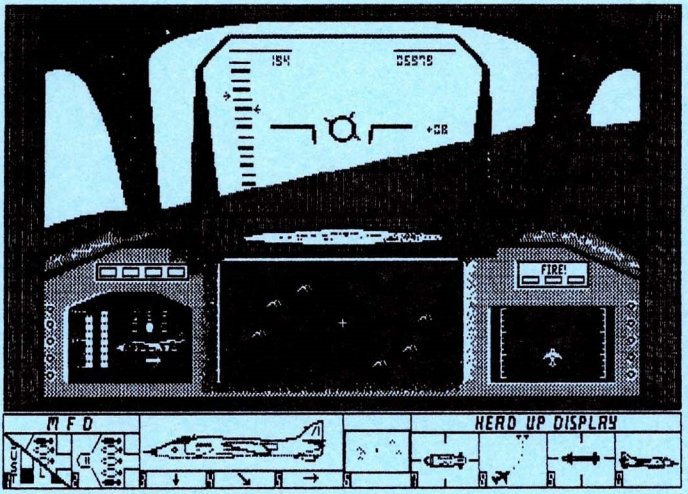
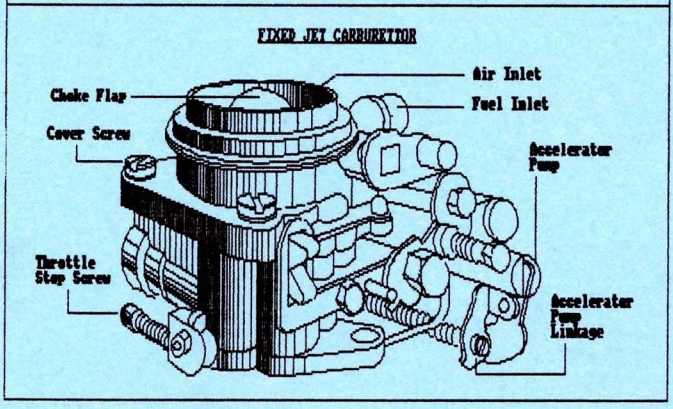
FILE

VOLUME 1 ISSUE 2: MAY/JUNE: PRICE 85p



Screendump of Strikeforce Harrier

Fixed jet carburettor drawn in prespective using the 'Draughtsman' drawing utility from EG COMPUTER GRAPHICS, now for the Amstrad PCW 8256 & 8512.



Screendump of Draughtman

Volume 1 Issue 2

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Going to the printers on 26th June 1987 - Be about 2-3 weeks.

Contributions in by 19th June 1987

Trade advertisements in by 12th June 1987

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EDITORIAL

By Chris Bryant

What a hectic last two weeks it has been, thanks to 8000 Plus. (see what they said below). It looks like we are going to make it. Lets hopes this is a taste of good things to come.

On page 21-24 of this magazine is a full listing of what is available in the Public Domain Library. Remember it is free to members so if you are not a member it's worth joining at our special introductory price of £5 for six issues. The special offer ends on 1st July where the new price will be £7 or £7.50p for six issues. This is because printing costs have gone up. I feel we will still offer great value with the free acess to the Public Domain Library and magazine. You will see that you can order your Public Domain software direct from Steve Cholerton which will save me passing it onto David Moore that offer the service before. I would like to thank David Moore for his help and time. Don't forget to drop any CPM Public Domain to Steve as we can build up our list.

If there is anybody out there who would like to start a regular series in the magazine or the occasional software Review then get in touch with me. We are also looking for more hints and tips so however simple it may be drop me a line. In mailbag this month there are many suggestions and I hope someone will come forward to write them. People who read issue 1 will notice Stuart Williams pieces on Communications and the PCW Point of View series are missing in this issue. Please could Stuart contact me regarding whether you are able to do the two series. I hope more of you will contribute as this is the only way we will succeed with PCW File.

If you have any problems then drop me a line or you can write to Steve Cholerton who's address appears elsewhere in the magazine.

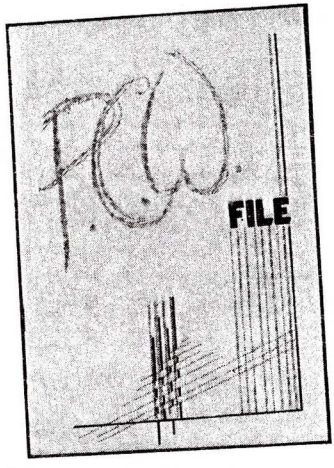
Finally, I would like to thank those people who have help with this issue and of course 8000 Plus for mentioning us in their magazine.

COMPETITION FOR 8000 PLUS?

Perhaps it's the bracing West Country air, but a new publication has been launched from Seaton in Devon to compete with 8000 Plus for the title 'Best publication on the Amstrad PCW West of Yeovil.' *PCW File* is not really a glossy competitor for 8000 Plus, but a non-profit making periodical aimed at enthusiasts.

Chris Bryant, the editor, is aiming at producing a forum where users can 'share experiences, write articles, hints and tips and help users if they get stuck on a problem'. The subscription fee is £5 for six issues which are to appear at *about* two monthly intervals. They are aiming at around 32 pages per issue, depending on contributions.

They have a small amount of Public Domain software which is free to subscribers (with a stamped addressed envelope and a



formatted disc). Non-subscribers will have to pay £2 per side extra as a copying fee.

Anyone interested can receive a sample copy by sending a SAE to *Chris Bryant, 11 Havenview Road, Seaton, Devon EX12 2PF*

-MAILBAG-

Edited by Chris Bryant

Please send in your comments about the magazine, experiences, interesting stories, queries and any other comments you might have about the computer industry. Would people please mark up the top of their letter if it is not for publication in PCW File.

Educational Programmes from School Software Ltd

One of my reasons for buying a PCW8512, which I obtained over Xmas 1986, was to give my three children the opportunity of using some purpose written programmed learning packages.

Having read glowing reports of how parents were able to help their children's education by supplementing school work with professionally written software I eagerly awaited the arrival of the first disc from School Software Ltd, a company based in Limerick, Ireland. I was soon to find that I had been grossly mislead by the ads.

The package we had chosen to buy first was called BETTER MATHS 1 (Age 12-16) and was advertised by School Software as having been rated in the top five educational programmes in the 1986 A.A. educational survey.

Infact, it consists of only 110 maths questions arranged in a series of 10 options each containing 10 questions covering different topics, and a 10 question test as a final option. To say, as the distributors do that it is "ideal for the ambitious student, giving hours of fun", is very misleading.

Having answered the 110 questions there are no further groups of questions to move onto and the student is left to repeat the same questions in each group. As my 9 year old daughter was able to answer correctly all the questions in one group at the first attempt I felt somewhat cheated at having paid £14.95 + £1 p&p for what is clearly a very limited educational package.

I think it would be very useful if PCW FILE could arrange to critically review educational software on a regular basis as there will inevitably be a deluge of these packages some good and some not so good.

