

NATGUG NEWS

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OFFICIAL JOURNAL OF THE

National TBS-80

& Genie Users

Group.

INFORMATION ON THE GROUP

Membership of the Group is by subscription to the Newsletter, which is published monthly. Membership details are obtainable from the Group Secretary. Membership of the Group is open to anyone with an interest in the TRS-80 range of microcomputers, and compatible systems such as the Video Genie.

Details of the Group accounts and the constitution of the Group are obtainable from the Secretary.

Members requiring assistance with problems related to the TRS-80/Video Genie may call the Secretary. An attempt will be made to put them in touch with a member who can help with the problem.

Workshops are arranged from time to time in various parts of the country.

Sub-groups exist in many areas. A list is provided at the back of the Newsletter from time to time.

The Group maintains two software libraries (Models I and II) which are free to members. Library lists are obtainable from the Secretary.

A membership list is obtainable on disk from the Secretary.

Back numbers of the Newsletter are available.

Please send all contributions for the Newsletter to the Editor.

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MILTON KEYNES SUNDAY MORNING MEETING
FOR A TRIAL PERIOD UNTIL CHRISTMAS 1984
PLEASE MAKE A NOTE THAT WE WILL BE
MEETING ON THE FIRST AND THIRD SUNDAYS
OF THE MONTH FROM 10.00 to 1.00 TO BE
HELD AT YORK HOUSE, STONY STRATFORD,
MILTON KEYNES. A map can be sent to
those faint of heart at the thought of
entering MILTON KEYNES.
Brian Pain 0908 564271.

Swindon Workshop 7/8/9 November 1984.

Topics and speakers required.
Contact Leon Heller or Brian Pain
0908-613004 or 0908-564271.

EDITORIAL

Sorry about the lateness of this issue, I've been rather busy lately.

Contributions to the newsletter seem to be increasing. Keep up the good work.

As usual, I will be organising a stand at the PCW show, which has moved to Olympia. The emphasis will have to be on the QL, I'm afraid, but we will be very pleased to see NATCUG members, also. Brian will be organising a "hospitality room" in a local boozery.

I was successful in the recent Radio Amateurs Examination, and am now a licenced amateur, with G1HSM as my call sign. One area of amateur radio that greatly interests me is packet radio, where you have a network of personal computers linked via radio, which in a few years should develop into a world-wide communications system enabling licenced amateurs with micros to communicate with other amateurs anywhere in the world, at minimal cost. These techniques, although legal in the States and Canada, are not yet authorised in this country. It is a very exciting development. If any of you are interested in amateur radio, and are put off by the thought of the examination, go ahead, it is quite easy.

Leon Heller

GUIDELINES FOR CONTRIBUTORS

1. If possible, send material in printed form.
2. Scripsit or Pencil disks/cassettes are acceptable.
3. Ensure your ribbon is in reasonable condition.
4. Printer output should be on A4 paper if possible.
5. If you send in hand-written material, write legibly.
6. Do not fold the sheets when posting them. Use a large envelope and keep them flat.

Leon Heller

LIBRARY INFORMATION

Model I: Leighton Davies, 105 Caerau Road, Caerau,
Glamorgan. Tel: (0656) 738337

Model II: Jim Hutton, 25 High Street, Stroud, Glos.
Tel: (045 36) 4423

MEMBERS' LETTERS

Thanks for a superbly organised weekend, I enjoyed myself very much indeed.

Here is the address of the firm who have bought up General Northern's stock:-

Inpholink,
Front Street West,
Bedlington,
Northumberland NE22 5UB.
Tel: (0670) 829009

E.C. Kilpatrick,
3a Gainsborough Street,
Sudbury,
Suffolk CO10 6ET.

(* GNOMIC have been "liquified". LFH *)

This letter has been written the day after my arrival back home, after the last NATGUG/IQLUG meeting in York House. I would like for the world at large to hear why I feel that I have just wasted £60 on the above function.

To start with, we can write off £20 for petrol for the car.

Now we come to the meeting itself. The lunch and evening tea should have been priced the same, as it was the same food, with the exception of desert, which would not account for the additional £1 on the price. Whilst on the subject of food, I must also comment on the fact that a salad is nice once in a while, but not for four days on the trot, although it must be said that there was a choice of meat with the salad on two of the days. This was ham or fish. As I am allergic to fish, this left me with a large choice! This amounts to £15.25, although not entirely wasted.

I now move on to the accomodation, leaving the lectures to last. As usual, the hostel at which I stayed, was excellent, but I have one complaint, and that is the time at which we had to be in the hostel: 23.00. This is much too early, but never mind. Cost: £21 for four nights.

Concerning the lectures, luckily I did not have to part with any money for this, as I was supposed to be giving two days of lectures. This left me with enough money to purchase four very low-quality disks from Os, two of which I can only use as TRS-DOS disks.

I was now ready to start my lecture at the time set by Brian (10.00), but no-one knew about this start time, so the lecture was cancelled. Then on Thursday afternoon Brian was asked when I would be starting, to which he replied "Friday morning, with just the three of you". Next morning, when a time was announced, we had 10 people in the room almost immediately. Mind you, these people were there the previous day, but we did not know what they wanted, as the bookings form did not allow them to specify. A slight oversight on the bookings form, that.

So far, this sounds like an all-out attack on Brian, and I apologise; it isn't intended to be. Sorry, Brian. To be totally fair to Brian, you must give concessions for his starting up IOLUG as well, for it must be a lot of hard work and things can quite easily be forgotten.

The Saturday focussed on the QL, and the Sunday was relatively like a normal NATGUG meeting. If things continue in this vein for the next year or so then I'm afraid that I just can't afford to come to a meeting to do as much as I do at home.

Although most of you will quibble and say "Well, what's £60?", I would like to make it known that I am at college on a grant that entitles me to £8 per week, and on that sort of income £60 is hard to find.

I suggest, for the good of both organisations, that the two groups not split, but rather, to have two separate secretaries to take on the burden, as it is evident that Brian can't be lumbered with it all. After all, I have enough difficulties running my own club, let alone two national ones.

Brian, you have done a great job with NATGUG, and probably IOLUG as well, but don't spoil it by trying to do too much!

