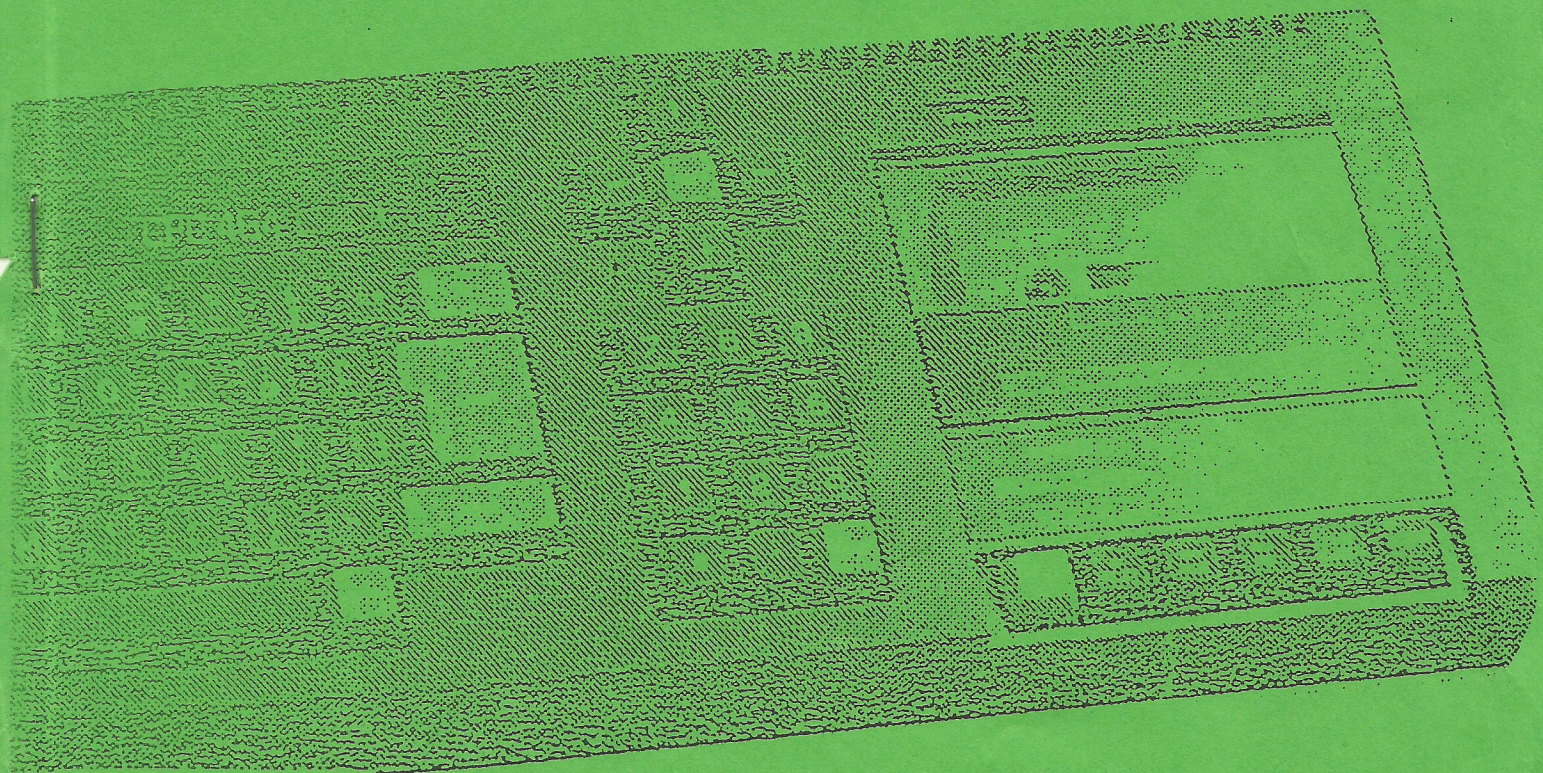


CPC

USER

THE BI-MONTHLY MAGAZINE
OF THE
UNITED AMSTRAD USER GROUP



CPC USER

EXECUTIVE EDITOR ... Don Snood
85 Woolston Road
Butlocks Heath
SOUTHAMPTON
Hants. SO3 5FN

EDITORIAL ASSISTANTS .. John Stanford and Alan Stead

EDITORS

ADVENTURE SOFTWARE
Terry Roberts
Woodlands
Church Road
HARBLETSHAM
Kent NE17 1AP

GAMES SOFTWARE
Clive Bentham
51 Longdales Road
LINDOLN
Lincs. LN2 2JR
(tele: 0522-22190)

BUSINESS SOFTWARE
Brian Bristow
60 King Edwards Avenue
HASTINGS
E.Sussex TN34 2ND
(tele: 0424-713669)

TECHNICAL QUERIES
Stephen Brokenshire
23 Hillside Crescent
BARNETBY-LE-WOLD
S.Numberside DN38 5HQ
(tele: 0652-680636)

PROGRAMMING LANGUAGES

Andrew Cope
9 Church Drive
Rhus-on-Sea
COLVYN BAY
Clwyd LL28 4LL

Stephen Gennard
13 Poplar Way
Moss Pit
STAFFORD
Staffs. ST17 9LJ

COMMUNICATIONS

(to be appointed)

CPC USER PRINTING AND DISTRIBUTION

Tony Baker
26 Uplands Crescent
FAREHAM
Hants. PO16 7JY
(tele: 0329-234291)

Telephone numbers should be called only between
6.30 - 8.30pm weekdays or 4.30 - 8.30pm at weekends

CPC USER is published bi-monthly by the United Amstrad User Group,
1 Magnolia Close, Fareham, Hampshire PO14 1PX

CPC USER welcomes the submission of listings and articles for publication.
Material should be on disc, typed or computer-printed, preferably double-spaced.
Contributions accepted for publication by CPC USER will be on
an all-rights basis, unless otherwise agreed.

© CPC USER/UNITED AMSTRAD USER GROUP, 1988.

No material may be reproduced in whole or in part without the prior written
permission of the editor. Whilst every care is taken, neither the United
Amstrad User Group nor its officers can be held legally responsible for any
errors or omissions in articles, listings or advertisements.
Material published does not necessarily represent the views
of the United Amstrad User Group or its officers.

UNITED AMSTRAD USER GROUP

M E N U

Editorial.. .. .	1
Contact	2
News	3
Games Software Update.. .. .	4
Bankraiding for Humans	6
Z80-Series Microprocessor.. .. .	7
Introduction to Pascal	8
Snippets of Wisdom	10
Adventure Software Update.. .. .	12
Adding Info to a Basic Program	13
More on Simple ROMbox Surgery..	14
MP-1 to MP-2 Conversion	15
Mailbox	16
PD Software Library Update	22
UAUG PD Software Review	26
CPM PLUS on ROMs	28
Textproc Word Processor	29
Silver Reed Typewriter Printer	32
Index to Published Material	33
Members' Advertisements	36
Trade Advertisements	38

STOP PRESS

Due to the need to limit the size of each edition of CPC USER, some material has been held over for the next edition.

Issue 13 will include MORE ON PASCAL by Steve Gennard, AN INTRODUCTION TO C LANGUAGE by Andrew Cope, EPROM PROGRAMMING by Rodney Tipping, the SCROLLER a type-in by John Blessing and reviews of NIRVANA, STAR LC-10, QUALITAS and WORD PERFECT - plus, of course, all the regular features.

E D I T O R I A L

The UAUG was founded two years ago and this is the twelfth edition of the Group's magazine. It would seem appropriate to mark this anniversary in some way and to this end an Index has been prepared to help members to find information published in Issues 1 to 12. The Index has been incorporated in this edition of CPC USER.

This edition also marks my departure. The time has come for me to stand down and make way for new blood and new ideas.

Fourteen months have passed by and seven editions of CPC USER, since I was asked to take on the task of Executive Editor. In those fourteen months we've seen many changes and have overcome more than a few difficulties. But out of it all, CPC USER has emerged as the magazine for all CPC users and, with it, membership of the UAUG has steadily increased.

I extend a warm 'Thank You' to my editorial colleagues and with Seasonal Good Wishes I bid you all farewell -

Don Snoad

C O N T A C T

C O N T A C T

EDITED BY: Gary Carter, 1 Magnolia Close, Fareham, Hants, PO14 1PX

PEN PAL REQUESTS

+++ none received +++

REQUESTS FOR HELP

BRIAN WATSON 39 High Street, Sutton, Ely, Cambs, CB6 2RA.
I am tracing my family history and would be pleased to hear from anyone using a CPC + peripherals to record/sort information.

SUE ILSLEY 26 Linden Ave, Prestbury, Cheltenham, Glos, GL52 3DP.
I have an Amstrad LP-1 light pen and a DMP2160 printer. There is a printer facility with the light pen software, however it does not seem to like the DMP2160. Does anyone know of a simple way to make them compatible, or a printer dump which would allow me to print my light pen drawings.

OFFERS OF HELP

+++ none received +++

INFORMATION REGARDING THE CONTACT SECTION

1. Any member may place a small notice in this section either Requesting Pen Pals, Requesting Help or Offering Help.
2. Entries under the first two headings are removed after 1 issue. Entries under the 'Offers of Help' are removed on the request of the author.
3. All notices must be 5 lines or less in length. The Authors Name, Address and/or Telephone number must be included in the notice.
4. All notices are published at the Contact Editors discretion.

THE PRICE OF FREE SOFTWARE I

The latest catalogue of public domain software offered by Seltec of Staines includes SCRIVENER which, even though Seltec claim to have "carefully tested and documented", is erroneously described by Seltec as "a full featured word processor with comprehensive text editing features".

Seltec's price for SCRIVENER on a 5 1/4-inch disk is £8 plus £2 p & p plus VAT; a total of £11.50 ! If you order it on a 3 or 3 1/2-inch disk, the price is £13.80 !!

As readers will have learned from CPC USER, Issue 10, SCRIVENER is nothing more than a data merge program which can be used only in conjunction with existing text files produced by an independent word processor. It is not a stand-alone program. Why is it that so many suppliers misrepresent the purpose and capability of SCRIVENER ?

TRANSFERRING TAPES TO DISKS ...

A new tape-to-disk transfer program called BANKRAID III is on offer to UAUG members. It has been developed for use on any of the CPC computers and is available only from the programmer; Neil MacDougall, 130 Robin Way, Chipping Sodbury, Bristol BS17.6JS. If you send your own disk, the price is £6 but you can obtain it without sending a disk for £9. A review of BANKRAID III is published in this edition of CPC USER.

ALTERNATIVE CP/M OPERATING SYSTEM ...

An alternative CP/M operating system is available exclusively to UAUG members. The system, called CENTROX, was developed by UAUG member Andrew Cope, who has very kindly donated his work to the UAUG PD Library and can be obtained free of charge from John Blessing. A review of CENTROX was published in CPC USER, Issue 11.

Graduate Software's CPM PLUS on ROMs is reviewed by David Cutts in this Issue.

WITHDRAWAL OF PRODUCT SUPPORT ...

We have learned that Caxton Software Ltd have stopped publishing software for Amstrad computers (that's ALL Amstrad computers, not just the CPCs) and are unable to provide product support other than to advise users of alternative sources of help. For information, phone 01-251-9494.

We called this number twice and left messages requesting help on a Caxton product; so far there's been no response whatever. So much for Caxton's marketing promise of unlimited product support.

SPECTRUM TO AMSTRAD CONVERSIONS ...

A few months ago we were asked whether we knew of a program that will enable Spectrum-coded programs to be run on the Amstrad CPC computers. Our enquiries have highlighted an article on this very subject which was published in the July 1986 edition of Amstrad Computer User; the article includes the necessary listings and there is some additional information on page 11 of the September '86 edition.

MEMBERSHIP STATISTICS ...

Membership of the UAUG stands at about 220; it would have been 247 but 27 members have failed to renew their subscriptions.

UAUG RUNNING COSTS ...

At the last meeting of the UAUG Management Committee, it was decided that in order to remain solvent the annual subscription must be increased. At that time it was agreed that the new rate would be £6 per year per member, but it seems there is disagreement in the camp and the matter is up for review at the next meeting. Unfortunately, the next meeting is not until November 16, which will be too late to publish details in this edition. However, we will try to slip-in a 'loose-leaf' note, confirming the new rate, before this edition is posted.

The cost of back issues of CPC USER is also increased; with effect from January 1st, back issues will cost 75p to members or £1.25 to non-members. Both prices include postage.

ALL CHANGE ...

There's been a re-shuffle of Officers on the UAUG Executive Committee. Details are shown on the inside rear cover of this edition.

MATERIAL FOR PUBLICATION ...

Members are cordially asked to note that correspondence and advertisements intended for publication in CPC USER should be sent to the new Joint Executive Editors at:
4 High Walk, Fareham, Hants. PO15.6BS
and not to Don Snood who retires from the post on December 1st.

MEMBERS OF THE UAUG COMMITTEES WISH TO EXTEND TO ALL MEMBERS THEIR GOOD WISHES FOR A VERY HAPPY CHRISTMAS AND A SUCCESSFUL NEW YEAR

GAMES SOFTWARE

GAMES SOFTWARE UPDATE

by
Clive Bentham

Well this month has been very disappointing indeed with regard to contributions from members for the games section. Not one single person wrote in, despite the pleas for help from other people in the last issue. So to those of you who asked for help I can only apologise for those that couldn't be bothered and the lack of answers.

I'm convinced more members of the UAUG play games than their silence suggests so can any one come up with a reason for the reluctance to take part and join in?

NEWS FROM DOMARK

**** **

After two years and massive sales figures worldwide, Domark has announced the imminent UK and European launch of its brand new entertainment package based on the world's most famous board game Trivial Pursuit.

A NEW BEGINNING is a wholly new game, centered around an entirely new game playing concept for Horn Abbotts' classic family board game. Though still incorporating the addictive question and answer format, Domark has devoted a great deal of time and resource to ensure that its follow up to Trivial Pursuit did not merely present the discerning customer with simply another batch of questions.

Instead, an enthralling game called A NEW BEGINNING has been assembled, which will take you through many galaxies in a bid to reach the planet of Genus II.

Mark Strachan, Domark's Joint Managing Director, states that to simply recreate a question and answer game would have been too easy. "We feel that our interpretation of A NEW BEGINNING will give the customer not only the undoubted appeal of the Trivial Pursuit concept, but also a wholly new and excellent game. Couple these two together and you have a superb combination, and a game that will again appeal to the whole family."

In A New Beginning, you and your family have to travel through space to a far off star system. Centuries of pollution have left the world a victim of the "greenhouse effect", so you set off in your lazer driven rockets to the far off constellation which contains the planet Genus II. However it has been agreed that only those with a superior knowledge of Genus Trivia will be allowed onto Genus II.

Each player first has to prove his worth for the trip in the sophisticated lazer rockets. Admission is granted by answering a trivial question correctly. Each player then assumes the role of a character, or live token, within the game.

Then Blast Off! Venturing through space you will encounter many stars and planets. You have to land at six and collect six luxury household items before making your way finally to Genus II and the final test of your Genus Trivia knowledge. Though each

planet with an item you need is in a different galaxy, each galaxy has some 50 planets. There is no way of telling which planet is which, though there are sometimes clues in planetary names to help you discern between the six different categories of Entertainment, History, Science, Geography, Art & Literature and Sports & Leisure.

A New Beginning is programmed by Oxford Digital, the company responsible for the original Trivial Pursuit. The game is said to include a whole host of original and sensitive programming ideas, and it all comes to a head for a superb final screen for the eventual winner of New Beginning.

The game should be available by the time you read this and will be released on all major computer formats. At the moment though, no price tag is announced.

Following major successes with Star Wars and more recently The Empire Strikes Back, Domark confirm the Autumn launch of Return of the Jedi.

Due for release in October, Return of the Jedi completes the trilogy of Star Wars films brought to the home computer by Domark.

The game picks up the action of the movie where the rebel forces begin their dangerous attack against the Imperial Deathstar.

In the first game of battle you control Princess Leia on her speederbike through the forest of Endor. But, be warned, as she is pursued tirelessly by the Imperial Stormtroopers also on speederbikes.

As you make your way to the Ewoks village, they help your progress by springing traps - but make sure you do not get destroyed by mistake.

Once you have left Leia safely at the Ewok village, you move to another part of the forest to control Chewbacca's Scout Walker as he manouvers it to a bunker. There Han Solo is waiting to deactivate the shields protecting the Death Star. Control Chewbacca as he avoids logs, and blasts his way through wave after wave of logs and rocks.

During waves two and three, the split wave effect occurs. You control not only Chewbacca in the Scout Walker, but also Lando Calrissian as he flies the Millennium Falcon. At crucial points in the wave, the action will switch away from the forest of Endor to Lando in the skies around the Death Star.

As Chewbacca fights his way to the bunker, so Lando nears the Death Star, fighting off a manic assault from the Imperial TIE FIGHTERS, Imperial Star Cruisers and shuttles. Lando blasts as many as he can as he nears the Death Star. Once Chewbacca reaches the bunker, Solo blows it, thus deactivating the shield around the Death Star.

GAMES SOFTWARE

The Millenium Falcon enters the Death Star, Travelling down a dangerous tube towards the centre reactor. He is still pursued by fighters, and has to be constantly on the look out for energy gates, falling pipes and fire from turrets in the tube.

Blast the reactor, and then turnaround in a mad dash to clear the Death Star as it blows. Return of the Jedi will be launched on most computer formats but as yet no price tag has been set.

ELITE GO BUDGET *****

In recent times there has been a marked increase in the budget charts of re-issued full price games, and Elite have decided to use the depth and strength of their back catalogue to break into this sector of the market.

Elite see this move as opening up further marketing opportunities and as a natural extension to its existing business. However, Managing Director, Brian Wilcox, points out that Elite's core business will still be the development of high quality premium priced games software.

"I think it's very important that our customers and consumers understand right from the outset that they can continue to expect quality software from Elite, and that it will not be available as budget software for a period of some three years. This will still allow the new range to release a multi-format game every month, and I believe our customers will appreciate that we have kept faith with them in refusing to devalue our product too quickly".

The budget range will be marked under the brand name of "ENCORE" the theme being to call upon the hits from the illustrious ELITE back-catalogue to give a repeat performance.

ENCORE will be releasing their games at £1.99 and the range will feature a host of well known titles such as Airwolf and Commando as well new titles such as Battleships. Games on the Encore label should be available in all the major multiple stores as well as independent distributors, so you should have no trouble obtaining the game of your choice.

