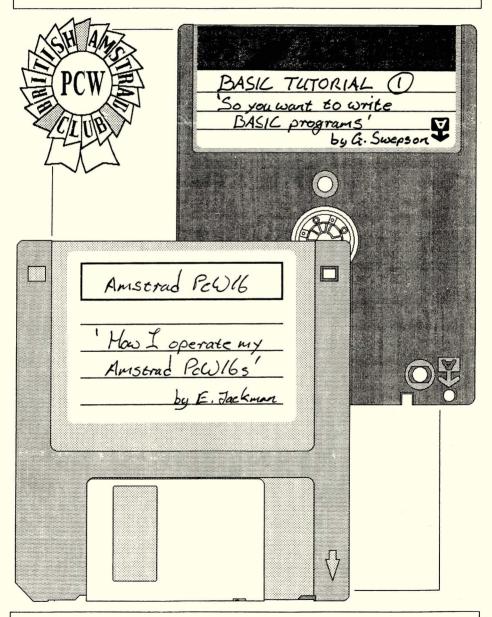
The Disc Drive

ISSUE 25

SPRING 2000



The British Amstrad PCW Club Magazine for all PCW and PcW users

Your One-Stop PCW Shop

Mail Order: PO Box 99, Thetford, IP24 1NA. Tel: 08700 736427 Email: Lsdmicro@aol.com

or we are open all hours at:- www.locomotive.com

THE LOCOSCRIPT SOFTWARE RANGE

(Requires 512K Minimum) LocoScript 4.....£29.95 The ultimate software upgrade for your PCW, adding scalable fonts, pictures, columns & more! (£19.95 for LocoScript 3 users) LocoSpell.....£19.95 Powerful Spellcheck/Word Count LocoFile.....£19.95 Versatile pop-up database. LocoMail.....£19.95 Programmable mailmerge system LocoOffice.....£19.95 Adds "Desktop" utilities such as calculator/calendar/converter & simple accounts. Req. LocoMail. Formerly released as "Instant Recall". Special Offer: Buy any of the above together with Locoscript 4 @ only £10.00 each! LX Font Pack Deals:-Add extra style to your Locoscript 3 or 4 documents and deduct £10.00 for any 2, £15.00 any 3. LX Business.....£19.95 LX Decorative.....£19.95 LX Display.....£19.95 LX Fixed Fonts.....£14.95 LX Symbols......£14.95 LX Style.....£14.95 **LocoScript 4 Graphics** Clip Art Library 1..£14.95 Clip Art Library 2..£19.95 or buy both together @ £29.95. 100s of quality .mda pictures ready for inclusion in LS4 files with a fully-referenced manual. Printer Support Pack @ £19.95 Required if you need to add an "external" printer to Locoscript 4 (make sure it's not Windows-only). Or if you are buying LS4 then let us install a suitable driver for you @ £10.00.

PCW SOFTWARE

Available on 3" or 3.5" disc for all PCWs (not 16), Runs under CPM. GAMES/LEISURE all @ £9.95 each or buy 3 for the price of 2! TOP 20 GAMES 1 Blitz, Defender, Patience, Cricket, Gridder, Mastermind, Squash, Postman, Santa's Grotto & more. TOP 20 GAMES 2 3D Oxo, Splatt, Word Shuffle, Yahtzee, Nine 9, Box Clever, Cendos, Santa's Grotto II etc. TOP 20 GAMES 3 Startrek, Tetris, Pontoon, Ludo, Mario's Cement Factory, Musical Numbers, Airline Pilot, Breakout, SUPER LEAGUE SOCCER Manage your own club to success GAMES DISC PLUS Cribbage, Dice and Dominoes. PCW CHALLENGE Formula 1, Space Command, Skywar and Strip Poker (18+). DOUBLE AGENT Exciting spy adventure text game EDUCATION @ £9.95 each or Buy 3 for the price of 2. SCHOOL'S OUT (age 7-14) **JUNIOR PLAYTIME (5-8) ULTIMATE SUMS (5-12) ULTIMATE QUIZ** (7-adult) MAGIC MATHS (4-8) MATHS MANIA (8-12) BETTER MATHS (12-16) BETTER SPELLING **Essential Guides** Superb disc-based tutorials on:-

Locoscript 2, Locoscript 3

CP/M. Advanced CP/M.

Micro Design 2, Advanced

MD2, Mallard BASIC.

APPLICATIONS Small Trader.......£39.95

Integrated sales/stock/invoicing.

Business Ledger...£29.95

Handles VAT/Cash/Profit v Loss. Personal Ledger....£19.95 Manages bank accounts, credit cards & regular standing orders. Super Labeller.....£14.95 Creates text and pictorial labels on any Epson-compatible printer. MicroBase.....£14.95 Flexible "card index" style filing system with search/sort/totalise. Supplies/Solutions 3" Drive Reviver @£12.50 New belt, cleaner and DIY notes. Daisy Wheel Kit @£12.50 New armature and instructions. Black Ribbons all @£5.95 For PCW 8256/8512/10 & 9512. Ink Cartridges: BC-01/BC-02 @ £16.95. DIY Refill Kit £9.95. Recycled 3" CF2 (Jap) 5 @£12.50 3.5" DSDD (720K)10 @ £6.50. We also offer 3.5" disc drives (external and internal) from £55, Inkjet Printers (mono or colour), a professional disc conversion service, shareware

ORDERING INFORMATION:

and LocoScript PC software.

Please request details.

Please Add £2.00 post/packing per order for software/supplies (any quantity). For a copy of our full A5 catalogue send a stamped SAE stating your PCW/printer model and disc size 3" or 3.5". Separate PcW 16 leaflet available. SD Microsystems Ltd

& Locoscript Software
We accept Visa, Mastercard,
Switch, Cheques or P/Os,

CHI	SICI	Brian D	orricotts	à s	
TT	CRO.	SSWORD MAKER, 1	WORDSEAR	CH MAKER	1
J. A.	0	an	d	Three D	4
š	U	WORDFILE (non memb		In Prog	rams
	The	ultimate for those intereste		Ward Bradella	2
ļi	Tille	utilitate for those intereste	a m producing	word Puzzies	11/1 -

Requirements Any PCW/PcW with 3½" 720k A: Drive (except PcW16)

<u>Crossword Maker</u> The 44 page manual, including tutorial, explains how to create your own crossword varying in size, from words and clues prepared by the user or from templates and word lists supplied. Will also search for true and partial anagrams.

Wordsearch Maker Separate user manual illustrating how to prepare a list of user defined words to be hidden within a puzzle up to 20 by 20 letters.

Wordfile Manager As a supplement to the Crossword maker, the manual explains how to organize and maintain your word files, editing, merging compressing etc: Aimed at the more advanced user.

Available from the British Amstrad PCW Club.

Steve Massam, Membership Secretary 27 St. Marks Road, Hadleigh, Benfleet, Essex SS7 2PY
Tel: 01702 555398

SIDNEY J. HOLLAND

Unit 7-Enterprise Works
Albion Row Industrial Estate,
Byker, Newcastle upon Tyne.
NE6 ILO

Tel: (0191) 265 92 50

Don't throw your printer ribbon, ink cartridge or toner cartridge away, return it to us and get it back at less than half the price of the original.



Contact: Steve Massam 27 St Marks Rd Hadleigh, Benfleet Essex SS7 2PY Tel: (01702) 555398

6 MORETON WALK OFFERTON STOCKPORT CHESHIRE SK2 5SP

January 15th. 2000

Steve Massam, 27, St. Marks Road, Benfleet, Essex SS7 2PY.

British Amstrad PCW Club Secretary

Dan Stove

My wife and I were pleased to see from a recent article and letter in the Daily Telegraph that we are not alone in our continuing long-term enthusiasm for the Amstrad PCW.

In 1985 we took one of the first 8256's out to our home in the Middle East and hammered it hard for five years both professionally and privately. I used it in preference to my employer's equipment and my wife wrote a weekly column in the local English language paper. After putting in a B: drive with memory upgrade chips the PCW was left with friends when we returned to the UK in 1990. They report it's still going strong and the original Amstrad printer is still working quite well. The ribbons dry up quickly in the heat but they know the WD40 trick.