P. Knaggs,
12 Seymour Road,
Chippenham,
Wilts. SN15 3NH.

(* I am sorry about Peter's disappointing week-end. His letter is considerably at variance with the one that precedes it. I too thought the food was rather grotty. You must make allowances for the fact that this was the first true joint workshop. We will endeavour to see that future meetings are better organised. What do other members think of the MK week-end? *)

I have just undertaken a major step and taken on Assembly Language Programming from the ground up. Somehow the apparent mystery and complexity of the language made me, and I'm sure, many other members, shy away from it. The opportunity arose because we had not planned any "away" holidays this year. (The weather was too good to waste money this year on the continent!). So with the annual duties of gardening and house painting behind me, I was browsing through some back issues of 80-MICRO and came across a great three-part article on Assembly Language Made Simple by Hardin Brothers. (December 1983, January 1984 and February 1984). Looking back through the newsletters for any hints and tips, I remembered that I bought a copy of Laurie Shields two-part article on Assembly Language Programming. So equipped with EDTASM I made a start.

I have only been at it for a fortnight now and have purchased ZENBA (Model I and III, ZEN4 for Model 4, is included in the package) for £44.50. So far I have managed to draw a graphic border around the screen and place a smaller rectangle inside it with my name inside the rectangle. Doesn't sound much but believe me, the feeling of excitement at getting it to run makes the effort worth while. More importantly though, there is no better way of learning the language than 'getting stuck in' and writing something - no matter how simple or useless. You will consolidate the knowledge much quicker. There is only one way which I know to consolidate knowledge quicker; that is, try

to teach a fellow 'computerist' what you have learned. It really rams (ugh!) the knowledge home. I quite often use that technique with local users.

Again whilst browsing through back issues I see that Tim Bourne has contributed several articles. The reason that this caught my attention was that he is the author of the PASCAL compiler and editor which is distributed by Molimerx. I would thoroughly recommend his software for those who wish to try PASCAL. The latest release is 6.1 and now includes amongst other facilities, Records. As yet the implementation does not include the type STRING. String handling can only be achieved by means of an ARRAY of CHAR. I hope Mr Bourne enhances his excellent software with this facility.

Whilst on the subject of PASCAL, there is a course presently being run by the Open University (Associate Student Programme) PM693 Structured Programming with UCSD Pascal. The fee is only £65 and is a non-examination course. I applied last year and have been following the course at my own pace. (OK! I hear you say, what about the assembly language programming you are doing!)

The course is extremely well documented and you are supplied with:

- a course text of five books
- an activity booklet containing programming exercises
- a guide to the UCSD Pascal environment
- a set book - the UCSD Pascal Handbook
- a reference manual on data structures
- instructions for setting up and doing the problems on your own computer.

It is estimated that the course will take about 100 hours of study. I presently have reached Unit 8 out of a total of 10 Units in the course. So far Mr Bourne's Pascal has served me well in this pursuit as it has the nice facility which compiles the source code to Z80 object code, not P-code as in some other implementations.

The address for those interested in the OU course:

The Admissions Office,
The Open University,
P.O. Box 48,
Milton Keynes,
MK7 6AB

Well, that's all for now.

David Roberts

0232-462564

As promised I enclose hereby a copy of a letter which I have sent to PCW which sets out details of my "struggle" to reclaim £10.89.

Obviously I have been "caught" and I really would not like anyone else to be and feel it is important that both clubs are aware of the position when ordering goods by mail.

I leave it to you, if you wish, to make any additions or alterations as to how you want to put this over in the two newsletters. I have checked with Citizens Advice that as my letter to PCW of the 5th August only contains sections of letters sent to me and I have also not expressed any opinion that might be libelous, it is perfectly in order ^{for} ~~in~~ me to have written as I have.

I am quite sure PCW will not publish this letter in their magazine but at least by writing it I feel better!

I also enclose the relevant section of the protection scheme for you.

Miriam Pollard
62 Alexandra Park Road
Muswell Hill
London N10 2AD

"CAVEAT EMPTOR

On the 28th November 1983 I placed an order for software advertised in PCW, the company advertising being Silver Fox Communications Ltd., the value of the order being £10.89 which I paid by Access. On the 1st January 1984 I noticed that Access had been debited despite my having in writing cancelled my order.

On the 26th January 1984 I informed Access and on the 9th March they replied stating "unfortunately the retailer has since been closed in our files. In the circumstances may I suggest that if the order was placed due to an advert in a newspaper or in a magazine, that you seek compensation direct from the Newspaper Publishers Association or the Periodical Publishers Association."

I received a further letter dated 19th March stating that "you are quite right under the Consumer Credit Act 1974 equal liability is between the retailer and credit guarantors but for items in excess of £30 (it is now £100). "As the amount of the transaction is under £30 you have a valid claim against the publishers of PCW and if you write to explain the circumstances including details of the advert you responded to then they are obliged to refund the monies to you."

This I did on the 20th March and 26th June and on the 20th July PCW replied as follows: "Our Mail Order Protection Scheme is designed to cover readers who have ordered goods from companies that have been declared bankrupt, Silver Fox Communications have not been declared bankrupt, but has, it seems absconded owing a number of people money, including yourself and VNU. Therefore under the circumstances we are unable to refund your money."

On the 26th July I asked for a copy of the Mail Order Protection Scheme and was advised in their letter of the 30th July - "My advise to you is that you write off the £10.89 and save yourself further expense by refraining from more correspondence."

I used to be a regular subscriber to PCW but you may rest assured that I shall not buy a copy again.

Of course it is your privilege to publish or refuse but I would respectfully ask that you do publish this letter as I feel it better to appear in your own magazine than a different magazine. Please let me know which edition this letter will appear in.

Yours sincerely,

Mrs. M. Pollard

I have recently purchased Scripsit for the Model 100. It operates with the built-in TEXT editor and provides excellent formatting and printer control capabilities including right hand justification and selection of number of copies for printing. It costs £19,95 from Tandy. Well worth it.

That's the good news. The bad news is that it does not run with the standard 'A' ROM as supplied in the UK Model 100s. My son bought the Starblazer game in the States and met the same problem. On enquiring of Tandy they fitted a 'B' ROM for their usual £5 (plus VAT) and all works well. It is essential to have this ROM if you intend to use the Video interface. I have tested this briefly and consider it highly overpriced at around £600 for what it provides.