IKARI WARRIORS POKE *****

This unusual poke was sent in by Jamie Verity from Wisbech in Cambs and relates to the Elite version of Ikari Warriors. It gives you up to 60 lives and lets you put up to 6 names on the high score chart whatever your score may be.

```

1 ' IKARI WARRIORS POKE by J. VERITY
2 SYMBOL AFTER 256:MODE 0:BORDER 0
3 FOR t=0 TO 15:READ j:INK t,j:NEXT
4 DATA 13,6,3,15,16,0,1,2,14,26,24,9,12,21,
  22,19
5 LOAD "lscreen.bin":OPENOUT "d":MEMORY
  4799:CLOSEOUT:LOAD "lwarrriors"
6 FOR a=30749 TO 30755:READ a$:POKE a,VAL
  (a$):NEXT a: ' 1st NAME
7 FOR b=30764 TO 30770:READ b$:POKE b,VAL
  (b$):NEXT b: ' 2nd NAME
8 FOR c=30779 TO 30785:READ c$:POKE c,VAL
  (c$):NEXT c: ' 3rd NAME
9 FOR d=30794 TO 30800:READ d$:POKE d,VAL
  (d$):NEXT d: ' 4th NAME
  
```

```

10 FOR e=30809 TO 30815:READ e$:POKE e,VAL
  (e$):NEXT e: ' 5th NAME
11 FOR f=30824 TO 30830:READ f$:POKE f,VAL
  (f$):NEXT f: ' 6th NAME
12 DATA 74,65,77,73,69,255,255: ' - Spells
  J A M I E
13 DATA x,x,x,x,x,x,x,x
14 DATA x,x,x,x,x,x,x,x
15 DATA x,x,x,x,x,x,x,x
16 DATA x,x,x,x,x,x,x,x
17 DATA x,x,x,x,x,x,x,x
18 POKE 28331,n
19 CALL -48
  
```

A few words of explanation are needed here. The Data statements shown in the above program, lines 12 to 17 are examples only, but the real statements that you use must contain the ASCII code number for each letter of the name that you want to appear in the high score chart.

There can be up to 7 letters in the name and they must be capital letters. There can be a max of six names. In line 12 the Data statement shown spells the name JAMIE, and as you can see in the examples, if the name does not make up 7 letters then the remainder must be made up to 7 by using the figures 255.

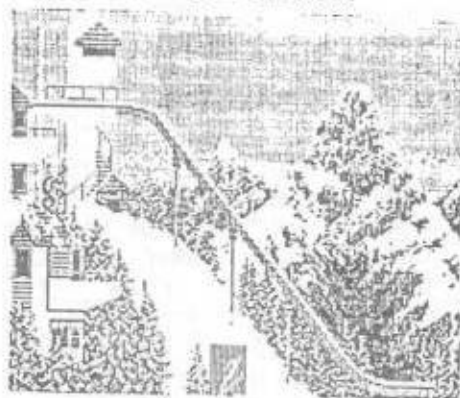
If you don't want six names on the chart then delete the unwanted lines and their associated data statements from the program.

In line 18, n=The number of lives required up to a max of 60.

GAMES COMPETITION *****

Two pieces of software are on offer as the prize in this competition - EVERY SECOND COUNTS, the latest family TV quiz game from Domark, (see Issue 10 of CPC USER for a full review) and RED SCORPION, an exciting and absorbing space combat simulation from Quicksilver.

Just to get every one in the right mood for some Winter weather the picture below is a screen print from a well known Amstrad game and the idea is that to win the prizes you must name the game and software house from which it came, and state three activities in the game including the one shown.



Write your answers on a postcard or letter (he says doubtfully) it doesn't matter, and send them to me, Games Editor, at the address on the inside front cover.

Closing date for entries is Friday 16th December 1988 and the winner will receive the prize hopefully in time for Xmas. (A nice gift idea maybe?).

BANKRAIDING FOR HUMANS !

by Neil MacDougall

Regular readers of Bonzo News (Nemesis) will know that most months contain a section devoted to my program "Bankraid". Bankraid is associated with tape to disc transfer, but has several other uses which have not been exploited.

The latest version is Bankraid III. It resides in the extra 64k found on 6128s or expanded 464s and 664s. When the time is right, two simple instructions will bring BANKRAID to life. All memory is stored intact (only the first normal 64k) and the registers, screen mode and colours are stored. The user can then either save what is in memory to disc or alter almost all aspects of the screen (size, mode, colours etc) or examine memory.

The procedure for tape-to-disc transfer is to find a point in the tape loader which is before the game is executed but after the game has loaded. This point is "patched" so that a jump into BANKRAID occurs. It's a bit like a hardware device, but the switch has to be put in manually ! So that beginners aren't put off, several automatic routines are provided which find the point and do the rest.

The above summarises the transfer process, but what else ? Hacking is also supported, and it is often the case that programs do weird things to your Amstrad which make it impossible to look at the memory contents. By using BANKRAID, the weird effects can be overcome and memory can be looked at, at your leisure or saved out and then examined using a disassembler. You'll need a knowledge of machine code for this activity !

Other activities include debugging code, code development etc.

BANKRAID - A bit of tech info

Each article (if there are any more) will include a bit on the operation of BANKRAID.

When you are using BANKRAID and use the QUIT option, the computer is reset. Even so, the extra 64k still contains some of the code from the program that was in memory when BANKRAID was called. It is laid out as follows :

Bank 0 = 0 to &3fff
 Bank 2 = &8000 to &bfff
 Bank 3 = &c000 to &ffff

Each bank is selected by the basic 'OUT &7F00,Bank+&c4'. This puts the memory shown above into the 16k slot &4000 to &7fff.

Below is a small list of programs that can transfer via BANKRAID. Most are "odd" games which use loaders which are normally difficult to deal with.

Key: M=Manual (P=Patch address
 L=Locate address)
 A=Auto S=Speed K=Key T=Tronic
 C=Cassys *=See Bonzo news

2112 AD	A MAG MAX S
AVENGER	A NEXOR A
DUMMY RUN	A RAMPAGE *
EAGLES NEST	* STAINLESS STEEL A
EQUINOX	A STORMBRINGER T
FOOTBALL OF YEAR	MP=#204D
	L=#300 STRIKE!! T
FUTURE KNIGHT	A THING ON A SPRING A
GAMEOVER	S WEST BANK A
JACK NIPPER	A WILLOW PATTERN K
KRACKOUT	MP=#18E L=#30

Happy Bankraiding - Let me know your problems/tips !

THE Z80 SERIES MICROPROCESSOR

by
Steve Gennard

This discussion of the Z80 microprocessor may be a little too technical for some users, but do not despair if you do not understand all the terms mentioned. The article is intended to appeal to the more technically able readers.

The Z80 microprocessor was designed to be software compatible with the Intel 8080. The Intel 8080 was the microprocessor used in all the early CP/M machines. This is the main reason why the Z80 was used as the successor to the 8080; while the Z80 is software compatible with the Intel 8080 it runs at a much greater speed.

The Z80 microprocessor series is made up of three versions of the chip. Each version is used under different conditions, but all are software compatible with each other.

The three microprocessors in the series are the Z80A, Z80B and the CMOS Z80. Both the Z80A and the CMOS Z80 have identical clock speeds of 4 MHz ($\pm 0.1\%$), while the Z80B has an increased clock speed of 6 MHz ($\pm 0.15\%$). Although the CPU executes all instructions at this clock speed this is not the virtual clock speed on the Amstrad computers. Because other functions

are undertaken such as system interrupts, a decrease of about 15% occurs in virtual clock.

The main difference between the Z80A, Z80B and the CMOS Z80 is that the Z80A and Z80B needs +5 volts to do a complete memory refresh, whereas the CMOS Z80 needs only 15mA.

The main advantage the Z80 has over most microprocessors is that it can cope with a complete 64k memory refresh in a fraction of second, without the use of any additional hardware. In fact, the refresh rate is easily comparable with any 8-bit or 16-bit microprocessor. This is one of the reasons why the Amstrad has 42k free and with high resolution screen. The other reason is that the operating system is paged into the Z80s main memory in blocks of 8 or 16k pages.

The instruction set of the Z80 has 158 instructions; many of these are identical to that found on the Intel 8080, although the names have changed. It has 17 internal registers, including 2 real index registers (IX, IY) and 3 modes of fast interrupt services. Altogether, this makes the Z80 an excellent microprocessor well suited to the Amstrad machines.

PROGRAMMING

THE PASCAL PROGRAMMING LANGUAGE

by
Andrew Cope

Hello! I'm the second programming languages editor, the one that doesn't introduce himself! I'm a fairly recently joined member of the UAUG and, as you probably know from the last issue, I've contributed to the PD Library.

My articles will offer one view of some of the more common alternatives to programming in Basic. Anyone who wishes to program seriously will need to move away from Basic sooner or later and there are quite a few alternatives.

For this issue, I'll take a look at Pascal since most programmers would recommend it as the next logical step after mastering Basic.

Pascal differs from Basic in several ways. The most obvious difference is that Pascal programs are compiled rather than interpreted. For those of you who don't know what that means, I'll try to clarify things a bit.

Computers can only understand very simple languages, even Basic is too complex for the CPU to deal with. This means that whenever you tell the computer to do something, it has to translate your request into a form it can understand.

With Basic, this translation occurs EVERY TIME a command is given to the machine. This means that the computer spends a great deal of time simply translating your instructions. A typical Basic interpreter can spend as much as 90% of its time translating the instructions compared with only 10% actually doing what you want it to do!

Obviously, if the translation had already been done, then the computer would be a lot faster. This is the theory behind compilers. The compiler reads through the text you have typed and, hopefully, translates it into something the computer can handle. Once the translation has been completed, it need never be done again.

This may seem like the answer to all your problems, but there's a hitch! If something goes wrong with your Basic program, you simply alter the text and re-run the program. This isn't possible if you used a compiler, because the original text is unlikely to be available - only a machine code program.

This means that you must re-load a text editor, then load in your text, alter it, re-compile it and try again. After a few runs round this circle you soon get frustrated. This situation does, however, have one advantage: it encourages you to develop your program BEFORE you start typing. This generally leads to a tidier program with fewer bugs.

THE PASCAL STANDARD

As compiled languages go, Pascal is very readable. Due to the strict rules employed,

you either write a structured program or a program that doesn't work! Unfortunately, this can create its own difficulties. Advanced programmers may often find that Pascal is restricting. When I used it at Plymouth Polytechnic, I found that I kept having to revise my program to overcome the limitations imposed by the compiler.

One example of this is in the use of different data types. Basic has only three types of data. Pascal has a great many more, but conversion between them is not automatic. In Basic, you can place the contents of an INTEGER variable directly into a REAL variable. In Pascal, most compilers would reject this since the variables are of a different type. The compatibility between Basic and Pascal is summarised in the following table, which shows the most common data types:

Data Type	Description	Language
Integer	Number in the range 32767 to -32768	Both
Real	Floating point number often in the range 1.7E38 to -1.7E-38	Both
String	Array of characters	Both
Boolean	Holds a TRUE/FALSE flag	Pascal
"Definable"	Definable data type	Pascal
Set	Allows manipulation of a group of items according to mathematical SET THEORY	Pascal
Record	Allows grouping of several data types; works in much the same way as the records in a database	Pascal

One point worth noting is that very few "serious" languages support the STRING data type. Although I have stated that Pascal supports it, I am really stretching a point as there are no STRING functions. You have to treat a string as an array of single characters and write your own functions most of the time.

Another difference between Pascal and Basic is that all Basic commands tend to be "built in" to the interpreter. With compilers, only the commands which affect program flow (the CONTROL STATEMENTS) are built in. Commands which actually "do" things are separate procedures (which are similar to sub-routines) and must be defined somewhere before you can use them. Luckily, the person who wrote the compiler will have provided

PROGRAMMING

definitions for some useful procedures.

Pascal is a block oriented language, meaning that the program code can be thought of as being divided into discrete blocks; here is an example:

```
PROGRAM DRAFT (INPUT,OUTPUT)
```

```
VAR loop, bottles : INTEGER
```

```
BEGIN
  FOR loop:=10 DOWNT0 1 DO
  BEGIN
    writeln(loop,'Green bottles,
              sitting on a wall');
    writeln(loop,'Green bottles,
              just about to fall');
    writeln('If one green bottle
              should accidentally fall');
    writeln('There'll be',loop-1,
            'Green bottles, sitting on the wall');
    writeln
  END
END
```

The keywords (those built in to the compiler) are shown in upper case. As you can see, the commands which do all the work are in lower case, indicating that they are NOT built into the compiler.

The code between BEGIN and END is the block mentioned above. In effect, a block of code can be thought of as a single "compound" statement. The FOR loop in fact is thought of as only repeating one command.

The first line of the program may not be required for some compilers. It tells the compiler what the program is called and that both input and output will be required. In practice, I could have left out the INPUT directive since the program doesn't take input from anywhere.

The next line simply defines two integer variables. Unlike Locomotive Basic, Pascal requires that all variables be announced BEFORE they are first referenced.

The first BEGIN command defines the start of the program; again, a single command is permissible here, but I doubt whether it would serve much purpose.

The FOR statement should be fairly obvious for those who understand Basic, as it works in much the same way in both languages (in fact, I've yet to find a language that doesn't recognise a FOR command).

The writeln() procedure sends the list of items to the VDU then follows the characters with a carriage return. It can be thought of as being the same as a PRINT statement.

Note that semi-colons are used to separate commands, but are not needed before an END statement. Also note that the last character in the source program must be a dot.

Pascal is best suited to writing medium-sized programs which make few demands on the hardware. It isn't really suited to games writing unless you get a slightly non-standard compiler, or take the time to create your own procedures with an assembler (if the compiler will allow this).

The most recent version of Pascal is called MODULA-2 and is a great improvement. Most of

the limitations of Pascal have been overcome, since the programmer is now given more control at a lower level. I am currently considering moving away from C as a first language and turning to Modula-2 instead. One improvement that I like is the removal of the BEGIN keyword.

CPC VERSIONS

Unfortunately, I know of only three Pascal compilers for the CPC computers. The first is a tutorial program that used to be available from Amsoft. Whether it's still available and what features it supports I don't know. There is also a very poor ROM compiler which was reviewed in Amstrad Computer User some time ago and, from what the reviewer said, is best forgotten. There is a CP/M version of Pascal available from the UAUG PD Library, but it doesn't produce stand-alone Z80 machine code and doesn't support all the standard features. The technical information and standard of documentation supplied with it is extremely good and well worth having if you want to learn about Pascal.

The only other Pascal I know of is Pascal-80 from HiSoft. They have kindly sent me details of this version and other languages they produce for the CPC. Pascal-80 appears to be a full implementation of the language and it would also appear that the resulting object code is both compact and fast. The compiler comes complete with a text editor and provides a complete development system. This usually means that swapping between compiler and editor is made as painless as possible.

I'm not quite sure if I've read the blurb correctly, but it seems that CP/M users can produce graphics using the GSX system, whilst Amsoft users seem to be offered only turtle graphics. Fortunately, Pascal-80 allows the insertion of machine code directly into the program, which means that if you know what you are doing you have full control over the computer.

Modula-2 is also available from HiSoft. I know that it is a full implementation of the language and that it appears to require CP/M Plus and two disk drives. What I don't know is what is supplied in the way of graphics commands; however, if you have the necessary hardware, I would suggest getting in touch with HiSoft and having a chat with them.

Contacts:

Amssoft 091-510-8787

HiSoft 0525-718181 for general enquiries, or 0525-718271 to place an order; address is The Old School, Greenfield, Bedford MK45.5DE

Prices: Pascal-80 £49.95; FTL Modula-2 £69.95

Further information:

Book entitled: A Student's Guide to Programming in Pascal by Laurence v. Atkinson published by John Wiley & Sons. ISBN No. is 0 471 10402 7.

In the next article, I'll be dealing with the C language.

PROGRAMMING

SNIPPETS OF WISDOM

from
John Packham

In response to Wg.Cdr.Cutts request for CALL addresses, here are a few that he may find useful.

CALL &BB18 Waits for a keypress
CALL &BB03 Resets the keyboard
CALL &BB3F Repeat off
CALL &BC6E Tape deck on
CALL &BC71 Tape deck off
CALL 0 Complete system reset
CALL &BB9F,0 Opaque mode
CALL &BB9F Normal printing
CALL &BC02 Reset all inks to default colours
CALL &BCA7 Turn off all sounds

Also, if anyone wants a POKE or two (no jokes please !), how about these:

POKE &B4E8,255 Shift lock on
POKE &B4E8,0 Shift lock off
POKE &B4E7,255 Caps lock on
POKE &B4E7,0 Caps lock off
POKE &B280,4 Cursor off
POKE &B280,2 Cursor on
POKE &B28F, various Alters paper
POKE &B290, various Alters pen
POKE &BDEE,201 Escape off

I hope these prove to be useful.

For anyone out there who cannot seem to fathom out the codes 0-31 in Appendix III of the 464 User Manual, I've discovered some here for you, either by chance or from various other books.

For instance.....CHR\$(31)+CHR\$(x)+CHR\$(y)
Locates cursor (x and y are numbers in the required range for a LOCATE command).

Also.....CHR\$(29)+CHR\$(x)+CHR\$(y)
Sets the border colour (x and y are the two colour codes required; for a steady border, they must both be the same number).

Also.....CHR\$(28)+CHR\$(z)+CHR\$(x)+CHR\$(y)
Sets pen to required colour (z = pen number, x and y are the colour codes).

Also.....CHR\$(26)+CHR\$(w)+CHR\$(x)+CHR\$(y)+CHR\$(z).
Defines window parameters (w = left edge, x = right edge, y = top and z = bottom).

Also.....CHR\$(24) Inverts text and paper.

Also.....CHR\$(23)+CHR\$(x)
Sets Graphic Write mode (x = 0 is normal, x = 1 is XOR mode, x = 2 is AND mode, x = 3 is OR mode).

Also....CHR\$(22)+CHR\$(x) Transparent option.
If x = 0 then printing is done normally, but if x = 1 then anything printed on the screen is in transparent mode.

There's more !

CHR\$(15)+CHR\$(x) Selects pen
 (x = pen number)
CHR\$(14)+CHR\$(x) Selects paper
 (x = paper number)
CHR\$(11) Moves cursor up one line
CHR\$(10) Moves cursor down one line
CHR\$(9) Moves cursor right one column
CHR\$(8) Moves cursor left one column
CHR\$(7) Beeps
CHR\$(4)+CHR\$(x) Sets mode (x = 0, 1 or 2)

I've found that these are handy to know because, although you can simply use the normal Basic commands, there may be a time when you need to do these sort of things from DATA statements and, by using CHR\$ codes, it's a simple matter of reading them into a String and acting upon them.

You may have some information on screen and, at a certain point in the program, you may want to delete a certain line or lines while the program is running. Instead of doing it the way I used to, by LOCATING to a certain line then printing so many spaces, quite simply all you need to do is to locate the cursor to the beginning of the line required at PRINT CHR\$(18).

If you have a WINDOW on the screen and wish to clear part of it, then LOCATE the cursor and PRINT CHR\$(19); this will clear from the top of the window to the line at which the cursor is positioned. Alternatively, use PRINT CHR\$(20) which will clear from the cursor line to the bottom edge of the window.

The rest of the codes I haven't yet worked out. Maybe someone can help me ?

Another facility that isn't too clear in the manual is the use of hardware volume envelopes. If you find it too difficult to set up your own envelopes, the 464 has eight envelopes all ready and waiting to be used.

The syntax is ENV x,y,z (x = envelope number, y is the hardware envelope number 8 to 15 and z is the TIME PERIOD and not the TONE).

