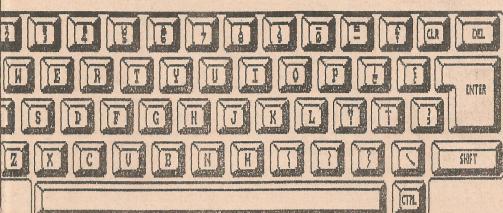
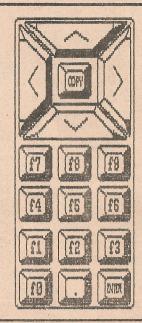
SAK COLOUR PERSONAL COMPUTER

CPC664 ETTCCLOUR

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CPC USER

UNITED ANSTRAD USER GROUP bi-monthly magazine

Version Hints & Tips Credits Articles Reviews Regular Spots PTTPTTPTTPTTPTTPTTPTTPT Laurananuanuanuanuanua Issue No.: 26 Aven Arcade Action
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MEMORANDUM



All material sent for publishing in CPC USER should be sent directly to the Executive Editor, and should preferably be sent as a Protext, Tasword, Pyraword or Mini Office file, or alternatively as a standard ASCII file. All articles are prefered on disc or tape, but typed or handwritten articles are accepted providing they are legible.

CPC USER has a selection of Sub-Editors; so if you have any problems which they may be able to answer then please contact them directly. It will be quicker!

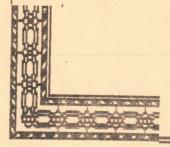
The Executive Editor reserves the right to edit and to print any material sent unless it is marked 'NOT FOR PUBLICATION'.

Thank you for your support.

PRESS DATE:-

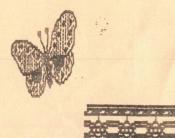
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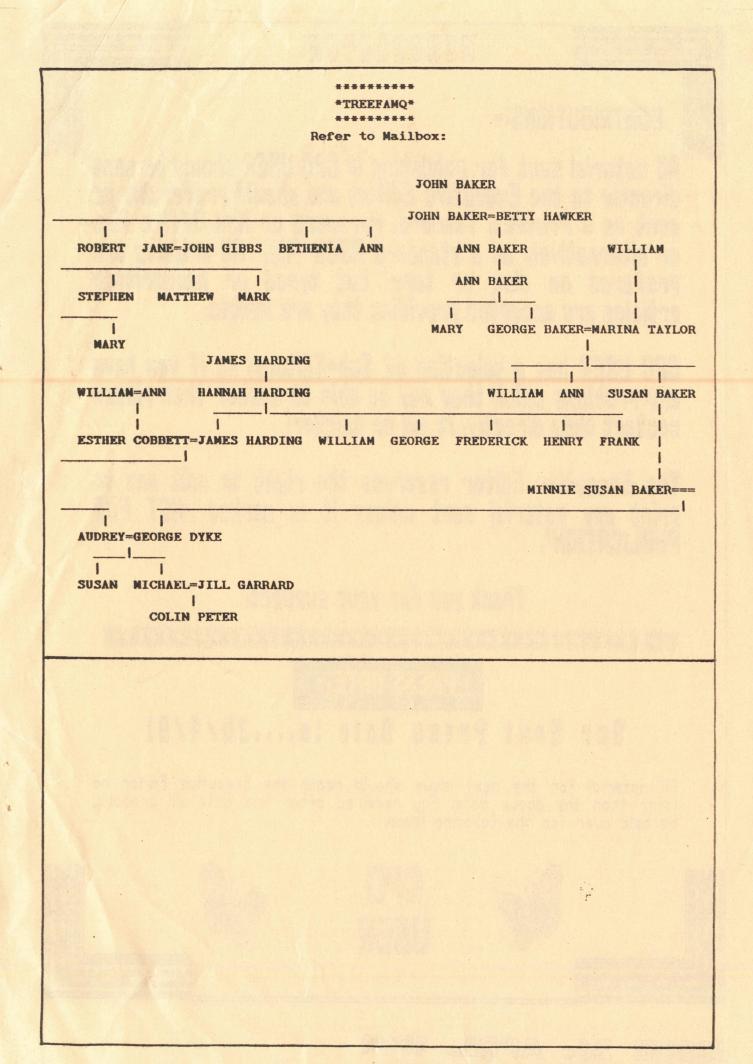
All material for the next issue should reach the Executive Editor no later than the above date. Any received after this date will probably be held over for the following issue.





CPC USER





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Keyword enables you to quickly and effectively make use of the complete wealth of the English language. Type in a word and straight away see a comprehensive list of alternatives. With over 10,000 synonyms and antonyms, 1000 main subject headings combined with its ease of use and rapid speed, you'll wonder how you ever managed without it.

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Pandora is a very first version of the BASIC programming language, designed to help you write fast action arcade type games in a fraction of the time it takes using machine code. Using simple basic commands, it requires no knowledge of assemblers. It includes a super-fast multi featured sprite editor and comes with 48 sprites as standard. Compiled to stand alone program with extensive graphics and sound facilities.

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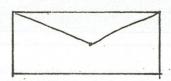
Daytime telephone no in case of queries:...... CPC01





Richard Fairhurst of Rutland starts this months column with a complaint:-I'm writing about the De-Cable review in issue 25. Not only was it written to an appalling standard, but it contained numerous inaccuracies to bias itself towards the product. Maxell 3" discs can be bought for around £17 for 10, not "nearly £30" as the reviewer stated. The quoted price of 22p for each 5.25 disc will only buy you poor quality unbranded discs. It is also stated that you have instant access to three sides or "1080K" of disc space without flipping the disc. In fact, the real figure (for 3 Data formatted sides) is 534K. For more, you will need a new DOS like RAM/ROMDOS, RODOS or MAGIC DOS. However, the most important thing excluded from the review was that Dee Geake, the author of this flattering piece, is actually the manufacturer of "De-Cable". This raises the question - did the U.A.U.G. know of this connection? If no, then you and the membership have been taken for a ride. If yes, then how can you claim to be a group run for the benefit of the membership? I would like to add that I "CPC USER" and have found both especially the PD library to be of commendable quality!

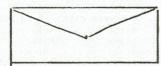
Well, what can I say Richard? All I can say is that I had an idea that the author was the manufacturer. I alone chose to include his 'review' because I felt that our members should know of such a product (after all, way back in the mists of time, I reviewed my own adventure games just after becoming Games Editor). BUT!, I can see your point. I apologise to you and to all members, and I'll say here and now that I shall make darn sure that it doesn't happen again.....Ed



Kjell Robertsen of Norway has a printer problem:-

I need to be able to connect two printers to the same computer without having to disconnect the leads every time I want to change between them. What I need is a device that allows me to connect the two printers to the computer and then use a switch or something to change between them. Does such a device exist?

I've been in touch with our Technical whizz Phil Craven, and he informs me that a SWITCHBOX thingy is available but he was unable to provide me with a supplier, and I've been unable to locate one. Maybe someone else knows of one?.....Ed

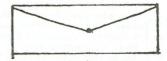


Mark Eccles of Manchester has an answer to David Mitchell's query:-

In reply to David Mitchell, you explained Tabs but not Decimal Tabs. Decimal Tabs work by placing a full stop/decimal point on the ruler line. When TAB is pressed, the cursor goes underneath the decimal point on the ruler line. Whatever is typed now is right justified. When a decimal point is typed, this goes underneath the decimal point on the ruler line, then everything typed goes after the decimal point. This is useful for columns of numbers.

Thanks Mark. The reason that I only explained Tabs was that it is the only kind I can do with my version of

Protext v1.07 (as I've NOW discovered), so my apologies to David for the error. By the way Mark...my name is PACKHAM not PACKMAN. I'll let you off this time, but don't let it happen again or else I shall be coming round with my whip!!.....Ed



Our Russian friend Neil Bukharayev says goodbye:-

I have to say that this letter is probably my last letter to the UAUG, as I couldn't stand against a rare chance to obtain a secondhand IBM PC clone. It's also Amstrad but now it's PC. I really loved my CPC, but it simply had no chance to survive in the cruel surrounding IBM PC world with no Dixons on the nearest High St (and with no High Streets as well). Thank you Tony Baker, John Packham, Bruce Merrett, Dave Andrews of Binary Bits, Brian Barton of Goldmark Systems, Patrick Hannon and all you UAUG members, who gave me a helping hand. I greatly appreciate your help and friendliness. I hope to be in touch with the UAUG members, at least with those who would like to swap any software, peripherals, blank 3.5" discs or computer mags (sorry, this time for the IBM PC compatibles) for some Russian items they may be interested in (books, records, CD's etc). Best wishes and happy computing for 1991, and all succeding years.

We're sorry you have to leave us Neil, but many thanks for the thanks. If ever your PC goes PUFF!!, you know there's always old faithful. Good luck for the future, and I hope it doesn't get too cold for you there.....Ed



George Dyke of Bournmouth can help David Mitchell too:-

Reading the letters issue 25 of the magazine I may be able to help a little DECIMAL TABS

These are not quite as you answered, if you put a FULL STOP in the RULE line

instead of an exclamation mark at the point you want the decimal point in your list and then you TAB to that before starting to enter the figures, the number will start moving left until you put the decimal point in, when the printing will start going to the right as usual as below:

345.56 1245987.4573

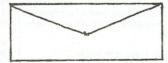
I think that will help David Mitchell of ESSEX now for Terry Green from Hayling Island.

FAMILY HISTORY

I have not used any commercial FAMILY HISTORY programmes for recording my daughter's lists of our family but have used PROTEXT for drawing out the TREE. I have about ten of these programmes and they all join up side by side to make one vast family tree.

The database MASTERFILE, I use for entering the names, relationships and other information as per primt out. If this is not clear I should be glad to help further

Many thanks George. Regarding your Decimal Tabs answer, plese see my reply to Mark Eccles. As for your solution to the family tree question, I think it's a great way of doing things. For those interested in the printout, plese refer to the inside back cover.....Ed



Alan Rose from Hull writes:—
I read with interest the Chairman's letter with regard to clip art and Goldmark Systems reply. PCW World (a user group) do clip art that is 100% compatible with the CPC and certain DTP packages. I wrote, enclosing a large SAE and received their catalogue, price list and a copy of all the clip art. Each disc contains 120 pieces of art and costs £4.95, but only £3.25 to members. Their address is....PCW World, Cotswold House, Cradley Heath, Warley, West Midlands, B64 7NF. Tel: 0384 66269.

Many thanks for the info Alan. I'm sure our members will appreciate it.....Ed

Dear CPC owner,

RSX-LIB (1.0) - The RSX library utility

Smogware Systems

Here's an excellent opportunity to purchase a 1st class utility for your CPC at a significant reduction from the normal price. Usually sold at £19.95, we can offer you the chance to buy for only £14.95! The saving of £5 is made possible due to the extremely low cost of advertising in your UAUG magazine, "CPC User".