On another front I have been wanting to move to a 16-bit machine and have reviewed the market for reputable suppliers. At work we are officially IBM-PC and DEC oriented with splatterings of Wang and HP. Some users have themselves acquired Sirius, Apple etc but that's their lookout!

My main requirement was for IBM-PC compatibility. In the end I narrowed the choice down to the Tandy 2000 and the Olivetti M-24. The former, despite its good spec and performance is definitely not PC compatible and I had to dismiss it for this reason.

That left the M-24. I was able to test it extensively with IBM software and could not beat it (by the way do NOT believe the test results in PC User July 1984 issue which comprised a Directory of personal computers. They had to retract their statements at the PC User show and Olivetti, I believe, come close to suing them!). The bottom line is I acquired one with 256K RAM and 2 320K disc drives, mono monitor (the colour one comes out later this year), MSDOS 2.11 and GW-BASIC for under £2,000. It is not simply a PC-clone for its offers increased performance on almost all fronts for less money yet has a distinctiveness all its own including its Italian styling. The M-24 is extremely fast (twice the speed of the IBM-PC), has a genuine 16-bit 8086 chip and offers great expansion possibilities. You have the choice of the terrible IBM-standard layout keyboard or Olivetti's own (you can guess which I chose).

I still have my Model-I, but will probably sell it off in time once programs are transferred. By the way apologies to those who answered my advert for the Model I in the March issue. I did not want to sell until a new machine had been acquired. If anyone is still interested contact me again. I shall put another ad in later, however.

I'm very pleased with the machine and I gather that Molimerx are investigating handling Olivetti software.

If anyone is planning to go Olivetti M-24, let me know as if there is sufficient interest I may start up a Users' Group. By the way the dealer I acquired it from is very helpful - if interested contact Mike Prudence at KGB Micros Windsor (Tel Windsor 50111)

Bob Wiggins Hassocks 3430

The search for a decent general ledger is still on. The choice has been narrowed to Peachtree and Sage. The main problem however is the storage. To assure compatibility with Model III Tandy has provided two 184K drives, which really is not enough to run serious accounts programs. So, perforce, I may have to go for larger storage - a dual, double-sided 80 tracks drive. As the generally recognised minimum storage required for an account program is 250K per drive such drive should provide some capacity to spare. Of course CP/M+ does not support double sided drives (did I hear that somewhere before ?) and I also know that should I replace my original drives with 80 track ones I would not be able to read Model III or TRSDOS 6 disks. It seems to me that although CP/M+ is really very good value for money and though it offers a lot to a programmer Montezuma CP/M is a better bet as a work horse when it comes to the standard CP/M software. Anyone would like to sell me cheaply this program ? Only legitimate copies considered !

Encouraging news in the latest Harding listing. Models 4 and 4P are doing well and there are new independent TRS-80 houses. Of course Tandy have brought the price down - for the period of their sale - by about £300. I wonder. With the NEC business system for £1000 including the printer coming on the market I think that this reduction in the price will be permanent. Anyway for the fun of it I went to Tandy to demand a refund of £300 but no such luck. It is a shame though that 80Micro went on the diet as well. My usual supplier at Victoria near platforms 1 & 2 stopped stocking it though the big Smith on the main concourse still have it. If they also stop, the search for a supplier will be on.

I wonder what is happening in the QLUG camp ? I have not heard anything lately about this wonder - maybe because I no longer take PCW and PC. But I don't see it advertised heavily anymore in the newspapers and Sunday supplements. I have a feeling that the orders, although heavy to start with, may tail off quickly. First time Spectrum owners may upgrade but I don't think that those who went from ZX to Spectrum will want to spend the money on yet another Sinclair. Commodore 64 is doing well though and it is becoming difficult to get. My DEC engineer was looking for one for his nephew and I found him a supplier but it took some time. One can buy it easily but only as a system - including disk drives, printer and some programs.

The June copy of the NATGUG journal has finally reached me (20th July) and I can see that the Sunday of the MK workshop will be shared. Is this wise ? There is this amazing manifestation of "loyalties" in the micro world. "My micro is better than any other and the language I use is the best" and so on. Well micro is micro (so long as it is not a con) and, providing that the keyboard is comfortable and does not require finger acrobatics, the display is clear, there is sufficient memory and a reasonable speed, each one can be usefully employed as a tool. As far as the languages are concerned they are all reasonable or lousy - depending on the mood. I have tried Basic, RM Cobol,

Pascal and Dicol having very quickly discovered that the Assembler is beyond me (and by implication Macros, Forth and C). Basic is all right for quick, short programs but trying to write a longer program is murder. In the early stages and in the days of great enthusiasm I wrote myself an insurance program (some 16K of it). It did everything I could think of including re-assessment for inflation. I now use Data Writer to keep track of my insurance. Then I wrote a general ledger program (some 34K of it and I had to break it into two parts). Again this program did everything I wanted with one serious limitation. The transaction file was loaded into memory which brought with it all sorts of problems like garbage collection etc. This program was discarded some time ago. Then I started on RM Cobol, a self-documenting language but so verbose. Why does one have to say "Display (or accept)...line...position" ? Why could it not be just "display(x,y)...." ? Now with Pascal which, like Cobol, enforces structural programming, there are all these brackets, the begins and ends. The language syntax is very unnatural. Dicol I maybe like most of all - probably because I have not done any serious programming using it. Just small improvements to the programs written for us by the OEM. But, if the machine/language partisanship is going to creep into the joint sessions I may attend future workshops just for the fun of it.

It is astonishing how little the people selling programs know about their wares ! Having decided to acquire CP/M 2.2 (Montezuma) I rang (you know who) to find out a few things about it. After all the only UK supplier will not accept returns if the program is found to be unsuitable and one does not wish to buy a pig in a poke. I found out that this version of CP/M does cater for different types of drives (including 80 tracks double sided) but the dealer has been unable to tell me whether I would be able to define physical drive 3 or 4 as logical A: or B:, whether this CP/M would treat so formatted diskette as one unit of 720K or would it consider each side as a separate unit, or even whether the manual contains the necessary codes to customise CP/M programs !! In fact the attitude was "Don't ask me all these questions - if you want the program send the money Charlie". It would also seem that the US version differs as far as the configuration program is concerned from the version sold in this country. The USA version permits defining the keyboard, assignment of OIBYTE (whatever that may be), and the printer linefeed filter in addition to the options specified in the UK catalogue. Well I have written to Montezuma now and, providing that I get an answer and the answer is satisfactory, I will buy it from the USA (even if this will cost me more). No wonder that people are ripping off the programs. As I say - if the program does what I want I buy it but I must be sure that the program will do just that.

