"
2020 PRINT#8
2030 FOR K=1 TO N
2040 PRINT W$(K)
2050 PRINT#8, W$(K)
2060 NEXT K
2070 RETURN
2080 REM ** Check for errors **
2090 CLS
2100 PEN 1
2110 PRINT "  YOUR WORDS ARE:-":PRINT
2120 FOR K=1 TO N
2130 PRINT K;".   ";W$(K)
2140 NEXT K
2150 WINDOW #1,24,39,6,15
2160 PAPER #1,1
2170 WINDOW #2,25,38,7,14
2180 INK 2,1:INK 3,24
2190 PAPER #2,2:PEN #2,3
2200 CLS #1:CLS #2
2210 PRINT #2:PRINT #2," DO YOU WISH"
2220 PRINT #2," TO CHANGE"
2230 PRINT #2," A WORD <Y/N>"
2240 INPUT #2,RES$
2250 IF RES$="N" OR RES$="n" THEN RETURN
2260 CLS #2
2270 PRINT #2:PRINT #2," WHICH NUMBER"
2280 INPUT #2,NUM
2290 CLS
2300 PRINT W$(NUM)
2310 PRINT:PRINT
2320 INPUT "Type the correct word";word$
2330 word$=UPPER$(word$)
2340 W$(NUM)=word$
2350 GOTO 2080
```

The grid below was produced using Word Sleuth. See if you can find the following: AMSTRAD, DISC, CASSETTE, KEYBOARD, MAGAZINE, BASIC, PASCAL, MONITOR, MAGENTA, BOOKS.

```
J Q S D W F H Q B W Q L B O Z
F N Q A K B R J F J L E U P Y
W L C U B Z Z D C A Y O J Y T
L I U A M A T Y C H D Y F Q B
M Q V H X W S S J F M W W Y I
X A Z E S C A I M C R Q M T G
K P G D T P H R C N S A M N Y
R X D E A T E F B Y G N B D Z
C G K U N C E P S A W E B I D
Z F E A H T N S Z O N V K E N
D V N W N S A I S Q B G S E X
J P T F U D N N P A C O J Y G
Y W P Q K E Z V C Z C M Q B L
N S X R D A M S T R A D Y R B
O K K D D Y N M Z T R Y J F R
M O N I T O R M M M D L E R O
R O P L H Z O P P E W V X M Q
B B L Y Y K O L F S G S X S W
U W L L K E Y B O A R D F Y T
K D I S C W K T T Y U R M K J
```

Where has all the Software gone?

One of the constant complaints to the offices of The Amstrad User is the lack of software, especially in the Games area. From the lists below, compiled with the help of the companies mentioned, you can see there is a fair range from which to choose. It's not a complete list as new products are arriving every week and, of course, they are not always confined to software.
If you are thinking of rushing to the 'phone to order with one of the listed companies - DON'T. None of them supply direct to the public. In the first instance you should contact your local dealer and place your order there. Only if you are really having trouble locating the copy you want should you ring the distributor concerned who may be able to advise where you will find it.

Note: We have tried to check the prices carefully, but with so many there could be errors, so take them as a guide only. No price showing means that medium is not available.

OziSoft™

(02) 211 1266

	Cass	Disc
ADVENTURE QUEST	39.95	
BATMAN	39.95	49.95
BATTLE FOR MIDWAY	39.95	49.95
BATTLE OF BRITAIN	39.95	49.95
BLADERUNNER	29.95	39.95
BOULDERDASH	29.95	39.95
BRUCE LEE	39.95	49.95
COLOSSAL ADVENTURE	39.95	
COLOSSUS CHESS	39.95	49.95
COMBAT LYNX	29.95	39.95
COMIC BAKERY	39.95	49.95
COVENANT	39.95	49.95
CRITICAL MASS	29.95	39.95
DAMBUSTERS	39.95	49.95
DAN DARE	39.95	49.95
DECATHLON	24.95	
DEFEND OR DIE	24.95	
DOPPLEGANGER	29.95	34.95
DUNGEON ADVENTURE	39.95	
DYNAMITE DAN	29.95	49.95
EMERALD ISLE	39.95	
OZISOFT (continued)		
F.A. CUP	29.95	39.95
FAIRLIGHT	39.95	39.95
FALKLANDS '82	39.95	49.95
FIRST STEPS MR. MEN	24.95	39.95
FORMULA ONE	29.95	39.95
FRANKIE GOES TO HOLLYW'D	39.95	49.95
GENESIS		49.95
GOONIES	39.95	49.95
GRAHAM GOOCH CRICKET	39.95	49.95
GREEN BERET	39.95	49.95
HERE/THERE MR. MEN	24.95	39.95
HUNCHBACK II	39.95	
HYPERSPORTS	39.95	49.95
IWO JIMA	39.95	49.95
JUGGERNAUT	29.95	39.95
KNIGHT RIDER	39.95	49.95
KONAMI'S MIKIE	39.95	49.95
KONG STRIKES BACK	24.95	
LASER BASIC	49.95	59.95
LASER COMPILER	59.95	69.95
LASER GENIUS	59.95	69.95
LORDS OF TIME	39.95	
MACDAM BUMPER	39.94	49.95
MATCHDAY	24.95	
MELTDOWN	39.95	49.95
MOVIE	39.95	49.95
NEVERENDING STORY	39.95	49.95
PING PONG	39.95	49.95
POLE POSITION	39.95	
PRICE OF MAGIC	39.95	
RAMBO	39.95	49.95
RED MOON	39.95	
RETURN TO EDEN	39.95	
ROCKY HORROR SHOW	39.95	49.95
SABOTEUR	29.95	39.95
SHOGUN	39.95	49.95
SNOWBALL	39.95	
SORCERY	29.95	
SPITFIRE 40	29.95	49.95
SPY VS SPY	39.95	49.95
STEVE DAVIS SNOOKER	39.95	49.95
STREETHAWK	39.95	49.95
SWORD & SORCERER	39.95	49.95
TAU CETI	39.95	49.95
TEST MATCH CRICKET	19.95	
THE IMAGE SYSTEM	39.95	
THEATRE EUROPE	39.95	49.95
THEY SOLD A MILLION	49.95	59.95
THEY SOLD A MILLION II	49.95	59.95
TOBRUK	39.93	49.95
TRANSFORMERS	39.95	49.95
TRIPLE DISC		39.95
TURBO ESPIRT	29.95	39.95
V	39.95	49.95
WHO DARES WINS II	29.95	49.95
WORD GAMES MR. MEN	24.95	39.95
WORM IN PARADISE	39.95	
YIE AR KUNG FU	39.95	49.95
ZORRO	39.95	49.95
For the PCW Range		
BATMAN		59.95
BLACK STAR		59.95
CARDBOX		197.65
SAS RAID		59.95
SCRATCHPAD		219.00
TOUCH 'N' GO		79.95

Victoria, Tas & NT (03) 222 2288
South Aust. (08) 297 9033
Queensland (07) 393 1677
N.S.W. (02) 319 2445
West Aust. (09) 328 5299

ARCADE ACTION		
50 GAMES	39.95	57.50
ALIEN HIGHWAY	34.95	44.95
ANDROID RUN 2	32.50	
BARSTOW MANOR	34.95	
CLASSIC COLLECTION	24.95	