I'm writing this on an eleven year old 8512 using Locoscript 4.06 with a LQ100 printer. The only fault so far has been the need to replace the B: stretched drive band. I intend to change the A: drive band when I can find one at the price quoted in the Telegraph article.

We will be interested to learn more about the Amstrad PCW Club, please find enclosed an SAE as requested.

Yours sincerely,

DENIS H. MARTIN I.ENG AMRAES.

British Amstrad PCW Club

CHAIRMAN & Editor (Newsletter)	Mike Elliston, 96 Sparrows Herne, Basildon, Essex SS16 5EX
SECRETARY	Peter Clark, 8 Wiltshire Avenue Hornchurch, Essex RM11 3DX Tel: (01708) 450596
TREASURER	Nick Chaundy, 2 Clickett Hill, Basildon, Essex SS14 INP Tel: (01268) 454917
Membership Secretary & Editor (The Disc Drive)	Steve Massam, 27 St.Marks Road, Hadleigh, Benfleet, Essex SS7 2PY Tel: (01702) 555398
P.D. Librarian	Daniel French, 44 Charcot House, Highcliff Drive, Roehampton, London SW15 4PT Tel: (0181) 8769251
Ordinary Member	Peter Hathaway

The opinions expressed in *The Disc Drive* are not necessarily those of the Editor or the British Amstrad PCW Club. Whilst every care has been taken to ensure that all articles are accurate no liability can be taken for errors or mistakes.

Advertisements are taken in good faith but the British Amstrad PCW Club can not be held responsible for the quality of service or the goods provided by the advertisers or their agents.

Contributions on disc in LocoScript, ASCII, MD TXT or Protext files are welcome from all readers on the understanding that copyright will be held jointly by the Club and the author unless otherwise agreed in writing. The Editor reserves the right to edit, amend or omit all contributions.

© British Amstrad PCW Club 2000

Tel: 01375 672759

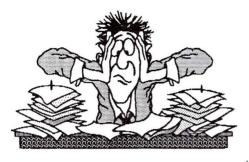
Editorial 2
by Steve
How I operate
my Amstrad PcW16s
Creating customised
business cards with MD3
Hot Tips
Now clock this
and get battering
Zero length files 13 by Graham Swepson
Vehicle fuel consumption14 by Tony Dimond
Adapting LocoMail listings
So you want to write
BASIC programs? 18 by Graham Swepson
Just for starters 21

Meetings

Are held on the first Thursday of every month, at 7.30pm THE BASILDON CENTRE Committee Room No 4

Subscriptions

£12.00 per Year + £2.50 per Meeting, payable on the door, First Meeting FREE!



EDITORIAL

I suppose It's old news now but, on the 6th of January the Daily Telegraph ran an article notifying it's readers of some obsolete items and lo and behold amongst them was the good old PCW (Obsolete! My foot!). The article pointed out a number of interesting facts about Amstrad and the PCW, and SD MicroSystems and PCW Today both got a mention. Both, Mike our Chairman and Daniel our new PD librarian not wishing to let the opportunity pass us by, contacted the Editor of the Daily Telegraph and proclaimed What about us? The biggest and best PCW Club in the world! The following week our Club got a mention and I received a steady stream of enquiries in return, around 120 in all. I had a busy time keeping up with them all, the majority were obviously from people wishing to receive more information about the Club, others were requiring help of one sort or another and the rest from people hoping to find a good home for their trusty PCW, sadly no longer required. Membership packs were dispatched at a steady pace, my stock of 3" drive belts was depleted in a matter of days and letters notifying members of PCW bargains within their area were wending there way up and down the country. Believe it or not I still receive the occasional letter from someone who has only just seen the article. In the end, I'm very pleased to say, we gained around 35 new members, which can't be bad. Perhaps we should do it again sometime?

Many will be pleased to see PCW Today is back, Adrian Braddy having successfully completed his move up to Galloway in

Scotland. Ah! that brings back memories. I can remember spending a wonderful few weeks in Galloway admiring the beautiful scenery whilst fending off those damn Midges. The latest issue 13 is full of information related to SD MicroSystem coming to the rescue of LocoScript Software. What would we have done if LocoScript had disappeared? Well worth a read.

Do you have any top tips? I'm looking into the possibility of having a page or two of tips in the future. I have included a couple of my own in this issue, and as you will see, they don't have to be a new ground breaking discovery or even outstandingly clever, just the little things you find useful in day to day use. It is often these little things that get forgotten. I've just rediscovered [SHIFT] + [EOL] to bring me back to the beginning of the next line in LocoScript. It's in the manual, but do you read it?

Are you experiencing any problems with your PCW or software? Want to know more about a particular subject? Why not drop me a line and I'll see if we can come up with the answer. Who knows? This in turn could possibly lead on to a problems and answers page in the Newsletter. Please don't think no one would be interested in what you have to contribute and simply leave it to a dedicated few.

Seeve

How I operate my Amstrad PcW16s

by Eric Jackman

Introduction

I have three PcW16s, two bought in August 1997 as £199 each, and the third in January 1998 for £130, plus a Canon BJC-240 printer. Two are in regular use for about an hour every day, with the third in reserve. I have found it very useeful to have the '16s side by side so that I can update a file on one whilst displaying connected files on the other. I always switch off at the mains between sessions, and have never experienced any hardware problems. All my data is loaded from and saved to discs, including copies of my barious 'Address Books', thus prolonging the life of Flash Memory. This also enables me to keep data secure when away from home.

Data

All data is loaded from and saved to a set of floppy discs as shown below. This is done automatically by the 16, if you use '[Control] + [F]' from the File Manager and select 'Disc'. I maintain three different data discs:

Disc 1 Working Disc, regularly used files

Disc 2 Back-Up Disc, plus older files

Disc 3 Emergency Disc

All my regularly used files fit easily on Disc 1. Every few days, updated files from Disc 1 are copied to Disc 2 via the Cabinet. Disc 2 also contains older files. Every month I perform a full Disc Duplication from Disc 2 to Disc 3. Therefore, any one file is always on at least 2 discs.

The Cabinet is never used to store data for documents and spreadsheets, because of its vulnerability to crashes and luck-ups. Each of my three PcW16s hold a different 'Address Book', but after each update these are copied to Discs 1 & 2.

All data files are contained within the first folder on each disk, with FOLDER01 being renamed as DISK-ONE, DISK-TWO etc, thus indicating which disc is being used in dialogue boxes and in the File Manager (see Figure A). On each of my PcW16s, the first folder on the cabinet has been renamed as CABINET1, CABINET2 etc, for the same reason.

WORD-PROCESSOR

I use this for all correspondence, notes, listings, logs, envelope and cheque printing, even for Inland Revenue claim forms, as shown in figure A. However, regular saves are recommended, because most lock-ups seem to occur here, usually when I have

been keving much too quickly for the software. I cannot recall ever having

a full crash from the Word-

Processor.



SPREADSHEET

The range of uses is shown on Figure B, where the presentation of the information is more than the spreadsheeting capabilities. For more demanding work, I use 1987 Supercalc software on my PC.

I know of two significant bugs in the software, which can be circumvented as follows:-

Formats: Changes might not be saved when using the mouse, so *always* apply new formats to cells using 'Control + Y' from the keyboard.

Fill Across: This menu feature remains 'greyed-out' when cells have been selected using 'Shift + [RIGHT ARROW]'. However, if you use the mouse to select the cells, it works correctly. Incidentally, I never liked the format range provided, so I designed my own set in a spreadsheet. When setting up a new spreadsheet, I do a 'Save As' from that spreadsheet to create a clone, using it much like a document template. (See Figure C)

A word of warning! If the spreadsheet gives an inconsistent message, especially the message 'No previous file found', (when you are not even looking for one), Don't touch the keyboard or mouse. Simply turn off the power for about 20 seconds and switch on again and restart from the Desktop. If you do anything else the 16 will probably crash.

ADDRESS BOOK

I have three separate 'Address Books', an empty one, a household inventory, and a building society accounts database used with the Word-Processor Mailmerge facility. (The empty Address Book is loaded from disc before I go on holiday).