I have been having great fun with the SAGE Try Before You Buy program. If you have not heard of it, for £20 you get a disk and an instruction booklet which takes you through most functions of the full program. If you decide to buy the program the £20 is reduced from the cost and, if not, you lose it. Still this

loss is bearable if one contemplates spending a few hundred Pounds on a program. This booklet also contains a table showing how the volume of the data disk can be calculated. The program is very easy to operate and one can almost use it just by following the menus. One starts with the initialisation and one is asked how many sales, purchases and nominal accounts to open. One must open a minimum of ten purchase accounts, ten sales accounts and ninety nominal accounts. In addition a file of 135 nominal categories is also created. As each sale, purchase and nominal account requires 50 bytes and each nominal category 30 bytes 9550 bytes are required for minimum files which must all reside on drive b:. The remainder of the space on this drive is available for the transactions' file - each transaction requiring 90 bytes. With the CP/M+ formatted disk of 154K this permits some 1,600 transactions per period - and I hope that I am right otherwise I will be in for a shock.

The main menu provides several options and some of the options also have their menus. Choice is on Inkey\$ routine with just a slight confusion. For example choice 02 takes one directly to the function but 2 requires a <return>. The same applies to the choice of accounts.

Having initialised the files one then proceeds to allocate the accounts numbers and their descriptions. There are 999 sale/purchases accounts permitted and 999 nominals. Sales & purchases share one sequence of numbers and the purchase accounts take the lower numbers so, if the minimum allocation is chosen, accounts 1 - 10 would be purchase accounts and 11 - 20 sales accounts. Nominals have a separate series from 1 - 999. The nominal numbers of 38, 65, 69 and 89 are pre-allocated for Debtors, Creditors, VAT controls and bank account and one can mess up the system by accidentally allocating these to some other headings. Once these allocations are completed one then proceeds to a mis-leading function called "Amend layout of a/cs". Nothing of the sort as in fact one creates the format of printed accounts. This is where 135 nominal categories, which were automatically created, are utilised. The only puzzle is that there are eight pages of 15 headings entitled trading account, profit and loss 1, 2 and 3, fixed assets, liquid assets, liabilities and funded by (capital and net profit - the latter being automatically entered by the program). The question is - as these eight pages have 120 categories and 135 categories were created what is happening to 450 bytes? Maybe I will discover when I get the full program. Having created the accounts one can then print them (not display). The final start up function is to enter the opening balances. Whilst doing so one can see on the top of the screen the net so there is help to see whether one is in balance at the end.

Operation of the program, that is posting invoices, credit notes payments or receipts or entering journal transactions, is an easy matter and one just follows the menu. The program also permits print of transactions either by dates or internal transaction numbers or both. There is no need to maintain any manual records. Trial balance and ledgers can be printed or dis-

played at any time. The accounts (trading, P & L and balance sheet) can be printed at any time and no printer output is provided at the update time. Annual update is a bit clumsy though as one has to transfer, using the Journal, all revenue balances to one profit/loss nominal.

The Try-Before You Buy comes with a well written instruction manual which covers only the aspects available on this test program. I even managed to get the accounts' print which apparently is not possible on this limited version. The manual leads one almost by hand through a specimen set of entries stating what key strokes to make etc. I have not tried to do this specimen set but, instead, I created my own accounts, entered my last month's balances and played with entering transactions until there was no more space. The postings file on the try version is very limited. Yes I think that I like the program and am going to get it. Customisation to CP/M+ is quite simple too, though I believe that the full program has a larger Install section. Well more about SAGE if and when I get it.

The last BOMICRO has a lot of nice things to say about CP/M+. Maybe the bugs, which are coming to light, will be corrected though the Tandy personnel in the branch I visit seem to be quite unconcerned. What Tandy will not do however is to provide support for a larger capacity disk drive. After all if they supported, lets say, a drive giving some 750K their chances of selling hard drives would be greatly reduced. I don't know much about hard drives for micros but I would think that to someone who wants to run Model III programs under LDOS, NEWDOS or DOSPLUS, Model 4 programs under TRSDOS 6.x and also CP/M a hard disk would not be of any use. But then a hard disk is generally beyond the means of the hobbyist and I don't know how many Model 4s are being sold for business use. I should not think that many as Tandy seem to be unable to get away from their hobbyist computer image. Their marketing strategy, in this country at least, is poor or to be more precise non existent. I also notice that there is a great turnover of the sales staff in their branches. The most experienced people seem to be leaving for other companies and they are being replaced by staff who do not know the equipment or the programs.

Well enough for this time - I am trying hard to fill a page or two in the NATBUG. I hate to see it being reduced so much in size. It is sometimes very hard to write especially if there isn't anything to write about (like this time). My communications attempts came to an abrupt halt with the relinquishment of the acoustic coupler, which has not been that satisfactory. I had a visit from my Cable and Wireless friend who produced an acoustic coupler (very much like Tandy's in looks but apparently much cheaper) and we contacted his account at Micronet (?) but I could not raise the Blandford board. There was a ringing tone but no reply. Once I gather some pennies and the modems will drop in price, as they are bound to, I will go for a good one with dialing from the keyboard and auto answer facility.

ANON.

PROBLEM SECTION

I would like to hear from anyone who has used a Silver Reed EX42 typewriter as a printer.

Norman Baust
(0329) 281480

BAR CODE READER

Does any member know where I can acquire (cheaply) a HEWLETT-PACKARD HEDS-3250 Bar Code Wand?

David Roberts

6 Plantation Road,
Ballymacormick Road,
Bangor,
Co Down.
BT19 2AF

Having a pressing need for a decoded version of BASIC, I ordered a copy of "Microsoft Basic Decoded" by James Fervour from Microcomputer Applications of Queen's Road, Blandford Forum. The price was £19.50 plus a £1 credit voucher for having previously bought their catalogue. The book I received was almost useless.

Only on pages 109,157 and 173 was the disassembly listing complete. All the other pages had the op codes listed but omitted the arguments to which the op codes applied. Of course, if you want to call subroutines in ROM you need to know which registers should carry the data on entry, and what is in the registers on Return. With the aid of a disassembler I could have gone through the book filling in the missing data by hand. However, it would have taken several hours, and is not on for a book costing £20.50.