THE COMET GAME	32.50	
CONTRAPTION	34.95	49.95
CORE	39.95	
COSTA CAPERS	32.50	
CUSTARD PIE FACTORY	32.50	49.95
DEATHSVILLE	32.50	49.95
TIME & MOTION	49.95	
DYNAMITE DAN	34.95	
EMPIRE	39.95	
GLASS	34.95	49.95
GOOCH TEST CRICKET	39.95	57.50
HI RISE	34.95	54.95
HIGHWAY ENCOUNTER	34.95	54.95
CLASSIC INVADERS	24.95	39.95
MAX HEADROOM	39.95	
MELTDOWN	34.95	57.50
MOON CRESTA	29.95	
N.E.X.O.R.	34.95	
OBSIDIAN	32.50	
SABOTEUR	34.95	57.50
SAI COMBAT	39.95	57.50
SAMANTHA FOX POKER	34.95	54.95
GEOFF CAPES STRONG MAN	34.95	
STAIRWAY TO HELL	32.50	49.95
STARQUAKE	34.95	49.95
SWEEVOS WORLD	34.95	54.95
TORNADO LOW LEVEL	34.95	54.95
TUBARUBA	32.50	49.95
TURBO ESPRIT	34.95	57.50
WAY OF THE TIGER	39.95	57.50
ADVENTURE & STRATEGY		
2112 AD	34.95	57.50
BIGGLES	39.95	57.50
BRIDGE PLAYER 3	49.95	
COMBAT LYNX	34.95	
DEATH WAKE	34.95	
DRAGONTORC	34.95	
DUN DARACH	39.95	57.50
ELITE	59.95	79.95
JEWELS OF DARKNESS	59.95	79.95#
KNIGHT LORE	39.95	
MANDRAGORE	57.50	
MARSPORT	39.95	57.50
MISSION OMEGA	39.95	
MISSION ELEVATOR	39.95	57.50
NEXUS	39.95	49.95
NICK FALDO GOLF	39.95	
NIGHT GUNNER	32.50	54.95
FORBIDDEN PLANET	34.95	
RASPUTIN	32.50	
RED ARROWS	34.95	
ROOM TEN	34.95	57.50
RUNESTONE	32.50	
SHADOWFIRE	39.95	
SPITFIRE 40	39.95	
STRIKE FORCE HARRIER	39.95	57.50
TOMAHAWK	34.95	57.50
3D VOICE CHESS	54.95	57.50
WARLOCK	29.95	
WARLORD	39.95	
WIZARDS LAIR	37.50	54.95
ZOIDS BATTLE BEGINS	34.95	54.95
EDUCATIONAL & UTILITIES		
THE ANIMATOR	57.50	69.95
CESARS TRAVELS	34.95	
CODE MACHINE	57.50	
GRAPHIC ADVENT CREATOR	94.95	94.95
LEARN BASIC PROGRAMMING	69.96	
MACHINE CODE TUTOR	57.50	
MINI OFFICE II	59.95	
THE MUSIC SYSTEM	59.95	79.95
OTHER DISC BASED TITLE		
ADVANCE MUSIC SYSTEM		159.95
BRIAN BLOODAXE		44.95
THE CASHBOOK		99.95
WORKING BACK Compilation		57.50
TIME 7 MOTION Compilation		59.95
FOUR PACK GAMES		49.95
MINI OFFICE II BUS		79.95
PERSONAL MONEY MANAGER		99.95#
OXFORD PASCAL		94.95#
FORBIDDEN PLANET		57.50
PYRADEV		119.95
SHADOWFIRE		54.95
TASWORD		94.95

- These programs are also compatible with the PCW8256/8512

MELBOURNE HOUSE
(03) 699 6155

BOUNDER		39.95
CAULDRON 1	24.95	
CAULDRON 2	24.95	39.95
CLUEDO	32.95	
COLOUR OF MAGIC	27.95	44.95
EXPOLDING FIST	27.95	
EXPLODING FIST plus		
FIGHTING WARRIOR		49.95
FIST 2 - LEGEND CONTINUES	27.95	44.95
HEAVY ON THE MAGIK	27.95	44.95
HOBBIT (de luxe) - with book	39.95	
HOBBIT - without book	27.95	
JACK THE NIPPER	27.95	44.95
KNIGHT GAMES	27.95	44.95
LORD OF THE RINGS (with bk)	44.95	
LORD OF THE RINGS (w/out bk)		44.95#
MAGIC	32.95	
MELBOURNE DRAW	32.95	44.95
MONTY ON THE RUN		44.95
MORDON'S QUEST	27.95	
MUSIC BOX	29.95	
NOSFERATU - THE VAMPIRE	27.95	44.95
RED HAWK	24.95	
ROCK'N'WRESTLE	27.95	44.95
ROGUE TROOPER	27.95	44.95
SACRED ARMOUR OF ANTIRIAD	27.95	44.95
SCRABBLE	32.95	
SCREEN PLAY	32.95	
STRIKE FORCE COBRA	27.95	44.95
TRAP DOOR	27.95	44.95
WORLD CUP SOCCER	32.95	

IMAGINEERING
(02) 662 4499

MINDSHADOW	19.95	
HACKER	19.95	34.95
SPINDIZZY	19.95	34.95
WINTERSPORTS	19.95	34.95
BARRY MCGUIGANS BOXING	19.95	34.95
FIFTH AXIS	19.95	34.95
GHOSBUSTERS	29.95	34.95
BACK TO THE FUTURE	19.95	34.95
KORONIS RIFT	19.95	34.95
THE EIDOLON	19.95	34.95
SOCCER	19.95	34.95
MERMAID MADNESS	19.95	34.95
RESCUE ON FRACALUS	19.95	34.95
PRO TENNIS	19.95	34.95
ON FIELD FOOTBALL	19.95	34.95

Adventurer's Attic

by Philip Riley

This month Philip gives advice on how to deal with a maze both when playing or writing an adventure game.

IF YOU'RE STUCK

Many adventures contain that most infuriating of problems - a maze. Unlike the rest of the adventure a maze need follow no set rules. Moving in one direction and then moving back again may not put you into the same place as you started. Another difficulty is that the descriptions are usually brief and generally identical. This can make things rather hard and you could in fact spend days just going around in circles. But despite these overwhelming odds you can actually map out a maze. It is rather a long and drawn out task but it will help further on in the game.

Once you have entered the maze, don't start wandering around aimlessly - get a piece of paper and a pencil and start making notes. You will require at least one item that can be picked up and dropped although you would be well advised to take as many items as possible into the maze.

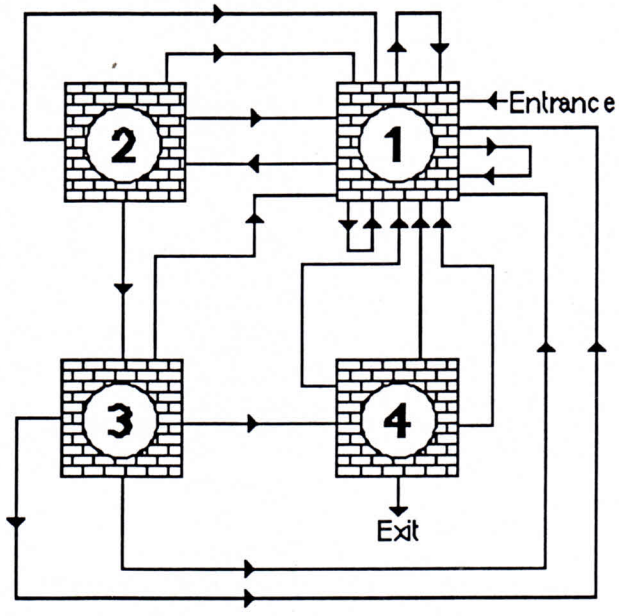
So, you are at the beginning of the maze. Generally you can move in all directions all of the time. Drop an item in your current location, pick a direction (any direction that takes your fancy) and move. If you have another item, drop it then attempt to move back to your original position. If you can see the first object that you dropped you have successfully returned. If the object is not there you are obviously in a different place. So by moving backwards and forwards and dropping items you should be able to map out the maze.