WHAT IS IT?

RSX-LIB is a unique utility for the CPC range of computers. It allows you writing BASIC programs.

The standard BASIC supplied with the machine is designed so that the language can be augmented by adding further commands, to make it even more powerful. You may have heard the term 'RSX' or 'bar command' used to describe a command which has been added on to those normally. available. RSX-LIB makes it easy to make use of extra commands (e.g. ICAS.MOTOR.ON) in your BASIC programs.

ENHANCED BASIC

All BASIC commands (RSX or standard) are interpreted and validated by the computer's (machine code) operating system, and then control is passed to a (machine code) subroutine to actually carry out the processing required. If you wish to add a new command to your CPC' BASIC, then you not only need to tell the computer what the new command is called, but you also need to provide it with the machine code to actually do the work!

THE PROBLEMS

You obviously, therefore, need to be able to write in machine code to produce such a subroutine. Even assuming you already have one handy (perhaps somebody else wrote it for you?), actually telling the computer about it isn't always the easiest or quickest thing to do, even if you are the bees-knees at machine code programming!

Installing RSXs is not totally straight-forward at the best of times, but if you want to place the machine code at a different location in memory (most such subroutines need to be loaded to a particular address to work, and will crash the computer when used if they aren't) - then that's when things get really tricky.

RSX-LIB SOLUTIONS

RSX-LIB hides all that machine code behind a few simple to use screens.

You don't even need to be able to spell "machine code" to be able to add lots of new commands to your standard BASIC.

RSX command files can be tailored to suit individual programs - select just the commands you require (from RSX-LIB's library) for use in your BASIC program. No wasteful files

containing commands you don't want! RSX-LIB acts as a specialised database, storing basic information about all your machine code files (which may be scattered across many discs), and uses this information to pull the routines together into a single, customised, relocatable, RSX

RSX files created with this utility are 'free-standing' (i.e. RSX-LIB is only in memory when you create the files - they are saved to disc, from where they can be accessed by your own BASIC programs without having to have RSX-LIB in memory to make use of them).

SIMPLICITY ITSELF

RSX-LIB is so simple to use that you can start writing your own BASIC programs to make use of extra commands from day one!

RSX-LIB comes complete with a starter pack' of 52 new commands (machine code subroutines) for your CPC, and you can install any or all of the commands at the press of a few buttons.

More commands can be easily added to RSX-LIB's library, using either straight machine code files, or RSX files containing many routines. Magazine 'type-ins' are an ideal source for new commands (look for listings with 'hex codes' in) to add to the library if you don't feel up to writing your own.

Disc changes are prompted for, when required, and helpful messages are produced if you should do

anything untoward! A friendly 36 page manual and an example program are provided to explain everything you need to know to get the most out of the utility.

UNBELIEVABLE?

Perhaps the most amazing thing about RSX-LIB is that it can alter the

machine code in the routines themselves so that they may be loaded and used anywhere within the central 32K of your CPC's 64K memory (&4000 - &C000, but keep away from areas used by your

operating system)!

This will be a real boon to those of you who have several files that all need to be loaded to the same area of memory. If you wrate them yourself, then you could always use your Assembler utility to re-assemble the code to a new address, but this can be an irritatingly time-consuming task; if you didn't (magazine 'hex code' type-ins?), then it probably isn't worth the effort to dis-assemble the code in the hope that you can find out what needs changing.

SELF-RELOCATING

RSX-LIB does away with all that hassle. It will search each routine for assembler instructions that refer to 'absolute' memory addresses, and alter the addresses to suit the current location in memory when they are installed.

This really is as good as it sounds. You don't need to have written your machine code routine to be 'position independent' - RSX-LIB actually looks at your code intelligently to decide what needs altering for the code to work at the address to which it has been loaded!

A choice of 'relocation' options is provided to give you the best chance of achieving this (some particularly complex routines may prove too difficult for RSX-LIB to handle essentially those which share code or data with other routines, or those which assume other areas of memory have been reserved for their use).

REVIEWS

RSX-LIB is used by CPC owners around the world, and has been well received ...

AMSTRAD COMPUTER USER (Dec 1989)

"everything to manipulate RSXs and enable them to be used in an easy and systematic manner is here"

AMSTRAD ACTION (Dec 1989)

"great if you program in any way shape or form ... makes creating RSXs a dream"

CYNOTEL BULLETIN BOARD (page 560)

"the result is impressive ... if you need such a program then RSX-LIB is your number one bet"

CREATING AN RSX FILE

Suppose that you have written, and saved to disc, a BASIC program (called SPIFFY.BAS) that requires 5 of the 52 RSXs in RSX LIB's library to be present when it runs (i.e. your program has been written to use them):

- 1) Reset the computer, insert the RSt tIR disc, and bulb "RSXLIB". The program will load itself, and the library file. and bill
- and then display the standard senu screen.

 2) Select option 1 from the senu (to Assemble An RSX file).

 3) A list of all RSXs in the library will be shown, which you can scroll up and down at will. Select the 5 RSXs you want to

use by placing the cursor on each, and hitting the COPY key. When you're happy that you've marked all the RSXs you require, press ENTER. 5) You will now be as

You will now be asked for the name of the RSX file to be created (this will be a binary file, and will eventually be loaded by your BASIC program). Type in "SPIFFY", and hit

6) RSX-LIB will now build the RSX file in memory, of the 5 machine code subroutines from disc as it requires them. It knows which disc each file is on, and which disc is currently in the disc drive, and will prompt for a change of

disc (by name) if necessary.

7) You will now be asked to insert a disc that the RSX file may be saved to (ideally the same one that SPIFFY.BAS is on).

Insert the disc, press ENIER, and a file called SPIFFY.RSX will be caved. will be saved.

The BASIC commands required to install the 5 RSXs - using the file you have just created - are now displayed on the screen le.g. MEHORY HIMEM-105 : LOAD "SPIFFY.RSX", HIMEM+1 : CALL HIMEN+11). Make a note of them, and hit any key to return to the menu.

9) Select option 9 from the menu to exit from RSX-LIB (this

9) Select option 9 from the menu to exit from RSX-LIB (this effectively resets the computer).

10) Now you can load SPIFFY.RRS (your BASIC program), and type in normally at the top of the listing - the installation commands that you were given by RSX-LIB.

11) Save the altered program back to disc.

12) Now whenever you run your BASIC program, it will load the RSX file and install the RSX commands it contains. If any of the routines were marked in the library file as requiring relocation, then the code will also be altered during the installation process to suit the current memory location.

OTHER MENU OPTIONS

There are 8 other options available from the menu screen, all of which are even simpler than option 1 (just described):

2) Dis-assemble RSX File. Allows an existing RSX file to be examined. Each routine may be saved to disc if required.
3) Add RSX To Library. Adds an entry to the library file (to make a machine code routine known to RSX-LIB, so that it can then be used as an RSX command).

4) Remove RSXs From Library. Allows one or more library entries to be deleted.

5) View RSX Information. Allows details stored for any RSX to be

viewed.
6) Alter RSX Information. Allows details stored for any RSX to be changed (e.g. the command name - you could change the name from ISCR.MAIT.FRAME to IFRAME if you wished). Changes can be

either permanent or temporary.

7) View Library Information. Allows details about the library file itself to be viewed.

Library Information. Allows details about the library file to be changed (e.g. how many alterations you can make to the library file before it is 'auto-saved' to disc).

9) End Session. Allows a controlled exit from RSX-LIB. Any unsaved changes to the library file will be reported, and you will be asked to confirm that they are not to be saved.

Smogware Systems (Dept VAVG)

20 Grove Avenue, New Costessey, Norwich, NR5 OHN, England.

24-HOUR ORDER LINE: (0603) 749132

Proprietor - I.A. Napier

RSX 'STARTER PACK'

Here is a list of all 52 RSXs supplied with RSX-LIB (1.0). Remember - these are not the main selling point, and are merely provided to allow you to get the feel of RSX-LIB, but that is not to say that you will find them useless!

Bear in mind that you can always change the name of any command, and can add more commands to the library. The manual gives more details of how these can be used, and many have parameters to pass data to and from the subroutines.

```
CAS. MOTOR. OFF .... Turn the cassette motor off.
 CAS.MOTOR.OFF ... Turn the cassette motor off.
CAS.MOTOR.ON ... Turn the cassette motor on.
FILE.IN.CLOSE ... Close a previously opened input file.
IFILE.IN.OFEN ... Open a file for input (and get header info).
IFILE.IN.READ ... Read a previously opened input file.
IFILE.OUT.CLOSE ... Close a previously opened output file.
IFILE.OUT.MRITE ... Open a file for output.
IFILE.OUT.MRITE ... Mrite a previously opened output file.
IGRA.INIT ... Initialise the Graphics VOU.
IGRA.MODE.SET ... Set the Graphics write mode.
IGRA.PAFER.SET ... Set the Graphics background ink.
IGRA.PEN.SET ... Set the Graphics plotting ink.
IGRA.PEN.SET ... Reset the Graphics VOU.
   GRA.RESET ..... Reset the Graphics VDU.
  INT. SMAP ..... Swap two integer variables. 

!KEY.FLUSH ..... Flush the Key buffer.
 INCY. INIT ..... Initialise the Key Manager.
IKEY. NEFEAT. OFF ... Set a key to non-repeatable state.
IKEY. REPEAT. ON ... Set a key to repeatable state.
IKEY. RESET .... Reset the Key Manager.
IKEY. MAIT .... Mait for key press, and return key number.
IMEM. COPY .... Copy a section of memory to a new location.
IMEM. PEEKZ .... Two-byte PEEK.
  INEM. POLEZ ..... Two-byte POKE.
 IMEM.PRINT ..... Display contents of memory (multi-format).
IMEM.PRINT.CHAR ... Display contents of memory (character).
IMEM.PRINT.HEX ... Display contents of memory (horizontal hex).
  IMEM. FRINT. VEX .... Display contents of memory (vertical hex).
 IMEM.SWAP ...... Swap tho sections of memory.
IREAL.SWAP ..... Swap two real number variables.
 ISCR.FADE ...... Shap two real number variables.
ISCR.FADE ...... Clear the screen, gradually.
ISCR.FIELDS ..... Text input to (multiple) screen fields.
ISCR.FROM.MEM .... Copy 16K of memory to screen.
ISCR.INVIT ..... Initialise the Screen Pack.
ISCR.INVERT ..... Invert a number of chars on the screen.
ISCR.INVERT ..... Invert a word on the screen (to next space).
ISCR.BESET ..... Paged the Screen Pack.
  ISCR.RESET ...... Reset the Screen Pack.
ISCR.SHAKE.OFF .... Stop the screen shaking.
  SCR. SHAKE.ON .... Start the screen shaking.
 ISCR.TO.MEN ..... Copy screen memory to 16K memory.
ISCR.UMPRINT ..... Read chars from screen to string variable.
ISCR.WAIT.FROME ... Wait for a frame flyback.
ISTR. VALIDATE .... Check string variable has only valid chars.
ITEXT.INIT ..... Initialise the Text VDU.
ITEXT.RESET ..... Reset the Text VDU.
 ITEXT. SHAP ...... Swap text pen and paper inks.
```

HOW TO ORDER YOUR COPY

BY POST Write your name & address on a piece of paper, and send it with UK Sterling Cheque or UK Postal Order for £14.95, or quote Credit Card name, number & expiry date.