The first entry in each case is a guide to its contents (See Figure D). An example of an inventory entry is shown a Figure E. The two digit number in the far right of the first field ensures that items in the same location, e.g Dining Room, are displayed in the chosen

order in the index on the right hand side.

ALARM & DIARY

Not used except to calendar references purposes. I never did get the hang of the Diary.

CALCULATOR

Used occasionally, but I frequently use the similar 'Insert Calculation' facility in the Spreadsheet.

FILE MANAGER

As mentioned above, all files are kept in the first folder on a disk. Originally I kept Documents and Spreadsheets in different folders, but this became a nuisance. Even though they are now combined, the selection of files for editing in each environment only displays the appropriate set of files. When pruning old files, I find the alternative alphabetical list order facility very helpful.

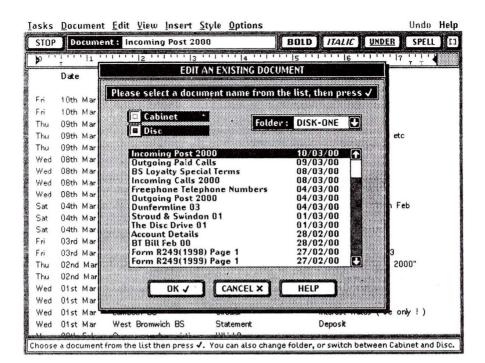
Figure F shows a 'Copy Files' in operation from DISK-TWO to CABINET1, with files listed alphabetically. I would then change discs and do a File Move (Control + M) from CABINET1 to DISK-ONE. This leaves the Cabinet Folder empty. This procedure is done when a file needs retrieving from Disc 2 because I have messed it up on Disc 1.

And Finally

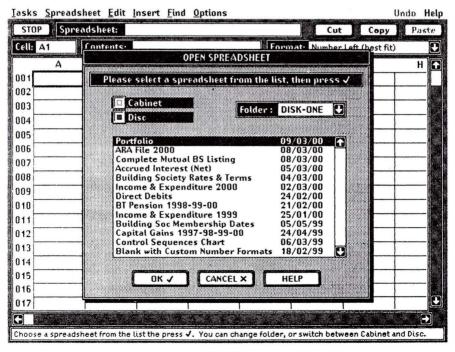
You might find my HOT KEY listing (Figure G) useful. This 'Control Sequence Chart' was produced as a '16 Spreadsheet'.

Editors Note:

Mr Jackman has very generously offered to receive phone calls regarding the PcW16 between the hours of six and nine in the evening: Tel: 0113 2852555 (West Yorkshire)



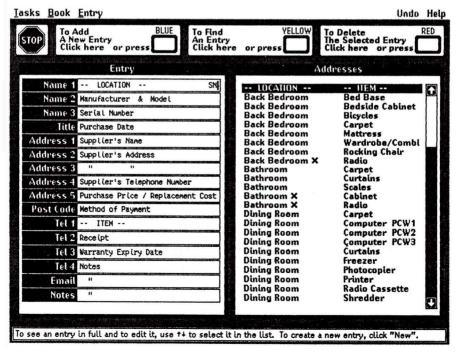
(Fig A)



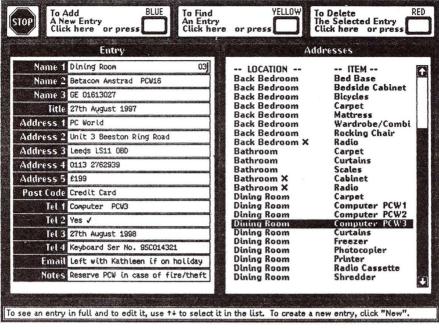
(Fig B)

STO	OP Sprea	dsheet:	Blank wit	h Custom	Number F	ormats	Cut Copy	Paste	
Cell:	GE	Contents:	5		***	Format:	Number Right #,###.##	C	
	Α	В	С		D	E	Number Left #### Number Left ####.#		
001	REMEMBER	TO SET	DÉFAULT	NUMERIC	FORMAT		Number Left ####### Number Right ####	L	
	Using 'TAS	K'+'0'+'N'					Number Right ####.#		
003							Number Right ####.## Number Right Bold ####		
004							Number Right Bold ####		
005							Number Right Bold ####.## Number Right #,###		
006 007							Number Right #,###.# Number Right #.###.##		
008							Number Right Bold #,###		
009			+				Number Right Bold #,###.# Number Right Bold #,###.##		
010			+		_		Spare: Number Left, Best	Fit	
011									
012			+						
013			1						
014									
015									
016									
017									
								•	
Type .	a number or s	some text ir	to the curr	ent cell, o	r change ce	lls using the	arrow keys or the mouse,		

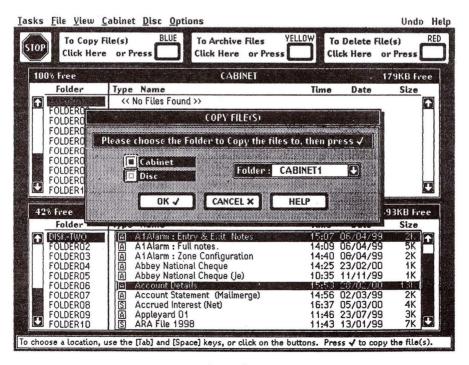
(Fig C)







(Fig E)



(Fig G)

Control Sequences Chart

	ADDRESS BOOK		WORD PROCESSOR		SPREADSHEET	FILE MANAGER
V	A Alternative List Order			«	Recalculate Spreadsheet	A Select all Files
		8	Bold Text			
		ပ	Copy Selection to Scratchpad	ပ	Copy Selection to Scratchpad	C Show Cabinet System Folder
		Dor]	Mark End of Selection	۵	Edit Cell Contents	D Deselect All Files
		DEL	Delete Selection	DEL	Delete Cell Contents	
ш	Export File	ш	Edit Stored Document	ш	Edit Stored Spreadsheet	
ш	Find Text	щ	Find Text	ш	Define Numeric Format	F Change Default Access
O	Go to Initial Letter			Ö	Go to Cell	
				I	Change Column Width	H Examine Disk
-	Import File	_	Italics Text	_	Import File	
		_	Check Spelling	_	Insert Calculation	L Change Disk
		Mor	Mark Start of Selection			M Move File(s)
Z	Add new Entry			z	Find Text	
1		0	Overwrite Mode	0	Export File	
		۵	Print Document	۵	Print Spreadsheet	
	Word Processing	œ	Replace Text		(Allow 9 width increments	R Rename File(s)
	Function Keys:	RET	Insert Hard Pagebreak		. for each numerical digit)	S Show Disk System Folder
	(Without Control Key)	S	Start New Document	တ	Start New Spreadsheet	
		۲	Re-paginate Document			
ш	F1 Left Aligned	HQ.	Reformat Paragraph			
ũ	F2 Centred	ם	Underlined Text			
ŭ.	F3 Right Aligned	>	Paste from Scratchpad	>	Paste from Scratchpad	V Change Preferences
u_	F4 Justified	≯	Select Whole Document	}	Select Whole Spreadsheet	
ш	F5 Bold	×	Cut Selection to Scratchpad	×	Out Selection to Scratchpad	
ű.	F6 Italic			>	Apply Format	
ĹL.	F7 Underline	Z	Undo Selection	Ŷ	Moves 7 Columns Left or Right	

Creating Customised Business Cards

with MicroDesign3

by David Preston

I recently attended a reunion of my friends from university. Although we had only completed our studies a year ago, most of us had not seen each other since graduation. At the end of the evening I began asking for phone numbers and e-mail addresses so that I could keep in touch with those present. I was met with a deluge of business cards of all shapes and sizes and I now keep up a regular correspondence with my fellow alumni.

Impressed by my friends' organisation, I thought I would look into have some cards of my own printed so that the next time I was asked for a contact number I wouldn't have to resort to the back of an old envelope and a pencil! Unfortunately I found that printing business cards is a costly business; my local printer charged over £20 and could supply a minimum of 100 cards - far too many for my needs.