This method will probably take a long time for you to discover all the secrets of the maze, but as I said earlier, it can be very helpful later on.

WRITING YOUR OWN

Of what use is a maze anyway, after all, if a person has blundered into it once, they are unlikely to stroll into it again. The answer to this is simple. All you need to do is make it necessary to enter the maze each time the game is played. There are two ways to achieve this. One is to put another part of your adventure on the other side of the maze that is only accessible by going through the maze. The other is to put a useful object inside the maze that the player must retrieve to complete the game.

The next little problem is putting a maze into your own game. You don't want it to take too much memory (Golden Rule No. 1 - save memory wherever possible). Below is a simple idea for a maze.



As you can see from the example map, there is not much to it. You can, of course, make it any shape or design you wish. The above example is presented to show you how a maze works. If you follow the arrows, you can see that by moving incorrectly you are automatically sent back to the start. Another point to note is that you are not able to leave the maze by the way you came in - you must leave through the exit.

If you do incorporate a maze into your own adventure game remember, that to make it most effective, it is best to keep all the location descriptions the same. This will make it much harder for the person playing to map it. Most mazes generally have short descriptions and in most cases the players will not realise that they are in one - until they get hopelessly lost! The following are a few descriptions that you could use for your own maze:

You are in the Mad House
You are in the Catacombs
You are in dense Fog
You are in a dense overgrown jungle
You are in the House of Horrors

As you can see they are most definitely brief. Of course, it is always better to come up with something different, but if you are at a loss, then you can always fall back on one of the above suggestions.

SOME ANSWERS FOR "LOST SOULS"

Having done the review of "Mordon's Quest" for TAU some time ago, I felt a duty to come to the rescue of Clinton Willis.

1. To get past the pygmy: you will need the bamboo and poison darts (from an earlier location). When in the pygmy's hut, make a blowpipe from the bamboo, and use it against the pygmy. Result - one dead pygmy.
2. To get past the carnivorous plant: you will need the body of the pygmy. Feed the body to the plant.

I completed this particular adventure many months ago, and am pleased to confirm that my original rating of 80% was a reasonably accurate assessment of the standard of the adventure.

I notice also that Douglas Mansell has some problems in the Jewels of Babylon. The following should help him.

1. To get past the lion: feed him the fish (from the Secluded Beach).
2. To get past the crocodile: you will need the gunpowder (from the Caves past the lion) and the match (past the Cannibal Village). What to do? Blow it up!! (of course).

Keep up the good work Philip. We need to develop as many adventurers as possible.

Andre Urankar

P.O. Box 1522
Rockhampton
QLD 4700

ROCSOFT

Suite 2/34 Lightwood Rd
Springvale,
Vic 3171

EDUCATION

Magic Paintbook	$16.50
Junior Tutor 1	$11.50
Shifter	$14.50
Quiz Whiz	$19.50

GAMES

Jigsaw Whiz	$16.50
Dragon Quest (Adv)	$16.50
Catacomb & Golf	$16.50
Serpent & Digger	$16.50
Tracker & Tag	$16.50
Olympic Gold	$19.50

Compete against a friend in this 2 player, 7 event game.

Screen Whiz $29.50
This is a very powerful art and graphics program for the Amstrad 464/664/6128 colour and green screen computers

Prices are for tape versions only, add $10 for disc.

Bits 'n' Pieces $19.50
A compilation of over "30" small programs and routines for use in the development of your programs and are in UNPROTECTED form so that you can experiment with them to suit your own needs, they include
- Basic screen dumps
- Perpetual Calendar
- Sound Experiments
- M/C to Data Converter
- Modified Character sets
- Visual Effects
- Mini Character Editor
- and much, MUCH more !!

Basic Game Routines $14.50
This collection of routines is for anyone writing their own arcade, adventure or educational games.

MAIL ORDERS ONLY
Please allow 21 days for delivery

HARDWARE

Printer Cables	1.5M	$25.00
	3.0M	$32.00

Speech Synthesiser $85.00
Complete with high quality stereo speakers and 5 free programs.

Dual Joystick Adaptor $19.50
You can play all of those two player games with the joysticks of your choice.

664/6128 Tape Lead $12.50
Load those tape games and files into your 664/6128.

Enquire about our many other Hardware products including
- Light Pen Package
- Monitor Extension leads
- VHF Modulator Power Pack
- 8-bit External Switcher
- Quality Stereo Amplifier
- RGB Colour Music Adaptor

Buy 3 programs and get 1 as a free gift. (To the average value of your purchase)
* * * SPECIAL CHRISTMAS PRICES * * *
Every effort will be made where possible to ensure pre Christmas delivery.

SOUNDEX

MATCHING SOUND-ALIKE WORDS

from Petr Lukes

SOUNDEX is an algorithm for encoding names as a sequence of the first letter and three digits, so that similar-sounding names produce the same code although the spelling may differ considerably. If you try to find a BAILEY in the telephone directory, you are advised to try also BAILLIE, BAYLEY, BAYLY, AND BAILYE. All these versions would produce the same code, namely B400.

The algorithm has been around for a long time, since the famous 1890 U.S. Census during which Dr. Hollerith introduced punched cards (he later formed a company which developed into IBM), but it keeps cropping up in magazines in various versions.

It could be useful if you have a large address book with similar-sounding names, but it can also help with look-up of frequently misspelt words. In the dictionary part of the program, the code for 'scimitairey' will match 'cemetery', 'scimitar', and 'symmetry', so exact spelling is not essential.

The algorithm, as coded here, requires two passes. The first pass eliminates all non-letter characters and saves the group code of each letter, provided it is not a duplicate of the preceding one. The second pass sets the first character of the code to either the first letter or the group of the first letter, depending on the choice of the mode, then eliminates the non-significant copies.

Simpler forms of the algorithm use only one pass, but do not eliminate the repetition of the first letter ('llama' would be encoded as L450 rather than L500), and do not recognise letters belonging to the same group but separated by one or more non-significant letters ('decision' and 'thicken' would both be encoded as 3250 in the dictionary mode, rather than 3225 and 3250 respectively).