BY PHONE ... Give your name, address, state "Dept UAUG" to claim your discount, and quote your Credit Card name, number & expiry date. (Permanent answer-phone service)

* Access, Visa, Mastercard and Eurocard may be accepted. * Orders are normally processed within 24 hours. * Where the destination is outside the UK, all orders are sent by air mail. To cover this additional cost, please add £1.50 (Europe) or £2.00 (Rest of World). * RSX-LIB is suitable for use with all CPC machines, but requires a disc drive (and is supplied on 3° disc only).

RSX-LIB IS AVAILABLE AT £14.95 DUE TO THE 25% DISCOUNT KINDLY OFFERED TO UAUG MEMBERS BY SMOGWARE SYSTEMS.

Adventure Chronicl by Bebby Howard

Many people who receive Spellbreaker, may by now already know that after just over two years it will no longer be published, a sad day for us all, I fear! John and Mike Brailsford the editors, blame the pressures of work alongside poor sales as the contributing factors. The copyright will not passed over to someone else so that it can be continued, in the hopes that it might be resurrected sometime in the future. It is a shame that many such magazines fold due to the lack of support, it is after all a much needed aid to many adventurers, and without them how many adventures would be stuck on a shelf just because we are unable to complete them?

Larry Horsefield a well known author of many Spectrum adventures has made the wise decision to obtain an Amstrad and convert all his adventures over. I look forward to being able to review them when they are finished. Larry has built himself quite a good reputation for writing good adventures, and I am sure that his conversions are just as good.

ACU in their infinite wisdom have decided to reinstate the adventure column, written by one of our own members, (so I know he will be reading this), knowing his ability to use poetic licence, especially when it comes to talking about disc drives, I am sure that it will become an excellent column, although the continuation of the column depends on the support it gets.

m a

I must at this point make a public apology to Alan Scully, it appears that I spelt the name of his public domain wrong in the December issue. It should in fact be "SCULL PD" and not "SKULL PD", as previously mentioned. Alan has also asked me to point out that he has changed his address, he now resides at: 9 Barra Wynd, Broomlands, Irvine, Scotland, KA11 1DB. I received a phone call a few weeks ago concerning the solution for Terrormolinos from one of our newest members. In the adventure you have to take ten photographs, and the solution only tells how you to take nine of them. The photograph that is missing is taken at the Plaza.

The date for the second Probe Convention has been set on 26th October 1991, in Birmingham. Over 150 avid adventurers are expected to attend. Hopefully transport willing, I shall be there to give my support to the many who will be receiving awards for their contribution to the adventure world. Until next time, happy adventuring!!!

Now for a couple of our regular pieces, starting off with....

FIVE OF THE BEST.

GUILD OF THIEVES: To Get the fish - At the moat, tie the cotton to the cue, put the maggot on the needle, and then lower the needle.

FANTASIA DIAMOND: Send Boris back across the river in the boat first. He Will send it back for you if you wait.

Adventure Chronicl by Bebby Howard

GREMLINS: To get rid of a few Gremlins, use the flash.

BEER HUNTER: Dig under the bed when you are inside jail.

CLASSIC ADVENTURE: Snakes don't like Bird's. Especially the ones that are not in cages.

Next, comes some more SYNONYMS to add to your ever growing list, just in case your favourite game has you stuck for the correct words to use.

MAKE, MAP, MELT, MEND, MIRROR, MIST, MIX, MONEY, MOUNT, MOVE, OFF, OIL, ON, OPEN, OPPOSE, ORDER, OUT, PADDLE, PAINT, PAUSE, PAY, PEEL, PICK, PINCH, PLANT, PLAY, PLUNGE, POINT, POISON, POLE, POLISH, POUR, PULL, PUNCH, PUSH, PUT.

Tune into issue 27 for more, but for now, here is the second part of Dave Havard's assistance with HOLLYWOOD HI-JINX.

HOLLYWOOD HI-JINX The 10 Treasures (Part 2) By Dave Havard

6. PARKING METER

Small Passage (below parlour). Nothing needed. To get below the Parlour, you need to play a tune on the piano. The tune is different for each game!

To find the tune: - Go to the Screening Room, Get Slide, Get Film, Put Slide Into Slide Projector, Put Film Into Film Projector, Examine Slide Projector Lens, Examine Film Projector, Examine Projector, Turn On Film Projector, Examine Screen (this gives you the 'tune' to play). Go To Parlour, Open Piano, Play Tune, Push Piano North, Go Down, South, Get Pillar, Drop It, North, Up, Push Piano South, Push Piano South, Go Down, Get Pillar, Drop It, North, Get Meter.

7. UNCLE BUDDY'S TOUPEE

In the Basement. All Punch Cards are needed (7). The Cards are found at:-

RED...... Upstairs Bathroom - Under Bath mat

ORANGE.....On the Patio

YELLOW.....In the Screening Room

GREEN..... Hallway - Behind Painting

BLUE..... Shaft Bottom - South from Cellar

INDIGO......Fireplace - Behind loose Brick

VIOLET..... Parlour - Inside Piano

The Business Card from the mailbox gives you the clue as to how many and of which colour are required. The letters of the name spell it out.

Once you have collected all the cards:-

enture Chronic Bebby ward

Go to the Basement, Examine Computer, Switch On Computer, Insert 'colour' Card Into Slot (until all 7 are inserted), Examine Display (note it), (576-3190), Press Button, Go to Living Room, Get Phone, Dial 'number on display', Go to Basement, Get Toupee.

8. HYDRANT (leave this until stairs are set - see No. 3) Inside the Attic. (Inside the Trunk). Nothing needed. Enter Closet (at ground level), Get Bucket, Go to Garden, North, Fill Bucket With Water, Go to Closet (straight away), Put Bucket Onto Third Peg, Out, Up, Open Door, Enter Closet, (you should now be on top of the closet), Wait (until closet rises), Open Door, North, Open Panel, (this unlocks the trunk), Open Trunk, Get Hydrant, Down, Open Door, South, Pull Second Peg, Open Door, Out.

9. FILM "A CORPSE LINE"

Bomb Shelter. Need Skis and Red Statuette. Nothing Else! Leave Torch at Cliff (down from Cannon Emplacement), then (from Top Landing) Wear Skis, Down, Remove Skis, Drop Them, Light Candle (the statuette), Get Match, Examine It, Put Match Into Wax, Douse Candle, S, W, Swim, Down, Down, West, Up, Up, North, Strike Match, Light Candle, Drop Match, North, Up, Examine Plank, Lower Right End of Plank, Pull Chain, Burn Rope, Stand On Right End Of Plank, Wait (until rope burns through), Douse Candle, Get Torch, Drop Statuette, Get Ladder, Down, Hang Ladder Onto Hooks, Examine Safe, Read Plaque [the combination is based on the first letter of each name (direction 1/r) and the number of letters in each name], Turn Dial "combination", Open Safe, Get Film, Up, Get Statuette, Return to Living Room, Put Statuette Onto Mantel.

10. DIAMOND

Games Room. Nothing needed. Examine Model. The Controls are as follows:-

BLUE....Grasps with claws

BLACK....Stamps with foot (good against tanks etc)

GREEN.... Moves Chihuahua East one place

WHITE.... Grasps with claws

RED.....Breathes fire (use ONLY for melting dome!) 100 , 41 000 , 41 000

Press Green Button (*2), Wait, Press Black Button (*2), Press Green Button (*4), (ignore missile, when you stamp on the truck it has no guidance system left and misses you), Press Black Button, Press Blue Button, Press Green Button (*4), Press Red Button (*3), Get Diamond. THE REST OF THE GAME.

Whenever you collect your tenth treasure, a peg and note will appear. Get Note and Read it, Get Peg, Go to Closet, Insert Peg Into Hole, Get any "Prop", Hit Herman with Prop (do this 3 times, it doesn't matter which prop you use, the 3rd one will always work). It would help to note the props as soon as you arrive in the Prop Vault, as the description scrolls up and you may not remember which ones are left. As you will only have time to get 3 props and hit Herman with them there is no time for anything else. Once Herman is down, UNTIE HILDEGARD.

IN ISSUE 27: Reviews of CRISPIN CRUNCHY, TIME & SIMPLY MAGIC.

The Library Index Files continue to be upgraded at regular intervals, as I mentioned in CPC User Issue 25, I sometimes add files to existing disc sides, so I recommend all members send me a formatted disc(s), or a cheque or Postal Order made payable to U.A.U.G. for £3.50. For this I supply one disc and it includes postage and packing. You will then receive the latest edition of the Catalogue. The contents of the index has now spilled over to 2 sides, PROTEXT files are on one side and the AMSDOS files on the other, so you can now choose the type you require, or even ask for both, when you

I would like to thank the following members who have donated programs to the library in the past few months. For a look at the complete list, please refer to issue 25.

- 1) Allen Cooper, has reorganised the PROTEXT/PROMERGE/CITIZEN 120-D printer files on PD 17/2. He has also added many new programs that demonstrate how to produce a text file in Booklet format, some of the demo text files he provided are also to be found on PD 18/2.
- 2) Richard Bowler has upgraded the files on PD 15/1 to alter the Old (01) London codes to the new 071 and 081 numbers.
- 3) William Trice has sent in some interesting CP/M Plus software that will be ideal for all you Maths buffs. The files can be found on PD 18/3.
- 4) Mr A.S. Cook has also sent in some very useful CP/M programs, all on PD 18/4. My favourite is BISHOW.COM, this enables a word processed file like PROTEXT or WORDSTAR to be read correctly without having to load up your W.P. It works a bit like TYPE except it has many more features, the best is the go back a page option. BISHOW has been in the library for ages and was originally on PD 2/3, but thanks to Mr Cook for providing the documentation I now know how to use it.
- 5) Trevor Wells has sent our library

a very good selection of Stop Press Clip Art and some new fonts which have originated from UAUG Member Alan Scull's privately run PD Library.

6) I have also added some more Amstrad Action test programs to the data to be found on PD 16/3. Also if any member uses dBASE II and a 'big' 3.5 B drive, then all of this data can be supplied, if required, in that fully indexed format. At the moment the entire 'AAGAMES' dBASE II program runs to 232K in length.