Jonathon Wortley, Wymondham, Norfolk.

Chris> Jonathon wrote to School Software to complain about MATHS 1 and this is the reply he received.

We regret that you find our better Maths program represents poor value for money.

Having spent years as an editor and author with a major educational publishing company, I am only too well aware of the value judgements used in assessing educational publications. This pattern is now continuing in regard to educational software.

Cont'd Overleaf

Mailbag Cont'd

We do not accept your criticisms of our program and believe that the initial version of it represents good value for money.

The PCW represents a small fringe market and our product is geared for the home user who wants to revise. We will vigorously challenge your assumed value judgements, if reviewed.

We therefore wish you to know that we object to being reviewed within the limitations of your value judgements and will take up the matter of any losses incurred through prejudicial, biassed or unfair review.

John Jennings Managing Director.

Chris's comment

I believe by saying that "the initial version of it represents good value for money" admits to me that the PCW version of Maths 1 is poor quality or they would not have said this. We also believe their reply to Johnathon Wortley implies a fairly cavalier dis-regard for the opinions of their customers. I was also surprised to find that they consider the PCW market to be "fringe".

I hope as Johnathon Wortley has suggested we can critically review Educational Software - If you are interested in taking part in reviewing software for the new column would you please get in touch with me.

I have an Amstrad PCW 8512, and, after much trouble with Locoscript, have settled for Protext, which is considerably better, but also contains pitfalls, and a manual written in a Jargon-happy gobbledegook only marginally more comprehensive than that of Locoscript. I should therefore be particularly interested in what other Protext users may have to say.

Charles E.Sprague, Berkhamstead, Herts.

Chris's Comment> I think it would be a very good idea if people interested in Word Processing send in hints/tips and advice on the Word Processing packages. If you are interested in organising the series or contributing to it please let me know. It would be great to find someone by Issue 3 of PCW File.

I am extremely interested in becoming an active member of your proposed forum and have many ideas that I would like to put forward in the interest of all PCW users.

Just a few to set the ball rolling:-

MEMORY UPGRADE - How about us all getting together to purchase 'chips' at the right price.

SOFTWARE - Ditto the above.

Cont'd Overleaf

Mailbag Cont'd

USER REVIEWS - Helpful to know how others have coped with particular packages in addition to the usual professional reviews. This to include hardware.

BBS - How about setting one up or using space on someone else's system - Sysops are very friendly people.

Malcolm Lowe, Weymouth, Dorset.

Chris's Comment

MEMORY UPGRADES

PCW File has obtained a discount from ANWUC in Manchester. The recommended price of the upgrade is £39.95 and the club Price is £31.95p. Cheques payable to ANWUC, 41 Millwall Close, Gorton, Manchester M18 8LL. Please mention PCW File (Part of the Amstrad Computing Newsletters group) to ANWUC.

SOFTWARE - We are going to arrange for a discount on software from one of the distributors of PCW software. What I need to know from you is what discount is required for you to use the service and whether enough people would use it to make it a viable suggestion to a firm.

USER REVIEWS - Yes, sure send in anything to tell other users have coped with other packages.

BBS - Not unless someone offers to help me provide this service.

FOR SALE - Aftershock Adventure game. As new, swap for another adventure game Contact Steve Cholerton - address on Page 16.

Hints and Tips

By Steve Cholerton

Defined functions

This first program is a useful routine which uses defined functions to create a box shape on the screen, It can be incorporated into your own programs easily, All you have to do is specify the co-ordinates and then gosub the rotine, eg,

```
10 x=1:y=1:h=25:w=88:gosub 2480
```

X is the row, Y is the column, H is the height and W is the width, This would draw a large rectangle on your screen,
This is the routine,

```
2480 REM Draw a box routine
2490 l1$=CHR$(150)+STRING$(w,CHR$(154))+CHR$(156)
2500 l2$=CHR$(149)+STRING$(w," ")+CHR$(149)
2510 l3$=CHR$(147)+STRING$(w,CHR$(154))+CHR$(153)
2520 PRINT FNp$(x,y);l1$
2530 FOR k=1 TO h
2540 r=x+k
2550 PRINT FNp$(r,y);l2$
2560 NEXT k
2570 PRINT FNp$(r+1,y);l3$
2580 x=0:y=0:h=0:w=0
2590 RETURN
```

Firstly though you must define the function early in the program before you use it, This is the line you need,

```
5 DEFfnp$(x,y)=chr$(27)+"Y"+chr$(x+31)+chr$(y+31)
```

Another useful routine is the simulated 'print at' routine, Firstly you have to define it,

```
5 DEF FNloc$(x%,y%,t$)=chr$(27)+"Y"+chr$(32+y%)+chr$(32+x%)+t$
```

Now whenever you want to print something at a specific place on the screen the command you use is,

```
10 PRINT FNloc$(x,y,"text")
```

X is the row, Y is the column and text is the text you require to be printed on the screen,

Hints and Tips

By Steve Cholerton

The following may be of use to anybody who is new to computers and or new to the PCW, It concerns escape characters, Below are listed some of the more popular and useful functions which are accessed by escape characters,

Effects on the screen

(Remember these escape codes will have to be preceded by the ? statement)

```
chr$(7).....sounds a bleep
chr$(27)+"E".....clears the screen
chr$(27)+"H".....sends the cursor to the top of the screen
chr$(27)+"J".....erases to the end of the page
chr$(27)+"M".....deletes the line with the cursor on it
chr$(27)+"N".....deletes the characters under the cursor
chr$(27)+"e".....enables the cursor
chr$(27)+"f".....disables the cursor
chr$(27)+"p".....enters reverse video
chr$(27)+"q".....leaves reverse video mode
chr$(27)+"r".....enters underline mode
chr$(27)+"u".....leaves underline mode
```

Printer styles

(Remember these will have to be preceded by LPRINT)

```
chr$(27)+"X".....sets 0 with a slash
chr$(27)+"o".....resets 0
chr$(27)+"W"+chr$(1).....enlarged draft quality
chr$(27)+"m"+chr$(1).....NLQ print
chr$(27)+"m"+chr$(1)+chr$(27)+"W"+chr$(1)...enlarged NLQ
chr$(27)+chr$(15).....condensed print
chr$(27)+"G".....double strike mode
chr$(27)+"E".....bold print
chr$(27)+"p"+chr$(1).....proportional text
chr$(27)+chr$(4).....italic print
chr$(27)+"S"+chr$(0).....superscript
chr$(27)+"S"+chr$(1).....subscript
chr$(27)+"d".....resets printer to default settings
chr$(27)+"@".....resets the printer
```

More details of these codes can be found on pages 122-141 of the manual

GRAPHICS IN LOCOSCRIPT

By Brian M. Hall

One of the drawbacks of Locoscript that I have heard some people complain about is the lack of any facility to use graphics of any description within a locoscript document. If you have a report to produce that would benefit from some graphical output, you have to prepare it by means of another program and this usually means it being printed on a seperate piece of paper.