```
100 CLS:PRINT"SOUNDEX LKS 860719"
110 'Soundex grouping:
120 'group 0: AEHIOUWY non-significant l
etters
130 'group 1: BFPV
140 'group 2: CGJKQSXZ q is sometimes pl
aced in gr. 0
150 'group 3: DT
160 'group 4: L
170 'group 5: MN
180 'group 6: R
190 'Letter-to-group table:
200 gr$="01230120022455012623010202"
210 ''''"ABCDEFGHIJKLMNOPQRSTUVWXYZ"
220 c%=0:WHILE c%<1 OR c%>2:PRINT"Select
:"
230 PRINT" 1 Names":PRINT" 2 Dictionary"
:INPUT c%
240 WEND:ZONE 20:ON c% GOTO 250,450
250 PRINT"Names"
260 z$="":WHILE LEN(z$)<1:INPUT"Enter na
me: ",z$:WEND
270 GOSUB 300:IF y$>""THEN PRINT"name: "
z$,"code: "y$
280 GOTO 260
290 'Encoding
300 y$=UPPER$(z$):a%=ASC(y$)-64
310 IF a%<1 OR a%>26 THEN PRINT"Invalid"
:y$="":RETURN'must start with a letter
320 w$=MID$(gr$,a%,1)'group of first let
ter
330 FOR d%=2 TO LEN(y$):a%=ASC(MID$(y$,d
%,1))-64
340 IF a%<1 OR a%>26 THEN 370'ignore non
-letters
350 x$=MID$(gr$,a%,1)'find group of lett
er
360 IF x$<>RIGHT$(w$,1)THEN w$=w$+x$'tra
nsfer non-repeated codes
370 NEXT d%
380 IF c%=1 THEN y$=LEFT$(y$,1)'first le
tter of name
390 IF c%=2 THEN y$=LEFT$(w$,1)'group of
 first letter
400 FOR d%=2 TO LEN(w$):x$=MID$(w$,d%,1)
410 IF x$>"0"THEN y$=y$+x$'transfer sign
ificant codes (groups 1-6)
420 NEXT d%
430 y$=LEFT$(y$+"000",4)'pad out with 0s
, chop to length
440 RETURN
450 PRINT"Dictionary"
460 z$="":WHILE LEN(z$)<1:INPUT"Enter wo
rd: ",z$:WEND
470 GOSUB 300:IF y$=""THEN 460
480 u$=y$:PRINT"word: "z$,"code: "u$
490 RESTORE 490:READ z$
500 WHILE z$<>"end":GOSUB 300
510 IF y$=u$ THEN PRINT z$,
520 READ z$:WEND:PRINT:PRINT"End of sear
ch":GOTO 460
530 DATA apology,cemetery
540 DATA conscientious,despair
550 DATA omit,scimitar,symmetry
560 DATA end
```

XMAS FAMILY FUN PACK

(12 programs)

Over 80k of programs for just $19.95 (cassette) or $29.95 (disc) including postage.

Exclusive to 464/664/6128 readers of The Amstrad User (NOT PCW)

ADVENTURE

House of Dracula - an extremely challenging text adventure to get your teeth into over Christmas.

EDUCATIONAL

Two programs for the younger members of the family.

Spelling Bee
Help the bee reach the flower to collect the honey by correctly guessing and spelling the hidden word.

Copy Cat
Test your reaction and co-ordination with this simple "Simon" based program.

ARCADE

Laser Blast: a fast action "shoot 'em up" which will keep many a joystick joker jinxed.

STRATEGY

A collection of EIGHT mind-bending brainteasers to exercise every inch of the grey matter.

HOW TO ORDER

Just send $19.95 for the tape (or $29.95 for the disc) to
The Amstrad User,
Suite 1,
245 Springvale Road,
Glen Waverley,
Vic 3150

Bankcard, Mastercard or Visa orders accepted on (03) 233 9661. Orders received after 1/12/86 may not be delivered before Christmas

The Amstrad PC1512

Reviewed by Martin Scragg

In all fairness to Martin, he was presented with the PC1512 on a Monday minus the MS-DOS disc which was subsequently delivered on the Wednesday. This left him a mere five days to look at the machine before it was whisked away.Our thanks to Martin for his efforts under the circumstances.
Read on to see what the "not the world's biggest IBM-PC fan" has to say.

At last the guessing game is over, Amstrad have finally released their IBM clone the PC1512 (originally code named AIRO). Amstrad denied all knowledge of the machine but everybody else knew that is was on the way, the only thing that nobody was sure about was what it would have as standard, and how much it was going to cost.

As with previous Amstrad machines, the PC1512 comes in several different basic packages, from the simplest having a monochrome monitor and one disk drive up to the deluxe version with a colour monitor single floppy disk drive and a hard disk. All machines come with 512k of memory as standard (upgradable to 640k), a centronics printer port, an RS-232 serial port, battery backed-up clock/calendar, a high resolution colour card and a mouse. The software that come with the machine is MS-DOS 3.2, DOS PLUS 1.2 and GEM.

On setting up the machine you will see tell tale signs that the machine is from the Amstrad stable. The monitor has two cables that come out of the back and plug into the system unit and one power cord that powers the whole machine. The keyboard plugs into the left hand side of the system unit, the mouse plugs in next to the keyboard and the power cord plugs into the wall (where else). The power button is located at the back of the monitor and is a little hard to reach, which means that you cannot turn it off by accident, but when the machine dies it is awkward to get to.

Before you first turn on the unit you must put the batteries for the real time clock into place. These sit in a little holder on the top of the system unit. The monitor has a swivel base so that you can adjust it to the best viewing angle, it sits on top of the system unit in a small recess. This means that you cannot push the monitor off the unit accidentally.

Once the PC1512 is set up you are almost ready to go, so turn on the power and wait. When you turn it on a message appears at the top of the screen that says "PLEASE WAIT....." while it goes through some self tests. Put one of the disks into the A: drive, and it will boot up after about 30 seconds.

Depending on which disk you boot up on, you will end up in MS-DOS, DOS PLUS or GEM. Most people will probably use MS-DOS because most of the software for the IBM-PC is written for this operating system. MS-DOS, for those of you who are not familiar with it, is a sort of souped up version of CP/M. Most of the popular IBM programs such as Lotus-123, DBase, Sidekick, Smartwork, Wordstar, Flight simulator etc. will run under this environment. About four or five of the programs that I tried would not work on the machine and if they did start up then they did not behave correctly. One nice touch of MS-DOS is that the last command can be brought back one character at a time by moving the mouse to the right or remove characters by moving to the left. You can then enter the command by pressing one of the mouse buttons.

DOS PLUS is a cross between CP/M and MS-DOS, sharing some

of the commands and utilities of both operating systems. This is also the basic operating system behind GEM, a graphic windowing system similar to that used in the Amiga or Macintosh, only not as user friendly in my opinion. When selecting a menu from the title bar for example, if you move the pointer onto one of the options a menu will suddenly pop up and the only way to get rid of it is to move off the menu and click one of the mouse buttons. Whereas on the Amiga or Macintosh you select the menu by pressing a button when the pointer is on the option you want. If you decide that you don't want that option you move off the menu and let the button go.