I will conclude this little article with the usual disclaimer:

The UAUG doesn't guarantee a program in the clubs P.D library will run or work correctly on your own machine. I know I've tested quite a lot of them over the past 2 years. Especially, if these offending files use 464 or 6128 firmware calls there can be problems.

For members who have standard 464's plus a single DD1 drive using CP/M 2.2, please make sure you specify the format of the discs you require. You can use DATA for AMSDOS files, but need SYSTEM format for CP/M 2.2. 6128 owners do not suffer this problem.

Don't forget what I said last time, for the library to expand I need more software, if you have written that little gem you would like to share with other members, or received PD from any other source. Then please pass it on to me, and we will all benefit.

I'm happy to receive telephone calls on any PD or serious commercial software subject, phone 0303 264794 between 1900 and 2000 hours any day.

Send all disc P.D requests to:

RICHARD SERGEANT
UAUG PUBLIC DOMAIN DISC LIBRARIAN
67 NURSERY FIELDS
HYTHE
KENT. CT21 4DS.

Bye for now, Happy Computing.

This is the section of the magazine for all machine code addicts. As the Firmware Guide is no longer available, I have decided to provide you with all the necessary firmware jumpblock addresses, along with their relative entry and exit conditions. Most of the addresses can only be accessed via machine code, but some can also be CALLed via BASIC. In these cases, the address will be marked alongside with a (B). Some of these may not have obvious effects. Also, those routines which have NO entry conditions and are not marked, you could also try calling from BASIC, but the effects are unknown to me so try with care. If you have any questions about the routines, then please contact me. If a personal reply is wanted, then please include a stamped, self-addressed envelope. I must tell you though, that I am no expert. I am merely taking the info straight from the guide.

0 &bb00 - KM INITIALISE (B)

ACTION:-

Full initialization of the Key Manager as used on power up.

ENTRY CONDITIONS:-

None.

EXIT CONDITIONS:-

AF,BC,DE and HL corrupt. All other registers preserved.

NOTES:-

The Key Manager indirection (KM TEST BREAK) is set to its default routine. The key buffer is set up to be empty. All expansions are set to their defaults.

Key translations are set to default. The repeating key map is set to default.

The repeat speeds are set to default.

Shift & Caps Lock are turned OFF.

The break event is disarmed.

1 &bb03 - KM RESET (B)

ACTION:-

Reinitializes the Key Manager indirections and buffers.

ENTRY CONDITIONS:-

None.

EXIT CONDITIONS:-

AF,BC,DE and HL corrupt. All other registers are preserved.

NOTES:-

The Key Manager indirection (KM TEST BREAK) is set to its default routine. The key buffer is set up to be empty. All expansions are set to their defaults.

The break event is disarmed.
All pending keys and characters are discarded.

ing 0-091 Handulo\massmord

This routine enables interrupts.

2 &bb06 - KM WAIT CHAR

ACTION:-

Try to get a character from the key buffer or the current expansion string. This routine waits until a character is available if no character is immediately available.

ENTRY CONDITIONS:-

None.

EXIT CONDITIONS:-

Carry TRUE.

A contains the character. Other flags corrupt. All other registers preserved.

3 &bb09 - KM READ CHAR

ACTION: - TO See To See

As 2 above, but does not wait.

ENTRY CONDITIONS:-

None.

EXIT CONDITIONS:-

If a character was available...
Carry TRUE
A contains the character.

If no character available....
Carry FALSE
A corrupt.

Always ...

Other flags corrupt and all other registers preserved.

4 &bboc - KM CHAR RETURN

ACTION:-

Save a character for the next call of KM READ CHAR or KM WAIT CHAR.

ENTRY CONDITIONS:-

A contains the character to put back.

EXIT CONDITIONS:-

All registers and flags preserved.

5 &bbof - KM SET EXPAND

ACTION:-

Sets the expansion string associated with an expansion token.

ENTRY CONDITIONS:-

B contains the expansion token for the expansion to set.

C contains the length of the string.
HL contains the address of the string.

EXIT CONDITIONS:-

If the expansion is OK....
Carry TRUE

If the string is too long or the token was invalid....
Carry FALSE

Always ...

A,BC,DE,HL and other flags corrupt.
All other registers preserved.

NOTES:-

The string to be set may lie anywhere in RAM. Expansion strings cannot be set directly in ROM.

6 &bb12 - KM GET EXPAND

ACTION:-

Read a character from an expansion string. The characters are numbered starting from 0.

ENTRY CONDITIONS:-

A contains an expansion token. L contains the character number.

EXIT CONDITIONS:-

If the character was found....
Carry TRUE
A contains the character

If the token was invalid or the string was not long enough....

Carry FALSE A corrupt

Always....

DE and other flags corrupt. All other registers preserved.

7 &bb15 - KM EXP BUFFER

ACTION:-

Set the address and length of the expansion buffer. Initialise the buffer with the default expansion strings.

ENTRY CONDITIONS:-

DE contains the address of the buffer. HL contains the length of the buffer.

EXIT CONDITIONS:-

If the buffer is OK....
Carry TRUE

If the buffer is too short....
Carry FALSE

Always....

A, BC, DE, HL and other flags corrupt.
All other registers preserved.

HAKE YOUR HICRO EARN!

Mome Wased Wusiness.

"YOU & YOUR MICRO". Your micro, be it an AMSTRAD, COMMODORE, AMIGA, ATARI, BBC, SPECTRUM, PC or any other make, it does not matter which, is a very sophisticated piece of machinery. Most people are content to sit back and use it as a toy, totally blind to their computers true business potential. Home computers have always been marketed as an entertainment, and an excellent one they are too. However that being the case, what you are about to read may come as a rather exciting surprise! AT LAST!!! We are now able to offer you a marvellous opportunity to gather very high earnings from your home computer. For your very own copy of our manual rush your application to us TODAY. This could well turn out to be the best investment you've made since the purchase of your micro.

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UAUG



TO:-

Linux Basta

Business,

(Prop. EP_I McGovern)

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Yes. Please rush me a copy of your manual "YOU AND YOUR MICRO". PLUS TEN FREE MONEY MAKING SCHEMES. I have enclosed a CH/PO FOR £18.95. or I enclose my VISA/ACCESS No.

Name....



John Packham, David Jay, and Brian Watson between them have put a thought into my head. Amstrad Action at one time had an excellent series "Words Work", in which readers put forward their ideas on how to get the best out of their printers and word-processors. I had a couple of items in it on Brunword and on defining characters in the printer's memory, and something like it would be a useful addition to CPC User. "PUTTING IT ON PAPER"? To start it off, I've something for David Jay that might also be of more general interest. Printing in columns. The more advanced versions of Protext can I believe do this, as can Brunword Elite, but if your printer is capable of reverse line-feed, as most of the more recent ones are, you can do it on the printer with some blood and sweat. The code the printer has to recognise is ESC, j, "n" (27,106,n), which causes the paper to move backwards "n" 216th of an inch. Assuming yours has this, then program some keys in your word-processor to produce the following:

27,108,10 (M10 - Left margin 10) 27,108,45 (M45 - Left margin 45) 27,106,36 (B1 - Move back 1 line) 27,106,216 (B6 - Move back 6 lines)

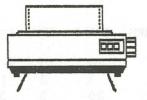
and set the screen margins to 1 and 30.

This assumes two columns 30 characters wide, starting in columns 10 and 45. To print two columns of 40 lines, enter them one following on the other with the control codes as below.

M10

Text of 1st column

B6, B6, B6, B6, B6, B1, B1, B1, B1, M45



Text of 2nd column

M10

The printer will then print 40 lines with a 10 column margin, back-track 40 lines, side-step to column 45, print the next 40 lines, and then revert to the original 10 column margin. I can also provide various utilities and the like for tweaking Brunword and, if your printer will support the ESC p and ESC a codes, instructions on how to produce proportional printing justified.

MIKE CATTON.

COMPETITION WINNERS

The winners of our last competition were....

1st place——PETER NASH with 5021 words.

2nd place——STEVE LEE with 4559 words.

3rd place——MR P. PEMBROKE with 3746 words.

Congratulations to you all and we hope you enjoy your prizes.

REVIEWED BY JOHN PACKHAM

Have you ever wanted to write fast machine code programs, but couldn't because

you don't know any machine code?

Well, fret no more because POWER BASIC is here. With the aid of this package, you can now write your program using SOME of the standard CPC BASIC commands, and then compile it into fast, compact machine code. As stated, only some of the BASIC commands are supported, and these are shown later. Those commands which are unsupported, are really not necessary, as the package really caters for the designing of games (although other programs can be written with it), and so the emphasis is on the graphics and sound commands.

If you have ever used Sprites Alive, then you will know about the program adding several new RSX's (Resident System eXtensions or new commands) to the CPC. Unfortunately, you still need to write a large part of your program in standard BASIC which can slow things down (although Sprites Alive is still fast and impressive). Well, Power Basic can be used WITH Sprites Alive, to compile the rest of the S.A. program, thereby making it run considerably faster. It can also be used in conjunction with Panda Sprites. In fact, there are two sets of demos with the Power Basic package; one lot for a Sprites Alive program, the other with Panda Sprites. I can tell you now, that I was really impressed.

As an example, here is a table showing the increase in speed of various operations. They were all carried out at least 32000 times. All timings are in seconds:-

	IF-THEN	WHILE	FOR	1-	*	1	ARRAYS	AND	RND	STRING+
BASIC COMPILED	78 3		3	13	70	93	309 37	10	17	
SPEEDUP x	26	26	5	33	7	13	8	43	24	5

As you can see, the results are truely impressive.

As most string functions are also supported, it's a must for the budding adventure game writers who haven't yet purchased a commercial adventure writing utility.

1.00.00.00.00

Any program you write can be written just like any other BASIC program, providing you do NOT use those keywords which are unsupported. Once written, your program should be saved in ASCII format ie...SAVE game , A

It is then a matter of running the program through the compiler, which is a four-pass compiler. The first pass counts the number of lines and allocates memory for various functions. The second pass deals with arrays and data areas and also any Procedures used (more on Procedures later). The third pass deals with most of the work and therefore takes the longest (you have to have a little patience here). Finally, pass four will save the generated machine code to disc. It must be stressed before going any further, that Power Basic will only operate on a 6128, although the resultant machine code will operate perfectly well on any CPC, providing no machine specific commands have been used such as FILL or GRAPHICS PEN.

Apart from the shortened list of supported keywords, there are also some restrictions placed upon the use of certain functions and commands, although personally, I don't think you will find them too extreme in practice. Some of the

restrictions are.....

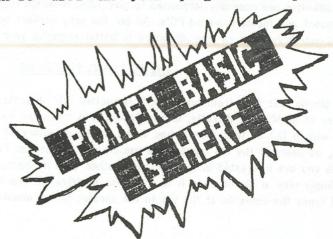
- a) line numbers must be in the range 1 32767
- b) floating point numbers are not supported
- c) all variable types must be set explicitly and not by using DEFINT or DEFSTR ie...x%, fred%, john\$ etc
- d) variable names can only be up to 9 characters in length
- e) numeric expressions can contain a MAXIMUM of just 1 operator such as.... y%=x%+z%. If more complicaterd expressions are required, then the whole thing should be broken down into seperate statements.