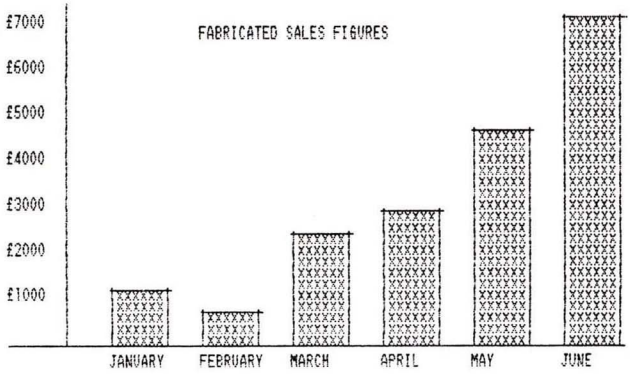
One of the most useful type of graphic output to the businessman is the presentation of data in the form of a graph and below is an example of a sales bar graph that I have produced from within Locoscript itself. It took me a couple of hours one evening to work out the spacing etc, but now I have a copy set up, I can produce any bar graph along these lines within quite a short time.

By pressing EXTRA and the Full stop at the same time you get a vertical bar ¦ In normal use with Line Spacing set to one and these vertical bars printed underneath one another, you would get a broken line. By setting Line Spacing to a half, these bars can be made to join up. Now it is a straightforward matter to join the vertical bars with the underline to produce a box. One thing to watch out for though is that the vertical bar is position and the underline, if produced in the same Pitch will overlap the upright. I have used a combination of Pitch sizes, but still you will notice the lines at the top corners are equal, but you need to be careful not to let the overlap become too great.

To produce the top line of each bar on the graph, I have used the following combination of characters and codes: (+Pitch17)(+UL) one space (+Pitch10) four spaces (+Pitch17)(-UL). The lines within each graph bar as follows: one vertical bar, six lowercase x's & one vertical bar all in 17 Pitch. Tabs are set at column number five for the left-hand vertical line at every eight spaces starting at column number nine. It should be remember that the Tabs are produced in 12 Pitch and if you are using a different Pitch as I am here you will have to adjust the tabs to line up with the pitch size you are using.

Another thing to watch out for if you are using more than one line of text that is to be printed, either within the area of your graph, or to the side of it, is that because you have set your Line Spacing to half you should miss a line between each line of text, otherwise the second line will overlap the first.

It took me a while to produce this graph but I got a lot of satisfaction in seeing that my idea worked when I printed the final result.



USING SUBMIT

BY Steve Cholerton

Probably the best way to show the usefullness of the SUBMIT command and the SUB file is to show you how I customised my database, Retrieve by Sage, to work how I wanted it to.

The problem with Retrieve was that the menu screens etc. were loaded in from disc whenever they were needed, making the program very slow. To combat this I created a *sub* file to load the whole program into drive M and work from there. I also made it more usefull in other ways, as you shall see later.

It would be ideal to just put side A of the disc in and have the program run automatically but this is not possible as their is not the space on side A to pip the CP/M file. So I put it on side B using pip I also put rped.bas, rped.sub, profile.sub, and submit.com on side b.

I then pip'ed pip.com, show.com, setdef.com, and profile.sub onto side A

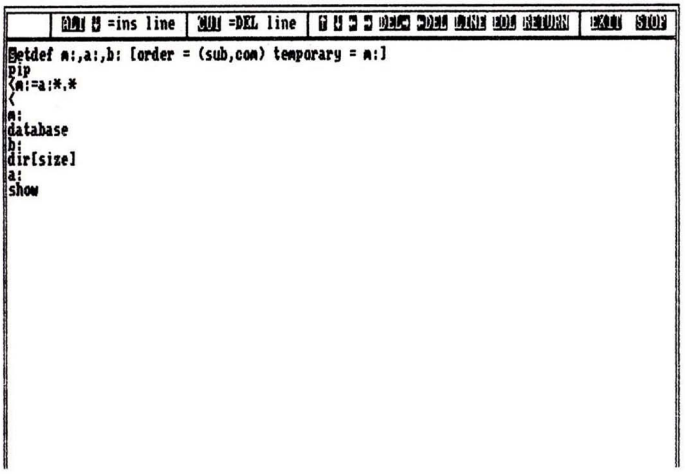
To create the profile.sub file I loaded rped, called the file profile.sub and then typed in the commands shown in the screen dump.

Now when I want the program I just insert the disc, side B and the CP/M file J14CPM3.EMS is loaded followed by the prompt 'Enter File to Submit I then type 'profile.sub', turn the disc over and press return. All the files on side A are then pip'ed accross to drive M and then menu screen comes up.
When I finish using the program it goes back to the CP/M prompt and gives a DIRectory of drive B including the size of the data files.
It then shows me the RW space on all the drives. I then know the space left on the discs. You can see that this makes Retrieve a lot friendlier to use and also faster.

Using SUBMIT can make any program a lot easier to use. I have not gone into detail when explaining how I customised Retrieve as there probably aren't many people out there you would like to do the same, I just used that as an example.

The Sub file is a seperate program which can contain any commands you can type in at the CP/M prompt and execute them in the order they are contained in the file. The submit program controls the way your main program runs. If you just want a program to auto-load and run then you would need to copy the files J14CPM3.EMSand SUBMIT.COM onto the same side of the disc as the program. You would then need to create a *sub* file.

First type basic rped, at the A> prompt. RPED will then be loaded. You then press the function key to create a new file. The name of the file can be anything up to 8 characters as long as it has a .SUB extention. Press return.



When you get to the main screen delete whatever it says, if anything and type the name of the program you want to auto run ie *database* then press return and press exit twice.

Now whenever you insert the disc the CP/M file will load and the program will auto run.

If you have created a BASIC workdisc you can include a command in your submit file to make the CAN key clear the screen when pressed.
Get to the edit screen of your SUB file using rped, and type prior to the BASIC line :

```
E 139 "PRINT CHR$(27)+CHR$(69)+CHR$(27)+CHR$(72) ↑M
```

This resets the CAN key to clear the screen whenever pressed. For this to work you also need to include SETKEYS.COM on your workdisc

Try organising your discs using SUBMIT, it is a very useful program.

'PCW DISK RE-LABELS'

Full Size
self adhesive labels

8 labels per sheet
90p per sheet or £4 for 5

Cheques payable to:
Bob Stead 2 Caledonian Place
Edinburgh EH11 2AS

Alpha - A Mallard Basic Sorting Program

by Tim Pymont

Owners of the PCW range of computers are generally well pleased with their machines, but there are always niggling little deficiencies in any system, and the wide variety of users of the PCW and Locoscript have unearthed a fair few of these - none of them major enough to justify buying a more sophisticated machine but, each of them, nonetheless, annoying to the affected group of users.

An early complaint was about the absence of a word count facility, this has been rectified if you buy a more recent (v 1.3 onwards) version of Locoscript, or alternatively there are a number of similar CPM utilities (at least one on Public domain).