A visit to the office stationary shop provided the solution to my problem. You can buy sheets of blank business cards in all sorts of designs. I bought a pack of 25 sheets of 10 cards for £5.30 - just over 2p per card. I could now turn to my trusty PCW and MD3 to print my details onto the cards. Not only is this cheaper than having them printed but I can prepare as many or as few as I want and can also make cards for friends and family who want them.

I should point out at this stage that I have an Olivetti JP370 printer which lets me print on envelopes and sheets of thin cardboard. I have not had much success printing on envelopes using the built-in dot-matrix printer and I don't think that it would handle these sheets of business cards very well. I must also confess that I am an MD3 novice and the instructions that follow will seem very basic to anyone with more than a passing knowledge of the program.

Measuring Up

The first task is to measure the sheet of cards you have bought. On mine, the 10 cards were laid out in 5 rows of 2 across. The top, left and right margins between the edge of the sheet and the perforations of the cards were all 15mm. Now find "printable area" of each card - this is the empty space on the card in which you can print your details. Be sure to allow at least a 5mm margin between the edge of your printable area and the perforation or preprinted design. In my case this area was about 60mm by 47mm.

The last job is to locate the top left corner of the printable area for each card on the sheet. This will give you 10 co-ordinates (x,y) where x is the distance from the left-hand edge of the sheet to the top left corner of the printable area and y is similarly the distance from the top edge of the sheet to the top left corner of the printable area. One important thing to remember when doing this is that the printer will be unable to print on the top 15mm of the sheet of cards. You will therefore need to adjust the y value for each co-ordinate by subtracting 15mm or so, depending on your printer.

Using MicroDesign

Now for the fun part! Load MD3 and press [EXIT]+[E] to go to the Editor. Type the text you want to appear on your business card. Usually your name, address, telephone number and e-mail address or mobile number is sufficient but you may have other requirements. I found that having my name and address right-aligned and my telephone number left-aligned looked quite effective. To do this, move the cursor to the start of your name and press [+] (the key to the left of the

spacebar) followed by [R]. Now move to the end of your address and press [-] (the key to the right of the spacebar) followed by [R].

Another consideration is which fonts to use. I used PAUL18 for my name and address, while JOHN14I was used for my telephone number. Check the back of the MicroDesign User's Guide to see samples of the fonts available and choose the ones you like best. Try not to choose fonts that are too large any font much larger than 20pt will seriously restrict the amount of text you can have on your card. To mark each piece of text that you wish to print using a separate font, move to the start of the first section and press [+] + [1]. Now move to the start of the second section of text and press [+] + [2]. You can mark up to 3 sections of text in this way.

Once your text has been entered, press [EXII] + [I] to move to the Typesetting screen. Load the fonts that you want to use by pressing [f3] and then choosing a slot and the required font file from the list shown. Remember to have your library disc of fonts handy! Also remember to put each font into the right slot - for example, if the section of text you want printed using PAUL18 has been marked by [+] + [1] then put PAUL18 into slot 1.

With the fonts loaded you are ready to begin Press [W] to set the typeset typesetting. window. This is the area of the page that will be filled with the text you entered into the To change the dimensions of the Editor. window press the spacebar to cycle between the top-right corner, bottom-left corner and centre of the window. When at one of the corners you can change the size of the window using the cursor keys. When in the centre of the window the cursor keys are used to move it around the page. Using the scale at the bottom of the page, change the typeset window so it is the same size as the printable area of your cards. Use [Extra] + [X] to change it to milimetres if necessary.

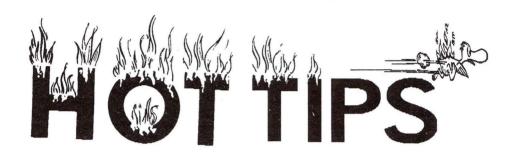
Now you must typeset your text into position on the page. Move the typeset window to the co-ordinates you calculated for the first card. Again, the scale at the bottom of the screen is invaluable when doing this. Press [7] to display the Typeset menu and then choose [PASTE] to typeset your text. You will see it appear on the screen. Although it is too small to read, you will get a rough idea of how it looks. If you are unhappy with it and want to try again, pressing [WORD] will let you undo the typeset You may need to change the amount of text in the Editor or perhaps change the size of font by loading an smaller or larger version. Once you are satisfied with the text for the first card, repeat the process for the others.

To speed-up the process of typesetting all 10 addresses you can use Block operations to copy one address several times. Still in the Layout screen, press [UNIT]. You will then be prompted to select an area of the page as a block. To do this, move and resize the window appears using that the techniques used for the Typeset window. Once you have selected the address that you want to copy press [ENTER]. Move select Copy from the Block menu by pressing [f3]. Press [EXTRA] + [2] and [EXTRA] + [COPY] to set the options that will ensure that the address is copied correctly. Finally, move the window to the position where you want the address to appear, checking the scale at the bottom of the screen, and press [ENTER]. The address will now be copied.

With all your typesetting done it is time to check that the text for your cards has been correctly positioned. Press [EXIT] + [L] to move to the Layout screen and then press [P] to print. Take your printout and lay it over one of the sheets of cards. You can now check that the addresses line-up properly. You may find that one or two addresses need to be moved slightly - this is done using

Block operations. The method is almost identical to that described above, except that this time, when you are setting the copying options, you should press [EXTRA] + [1] instead of [EXTRA] + [2]. This ensures that when the address is copied to its new location it is removed from its old position.

Once you are happy that all your addresses appear in the correct place on the page you can print onto a sheet of cards. Now, whenever anyone asks for your telephone number, there's no need to hunt around for an old envelope and a pencil!



MicroDesign 3

If you only need the top section of an image eg; the header of a Header and footer Area or Page file, watch the screen as the file is loading, and after you see the section you require on screen, press [STOP]. This leaves what ever is currently on screen intact and stops the rest of the image from loading.

Steve

LocoScript

Having imported a ASCII file I often have an unwanted [RETURN] at the end of each line, but still wish to preserve the [RETURN] between the paragraphs. I use Find and Exchange to automatically remove the unwanted [RETURN]s as follows;

With your cursor at the beginning of the document. Press [SHIFT] + [EXCH/FIND].

Beside Find press [RETURN].

Beside Exchange press [RETURN][SPACE].

Cursor down to Automatic Exchange and press [ENTER].

Hold down [Alt] + [SHIFT] and press [DOC/PAGE] to take you back to the beginning of the document.

Press [SHIFT] + [EXCH/FIND] again.

Beside Find press;

[RETURN][SPACE][RETURN][SPACE].

Beside Exchange press [RETURN][RETURN].

Cursor down to Automatic Exchange and press [ENTER].

Hold down [Alt] + [SHIFT] and press [DOC/PAGE] to take you back to the beginning of the document once again.

Press [SHIFT] + [EXCH/FIND] for the final time. Beside Find press [RETURN][SPACE].

Beside Exchange press [SPACE].

You may find a few of the lines need adjusting manually but generally all will seen to be fine.

Steve

If you have any tips to offer, please don't hesitate in sending them to me. ED.

NOW CLOCK THIS AND GET A BATTERING.

Owners of the SCA Professional Plus RS232C Serial/Parallel Interface will be aware that this unit contains a real-time clock/calendar with an on-screen digital display but may or may not know that within the confines of the interface is a back-up battery.

As the years have passed many of these batteries have failed - well, they were never intended to last up to 10 years. Various suggested suitable reports have that replacement was unobtainable and therefore left the user without his or her timepiece. My SCA interface with the copyright date of 1989 is in constant use but has a dud battery, therefore action was needed to get it back to full working order. Enquiries at my local battery specialist, who claimed expertise in computer batteries, offered various bits of advice and information (which, as it turned out, was mainly nonsense) but failed to come up with a replacement. Not to be beaten I searched a 1998 issue of the Kelly's Business Directory for the address of the battery manufacturer, contact was made and without delay a written reply was received from Mr. Bob Stone, Technical Support Engineer, Varta Ltd. containing all the information that could be needed.

In a nutshell the Varta 170DK Nickel Cadmium (Ni-CD) button cell (the type fitted in my interface) is obsolete but Mr. Stone offers a "drop-in" replacement, namely either the Varta V200H or V250H which both have identical dimensions to the old battery. Both are the same voltage (1.2v) but are higher in capacity (an asset) at 200mAH and 250mAH respectively. An interface owner will need to check how many cells there are in the original; each cell is 25mm in diameter and 7mm thick.