As I said, these and other restrictions aren't too severe and can usually be worked around.

If you write your own machine code RSX's, then these too can be incorporated into a Power Basic program without too much fuss. In fact, some are already supplied. In TOOLKIT1, Procedures can be used in your programs in place of GOSUB, for

10 | RESET
20 ..
30 ..
40 | P, fred
50 ..
60 ..
1000 | D, fred
1010 ..

1010 ... 1020 ... 1030 ... 1040 |E



Line 10 simply resets everything. Line 40 calls the procedure 'fred' (like GOSUB 1000). Line 1000 defines the procedure 'fred' and line 1040 ends it (like RETURN). You must admit, it's a lot better than having to remember which subroutine starts at which line.

In TOOLKIT2, extra RSX's are available for accessing the extra memory on a 6128.

KEYWORDS SUPPORTED.

BORDER, CLG, CLS, CURSOR, DRAW, DRAWR, FILL, GRAPHIC PAPER, GRAPHICS PEN, INK, LOCATE, MODE, MOVE, MOVER, ORIGIN, PAPER, PEN, PLOT, PLOTR, PRINT, SPEED INK, SYMBOL, TAG, TAGOFF, TEST, TESTR, WINDOW, WINDOW SWAP, XPOS, YPOS, ENT, ENV, RELEASE, SOUND, SQ, CLEAR INPUT, INKEY, INKEY\$, INPUT, JOY, SPEED KEY, CLOSEIN, CLOSEOUT, DATA, EOF, LOAD, OPENIN, OPENOUT, READ, RESTORE, SAVE, FRAME, TIME, IF-THEN-ELSE, FOR-TO-STEP-NEXT, ON GOTO, ON GOSUB, WHILE-WEND, AND, ASC, LEN, MOD, NOT, OR, RND, UNT, VAL, XOR, CHR\$, HEX\$, LEFT\$, LOWER\$, MID\$, RIGHT\$, SPACE\$, STRING\$, UPPER\$, CALL, PEEK, POKE, DIM, END, GOSUB, GOTO, MEMORY, RANDOMIZE, REM, RETURN, STOP.

Any keywords not found here are at present unsupported, but may be supported in future versions.

POWER BASIC comes complete with 2 discs containg Compiler, Demos, Toolkits and Sundries (including a program for dumping your program to tape). A 40 page manual is also enclosed. The whole package costs £29.95 and is available from SPM Software, 32a Albert Street, Seaham, County Durham, SR7 7LJ.

SIREN SOFTWARE'S PC-TRANS UTILITY REVIEWED BY ROY HARROW

WHAT IS IT?

PC-TRANS is a suite of three programs for the CPC that allow the transfer of files to and from 3.5" diskettes formatted for use on an IBM compatible Personal Computer.

WHY IS IT NECESSARY?

Although the 3.5" diskettes used on IBM compatibles are exactly the same as those used on the increasingly popular 3.5" second disc drives for CPC's, they are unfortunately formatted in completely different ways. This means that just taking a 3.5" diskette home from your work PC and shoving it into your CPC's second disc drive of the same size will not give very fruitful results, or vice verse.

MS-DOS

IBM PC's and the plethora of compatibles use an operating system written by Microsoft called MS-DOS (or PC-DOS on true IBM computers). This operating system has for better or worse become the de facto standard for business computers and is used on literally millions of computers around the world.

Under MS-DOS 3.5" diskettes are normally formatted to give 720K, although High-Density (1.44MB) diskettes are also to be found on more recent and higher-powered PC's. All but the very earliest versions of MS-DOS allow you describe a tree-like structure of sub-directories on your diskettes to better organise your data.

THE PC-TRANS PROGRAMS

1. PC-READ

PC-READ will read simple text files from an MS-DOS formatted 3.5" diskette. It will only (reliably) read files from the root sub-directory of an MS-DOS diskette, and is limited to a maximum file size of 64K.

You are presented with a list of files that it has found in the directory of the MS-DOS diskette, which seems to include deleted files, as some of the file names look remarkably suspicious. Presumably because of this feature, you must identify the file you are interested in by a number rather than its name.

You may elect to simply view a file or copy it to a 3" disc in drive A. Now to the bad news, whichever option you, select PC-READ still types the contents of the file to the screen, taking absolutely ages on a long file.

2. PC-WRITE

As would be expected by the name, this program will transfer a file from your 3" disc in drive A to a 3.5" diskette in drive B for use of an IBM PC. Because of the way PC-WRITE works, the 3.5" diskette must have previously been formatted using the third program (PC-FORMAT) below. In addition you are limited to a maximum of 11 files, each no longer than 64K, per 3.5" diskette. Presumably these limitations were to keep the program simple and to prevent Siren Software from having to rewrite all the complexities of MS-DOS file handling for the CPC. PC-WRITE only has to deal with a predefined set of 11 'slots', each capable of taking a file up to 64K long. It does not have to cope with all the traumas of files being split up into many different pieces as happens under both MS-DOS and CP/M, in their attempts to maximise your usage of the available free space.

3. PC-FORMAT

This formats a 3.5" diskette ready for writing to by PC-WRITE. Unfortunately, it does not produce a pukka MS-DOS format diskette, but simply one that MS-DOS can manage to read (try running the MS-DOS 'CHKDSK' utility on it for instance). The way PC-TRANS works is that it can only write to a diskette formatted using this program. And, diskettes formatted in this way must not be written to by an IBM-PC, if you want to continue to be able to use them with PC-WRITE. This means that you will need a pair of diskettes to complete a full cycle of a transfer from CPC to PC and back again (or vice verse). Although not perfect, it means that you, must prepare yourself in advance with a supply of suitably labelled MS-DOS and PC-TRANS formatted 3.5" diskettes.

SOME TIMINGS:

On files of only a few kilo bytes, timing is not a great concern, but as can be seen below, it can lead to some extended periods of thumb-twiddling while you are waiting to read those really long files.

| 1K | 2K | 25K

PC-READ | 10" | 28" | 6' 26" PC-WRITE| 7" | 8" | 30"

WHY MIGHT YOU WANT TO USE IT?

To be frank I have no idea, but I can tell you a little about what I have used PC-TRANS for, and this may give you some idea of its potential.

I wanted to be able to take some work home (on disk), continue typing a document using PROTEXT on my CPC and take it back again the next day. As I also have PROTEXT on my PC at work this has proved relatively simple, apart from having to get the odd cup of coffee while my CPC reads in a largish text file.

Another application involved transferring some articles for a church magazine from PROTEXT on my CPC to a 5.25" MS-DOS diskette, for laying-out and printing by another member of the church using some desktop publishing software on a PC with an attached laser printer. This was quite an involved exercise, but I could not have done any of it without first getting the text files onto my PC at work (all on a Saturday morning of course).

Although I use a PC at work, most of my word-processing there does not make use of PC PROTEXT, but is on a large IBM main-frame. My latest batch of home-work has involved yet another set of software to transfer my text files between my PC and the mainframe. The whole cycle being:

IBM Mainframe •-- PC •-- 3.5" MS-DOS diskette •-- CPC 3" disc and PROTEXT.

Another application that I have in mind but have not yet tried is the transfer of data to/from Masterfile.

ANY ALTERNATIVES?

At the time I purchased PC-TRANS, June 1990, the only other alternative was the Moonstone's Multi File Utility (MFU), at around £40 or £50. From the review in WACCI it seemed to be a "slodge-hammer to crack a nut". WACCI have since clinched a deal with Moonstone and sell MFU for just under £30.

Not long after the release of PC-TRANS, one of Siren's 3.5" diskette drive competitors, Microstyle, began to sell Moonstone's specialist CPC-PC file transfer utility '2-in-1' for the same price as PC-TRANS. From the reviews (e.g. Amstrad Action, October 1990), like MFU it is another CP/M program (so it gets one point knocked-off for inconvenience) but seems to be very fast and quite versatile. I have not seen it myself, but it sounded a very good product, however, you never really discover all of the limitations until you try for yourself.

The only other alternative might have been to buy a serial port for my CPC, and no doubt some other file transfer or comms. software. Apart from the undoubted expense, this was out of the question as my CPC and PC are not sat next to each other. (I know I could connect them together using over the telephone but phone-bills apart, neither my home CPC nor my work PC have a MODEM connected to them).

CONCLUSIONS

PC-TRANS three programs work, most of the time, as advertised, although it is worth noting the limitations of any utility of this type, and if you have a specific application in mind it may be worth a phone call to the supplier to check.

In fact, I did do this before I purchased PC-TRANS and although Siren Software were very helpful in answering all of my questions, they did not tell me about the slowness of the PC-READ program (because I did not ask that particular question, I presume).

Although it is not a major drawback, the decision to package the utility into three separate programs can be irritating when you need to move from one to the other.

On the whole, I am reasonably happy with the product, and am willing to put up with my grievances, as most of my time is not spent transferring files but working on them with PROTEXT. However, if I was out to purchase a similar utility today I would want to take a serious look at Moonstone's '2-in-1'.

Siren Software could redeem themselves considerably by removing the print-to-screen during PC-READ. I suspect that this would reduce PC-READ's transfer time to about the same the same as PC-WRITE, which was quite respectable. Of course a free or cheap upgrade to the loyal first customers who have done the real product testing would be nice as well. If anyone out there would like some help or advice on CPC-PC file transfers, I would be only too happy to help where I can.

SUPPLY DETAILS

PC-TRANS comes on a single 3" disc and costs £24.99

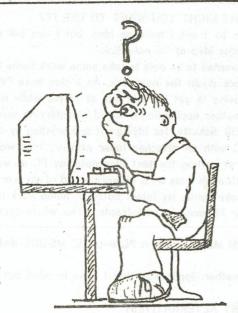
Siren Software can be contacted on 061 228 1831, 84-86 Princess Street, Manchester M1 6NG.

BEGINNERS

BASIC

bу

ANDY KEECH



It was disappointing to have so little response, especially with free software up for grabs, to the competition set in the December issue. So there will be a repeated competition this month to see if there is anyone other than the four that sent in their programs. Susan Phillips the winner of the December issue competition will be playing with her software now and I hope it will not hinder her programming.

With no further introduction, I will bring on the words for this issue.

WRITE:-

This is used when creating a file, an example of which will follow.