With the hardware envelope, do NOT forget the = sign. A TIME PERIOD of around 1000 is best for you to hear what is happening but, as with everything else, you can learn a lot by experimenting.

If you need a text dump routine and don't

wish to use up valuable memory with some specific machine code dump routine, then try this:

```
10 FOR z=&BF00 to &BF06 :read a$ :POKE z,val
  ("%"+a$):NEXT
20 DATA cd,60,bb,32,07,bf,c9
```

These two lines just poke in some code to read which character is under the cursor; it even remains if you reset the machine with CTRL+SHIFT+ESC.

The part of your program where you require the dump, you need to use a FOR-NEXT loop:

```
1000 FOR y=1 to yy:
  REM yy=No of lines require printing
1010 FOR x=1 to xx:
  REM xx=No of columns depending on mode
1020 LOCATE x,y:CALL &BF00
1030 char=PEEK(&BF07)
1040 IF x<>num THEN PRINT CHR$(char);:GOTO
  1060: REM num=20, 40 or 80 depending
  on mode
1050 PRINT CHR$(char)
1060 NEXT x,y
```

This is a little bit slower than a good machine code dump, but it still does the trick and you don't have to reserve any memory for it.

Afterthought:

The text dump routine should, of course, contain a PRINT#8 instruction, instead of the normal PRINT statement - Sorry.

It seems to me that the User Manual (I'm talking of the CPC464) is not at all clear regarding several commands; by way of example, consider the commands that deal with defining functions.

The manual clearly states that DEF FN(x)=x*x will work quite easily (and it does too!) but what is not made clear is the number of variables permitted for use in a function. For instance...

```
DEF FN(x,y)=x*y ..... works OK
DEF FN(x,y,z)=x*y*z ..... also works OK
DEF FN(w,x,y,z)=x*y/z+cos(w).. also works OK
```

In fact, practically any number of variables can be used within a function. Also the variables used in a function are only DUMMY ones to enable you to set it up. When used within a program, they can be replaced by other variables; for example, suppose you had two variables a & b and you had already defined a function to multiply two numbers together as in sample 2 above - the x and y variables are simply replaced by a & b.... eg. PRINT FN(a,b).

The variable names used in setting up the function can also be used in the rest of the program without the computer getting its chips in a twist.

For anyone who does a lot of editing within a program, try typing a line full of anything you like, take the cursor back to

the beginning of the line, then type some more. Nothing unusual about that, you may say, but now do the same again but before you do, hold down the CTRL key and press TAB. Now you're in overwrite mode, just like most word processors!

Anyone want faster Basic circles? The simple answer is to first put all the SIN and COS values of a circle into two arrays. For instance...

Near the beginning of your program enter a line such as:

```
DIM si(360),co(360):FOR num=1 to 360:si(num)
=SIN(num):co(num)=COS(num):NEXT
```

It is important to realise that the <num> variable used must NOT be an integer variable like num%. If you were to set it as such, then the COS and SIN functions would not work correctly.

Put your circle drawing routine into a sub-routine like so...

```
1000 REM CIRCLE
1010 FOR num=1 to 360
1020 origin x,y
1030 DRAWR radius%*si(num),
  radius%*co(num),col%
1040 NEXT
1050 RETURN
```

The radius and colour are set up before entering the sub-routine. Variables x and y are the centre of the circle. If you want to see the difference in speed, change line 1030 to:

```
1030 DRAWR radius%*SIN(num),
  radius%*COS(num),col%
```

You could even change the DRAWR command to a PLOTR command.

If you ever need to store a screenfull of information, whether graphics or text, and you don't want to type in a large machine code routine to do it, then it's quite simple. First of all you need to reserve memory and, because the only safe place to store another screen is at address &4000, the first line of your program should be MEMORY &3FFF. Whenever you need to store the screen, use CALL &BC06,&40; to recall it, use CALL &BC06,&C0. Pretty useful, don't you agree?

If anyone wants assistance with either GAC or GENESIS adventure creators, then please let me know. Also, if there are any members who live within a bus-ride distance of the Thornhill district of Southampton, and are willing to teach me all they know about machine code, I'd appreciate hearing from them. I understand principles, mnemonics, etc, but cannot fathom out how to do anything useful with it. I understand 98% of Basic but would like to progress further. The Assemblers I own are: Code Machine by Picturesque, A.D.A.M. and Dr Watsons Assembly Language Course.

If anyone needs help with Amstrad Basic, I'd be glad to oblige provided all initial enquiries are accompanied by an SAE.

ADVENTURE SOFTWARE

THE ADVENTURE PAGE

by Terry Roberts

Some of you may have noticed the absence of an adventure page in the last Issue (No. 11) of CPC USER, which was due to my being away for most of August in connection with my job. I had also hoped for some views on what you wanted to see in these pages but I only had one letter on this together with a letter from Mr. A. Lee with hints and tips for NOVA and HAUNTED HOUSE. Bob Adams, who writes an Amstrad column for Adventure Probe magazine, felt that reviews and hints/solutions are important but pointed out that as CPC USER is only bi-monthly it is difficult to include up to date news. I also looked through the completed questionnaires and many of you felt that there was too much on adventures in the magazine. With this in mind I have decided to include an adventure piece as an occasional contribution to CPC USER rather than a regular spot. For the few that need a more regular fix, can I urge you to subscribe to ADVENTURE PROBE (if you don't already do so) since this is one of the last remaining specialist adventure mags remaining. Copies are only £1.25 each month and the address is Mandy Rodrigues, 24, Maes y Cwm, Llandudno, Gwynedd LL30 1JE.

TOPOLOGIKA SOFTWARE OFFER

Some months ago Brian Kerslake of TOPOLOGIKA offered UAUG members discount games but not one member took up the offer! Not to be put off, Brian has now improved his offer and we can get 20% discount AND he will give a further 10% to UAUG to help club finances. The software was described in Issue 9 of CPC USER and the prices are as follows:

Kingdom of Hamil	UAUG price	£8.00
Countdown to Doom		£8.00
Philosophers Quest		£8.00
Acheton		£8.00
Return to Doom (NEW RELEASE)		£10.35
Giant Killer (for 9-14 yr olds)		£12.00

To purchase any of the above please send a cheque payable to TOPOLOGIKA to ME at my address and I will forward orders to

GIANT KILLER

by Peter Killworth

Although GIANT KILLER is based on the tale of Jack and the Beanstalk, it's definitely not a game for the rising-lives.

In this best-selling mathematics adventure you start - as Jack or Jackie with the inescapable task of going to market to buy a pig. Discovering this to be impossible, you are left with no other option but to go exploring. Only by finding the Giant, the treasures - and by solving all the puzzles (calculator work, spatial investigations, coordinates, topology, tessellations, mapwork, etc) - can you win the maximum score of 250 points.

Programmed by the author of such well-known classic adventure games as 'Countdown to Doom', 'Castle of Riddles', etc, GIANT KILLER is squarely aimed at the 9-14 age range, although many older children - and adults - are finding the game charming and the puzzles a really worthwhile challenge.

Program Guide
Player's Guide
Disc

BBC/Master £18.40
Master Compact £20.70
Spectrum +3, Amstrad CPC (disc) £14.95
Amstrad PCW £14.95
Amstrad PCs (and compatibles) £14.95



INTERACTIVE FICTION

First published by Acornsoft, these classic games from Britain's best adventure writers are now available for many other machines. If you missed them the first time round, you can't afford to miss them now!

Kingdom of Hamil

by Jonathan Partington

Night, blackest night. Bones weary after days and nights in the saddle, you seek shelter in a strange, derelict chapel, and dream of the place you seek: Hamil. A Kingdom of green pastures and sparkling fountains, of sorcery and romance, of strange but loyal beings: a land that once was yours. Have you the nerve - and the sheer intelligence - to try to win it back? Game size: Moderate, with many unusual puzzles Rating: Standard

Countdown to Doom

by Peter Killworth

New Extended Version

Orbiting the treasure-rich planet of Doomwangers, deserts, jungles, glaciers, swamps and crashed spaceships of previous adventures just visible through the swirling clouds, your ship faces a sudden and savage attack, and crash-lands on Doom. Can you cannibalise enough spares to repair it before Doom's highly-corrosive atmosphere rots it - and you? Game size: Medium, with an SF flavour Rating: Standard

Philosophers Quest

by Peter Killworth

New Extended Version

Waving that old magic wand that you found in the junk shop off Market Street was a big mistake. The atmosphere turned inside out, taking you with it and doing the same to you. And when it swirled back again the quaint old shop - and the strange old shopkeeper - were nowhere to be seen. Game size: Compact, but packed with unexpected twists Rating: Advanced

ACHETON

by Jon Thackray, David Seal and Jonathan Partington

"We hereby challenge the greatest adventurers in the Known Universe to uncover the dread secrets of our realm. Deeds of heroic valour will be required, and less of intellect that Newton and Einstein would have copped at. The rewards will be great: riches immense, power supernatural, and the knowledge that you have succeeded where thousands have failed." Signed in the four thousand and twenty-seventh year of the reign of Yelka-Oelkin IV. May his Dread Majesty live forever! Game size: Probably the biggest micro-adventure ever written! Rating: Expert

Available for BBC/Master, Spectrum +3, Amstrad PCW, CPC (disc), PC (and compatibles). All versions £9.95

RETURN TO DOOM

You are flying through the universe, minding your own business, when a desperate distress call hits your transceiver. "Mayday! Mayday! The Galabov, taking the Ambassador of Regina on an important mission to Fixto, has just crashed on Doom! Ship disintegrating fast! We have left the ship for safety - Please hurry - heading for cliff."

You - as the only person ever to survive Doom - immediately steer your ship for that dangerous planet once again. Now could be your finest hour (or maybe longer). Rating: Advanced

RETURN TO DOOM is Part 2 of Peter Killworth's challenging Doom Trilogy, and is available for the above machines, price £12.95.



ADVENTURE SOFTWARE

Brian. Go on - treat yourselves for Christmas.

- (a) Jones
- (b) Mandarin
- (c) Austin
- (d) Roberts ?

COMPETITION TIME

Yes, it's late but not forgotten. All you need to do to win the triple cassette trilogy TIME AND MAGIK is to answer a few simple questions. In case you don't know, this compilation is three adventures from Level 9 computing recently released by Mandarin Software and it comprises LORDS OF TIME, RED MOON and THE PRICE OF MAGIK valued at £14.95.

The questions are:

1. Name two other compilations of Level 9 games released before TIME AND MAGIK.
2. Name one other Level 9 game released in 1988.

In case there is an overwhelming response, a third question is included as a tie-breaker:

3. What is the family name behind Level

Please send your entries to me to reach me by 31 December, to allow for Christmas post. If there is more than one correct solution these will go into a hat and my dog will pick the winner.

NEWS

By the time you read this it will probably be old news, but Magnetic Scrolls should be releasing the CPC version of CORRUPTION which is their follow up to JINXTER. I have the ST version and it is very different and much better than JINXTER. Based on The City and yuppie land, it is also an extremely challenging game. I can't wait for the dark nights so that I can tackle it with a clear conscience.

That's all for this year. I do hope more of you discover the satisfaction of adventuring as opposed to the shoot em up stuff ! Happy Christmas to you all.....see you next year.

PROGRAMMING

TO ADD INFORMATION TO A BASIC PROGRAM

by
Dave Cutts

When a BASIC program is written, a preface may be placed at the start of the program with a FOR-NEXT loop of, say, FOR var=&xxxx to &yyyy:PRINT CHR\$(PEEK(var));:NEXT. What xxxx and yyyy may be will be explained later.

Then |PROTEXT and ensure that you CTRL.P or you will have odd results in your screen print later. Then proceed to write the introductory info and do not now rely on Word-Wrap but arrange the lines (80 long) as neatly as possible. Then SAVE it, as you may need it again !

Back to BASIC and using |MDUMP, find the

start of the info notes compiled with Protext which will have appeared just below the end of the BASIC program (this starts at &172). Note this info start-address and continue down to find where it ends. Note this address too. You now have the xxxx and yyyy to complete the FOR-NEXT loop mentioned above.

The rest of the BASIC protocol, I leave to you. Good Luck and I think you will find it a useful tip. It will probably work with other Word Processors but I only have Protext, so know not if it will.

MORE ON SIMPLE ROMBOX SURGERY

by
Brian Bristow

Further to John Blessing's excellent suggestions in Issue 9, I have also tried his alterations and found that they work perfectly.

I use a Rombo Rombox, and found that the reset button and the On/Off switch could be incorporated therein. The reset button seems effective at any time, even when programs such as Discology, which ignores CTRL-SHIFT-ESC, are running. To find out where to connect the reset button wires, use a test meter to find a suitable track inside the rom box, by reference to John's instructions.

I could try to describe suitable tracks on Rombo, but it's not easy to be sure that you would get the right ones!

There is room to drill two holes in the side of the box, below the level of the Printed Circuit Board, then hide the wires below the PCB for a neat job. First you must remove the PCB from the box. The 4 little grey supports are glued, at their bottoms, to the box (Ouch!). I found that the safest way was to break off the top of 2 of those supports, both on the same side of the box, by twisting them gently with long nosed pliers from directly above a little clockwise, then a little anti-clockwise until they broke. I haven't worked out yet how to resecure the PCB...

The switch is connected to the underside of the three prongs on which the tiny plug thing goes which selects rom sockets. Use a single pole, two way, centre off, switch, connect the centre prong to 'in' on the switch, and each of the two outer prongs to either of the two 'out's' on the switch, then leave the tiny plug thing off. Now, not only can you switch roms off, but you can choose their select numbers without access to a cross head screwdriver.

Now you can use Discology without swearing, and without 'Deconnector toutes les ROMS!' appearing...

Postscript:

I found that my CPC made noises through the speaker, louder noises as the volume was turned up, and traced the fault to the Rombo. Feeling certain that it was not my workmanship that was causing the trouble (!), I sent it to Rombo Productions for repair. To cut a long story short, it was due to my modifications, and for an explanation, I will hand you over to Rombo Productions:

"The CPC range of computers has a 'sound in' signal on pin 1 of the expansion connector, this is quite a high impedance input and will pick up any stray noises that happen to be around. The expansion connector (DK'tronics 64k Memory) is also equiped with 2 ground lines (2 and 49) which originate from 2 different parts of the main CPC PCB.

The modification that you had made used the ground track on pin 49, which is not connected (except to a de-coupling capacitor) on the Rombo PCB. The above two factors meant that any noise picked up by your additional wiring was sent down the signal track or ground line and into the CPC amplifier.

I have simply changed the reset switch ground connection to the other pin (2), and now all seems to be OK when your Rombo is used on our CPC 664."

All is now back to normal. Rombo Productions made no charge for that work, which, in my opinion, is excellent service. They even replaced my two broken little grey plastic supports as well and solved another problem for me!

MP-1 TO MP-2 MODULATOR CONVERSION

by
Peter Dooley

Shortly after I upgraded to a 6128 I considered purchasing an MP-2 TV Modulator/Power Supply Unit. As I already had an MP-1, the thought occurred to me that I may be able to modify the MP-1 to upgrade it to MP-2 standard. When comparing the two units (theoretically), the only difference is that the MP-2 has a 12 volt supply to power the 6128 disk drive. When I opened up my MP-1 to check it out for upgrading I found that it also had a 12 volt supply, but as it was derived from a Zener diode and only rated to feed the modulator section it would not be suitable for powering a disk drive.

I resigned myself to the fact that I would have to purchase an MP-2. This proved to be an impossible task because, at that time (late 1987), the earliest delivery date was three months from date of order - and even that wasn't guaranteed. So, back to the MP-1 with more determination.

When I first checked the voltages in the MP-1 I had no circuit diagrams or other information to work from. The unit is simple enough, having an 8-0-8 volt transformer with full wave rectification and smoothing to supply two 5 volt regulators. This is the main 5 volt supply for the computer. Also on the transformer was a single 10.5 volt winding, which is rectified, smoothed and regulated by a 12 volt Zener diode to supply the modulator. It was while looking at this part of the circuit that I discovered that the 10.5 volt winding was wired in series with one of the 8 volt windings giving an ac voltage of between 18 and 19 volts. This is sufficient to enable correct operation of a 12 volt regulator. I am not sure of the current rating of the transformer but, when considering how often the disk drive is actually in use, I did not regard this as a problem.

To modify the MP-1, proceed as follows:

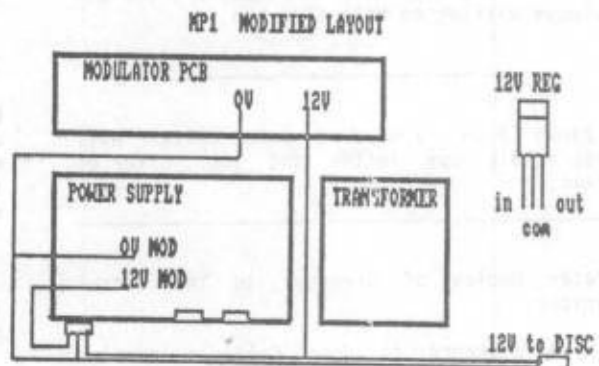
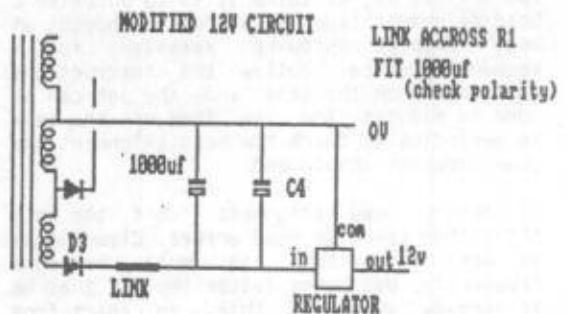
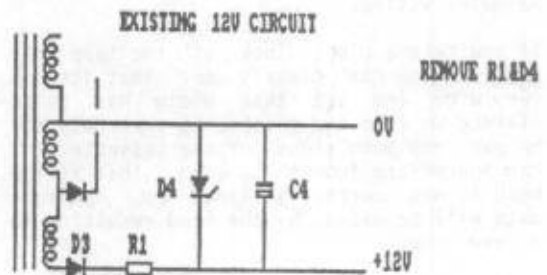
1. Remove Diode D4 from the main power supply board and replace it with a 1000µf 25V capacitor;
2. Remove Resistor R1 from the main power supply board and replace it with a wire link;
3. Mount the 12 volt Regulator onto the back of the heatsink;
4. Disconnect the 0 volt and 12 volt wires to the modulator circuit board and connect to the regulator (see diagram);
5. Supply modulator and disk drive socket from regulator +12 volt output (the centre pin on the socket is 0 volt).

The cable with the disk drive socket can be brought out of the modulator case via one of the ventilation slots, or a hole can be drilled near the exit of the other cables.

Parts required:

- 1 off 12 volt Regulator (Maplin Code QL32K)
- 1 off 1000µf 25 volt Electrolytic Capacitor (Maplin Code FB83E)
- 1 off 2.1mm Socket (Maplin Code FT96E)

All parts are standard and widely available.