From examples examined it will be only one. Tagging arrangements will also need to be checked but the interface permits a little leeway so this should cause no problems. These two batteries are of the Nickel Metal Hydride (Ni-MH) type which the manufacturers claim to be superior in a number of ways to the old Ni-CD type.

To price these batteries I turned to the catalogue (year 2000 version) issued by CPC Plc of Preston, finding to my surprise that the asking price for the V250H (the V200H is unlisted) is only £1-40 + VAT. This a cheap price to pay to return to full working order an interface that cost £66-98 post free when advertised for sale by the makers way back in 1991 (8000 Plus, issue 63, Dec. 1991, page 9).

I can not, of course, categorically state that the Varta 170DK button cell was the only type to be used by SCA when producing their interfaces but should anyone open up their example and find something different I will be only to happy to try and confirm a replacement. It would, I feel, be wise to replace the battery, even if it is still working, as a precaution against future problems.

Acknowledgements: My thanks go to Mr. Bob Stone of Varta Ltd. for his prompt, courteous and informative response to my query – a rare occurrence these days!

ZERO LENGTH FILES

by Graham Swepson

By the normal methods of LocoScript file creation you cannot create a file of zero length. But there are two methods of creating them. I can think of two uses for them:

- 1) If you have many printer files and a CF2 173k Drive A: you are likely to need to load more files from your LocoScript S.o.D. disc than the first side of that disc can hold. In this case you will need an ET.AL file to prompt LocoScript to ask for a second disc. Strictly speaking you do not need an ET.AL file; you just need ET.AL in the list of filenames. You can of course create an empty file of Ik or 2k length but since your disc is already short of space, such a file might not be acceptable.
- 2) If you have a hard disc you will know that your disc management screen is yards long, and that if you display Group 0 of Drive A: then Group 7 of Drive M: will be somewhere next door. Further, moving from one end of the screen to the other by cursoring is time consuming and tedious. A quick way is to copy a file from your currently displayed source group to your desired destination group by using the dialogue box. Plainly, the quickest file to copy is a file of zero length. For convenience, this file should be at the top of the column in the source group.

There are two ways of creating a suitable zero length file:

- 1) From LocoScript:
- a) Display the disc management screen, and cursor to Drive M:. Pick any group. If the group does not have a name, use [f5] (Loco 1) or [f4] (Loco 2, 3 or 4) to give it any name.
- b) Keep the highlight within this group but move it off any filename.
- c) Press [f5] (Loco 1), or [f3] (Loco 2, 3 or 4), and select "rename document" or "Rename file". Press [ENTER].
- d) The dialogue box will appear with a ? in the

filename boxes of the upper and lower parts. In the NEW NAME box enter ET.AL or "EMPTY. FIL or the name you want to give to your zero length file.

- e) In the OLD NAME box enter the name of the group, and add a .GRP suffix. Press [ENTER].
- f) The group will now lose its name and revert to its group number but a zero length file with your chosen filename will appear within the group. Copy this file to Group 0 of Drive A: or to where you wish. A leading "will ensure it is at the top of the column.

Beware: Do not put an ET.AL file into LocoScript Drive C: of a hard disc. If you do, LocoScript will ask for another (hard) disc!

- 2) From Basic:
- a) Switch on your PCW, or reset with [SHIFT] [EXTRA] and [EXIT]. Insert your CP/M disc into Drive A: (or run your hard disc to load CP/M). When A> appears, type BASIC and press [RETURN].
- b) When Ok appears, remove the CP/M disc from Drive A: and replace it by a formatted disc (maybe your LocoScript S.o.D.). Make sure this disc is not write-protected.
- c) Type

OPEN"R",2,"ET.AL":CLOSE:DIR

or

OPEN"R", 2, "!EMPTY.FIL":CLOSE:DIR

or the equivalent with the filename you want.

- d) Press [RETURN]. You should get a display of all the filenames in Group 0 of Drive A; including the new one. They might not be in order.
- e) The above procedure will put the zero length file into Group 0 of Drive A: (or LocoScript Drive C: of your hard disc). If you want it elsewhere then reset your PCW, reload LocoScript, and copy/move the file. A leading! will ensure it is at the top of the column.

Beware: Do not put an ET.AL file into CP/M Drive A: (LocoScript Drive C:) of a hard disc.

VEHICLE FUEL CONSUMPTION



by Tony Dimond

Here is a LocoMail listing which will help you to keep a close eye on your vehicle's miles per gallon and running cost per mile. Once it is entered on your faithful PCW use LocoMail to enter the date, the current mileage, the litres purchased and the cost of those litres and at once you will be given the calculated results of mpg and pence per mile.

Some of the information you will need to enter can be found on the dockets issued at your petrol station. I find that some garages do not include the quantity of petrol purchased on these dockets, so I am always on the alert to make a note of this from the display on the petrol pump beside which my car is parked.

The cost is always on the docket, but you will have to look at your milometer to note and record the current mileage. I find it convenient to write these two details, cost and current mileage, on the docket so that all three items of information are together on one scrap of paper when next I am sitting at my keyboard. Usually the date is to be found on the docket, but it is not critical if you have to remember whether it was Monday or Tuesday of last week if you purchase petrol only weekly. If you buy petrol more often than that you may find it best to make a combined entry showing the total amount of petrol purchased with the total cost of several purchases.

Before you use the routine for the first time you must enter into the listing the miles shown on your milometer as you fill the tank from 'empty'. Do not take this to mean that you must wait until your car comes to a stop haveing used every last drip of fuel in the tank! You drive the car and will know the point at which you feel it is necessary to fill up so as to avoid any risk at all of running out of petrol and this is what I mean by empty.

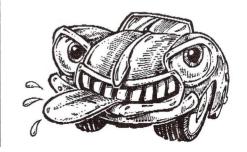
This figure has to be entered into the listing

where the line reads sm=0. Change the zero to whatever is shown on your milometer. Don't try to separate the groups of digits: Supposing the reading is 12345 or twelve thousand, three hundred and forty five; just delete the zero and enter 12345 or whatever your milometer shows as a simple group of digits.

Then wait until next time you need petrol. Note your current mileage, the litres purchased and the cost of this petrol. Take this information back to your computer station, and with your cursor over the listing press F for Fill and then press ENTER. When the routine begins start inputting the details as requested when the program is running.

First you will be asked for today's date as DD/MM, that is two digits for the day and two digits for the month. The listing will enter the year as two digits, and to continue this you will have to edit the routine at the beginning of each new year as mentioned in these notes elsewhere.

Then you will be asked to enter the current mileage, the litres purchased, and the cost of those litres. When entering the litres purchased and the cost of them you must enter a decimal point, unless you purchase an exact number of litres, or are charged an exact number of pounds without any pence. Most often this won't happen, so put a decimal point where required for the litres, and between the pounds and pence.



After your first usage of the routine the listing is used by editing the last record you entered, and using [f1] ([f7] if you are using LocoScript 1) to insert the routine at the foot of the page. Then you save this document and

fill it as described in paragraph above.

Here is the listing but to make it work you will need to type it in yourself so as to enter working versions of the codes used.

```
(+Mail)u="/00" &
tah="→
date=?:What is today's date dd/mm? d
date=date&u ₽
5M=0 4
cm=?#:What is the current mileage? &
m=[cm-sm] &
pg=?#;What was the previous total gallons? &
lp=?#:How many litres did you purchase? &
c=?#:How much did this fuel cost? 4
pc=?#:What was the previous total cost of fuel?4
tc=[pc+c] d
g=[lp*0.2212]+
tg=[pg+g] &
mpg=[m/tg|2]4
pcost=[tc*100/m/2](-Mail) &
(+Mail)date:tab:[cml/]:tab:[cm-sml/]:tab:[tgl/](-Mail)gal(+Mail)tab:lp(-Mail)ltr &
(+Mail)tab:g(-Mail)g(+Mail)tab(-Mail)f(+Mail)[tcl/]:tab:mpg:tab:pcost(-Mail)p4
```

Let's look at this listing line by line. Those of you familiar with BASIC programming may see a similarity in the structure, and I believe I may have written the listing having studied a BASIC listing in PCW Plus called Vehicle Fuel Record (VFR).