The publisher stated that the book was intended to come apart, and was predrilled for loose leaf filing. The copy I received was not predrilled, but looked as if it would come apart. In the short time that I retained the book I noticed several errors.

I returned the book to the supplier and in due course received a cheque for £19.50, no refund of my £1.30 postage, no word of apology, no helpful suggestions as to where I could obtain a good copy - and they kept my £1 credit voucher! Hardly likely to encourage custom.

So if any member knows where I can get a complete version of "Microsoft Basic Decoded" or has a copy that is no longer needed, I should be pleased to hear from him/her.

Your correspondent Mr Curry was querying the Basicode Interface I agree with him. The circuit in the BBC booklet is deplorably illegible. I ordered the PCB from the Netherlands and received with it a perfectly clear circuit and parts list. I have not completed the board yet as I am having difficulty getting some of the components. I intend to fit it internally

to my GENIE I, but am not clear whether I have to make connections to the cassette recorder. The diagram shows recorder plug connections, but the recorder is a built in unit on the GENIE, which is a different kettle of fish as I am no electronics man. Do I have to connect to the optional external recorder plug? Can anybody help?

B.Mason

'Highlands'
Bromsash
Ross-on-Wye
Herefordshire
HR9 7PR

Tel:- 098 981 353

(* Anyone building the BASICODE interface should avoid using the PCB obtainable from the Netherlands. The circuit is unnecessarily complicated. You should use the small circuit board, as described in the newsletter a few issues ago, which you can easily make yourself by painting the pattern onto copper laminate with cellulose paint and then etching in ferric chloride solution. Alternatively, you could wire the circuit up on a small piece of Veroboard. With the interface fitted, if you have a Genie, you must use an external recorder for BASICODE. LFH *)

I have a few queries which I hope someone in the Group may be able to help with.

1. Has anyone managed to run C/PM on a V.G. with the Gnomic 64k RAM extension? Presumably it is just a matter of writing a BIOS but I am rather ignorant on these matters. Any information would be appreciated.

2. There is a circuit for a simple modem in the March '83 Byte which uses the TI TMS99532 chip. It uses the Bell frequencies and I'd like to know what is involved in adapting the circuit to European standards.

3. Is anyone using Homelink connected to their micro? If so how about a review and details of the connection.

I have been considering whether to sell my V.G. setup or upgrade, but there is no clear cut choice as far as I can see. The QL is, no doubt, a splendid machine but I fear I should regret going from disk to microdrive. There are more and more attractive machines coming on to the market, but, by the time one has added the price of disks and replaced the software it will be considerably more expensive than adding a hires graphics card or whatever it takes to upgrade the old system, not to mention the familiarity angle.

It would be interesting to see other members views on the subject.

Bernard Mantell
6 Manor Cottages,
Easton,
Winchester,
Hants.SO21 1EQ

Tel. Itchen Abbas 619

(* T.I. now produce a CCITT version of their modem chip. Try Quarndon Electronics on (0332) 32561 for further details. LFH *)

Two little things worry me that perhaps you or a member might be able to help alleviate. I have a Model 1 with Microfirm expansion to 48K, 2 Cumana Disk drives, and an Epson RX80F/T printer. I operate under DOSPLUS and my word processor is NEWSSCRIPT.

When writing a collection of sections, I put the text onto a formatted disk in drive 1 that has on it no system code so that the disk takes quite a lot of text. I like to copy each file that I complete onto another format only disk as a backup. The only way I have succeeded in doing this is to have a transfer disk with DOSPLUS only on it, put this in drive 0, use TRANSFER :1 :0 to put the text onto the transfer disk, then put in the backup format only disk in drive 1 and use TRANSFER :0 :1 and the finally KILL the file on the transfer disk in drive 0. Is there a less tedious way? Copy1 is more tedious still.

The other thing is that when setting out forms I often want more than 64 character spaces. This is OK for the printer but means a lot of V+15 to shift the text on the screen and then V* to move it back to normal. Is there any way around this other than parting with Model 1!

Eric Brandes.

46 FIELD WAY CHALFONT ST PETER BUCKS. SL9 9SH
Tel:-Gerrards Cross(0753) 882982

In the May issue of NATGUG News Geoff Smith comments that a number of assembler patches have been published in previous issues for Scripsit. Can anyone help with a list of these patches so I can buy any relevant back issues please.

I use a Seikosha GP100A mk II Printer which will not recognise graphic characters. As the LPRINT instruction is vectored it should be possible to use an assembler program to convert TRS-80 graphics to the Seikosha graphics mode dot code. Has anyone done this already? If not are there any other Seikosha users who would be interested?

I find the absence of a £ sign on the screen annoying on my Genie I. Is there an alternative UK character ROM available, or has anyone achieved this by any other means?

ALLAN FOWKE
29 QUEENSWAY
BAMSTON
CAMBS CB2 4DJ

(* Eric Hartley's lower-case mod. for the Genie and TRS-80 will give you a pound sign. You also get a much nicer character set into the bargain. The cost is about £12. Fitting involves a little soldering. Contact Eric on (0200) 22380. LFH *)

Having read a recent article in Acorn User regarding the use of a micro to decode and print out radio teletype transmissions, I am trying to find a source of software to work with the Scarab decoder, or any other decoder for that matter, and a TRS-80 Model III with disc drives. I wonder if there is anyone in the TRS-80 User Group who has experience of this application that you could put me in touch with.

Peter Earthy

I am trying to write a comparative report on Database programs so that would be purchasers can get a better idea of the programs that might be suitable for their specific requirements. What I am interested in is the uses of the programs. How well the specific program matches up to the task in real life and any deficiencies?

I have copies of Maximanager, Datawriter, Microfiles, ISS, PIMS, SIR and a few homewritten programs for specific purposes. However I have only used these for my own applications and others may have had different experiences.

It is impossible to buy all the programs and to use them for long enough to find out their strengths and weakness and therefore I would welcome other members views. I have no experience of relational databases or the new Profiles. I am also interested in hackers that have modified programs or have used the program beyond the obvious facilities in the specification.

My own Mod 1 has two 40 track double density drives but I have used tapes and a Stringy floppy. How do others feel about speed-ups and small memory machines for database work? How does the TRS-80 compare with other computers? Is the 4P as useful as it appears for this work or are there snags? Do members use more than one program?