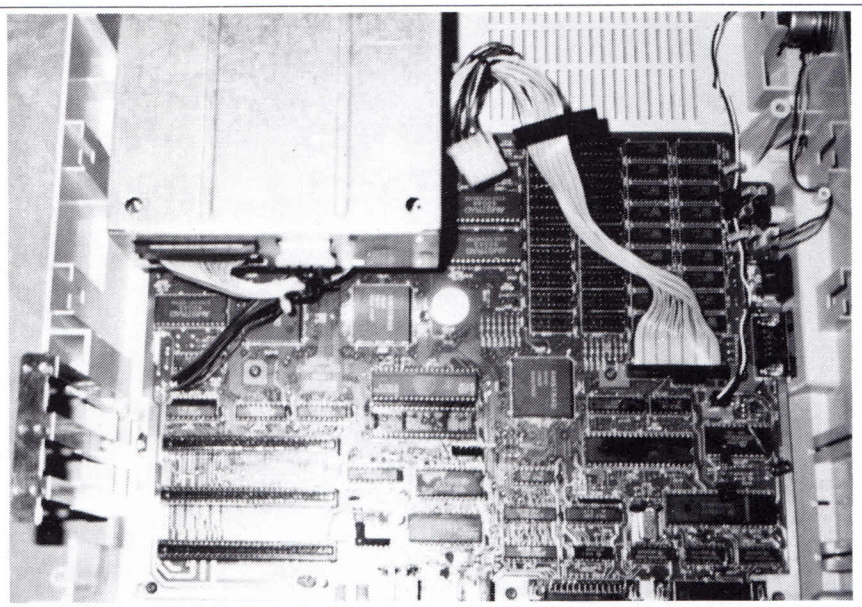
The manual seems to be of a similar standard to the other Amstrad manuals, starting off with the very basics of how to plug the machine in, and how to make back-ups of the disks, then goes on to the complicated things like the DOS commands and leaves the beginner stranded in the middle somewhere. Luckily there are lots of books on how to use the IBM-PC, so you should not have much trouble finding one that tells you what you need to know. The appendix of the manual is up to the usual Amstrad standard, and contains most of the information that you are likely to need.

The keyboard is attached to the computer via a coiled cable, so that it can be placed at a comfortable distance from the machine and has adjustable legs so that you can change the typing angle. Although the keys have a slightly spongy feel it doesn't take long to get used to. As in the IBM-PC the numeric keypad functions as both a numeric keys and cursor keys, selectable by a Num-lock key. At the back of the keyboard is a joystick port which imitates the cursor keys so you can use the numeric keypad as that, and use the joystick as the cursor keys. The joystick will not function with software that looks for a joystick, but it can be used by software that looks for the cursor keys. One of the worst things about the keyboard is that it has three delete keys, making it confusing as to which one to use.

A familiar keyboard

The model I was given to review had a single drive and a monochrome monitor. The monochrome monitor is black and white and of quite a good quality with adjustments on the side for brightness and contrast. The monitor contains the power supply for the entire computer so you would expect it to get warm after a while. For those people who turn their machine off and then on again rapidly to get out of a program, this machine is a good reason not to do so. A friend tried it but the computer would not turn on again straight away and we had to wait about 30 seconds before it could be turned on again.

Looking inside the machine you will see a work of art. Amstrad have managed to cut down the chip count by a large factor. There are three large custom chips inside which take the place of most of the IBM-PC's circuitry as well as a multi-function card and a built in graphics card. There are two rows of memory chips which make up the 512k of memory, and there are two rows of sockets to expand the ram up to 640k. There is an 8086 microprocessor running at 8Mhz with a socket next to it for a maths co-processor. At the back of the machine there are three expansion slots which take add-on cards. I



Looking inside you see a work of art

did not have any add-on cards to try, but from the information supplied with the machine the only cards that won't run are the EGA or CGA graphic cards because of the internal graphic card.

In conclusion the machine functioned fairly well in the limited time that I had to test it out. It runs a lot faster than the original IBM, so you can get on with what you are doing in a reasonable amount of time. The machine crashed a few times and I had to turn it off rather than resetting it. I think that this might have been due to flat batteries. Being used to MS-DOS, the first time I tried to reset the machine with CRTL/ALT/DEL it did not work, so I tried the delete key next to it and then both together with no success. I referred to the manual and it said use CTRL/ALT/DEL so another look at the keyboard revealed the correct delete key on the numeric keypad. The graphics card does not seem to emulate any popular cards (eg. Hercules) so you might be limited by it.

With the base machine (a monochrome monitor and single drive) starting at about $1500, this would seem to be a pretty good price considering that it has got the most popular add-on cards built into it and the bundled software.

So I suggest that you get yourself down to your nearest Amstrad selling point and check it out and see for yourself.

THE BOTTOM LINE

PC1512SD + PCMM Mono screen/single drive	$1499.00
PC1512SD + PCCM Colour screen/single drive	$1899.00
PC1512DD + PCMM Mono screen/double drive	$1949.00
PC1512DD + PCCM Colour screen/double drive	$2349.00

CAPTURE

A Game from Donald O'Connor

Capture is a "thinking" game you play against the computer. You each have six men in an 8x3 grid. The object is to capture three of the computer's men before it gets yours. This is achieved by sandwiching your opponent between two of your own men on the top and bottom line.

As life could be a little difficult for green screen owners, the following changes may help:

Add these lines:

```
2215 n$=chr$(159)+chr$(159)
2515 GRAPHICS PEN 1
2411 GRAPHICS PEN 2
2412 MOVE 96,70
2413 TAG
2414 PRINT "Player";
2415 TAGOFF
2416 LOCATE 14,21
2417 PRINT m$
2418 LOCATE 14,22
2419 PRINT m$
2461 LOCATE 17,21
2462 PRINT n$
2463 LOCATE 17,22
2464 PRINT n$
2465 MOVE 304,70
2466 TAG
2467 GRAPHICS PEN 3
2468 PRINT "Computer";
2469 TAGOFF
```

Edit line 2210 to read:

```
2210 m$=chr$(125)+chr$(123)
```

In the following lines change m$ to n$:

```
2320, 2330, 1750, 1760, 1560, 1570, 1600, 1610,
1830, 1840.
```

```
100 RANDOMIZE(TIME)
110 DIM s(8,4),c(16)
120 GOSUB 2590
130 MODE 1
140 GOSUB 2070
150 PRINT #2,"Do you want to go first (Y/N) ?
"
160 a$=UPPER$(INKEY$)
170 IF a$="Y" THEN 270
180 IF a$<>"N" THEN 160
190 fx=5
200 fy=2
210 tx=4
220 ty=1
230 GOTO 1540
240 '
250 '  players move
260 '
270 GOSUB 940
280 PRINT #2,"Your move (number) ? ";
290 a$=UPPER$(INKEY$)
300 IF a$="" THEN 290
310 PRINT#2,a$
320 ym=VAL(a$)