The first line simply sets up what I think would be called a string variable in BASIC. It establishes that the letter y equals "/00" and this saves you entering the year when entering dates. If you start to use this listing you will need to alter this line next year so that y="/01"

In the second line the computer is told that tab in the listing should be replaced by a [TAB]. If I had used a [TAB] then I would have had to switch off LocoMail and then switched it on again using (-Mail) and (+Mail).

The third line asks you to answer a question

in the form of two digits for the day then a slash and then two digits for the month. New Year's Eve would be 31/12

Line four combines the day and month details you have just entered to y which the program knows is /00, the current year.

In the next line **5M** is short for starting mileage which is set at **0** but which you must edit to be the mileage recorded on your milometer when you are ready to use the program. Then *next* time you buy petrol the current mileage will be subtracted from this starting mileage to find the mileage **between** filling up from empty to filling up again.

Line six asks you to enter the current mileage just mentioned in the previous paragraph. cm=? is LocoMail's way of putting a question to users and the hash ensures that only a numeric value will be accepted. The semi-colon enables the program to print the question on-screen in a form understandable to users.

Line seven finds the mileage (m) by doing simple arithmetic. It subtracts sm (starting mileage) from cm (current mileage). The square brackets in [cm-sm] is LocoMail's way of initiating arithmetical processes.

Line eight asks you another question, once again insisting on a number as the answer, this number being the pg or previous gallons. The first time you use the listing this will be nil and thereafter the necessary number will be there on-screen for your use.

Another question with a numerical value answer in the next line asks you how many litres you purchased. Most often that will be on your payment slip but if it isn't at your local petrol station you will have to get into the habit of noting it from the pump display, just as you will need to note your milometer reading and the charge for petrol.

Now you are asked for the cost (c), another numerical value. Enter this as ££.pp for the pounds and pence, except that if it is an exact number of pounds there is no need to enter pence.

Line eleven asks you for another numerical value, pc, the previous (total) cost of fuel. Don't panic, the first time you start using this routine the figure will be zero, after that it will be on-screen in front of you. After several year's use my previous total cost of fuel is an enormous amount, you wouldn't believe it so I won't tell you!

That's it. You have finished. All you can do now is watch the program taking a few seconds to do the necessary calculations.

Line twelve finds an up to date tc or total cost by adding previous cost to cost, [pc+c]

Then g (gallons) are calculated by multiplying lp (litres purchased) by 0.22, g=[lp*0.22121. 0.22 is the appropriate conversion factor, and the vertical bar [1]

followed by the [2] 12 ensures the result is rounded to two decimal places.

(May I digress by saying rounding is not the same as truncating; if you wanted to truncate to two places of decimals the instruction would be slightly different.)

tg (total gallons) are found by adding previous gallons to gallons - tg=[pg+g]

Miles per gallon is found by dividing miles by total gallons to two decimal places mpg=[n/tg|2]

pcost is my abbreviation for cost in pence per mile. It is found in line sixteen by multiplying total cost by 100 to change it from pounds to pence, dividing by miles, and rounding to two decimal places. The computer does the work far quicker than my explanation takes to read!

The final very long line includes four examples where the arithmetic results have been modified in a different way.

[cm/] shows the current mileage with a comma between the thousands and hundreds; [cm-sm/] subtracts starting mileage from current mileage and shows the result with a comma after the thousands and [tgl/] does the same to total gallons; and [tcl/] marks off the thousands of pounds in the same way. The slash in these items uses commas to separate long numbers into groups of three.

Otherwise the line does little more than set out all the results in their appropriate columns using tabs in your document set-up which I have yet to specify. I leave you to go through the line carefully to see how it works while I give you details of the document set up.

If you have a working knowledge of LocoMail you will not learn much from these notes, but I think I remember Steve Massam recommending studying LocoMail routines and modifying them to your own needs. I have learned much over the years doing just that.

Here is the document set up I use. Use [f1]

to get into Document setup and then [f2] to Change stock layouts. (In LS1 use [f2] to get into the Document layout menu, then select the brand New layout option.) My left margin is at 10, right margin at 92. Pitch is 12, Line Spacing is 1, Line Pitch is 6. Use [f8] to set Scale pitch at 12. I have right tabs at 28 and 36, and decimal tabs at 42, 52, 60, 70, 78 and 86.

I use a two-line header with Miles starting at 31, Petrol bought at 50, Total £p at 66, and Pence at 86 on the first line. On the second

line Date is at the Left Margin at 10, Mileage Travelled at 20, TotalGals at 38, Litres at 50, Gallons at 57, Cost at 68, mpg at 76 and per mile at 84. The second line is underlined.

That is fairly complicated to set up but it adds tremendously to the clarity when all the columns are nicely set out below relevant headings. Try managing without the headings and you will see what I mean, but you could add this Header later once you have the program working.

		Miles		Petrol	bought	Total £p		Pence
Date	Mileage	Travelled	TotalGals	Litres	Gallons	Cost	mpg	per mile
9/10/99	15,565 -	Tank full	to begin red	cords				
14/10/99	15,830	265	7.08	32.19	7.08	£16.71	37.43	6.31p
17/10/99	16,046	481	12.19	23.24	5.11	£28.77	39.46	5.98p
25/10/99	16,299	734	21.20	40.96	9.01	£48.39	34.62	6.59p
10/10/99	16,560	995	29.80	39.11	8.60	£67.13	33.39	6.75p
19/11/99	16,776	1,211	36.78	31.71	6.98	£83.59	32.93	6.90p
22/11/99	17,040	1,475	43.73	31.58	6.95	£98.09	33.73	6.65p
6/12/99	17,338	1,773	52.30	38.96	8.57	£119.48	33.90	6.74p
19/12/99	17,552	1,987	60.18	35.84	7.88	£138.08	33.02	6.95p
24/12/99	18,058	2,493	72.56	56.27	12.38	£167.84	34.36	6.73p
8/01/00	18,360	2,795	81.14	39.00	8.58	£186.91	34.45	6.69p
24/01/00	18,494	2,929	86.87	26.04	5.73	£199.91	33.72	6.83p
24/01/00	18,807	3,242	94.00	32.41	7.13	£216.41	34.49	6.68p
31/01/00	19,155	3,590	103.72	44.17	9.72	£238.01	34.61	6.63p
25/02/00	19,366	3,801	111.43	35.04	7.71	£257.25	34.11	6.77p

In creating this LocoMail programme Tony has made good use of the vertical bar LocoMail instruction to position the decimal point. To type the vertical bar on an 8000 PCW you will need to press [EXTRA]+[.]. On the 9000 the vertical bar has it's own key. ED.

ADAPTING LOCOMAIL LISTINGS

I write to congratulate and express my agreement with our editor Steve on his suggestion that the alteration of LocoMail listings can produce routines to do other similar jobs.

As an example, when I was regularly engaged in Archery as a sport I adapted an invoice listing to score several sets of arrows, with the purpose of analysing my success over different distances, or at different times, during a period of practice. My listing to keep check of mpg and pence per mile, arising from my car's fuel consumption, either arose out of, or became, two routines to check gas

and electricity bills, one of which was published in issue 12 of PCW Today last year. Other adaptations allow me to manipulate our family database in a variety of ways.

Another point I would like to make is that if you have dabbled in BASIC programming you may find this a big help in using LocoMail successfully. This may be more obvious if you look at Steve's listing of mail-merge codes with their meanings on page 6 of Disc Drive 23, and think of similar instructions you have used in BASIC listings.

Tony Dimond

SO YOU WANT TO WRITE BASIC PROGRAMS?

 Tutorial 1	 By Graham Sewpson
	Tel: 01484 682988

In issues 17, 18 and 20 of *The Disc Drive* Daniel French wrote three articles entitled "Programming in Mallard BASIC". The Editor can supply these back issues @ £1.20 per copy. I propose to carry on from these articles though in a slightly different style.