Derek Trayler

88. Grosvenor Drive,
Hornchurch,
Essex RM11 1PW.

I was interested in John KilPatrick's comments on Model I software in the May issue of NATGUG News

I have been trying for some time to get a copy of Little Pascal for a tape based Model I without success. If anyone has this program I would appreciate the chance to discuss ways of taking a copy.

Anyone who can help please ring me on (0223) 832308

Allan Fowke

ANSWER/ORIGINATE MODEM

In the For Sale and Wanted section is an advertisement for Peter Hall's modem PCB. I saw Peter's prototype modem at the MK workshop last year, and tentatively suggested that he might care to make the PCBs available, so that members could build their own. Peter subsequently had 50 boards made, at his own expense. He has made a very nice job of it; the board is neatly laid out, and the assembly and alignment instructions are comprehensive and clear, provided you have some experience of electronic construction. Peter gave me one of his PCBs, and we shall be putting the modem together as a group project at the Swindon Workshop. A nice touch is the use of the TRS-80 (Model I, III or IV) as a tone generator, for setting up the modem. Here is Peter's program:-

```
10 'MODEM SET UP PROGRAM TONE GENERATOR PETER HALL JULY 84
20 'TONES WILL BE GENERATED FROM THE GREY "AUX" CASSETTE PLUG
25 'THIS PROGRAM WILL OPERATE ON A MODEL I/III OR IV .
30 DEFUSR0=&H7F04
40 A=&H7F04
50 FORX=1 TO 32
60 READ D
70 POKE A,D
80 A=A+1
90 NEXTX
100 D=30
110 CLS:PRINT"*** MODEM SET-UP TEST PROGRAM ***":PRINT:PRINT
120 PRINT" 1. 1750HZ"
130 PRINT" 2. 1080HZ"
140 PRINT
150 PRINT" 3. 1100HZ"
160 PRINT" 4. 980HZ"
170 PRINT" 5. 1850HZ"
180 PRINT" 6. 1650HZ"
190 PRINT:PRINT:INPUT "SELECTION";S
200 PRINT:INPUT "DURATION";D
210 M=PEEK(84):IF M<>1THEN290
220 IF S=1 THEN F=1750
230 IF S=2 THEN F=1080
240 IF S=3 THEN F=1100
250 IF S=4 THEN F=980
260 IF S=5 THEN F=1850
270 IF S=6 THEN F=1650
280 GOTO 350
290 IF S=1 THEN F=1510
300 IF S=2 THEN F=940
310 IF S=3 THEN F=1020
320 IF S=4 THEN F=860
330 IF S=5 THEN F=1600
340 IF S=6 THEN F=1418
350 IF S<1 OR S>6 THEN 110
360 FC=(1/F-31E-6)/14.66E-6
370 DC=D*F-1
380 POKE &H7F00,DC-INT(DC/256)*256
390 POKE &H7F01,INT(DC/256)
400 POKE &H7F02,FC-INT(FC/256)*256
410 POKE &H7F03,INT(FC/256)
420 X=USR0(0)
430 GOTO110
440 DATA 243,42,0,127,237,75,2,127,6,0,17,255,255,65,62,1
450 DATA 211,255,16,254,65,62,2,211,255,16,254,25,218,17,127
460 DATA 201
```

80-NET OPERATIONAL AGAIN

80-NET, the Group's computerised bulletin board system is operational again thanks to Mac Randle. The number is (0926) 39871, and the system is operational from 23.00 to 00.00 every evening. As before, the relevant parameters are: 300 baud, even parity, seven data bits, one start and one stop bit.

A COMPUTER CONTROLLED FREQUENCY SYNTHESISER

Now that I have an amateur radio licence, I have decided to build my own 2 metre VHF receiver and transmitter.

The heart of the rig will be a microprocessor-controlled phase-locked loop frequency synthesiser. At present I have an experimental 35MHz - 70MHz synthesiser interfaced to my Model I. It uses a Motorola MC145156 phase-locked loop synthesis chip (this device is intended for microprocessor control), an MC1648 ECL voltage-controlled oscillator tuned by a hyper-abrupt variable capacitance diode, an SP8647 ECL dual-modulus prescaler, an OP AMP active loop filter, a broad-band amplifier and a few other bits and pieces.

Because the Model I generates a colossal amount of RFI, the final version will use a Motorola CMOS processor, but for experimental purposes the Model I works very well, with the MC145156 being controlled via three bits of an output port (I could have used the Printer port), with one bit acting as a clock line, another transmitting serial data, and a third bit generating an enable signal. The relatively simple software needed to control the synthesiser was written using Macro-80. If anyone is interested I'll publish the circuit in the next issue. It'll cost about £40 or so to build, and is capable of generating frequencies from LF right up to 250 MHz or so!

Leon Heller

Super Scripsit Space Code Changes

The standard version of Super Scripsit uses an underline character code on the screen as "shorthand" for every two spaces together. This has the disadvantage that the screen layout then does not match the printed layout.

To overcome this, Peter Knaggs has followed up work by Mike Adams to locate the offending code and change it. After amendment, as described below, spaces are not compressed and screen layout matches printer output for all except proportional spaced printing. SCR35/CTL handles the Scripsit/ASCII conversion and SCR64/CTL handles keyboard text input. In each case a conditional jump is replaced by an unconditional jump, removing the test for double space.

Zaps are as follows:

SCR35/CTL FRS1 30H change byte from 20 to 18
Context: from 2EH onwards FE20 200B 2BBE

SCR64/CTL FRSO 38H change byte from 20 to 18
Context: from 36H onwards reads FE20 2007 36F7

Tony Cottingham

21 Sandalwood Road
Loughborough
Leics LE11 3PR

Having recently obtained a BBC I was soon attempting to sort out the problems of making the two computers talk to each other.

A cable was made up with the required plugs and wired as in the diagram.

Searching through a number of bits of information I tried several things then after a struggle was given a lead, which in fact took me to the Advanced Users Handbook and the following method was arrived at.

My main concern was to be able to type in programs on the 100, upload to the BBC and save on disk, to be later downloaded to the 100.

This way the 100 has the facility of a monitor and a disk without buying the expensive Tandy interface (providing that you have a BBC with disk!).