Another handy utility not available on Locoscript is one to sort a list of words into alphabetical order. This has always presented something of a challenge to BASIC home programmers, because Alphabetical sorting programmes were notoriously slow and heavy on memory use. However, for the PCW owner there is a simple solution, for Amstrad have blessed us with the gift of MALLARD BASIC and its excellent JETSAM file handling system.

In the future we will cover the many and wonderful abilities of JETSAM to provide Keyed Access Filing, but for now it is sufficient for us to know that JETSAM stores records in a file and can spew them out in rank order (ie Alphabetically).

This program, therefore, makes an entirely frivolous use of JETSAM by taking words into a keyed file and then reading them out in rank order. The sorted words are then written into a second file, this time in alphabetical order, and this file can be manipulated however you wish - for instance by incorporation into a Locoscript document.

The program as listed has seven main stages:-

1. Set up for Jetsam.
2. Create a keyed file.
3. Take words from the operator -add them to the file.
4. Create a sequential file.
5. Read keyed file in rank order - write to sequential file.
6. Destroy Keyed file.
7. Close Down.

I have put a limit of 20 characters as the length of a word. To change this change the FIELD command in line 150 to the length you require and the variable RECLENG in line 130 to two more than this number. (The extra two bytes belong to Jetsam and can't be used).

Cont'd Overleaf

Alpha - A Mallard Basic Sorting Program Cont'd

You should save the program on your BASIC disc and then transfer the alphabetical files you create to a locoscript disc for manipulation, Alphabetical files created by ALPHA will have the particular filename you have chosen and, for easy recognition, the filename ".ALF"

To use an alphabetical file in a locoscript document simply use the insert text function (f7 - while editing a document). If you only want a printout of the list then create a new document, insert the alphabetical file, and exit.

The more adventurous amongst you, I'm sure, will want to amend this program to suit your needs. How about "Turnkey Operation" with a suitable PROFILE.SUB file on the disc to load CP/M plus BASIC plus ALPHA then prompting for the disc to be changed back to the Locoscript one for transfering the alphabetical files.

This really is a simple little program, and so easy to use too. I'm sure almost everybody will gain from having it on their "Start of the day" disc, incidentally, if you have words associated with numbers (eg names and membership numbers) you can also produce numerical lists. Just type each number and word separated by a space ? prompt. Number first for a numerical list, word first for an alphabetical list.

ALPHA - LISTING

```
100 CLS$=CHR$(27)+"E"+CHR$(27)+"H"
110 PRINT CLS$
120 BUFFERS 6
130 KEYFILE=1: RECLENG=22
140 CREATE 1,"WORD.DAT","WORD.KEY",2,RECLENG
150 FIELD KEYFILE,20 AS WORDFLD$
160 PRINT:PRINT:PRINT:PRINT TAB(20) "ALPHABETICAL SORTING PROGRAMME"
170 PRINT
180 INPUT "HOW MANY WORDS DO YOU WISH TO SORT?       : ",A%
190 PRINT
200 PRINT "ENTER THE WORDS AT THE ?, FOLLOWED BY <RETURN>."
210 FOR B%=1 TO A%
220 INPUT "? ",WORD$
230 LSET WORDFLD$=WORD$
240 RC%=ADDREC(KEYFILE,2,0,WORD$)
250 NEXT B%
260 PRINT
270 PRINT "OK, I'VE GOT THE WORDS. "
280 INPUT "NOW GIVE ME A NAME FOR THE FILE (MAX 7 LETTERS PLEASE)  : ",NAME$
290 OPEN "O",2,NAME$
300 PRINT CLS$
310 PRINT "ALPHABETICAL LIST OF YOUR WORDS"
320 PRINT
330 RC%=SEEKRANK(KEYFILE,2,0)
340 WHILE RC%=0 OR RC%=101
350 GET KEYFILE
360 PRINT WORDFLD$
370 PRINT # 2 WORDFLD$
380 RC%=SEEKNEXT(KEYFILE,2)
390 WEND
400 CLOSE KEYFILE
410 CLOSE 2
420 ERA WORD.DAT
430 ERA WORD.KEY
440 END
```

Review By Lindsay Lockett

Title : Draghtsman
Type : Graphics Software
S/W house : EG Computer Graphics
Price : £29.99

E.G. Computer Graphics have produced one of the cheapest and powerful graphics programs for the PCW series. Draghtsman can be loaded straight from CP/M and requires no G.S.X. drivers. The package consists of a program disc holding the graphics program with four excellent screens to show how powerful this program can be in the right hands, a long green function key strip to place above the top row of keys, a 15 page manual and a letter apologising for the deiay of delivery but it's well worth the wait.

The manual could do with being a bit longer as only a brief description is given off each function but it only takes a few minuites before you are drawing circles all over your PCW. The function keys call up drop down menus (similar to Locoscripts). Selection of the menu is done by the cursor keys with the key in the centre of the cluster being used to select an option.

The main screen shows the X-Y co-ordinates of the cursor, the fix point, the position of the cursor relative to the fix point, the cursor speed and a cross hair cursor. The program allows the construction of lines , rays , circles, ellipses, polgons and arcs. The horizon can be set for drawing in one or two point perspective, shapes can be filled in nine shades, text can be printed in 90 degree steps, symbols can be defined, screens printed, saved , loaded and a device menu will allow the program to be used with the ESP lightpen, mouse and the Kempston mouse in later versions. One critism is to construct shapes the operator must know information like radii, X and Y axis, number of sides and starting angle which is a pain when you want an object to fit into a critical space. If a mistake is made pressing shift and the function key will remove the last shape drawmAn eraser function is avaliable but it's advisable to use it as less as possible as I tended to rub out an hours work in one key stroke. It is possible by using the symbol designer to create symbols of up to 3x3 characters in size, useful for various fonts or small objects that are to be used many times like components on a circuit board. The filling routine is not that good but it is instant unlike Logos and it can fill in nine patterns.

I have come to the conclusion that at £29.99 it beats Dr Draw and possibly the ESP software but only as a technical drawing utility as the others are slightly more 'user friendly'. It can also be used to produced pie charts and histograms but not as complex as Dr Graph. So if you're after a graphics program try this its £20 cheaper to any rivals.

Graphics : 20/20 (after all it is a graphics program)
Sound : 1/20 (for the dreaded BEEP)
Value : 17/20
Ease of use : 15/20 (no installing , but a thin manual)
Overall : 17/20

Address : Orange house , Orange street , Uppingham , Leics.
LE15 9SQ , Tel - (0572) 821291)

Software Review

By Steve Cholerton

Title :Strike Force Harrier
Type :Flight Simulator
S/W House :Mirrorsoft
Price :£19.95

Probably the best way to describe this product is to quote from the manual.

'STIKE FORCE HARRIER is not just a flight simulator. It's also a full battlefield simulation, complete with strategic planning and overall objective. Operating from small ground sites in the Harrier's own unique way, your task is to destroy the enemy HQ some 250 miles away, at the same time making the best use of your ground forces.'