330 IF ym>0 AND ym<9 THEN 380
340 CLS#2
350 PRINT #2,CHR$(7)"Illegal move."
360 FOR i=1 TO 1000:NEXT
370 GOTO 270
380 IF s(ym,1)=1 THEN mfy=1:GOTO 410
390 IF s(ym,1)=0 AND s(ym,2)=1 THEN mfy=2:GOT
O 410
400 IF s(ym,2)=0 AND s(ym,3)=1 THEN mfy=3 ELS
E 340
410 PRINT#2,"Left or right (L/R) ? ";
420 a$=UPPER$(INKEY$)
430 IF a$="" THEN 420
440 PRINT#2,a$
450 IF a$="L" THEN d=-1:GOTO 470
460 IF a$<>"R" THEN 340 ELSE d=1
```

```
470 mt=d+ym
480 IF mt>8 OR mt<1 THEN 340
490 IF s(mt,3)=0 THEN mty=3:GOTO 520
500 IF s(mt,2)=0 THEN mty=2:GOTO 520
510 IF s(mt,1)=0 THEN mty=1 ELSE 340
520 mfx=ym
530 mtx=mt
540 WINDOW #1,mfx*3+2,mfx*3+3,mfy*3+8,mfy*3+9
550 PEN #1,0
560 PRINT#1,m$;
570 PRINT#1,m$;
580 WINDOW #1,mtx*3+2,mtx*3+3,mty*3+8,mty*3+9
590 PEN #1,2
600 PRINT#1,m$;
610 PRINT#1,m$;
620 s(mfx,mfy)=0
630 s(mtx,mty)=1
640 IF s(mtx,3)<>1 OR s(mtx,2)<>2 OR s(mtx,1)
<>1 THEN 1070
650 '
660 '  player captures man
670 '
680 PRINT#2,CHR$(7)"Player captures man"
690 FOR i=1 TO 1000:NEXT
700 WINDOW #1,mtx*3+2,mtx*3+3,14,15
710 PEN #1,0
720 PRINT#1,m$;
730 PRINT#1,m$;
740 WINDOW #1,mtx*3+2,mtx*3+3,11,12
750 PEN #1,0
760 PRINT#1,m$;
770 PRINT#1,m$;
780 WINDOW #1,mtx*3+2,mtx*3+3,14,15
790 PEN #1,2
800 PRINT#1,m$;
810 PRINT#1,m$;
820 s(mtx,1)=0
830 s(mtx,2)=1
840 ps=ps+1
850 LOCATE 38,14
860 PEN 2
870 PRINT ps
880 PEN 1
890 IF ps=3 THEN 1970
900 GOTO 1070
910 '
920 '  any possible moves
930 '
940 x=0
950 FOR i=1 TO 8
960 FOR j=1 TO 2
970 IF j=1 THEN d=j ELSE d=-1
980 IF (d=1 AND i=8) OR (d=-1 AND i=1) THEN 1
020
990 IF s(i,1)=1 AND s(i+d,1)=0 THEN x=1:i=8:j
=2:GOTO 1020
1000 IF s(i,1)=0 AND s(i,2)=1 AND s(i+d,1)=0
THEN x=1:i=8:j=2:GOTO 1020
1010 IF s(i,2)=0 AND s(i,3)=1 AND s(i+d,1)=0
THEN x=1:i=8:j=2
1020 NEXT:NEXT
1030 IF x=0 THEN 1990 ELSE RETURN
1040 '
1050 '  computers move
1060 '
1070 PRINT#2,"Thinking..."
1080 FOR i=1 TO 16
1090 c(i)=0
1100 fx=INT((i+1)/2)
1110 IF i/2=INT(i/2) THEN d=1 ELSE d=-1
1120 tx=fx+d
1130 IF tx>8 OR tx<1 THEN c(i)=-10:GOTO 1360
1140 IF s(fx,1)=2 THEN fy=1:GOTO 1170
1150 IF s(fx,1)=0 AND s(fx,2)=2 THEN fy=2:GOT
O 1170
1160 IF s(fx,2)=0 AND s(fx,3)=2 THEN fy=3 ELS
E c(i)=-10:GOTO 1360
1170 IF s(tx,3)=0 THEN ty=3:GOTO 1200
1180 IF s(tx,2)=0 THEN ty=2:GOTO 1200
1190 IF s(tx,1)=0 THEN ty=1 ELSE c(i)=-10:GOT
O 1360
1200 IF ty=1 AND s(tx,2)=1 AND s(tx,3)=2 THEN
 c(i)=c(i)+2
1210 IF s(fx,fy+1)=1 AND s(tx,3)=1 AND s(tx,2
)=0 THEN c(i)=c(i)-2
1220 IF fx=1 OR fx=8 THEN 1250
1230 IF s(fx,fy+1)=1 AND s(tx,3)=1 AND s(tx,2
)=0 THEN c(i)=c(i)+1
1240 IF fy=2 AND s(fx,2)=2 AND s(fx,3)=1 THEN
 c(i)=c(i)+1
1250 IF d=1 THEN 1300 ELSE IF fx=8 THEN 1280
1260 IF s(fx,fy+1)=1 AND s(fx+1,3)=1 AND s(fx
+1,2)=2 AND s(fx+1,1)=0 THEN c(i)=c(i)-2
1270 IF fx=2 THEN 1290
1280 IF s(tx,3)=1 AND s(tx,2)=0 AND (s(fx,fy+
1)=1 OR (s(tx-1,3)=1 AND s(tx-1,2)=0) OR (s(t
x-1,2)=1 AND s(tx-1,1)=0) OR s(tx-1,1)=1) THE
N c(i)=c(i)-2
1290 '
1300 IF d=-1 THEN 1350 ELSE IF fx=1 THEN 1330
1310 IF s(fx,fy+1)=1 AND s(fx-1,3)=1 AND s(fx
-1,2)=2 AND s(fx-1,1)=0 THEN c(i)=c(i)-2
1320 IF fx=7 THEN 1340
1330 IF s(tx,3)=1 AND s(tx,2)=0 AND (s(fx,fy+
1)=1 OR (s(tx+1,3)=1 AND s(tx+1,2)=0) OR (s(t
x+1,2)=1 AND s(tx+1,1)=0) OR s(tx+1,1)=1) THE
N c(i)=c(i)-2
1340 '
1350 IF fy=2 AND s(fx,3)=1 AND s(tx,ty+1)=1 T
HEN c(i)=c(i)+1
1360 NEXT
1370 x=-10
1380 y=0
1390 FOR i=1 TO 16
1400 IF c(i)=-10 THEN 1430
1410 IF c(i)>x THEN x=c(i):y=i:GOTO 1430
1420 IF c(i)=x THEN rn=INT(RND(TIME)*2):IF rn
=0 THEN x=c(i):y=i
1430 NEXT
1440 IF y=0 THEN 1990
1450 fx=INT((y+1)/2)
1460 IF y/2=INT(y/2) THEN d=1 ELSE d=-1
1470 tx=fx+d
1480 FOR i=1 TO 3
1490 IF s(fx,i)=2 THEN fy=i:i=3
1500 NEXT
1510 FOR i=1 TO 3
1520 IF s(tx,i)=0 THEN ty=i
1530 NEXT
1540 WINDOW #1,fx*3+2,fx*3+3,fy*3+8,fy*3+9
1550 PEN #1,0
1560 PRINT#1,m$;
1570 PRINT#1,m$;
1580 WINDOW #1,tx*3+2,tx*3+3,ty*3+8,ty*3+9
1590 PEN #1,3
1600 PRINT#1,m$;
1610 PRINT#1,m$;
1620 s(fx,fy)=0
1630 s(tx,ty)=2
1640 PRINT#2,"My move :"fx;
1650 IF d=1 THEN PRINT#2,"R" ELSE PRINT#2,"L"
1660 FOR i=1 TO 1000:NEXT
```

```
1670 IF s(tx,3)<>2 OR s(tx,2)<>1 OR s(tx,1)<>
2 THEN 270
1680 '
1690 '  computer captures man
1700 '
1710 PRINT#2,CHR$(7)"Computer captures man"
1720 FOR i=1 TO 1000:NEXT
1730 WINDOW #1,tx*3+2,tx*3+3,14,15
1740 PEN #1,0
1750 PRINT#1,m$;
1760 PRINT#1,m$;
1770 WINDOW #1,tx*3+2,tx*3+3,11,12
1780 PEN #1,0
1790 PRINT#1,m$;
1800 PRINT#1,m$;
1810 WINDOW #1,tx*3+2,tx*3+3,14,15
1820 PEN #1,3
1830 PRINT#1,m$;
1840 PRINT#1,m$;
1850 s(tx,1)=0
1860 s(tx,2)=2
1870 cs=cs+1
1880 LOCATE 38,17
1890 PEN 3
1900 PRINT cs
1910 PEN 1
1920 IF cs=3 THEN 1980
1930 GOTO 270
1940 '
1950 '  game over
1960 '