First, I concur with Daniel in that you will need the Basic manual. It is not faultless or complete but it is essential. If you do not have a copy already then get one. SD Microsystems tell me they can still supply, but the price has risen to £16.95 inclusive of p. & p.

Apart from the manual you will need your CP/M and utilities disc, your LocoScript Start-of-Day disc, two blank formatted discs, and if you want to save your work on paper then a file punch and a ring binder.

I am not going to follow the manual's sequence closely. Rather I am going to give you what the manual handles poorly or not at all. Where I want you to understand what the manual covers well, I shall merely make a reference to it. From time to time we shall use LocoScript, so I expect you to be familiar with your version of it.

The manual exists in at least two forms: the original 10" x 7" and the later A5 sized ISBN 1 85195 009 5. The page numbering in the two formats is not identical so when I make a reference it will take the form of p1/p2 where p1 refers to the old edition and p2 to the new.

An early caveat: Where I refer to "The User" or "The Programmer" and thereafter to "he" or "him" these should be understood to refer equally to "she" and "her".

Big computer programs are written like the chapter of a book; that is, they are assembled from paragraphs with each paragraph having to do a subroutine that contributes to the whole. I shall never have the space to give you a long program; rather I hope to coach you in the faculty of writing the paragraphs. It follows that if/when you come to write a big program you will first have to break down the program's task into the sub jobs for which you know you have the appropriate paragraphs.

I shall continue the convention that [RETURN] means 'Press the Return key' and that square brackets round any symbol denotes a key; e.g. [12].

Daniel's three articles covered:

Issue 17: Loading CP/M and Basic, the PRINT command, simple arithmetic in Direct mode, Line numbers, the NEW command, Number variables, the use of INPUT with numbers, and simple multiple calculations in Program mode.

Issue 18: Fixed strings, String variables, variable types denoted by the %! # and \$ suffixes, joining strings, splitting strings with LEFT\$() and RIGHT\$(), use of the semicolon to hold the cursor, and the use of INPUT with strings.

Issue 20: The FOR NEXT loop, splitting strings with MID\$(), and recovering numbers from number strings with VAL().

O.K, let us LOAD Basic, ref 5/1.

I would like to give you a means of preserving your work on paper but printing on your printer from Basic is as yet too complex an operation, or at least it will be for many of you in spite of what the manual suggests. Consequently I shall use what is considered an unorthodox method but you will be familiar with at least a part of it.

Also, you must be able to preserve your work to disc. This act of recording a program on

disc is known as "saving" and uses the Basic command word SAVE. As yet we have nothing to save.

All programs have to do a job. It is tiresome to discover a program and to have to analyse it to discover the job it is supposed to do. Therefore, a program that is going to endure for longer than the content of your short term memory should remind you the programmer, and tell the program user, what that job is. The program's name, if it exists within the program, usually does this but only in the most terse way. A line or two of further text is usually worth while.

A program, particularly a complex program, should also contain a development or version number to indicate the sequence of improvements. We have all seen v numbers when LocoScript loads up. I usually use the date. So let us compose the short program HEADER. BAS that we can put at the top of our later programs and that will contain these scraps of information. Of course it will have to be altered fairly radically for each new program but its existence will remind us to do so. So type:

10 print tab(41)"HEADER.BAS"tab(80)"v 04-03-00"string\$(5.10)

20 print"HEADER.BAS indicates the function of the program below." and [RETURN] after each line.

Why tab(41) in line 10? The screen has 90 columns numbered 1 to 90. If we want the word HEADER.BAS, a ten character word, to print centrally then it must occupy columns 41 to 50, leaving 40 blank columns both before (1 to 40) and after (51 to 90). But in fact anything else on the line, here the date, will alter the apparent symmetry of the line. Consequently we may have to tinker with tab(41) at a later time to get the most pleasing effect. For STRING\$(5,10) see refs 51/57 and 328/367. Printing one character 10 takes the cursor down one line. Printing five

While we are about it we can usefully add some further bits. If we wanted to include some longer lines of text it would be desirable that Basic should start a new line when the screen starts a new line. Failure to make these coincide would either prevent use of the whole length of the screen line or cause a new line to be begun part way through a screen line. Because the screen has 90 columns, the screen line length is 90 characters but Basic's default length is only 80. So let us use the WIDTH command to alter Basic's line length to match. Add line 8 [RETURN]

10 print tab(41)"HEADER.BAS"tab(80)"v 04-03-00"string\$(5,10)

20 print"HEADER.BAS indicates the function of the program below."

8 width 90

Also it would be nice to start the running of the program from the top of a clean screen. This requires the printing of two screen codes, of which more at a later date. For now, printing chr\$(27)"E" clears the screen, and chr\$(27)"H" sends the cursor to the top left corner. Note that these codes are case-sensitive. Also, we can use a bit of shorthand by making e\$=chr\$(27), so type

EDIT 8[RETURN]

takes the cursor down five.

This will display line 8 and put the cursor within it. Note: there is an error in my copy of the old manual. In the early index, absent from the new manual, it gives page 14 for 'Editing programs' whereas in fact the EDIT command first appears on ref 17/13. Alter line 8 so it reads.

8 WIDTH 90:e\$=chr\$(27):print e\$"E"e\$"H"chr\$(13)[RETURN]

As you see, we can put several instructions on the same line provided we separate them with colons. Note that if we are to use the shorthand, we must define it before we use it.

Incidentally, e\$=CHR\$(27) is shorthand, but how short is escape\$=CHR\$(27)? See for example ref 32/32

Now type

LIST[RETURN]

Note that Basic has put the lines into numerical order and raised all the key words to upper case, thus:

- 8 WIDTH 90:e\$=CHR\$(27):PRINT e\$"E"e\$"H"CHR\$(13)
- 10 PRINT TAB(41)"HEADER.BAS"TAB(80)"v 04-03-00"STRING\$(5,10)
- 20 PRINT"HEADER.BAS indicates the function of the program below."

For clarity I shall often present Basic's key words in upper case but when you type them you should always use lower case. If Basic fails to recognise a key word it will fail to raise it to upper case. This failure indicates an error; e.g. you have typed 'pirnt' when you meant to type 'print'. Typing in lower case exposes these errors.

Basic has a keyword RENUM, ref 17/13, that neatens the line numbers into 10 increment intervals. So type RENUM ...[RETURN] then LIST ...[RETURN] and we get:

- 10 WIDTH 90:e\$=CHR\$(27):PRINT e\$"E"e\$"H"CHR\$(13)
- 20 PRINT TAB(41)"HEADER.BAS"TAB(80)"v 04-03-00"STRING\$(5.10)
- 30 PRINT"HEADER.BAS indicates the function of the program below."

Add line 40 as

40 rem # # # # # #

O.K. but why? This is as far as we are going to develop HEADER.BAS for now. It is time to SAVE it to disc. The simple formula for this is:

SAUE"HEADER

But do not do this yet. This operation would save our program as HEADER.BAS to the current group of the current drive; i.e. to group 0 of Drive A: unless you have changed it. However, it is best to get into the habit of addressing the saving command so that the program is saved to the destination you intend. The address is inserted thus:

SAVE"nX: HEADER[RETURN]

Where n is the group number, usually 0, and X is the drive letter, A, B, C etc. If you do this, you will save HEADER.BAS to the address of your choice in Standard form. See ref 314/353.

There are two other forms in which you could save it; i.e. in Ascii form or in Protected form. These require the form specifier A or P to be appended thus:

SAVE"nX:HEADER.BAS",A

SAUE"nX:HEADER.BAS".P

Protected form allows you to run the program but prevents the editing or even the listing of the program, by anyone, including you.

Which is the best form for our purpose? Remove your CP/M disc from the PCW and put one of your blank formatted discs into a drive. This disc is about to become your Basic programs disc. Now type:

SAVE"OX: HEADER[RETURN]

SAUE"1X: HEADER. BAS", A[RETURN]

SAVE"2X:HEADER.BAS",P[RETURN]

Where X is the letter of the drive into which you have put your disc. Next time we shall see which of these forms best suits our purpose.

Quest for Starters!

If you have been following this series of LocoMail tutorials you will have a LocoFile Data File with the fields or item names; Title, Initials, Surname and Address.