This game is good, as soon as you see the opening screen with it's stunning graphics you know that there is something special about it. The game comes quite modestly packaged, by todays standards, just a slim plastic wallet containing the disc, a small size manual and a 'keycard' giving the appropriate keys for your computer. The manual although small contains quite a lot information and diagrams, if you wish to get the most out of this game I recommend a couple of peaceful evenings studying it.

I think I should mention the game is contained on one side of the disk and is loaded into memory in go. This means that you could 'pip' the CP/M operating system (file J14CPM3.EMS) onto side two of the disc so that instead of loading CP/M from a seperate disk and then loading SFH, turn the disc over and press return. The program is then loaded into memory.

The game is 143K long and as I said earlier is excellent. It takes a lot of time and effort to get into but if you have just paid £20 for a game you are probably willing to spend a bit of time on it. To fly the plane you have to remember 30 keys and their functions and keep track of about 20 instruments on your screen. Although this sounds difficult it is not so bad and doesn't take so long to learn.

Taking off is quite easy, landing is not so easy also whenever I seem to get down to about 500 feet for a bombing run I usually hit a mountain. This is my inadequacy at the game but I will keep on trying.

The view through the cockpit window is good, better than the majority of these sort of games but the reaction to a keypress is sometimes rather errratic, it seems to depend on the activity going off elsewhere. It isn't fast but it is fast enough to be playable and enjoyable and is also addictive which is a good point.

Overall I rather like this game and it does show that the PCW is capable of a lot more than simple word processing. It is is one of those games you keep coming back to, although I think I should mention

Cont'd Overleaf

that there was a bug in my version. When I crashlanded on boggy land, instead of returning me to the choice of Combat practice, Combat, Practice etc. the screen went crazy with letters all over the place and it was impossible to play another game without reloading. However I am not saying this is evident on all versions and it does not really happen often. A good game.

Graphics :9/10
Sound :the PCW's occasional beep
Playability:8/10
Overall :8/10

Book Review

by Steve Cholerton

Title :Program Your PCW
Author :Ian Sinclair
Publishers :Glentop
Price :£6.95

Program your PCW is a book designed to teach people to program in Mallard Basic. If you are a total newcomer to programming then you may find this book a little fast moving and difficult to get into, nevertheless there is a lot of information within the covers which is worth rooting out and understanding. Ian Sinclair is a good and a very capable author and he does know what he's talking about.

If you can already program in BASIC then this is the ideal book for you as you will be more able to understand the various extensions and idiosyncracies which Mallard Basic possesses. The last few chapters are about disc filing and gives a discussion on serial and random access and finally JETSAM. The section on JETSAM although including a workable database program to demonstrate the various commands is not really very clear or easy to understand. I have read the first 3 parts out of a 5 part series, which started in December, published in 'Putting your Amstrad to Work', which explained JETSAM a lot better.

Overall I enjoyed the book and although there are a number of typing errors I think it is good value at the price. It won't replace the BASIC manual, but then the manual couldn't do what this book does. Good Value.

Overall :4/5

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Programming in Mallard basic

By Steve Cholerton

Part one

This series on Programming in Mallard-80 Basic is not an in-depth tutorial on BASIC programming, for that you need a decent book, this series is designed to be used either alongside a proper tutorial or as a reference guide. I am hoping to include a lot of things the books may miss out, but which may be important to the beginner or novice programmer. I will not be going into a lot of detail but hope to give a general outline and understanding of the language, clearly enough to maybe lure some of you away from the arms of Locoscript and into the wonderful and rewarding area of Programming. With your PCW you have included Mallard-80 BASIC incorporating JETSAM, this means you have a powerful version of the language incorporating a file handling system superior to any other available from within BASIC on any other micro. Further on in the series I will be leading you towards writing and understanding a database program using BASIC. This program will enable you to store the names, addresses, companies etc. of your friends or business accociates, the program will be capable of a lot more and a full listing will be printed towards the end of the series. This you can customise or use as it is, studying the listing will enable you to learn a lot about programming in BASIC. If anybody would like a copy of this program putting on one of their discs so they can study it in relation to the series, just send a disc and £1.50 for p&p to the address below. I do not think it is a good idea to provide the listing at this stage as the program is 16k long and the listing takes up 7 sides of A4, so to attempt to type it in without understanding it might make debugging rather hard. Also if anybody has any questions on this series or the PCW or anything concerning computers, don't hesitate to contact me on the address below.

Steve Cholerton
61 Market Street
Ironville
Nottinghamshire
NG16 5NG

If you are going to do any programming at all it is essential to have a seperate 'start of the day' disc on which to store your programs and data, so firstly I am going to explain how you should go about this. To start with you need to tranfer the files J14CPM3.EMS (or J11CPM3.EMS if you have an older machine), BASIC.COM, the two RPED files and SUBMIT.COM, from your CP/M master disc, to a blank formatted (drive A) disc. I am assuming you have some experience with CP/M as this involves the PIP

utility. If you haven't, then refer to pages 78 and 79 of your PCW users guide as supplied with the machine.

At the A> prompt with your new disc in the drive type SUBMIT RPED.SUB, when you get RPED's menu press F1 to create a new file, give the old name as RPED.SUB and the new name as PROFILE.SUB.
On your screen within the border you should see the word BASIC, if there is anything else there edit it out so as to leave only the word BASIC.
Press RETURN then EXIT. Press EXIT to quit. Now when you first switch on your machine and put the disc in drive A you should automatically go into BASIC, and you are ready to program.

When you get more familiar with BASIC you may require a certain BASIC program to run when you insert the disc. To do this you need RPED again. Enter as the old name PROFILE.SUB and as your new name PROFILE.SUB. Press F1 and you will see the word BASIC surrounded by the border, move the cursor to the end of the word BASIC and type the name of the program you wish to auto-run, ie. Basic database, press RETURN then EXIT, press EXIT once more. From now on when you insert the disc BASIC will load and then auto-run the program you wish, in this case the program called Database.

With your newly created BASIC work disc in the drive it is time to learn how to LOAD and SAVE programs because it's no good writing your first 10 line masterpiece and then realizing to your dismay you don't have a clue how to save it to disc. If you recently bought the machine you wont have a copy of the BASIC manual so this might be useful to a lot of people. (The BASIC manual can be purchased from Locomotive Software - £9.95, buy it.)
If you have loaded basic you should see the message MALLARD-80 BASIC with JETSAM, 29549 bytes free etc. and the OK prompt, this means BASIC is ready to recieve your instructions. Firstly we have to create a short line of BASIC to practice loading and saving with, at the prompt type 10 print 24-12 and then press RETURN. You always press RETURN after a BASIC instruction. Now to save this (very) short program to disc, type save "testprog" and press RETURN. The word between the quotes could be anything as long as it is less than 8 characters long. When you press return the disc will whirr and the program will be saved.