Clive Bentham of Lincoln writes:

"I own a 464 which I have had for nearly four years now and I use the standard machine without an external disc drive. I must say first of all, that it has been my experience during that time, that although tape loading is very slow compared to discs, I have found the cassette tape to be a very reliable storage medium and I get no problems at all with loading or saving provided the tape mechanism is correctly set up.

I would say that without doubt the symptoms that John Calder mentions in his letter (CPC USER, Issue 11, pages 33/34) are caused by the misalignment of the recording head, which is the part of the mechanism that writes on, and reads off the data that is on the tape. This alignment is known as the Azimuth setting.

If you take a close look at the tape in a cassette you can clearly see that its not very wide and yet that width has to be divided to form two tracks, so that data can be put onto both sides of the cassette. You can appreciate from this then, that if the head is not correctly lined up, how some data will be missed by the head resulting in a read error.

Head misalignment is a common fault with the Amstrad cassette mechanisms, mainly because they are a mechanical device and will naturally move with time and use, so don't worry about it, the problem is easy to overcome.

The easiest way to solve it is to purchase a head alignment tape which can be bought at most computer software retailers for a reasonable price. Follow the instructions that come with the tape and the job can be done in minutes. You can then use the tape to periodically check the head alignment and your troubles should end.

Of course, head alignment isn't the only thing that can give read errors. Cleanliness is most important and must be done frequently, but Johns letter implies that he is already aware of this, so apart from electrical or mechanical failure, head alignment should do the trick.

If John has any further problems with his 464 my address can be found in the front cover of the mag under Games Editor, and I'm always willing to help if I can."

Thanks Clive. I'm sure John Calder will appreciate your letter and your offer of help.

Peter Dooley of Greasby in the Wirral writes:

"With reference to John Calder's problem

with tape loading, Amstrad Action Issue 16 contained an excellent listing for checking out the mechanics of a 464 tape deck. The program helped me to determine the cause of loading problems some time ago. I no longer have a copy on tape, but I still have the magazine should he have any difficulty in obtaining a copy.

If the program does indicate a problem, CPC in Preston can supply spare parts.

Whilst I'm at my keyboard, could any member advise me of any 6128 programs for the following:

1. CAD for electronics and printed circuit boards, and
2. INDEX for magazine articles, etc."

Thank you for writing in, Peter. John Calder will no doubt be pleased to learn of the listing.

I don't know of any CAD program that is specific to your needs, but I suggest that you contact Timatic Systems of Fareham, Hants, who offer a number of drawing packages and they may be able to advise you.

As to your requirement for an INDEX program, almost any database software will do what you want, so long as it includes a 'sort' facility. I would recommend Campbell's MASTERFILE III or Minerva's RANDOM ACCESS DATABASE if you are working in Amsdos, or Rational Solutions' ATLAST PLUS if you prefer the CP/M environment. Another possibility is PAPERBASE which is mentioned in the letter in Mailbox from Dr Shaw.

The Caxton range of databases were also quite good, but Caxton no longer support the Amstrad computers so you may not get much help if you opted for a Caxton program.

Gary Martin of East Molesey writes:

"I have also experienced 'Read error B' when using my 464. There are many reasons for this, but here are a few tips.

1. Use only good quality tapes;
2. Use only ferric oxide and not chrome;
3. Never use C90 as the tape is too thin;
4. Before saving or loading a program, ensure that the tape has been 'spooled' (i.e. fast forward then rewind); this takes up any slack and tensions the tape

Do you get the same read errors when using other tapes? If all else fails, then you will have to reset the Azimuth angle of the tape heads; this can be done using commercial alignment programs."

Thank you Gary. John Calder is certainly getting value for his subscription!

Kenneth Hodgson of Stoneclough near Radcliffe writes:

"What PD software do you have that might be of help to me. I have a CPC464, upgraded to a 6128, plus DD-1 drive. My daughter who is 14 yrs old uses the computer most and is at present trying to do a school magazine using desk top with extra fonts. I have NewWord with dictionary, Tasword, Taspell, etc, also Mini Office II.

I am only a beginner to computing but with a little help I hope to improve. I enjoy using the computer and would like to do more things on it. Also my wife is a junior school teacher, so any educational programs would be welcome from PD.

Thank you for producing a very enjoyable magazine. I enjoy reading every page even though I don't always understand them."

Well, Ken, I'm not too sure how best to advise you simply because I'm uncertain about your needs; I'm not even sure whether our advice is sought for yourself or your family. As a start, I suggest that you study the PD Software Update (published in this edition of CPC USER) and, if anything takes your fancy, contact John Blessing for information about a particular PD disk. You should bear in mind that by the very nature of PD software, it is not always the most up to date nor may it even include the sort of programs you are looking for.

Dr Shaw of Chidham near Chichester writes:

"I am prompted to write to Mailbox by Wg.Cdr.Cutts' use of the word 'senile' in his letter in Issue 10. I am sure he is doing himself a disservice - memory plays tricks at any age. There must be many CPC users who, like myself, are in the older age group. Does the recent survey indicate this? We may have slowed down a bit but we are not senile.

I am a retired scientist and use my 6128 for what I regard as 'serious' applications, having no interest in computer games. It irritates me that all micro computer publications concentrate on business and games with no reference to science or engineering applications - or am I reading the wrong journals? Of course I realise that that is where the money is generated, but there is a lot of science going on and the CPC is a first class machine.

I learned my computing on a mini - a laboratory dedicated DEC PDP12 and successfully indulged in assembly programming. Yet when a few years after retirement I got interested in micros, I found it very difficult to get to grips with the subject. In my view this was not due to what Wg.Cdr.Cutts might call 'senility' but, first, because manuals and most books are very badly written and, second, the literature is peppered with abbreviations

(I have not yet translated 'm/c' in Peter Cooper's letter on page 8 of Issue 10!). Perhaps CPC USER could publish an occasional glossary of new abbreviations appearing in its articles.

As an example of a 'serious' use, I have been compiling a cumulative index of a particular professional journal. The programs I use are adapted from PAPERBASE. This is a set of five programs designed to help the researcher build and maintain a personal database. References can be stored, searched, put in order, put in a particular layout format for publication and a manuscript can be searched for the references it contains. It is inexpensive, user friendly, and marketed in formats for different computers by Wight Scientific of 44 Roan Street, London SE10.9JT (with whom I have no business connections).

Amongst other programs I use are AMSTAT for statistical analysis and BRAINSTORM which is useful for organising one's thoughts.

I have a number of queries in the hope that the answers will be of interest to other users as well as myself:

1. The 'brightness' and 'contrast' controls on my monitor seem to do the same thing, i.e. alter the brightness. Is this normal?
2. Is there a way of putting diagrams into manuscripts prepared with Tasword?
3. If I had a 5 1/4-inch disk drive, could I simulate a PC - or at least put text on to disk so that it could be read by a PC?
4. Tasword seems to use the second 64k on the 6128 as a RAM disk without the limitations of Bank Manager. They won't tell me how it is done. Does anyone know?
5. My printer, an MP-165, has a Download Character Set - how do I use it? A good subject for an article by someone who knows, there seems to be a dearth of information about how to get the most out of one's printer.
6. I would like to use an analogue-to-digital converter and digital input and output control lines with my 6128. If anyone has experience of this would they please write to CPC USER about it.

Well, you did ask for some copy! CPC USER seems to be striking the right balance and I hope it continues in the same way. The CPC is a super machine and it was a little worrying to see the reduction in advertisements for CPC items when the newer machines and related publications appeared on the market. Perhaps we could hear from others with scientific or engineering applications."

Unfortunately, I don't know the answers to your technical questions but, hopefully, one or more of our more knowledgeable members will respond and, with luck, the answers will appear in the next edition of CPC USER; meanwhile, you may like to contact our tame Technical Queries Editor: Stephen Brokenshire on 0652-680636 who may be able to help.

As to your query about which magazines carry engineering and/or science applications, there are such magazines but they are specialised and have a small circulation; due to the latter, they tend to be expensive and are obtainable only by subscription (at least £40 per year) - not from bookstalls. The only one I know of is WHAT'S NEW IN COMPUTING; it often carries details of specialised books and software and I suggest that you may like to get in touch with them on 01-855-7777 (they may well be able to provide a list of specialised software distributors). Another magazine which may be of help to you is ENGINEERING COMPUTERS published bi-monthly by Innopress Ltd; the mag is circulated free of charge to anyone involved with engineering computing (you can contact the publishers on 0322-77755). I am sending you a few copies of these two mags to give you some idea of their coverage.

If you are looking for modular statistical and/or mathematical packages to run on your CPC, contact S.C.Coleman Ltd on 0530-415919.

Another source of information is the Software Authors Yearbook, published by MacMillan; it includes a section devoted to a listing of software houses and the programs they publish. The book is held by all the larger public lending libraries.

You will need to recognise the limitations of the CPC computers in terms of their operating environment and their small memory. Most of the modern specialist programs were written for IBM-compatible computers with at least 1Mb of RAM.

Cost is another consideration. Even programs written to run under PC-DOS have a limited market and are thus expensive. For example, the price of marine engineering and naval architecture software developed by the Wolfson Unit of Southampton University is between £900 and £1400 per module. Even so, there are a number of specialist programs available for small memory computers, one source being the public domain software libraries (we have a few in our own PD library) and you may well find the CP/M Special Interest Group more fruitful than most. The address of the CP/M SIG is 90 Braybourne Close, Uxbridge, Middx. UB8.1UJ; for other PD software libraries contact: Advantage (0242-224340), PD Software (08926-63298) or NATGUG (0373-72739).

Many engineering and scientific programs have been donated to PD libraries. The well-established libraries carry surprisingly large stocks of specialised programs or adaptations which can be run in conjunction with commercial programs such as dBase II. The PD libraries are an excellent source of programs designed to run under CP/M which, not so many years ago, was the most popular computer operating environment. However, the bottom line is that nearly all the software that can be used on the CPC computers will run only in the CP/M 2.2 environment.

I couldn't agree with you more about the standard of user-handbooks; unfortunately, the majority of handbooks are not written by professional technical writers but are

thrown together by whoever happens to be available at the time (usually the programmer).

I'm not certain but I believe that the IBM disc format, usable on the CPC6128, can be read by a PC from a 5 1/4-inch disc formatted and used in a 5 1/4-inch 2nd disc drive on the 6128. The CPC6128 User-Instructions actually state (Section 7, page 45): "... IBM Format (CP/M 2.2 only) ... is logically the same as the single-sided format used by CP/M on the IBM PC. The 6128 will read and write to IBM format discs, but will not create or copy them."

Details of the Download Character Set on the Micro-Peripherals MP-165 printer are given in pages 71 to 81 of the printer user-manual. I did have an MP-165 but hardly used it and I've forgotten most of the relevant detail. However, a local stockist should be able to help you. If there isn't a stockist near you, try asking one of the main distributors such as Microsol Ltd (01-739-5607) or contact Micro-Peripherals Ltd at Intec 2, Wade Road, Basingstoke RG24.0NE (tele: 0256-473232).

Incidentally, "m/c" is an abbreviation for machine code. I take your point about the need for a glossary of abbreviations and jargon.

Peter Breckin of Bury writes:

"First of all what's this about yourself, resigning as Editor, just when we had got used to you and making a good job of it too and selling all your programs and bits and pieces - are you deserting the CPC or what?"

Wg.Cdr.Cutts requests lists of call addresses (Issue 10, page 9). I believe these are in the Firmware Manual (Soft 158), but wouldn't they also be on the UAUG's PD Disk PD2/2 "CTL-6128"?

I would still appreciate a list of members as requested in one of my previous letters - couldn't you give notice in the mag that they were to be published unless anyone had an objection in which case they should notify you that their's is not for publication?

I have immediate need for three as follows:

Mr J.Benzies (so that I may take advantage of his offer on page 27 of Issue 11); Mrs T. Walker of Hythe and Mr T.Magean of Banbury so that I may correspond with them. I would appreciate their addresses to enable me to write.

I realise that it is too late now, but we ought to have publicised the Amstrad Exhibition in Manchester (end of October) to see if many members intended going - it would have been a good opportunity to meet up with others. I believe the admission fee was £5 - shocking, considering it is in effect an advertising/sales exhibition."

The UAUG would be contravening the Data Protection Act if it published members names and addresses; I believe I've made this clear on a number of occasions in CPC USER and, until the Executive Committee decide what action to take, there's nothing more I can do. The Act requires the UAUG to protect the data; the UAUG cannot off-load its responsibility by placing the onus on members to lodge their objection.

I suggest that you either ask us to publish your name and address (perhaps in the new CONTACT section of CPC USER), or follow the initiative taken by others and write to the members you wish to contact and send the letters with pre-stamped envelopes to the UAUG for addressing and posting to the members concerned; they then have the option of writing to you direct if they choose to do so.

My reasons for leaving CPC USER are personal and will not be of interest to the membership. I gave notice in July of my intention to stand down in December and that decision stands. I shall continue to support the UAUG by remaining a member and by submitting the occasional article for publication.

John Goodwin of Hackenthorpe near Sheffield writes:

"As I couldn't come up with an article, but still wanted to contribute, I shall do my bit through Mailbox. I am coming towards the end of my first year's membership and you will be glad to hear that I shall be renewing my subscription. I didn't feel that way at the time of the Questionnaire - I helped criticise but didn't offer practical help. Since I realised that, I look forward to each edition; I will try to help in any way. Last Issue I submitted a Game review and, though I'm no journalist, I was happy to have contributed and seen my first efforts in print.

The last Issue I thought was very good and it seems your cries, sorry, appeals for help have been heard. I think a marvellous job has been done by you all to keep the mag going when contributions reached a low ebb.

I'm a 6128 owner (previously owned a 464) and have added a 5 1/4-inch drive which I use under RODOS. This was a good decision in view of the larger capacity and disc prices. I recently purchased a DMP2160 which I'm just getting to grips with. I am very pleased with this printer - it fulfills my needs even if it has had a mauling by the computer press. I would be willing to help anyone who needs a print-out; obviously I would have to make a charge. I use various applications software and play games to relax. My favourite word processor is BRUNWORD.

It was interesting to see the articles in Mailbox by two lady members. It is rare in computer magazines to see contributions from the ladies; the articles were very interesting and I hope there will be more. I

would be willing to help people new to computers, especially the 6128.

That's all I can come up with for now. Can I take this opportunity to wish yourselves and all members A VERY HAPPY CHRISTMAS AND NEW YEAR. Bye for now. Keep up the good work."

Thank you John for making the effort and I appreciate your support. I'm delighted that you've seen the light and will be renewing your sub. Thank you too for your kind offers of help and seasonal greetings.

Richard Sergeant of Hythe in Kent writes:

"I read your article UPGRADING THE CPC in Issue 11 and, out of interest, I enquired at the Crawley Branch of Tandy about the hardware. The manager was very helpful and, after digging through old catalogues, we identified the Disk/Video Interface, ref 26-3806. He 'phoned his head office and they confirmed that there were only two of these items left in the UK @ £100 + VAT each.

I was suitably impressed and decided to place an order leaving a small deposit; hopefully delivery will be within a week.

Now, the crunch! As I am not an electronics expert, what exactly have I got to do to upgrade my 464. Do I need a DD-1 as Drive A? How do I sort out the connections between the unit's processor and the 464 expansion bus? Are extra leads required or is any soldering to be undertaken?

I am just a little worried that the conversion may be out of my league and might I be better advised to cut my losses and not proceed with the purchase.

I have the 64k memory expansion, SSA-1 speech amplifier, Dk'tronics lightpen and Rombo box with Maxam and BCPL ROMs installed and already hanging off the expansion port.

Any further and if possible detailed information about using the Disk/Video Interface would be appreciated. What software will I require to format and use the 5 1/4-inch drive?

I hope I am not asking too many questions and you are able to give a bit of helpful advice."

Oh dear me. I hope you are not going to hold me responsible for spending your money Richard! This sort of surgery is for the wizzid brigade, a member of which I most definitely am not. But I will try to advise you as best I can.

You will be aware from your 464 User Instructions of the various connections at the expansion bus. When you unpack the Tandy DVI, there should be a handbook which isn't a lot of use but does show the connections at the Tandy ribbon cable. The trick is to be able to match or convert the two connections (i.e. the 464 expansion port and

the Tandy ribbon cable connector) so as to render them compatible. If your expertise won't run to this task, then forget it. The alternative, and probably the safest course anyway, is to acquire a DD-1 drive (which will include the necessary software) and utilise the Tandy DVI as a second drive. The Amstrad DD-1 can of course be fitted in the upper slot of the DVI, having moved the existing 5 1/4-inch drive from the upper to the lower slot. To enable the 3-inch drive to be fitted, you will need a pair of brackets to suit a 5 1/4-inch drive housing and these can be obtained from disk drive suppliers (e.g. Timatic Systems). If you fit a DD-1 drive in the DVI, you will first need to remove the processor board from the DVI; this is a very simple task requiring only a screwdriver. Whether or not you choose to fit other peripherals in the DVI casing is a matter for you to decide. It is a bit of a squeeze, so maybe you should take it one stage at a time and get your drives working before you tackle anything else.

Assuming that you plan to utilise the Tandy DVI as your 2nd drive, check that the link pin on the drive pcb is correctly positioned (see CPC USER, Issue 7, pages 12 - 14).

It may all sound a bit daunting but it's straight-forward enough if you're going to fit a DD-1 rather than cannibalising the expansion ports. I can assure you that even with the additional cost of a DD-1, you will not regret it. Good luck.

Mike Catton of Gosport writes:

"I am collecting information on printers with a view to writing a comparative review of the more common ones. I've written various test programs which I've tried on one or two printers and would be grateful if readers would run similar tests on their printers and let me have the results plus any comments.

The first program tests the printer's various functions, both in draft and NLQ. It starts with an initialising sequence that sets the printer to print in Elite at 80 columns per line with a left-hand margin of 10 cols. This is the mode in which I do all my printing, unless I am using Qualitas, since I can get more on a sheet than with Pica at 68 characters per line and the reduced number of line feeds causes it to run some 10% faster. This is followed by a line made up as follows:

1. A string of upper case 'N's;
2. A string of 'I's in italics;
3. A string of 'R's in reverse;
4. A string of 'D's in double-height;
5. A string of 'g's in IBM high-order;
6. A string of 'h's in Epson high-order;
7. Superscript; and
8. Subscript.

This is then followed by a duplicate line in NLQ. Use enough characters so that the lines occupy 80 columns or a bit less. If your

printer won't recognise any of the codes, omit them and let me know.

I've run this on a few printers, sometimes with surprising results. Some, when in NLQ, won't print italic, superscript or subscript and one wouldn't print Elite. Which makes it rather pointless having them, since you can't use them when it matters.

The other two tests are full pages of text, one in Pica at 68 columns per line and the other in Elite at 80 cols. This gives about 4300 characters in Elite and a bit under 4000 in Pica. I time these tests, both in draft and in NLQ, to get a measure of the true printing speed. This again has produced some surprising results. The Citizen 1200 with a claimed speed in Pica of 25 char/sec actually printed at 19, while the Star NL10 with a claimed speed of 30 could only manage to do 17.