OPENOUT/CLOSEOUT: -

An inseparable couple. These two are essential for programming when files need to be created and saved. If for example you have a language tester as we saw in the last issue, you could list the english and french words in a variable and then save them for use later. The section of the program would look something like this:

1000 OPENOUT file\$
1010 FOR n=1 TO 50

1020 WRITE#9, english\$(n), french\$(n)

1030 NEXT

1040 CLOSEOUT

OPENIN/CLOSEIN:-

Obviously the above example is

useless unless it can be reloaded and I will not insult your intelligence further than to list the following:-

2000 OPENIN file\$

2010 FOR n=1 TO 50

2020 INPUT#9, english\$(n), french\$(n)

2030 NEXT

2040 CLOSEIN

Simple isn't it!

DIM:-

This command tells Arnold how much space to reserve for a variable. The following statement reserves space for seven days in the week. DIM day\$(7) This next one will reserve space for a pack of cards where there are four suits and thirteen cards in each suit. DIM card\$(4,13). In the above example we would have first needed to dimension the variable thus. DIM english\$(50),french\$(50).

Do you realise that you now have the fundamentals to design an entire program. You have the mechanics to create, save, load and compare data. If you feel daunted at this point, please don't give up. The task may look gigantic, but armed with the words you know, I wrote such a program. I'll start you off.

Type the following

10 REM *** A shell for ***

```
20 REM ***
                             ***
              Languages
30 REM *** Version 1.2, 1991 ***
40 MODE 1
50 DIM english$(50), french$(50)
60 BORDER 10
70 LOCATE 16,3:PRINT"Languages "
80 LOCATE 16,6:PRINT"Main menu"
90 LOCATE 16,8:PRINT"1. Create a file"
100 LOCATE 16,10:PRINT"2. Save file"
110 LOCATE 16,12:PRINT"3. Load file"
120 LOCATE 16,14: PRINT"4. Catalogue
    disc/tape"
130 LOCATE 16,16:PRINT"5. Test menu"
140 LOCATE 16,18:PRINT"Select a key."
150 ins=INKEY$
160 sel=VAL(in$)
170 IF sel<1 OR sel>5 THEN 150
180 ON sel GOSUB 500,1000,2000,3000,
    4000
190 CLS: GOTO 70
500 REM *** Create a file ***
990 RETURN
1000 REM *** Save a file ***
1990 RETURN
2000 REM *** Load file
2990 RETURN
3000 REM ***
              Catalogue
3990 RETURN
4000 REM ***
               Sub Menu
4990 RETURN
```

of you who realise the For those simplicity of the format, many people have difficulty in structuring. They have many ideas and ambitions, but lack the initial drive. You will see that explanations the earlier OPENOUT/CLOSEOUT, OPENIN/CLOSEIN slot into this program very well. The beauty of this method of programming is that you can create as you go along. It answers the question where do I begin. You should be able to complete the sections using a little bit from each issue so far.

Drawing graphics need not require many more commands than you already have at your disposal. The keyword for using the characters that Basic has stored is CHR\$. At this point please refer to Appendix III of your user manual for the full list available. To print a pound sign, all you need do is type:-

PRINT CHR\$(163)

The number refers to the ASCii code for the character. At this point there is nothing like a bit of experiment to make you feel at home with the command.

Now type in the following to see a moving character.

```
20 WINDOW 10,11,10,10
30 PRINT CHR$(248):GOSUB 200
40 PRINT CHR$(249):GOSUB 100
50 PRINT CHR$(250):GOSUB 100
60 PRINT CHR$(251):GOSUB 100
70 PRINT CHR$(250):GOSUB 100
```

80 GOTO 30 100 FOR t=1 TO 200

10 MODE 0

110 NEXT
120 RETURN
200 a\$=INKEY\$
210 IF a\$="" THEN 200
220 GOTO 100

Now change the character codes to 239,238,238,198,128 and add GOSUB 200 to the end of line 70. This will make the character exchange slow, so change line 100 to read "FOR t=1 to 20" and that should create an image that might come in handy if you were designing an invaders game.

Larger pictures may be created by placing characters along side each other. This is possible with careful planning. This method will be familiar to cross-stitchers everywhere. As usual I'll give you an example but this time I don't want you to run it immediately. Using your user manual try to picture the character effect in your mind and then run the program to see if you were correct. Note the versatility of the program.

```
10 REM *** Drawing with Data Statements
20 REM *** A.Keech from Basic IV (UAUG)
30 MODE 1
40 WINDOW 5,15,2,20
50 FOR n=1 TO 10
60 READ b(n),c(n),d(n),e(n),f(n),g(n),h(n),i(n),j(n),k(n)
70 NEXT
80 FOR n=1 TO 10
90 PRINT CHR$(b(n));CHR$(c(n));
CHR$(d(n));CHR$(e(n));CHR$(f(n));
CHR$(g(n));CHR$(h(n));CHR$(i(n));
CHR$(g(n));CHR$(h(n));CHR$(i(n));
```

100 NEXT

110 a\$=INKEY\$:IF a\$="" THEN 110

120 STOP

130 DATA 150,154,154,154,154,154,154, 154,154

140 DATA 149,143,128,143,128,143,128, 143,128,149

150 DATA 149,128,143,128,143,128,143, 128,143,149

160 DATA 149,143,128,143,128,143,128, 143,128,149

170 DATA 149,128,143,128,143,128,143, 128,143,149

180 DATA 149,143,128,143,128,143,128, 143,128,149

190 DATA 149,128,143,128,143,128,143, 128,143,149

200 DATA 149,143,128,143,128,143,128, 143,128,149

210 DATA 149,128,143,128,143,128,143, 128,143,149

220 DATA 147,154,154,154,154,154,154, 154,154,153

Line 50 makes sure that line 60 is repeated 10 times in the same way that Line 80 does it for line 90. Be careful with your typing and ensure that you have put in every comma, semi-colon and bracket. Note that all the character numbers in line 90 have two brackets, one around the n and one around the whole lot.

This type of drawing uses inbuilt characters but Arnold is capable of being fed character designs. I'll tell you how, next issue. For now though I would like you to draw a playing card (the five of diamonds), and secondly a scrabble board. In the later use D for a double word score, T for a triple word score, t for a triple letter score etc.

Next issue we will also look at DEG and SIN. It will help you if you are fully conversant with the Mathematics surrounding these two. A good source of information is your local library. And by the way, a personal comment for Jim, they frighten the hell out of me too and I've written the program I intend to accompany the explanation!

There is lots for you to do so I'll leave you to get on with it.

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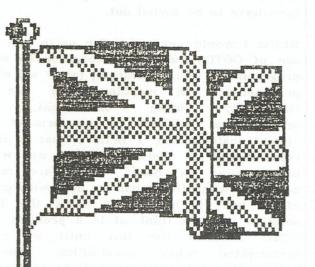
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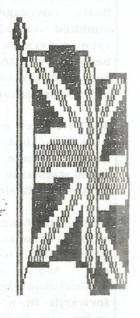
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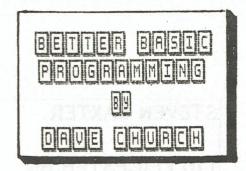
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All too often one sees Basic program listings written in such haphazard ways that understanding how they work becomes a mammoth task. In an attempt to get something working quickly, many Basic programmers fall into a slip-shod method of programming which, even for themselves returning to the listing after only a few weeks break, can be quite unreadable.

The problem is caused by a lack of 'structure' in the programs i.e. lack of organisation, discipline and the use of simple generally acceptable and understandable techniques.

Many professional programmers belittle the Basic language as one not worthy of serious consideration because of the ease with which it is possible to produce badly structured programs. They would even claim that it is impossible to produce well programs in Basic and serious programming should always use another language such as C or Pascal etc. in which good programming structures are forced on the programmer. The Basic language, it is often said, breeds muddled thinking and leads to 'spaghetti type' programming where the command chains become so interwoven that even the writers can find themselves lost only a short while after completing a program.

Whilst I have some sympathy with these views I believe that with a little forethought and using some self discipline, good understandable and readable programs can be written in Basic.

One of the fundamental problems which lead to badly structured programs is in the undisciplined use of the GOTO command. It is all too easy to insert GOTO's indiscriminately jumping backward and forwards in a program until any feeling of order is completely lost in a maze of interwoven paths. Any attempt to modify and improve such programs at a later date

involves enormous mind boggling feats of stamina as each change made tends to introduce other unforeseen problems which then have to be sorted out.

Whilst I would not go so far as to ban the use of GOTO commands altogether as some programmers would advocate, (after all when programming in machine code continually using conditional unconditional "GOTO's" in the form of the "jump" instructions), I believe that a tight rein should be held on their use when programming in Basic. There are many occasions when GOTO can be used with great effect but if, instead of being the first solution that we think of to a problem, the GOTO becomes the last until we have investigated other possibilities, then believe that our programs will be that more readable, simple and consequently, easier for others and ourselves to modify and improve when we require.

So, what other alternatives are there to the use of GOTO. Well, the answer lies both,in making good use of the powerful Basic commands that have been provided on our CPC's namely WHILE/WEND, IF/THEN/ELSE, ON? GOSUB, etc., and also in the basic manner in which we put our programs together. It is no good sitting at the keyboard entering code as it occurs to us if we first have not thought out what it is that we are trying to achieve. This doesn't mean that we have to write out in full the program on paper, or indeed involve ourselves with the intricasies of Flow-Charts or other devices, before we get down to the more interesting part of using our computers, but it does mean that a certain amount of forethought and planning with written down notes including details of any complex programming sections, should be made. This should also include VDU screen layouts that we intend to use, the stating of important variables and the detailed listing of any complex program sections and algorithms which will be required.

Many programs lend themselves to a method I often use which, although I make no claims for originality, has always allowed me to quickly pick up the threads of a program months and often years later with little trouble.

The method is particularly useful where a number of operator keyboard selections are required to be made and makes extensive use of subroutines and the GOSUB command. The

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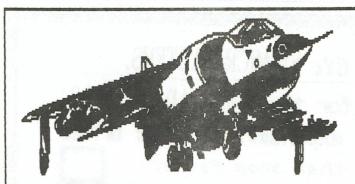
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Simulation and



There are computer games and computer games. Personally, I've never been one for Space Invaders, and the arcade scene. I much prefer to beat the computer by sheer strategy and deviousness.

In each issue I shall try to review either an older title, or a more recent one (notice I said title, not game!). Also, I hope to include a few tips, general information and news, together with responses to any letters I may receive. Whether you like the column or not, write in to the BIG Ed. (John Packham), or myself, and share your thoughts or experiences. Without your input, I'll just have to assume that you hang on every word.

Right then, fall in for the first review.....

GUNSHIP

The AH-64-A Helicopter Simulation. By Microprose.

This cockpit / first person view simulation has to be one of the best on the market. The 80+ page manual gives an indication into the depth with which this programme has been researched. You don't have to read more than a few pages to get started, but as you progress from the training ground to ever more dangerous theatres of conflict, you will be thankful for it's detailed coverage. From lift off to touchdown, this simulation takes you over. Using joystick and / or keys, the principles of flight are brought to your fingertips.