To test this type NEW, to clear the program from memory, then type load "testprog". Again the disc will whirr and the program will be loaded into memory. To see your program type LIST and you will see the line,
10 print 24-12, appear on the screen. If it doesn't then repeat the above until it does, checking for spelling mistakes etc. Once you understand the above you are ready to SAVE and LOAD any program from within BASIC.
While on the subject you can also add an extension to the SAVE command ie. save "testprog",a will save the program in ASCII form suitable for later editing in RPED etc. or save "testprog",p will save the program in protected form, meaning the program can be RUN but not LISTED.

Printing

Now you understand the above we can get down to a bit of simple programming. One of the most widely used statements in BASIC is the PRINT

command, this is the statement used to output text to the screen, and if we wish to see the results of a calculation etc. then this is the command we must use. If you type a statement without a line number then this statement will be executed straight away. To see this type PRINT 20-2 and press RETURN and you will see on your screen the answer 18. The computer has executed the statement as soon as you pressed the return key, this mode of operation is only really useful for using the computer as an overgrown calculator typing PRINT (or ?, as it can be abbreviated to) followed by a calculation and pressing RETURN will let you see the result of the calculation on your screen. For programming purposes though we need line numbers.

Line numbers determine in which order the program statements are executed. The numbers can be anything but the most usual way is to number the lines in increments of 10 ie. 10,20,30,40,etc. the reason for this is that later on you might require an extra line between 10 and 20, this is easy just call it 15 or 11 or 19 or whatever. If your lines had been numbered 1,2,3,4,5,etc. this would not have been possible without first using the RENUM function to renumber the lines. Lets try a short program

```
10 PRINT "Wow Mallard Basic is really easy to learn"
20 PRINT "Dont you agree"
```

Once you've typed this in exactly as shown you have to type RUN to see what happens. As you can see the words between quotes on line 10 appear on the screen and the words between quotes in line 20 appear on the line below. It would look a bit better if we could clear the screen. To do this in Mallard Basic you need to use escape characters. Typing PRINT chr$(27)+"E" will clear the screen and typing PRINT chr$(27)+"H" will send the cursor to the top left of the screen. So lets add an extra line to our above program

```
5 PRINT chr$(27)+"E"+chr$(27)+"H"
```

If you run this you will see the effect is much better. If you also list it you will notice that line 5 has been slotted in in front of line 10. As you see it doesn't matter what order you type the lines in, it is the lowest numbered which is executed first and the largest last. This is true for so long as you don't use the GOTO or GOSUB or IF THEN statements etc. These will be explained in detail later on, as will escape characters.

There are other ways in which you can improve the look of something which you want printed on the screen. The easiest way is to include an extra PRINT statement on its own, this will produce a blank line. To see the effect add this line to your program.

```
15 PRINT:PRINT
```

When you run this you will see that 2 blank lines have been put between the two lines of text. You will have noticed the colon (:) between the two print statements in line 15, if you wish to have more than 1 statement on a program line each statement has to be seperated by a colon. Using colons it is possible to produce a line of up to 255 characters, but using shorter lines is more advisable, if only to make the program more

understandable. On the theme of making programs easier to understand you can use the REM statement. REM means remark, and anything following the REM statement is ignored by the computer and is only there to make the program more readable. REM can be abbreviated to ' (produced by SHIFT and 6).
Add this statement to your program

```
3 REM This program is to demonstrate the PRINT statement.
```

You can see that this line has no effect on the program when run, it is there just for reference.

Your program should now look like this

```
3 REM This program is to demonstrate the PRINT statement
5 PRINT chr$(27)+"E"+chr$(27)+"H"
10 PRINT "Wow Mallard Basic is really easy to learn"
15 PRINT:PRINT
20 PRINT "Don't you agree"
```

I am now going to show you how to make the program print the words on the screen differently. If you put the semicolon (;) symbol at the end of line 10 after the quotes and delete line 15, when you run it you will see that the two lines are now printed next to each other. To make this look better put a space before the quotes at line 10 and then run it. Line 10 should now look like this.

```
10 PRINT "Wow Mallard Basic is really easy to learn ";
```

And your program should now look like this.

```
3 REM This program is to demonstrate the PRINT statement
5 PRINT chr$(27)+"E"+chr$(27)+"H"
10 PRINT "Wow Mallard Basic is really easy to learn ";
20 PRINT "Don't you agree"
```

Another way of changing the printing positions on the screen is to use a comma (,). As it is this symbol spaces items 15 spaces apart. A short program should help demonstrate this. First type NEW (to clear your old program from memory), then enter the following program, remembering to press RETURN at the end of each line and watching out for spaces and spelling mistakes. If you do make a mistake type EDIT *linenumber* and correct the mistake. This is the program, remember ? is the abbreviation for PRINT and ' is the abbreviation for REM.

```
10 ' Program using commas as spacers
20 ? chr$(27)+"E"+chr$(27)+"H"
30 ? "00","15","30","45","60","75","89"
40 ? : ?
50 ? "These are spaced 15 spaces apart ";:? "Simple really"
60 END
```

Run the program and watch the effect. Line 10 starts with a REM statement and is ignored by the computer. Line 20 clears the screen and sends the cursor to the top left of the screen. Line 30 prints the figures

between the quotes at intervals of 15 spaces. Line 40 prints two blank lines. Line 50 prints the text which is printed side by side thanks to the semicolon in the middle of the line (notice the colon to seperate the two seperate statements). Line 60 is a line we haven't covered yet and all this does is END the program. It does not need to be used really in this example but can be useful in larger programs. The word STOP can also be used but has a slightly different meaning which is not really important at the moment.

The commas can be useful for tabulating columns of figures but you may not want a 15 column spacing. This can be changed by use of the ZONE command. For example ZONE 20 will make each comma space at 20 spaces as opposed to 15.

A much more useful command is the TAB command and and it is used in the format ? tab(*n*) where *n* is the column on which you want to start printing at. This is a good time to remind you that the PCW screen is numbered 1 - 90 columns across, from left to right, and that it is numbered 1 - 31 columns down from top to bottom. Try this short program (clear the memory first by typing new). From now on I will not remind you to either press RETURN at the end of a line, or to type NEW to clear the memory when typing a new program in.

```
10 ' Demo of tab command
20 ? chr$(27)+"E"+chr$(27)+"H"
30 ? tab(45)"a"
40 ? tab(44)"aaa"
50 ? tab(43)"aaaaa"
60 ? tab(42)"aaaaaaa"
70 ? tab(41)"aaaaaaaaa"
```

When you run this you will have a triangle of 'a's at the top of your screen. If you examine the listing it is obvious how this is done.
If your tab number is bigger than the width of the screen then it goes back to the first column and the next line and continues from there. Mallard Basic does not have a built in 'print at' command, but this can be achieved by using a defined function and escape characters, this will be discussed in part two of the series.

If you want to find out the tab number to centre a piece of text on the screen this formula will do the job.