The printers I am particularly interested in, as being the ones most commonly available, are the Citizen 1200 and LSP10, Panasonic 1081, Amstrad 3160, Star LC10 and Epson LX800; also the 24-pin models: Amstrad LQ3500, NEC P2200, Star LC24-10 and Epson LQ500. As well as this numerical information, I'd like general comments on such things as print quality, paper handling and general convenience plus your assessment of the handbook - English or Janlish - how thorough, how well indexed, etc. Please write to me: M.Catton, 11 Battery Close, Gosport, Hants. PO12.4PA (tele:0705-585764).

Peter Hunter of Norwich writes:

"Like so many other members I am very pleased that you have had such a wonderful response to your plea in Issue 9. Like so many other members I thought I also should put pen to paper and "do my bit".

I would like to start off by thanking you and all the committee members for your hard work, dedication, free time and experience. CPC USER is without any doubt my most waited for magazine, and I have all the CPC magazines on subscription.

I have just read with interest the WHOLE of CPC USER Issue 11, which is more than I can say about ANY of the Nationals. Keep up the good work and thanks again. I now look forward to Issue 12.

If anyone is interested, soon after getting my 6128 I purchased a book called "Using Your Amstrad CPC Disc Drive"; it's only a small book, but it tells you much more than the handbook does and is easy to understand terms. I do believe that this is now in the UAUG book library.

Let me tell you a bit about myself. I am 41 years old, married with no children, and happy. I am back disabled and my wife has Multiple Sclerosis, so we see a lot of each other. My main hobby has always been Amateur Radio and, some time ago, I was

introduced to computers via the ZX Spectrum, as there was at that time much more software available for the Spectrum. I then progressed to the Spectrum +3 (with built in disc drive) and for a long time I was very happy.

My main use of the micro was for sending and receiving morse code; it's very nice, after having set up all your equipment, loaded in your software etc, to tune the radio into another amateur station in the next town, next country or the other side of the world. Listen to the morse code he is sending and have it going through your computer and out onto your screen as plain English that anyone can read. Even nicer than that is to then TYPE in your reply, in plain English, or abbreviated as it usually is, and send it via the computer and your transmitter, out of your antenna and into the other station's receiver, as perfect MORSE CODE. It isn't quite that easy, but it isn't far off. You can also use your micro for such things as RTTY PACKET RADIO etc etc but that's another story.

Anyway, about six months ago I saw an article for a program written for the Amstrad CPC and, knowing that the Spectrum +3 was virtually a CPC, I thought it might not be a bad idea to see if I could convert the program to run on the +3, so I borrowed a handbook from a friend who has a '6128. Well, after reading the handbook from cover to cover I was so pleased with what I had read that I didn't buy the company but I did buy a CPC 6128! Since then I have not spent very much time at all on amateur radio.

I now have the Amstrad DMP 2160 printer and a second disc drive to go with the 6128. I got the second disc drive unit second hand from a friend who bought it as a spare replacement, I then built a power supply and made up a connecting cable and I cannot now imagine how I ever managed with only one drive. Then again, how did we ever manage with a cassette player, as some still do.

I don't think I will ever become a programmer, but I do enjoy trying to change programs for my own purposes. I hate games, but then not everyone would enjoy sitting in front of a radio for hours on end trying to tune into unreadable stations. So I don't knock those who enjoy games.

I seem to spend most of my time now setting up programs such as databases etc for use in conjunction with my radio station; for some reason radio amateur's seem to love making lists and charts etc.

I used to have Tasword for the +3 so when I got the 6128 I also bought Tasword. I then got Tas-spell and Tasprint. Then I was introduced to Protext and Prospell and I now

use nothing but. Tasword is good....but not that good.

I have also added programs such as Discology, Art studio, and AMX Pagemaker, though the vast majority of my programs have come from the Public Domain Library. My favourite and most used PD program is without any doubt: "NSWP" I have this on CPM so all I do is type "|CPM" and NSWP is loaded, thanks to the article by Tony Baker in Issue 10 of CPC USER. I have sent you a short program written by a friend, called "INITCPM3.BAS"; you just run the program and follow the instructions. What it does is to put tracks 1 & 2 of the system (CPM) disc onto a vendor formatted disc, and so allowing you to put such programs as NSWP etc onto a vendor formatted disc and still auto start.

I always send blank discs in a padded envelope, with return postage, for PD software, as I have done today. I usually get about three discs full at a time and doing it this way THEY ARE COMPLETELY FREE. A lot of the programs though are well worth paying good money for.

I did pick up an AMX Mouse MkII + 6128 interface + mouse mat + Art + handbook a while ago, second hand, and I have no interest at all in that, although it was fun at first, it all seems to work OK but it is just sitting on my shelf collecting dust now. So, if anyone wants that package cheap (no splitting it up) just give me a ring on Norwich (0603) 748338 anytime and make me an offer, either to include p&p or to be collected, and it's yours.

Well, this letter has certainly turned out to be much longer than I intended. I am not much good at describing software but I am very pleased with most of the programs I have received so far, and I have quite a lot of them. All I can say is make full use of the PD library; if you don't like or want any of the programs you get then you can always erase them. If you do it the way I do then the programs are FREE so you have nothing to lose.

I have included some of my most used programs on the other side of this disc. Most of them have help notes included, or are self explanatory, and are useful utilities. None of them were written by me, but are all public domain.

I hope that some of this letter is of interest to some of the members. If anyone wants any more info then please let me know, preferably via CPC USER."

It is good to hear from you Peter and we all wish you and your wife the very best of luck. The software that you kindly sent to John Blessing is available on PD Disk 8/5, for the benefit of all members. Many thanks.

MEMBERS ARE CORDIALLY ASKED TO NOTE THAT POSTAL REPLIES WILL BE MADE TO INDIVIDUAL LETTERS ONLY IF AN SAE IS SUPPLIED.

THE EXECUTIVE EDITOR RESERVES THE RIGHT TO PUBLISH ANY LETTER RECEIVED UNLESS CLEARLY MARKED: "NOT FOR PUBLICATION"

P D L I B R A R Y

PUBLIC DOMAIN LIBRARY UPDATE

by
John Blessing

I'm going to break a long-standing habit (no, not smoking), and not have my customary moan. Why is this? Well, I've had lots more software AND Richard Sargeant has written a review of some of the PD software - well done Richard, you've only got another 4 Mbytes to go!

Andrew Cope has made quite a departure from CENTROX (it's the sort of name you pronounce in capitals), and sent in a graphic adventure game. It seems well up to his high standard and you can find it on 8/3.

Dave Cutts has sent in some utilities for UTOPIA owners (8/2), can't say I've tried it as I don't own this rom. He has also rearranged the STD codes into in numerical order - so you can now find a place from a number without loading all the place files in one go (8/4).

As well as gaining my favour for reviewing some software, Richard Sargeant has sent in a rather odd piece of BASIC programming, ODEPRINT (8/2) will compose a poem to your loved one - get it before Feb 14th! On a more serious note, his MORTGAGE program will calculate just how big the pound of flesh required by your building society is. He has also debugged the calendar utility TODAY. Both of these can be found on 3/1.

Whilst we are talking of new versions, Peter Cooper has updated his utility KEYDEF (PD 7/2).

Finally, Peter Hunter has sent a disc full of PD (8/5), there's bound to be something on this one to interest you.

Well, I'd love to carry on writing, but there is a mountain of padded envelopes perched on top of my desk and I'm in serious danger of setting off an avalanche. So before I start praying for another postal strike, I'll sign off and get some of these goodies back to you!

PUBLIC DOMAIN LIBRARY

New items since last list are marked #

PD1/1 (CPM)

CAT3 Single entry per line directory
CLEANUP File eraser
COMPARE Compares two files
CRCK44 Produces checksum
LDIR ? (any ideas on this one?)
LIST Sends file to printer
LRUN Run a no. of commands from a library, as if separate COM files were being run
NSWP Multiple file utility
NI Sorted directory with file lengths
SD Directory utility ('SD //' for help)
PASSWORD Used with SCRAMBLE
RENAME Rename with wild-cards
RPIP PIP with quick repeat
SCRAMBLE File encryption
SORTV Alphabetical sort of file
SQUEEZE Compress file
SUPERSUB Interactive version of SUBMIT
TYPEL Like TYPE
UNERA190 File unerase
UNSQUEEZE Expand compressed file
VLIST TYPE with variable scroll speed
WHATSNEW Lists newest files (needs date-stamping I think)

PD1/2 (CPM)

COBOL COMPILER With 32k documentation

PD1/3 (CPM)

Z8OASMUK Assembler
ZMAC Assembler
ZLINK Linkage editor for ZMAC
ZSM Z80 assembler (with doc)
DEDUMP File transfer software (.ASM and .COM versions - no documentation)

PD1/4 (CPM)

ZBEAMS Z80 monitor and assembler

PD1/5 (CPM)

SECRETARY Word processor

PD2/1 (CPM)

 SMODEM Smart modem utility
 CIRKIT7 Prestel link 2
 KERMODE ?

PD2/2 (CPM)

 AMSMOD7 Modem utility
 MEX Modem utility (type 'MEX' then
 'HELP' for help)
 SMARTMEX Smart modem version of MEX
 UKM1275 Modem utility
 XMCPC2 Modem utility for Dart
 serial interface
 CPC-UKM7 Modem Utility
 CTL-6128 Lists CPM control codes
 HMODEM Modem utility
 MODEM Modem utility

PD2/3 (CPM)

 BANNER Notice printer
 GOTHIC Sideways banner printer
 COLLOSAL
 CAVE ADVENT The original adventure game
 BIO Biorhythm generator
 BISHOW ? (any ideas?)
 CAL Calendar generator

PD2/4 (CPM)

 CHESS Text version
 OHELLO Text board game
 CUBE Simulation of 5x5 Rubik cube
 GOLF Text simulation of golf game
 LIFE Classic game of life
 MASTMIND Guess the computer's word
 MAZE Generates mazes
 NEWPUZ Wordsearch puzzle generator
 PINGPONG Graphic pingpong game
 (CPM+ only)
 PRESSUP Board game
 STONE African stone game
 TICTACTO Noughts and crosses

PD2/5 (AMSDOS)

 25-SQUARE Rubik cube game
 BIOCHART Biorhythm generator
 BLCKJACK Blackjack card game
 BREAK Snooker quiz game (6128 only)
 F4SQUARE Puzzle game
 FAMILY Family history
 (no instructions, any ideas?)
 FLAG-1 Draws Australian flag
 FLAG-2 as Flag-1 using FILL command
 HIGHLOW Guess the hidden number
 HOROSCOP Horoscope generator
 JACKPOT Simple fruit machine
 KEYS Redefine keyboard to give
 keyword command entry
 LIFE-10 Life game
 MEMGRAPH Screen designer
 (6128 only - needs BANKMAN)
 MERCHANT Space trading game

PD3/1 (AMSDOS)

 AMSDIR Tape cataloguer
 CAT Sends CAT to printer
 HOME Home budget
 ICON2 Ascii/Prestel converter
 INPUT1 General input sub-routines
 LABELS Label printer
 #MORTGAGE Calcs mortgage payments
 PAPERMAN Management simulation exercise
 PENNYTEN Pingpong game
 PJBOMBER Bomber game
 POLAR Plots polar equations
 QUEST Text adventure
 RAFFLES Maze game
 SCOSAVER Game - not working -
 anyone like to fix it?
 SPELLING Spelling game
 SPORTMAN Sport management game
 SURFACES Graphic demo
 #TODAY Calculates day names from
 dates and Easter dates

TYPTUTOR Typing tutor
 USEOFMIN Graphic demo
 WUMPUS - Text adventure

PD3/2 (AMSDOS)

 A comprehensive subject index
 in MASTERFILE format

AMSMAG85
 AMSMAG86
 AMSMAG87
 ODDMAGS

PD3/3 (AMSDOS)

 AS PD3/2 BUT IN ASCII FORMAT

PD3/4 (AMSDOS)

 BLUE RAIDER Two part text adventure

PD3/5 (AMSDOS)

 ROLL Binary and BASIC versions
 of scroll RSX
 SCRSWAP Binary and BASIC versions
 of screen swapping RSX
 ROLL.DEM Demo for ROLL RSX
 SCRSWAP.DEM Demo for SCRSWAP RSX
 FCAT Binary and BASIC versions
 of directory to ascii file RSX
 RSX-DOC Ascii file with instructions
 for above programs
 ROMREAD Saves rom as binary file
 AMSTRAD.DSK Details of connecting 2nd drive
 PSU.DOC Construction details for 2nd
 drive power supply
 DC Drive interface construction
 details
 DISK Disc menu
 BBLIST List of bulletin boards
 BDOC Ditto
 BENDS Calc developed length of
 bent metal (needs Supercalc2)

P D L I B R A R Y

IMSPRIN	Spring designer (needs SuperCalc2)	PD5/3 (CPM) *****	
FONTY	Font designer	MBASIC	The standard PD BASIC (CPM+ only)
AMSFAX	Teletext simulator	PD5/4 (CPM) *****	
#CAT-U82A	Sends CAT to printer	PASCAL	Pascal compiler - lots of documentation and examples
PD4/1 (CPM) *****		PD5/5 (CPM) *****	
DS	Sorted and extended directory	CREATOR	Database (requires MBASIC - on PD5/3) - CPM+ only
MDIR	Sorted and extended directory (with .doc file)	REPORTOR	Report generator for CREATOR
NULU	File manager	ACCOUNTS	Small business accounts programs (must have DBASE II!)
ADJUST	2nd drive parameter patch	PD6/1 (AMSDOS) *****	
FORTH	8080 Fig-Forth 1.1 compiler (no documentation)	MEMBERS	Database (needs BANKMAN)
FORTH	MVP Forth compiler with documentation	PAYROLL	Calculate pay statements (needs BANKMAN)
MIKEDIT	Wordstar like editor	PORTFOL	Record shareholdings
MLOAD	?	DIARY	Diary program
UNLOAD	?	ENCODE	Encrypt messages
LU	Library utility (no doc)	DECODE	
MAKE	?	POINTERS	Prints useful characters
QWIKKEY	?	ELECTBIL	Calc electricity bills
UNSPPOOL	?	CHIMES	Realistic simulation of chiming clock
WC	Ascii text file word-counter (with doc)	BANKDBSE	Database - needs BANKMAN
ERAQ	Easy erase (CPM2.2 or CPM+)	PD6/2 (AMSDOS) *****	
ZAP35	Superzap disc sector editor	UNIX SHELL	
TYPWRYT	Computer emulates a typewriter	PD6/3 (AMSDOS) *****	
PD4/2 (PROTEXT - CPM or AMSDOS) *****		UNIX SHELL	Comprehensive documentation
STD dialling codes - very comprehensive		PD7/1 (AMSDOS) *****	
NB see 8/4		ELECTION	Programs to analyse and predict elections (6128)
PD4/3 (ASCII - AMSDOS) *****		RANDOM	Random access programs (6128)
STD dialling codes - very comprehensive		PD7/2 (AMSDOS) *****	
NB see 8/4		CASSLAB	Cassette label designer and printer
PD4/4 (CPM) *****		D-CAT	RSX to list file attributes
DAZZLESTAR	Full featured disassembler (needs 2 drives)	GRA-MEM	Graphically displays memory usage
PD4/5 (CPM) *****		DISC-RSX	TYPE, DUMP (as in CPM) and INFO on file length etc
PCFILE	Database + documentation (not tested yet!***)	SIDEWAYS	Prints ASCII file sideways (NB max 60 lines)
CRUNCH	File compressor	LASBALL	Breakout with a difference!
UNCRUNCH		CHRDESIG	Character designer
PD5/1 (CPM) *****		HELPWINDO	Window designer
SCRIVENER	Innovative mixture mail merge and data merge with 60k of documentation - well worth exploring!	#KEYDEF	Utility for UTOPIA ROM owners only
PD5/2 (CPM) *****		MENU	Utility for composing menus
VDE	Text editor	COPY	Disc copier (NB run READWRIT.BAS first)
INVENTORY	Database - originally designed for catering but flexible enough for other uses.	READWRIT	
SORT	Alphabetical sorts a text file	CAT8	Redirect CAT to printer
SPELL	Spell-checker with editable dictionary		

P D L I B R A R Y

PD7/3 (AMSDOS)

PASCALDEM Selection of Demo programs written using Hisoft Pascal (including source files)

PD7/4 (CPM)

MLOAD21 ?
NULU11 Update of library utility - lots of documentation

PD7/5 (CPM - MBASIC)

KPFLY Flight simulator (not configured for CPC)

All programs below require MBASIC.COM, which is included in this disc

TIMER Appointment manager
LESSON1 Tutorial on BASIC variables
SPAD Notepad wordprocessor
KOLOSSUS Artificial psychiatrist (not configured for CPC)
SIMULAT Small business simulation
DC10 Flight simulator (not configured for CPC)
SEQU Sequential database
TEACHER Set up class tests (not configured for CPC)
DRAW Drawing utility (not configured for CPC)
MATH Maths tutor
XMAS Quiz about Xmas
VOCAB Vocabulary tester
FIREMAN Firefighting game (not configured for CPC)
RENTAL Rent management
SIAI Simulated artificial intelligence game (not configured for CPC)

PD8/1 (AMSDOS)

TAX Expenses manager for Equity members - easily adapted
WALES Tourist guide

PD8/2 (AMSDOS)

#UTOPIA Selection of utilities for Utopia rom owners
#ODEPRINT Rhyming couplets generator

PD8/3 (AMSDOS)

#RPG Graphical role-playing adventure

PD8/4 (AMSDOS)

#TEL STD codes in numerical order

PD 8/5 (AMSDOS)

#BANKER Bank account program
#CALLENPT Calendar printer
#CARNUM Find out the town your car was registered in
#CATPRINT Another!
#DEDIT Disc editor
#DIGICLOC Digital clock with alarm displayed on screen
#DIREDIT Unerase etc.
#DISCLIB Good disc library
#DISCMAP Shows positions of files on disc
#DISCTRAC Fast CAT
#FORMPROG Quick formatter
#HOMEACCT Easy to use home accounts prog
#WHATFORM Check format of disc
#TVSAT Ggives TV satellite position
#INITCPM3 Puts tracks 1 and 2 of CPM system on vendor discs

HOW TO ORDER:

1. Each of the sections above will fit on one side of a disc so send enough discs! eg if you want all the PD library then send 19 discs.
2. Please make sure the discs are blank and in VENDOR format.
3. Use a padded envelope and enclo have been compressed to save disc space. This is indicated by a "Q" as the second letter of the filetype, eg READ-ME.DQC would be a SQUEEZED version of READ-ME.DOC. These can easily be converted into normal ascii with either UNSQUEEZE or NSWP on PD1/1 (easier still use 'P' option print an unsqueezed version) so you should order this section of the library first.

SEND ORDERS TO:

John Blessing
26 Chichester Close
West Wellow
Nr Romsey
Hants.S051 6EY

UAUG PUBLIC DOMAIN SOFTWARE - A PERSONAL VIEW

by
Richard Sergeant

Since joining the UAUG in July 1988, I have received from the PD Software Library 8 disc sides of programs. I thought I would write a novice's review on how I have coped with and used this Megabyte of data.