Having powered up, and increased thrust and torque, you find yourself hovering steadily (unless you have selected realistic weather conditions). A dip of the nose, and away you go. Ready to seek out the enemy and deal death, or crash into the nearest hill! Before each flight you are given primary and secondary targets, together with their map coordinates. Not only that, but each one is described, which, together with the intelligence report, gives you some idea as to which weapons to load up.

Infantry can be hit by cannon or unguided rockets. Armour and bunkers are better hit by the now notorious Hellfires. Together with air to air missiles, fuel and decoys, it becomes quite a choice when limited by the max. take off weight that varies according to height above sea level and temperature. (I told you it was well researched)!

Once your first target is found and selected, the view bucks realistically as the first shots are fired. Things get even hairier when you start flying in ernest and the enemy can (and do) shoot back. One way to avoid getting hit is to keep low, and fly from hill to hill, using them as cover. When the enemy is just the other side, you sneak around, guns blazing, before they have time to react. A bare minimum of targets are pinpointed on the map when you take off. The rest appear as you overfly them. Evasive action, the use of decoys (a tactic in itself), and target recognition all give you a longer shelf life. It's no good haring in for an infantry target if it is well supported by anti aircraft SAM's for instance.

With three levels of play, and many variations of reality, night and day flights, this would be a winner with only one scenario. GUNSHIP gives you dozens of scenarios, in four different theatres of the world. Every flight is different, and with promotions and medals to win, plus, of course, a save game facility, this is an unbeatable winner from MICROPROSE. They are offering a 35% discount to our readers, so what more could you ask for? Normal price is £14.95 Tape. £19.95 Disc.

TACTICAL AWARENESS SECTION

GUNSHIP

Tips from Dave Havard

- 2. Hellfire missliles. These have to be kept in sight all the way home. However, enemy armour is usually more deadly than the softer targets. It is possible to fire more than one at multiple targets, just wait about five seconds between each launch. As the first target is hit, the target indicator changes, and the next missile, already on it's way, changes direction towards it. Note that this tactic is best employed when you are faced with a collection of armour and nothing else. Otherwise a soft target may be selected and the missile hits before you can change it manually.
- 3. Be sure to read the Intelligence report before each mission. Make a note of whether enemy HIND helicopters are in the area. If not you can de select Sidewinders, and load up even more Hellfire's.
- 4. If both your engines are hit, it is possible to land without them. Details of this are given in the manual, but I can proudly confirm it works. It takes practise, and you have react quickly though.
- 5. If you suspect an enemy Hind is approaching, find a quiet spot, hover and rotate with the rudder. Be sure to have a Sidewinder selected, as the enemy pilots are very good at using hills for cover, and you won't have much time to get off a shot.
- 6. Be patient. Make good use of your map and compass bearings to sneak around those hills and catch the enemy napping. Most of them aren't displayed on the map until you approach. Beware of large open spaces! If you come under heavy fire, run for cover. Do NOT try and fight it out, survival takes planning.
- 7. The manual is not just a load of bumph. Get to know your enemy's weapons, so that you can decide wther to jam against infa red or radar tracking. Also so you know when to use Chaff or Flares. Don't leave the jammers on, they give away your presence. After you have used a decoy, bank left or right and change height, never give an enemy missile a choice, just leave it with a decoy.

SIM CITY from INFOGRAMES

£9.95 Tape or £14.95 Disc Reviewed by Darren Young

Infogrames has always had a reputation for coming up with quality, original games, and 5im City is certainly no exception. As in many cases, this program will appeal to you or it won't. Building the city of your dreams isn't everyone's cup of tea.

Upon loading, you are presented with the edit

screen, showing you what your landscape looks like and what options are open to you. As the Mayor, you have a whole island under your control to develope and run.

You can build roads and railways, parks, stadiums, seaports and airports, as well as residential, commercial and industrial zones where the inhabitents live, shop and work. For the more sadistic among you, there is also an option to activate disasters upon your innicent population (though I can't imagine why you'd really want to do that!), including such horrors as earthquakes, air crashes and....nuclear meltdowns!

While this is going on, you can easily view your city through a special map option, plan next years budget and get an evaluation from the public of how they think you are doing. By controlling crime, fire, pollution and traffic you'll keep them happy, and they'll soon demand luxuries like stadiums and police departments, but upset them and they'll be off out of it before you can say "ghost town!"

A very good manual is supplied, which goes into great detail of all the ins-and-outs of the game. Although it is very absorbing, there isn't really any ultimate goal, other than to build a good city and balance your budget. I for one, prefer a game where you have to actually achieve something in the long run, and you could get a bit bored with the same scenario every time.

Another minor winge is the graphics and sound, neither of which is anything to rave about. The sound chips excel themselves with the occasional error bleep, but not much else. And, although the pictures are nicely produced, the colours resemble something less than nice, with orange and green being the most dominant.

But these are small gripes and don't affect your enjoyment of the game too much. Overall, Sim City is a challenging and brilliantly original concept, and a must for all budding town planners and megalomaniacs!

** * JOB VACANCY ** *

Due to other work commitments, the time has come for the Executive Editor to resign. Therefore, a new Editor is wanted. If you are interested, please contact John Packham as soon as possible. Applicants must be responsible, reliable and able to work to deadlines. Please write now for more info.....Ed

THE STORY OF A SYSTEM -- A USERS EXPERIENCE BY DEREK MURRAY

My first contact with computers was when I purchased for £130 a "JUPITER ACE". Like a Sinclair Z80 (but running in FORTH not Basic) with a 32k Rampack to boost it's 16k. I enjoyed using it even though its performance was very limited, rubber keys and wobbly rampack and all. Then several years ago, and after much reading of magazines, I purchased a 6128 on my assessment since confirmed by many, many others, that it was the best of the bunch available then, many are not heard of today. The next step was to join "Amstrad User" to get some disc software for use on my machine but the Mag was not very good and as I bought both it and "Computing With the Amstrad" eventually I settled for C.W.A only.

About that time "Amstrad Action" came to my attention and I have subscribed ever since. "C.W.A" was very good indeed for teaching computing and every month there was a tape you could buy of all the games, utilities and programming articles in the magazine. Until it was closed down I enjoyed a great read and great tapes and discs, of the interesting programmes inside that fine magazine. The subscriptions to the "Advantage" U Group gave me more Discs of C.P.M Utilities and other well known programmes for a while. It does not appear now either.

How I became aware of U.A.U.G. I cannot remember but it was very good value then and 3 years later is even better. The great flood of C.P.C magazines has faded dramatically away, down to the very best. Two in my case; Amstrad Action and C.P.C User. The wheel has turned full circle now though, because both you and A.A see the need to start "Beginners to Computing" articles and A.A is starting this month to have a cover mounted cassette on each issue. I await events with great curiosity.

The outcome of all this was to give me a growing collection of Tapes and Discs packed with Programmes, Utilities and Games which I decided I had to get in hand otherwise they would just be in a permanent shambles, as far as finding any item required fairly quickly was concerned. It did help to have such a great source of free P.D so easily available via your P.D. Librarian and I now own many of those not already in my collection from the sources mentioned above.

What then to do about all of this? The first thing was to put the "Intelligent DiscMenu" programme (by Foster & Curwen "C.W.A" April 88) onto each disc as "Disc.Bas"so I could handle all my files as I wished (Use "D.Bas" on some discs to avoid confusion with Run "DISC" type progs like Sirens "Master Disk" (A very good Disc Facility Programme). This was an improvement on "DISC" which I already had on each disc as "1D" (which I did to get the simplest entry with least typing effort). The improved version gives a 4 column menu of the Disc and allows you to Run "(Cursor arrow/Ret'n) any programme on the Menu. Not only that but you can also Load, Erase, View (on Screen or Printer), Transfer between A.drive and B drive, Self load the prog onto another disc (by pressing TAB), Rename any programme etc. A very handy all in one Menu of the things one needs to do as simply as possible. The only snag with it is the menu to printer facility. It squashes up the first 5 letters and forces double spacing for some unknown reason with my printer. It has hidden virtues as we will see later. A Printer was the next step, to print out my disc labels and enable this producer of poor handwriting to have a little pride in his written words for once.

The same careful process as before came up with a STAR LC10 (COLOUR) PRINTER from Evesham Micro and very good it is too. Even though I have not fully mastered colour printouts yet. I will with the aid of "COLOUR DUMP II" from M.J.C. SUPPLIES. To make full use of the 6128, buying a second drive seemed to be next thing so I bought a SIREN 3.5" DRIVE at a very good discount together with RODOS, RAMDOS and a ROMBOX (+10 3.5"Discs). Nowadays a better buy would be "MICROSTYLE's" Switched 3.5" DISC DRIVE, plus"MS800", the latest Operating System from our own Phil Craven who runs "MICROSTYLE" and from whom I hope to receive soon a Switch conversion for my unswitched drive and his brand new "MS800 DOS" which sounds great. Using the switch will allow you to use each side separately, as "TWO,3"DISCS" and enable users to put MF II Tape to disk transfers of games etc on a 3.5"disc on the B drive and allows you to run them from there. That solves a problem for me because I was going to have to use all my expensive 3" discs for MF II Grabs"

The new system is also able to use all 800k as one side if required. As it costs a lot less than ROMDOS or RODOS which are required to drive 800k at present it is great value for money!. My purchase of RODOS was a mistake, as I found it very difficult to get used to, or happy with (in that respect and many others it is similar to PD 6:2 CENTROX). That was not true of "RAMDOS" which after a slow start is now a great asset and "ROMDOS" is even easier to use. In spite of that fact I am in a state of great anticipation waiting to experience the mods to my drive and the wonders of "MS800".

I have drifted away from my story due to enthusiasm over my latest purchases, but should say at this stage that 2 years ago I was very, very lucky to see an Ad in our Works Newspaper of Amstrad Utilities, Progs etc, for sale "on Updating Computers" and for a very reasonable sum I was the new owner of "UTOPIA" on ROM, "PROTEXT" on DISC, SIREN "Master Disc", A M X ART, MODEL UNIVERSE, MAX

DESKTOP, TORNADO LOW LEVEL and 2 very good games on disc all in the proper cases and full documentation. I was shell shocked at all this good fortune but what to try first? What a delightful state to be in!!

UTOPIA was fitted into my ROMBOX it is splendid and was much recommended even at full price, as indeed was "PROTEXT" on disc. I find the disc version more than good enough for my needs. The "Master Disc" is another good addition to the system as it has a screen full of options to use with your discs and the Disc Editor shows all files including erased ones and allows you to unerase them at great speed as well as many fine utilities too numerous to list here, as were all those of "UTOPIA". I have had great use of Utopia and Protext and together with "ROMDOS" are very highly recommended by me. The all new "MS800" will steal the glory from Rodos no doubt, when it arrives, I would be happy to buy either of them, or both in my case. The very latest buy is Bonzo Meddler again from "MICROSTYLE" which will be arriving with the other purchases from Phil, any day now. My thinking in buying this is that good in its way that "MF II" is it does use a heck of a lot of Disc space needlessly copying all the memory used or not. I hope B.M will copy the same games with a more economical use of disc space. We will have to wait and see won't we?