1. Count the number of characters including spaces
2. Subtract number from 90 if even, from 91 if odd
3. Divide result by 2
4. This is your tab number

By the way if you're bored of green on black in BASIC then type,

```
? chr$(27)+"c"+chr$(27)+"63"
```

This will give you a black on green screen. That's it for this time, I will continue next time with more advanced uses of PRINT including LPRINT, variables, concatenation etc. Bye for now.

Instructions to use the Article database

Written by Steve Cholerton

Before you run the database you will need to first run the program called create. This puts a file on the disc for the data to be entered into. This need only be run once for every disc side you use for data.

You will firstly be presented with the main menu. The ENTER choice allows you to enter the data and save it to disc, if you change your mind you can delete it or specify a field number you wish to change.

The LIST option allows you to list all the records you have on disc. You are offered the choice of either list to screen or printer. If you list to screen you will have to press a key to make the next record appear. If you just want to browse through however you can hold a key down and it will go through automatically and return you to the main menu when it has listed all the records in the file. If you want to list to printer you are offered the choice of either draft quality or NLQ print or condensed print. The records will then all be printed out as a hard copy.

The FIND option allows you to FIND/DELETE individual records. You will be presented with a menu asking you how you would like to search for your entry. You are offered tow keys. Type in the key you would like and then the first six letters of your chosen records field. i.e. If you enter '2' then you will type in the first letters of the title of the article. If you want to return to the main menu press '1' when asked for the six letters. If a file is on disc with the first six letters the same as what you input, it will be found. However there may be more than one occurence of SMITH or whatever, so the record that is found will be displayed on the screen with the option to see the NEXT or the PREVIOUS record in alphabetical order of your chosen key. When you find the correct record press 'C' and you will be offered the choice to DELETE it or just to look at it and then RETURN TO MENU. In case you press DELETE by accident there is a YES, NO option to insure of no accidental deletions.

The PRINT option lets you find and then PRINT an individual entry. It uses the same sequence of menus as the FIND option except with the option of PRINT RECORD at the last stage. You are also offered the choice to print in draft or NLQ or an enlarged version of the two, or condensed print.

The QUIT option is self explanatory, if you enter this option you will be asked to comfirm this. If you answer NO you will be returned to the main menu. If you answer YES the program will terminate.

This program should be fairly easy to customise to your own requirements. It is written in MALLARD BASIC using JETSAM.

This program was to large to list in PCW File and we also did not want to get complaints that the program did not work because of typing errors. So this program is available if you send a disc and £1.50 to cover P&P to:

Steve Cholerton, 61 Market Street,

Ironville, Nottinghamshire NG16 4GH.

Instructions and Rules

1) The software is free as long as you enclose a S.A.E plus the number of discs required. (Formatted please!).

2) Overseas pay £2.50 for postage and packing.

3) Please mark your discs clearly with your name and address. If you don't you may get somebody else's disc.

4) Please allow at least a month for delivery.

5) If you have any Public Domain Software please let us have it as we can make the library bigger.

6) Please write your order down clearly as we can read it.

7) The service is free for members of PCW File only. If you are not a member a £2 per side Copying fee is required to pay for time spent doing your discs.

8) If you don't enclose a S.A.E then we reserve the right to keep your discs however we will notify you and you will be charged for the stamp.

Disc 1A

Name	Bytes	Name	Bytes
BOGGLE.BAS	1K	CALCULATE.BAS	6K
LABELS4.BAS	4K	LU.COM	19K
LU.DQC	20K	MERCHANT	13K
NSWP.205.COM	11K	NSWP205.DQC	15K
POSTER.BAS	17K	SQUEEZE.COM	16K
TRADE.BAS	15K	TTYPE.DQC	12K
UNSQUEEZ.COM	12K	WHATSNEW.COM	2K
WUMP.BAS	6K		

Disc 1B

Name	Bytes	Name	Bytes
BLKJACK.BAS	7K	CHESS.COM	26K
FOOD.COM	32K	GOLF.COM	26K
HORSE.BAS	5K	MASTER.LEX	17K
NEWPUZ.COM	25K	ROCKET.BAS	3K
STRTRK.BAS	24K		

Disc 2A

Name	Bytes	Name	Bytes
/APLICAT.CRC	1K	/COMMUNI.CRC	1K
/DIRECTO.CRC	1K	/FAMILY.CRC	1K
/FAMILY2.CRC	1K	/FAMILY3.CRC	1K
/HACKERS.CRC	1K	/LIBRARI.CRC	1K
/POTPOUR.CRC	2K	BANNER.COM	2K

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BIO.COM	14K	CAL.COM	6K
CAT.COM	1K	CAT3.COM	1K
CLEANUP.COM	1K	COMPARE.COM	2K
CRCK44.COM	2K	DISK76.COM	4K
DISPLAY.COM	3K	FIND.COM	1K
GOTHIC.COM	11K	HELP.COM	4K
IDUMP.COM	1K	LDIR.COM	3K
LISTT.COM	2K	LRUN.COM	2K
MAST.CAT	1K	MAZE.COM	3K
MCAT41.COM	7K	MCAT41.DQC	5K
NI.COM	4K	NSWP205.COM	11K
PASSWORD.COM	1K	RENAME.COM	3K
RPIP.COM	8K	SCRAMBLE.COM	1K
SMODEM+.IQF	2K	SORTV.COM	2K
SUPERSUB.COM	2K	TYPEL.COM	4K
UNERA190.COM	2K	VLIST.COM	2K
WCOUNT.COM	6K	XTYPE.COM	9K

Disc 2B

Name:	Bytes	Name	Bytes
CHASE.BAS	4K	D.COM	4K
LOANAMORE.BAS	2K	MBXREF.BAS	6K
OTHELLO.COM	22K	RCPM-052.LQT	31K
REALEVAL.BAS	5K	SMODEM.DQC	16K
SMODEM+.COM	12K	SMODEM53.AQM	61K

Disc 3A

Name:	Bytes	Name	Bytes
ADVENT.COM	10K	ADVENT1.ADV	1K
ADVENT1.DAT	18K	ADVENT2.DAT	7K
ADVENT3.DAT	7K	ADVENT4.DAT	4K
ADVENT5.DAT	6K	ADVENT6.DAT	18K
EAVENT.COM	24K	NSWP205.COM	11K
README.1ST.COM	1K	SAVEADV.COM	7K

Disc 3B

Name:	Bytes	Name	Bytes
DU-V86.COM	8K	DU-V86.COM	8K
FINDBAD.COM	2K	I/O CAP.COM	1K
MAKE.COM	1K	NSWP205.COM	11K
QWIKKEY.COM	2K	SPELL-11.COM	3K
SPELL-ED.COM	9K	SYNONYM.COM	2K
THELPO.DAT	2K	THELP1.DAT	2K
THELP2.DAT	1K	THELP3.DAT	1K
THELP4.DAT	1K	THELP5.DAT	1K
TTKEYBD.DAT	1K	TTYPE.BAS	21K
TTYPEXC.DAT	1K	TTYPEXD.DAT	2K
TTYPEXE.DAT	2K	TTYPEXF.DAT	2K
TTYPEXG.DAT	2K	TTYPEXH.DAT	3K
TTYPEXI.DAT	3K	TTYPEXJ.DAT	3K
TTPEWRYT.COM	3K	UNSPOOL.COM	2K