PD 1/1 was my first acquisition and essentially to obtain NSW.P.COM, thus allowing me to unsqueeze DQC files. I have had no problems and following Don Snoad's instructions (CPC USER Issue 9 page 5), was simplicity itself. The DOC files were printed out on my trusty DMP 2160 using <CTRL> P and then enter at the A> or B> prompt "type filename.doc". This achieved pages of hard copy; however I was not very happy with the "PRESS RETURN TO CONTINUE" prompt spoiling the general layouts. I eventually found the printer option in NSW.P, this solved my problem. Having two disc drives makes life easier when transferring or copying files, I did have a few moments problem when working on SCRIVNER.DQC [PD 5/1] to try and produce SCRIVNER.DOC, I did not allow enough space on the disc, you cannot transfer NSW.P, SCRIVNER.DQC on to a blank data formatted disc and also get the unsqueezed DOC file on the same side; my solution, use another blank side with at least 113K spare.

Still on the subject of SCRIVNER - the first thing to do after you have produced your instruction booklet, is make a back up of the SCRIVNER.COM and bundled demo files. I didn't and whilst experimenting with one of the programs, decided to break off, resetting the computer caused the disc directory to be corrupted. I was able to save it via the use of DISCOLOGY so, be warned, if you open a file make sure you let SCRIVNER finish off what it set out to do and write the new file to disc. There is only 37K free when you receive this disc, so it may be advisable to make up different working discs.

Returning to PD 1/1, the disc is full of programs, RPIP.COM works just like PIP, the MCAT41 does work, but I prefer my Library Catalogue Program that I typed-in from CWTA (April 1988); this enables me to have up to 995 entries on a datafile, that is easily modified and the hardcopy is very useful. What a pity that because of copyright, I cannot send it for inclusion in the PD Library. Still folks if you do not have a copy, get the magazine, the time

spent typing it is worth the effort. Mind you, the original listing was not without the inevitable corrections published the following month.

PD 3/2 contains 4 programs that have to be loaded into MASTERFILE 128 or 3, the files catalogue the Amstrad CPC magazines ie. A.A, A.C.U, and C.W.T.A, from 1985 to September 1987. The Oddmags program contains various references to articles about Amstrad computers in non-Amstrad magazines. Printing out the 156k of information provides a very useful index and reference, be prepared to use over 250 sides of paper. I do hope Colin Baker produces AMSMAG88.BIN for the Library.

The program, in PD 2/5, we like the most is BREAK.BAS, a trivia quiz game. Potting the coloured balls i.e. answering a question correctly increases the size of your snooker break. I had to slow down the timing of the presentation of the questions and the response time allowed. Altering lines 560 and 970 - change 40 to a higher number, I suggest 100 should do the trick.

To use MEMGRAPH, copy BANKMAN.BAS and BANKMAN.BIN from your 6128 CPM Plus Master Disc onto PD 2/5. If you can deprotect BANKMAN.BAS alter line 180 to include RUN"MEMGRAPH.BAS" now when you run BANKMAN, MEMGRAPH will auto load. HOROSCOPE - requires an extra line '5 MODE 2', the default MODE 1 is untidy, for those of you using colour monitors adding 'BORDER 10:INK 0,13:INK 1,0' to line 5 makes reading text in MODE 2 much easier; also, whilst your playing around with HOROSCOPE, edit line 640 change ON I etc - to - ON NA etc. JACKPOT - I thought would be better in MODE 0, but I am still working on the problem. FAMILY - I do not understand, is it a form of the Life Game? MERCHANT is a space trading game, text only, I had to edit 3 line no's 880, 950, and 990 to remove the exclamation marks [!], also play the game in MODE 2, it makes the layout tidier. I did a screen dump of the first 2 screens this gave me the instructions and made the sequence of key presses much easier to remember.

PD 3/1 - HOME.BAS the budget program has a number of bugs. What does the command SWAP do and how is it used? I had to remove all reference to it on lines 880 and 900 before the program would run without

crashing. I spent several hours altering and adding a printer option to this program; I have called it HOMECOPY.BAS and hopefully John will include it on this disc. TODAY.BAS - has a bug(s), when you select the Easter Day Option, the program crashes after telling you the answer; as for the select a Special Day, it leaves me mystified, the calculations are missing; also a part of the program is ignored on how to calculate Friday the 13th's. I have played around with this and have now included it in the new improved version, shortly to be available from the library. Perhaps another member might like to add the missing Option 2.

SPELLING.BAS - has a fault, if you try and answer more than 20 questions. Another one to try and sort out: RAFFLES.BAS - A maze type game, doesn't show up too well on my green screen. However I like the guard dog. PJBOMBER.BAS - a BLITZ look a like with a high score save option, that is if you firstly change line 1050 to include OPENIN "PJBOMSCR" and add line 1265 CLOSEIN. AMSDIR.BAS - needs a lot of work to improve it, the various options should be available via a menu. CAT.BAS is a super program, I have used it to make a card index for all my individual disc cases. LABELS.BAS also works a treat, far easier to set up than the labels program in the Mini Office package.

There are a lot of DOC and ASCII files to read on PD 3/5, the Super Calc 2 data files BENDS.CAL and IMPSPRIN.CAL are a little out of my depth; however I had no trouble loading them. The graphic demo's are fine, as for FCAT and ROMREAD I haven't worked out their function yet. FONTY has a bug - line 830 gocub should read ---- you've guessed it!

AMSFAX - Your very own CEEFAX or ORACLE, is the sort of program I like; you can set the correct time of day by altering line 20. Getting an acceptable presentation of your data, that you enter from line 1000 onwards should improve your programming skills.

PD 4/1 includes some various FORTH languages, I spent some time trying these programs out but apart from some simple reverse Polish maths calculations that worked, the rest left me baffled. DS.COM and MDIR.COM are super, everyone should have a copy on each side of their CPM discs, DS only uses 2K and gives a full CAT of the directory. WC.COM is a word counter program, let it loose on your word processor text files and be amazed at the speed it gives you the correct answers. The ADJUST.COM file seems interesting; unfortunately I wasn't able to find a use for it. I don't have any 3 inch 700k plus discs to play with....

The programs on PD 5/2 are all CPM based. INVENT.COM writes files to the disc so be

careful and make a working back-up. SPELL.COM and its associated files MASTER.LEX, SPELL.DOC, SPELL-ED.COM, SORT.DOC and SORT.COM should be transferred to a blank formatted working disc, also required on the same side are the copies of the text files you intend to spell check. I have tested the program on TASWORD files and ordinary DOC files that are found bundled on the various PD software. If I were you I would not fill up the disc as, when in use, new files are created; leave 50k or so spare.

The second thing to do is print out both SPELL.DOC and SORT.DOC. These files can then be erased or you could use them for testing the program. Read and digest the information, and then you are ready to proceed. The MASTER.LEX file starts off at 17k, or exactly 1940 words, WC.COM could be used to count the size and might be a useful addition to your spell checker disc. MASTER.LEX is your start dictionary, working on your text files, and following the instructions will enlarge the dictionary data; I've now increased my copy to 2355 words.

In my experience I do not advise the use of SORT.COM until the end of the session, as it works incredibly slowly sorting your newly produced MASTER.LEX file into alphabetical order; don't be put off if nothing appears to happen, your computer just sits there and hums to itself for what seems like half an hour (I haven't actually timed it), and then all of a sudden it finishes with ++ DONE ++ and your even newer copy of MASTER.LEX the sorted version is present.

The SPELL-ED.COM program creates a file called NEW.LEX and then crashes. It is claimed that no damage is done and I have no evidence to the contrary. This program also rewrites your text files, so beware and only use copies. I do not have any other spelling checker utility; this CPM based set up works but seems rather clumsy and sluggish. However as a merit point the subtitle of SPELL.COM is "The Poor Persons Speller".

I originally tried out VDE.COM, and my first reaction was that as a text editor it was next to useless because I could not get the program to print out any of the text I had inputted. I then read the instructions in VDE.DOC and all was revealed; you could actually use it to create or add to your MASTER.LEX file. Remember to run SETKEYS KEYS6128.VDE before entering VDE.COM. This program needs and requires time and practice to use it correctly.

In conclusion I hope my comments will be of some use, and I look forward to receiving the other PD discs, that I have yet to try out.

REVIEW

CPM PLUS ON ROMs from Graduate Software

by
David Cutts

After receiving the original ROMs a few months ago, I was very impressed by the facilities provided and, despite several shortcomings, found them very helpful and easy to use.

However, I have recently received the upgraded ROMs and am compelled to report that they are an absolute delight to use and, even for those who may only occasionally use CPM+, the commands available still justify the very reasonable price tag.

Perhaps I may amplify on my opinion by detailing some of the more significant features of these extremely clever and innovative pieces of software. Those I have marked with an * are upgrades to the original ROMs and there are, of course, other features which are too numerous to detail in toto. A ROMboard or ROMbox is, of course, essential.

The facilities afforded by the Graduate ROMs include:

1. AMSDOS | COMMANDS

- (a) |D enters CPM+
Can be used with additional parameters; e.g. |D,"PROG" will enter CPM+ and load PROG.COM
- (b) |EMS early morning start
Will also accept additional parameters as in (a) above.
- (c) |PW (or |PASSWORD) built in password which may be called from within a Basic program.
Not hacker-proof but adequate.

Others include:

CPMVER
MYNAME
MYNAME,1
MYNAME,2
NOCPM *
OHELP *

The three |MYNAME commands above give variously, name, CPM registration, address. |NOCPM disables the CPM+ ROMs and |OHELP lists accessory ROMs, if any are installed.

2. CPM+ TRANSIENT COMMANDS

All the transient commands will accept additional parameters, as indicated in 1(a) above. Examples of the transient commands provided are:

- (a) DIR* may, in some instances, need DIR.COM on disk.

- (b) ERASE, RENAME, TYPE, USER, SHOW*, DATE* and others normally requiring COM files on disk.
- (c) BUILTIN lists all additional commands.
- (d) CAT* supplements DIR by adding free space and sorting files into alphabetical order. Drive can be specified, thus: CAT[dr:] same as in Amsdos.
- (e) CLS same as in Amsdos.
- (f) HOME returns cursor to top left of screen.
- (g) PALETTE as in CPM+ but with INK*, PEN* and PAPER* as in Amsdos; naturally associated with MODE re- number of colours.
A lovely refinement!
- (h) ROMCAT* lists the software contained in any accessory ROM supplied by Graduate Software. (Graduate can supply your favourite routines on ROM and have a range of standard ROMs at very reasonable cost)
- (i) SETLIST initiates printer with codes if desired.
- (j) CKEY, NKEY, SKEY are used to define the CTRL key (normal and shift mode) whilst EXPAND defines a character string to a single key stroke.
- (k) SIGNON* accesses CPM accessory ROMs but not such as UTOPIA, etc.
- (l) WAIT is self-explanatory.

As already mentioned, this summary does not cover all the commands provided.

3. USER INSTRUCTIONS

The new handbook is a simple no-nonsense affair which is adequate and straightforward with a Table of Contents, several examples and an Index...but, alas, it could have been put together more satisfactorily for, like the original version, it tends to fall apart at the seams as the whole thing is inadequately stapled; presumably, the overall cost was the main consideration. Somewhat too penny-pinching, in my opinion, as I would be prepared to pay a little more for a sturdier document.

Nevertheless, the ROMs are a gem; worth more than the asking price and I unreservedly recommend them to all CPM+ users. I look forward to hearing more about the products (ADLAN, etc) of this up-and-coming supplier.

Cost of CPM+ ROMs: £32.50, or £9.90 if you have the earlier version for upgrading. The ROMs are obtainable from: Graduate Software, 14 Forrester Avenue, Weston on Trent, Derby (tel:0332-702993)

TEXTPROC

Don Snoad delves into the depths of a lesser known word processor and doesn't like what he finds

INTRODUCTION

Textproc was written by Paul Townsend for the Amstrad CPC range of computers; the program, of about 16K, is marketed by Britannia Software Ltd and is available from Goldmark Systems on tape, disc or ROM.

From the outset, it is difficult to judge precisely what the programmer's objectives were in developing this word processor. If it was his intention to produce a program that was to be totally different at any cost from any other word processor, then he has succeeded admirably. The program is unconventional and structurally illogical; consequently, it is very difficult to get to grips with. It certainly has a number of features not found in any other word processor, but there are also a number of features essential to serious word processing that this program does not provide.

Uniquely, the program initialises with as many prompts as there are external ROMs, each prompt allowing the user to select or deselect any installed ROM (including the dos ROM!) - the intention being to enable external ROM commands to be called from within Textproc.

Once the ROM prompts have been answered, the main menu is displayed offering seven options and showing the status of available file size, bytes used, bytes free, column display mode and whether the customisation facility is toggled on or off.

The maximum file size available will vary according to the number of background ROMs initialised and which Textproc program (i.e. tape, disc or ROM) is in use. With only the dos ROM initialised, maximum file sizes will be of the order of 24K when using the cassette or disc-based Textproc or about 41K when the ROM version is used; both these file capacities will be reduced by about 3.3K if user-defined characters are in use via the customising facility provided by main menu Option 7.

THE PROGRAM

The program structure is outlined in the accompanying block diagram. As the diagram shows, the main menu offers seven options; namely:

- | | |
|--------------|---------------------------------|
| 1: Type In | 5: Print Text |
| 2: Edit Text | 6: Run External Commands |
| 3: Save Text | 7: Edit Display and Custom Mode |
| 4: Load Text | |

Option 7

The customising facility is in part quite useful in that it offers a choice of display mode and allows the user to define new printer sequences and function key expansion strings.

The customisation feature is presented under six operational headings. Operation 'A' allows the user to choose one of two display modes; namely, 80-column or 128-column (unfortunately, there is no provision for selecting any other column width) and there are certain constraints which determine whether the full 80-columns or 128-columns will be displayed and whether a single line of text will be shown on one line or two lines on the screen. Operations 'B' and 'C' enable the user to define a new character set (maximum of 113 characters) when 'custom' is switched on; when 'custom' is switched off, the program defaults to the standard character set. In addition, character definitions can be edited regardless of the 80- or 128-column display mode (whilst editing, the cursor changes to a red dot and the pixel behind the cursor can also be switched off!) and the printer sequences (i.e. underlining, special effects and printer pause) can be set up.

The user handbook states that ASCII codes 128 to 136 are used for special printer control sequences, 137 to 249 are reserved to correspond with any new character definitions and those beyond 249 are reserved for use within the program. The handbook also states that ASCII code 163 is 'reserved' for the £ symbol. However, all this data is perplexing since the Amstrad CPC computers are limited by a 7-bit printer port and, as I understand it, cannot handle ASCII codes beyond 127.

The expansion string facility under Operation 'C' is more straightforward and allows the user to define or edit a string of up to 32 characters against each of the eleven function keys in the numeric key pad. Operation 'D' provides the route for saving customised data to tape or disc; alternatively, the data can be saved as an integral part of the program, but this alternative is not available if the Textproc program in use is on ROM. Operation 'E' enables the user to load customised data previously saved on tape or disc, but again a constraint is imposed in that the file can be loaded only if there is more than 3K of memory free. Selecting Operation 'F' from the custom menu returns the user to the main menu.

Option 6

Selecting Option 6 from the main menu is in my view something and nothing. The sole purpose of Option 6 is to enable the user to call external commands such as [TAPE, [TAPE.OUT, [DISC, [DISC.IN and [DISC.OUT, and to call commands from initialised background ROMs. The option does not allow the use of the more useful commands such as CAtalog, ERAsE or RENAmE unless those commands are available via an initialised ROM. This option could have been better utilised to call the more frequently used housekeeping commands but, as it stands, its value as an integral part of Textproc is very limited. An obvious problem with this aspect of Textproc is that should the expansion string feature be fully utilised, such utilisation will override or at least clash with any command in an initialised background ROM that also employs the same function key.

Option 1

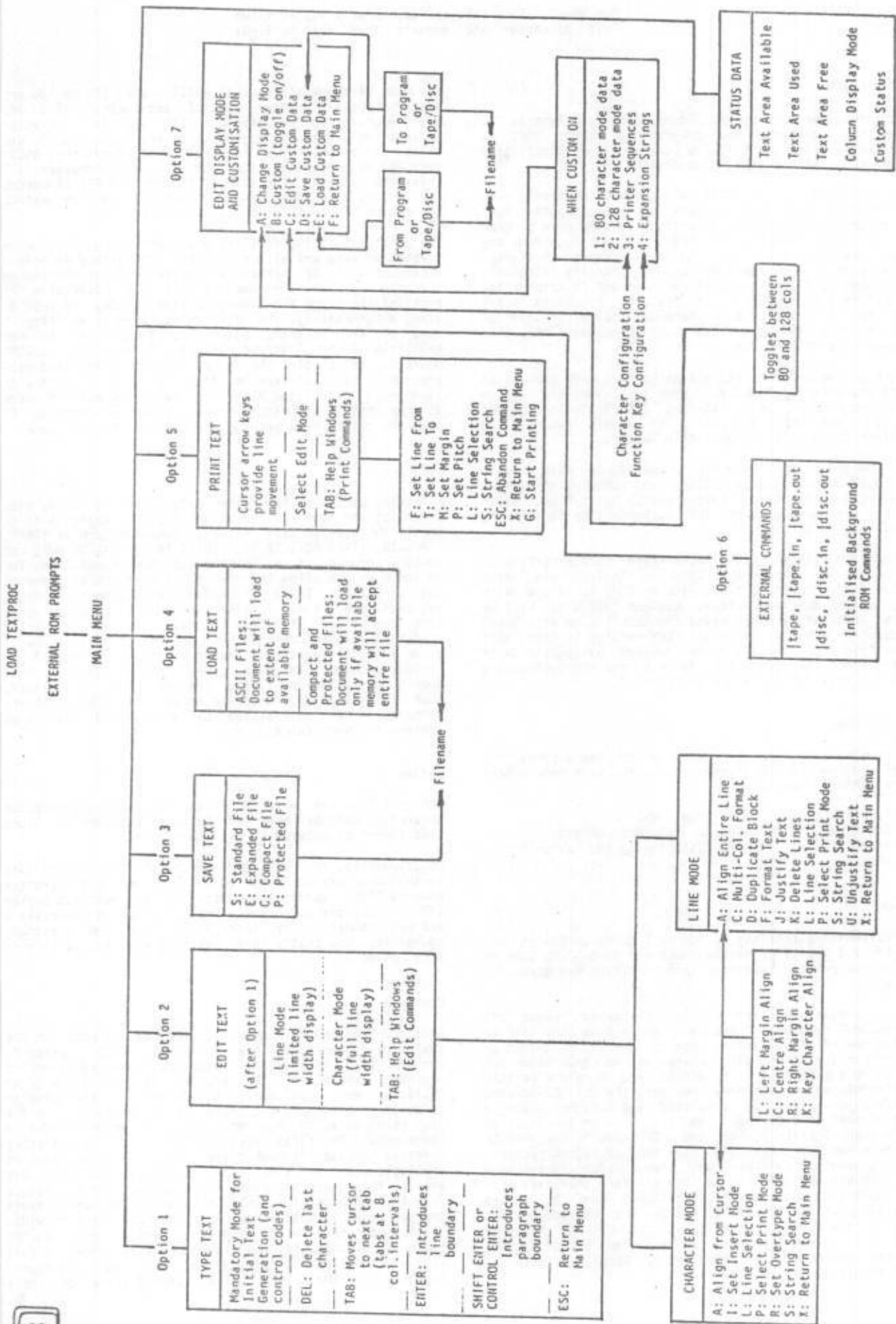
Option 1 from the main menu is the mandatory mode for generating the main body of text of a document. Volume text cannot be entered by any other route.