To transmit from the 100 to the BBC

There are two ways;

- 1) a. Enter TELCOM mode
b. STATUS 37IIE

BBC Break
*FX7,3
*FX2,1

ON 100 ENTER UP MODE
Type in file name (which must be a .DO file)
Press ENTER and file is transferred.

ON BBC press BREAK
Type OLD
LIST

program is there to be saved to disk or if in BBC syntax may be run.

- 2) If a BASIC program is to be sent then on the 100 you can use,

SAVE"COM:37IIE"
and when ENTER is pressed the transfer will be made

On BBC proceed same as above.

To transmit from the BBC to the 100

On BBC,
BREAK, Load program to be sent

- a) Type *FX8,3 (BAUD RATE 300)
*FX5,2 (OUTPUT PRINTER)
VDU2 (ENABLE PRINTER)
Type L. but do not press

On 100

- b) Enter TELCOM MODE
- DOWN MODE
- Give a File name
- Press ENTER

On BBC press RETURN and program will be transferred.

On 100 press F2(DOWN) to clear. The program will be saved as a .DO file. Look at the .DO file and edit any L. or other spurious characters before the start of the program, then to get it to BASIC, enter BASIC, type NEW to clear any existing program in memory, type MERGE"RAM:programe.DO" and it will be moved to BASIC. For some reason a ?DS error shows, but do not worry. It may now be Listed and Saved as a BASIC program.

I found the 300 Baud speed the most reliable, although transfer from the 100 to BBC can be done at 1200 or 9600 but from BBC to 100 only the 300 rate seems to work every time.

There are supposed to be other ways into the 100 such as MERGE"COM:3711E" but this does not appear to work.

Other experiments,

with the 100 in TELCOM/Half mode (Baud rate etc can be 8711E) and the BBC with *FX2,1, then the 100 can write direct to the BBC in text or programs direct, even sending control messages such as RUN,CLS,LIST and in fact it appears that most commands can be sent even graphics, so changing the colours on the BBC direct from the 100.

With the 100 in TELCOM/Half mode (8711E) and BBC with Termi program (see below) running, then the two computers can talk to each other via the keyboards but no direct control commands can be sent, just text, both screens echoing its own keyboard.

NOTE: Line feeds work from the 100 to the BBC but not from BBC to 100 so to line feed from BBC to 100 requires the use of the space bar. From BBC to 100 Delete works but not from 100 to BBC, although the cursor moves back the character is not deleted, so to delete a character requires a backspace then a spacebar.

No limit to the amount of text and all characters from the BBC are accepted by the 100 including curly brackets, square brackets but no pound sign.

If in this mode the DOWN button is pressed anything coming from the BBC will be saved as a .DO file and can then be read latter.

So there we are, I hope that these notes are of use to members.

In fact when you plough your way through the 100 handbook and the BBC User and Advanced User books, virtually all the information is there but it has to be dug out.

Model 100 see,

LOAD:COM: page 138

SAVE:COM: page 160

MERGE:COM: page 142

BBC Advanced User book,

*FX2 page 118

*FX5 page 121

*FX7 page 123

*FX8 page 124

TERMI.....

10 CLS

20 REPEAT

30 IF (?65032 AND 1)=1 tx=?65033: VDUTx:IF tx=13 PRINT

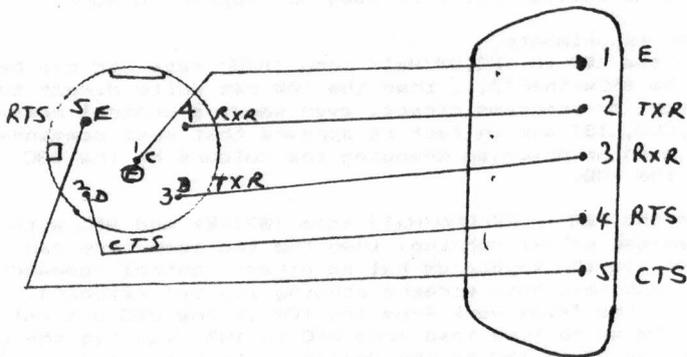
40 Z\$=INKEY\$(0):IF Z\$<>" ?65033=ASCZ\$:PRINTZ\$:IF

Z\$=CHR\$13 PRINT

50 UNTIL 0

Text files are still a problem and any comments or other ideas will be welcome,the 100 is a great machine with good potential. Wonder when ROM for underneath will appear?

RAY COX,LEICESTER



Spooling DOTPRINT printer output to disk (part 1)

This article is the result of one of those things that could only happen at a NATGUG meeting. There I was quietly minding my own business at an early stage of the weekend, when I noticed a printer printing, albeit rather slowly, something that looked very like circuit diagrams. Being both a hardware & software freak, this amazed me and I had to enquire further. It turned out to be an ingenious use of DOTPRINT, where Tony Evetts had gone to a lot of trouble to actually design a font set with fragments of circuit symbols. Not surprisingly, Tony had been asked to give a talk on DOTPRINT. He commented that it was a pity that the program processing was so slow that his lecture was going to take ages. Like an idiot I suggested that it would be possible to do the printing to a disk-file beforehand, and then print this out. I think Peter Knaggs agreed, and before long the idea had become a requirement. Later on in the day, Herr Brian issued a three-line whip about an article, so here we are !!

A couple of comments however. The LDOS cogniscenti said all that was necessary was a bit of device linking. True (nearly - see later), but of course it just happened that we were using NEWDOS/80. Perhaps this caused the use of a bit of a sledge-hammer to crack a nut, but we'll maybe learn something in the process. The other thing is that I've presented the software exactly as written (with some extra comments). There is a temptation to tidy things up and make a few alterations, but I know that this code definitely worked on Tony's Model 1. Unfortunately I can't remember which version of DOTPRINT he had - I think that different releases may require different code.

The first idea was to use NEWDOS's ROUTE PR,MM=hhhhH command which allows a limited amount of device redirection from the printer to a user-written driver at hhhhH. Suffice to say that we actually got this going, and were able to send simple printing to disk. Then came the big test - some DOTPRINTing. Everything seemed to go fine except the "printing" still came from the printer. Oh dear - and then the penny dropped. DOTPRINT's machine code (WPML/CIM) included its own printer driver, something I should really have guessed. Incidentally, this would also have nobbled LDOS LINK idea. If you think about it, bit image printing can produce all of the codes from 0 to 255. I seem to recall someone writing in the Sept '82 issue on the fact that the normal ROM printer driver doesn't cope properly with CHR\$(0), (11) and (12).