1970 PRINT#2,"You win.  Well done.":GOTO 2000
1980 PRINT#2,"I win.  Bad luck.":GOTO 2000
1990 PRINT#2,"No possible moves.  Game drawn.
"
2000 PRINT#2,"Do you want to play again ?"
2010 a$=UPPER$(INKEY$)
2020 IF a$="N" THEN MODE 1:END
2030 IF a$="Y" THEN RUN ELSE 2010
2040 '
2050 '  draw board
2060 '
2070 WINDOW #2,1,40,24,25
2080 PLOT 56,248
2090 DRAW 440,248
2100 DRAW 440,104
2110 DRAW 56,104
2120 DRAW 56,248
2130 PLOT 56,200
2140 DRAW 440,200
2150 PLOT 56,152
2160 DRAW 440,152
2170 FOR i=1 TO 7
2180 PLOT 56+i*48,248
2190 DRAW 56+i*48,104
2200 NEXT
2210 m$=CHR$(143)+CHR$(143)
2220 FOR i=1 TO 6
2230 PEN #1,2
2240 READ x,y
2250 WINDOW #1,x,x+1,y,y+1
2260 PRINT #1,m$;
2270 PRINT #1,m$;
2280 s((x-2)/3,(y-8)/3)=1
2290 PEN #1,3
2300 READ x,y
2310 WINDOW #1,x,x+1,y,y+1
2320 PRINT #1,m$;
2330 PRINT #1,m$;
2340 s((x-2)/3,(y-8)/3)=2
2350 NEXT
2360 PEN 1
2370 LOCATE 30,11
2380 PRINT"score :"
2390 PEN 2
2400 LOCATE 30,14
2410 PRINT"player   0"
2420 LOCATE 10,2
2430 PRINT"C A P T U R E"
2440 PEN 3
2450 LOCATE 30,17
2460 PRINT"computer 0"
2470 LOCATE 9,4
2480 PRINT"by Don O'Connor"
2490 PEN 1:GRAPHICS PEN 1
2500 TAG
2510 MOVE 72,270
2520 PRINT"1  2  3  4  5  6  7  8";
2530 TAGOFF
2540 RETURN
2550 DATA 5,14,5,17,8,14,8,17,14,14,17,14,14,
17,17,17,23,17,23,14,26,17,26,14
2560 '
2570 '  instructions
2580 '
2590 INK 0,1
2600 INK 1,24
2610 INK 2,2
2620 INK 3,6
2630 MODE 1
2640 PEN 1:GRAPHICS PEN 1
2650 BORDER 1
2660 LOCATE 1,13
2670 PRINT"Do you want any instructions (Y/N)
 ? ";
2680 a$=UPPER$(INKEY$)
2690 IF a$="N" THEN 2940
2700 IF a$<>"Y" THEN 2680
2710 CLS
2720 PEN 3
2730 LOCATE 14,1
2740 PRINT"C A P T U R E"
2750 LOCATE 14,2
2760 PRINT"=============="
2770 PEN 1
2780 PRINT
2790 PRINT
2800 PRINT"  You have blue men, the computer
has   red men.  The idea of the game is to
 capture the computer's men.  You do thisby h
aving one of your men on the bottom row, one
on the top row, and the comp-  uter's man bet
ween the two."
2810 PRINT
2820 PRINT"  You may move any of your men tha
t is  on the top row, or a man on either of
 the other rows, as long as there are no men
on top of it."
2830 PRINT
2840 PRINT"  The first to capture 3 men is th
e     winner."
2850 PRINT
2860 LOCATE 16,21
2870 PEN 3
2880 PRINT"GOOD LUCK"
2890 LOCATE 9,25
2900 PEN 1
2910 PRINT"Press ENTER to continue."
2920 a$=UPPER$(INKEY$)
2930 IF a$="" THEN 2920
2940 INK 0,0
2950 RETURN
```

BBBBBBOOKSSSSSs

Title		Subscriber Price	Normal Price
Advanced Amstrad CPC6128 Computing (Sinclair)	Delivery 12/86	$ 25.15	$ 27.95
Advanced User Guide		$ 19.75	$ 21.95
Adventure Games for the Amstrad		$ 25.15	$ 27.95
Amstrad Compendium		$ 20.65	$ 22.95
Amstrad Computing	4 left then O/P	$ 21.55	$ 23.95
Amstrad Games Book (Pitman/Ramshaw)		$ 14.35	$ 15.95
Amstrad Games Book (Melbourne House)		$ 20.65	$ 22.95
Amstrad Pentacle Adventure Creator	3 left then O/P	$ 8.05	$ 8.95
Amstrad Users Omnibus - 464/664/6128		$ 17.95	$ 19.95
Basic BASIC		$ 11.45	$ 12.75
Basic Programming on the Amstrad		$ 22.45	$ 24.95
Brainteasers for the Amstrad		$ 19.75	$ 21.95
Childs' Guide to the Amstrad Micro	New stocks in	$ 9.85	$ 10.95
Disc System, The Amstrad CPC 464		$ 25.15	$ 27.95
DR CP/M Plus Handbook for CPC6128 & PCW8256	Delivery 12/86	$ 84.00	$ 89.00
Dynamic Games for the Amstrad		$ 17.95	$ 19.95
Exploring Adventures on the Amstrad		$ 21.55	$ 23.95
Filing Sytems And Databases for the Amstrad		$ 26.95	$ 29.95
Games and Graphics Programming - 464/664/6128		$ 26.95	$ 29.95
Getting Started with CP/M	2 left then O/P	$ 26.95	$ 29.95
Graphics Programming Techniques		$ 22.45	$ 24.95
High Energy Programs for the Amstrad (Post Free)		$ 9.95	$ 9.95
Ins and Outs of the Amstrad		$ 20.65	$ 22.95
Inside CP/M Plus		$ 26.95	$ 29.95
Introduction to CP/M Assembly Language		$ 32.35	$ 35.95
Machine Code for Beginners on the Amstrad		$ 17.95	$ 19.95
Machine Language for the Absolute Beginner		$ 20.65	$ 22.95
Making Music on the 464/664		$ 19.75	$ 21.95
Master Machine Code on your 464/664		$ 19.75	$ 21.95
Mastering the Amstrad PCW 8256	NEW	$ 29.50	$ 32.25
On the road to Artificial Intelligence	Out of Print	$ 17.95	$ 19.95
Pitman's First Book of Amstrad Games		$ 11.65	$ 12.95
Powerful Programming for Amstrads 464/664/6128	NEW	$ 22.55	$ 25.05
Practical "C"	NEW	$ 25.80	$ 28.65
Practical Programs for the 464		$ 21.55	$ 23.95
Programming the Amstrad CPC 464		$ 17.95	$ 19.95
Ready made Machine Language routines - 464/664		$ 20.65	$ 22.95
Structured Programming on the 464/664/6128		$ 26.95	$ 29.95
Whole Memory Guide		$ 26.95	$ 29.95
Working Amstrad		$ 17.95	$ 19.95
Writing Adventure Games on the 464/664		$ 20.65	$ 22.95
Your first Amstrad Program		$ 20.65	$ 22.95
40 Educational Games for the Amstrad		$ 19.75	$ 21.95
60 Programs for your Amstrad		$ 19.75	$ 21.95

How to Order

Send a list of the titles and quantities you require along with a cheque for the total **plus** $5.00 postage and packing (regardless of the quantity you order) to:

THE AMSTRAD USER

Suite 1 , 245 Springvale Road, Glen Waverley, Victoria, 3150

Bankcard, Mastercard or Visa accepted on (03) 233 9661

Back Copies

The Amstrad User (Australian)

Issue 1	February 1985	$4.00
Issue 2	March 1985	Out of Print
Issue 3	April 1985	$4.00
Issue 4	May 1985	$4.00
Issue 5	June 1985	Out of Print
Issue 6	July 1985	$4.00
Issue 7	August 1985	$4.00
Issue 8	September 1985	Out of Print
Issue 9	October 1985	$4.00
Issue 10	November 1985	$4.50
Issue 11	December 1985	$4.50
Issue 12	January 1986	$4.50
Issue 13	February 1986	$4.50
Issue 14	March 1986	$4.50
Issue 15	April 1986	$4.50
Issue 16	May 1986	$4.50
Issue 17	June 1986	$4.50
Issue 18	July 1986	$4.50
Issue 19	August 1986	$4.50
Issue 20	September 1986	$4.50
Issue 21	October 1986	$4.50

Tapes for any of the above $5.00

Twelve issue subscription:
Magazine only $37.50
Twelve issue subscription:
Magazine plus tape $80.00

Year Discs containing all software previously published on The Amstrad User tapes
Year Disc No 1: Issues 1 - 12 $50.00
Year Disc No 2: Issues 13 - 16 $22.50
Year Disc No 3: Issues 17 - 20 $25.00

(Tapes or Discs not suitable for the PCW 8256/8512)

Disc Drives

DDI-1 Disc Drive as the first or second drive for the CPC464 - normally $449 - but for subscribers to The Amstrad User an amazing $379 including courier delivery. (Non-subscribers may order at the special price of $409).