The whole thing is now fitting together very well for me. The use of Romdos gives permanent use of the 3.5" Discs in drive B without any fuss. CPM+ is easily called into use too, as long as you remember to type in at the DA prompt, Ramdos+ d20, (or whatever format you may have chosen of d10 ,d20 etc of the six available using the "FORMATS File" in Ramdos (or) Romdos). The use of CPM+ and the PD"MFT" prog gives good file or disc copying off "Drive A" to "Drive A". The use of PD "NSWP" (or "FILEMAN" which is the same thing), enables copying from Drive A to B with the greatest ease not to mention Multi Copy, Multi Erase and all the other goodies on "NSWP".

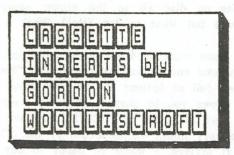
I am delighted that the "Intelligent DiscMenu" prog switches from A to B Drives as quick as you press A or B (even without Romdos) and with just "Disc.Bas" you can have the Drive B Menu and options, just as for Drive A. My latest joy has been to find that the "CAT" prog from PD 7:2 goes from Drive A to B and prints out a beautiful little label to put into your disc cases or stick on the outside with "Pritt Stick" if they are the plastic type. Even better is its request to Print out the "Next User?", as I have found that using Users 0-15 (I use 0-8) when loading to my 3.5" discs I can keep the contents of my 3" P.D and other discs together as before for cross reference to my original records. Many people say using several users on your discs is difficult or not a good thing. Well I think it is a first class system much under rated and under used. All it needs is to ESC from the program you are in (Say the Disc Menu which I always use), Type in |User,x:Run (x is a No. 0-15) and you find yourself back in the Disc Menu prog, only in a different User. And you can switch to the other drive in user x by pressing A or B as appropriate. If you want to, you can put some thought into how |User,x would suit your needs and off you go. Why not try it today.??.

Another Gem I"ve found out is the fact that if you use B* as your answer when you press L in NSWP (to change discs or drives in use) if you use A* or B* in reply it will list all files on Disc in alphabetical order for you, giving all "Users" as part of the information on each file.

Now finally may I say that the PD 8:5 "Disclibr" prog will take all your discs, catalogue them and add them to the library with any identifying code you care to give. Each file or each side as you wish. Several copies can be stored on discs, one for games, one for PD, one for C.P.M Utilities etc. It can take a great number of Discs (or 999 Files) in just the one LIBR file, but I find it better to sort into categories and have several files, not just one with everything in it. All the Disclibr files created are easily printed out in half page width columns, which can be "PRITTed" together and kept as a full index of all your files and all your discs.

This then is the full system with good Disc Menu Labels on each disc, good File and Disc Indexes in Disclibr, Files or Printouts. The ability, using ROMDOS (or MS800) to fully utilise your 3.5" discs, to copy your 3" discs into separate User areas and View, Copy, Erase or Print Out these files in All Users using Nswp (or Cat from PD 7:2). With Utopia and Master Disk to help with any problems and Protext for your Letters etc. If You should have alternative Programmes or Files doing the same jobs of course all I have said applies to Your System too and You should also be A Very Happy Computer Person-For a while that is!! (Until you read about some new programme and debate whether you should buy it or not, how will it fit in?, will it be better? If you weigh it up carefully and you can afford it, why not buy it and have the fun of something new in your system to play with. If you are a Hacker you will want to add......

MAXAM, HACKIT, ASSEMBLERS, DISASSEMBLERS Etc, Etc. (AH!! WELL!!!THATS LIFE!! is'nt it).



This is a simple type in which will programme on disc hard to handle not can miss out this section. having a suitable word processor nor First of all if you do not wish to type the basic program.

the same data or save the data for running of the programme. future use. Before running the program Next do be careful when entering one should have turned on the printer comma's(,)/full stops(.)/colons(:) and and inserted paper i.e. you are ready semi colons(;) as each affect the to print. Then run the program from the program in a different way - if on tape or disc to produce the first page running the program a "syntax" error of instructions. Progress is by message occurs do check these first in pressing "X" until the first prompt the line produced by the computer with

line can be amended at this stage. On if desired. pressing ENTER the line will be printed Lines 320/500/580 and 740 turn the again. You will of course start a fresh card outline. It is best to do a few program has run. practice runs first especially if you The program itself runs from Line 320 columns. If you keep to the 60 the program running on into the characters then this is reasonably easy subroutines from 780 onwards. as the lines remain on the screen to At line 360 an instruction is given to the end of the program. To produce blank lines (i.e. if you have no more

At the end of the 15 lines you will be the maximum of 24 characters if possible - although you could fit in 30 characters. After entering this line you will have a further 5 lines of 60 characters before the end of the program. Should you require to print another card then enter "goto 300" after making sure that the printer/paper is ready.

COMMENTS ON PROGRAM

I felt that a few comments were print out cassette inserts for putting appropriate here for those not familiar in your cassette cases. This programme with listings especially as some who was written following a request from wish to use this program may have a one of our members who had a modified limited knowledge as a work 464 but was finding the Public Domain programmes/programming - the "experts"

having the necessary skills to modify in the instructions (which need to be included in a Public Domain program) The program is in the Public Domain so then type in Line 20 followed by Line you can pass it around but not sell it. 300/320/340 and so on, ending with Line I have written it in Basic and have not 900. All other lines can be left out yet modified it to be able to repeat without affecting the instructions and

line is produced on screen. The ball had the error message. The man said and the ball had been been as a second se

You may enter up to 60 characters (to The REM (reminder) messages are self right hand edge of screen) of your explanatory in Lines 300/480/560 and titles, capitals printing out clearer 720 and are transparent to the program - if you go over this number then the i.e. they do not appear in it or affect printing will overrun the card. The its running. They can be removed later

out and a further prompt appear. Should printer codes for bold+condensed and you make a major error then you can enlarged printing on and off as the break into the program (Press ESC program progresses, especially the one twice) and enter "goto 300" to start in Line 740 which returns the printer back to its original setting after the

are trying to print the titles in to Line 760 which is "END" - this stops

go to the subroutine at lines 840 to 900, - this subroutine draws the lines titles) then merely press ENTER. marking out the cassette card sections. This is repeated again in lines 460 and asked to type in the title - do keep to 600. Lines 380 and 620 produce blank lines.

The loops in Lines 400 to 460 and 780

to 820 repeats 15 times the prompt "type MAX 60 CHARS" printing each line in turn as enter/return is pressed. Lines 520 & 540 then ask for the title line and print it out when enter/return is pressed. Finally Lines 640 to 680 repeats 5 times the original prompt in lines 780 to 820.

CARDCASS PROGRAM

```
20 MODE 2:INK 0,13:INK 1,0:BORDER 10
                              CASSETTE INSERT PROGRAMME
40 PRINT "
                   PROGRAM PRODUCED BY GORDON WOOLLISCROFT FOR THE PUBLIC DOMAIN.
60 PRINT "
IT MAY BE GIVEN AWAY BUT NOT SOLD "
80 PRINT:PRINT:PRINT
100 PRINT "THIS PROGRAM ENABLES YOU TO PRODUCE AN INSERT FOR YOUR CASSETTE CASES
          YOUR PRINTER WHICH AFTER TRIMMING SHOULD FIT IN THE CASE WITH TEXT AT
ON
          APPROPRIATE PLACES. ": PRINT: PRINT
THE
120 PRINT "SCREEN PROMPTS APPEAR AS NECESSARY AND THE TEXT IS TYPED AND PRINTED
           LINE ON THE SCREEN AND THEN ENTERED. EACH LINE CAN ONLY BE EDITED
BEFORE ENTRY. ": PRINT: PRINT
140 PRINT "BEFORE RUNNING THE PROGRAM ENSURE THAT THERE IS PAPER IN THE PRINTER
AND THAT IT IS ON LINE (READY). ON RUNNING 2 LINE FEEDS OCCUR AND THEN THE FIRST
OUTLINE LINE IS PRINTED FOLLOWED BY SCREEN PROMPTS . ": PRINT:PRINT
160 GOSUB 920
180 PRINT:PRINT:PRINT
200 PRINT "YOU WILL BE ASKED TO ENTER UP TO 15 LINES (MAXIMUM OF 60 CHARACTERS)
WHICH CAN THEN BE EDITED IF NECESSARY. ON PRESSING ENTER THE LINE IS
PRINTED. ": PRINT: PRINT
220 PRINT "THE NEXT PROMPT WILL ASK YOU FOR THE SPINE TITLE (MAXIMUM OF 24
                WHICH CAN THEN BE EDITED IF NECESSARY. ON PRESSING ENTER THE LINE
IS PRINTED. ": PRINT: PRINT
240 PRINT "YOU WILL THEN HAVE A FURTHER 5 LINES OF TEXT AVAILABLE IF NECESSARY FOR
TEXT. AT THE END THE FINAL OUTLINE LINE IS PRINTED. ": PRINT: PRINT
260 PRINT "IF YOU WISH TO PRINT ANOTHER CARD THEN YOU MUST RUN THE PROGRAMME AGAIN
        ENTERING RUN OR GOTO 300": PRINT: PRINT
280 GOSUB 920
300 REM - SET PRINTER ON LINE/SET UP PRINT SCHEDULE
320 PRINT #8, CHR$(27); CHR$(69); CHR$(15)
340 CLS : MODE 2
360 GOSUB 840
380 PRINT #8
400 FOR a = 1 TO 15
420 GOSUB 780
440 NEXT a
460 GOSUB 840
480 REM - SET UP ENLARGED PRINT SYSTEM
500 PRINT #8, CHR$(27); CHR$(87); CHR$(49)
520 LINE INPUT "type spine title - 24 spaces";a$
540 PRINT #8,a$
560 REM - TURN OFF ENLARGED PRINT
580 PRINT $18, CHR$(27); CHR$(87); CHR$(48)
600 GOSUB 840
620 PRINT #8
640 \text{ FOR a} = 1 \text{ TO } 5
660 GOSUB 780
680 NEXT a
700 GOSUB 840
720 REM TURN OFF PRINTER OPTION
740 PRINT $18, CHR$(18); CHR$(27); CHR$(64)
```

780 LINE INPUT "type MAX 60 CHARS":a\$

800 PRINT #8.a\$

B20 RETURN

840 FOR n = 1 TO 64

860 PRINT #18, CHR\$(95);

900 RETURN

920 PRINT"

TO CONTINUE"

= "" THEN 940

980 IF k\$ ="x" OR k\$ =

1000 RETURN

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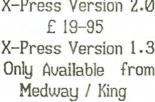
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