In this tutorial I'm going to show you how to list items of information held in a LocoFile data file and to enable us to vary the way the information is laid out there is a radical change to be made in the LocoFile data file.

Referring back to the first tutorial, do you remember how instead of having the Title, Initial and Surname under one Item Name eg; Name, we split it up into three separate Items eg; Title, Initials and Surname? In this way we were able to Index our LocoFile data via Surname and also use the individual Items eg; (+Mail)Title:SP:Surname(-Mail) without including the Initials.

Now we need to do the same to the address Item. At present the address is OK! But if you wanted to put the address in a single line you can't, because of the way it is set out in the LocoFile data file. It is always best to break an Item like an address up into it's various components, as we did for the name and I would suggest something as in figure 1.

(Fig 1)

Title Initials Mr S R	Surname Massam	Forename Stephen
Street1 27 St Man	rks Rd	Handle Steve
Street2 Hadleigh		Tel: 01702 555398
Street3		
Town Benfleet		Notes:
County Essex		Smart Alec!
Post-Code SS7 2PY	!	

Whilst you are making these changes you might as well add a few extras, like Tel:, Fax, e-mail:, Forename, Birthday, and Handle being

a good one for an informal name eg: you might know someone called Robert who prefers to be addressed as Bob.

When you have a LocoFile data file arranged like this you have many options as to how the information can be laid out an processed. If you want an address list in alphabetical order, without taking up sheets of paper, you can do it. If you want a simple alphabetical name and telephone list, you can do that too. If you want a list of Birthdays in date order you do that as well. Should you want to send a letter to all in a particular county, no problem. The options are almost endless.

To begin with let's keep things relatively simple. Having set up your LocoFile data file as suggested above, create a new document and copy the LocoMail program in figure 2.

(Fig 2)

(+Mail)\$="Surname" & RT=" & ":SP=" " & Loop="(+Mail)Surname:SP:Initials:SP Telephone:SP:Street1:SP:Street2 & SP:Street3:SP:Town:SP:County:SP:Post-Code:RT:\$+(-Mail)#(+Mail) & County:SP:Post-Code:RT:\$+(-Mail)#(+Mail) & County:SP:Post-Code:RT:\$+(-Mail)#(+Mail)#(+Mail) & County:SP:Post-Code:RT:\$+(-Mail)#(+Ma

%Loop@\$#(-Mail)

The first three lines of this program will be familiar to you, if you have following this series of tutorials, but the rest needs some explaining. As stated in the first Tutorial a string eg; anything that is enclosed within ["] Double Quote Marks, can consist of a number including of things LocoMail. codes/instructions and that's precisely what we have Loop="LocoMail here: codes/instructions" As a newcomer to LocoMail, one very important point to remember when using this type of string is that it is best for now at least not to have a string within a string eg; Loop=" sp=" " ". Generally it just won't work, although there are exceptions. As the string we are creating starts with a LocoMail instruction, it's good practice to start the string by turning LocoMail on eg: (+Mail) and finish the string by turning LocoMail off eg: (-Mail). The item name Loop has no significance; remember it's just a name. It could as easily have been named Prog1 or Repeat-This-Please, but the word Loop does give a short explanation of what the sting is to be used for. Basically we want LocoMail to repeat the instructions stored under this Item Name for every record in our LocoFile data file and the last line "Loop@\$# tells LocoMail to do just that: Perform "Loop" until current record number. Basically when LocoMail has come to the end of the data file there are no more record numbers so it stops. This type of string consisting of LocoMail codes is like a LocoMail program within the maim LocoMail program and is stored under the item name until it is instructed to perform by, in this case %Loop. How many times the performance is carried out can be controlled instruction @ something Something in this case codes are extremely useful part of LocoMail, commonly known as Loops, and can cause some confusion until more experience is gained, so I shall leave them for now.

Did you spot the \$\diamonds in the Loop string? This instructs LocoMail to go to the next record.

If you merge this document with your new LocoFile data file which has more than one record in it, you should be presented with an Alphabetical list of Names, Telephone numbers and addresses. (You need to have an index with Surname as the Main Key item for this to work) But the layout could be better! Let's make a few changes; see figure 3.

(Fig 3)

(+Mail)\$="Surname" ←

RT=" ←

":SP=" ":TB=" → ":PH="Tel: " ←

Loop="(+Mail)Surname:SP:Initials:TB:PH:

Telephone ←

TB:Street1:SP:Street2:SP:Street3:SP:Town:SP:

County:SP:Post-Code:RT:\$+(-Mail)"(+Mail) ←

%Loop@\$#(-Mail)

Looking at the third line down you will see I have added a couple of extra strings after SP=" ": . TB which stands for TAB and PH stores the abbreviation Tel:. Now if you look closely at the Loop string you will see I have used TB:PH between Initials and Telephone and TB again after Telephone and before Streetl. I have also done away with the item name Title and put the item Surname before the Initials. Having set a couple of tabs in the layout, when you merge this document with the LocoFile data file you should see a much improved layout.

We can make a copy of this file and adjust it still further to produce a program which will lay out addres labels see figure 4.

(Fig 4)

%Loop@\$#(-Mail)

Look closely at this program, can you see what's going to happen when it is merged with you LocoFile data file? Basically the components of the address have now been

change from a single line to how you would expect to see them on an envelope, one line under another. The item name NP is an abbreviation for Next Page, so having set the paper type to labels from Document Set Up this will produce an address per page or label. But there is something that is not quite correct. Merge it with your data file and see what happens!

Did you get blank lines/gaps in the address? This is because LocoMail has been instructed to put a [RETURN] after each item of the address regardless as to whether the following item holds any information or not. We need to instruct LocoMail to disregard the [RETURN] after an Item if the item that follows contains no information! We need to do a few more adjustments see figure 5.

(Fig 5) (+Mail)\$="Surname" & RT=" 4 " : SP=" " : B="" : NP=" T ______ H 4 Loop="(+Mail)RT1=RT:RT2=RT:RT3=RT & U #Street2=B: <: RT1=B: > 4 #Street3=B: (:RT2=B:) 4 #Town=B: <: RT3=B: > & Title:SP:Initials:SP:Surname:RT & Street1:RT1:Street2:RT2:Street3:RT3:Town:RT: County & RT:Post-Code:NP:\$+(-Mail)"(+Mail) & %Loop@\$#(-Mail)

Let's look at this program in detail.

We have added another sting B="", the B stands for blank and several changes have been made to the Loop string. Note that the item name RT after Street1. Street2 and Street3 has been changed to RT1, RT2 and RT3 and at the start of the string I have added RT1=RT:RT2=RT:RT3=RT. These first instructions set RT1, RT2 and RT3 to [RETURN] every time the sting is performed. But immediately LocoMail is instructed to look at Street2 on the data base and if it is empty/blank then RT1 equals nothing/blank not a return. Street3 and Town are dealt with in the same way. Referring back to the first tutorial you will see # means IF. : (! means THEN so the instruction #Street2=B:(:RT=B:) translates as: IF Street2 equals Blank THEN RT1 equals Blank.

Basically if Street2 is empty we don't want a [RETURN] code after Street1, but if there is information held under the item name Street1 then RT1 is left as a [RETURN].

If you now merge this new file with your data base you should see no blank lines.

Next time I will show you how to extract information from an individual file an request.

Steve

If you encounter any problems or find you are having difficulties understanding what I have writen in this series of articles, please don't hesitate to get in touch ED.



To all who contributed to the production of this magazine.

Pinboard OVER Computers

Disk transfers from CP/M to MS DOS from £4.50. PER DISK.

IF you are still using your PCW then we are still very involved in providing as full a service as we can. Repairs, spares and consumables are all available.

THE No. 1 REPAIRS SERVICE

We offer an extensive repair service at very reasonable rates. Our vast supply of second hand items, too numerous to list ensures respectable prices. Whatever you need please contact us for availability and latest prices.

For all your PCW requirements

PINBOARD COMPUTERS

Unit 9 Bondor Business Centre, London Road, Baldock SG7 6HP

Tel: 01462 894410 Fax: 01462894460.

Web: www.btinternet.com/~pinboardcomputers