Disc 4A

Cont'd Overleaf

Name:	Bytes	Name	Bytes
NSWP.COM	12K	QK20.COM	3K
QK20.DOC	9K	RASMB.COM	3K
RASMB.DOC	2K	RASMB+.COM	6K
RASMTA.COM	3K	RASMTA.DOC	1K
README.CAT	12K	READTHIS.CAT	1K
TYPE.ME	1K	UNLOAD.COM	1K
UNLOADI.COM	1K	WS30PAT.PQS	17K
Z80ASMUK.COM	9K	Z80DOCUK.COM	6K
ZDEBUG17.COM	10K	ZDEBUG17.DQC	11K
ZDEBUG17.COM	4K	ZLINK.COM	14K
ZLINK.DOC	3K	ZMAC.COM	12K
ZMAC.DOC	11K		

Disc 4B

Name:	Bytes	Name	Bytes
-CATALOG.001	3K	ANYCOD1.TST	2K
ANYCOD2.TST	3K	ANYCODE.ASM	4K
ANYCODE.CRS	4K	ANYCODE.DQC	14K
ANYCODE.HEC	1K	ANYCODE.HEX	1K
COMPARE.COM	8K	COMPARE.DOC	2K
CONV2.RSX	3K	CORPMEM.FRM	3K
DSKORDER.CAT	4K	DU-V87.DOC	12K
DU87.COM	8K	FORMAT.CAT	6K
HELP.HQP	16K	LASM.COM	6K
LASM.DOC	4K	LOHD.COM	2K
LOOK.COM	12K	LOOKAT.COM	1K
LOOKAT.DOC	2K	MEMSHIP.FRM	3K
NDDT.COM	6K	NDDT.DOC	5K

You can now get the Public Domain Software direct instead of me having to send it off myself. Don't forget to enclose a S.A.E plus the formatted CP/M discs required.

Steve Cholerton, 61 Market Street,Ironville, Nottinghamshire NG14 4GH.

Your Domain

Your Domain lets you send in your own programs for everybody to share. If you want to share your peice of programming expertise then send in the disc and a S.A.E as we can return it. If you want the program in this months Your Domain then please send the Editor a S.A.E and formatted disc.

Number 001 Address Book Creation Utility by Lindsay Lockett

This program allows you to create your own address book. You can Edit the address book, Search the address book, save or Load address book, ammend address book, view etc. There is a Locoscript file explaining how to use the features of this program.

LATE NEWS

If you want to enquire about writing an article please phone 0297-20456 or please write to me.

PCW FILE EXTRA...PCW FILE EXTRA...

A few changes have been made since printing Issue 2

Public Domain Software Page 24: Please would everyone interested in the software please send me the discs as Mr Steve Cholerton is unable to do it due to upgrading to the Atari ST for his new job. David Moore will hopefully be able to offer the service for a little while longer.

Programming in Mallard Basic Page 16: If you have any queries about Basic would you please send them to me. If there is anybody who wishes to take over the series please let me know. I will be printing your helplines in the next magazine so any problems please let me know.

Database Program Page 24: We cannot now offer this program, however I do have the listing for anybody interested.

More Public Domain Software

Disc 5A

BLKJCK.BAS	ROCKET.BAS	SCRIVNER.TXT	SCRIVNER.COM	BOGGLE.BAS

Disc 5B

ADDRESS.BAS	CASTLE.DOC	MINDREAD.BAS	COUNSEL.BAS	MONOPOLY.BAS
STARTREK.BAS	BANNER.BAS	FOOTBALL.BAS	OTHELLO.COM	TIME.BAS
CALENDAR.BAS	FOOTBALL.COM	PRINT.COM	CASTLE.COM	GOLF.BAS

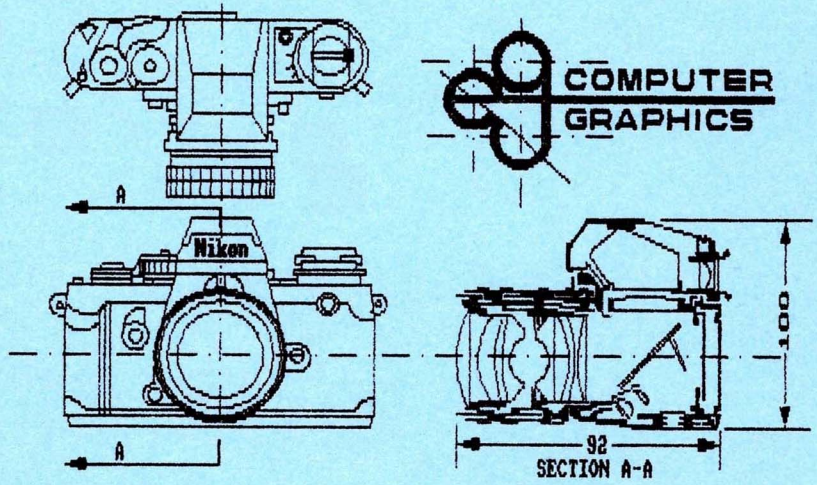
As the Public Domain Software is free would you please remember to enclose a S.A.E for the return of your software. If there is anybody out there willing to help me provide this service would they please get in touch with me.

If you want a chat about an article or regarding a problem etc please

Phone 0297-20456

X-Y: 351 206
FIX: 000 000 REL: 351 206 CURSOR SPEED: 1

Draughtsman



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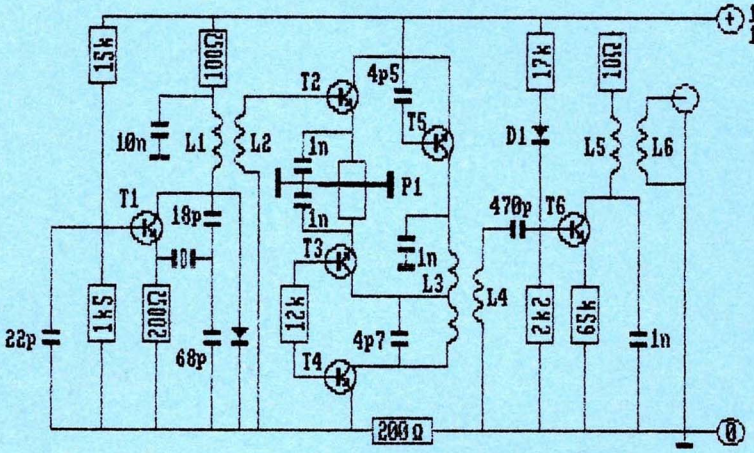
Draughtsman

ELECTRONIC CIRCUIT