If PO Box number is quoted in your address then delivery will be made by the Post Office. Please also include a daytime contact telephone number in case of delivery problems. 'Phone orders accepted with Bankcard, Mastercard or Visa.

The Amstrad Computer User (English)

Issue 3	January/February 1985	$5.00
Issue 4	March 1985	$5.00
Issue 5	April 1985	$5.00
Issue 6	May 1985	$5.00
Issue 7	June 1985	$5.00
Issue 8	July 1985	Out of Stock
Issue 9	August 1985	Out of Stock
Issue 10	September 1985	Out of Stock
Issue 11	October 1985	Out of Stock
Issue 12	November 1985	$5.50
Issue 13	December 1985	$5.50
Issue 14	January 1986	$5.50
Issue 15	February 1986	$5.50
Issue 16	March 1986	$5.50
Issue 17	April 1986	$5.50
Issue 18	May 1986	$5.50
Issue 19	June 1986	$5.50
Issue 20	July 1986	$5.50
Issue 21	August 1986	$6.50
Issue 22	September 1986	$6.00

Subscriptions to this magazine have now closed. Existing subscribers will be supplied until their subscription expires.

Binders

In attractive white and silver to protect your collection of The Amstrad User. Can also take the English Amstrad Computer User at a squeeze. Stocks are now getting low, so order yours now. Still the same price at $12.95 including postage.

Xmas Special

"Lord of the Rings" from Melbourne House. Available on 2 cassettes (with book) or disc (without book) for all **CPC or PCW** machines. Normally $44.95, but to our magazine readers just **$36.95** including postage. Please state machine when ordering. Pre-Christmas delivery cannot be guaranteed on orders received after 1st December 1986.
Don't forget our other special elsewhere in this issue.

Mail your orders to: The Amstrad User,
Suite 1, 245 Springvale Road
Glen Waverley, Victoria 3150
or telephone (03) 233 9661 with Credit Card

The 40cent Programs

by Ivor Joystick

Once upon a time, a sensible man bought an Amstrad computer.

Thirsting for information, he took out a subscription to The Amstrad User, the largest selling magazine for the Amstrad range in Australia.

He didn't need his machine to work out that, for less than $3* per month for 32 pages (and quite often more) of solid Amstrad information, he was getting programs for less than 40 cents each!

This made him live very happily ever after.

. . . but that's not the end of the story

Every month The Amstrad User is packed with a range of articles, programs, hardware and software reviews, utilities, User Group Information, Letters, Tutorials, Hints and Tips - all devoted entirely to the Amstrad computers.

And to save you the trouble of keying-in and correcting your typing errors, a cassette containing the programs appearing in the magazine each month is also available.

Make your Amstrad a success story by subscribing to The Amstrad User now.

* Based on yearly subscription of $35.

Please send me THE AMSTRAD USER for 12 months

Magazine only: $37.50 ☐ Magazine and cassette: $80 ☐ (PNG and NZ add $21 airmail)

Payment by: Cheque ☐ Bankcard or Mastercard ☐

Card number__ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ Expiry date.....

Name ..... Phone.....

Address .....

..... Postcode .....

Signed ..... **Please start with Issue No.**.....

Return to THE AMSTRAD USER, Suite 1, 245 Springvale Road,
Glen Waverley Victoria, 3150 Telephone (03) 233 9661

(OVERSEAS PRICES ON APPLICATION TO ABOVE ADDRESS)

Everything you want from an office typewriter

MONITOR INCLUDED
The Amstrad PCW 8256 comes with high definition (720 x 256 pixels) screen that provides 40% more display area than the IBM PC.

POWERFUL 256K MEMORY
The Amstrad PCW 8256 has a powerful 256K memory that works on high speed RAM discs. This allows you to store information while creating your own documents.

***CP/M PLUS OPERATING SYSTEM**
This system gives you access to over 8,000 commercial software programs, and with BASIC, or Logo and GSX Graphics System Extension, you can explore the power of microcomputing and even write your own programs. (*CP/M Plus is a registered trademark of Digital Research.)

INBUILT DISC DRIVE
Using your high speed RAM disc and the inbuilt disc drive you can save documents and read them or use them again any time you like.

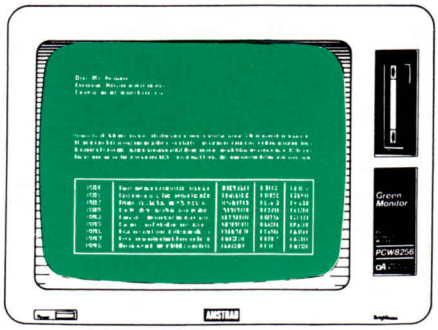
82 KEY KEYBOARD
By simply using the "light touch" keyboard with the built-in wordprocessing software, you can utilise a whole range of advanced wordprocessing functions from simultaneous printing and editing to simple cut and paste editing.

HIGH SPEED PRINTER INCLUDED
Lets you choose between letter quality or draft quality text. Plus built-in features such as type face, pitch, italics, boldface, underline, super and sub script.

With a computer, word processor, monitor and printer included

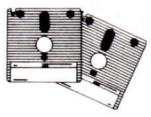
When you consider the returns you get on $1,329, the Amstrad PCW 8256 is an inspired choice for your office.

In actual fact, for around the same price as a conventional office typewriter you can own a complete wordprocessing and computing system.



The Amstrad PCW 8256 is available from leading department stores, retailers and computer outlets throughout Australia.

Rest assured, you're purchasing a high quality word-processer and computer at a highly competitive price.



No other system adds up to

AMSTRAD

TPB/941B