Unfortunately, the facilities which the program provides in this mode are confined to deleting the last character entered (DEL), moving the cursor to the next tab marker (TAB) - tabs are permanently set at 8-column intervals - and two commands for introducing line and paragraph boundaries. And that's it! Anything else has to be done from Option 2.

Option 2

Option 2 from the main menu is the editing mode for the text already generated via Option 1. Under Option 2, certain text manipulating sequences can be executed dependent upon whether the program is in line mode or character mode. On entry to Option 2, the program defaults to line mode but there is no information in the user handbook as to how one exits or enters either of these modes. On first reading, this is a frustrating omission because although there are ten editing features available when in line mode, only six of them are available in character mode. So far as one can deduce from the handbook, the only obvious differences between the two modes is that when in line mode the line width display may be limited and the cursor moves to the beginning of the line, whereas in character mode the full line width will be displayed but the cursor may appear anywhere in the line. The significance of these

REVIEW



► differences is not explained in the user handbook; in fact the handbook is so ambiguous that any newcomer to Textproc could be forgiven for being completely misled. In practice, these line and character modes do not exist as command modes, and references to them are typical examples of the unnecessary complexity indulged in by the handbook writer. The so-called modes, are merely cursor positions; in other words if the cursor happens to be at the start of a line it is described in the handbook as being in 'line mode', and when the cursor is anywhere else in a line of text it is in 'character mode'; effectively, this means that insert or overwrite commands (and consequently the use of the COPY key) can be given only when the cursor is in the line of text and not when it is at the start of a line. Even so, the statement made concerning the different availability of edit commands (according to the position of the cursor) is still valid, and this seems to be a totally pointless restriction.

The Option 2 edit mode command structure is very difficult to grasp. The DEL, CLR, and TAB key commands are immediately acted upon, but almost all the remaining commands require numerical or other parameters to be entered before the command can be executed. To add further confusion to an already difficult command structure, all kinds of 'symbols' appear on the screen (such as graphic blocks, scrolling digits, double quotation marks, repetition of double quotation marks, etc) and some of the required numerical inputs must be within certain specified ranges for them to be valid. If that were not enough, the keyboard arrow keys move the text not the cursor, and the COPY key responds only during an insert or overwrite operation.

Options 3 and 4

Option 3 is the Save Text facility, enabling a document to be saved to tape or disc having first set the appropriate external command via Option 6. The normal default environment will save to disc; however, if the Textproc program in use is on tape, or if the dos ROM was deselected on start up, file saving will default to tape.

When selecting Option 3, the user can choose one of four file types; these are: standard, expanded, compact or protected. Standard and expanded files are saved character by character in ASCII format, whereas compact and protected files are saved 'en bloc' as they stand. When opting to save a 'protected' file, a password will be prompted for and must be entered (it will be saved in encrypted form); the password, once entered, cannot be read by loading or listing the file.

According to the user handbook, standard files will be compatible with those generated by other programs; expanded files should be employed when data has to be sent to the printer via another operating system or hardware interface; and compact or protected files are presumably treated as conventional document file saving. Standard files can contain BASIC programs and are loadable in BASIC, but compact or protected files are incompatible with BASIC.

There seems to be all kinds of 'ifs' and 'buts' that influence any file saving operation and, although the program will allow a filename of up to 32 characters long, the filename must conform to a valid Amsdos filename. Since Amsdos requires a filename of no more than 16 characters for saving to tape or no more than 8 for saving to disc, one is left to wonder why Textproc provides 32 characters. File attributes must not be entered because the program allocates its own attributes (e.g. "." for compact files and "/" for protected files).

Option 4 is the Load Text facility and functions in a similar manner to Option 3. A standard or expanded file

will be loaded to the extent that the available memory will allow, whereas compact or protected files will not load at all unless there is sufficient memory available to accept the entire file. Protected files cannot be accessed without the appropriate password.

Option 5

Option 5 from the main menu is the Print Text facility which, according to the handbook, enables the user to use the cursor to provide line movements and provides the option to return to the edit mode. In practice, printing cannot be started without first answering four prompts concerning line numbers, margins and pitch, following which the print command can be given (the prompts appear at the bottom of the screen, but the prefaces essential to the prompts do not !).

Surprisingly, Option 5 also allows line selection and search facilities to be entered, which seems totally illogical. Other more important features such as text emphasis and printer control codes have to be entered from a sub-menu via Option 7 !

HELP

Two on-screen help displays are available, one in edit text mode (Option 2) and another in print text mode (Option 5). When in the relevant mode, the appropriate display can be accessed by pressing the TAB key. The print text help screen is reasonably straightforward and lists the prefaces for the prompts that need to be answered before printing can commence, but the edit text help screen does not show the restrictions on certain editing commands imposed by the cursor position (i.e. the so-called 'line and character modes').

DOCUMENTATION

The user handbook, first published in 1986, comprises a 26-page centre-stapled booklet in A5 size. The print is large and legible but there are no diagrams, no summary list of commands, and no detailed index. Apart from the mis-information about line and character modes, all the essential data is given in the handbook but it takes a lot of reading to sort out the wood from the trees. Like many program handbooks, there is great room for improvement especially in the book's overall structuring.

CONCLUSIONS

I am completely mystified by the programmer's reasoning for imposing separate text entry and editing modes, and I can see no useful purpose in having the string search and line selection features duplicated in the print menu. Neither can I see any sense in omitting the all-important prompt prefaces from the print menu.

A lot of work has gone into providing such features as external ROM select/deselect, function key expansion, customisation, file types and multi-column formatting, but less work than there could have been on the more fundamental necessities such as better housekeeping facilities (e.g. CATalog, ERASE and REName), block move/delete, file merge, headers/footers and page numbering, comprehensive cursor controls, unrestricted column and tab setting and a proper display of current column, line and page numbers - to name but a few.

The numerous omissions combined with the inherent constraints and unnecessary complexity of operation render this program impracticable as a serious word processor and, regretably, I cannot recommend it.

REVIEW

THE SILVER REED (MODELS EX42, EX43N AND EX44) TYPEWRITER PRINTER

by Don Snoad

Because of the nature and demands of my profession, I need a daisy-wheel printer and a dot matrix printer. A daisy-wheel printer is my primary requirement, but I later acquired a dot matrix printer for initial drafting and to reduce the unexpectedly high cost of print ribbons which are consumed at an alarming rate by my daisy-wheel printer.

I would have liked to purchase a combination printer that is in effect two printers in one and will provide a dot matrix or daisy-wheel print-out at the flick of a switch, but the cost of a printer of this type was and still is prohibitive. Nowadays, most users in my position would opt sensibly for a Juki 5510 and a Juki 6100, or perhaps one of the new laser printers, but my choice had to be made before the 5510 or laser printers were marketed so for various reasons I ended up with a MicroPeripherals MP-165 (which is a 9-pin Epson FX/RX compatible dot matrix printer) and a Silver Reed EX44 daisy-wheel combined typewriter/printer. The EX44 was chosen, in preference to the Juki 6100, to provide some flexibility for small jobs, envelope addressing and the like, as well as a standby in the event of a computer break-down.

The EX44 and its predecessor the EX43N are very similar models and the EX42 has only minor differences. All three models are mainly but not entirely Epson-compatible; all three are based on the Diablo 630 and are identical in their control codings; they also have the advantage of an 8-character 2nd keyboard and a full 12 inch platen. The departure from standard Epson/Ascii coding is acceptable, being confined to the characters/codes shown in the following table; in fact, in some ways the Silver Reed coding has its advantages and only six rarely used characters from the normal set are forfeit (i.e. \ ↑ ` { } ~).

Character	Ascii Code	SR Code
£	163	35
#	35	92
z (s/script 2)	-	94
½	169	96
µ	183	123
° (s/script 0)	-	125
±	-	126

An interface is required before the printer can be computer driven; serial- or parallel-connected interfaces are optionally available. All three models use the same daisy-wheels and print ribbon cassettes as well as the auto-correction tape. The daisy-wheels are not Qume-compatible but the range available from Silver Reed extends to 19 different wheels in English.

The machines are modern, wedge shaped, lightweight mains driven portables and are supplied with power cord and an all-over clip-on dust cover. The keyboard comprises

63 keys; in typewriter mode, 97 characters are available including those on the 2nd keyboard; in printer mode, 88 characters are available but the 2nd keyboard is inoperative. The typewriter/printer changeover switch, which can be used at any time to provide a mix between typewritten and computer-driven output, is sited on the interface box. The keyboard includes a 10, 12 and 15 character pitch selector and the platen width (or length if you prefer) will accommodate up to 110 columns in 10 CPI, 132 columns in 12 CPI or 165 columns in 15 CPI. Line spacing can be set to 0, 1, 1½ or 2 lines.

The machines are equipped with an adjustable paper edge guide for single sheet manual feed (no tractor feed option is marketed) and an automatic character eraser/corrector with a 16-character memory. The manual sheet feed has the advantage over auto feed (such as that used on the Juki 6100) in that each sheet can be positioned as required rather than where the auto-feed unit dictates (this often creates problems when positioning headers, etc). A mechanism is fitted at one end of the platen which when set performs as a paper end indicator.

In printer mode, typing speed is approx 12 characters/second which is rather slow by printer standards but still considerably faster than my four-fingered typing. The interfaces are equipped with four banks of dip switches to provide for 17 national languages plus carriage return and line feed controls. The serial interface includes additional switches for Xon/Xoff protocol, even/odd/no parity, 7 or 8 data bit, 1 or 2 stop bit and baud rates of 300, 600, 1200, 2400, 4800 and 9600. A data buffer of 256 bytes is provided. The Silver Reed I/F.40 parallel interface connects directly to the printer port on the CPC6128; the serial version would additionally require an Amstrad RS232 or similar interface.

In conjunction with a wide range of business software, my Silver Reed EX44 has been in regular use for over two years (in excess of 2000 operating hours); there is no obvious sign of deterioration electrically or mechanically and it has never malfunctioned or broken down. Although the daisy-wheels are expensive (about £18 each) they are robust and I am still using the original wheel supplied with the machine. I always use carbon ribbons (never fabric) which have a surprisingly short life and cost about £2.65 each. CPC USER is produced on my Silver Reed and each edition consumes between 5 and 6 cassettes.

Two years ago, the recommended retail price of the Silver Reed EX43N and EX44 models was around £350, but many retailers were selling them at £260. Although now out of production, the EX43N and EX44 can still be obtained, new, for about £210. An interface will cost an extra £50 to £60.

This Index covers the twelve issues of the UAUG Journal published in the two-year period from January 1987 to December 1988. The twelve issues here indexed are the original Newsletters, Issues 1 to 5 inclusive, and CPC USER Issues 6 to 12 inclusive.

The index is presented in alphabetical order of groups and subjects. The numbers shown against a subject are the Journal Issue Number followed by the Page Number; where subjects extend over more than a single page, only the first page number on which the subject starts is given.

ADVERTISEMENTS

- Members, 1-10, 2-6, 3-10, 4-14, 5-24, 6-23, 7-22, 8-28, 9-27, 10-28, 11-43, 12-36
- Traders, 3-10, 4-14, 5-22, 8-29, 9-29, 10-32, 11-45, 12-38

DATABASES

- Cardbox, 11-21
- Database, 10-9
- Masterfile III, 6-9

COMMUNICATIONS

- Axis, 11-24
- Circuit Mode/Software, 6-14
- Introduction to Prestel, 1-7
- Skywave Multi-port Interface, 1-4

FEATURES

- Contact
 - Pen Pal/Help Line, 12-2
- Keyboard
 - Business Software, 6-8
 - CPC v PCW Formats, 8-8
 - Matrix Graph Option, 10-4
 - Printer T-Switch, 7-7
 - Protection v Copying, 8-8
 - Quill Word Processor, 8-8
 - ROM Restrictions, 7-7, 8-8
 - SR.EX43N Printer and Protex, 6-8
 - Unsqueezing the Squeezed, 9-5
- Mailbox
 - Abbreviations in Articles, 11-30
 - Amateur Radio/Communications, 10-11
 - Amstrad Show, 5-6
 - Amtix Awards, 2-2
 - Analogue-to-Digital Conversion, 12-17
 - Auto-loading CP/M+ Programs, 11-28, 11-35
 - Azimuth Angle,
 - Setting Tape Heads to, 12-16
 - Bonzo Super Meddler, 11-28
 - Brunword, 8-9
 - Calculator Program, 11-32
 - Call Addresses, 10-9, 10-12, 11-26, 11-28, 12-18
 - Citizen 120D Printer, 8-9
 - Comlink, 10-11
 - Complaint re PD Software, 8-9
 - Computer Club in Bury, Lands, 11-29
 - Configuring Wordstar, 11-26
 - Copyright Question, 5-8, 7-10
 - Cost of UAUG PD Software, 11-26
 - CPC/PC Compatability, 12-17
 - CP/M for Beginners, 11-35
 - Diagrams with Tasword, 12-17
 - Digital Control Lines, 12-17
 - Disc Cases, 9-10, 10-13

- Disc Catalog Print-out, 11-26
- Disc Copying Program, 11-27
- Disc Labelling, 8-11, 9-10, 10-10
- Discology, 11-28
- Discovery Plus, 11-28
- Disc Sector Reading/Writing, 11-26
- Disc Utility HCAT, 10-8
- Discology, 7-10
- Discovery Plus, 7-10
- Dr.Logo, 10-9, 11-31
- DTP and Typesetting, 10-10
- Easi-Amsword, 11-34
- Engineering/Science
 - Applications Software, 12-17
- Engineering Programs
 - using Supercalc2, 10-12
- Exchange TV for Colour Monitor, 6-15
- FIDO Utility, 10-10
- Font Package for CP/M Protex, 11-31
- Free Software Handbook, 10-13
- Hire Before You Buy, 5-8
- Info-Script, 11-27
- Juki 6000P Printer, 9-11
- JY2 Joystick Repair, 6-15
- Magazine Index, 5-6
- Matrix, 11-34
- Membership Fluctuation, 11-33
- Mini Office II, 9-10, 10-10
- Mini Office II/Quendata Problem, 8-10
- Monitor Brightness/Contrast, 12-17
- Monitors from Comet, 7-10, 8-11
- MP165 Download Character Set, 12-17
- MP-1 Modulator, 8-10
- MP-2 Modulator, 8-11
- MSX/CPC Compatibility, 10-12
- Multiface II, 7-10, 11-34
- NSWP Utility, 10-13, 11-26, 11-28
- Oddjob Utility, 11-27
- Offer of Help
 - with Type-ins, etc, 11-28
- Panasonic KX-P1081 Printer, 9-11
- Plastic Disc Boxes, 11-32
- Programming Utility UTP.BAS, 10-8
- Programs for 6128, 5-8
- Protex Control Code Query, 2-2, 3-3, 4-4, 8-10
- Protex/DMP2000 Problems, 8-10
- Quality of User Manuals, 11-30
- RAMdisk in Tasword, 12-17
- Reading/Writing Disc Sectors, 11-26
- Request for AMS, 3-3
- Request for Catering Program, 10-10
- Request for CW/RTTY Program, 2-2
- Request for JANET/BITNET info, 7-10
- Request for
 - Protex/Masterfile III help, 8-10
- Request for
 - Spectrum/CPC Conversion, 8-9, 11-27, 12-3
- Request for
 - Stop Press help, 8-11, 11-31
- Request for Weather Program, 2-2
- Response to Appeal, 5-7
- SARUG, 10-12
- Screen Dump from Dr.Logo, 10-9
- Scrivener, 11-28
- Speed of Z80, 11-26
- Spectrum/CPC6128 Emulator, 10-11
- Star NL10 Printer, 11-33

INDEX

Tape Loading/Saving Problems, 11-34
Testing Printers, 12-20
Transport/Driving
 Simulator Programs, 11-34
UAUG Publicity, 11-32
Upgrading the CPC, 12-19
WACCI, 11-26
Word Perfect, 11-34
£ v # Symbols, 11-28

Monitor

NewWord, 7-5
Mini Office II, 11-7
MP's Club Mailing List, 6-6
Second-hand Printer, 6-6

HARDWARE

Citizen Printers, 9-15
E.S. Lightpen, 2-3
Low Cost 2nd Disc Drive, 7-12, 8-4, 8-11
MP-1 to MP-2 Conversion, 12-15
Silver Reed Typewriter/Printer, 12-32
Simple Romboard Surgery,
 9-16, 11-33, 12-14
Skywave Multi-port RS232, 1-4
Star LC24-10 Printer, 11-15
Upgrading the CPC, 11-20

HINTS AND TIPS

Basic

Location Addresses, 11-8
Snippets of Wisdom, 12-10

CP/M

Disc and File Cataloguing, 9-22
Help, 1-2, 10-14
Self-loading Programs, 10-26
CP/M+ on ROMs, 12-28

Games

Elite, 3-7
Elite Docking, 1-2
Mutant Monty, 3-7

Hardware

Printer Platen Refurbishment, 10-7

MISCELLANEOUS ARTICLES

Configuring the CPC for Wordstar,
 10-24, 11-26
Disc and File Cataloguing, 9-22
DOS Compatibility, 8-15
Getting to Know You, 5-12
Hire before Buying, 5-8
Low Cost 2nd Disc Drive,
 7-12, 8-4, 8-11
Make Your CP/M Programs
 Self-loading, 10-26
Of ROMs and Discs and Things, 7-4
Question of Format, 5-11
Read the Manual, 8-23
Simple Romboard Surgery, 9-16, 11-33
The Copyright Act Amendment, 5-11
The Copyright Debate, 5-8
This and That, 11-36
6128 into 464 Will Go, 5-10
Upgrading the CPC, 11-20
Z80-Series Microprocessor, 12-7

NEWS ITEMS

Industry, 5-4, 6-4, 7-3, 8-4, 11-2, 12-3

UAUG, 3-1, 4-3, 5-4, 6-3, 7-3, 8-3,
 8-26, 9-3, 11-2, 12-3

OPERATING SYSTEMS

Rodos, 6-11
Centrox (Unix Shell), 11-12, 11-41
CP/M+ on ROMs, 12-28

PROGRAMMING

Basic

Basic Computer Literacy, 7-17
Basic Data Protection, 8-22
Editing with a wp, 1-2
General, 11-8
Improve Your Program Writing -
 Saving memory, 11-9
 Improving Readability, 11-10
 Speeding up Programs, 11-10
Introduction, 3-8, 4-7
Location Addresses, 11-8
Loops, 4-7
Programming RSXs, 8-24, 9-20, 11-33
Snippets of Wisdom, 12-10
String Input Routine, 10-16

Eprom

Programmer, 5-16

Nevada Fortran

Compiled Language Programming, 6-16
NF for Beginners, 7-18

Other

ADA, History of, 9-18
CPC Function Keys, 6-19
Configuring Wordstar, 10-24, 11-26
Programming Languages Intro, 7-16
Protex/Merge Disc Loader, 10-17

Pascal

Introduction to Pascal, 12-8

REPORTS

Adventuring Mags and Clubs, 6-7, 7-6, 8-6
Computer Show 1987, 1-3
New CPC Software, 10-23

REVIEWS

Adventuring

Acheton, 12-12
Adventuring Tutorial, 5-21
Case of the Mixed Up Shymer, 10-3
Countdown to Doom, 12-12
Corruption, 12-13
Discount Offers, 12-12
General, 6-7, 9-4, 10-2
Giant Killer, 12-12
Guild of Thieves, 10-3
Infocoms, 7-6
Introduction, 5-21
Kingdom of Hamil, 12-12
Moonmist, 8-7
Philosophers Quest, 12-12
Return to Doom, 12-12
Witness, 8-7

Books

Amstrad Disc Companion, 9-27
Computer Challenges
 for the Amstrad, 11-37
Sub-routines for the Amstrad, 9-27

Communications
 Cirket Modem/Software, 6-14
 Axis, 11-24

Databases
 Masterfile III, 6-9
 Cardbox, 11-21

Datamerge
 Scrivener, 10-21

Games
 Airwolf, 12-5
 Amarote, 4-5
 Advanced Tactical Fighter, 10-5
 Battleships, 12-5
 Commando, 12-5
 Disc 50, 3-4
 Dizzy, 5-15
 Enduro Racer, 5-14
 Every Second Counts, 10-6
 F15 Strike Eagle, 6-5
 Galletron, 4-6
 Head over Heels, 6-5
 Hobbit, 2-4
 Ikari Warriors (poke), 12-5
 Knight Games, 1-5
 Mission Jupiter, 5-15
 New Beginning, 12-4
 Paperboy, 5-14
 Price of Magic, 2-4
 Return of the Jedi, 12-4
 Tau Ceti, 11-4
 Thrust, 3-5
 3D Driver, 11-4

Public Domain
 UAUG Software Review, 12-26

Spreadsheets
 Matrix Plus, 9-12
 Stockmarket, 6-10

Word Processors
 Brunword, 7-8
 Microscript, 11-16
 Microword, 11-11
 Mini Office II, 6-12
 PenDown, 9-14
 Pocket Protext, 9-28
 Pyaword, 8-12
 Textproc, 12-29
 Which Word Processor?, 5-19
 WYSIWYG or Is It?, 5-20

Hardware
 Brother M-1109 Printer, 3-6
 Citizen Printers, 9-15
 Eprom Programmer, 5-16
 E.S.Lightpen, 2-3
 RS232, 1-4
 Silver Reed EX43N Printer, 12-32

Multi-Function Programs
 Mini Office II, 1-6

Utilities
 Bankraid III, 12-3, 12-6
 Bonzo Super Meddler, 5-17
 DLan, 8-5
 Multiface II, 5-17
 Mirage Imager III, 5-17
 Qualitas Plus, 9-13, 10-20
 Tas-Diary, 6-10
 Tas-Sign, 5-18

SOFTWARE

Adventure
 Case of the Mixed Up Shymer, 10-3
 General, 6-7, 9-4, 10-2
 Guild of Thieves, 10-3
 Infocoms, 7-6
 Introduction, 5-21
 Moonmist, 8-7
 Witness, 8-7

Business
 Axis, 11-24
 Brunword, 7-8
 Cardbox, 11-21
 Masterfile III, 6-9
 Matrix Plus, 9-12
 Microscript, 11-16
 Microword, 11-11
 Mini Office II, 1-6, 6-12
 Pocket Protext, 9-28
 Portfolio Manager, 6-10
 Pyaword, 8-12
 Stockmarket, 6-10
 Tas-Diary, 6-10
 Textproc, 12-29

Communications
 Cirket Modem/Software, 6-14
 DLan, 8-5

Games
 Amarote, 4-5
 Disc 50, 3-4
 Dizzy, 5-15
 Enduro Racer, 5-14
 F15 Strike Eagle, 6-5
 Galletron, 4-6
 Head over Heels, 6-5
 Hobbit, 2-4
 Knight Games, 1-5
 Mission Jupiter, 5-15
 Paperboy, 5-14
 Price of Magic, 2-4
 Tau Ceti, 11-4
 Thrust, 3-5
 3D Driver, 11-4

TYPE-INS

Bar Chart, 4-4
 Calculator, 9-8, 11-32
 Call Addresses, 11-28
 Digital Clock, 11-14
 Disc Box Labeller, 7-15
 Disc Catalog, 11-26
 Disc Copier, 11-27
 Graphics Effect, 4-4
 HCAT, 10-15
 Reading/Writing Disc Sectors, 11-26
 Temp Conversion, 5-9
 UTP, 10-15

UAUG SERVICES

Book Library, 1-8, 2-5, 3-12, 4-10, 5-27,
 7-11, 8-14, 9-26, 11-37

Competition, 1-9, 2-7, 3-9, 4-8, 5-13,
 6-22, 7-21, 8-27, 11-44

PD Software Library, 1-8, 2-5, 3-1, 4-9,
 5-26, 6-20, 8-19, 9-6,
 10-18, 11-38, 12-22

Software/Hardware Offers, 1-8, 2-5, 3-13,
 4-11, 5-28, 6-20, 9-25

SALES & WANTED

**** AUTUMN 88 BARGINS ****

Gary Carter, 1 Magnolia Close, Fareham, Hants, PO14 1PX
Tel: (0329) 281324 any evening

AMSTRAD CPC CASSETTE SOFTWARE

Gatecrasher	Hold Fast
Bridge-It	Rock'N Wrestle
Satellite Warrior	Terrormolinos
Jet Boot Jack	Confuzion
Electro Freddy	Gems of Stradus
Frank N Stein	Jammin
Dragon's Gold	Paws
Blagger	The Covenant
Atom Smasher	Execution
The Key Factor	Match Point
Fu-Kung in Las Vegas	Terra Cognita
Subterranean Stryker	Death Pit
Gems of Stradus	Binky
Oh Mummy	Fire Ant
Traffic	Hard Hat Mack
Meltdown	The Spanish Tutor Level A
Doppleganger	Frank Bruno's Boxing
Timeman One	Colony
Timeman Two	Las Vegas Video Poker
Animal Vegetable Mineral	Sir Lancelot
Hi Rise	Knight Tyme
Wizard's Lair	Hero of the Golden Talisman
Shadow of the Bear	Zub
Argo Navis	Hot Costa Capers

PRICE: Per Title	-	65p	
5 Titles	-	£3.00	(60p per Title, Save 25p)
10 Titles	-	£5.50	(55p per Title, Save £1.00)
20 Titles	-	£10.00	(50p per Title, Save £3.00)

POSTAGE: Per Title	-	25p	
5 Titles	-	£1.00	Please add to all orders if they are to be posted
10 Titles	-	£1.75	
20 Titles	-	£3.25	

HISOFT 'C' FOR THE AMSTRAD CPC

- On 3 inch Disk
- Complete with Manual
- Fast Compiler for popular language

++ HALF PRICE OFFER SAVE £20.00 ++

Retail Price from Hisoft £39.95. FROM THE UAUG ONLY £19.95 Incl P&P!!!

AMSTRAD CPC PRINTER CABLE

- 1 Metre Long
- Centronics Parallel to CPC Printer Port

Usually Retail at £8 - £15. FROM THE UAUG ONLY £5.00 Incl P&P!!!

SOFTWARE FOR SALE

On tape for the CPCs

- Laser Basic..... £4.99
- Laser Compiler.... £4.99
- Armageddon Man.... £3.99
- Quill+Illustrator. £3.50
- Marble Madness
+ Construction Set £3.50
- Star Wars..... £2.99
- Nexor..... £2.99
- Predator..... £2.99
- Hunt for
Red October £3.99
- Sun Star..... £1.99
- First Steps with
the Mr Men .99p
- Raid..... £1.99
- Skyfox..... £1.50
- Tank Busters..... .99p
- Xevious..... .99p
- Beach Head..... .99p
- Rasterscan..... .99p
- Flash Gordon..... .99p
- Fighter Pilot..... .99p
- Scalextric..... .99p
- Mini Office..... .99p

Prestige Collection
includes Eidolon, Rescue
on Fractalus, Ballblazer,
Koronis Rift (instructions
in French)..... £2.50
Coin-op Connexion
includes Crystal Castles,
Breakthru, Express Raider,
Metro Cross..... £2.50

PLEASE ADD 40p PER TAPE
TO COVER POSTAGE/PACKING

There's nothing wrong with
any of the above; they're
simply not wanted.

SOFTWARE WANTED

SUPER SPRITES
by Pride Utilities

MICRO GRAPHICS by ?

Both the above programs
required on tape for the
464. Will pay cash or
swap for any of the above
software

Also wanted: any other
packages on tape for 464
(or 464 + 64k memory exp)
to do with graphics but
not the Image System.

John Packham
60 Hightown Towers
Warburton Road
Southampton
Hants. SO2.6HH

COMPUTER FOR SALE

CPC464 with colour monitor
upgraded to 6128 standard
with RAM chip and Dk'tronics
64k memory expansion; also,
DD-1 disc drive and joystick.
Lots of games on tape and disc.
£425 or near offer.

PHOTOGRAPHIC DARKROOM EQUIPMENT
FOR SALE

Durst 601 enlarger with CLS66
colour head and black and white
head with condensers.
For 2 1/4 square or 35mm negs

Durst TIM60 electronic timer

Jobo T.B.E. temperature control

Durst C.N.A. 3-channel colour
analyser with mains adapter

Durst 3.5, 50mm lens Comonar for
35mm film, plus Rollienar EL 4.5
75mm lens for 2 1/4 square negs

Paterson Minor and Major
focus finders

Developing tanks for 35mm and
2 1/4 inch films; also tanks
and motor base for prints up
to 15 x 12 inches

£650, or exchange for Amiga
with colour monitor and disc
drive

Kenneth Hodgson
12 Eames Avenue
Stoneclough
Nr Radcliffe
Lancs. M26.9HN

SOFTWARE FOR SALE

- Colossus Bridge (on tape).... £ 6.00
- Infodroid..... (on tape).... £ 2.50
- Driller..... (on disc).... £ 7.50
- Deactivators... (on tape).... £ 2.50
- Enduro Racer... (on tape).... £ 2.50
- Maxam..... (on tape).... £ 8.50
- Word Perfect... (on tape).... £ 6.50

The following five budget titles on
tape for £ 3.00:
Colony, Kikstart II, Saboteur, Metal
Army and Battleships.

All prices include 1st class postage

John Goodwin, 39 Fourwells Drive,
Hackenthorpe, Sheffield S12.4JB

TRADE ADVERTISEMENTS

THE COMPUTER STORE

PROPRIETOR : ALEX AIRD

AMSTRAD DISC SOFTWARE

Barry McGuigan's Boxing	4.99
Challenge of the Gobots	5.99
Crystal Castles	4.99
Dogfight 2187	4.99
Doomsday Blues	4.99
Druid	4.99
Fifth Quadrant	4.99
Fifth Axis	4.99
Four Pack (Manic Miner, etc)	4.99
Hacker	4.99
Hive	4.99
Howard the Duck	4.99
Hydrofool	5.99
Kinetic	4.99
Kung Fu Master	4.99
Little Computer People	4.99
Mr Weems and the She Vampires	4.99
Mission Omega	4.99
Ping Pong	4.99
Revolution	4.99
Rescue on Fractalus	4.99
Stainless Steel	4.99
Starstrike II	4.99
Strike Force Cobra	4.99
Spy v Spy	4.99
Triaxos	4.99
Tempest	4.99

MORE CASSETTE GAMES NEW IN THIS MONTH

Ace of Aces	3.99
Army Moves	4.99
Arkanoid	4.99
Batman	4.99
Cobra	4.99
Freddy Hardest	4.99
Game Over	4.99
Green Beret	4.99
Head over Heels	4.99
Into the Eagles Nest	3.99
Konami Golf	4.99
Mag Max	4.99
Metrocross	3.99
Mutants	3.99
Short Circuit	3.99
Slap Fight	4.99
Top Gun	4.99
Tai Pan	4.99
Wizball	4.99
Zoids	2.99

AMSTRAD TAPE SOFTWARE

Hunchback	3.99
It's a Knockout	3.99
Infiltrator	3.99
Great Escape	3.99
Star Games I	4.99
V	3.99
Jet Set Willy the Final Frontier	2.99
Micro Value II	3.99
Manic Miner	2.99
World Series Baseball	3.99
Galvan	3.99
Yie ar Kung Fu	3.99
Highlander	3.99
Movie	3.99
Mario Bros.	3.99
Amtix Accolades	4.99
Saboteur II	3.99
Acrojet	3.99
Ping Pong	3.99
Shadlins Road	2.99
Yie ar Kung Fu II	3.99
Micro Value	3.99
Nemesis	3.99
10th Frame	3.99
Now Games 3 (5 games)	3.99
Donkey Kong	3.99
America's Cup Challenge	3.99

BUDGET GAMES

3D Starfighter (Code Masters)	1.99
Agent X II (Mastertronic)	1.99
BMX Simulator (Code Masters)	1.99
Grid Iron (Top Ten)	1.99
Mega Bucks (Firebird)	1.99
Metalyx (Alternative)	1.99
Mission Genocide (Firebird)	1.99
Pro Ski Simulator (Code Masters)	1.99
Smashed (Alternative)	1.99
Tank Busters (Firebird)	1.99
Venom (Firebird)	1.99

EUROMAX JOYSTICKS (all microswitch)

Elite	9.95	Professional	15.95
Micro Ace	12.95	Pro 5000 Clear	15.95
Konix Speed King (incl free game)	9.95		
Wix Card Cursor Controller	3.95		
DD40-L Disc Bank (20 cased)	12.95		
Proto Disc Box (10 uncased)	5.99		

INFOCOM GAMES ON AMIGA AND ATARI ST AT HALF PRICE PHONE 021 770 0468
MAKE CHEQUES PAYABLE TO AIRD SERVICES

SEND YOUR ORDER TO THE COMPUTER SHOP

UNIT 82, IN SHOPS, 2/8 GREENWOOD WAY, CHELMSLEY WOOD SHOPPING CENTRE
CHELMSLEY WOOD, BIRMINGHAM B37 5TL

OR CALL IN AND SEE OUR LARGE RANGE OF AMSTRAD CPC SOFTWARE

THE UNITED AMSTRAD USER GROUP

EXECUTIVE COMMITTEE

CHAIRMAN : Tony Baker
26 Uplands Crescent, FAREHAM, Hants. PO16.7JY
Telephone: 0329 - 234291

SECRETARY : Paul Owen
41 Kings Road, GOSPORT, Hants. PO12.1PX
Telephone: 0705 - 526366

TREASURER : Gary Carter
1 Magnolia Close, FAREHAM, Hants. PO14.1PX
Telephone: 0329 - 281324

MANAGEMENT COMMITTEE

Public Domain
Software Librarian
John Blessing
26 Chichester Close
West Wellow
nr ROMSEY
Hants. SO51.6EY
(tele: 0794 - 22804)

Publicity Manager
Simon Linssen
13 Furzedown Road
Highfield
SOUTHAMPTON
Hants. SO2.1PN

CPC USER
Executive Editor
Don Snoad
85 Woolston Road
Butlocks Heath
SOUTHAMPTON
Hants. SO3.5FN

Discount and
Advertising Manager

(to be appointed)

Computer Book
Librarian
Brian McKiddie
29 Hill Park Road
GOSPORT
Hants. PO12.3EB
(tele: 0705 - 580538)

Sales Manager

(to be appointed)

Telephone numbers should be called only between
6.30 - 8.30pm weekdays or 4.30 - 8.30pm at weekends

THE UAUG JOINT COMMITTEE COMPRISES MEMBERS OF THE EXECUTIVE AND MANAGEMENT COMMITTEES

The United Amstrad User Group was founded in 1986 by a handful of dedicated CPC enthusiasts. Membership now extends throughout Britain. The continuing success of the Group is due to the low membership subscription and five-star service; this includes:

- * Bi-monthly magazine
- * Computer Book Library
- * Public Domain Software Library
- * Extensive Discount Agreements
- * Comprehensive Help, Advice and Support.

The bi-monthly magazine is written by CPC users for CPC users and contains authoritative reviews and articles, as well as other regular features specific to the Amstrad CPC computers. The magazine also provides three help lines: Mailbox (for general correspondence, member-to-member contact, etc), Keyboard (for resolving members computing problems) and Monitor (a members' complaints bureau). The magazine carries trade and member advertisements; members ads are published free of charge.

The computer book library is operated by post and is open to all members.

Books may be hired by the month for a nominal fee.

Most of the books have been donated and are specific to CPC computers.

The public domain software library contains many programs covering games, business, educational, utilities and programming languages. The library is open to all members and is free of charge.

The discount service to members is extensive. Companies offering discounts to members include Durell Software, Siren Software, HSV Computer Services, Micro Prose, Timatic Systems and Alligata Software; discounts range from 5% to 35% or more, and include games/business software, hardware, discs, disc storage boxes, listing paper and printer ribbons. In addition to arrangements with traders, the UAUG also maintains a small stock of joysticks and games/business software at prices substantially lower than retail.

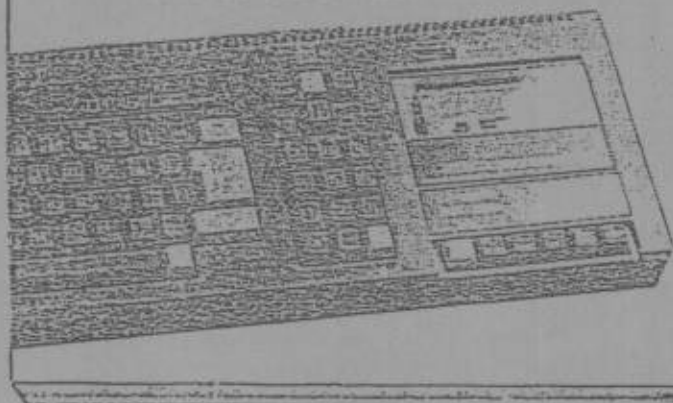
HELP TO STRENGTHEN THE GROUP.....GET A FRIEND TO JOIN, NOW

ANNUAL MEMBERSHIP SUBSCRIPTION: £5

CPC

USER

THE BI-MONTHLY MAGAZINE
OF THE
UNITED AMSTRAD USER GROUP



PUBLICATION DATES

CPC USER is published on the first day of February, April, June, August, October and December.

Contributions and other material for publication should be sent to the Editor by the first day of the month preceding publication.