Anyway, a new approach was now needed. The first thing was to track down the printing bits within WPML. Everybody has their own favourite program and technique. I used TASMON and then SUPERZAP. So as not to take up too much magazine space, I'll not go into this in detail. At the end of the day, all I did was some zaps on WPML so that it referred to my new driver. Before going into the listing, the only other thing concerns closing the disk file. When you write to disk, the file eventually has to be closed, but unfortunately there is no easy way the software can tell when you've finished. To get round this, I added a little extra keyboard driver that looks for a triple key depression <.,./>. This stops the writing to file and closes it.

```
1 ;**** DP2DSK/SDF ****
2 ;**** 07/27/84 ****
3
4
5 ;*****
6 ; SET UP DISK & KEYBOARD DRIVER
7 ;*****
8
9         ORG  OF400H
10        EXEC START
11
12 START:  EQU  $
13         LD  HL,MSG           ;POINT TO THE MESSAGE TEXT
14         CALL 4467H          ;DOS CALL TO DISPLAY IT
15
16         LD  HL,(4016H)       ;GET ORIGINAL KBD DRIVER
17         LD  (KBDR1+1),HL     ;PUT IT ON THE END OF OURS
18         LD  HL,KBDRIV       ;GET OUR DRIVER ADDRESS
19         LD  (4016H),HL      ;AND ACTIVATE IT
20
21         LD  HL,SBUFF        ;A BUFFER FOR DISK SECTORS
22         LD  DE,FCB          ;FILESPEC WILL BECOME FCB
23         LD  B,1              ;A LOGICAL RECORD LENGTH OF 1
24         CALL 4420H          ;DOS CALL TO OPEN THE FILE
25         JP  Z,402DH         ;BACK TO DOS - NO ERROR FOUND
26
27         JP  4409H          ;DISPLAY ERROR MESSAGE & QUIT
28
29
30 SBUFF:  DS  256             ;TO KEEP 256 BYTE SECTORS
31 FCB:    DB  'PR2DSK/FIL',13 ;NAME OF THE FILE
32
33         DS  21              ;FCB NEEDS 32 BYTES TOTAL
34 MSG:    EQU  $
35         DB  28,31,'Loading printer data to disk file',10
36         DB  10,'Press <./> to close disk file',13
37
38
39 ;*****
40 ; BIT TO WRITE CHARS TO DISK
41 ;*****
42
43        ORG  OF800H
44
45 DSKPRNT: EQU  $
46         PUSH IY              ;SAVE ALL REGISTERS
47         PUSH IX
48         PUSH DE
49         PUSH BC
50         PUSH AF
51         PUSH HL
52
53         LD  DE,FCB          ;NEEDED BEFORE FILE ACTIVITY
54         CALL 001BH          ;CALL TO WRITE ONE BYTE
55         JR  Z,DSKP1         ;NO ERROR
56
57         OR  0C0H            ;TO MAKE THE ERROR DISPLAY WORK
58         CALL 4409H          ;DISPLAY IT
59
60         LD  DE,FCB          ;CONFIRM DCB POINTER
61         CALL 442BH          ;CALL TO CLOSE THE FILE
```

```

62
63          JP    402DH          ;AND BACK TO DOS
64
65
66 DSKP1:   EQU    $
67          LD    A,(3C3FH)      ;PEEK TOP RHS OF SCREEN
68          XOR   0AH           ;SPACE TO ASTERISK OR VV
69          LD    (3C3FH),A      ;POKE IT BACK
70
71          POP   HL            ;RECOVER THE REGISTERS AGAIN
72          POP   AF
73          POP   BC
74          POP   DE
75          POP   IX
76          POP   IY
77
78          RET                  ;AND BACK WHENCE WE CAME
79
80
81 ;*****
82 ; THIS IS THE EXTRA KEYBOARD DRIVER
83 ;*****
84
85 KBDRIV:   EQU    $
86          LD    A,(3820H)      ;LOOK AT A KEYBOARD ROW
87          AND   11010000b     ;MASK OUT THE KEYS WE WANT
88          CP    11010000b     ;WAS IT ",./" ?
89          JR    NZ,KBDR1      ;NO
90
91          LD    DE,FCB
92          CALL  4428H          ;CLOSE THE FILE
93          JR    Z,KBDR2       ;CLOSE WENT OK
94
95          OR    0COH
96          CALL  4409H          ;DISPLAY THE ERROR
97
98 KBDR1:    JP    $-$          ;OLD DRIVER ADDRESS HERE
99
100 KBDR2:   EQU    $
101          LD    HL,(KBDR1+1)   ;GET ORIGINAL DRIVER ADDRESS
102          LD    (4016H),HL     ;RESTORE IT FOR SUBSEQUENT USE
103          JP    (HL)          ;AND GO TO IT FROM HERE
104
105          END

```

Exec Addr F400

I can think of one or two other notes. The code is somewhat untidy - one example is the existence of two origins. I can't really remember why this happened, but as it wasn't too clear where the gaps were in the WPML code, the choice was arbitrary. I put in a little bit that blinks an asterisk at the top right of the screen when file writing is taking place. The experts will recall that there is a bit in ROM that does this already - quite right, but I couldn't remember where it was !! I confess that the whole story is a bit incomplete, but I hope that the bits are of interest. Clearly something more is needed - the bit that prints the disk-files out. I will make this the topic of Part 2.

FOR SALE AND WANTED

Build yourself an answer/originate modem for £30.

PCB with full instructions £7.50 inclusive.

You supply components, case and power supply. No special test equipment needed: filter alignment can be performed using your TRS-80 as a tone generator, with output via the cassette port, using a simple program (listing elsewhere in this issue).

The modem may be used direct-coupled, or acoustically-coupled, to the Public Switched Telephone Network.

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Such prices are cash and carry only and apply for payment by cash, bankers order or previously cleared cheque. The normal collection point is the Heathrow area but it may be possible to arrange it elsewhere, for example, the Brighton area. Otherwise delivery can be arranged for a charge.

If interested contact:

R.E.Wiggins on 01-920-8211 (weekdays) or Hassocks 3430 (evenings, weekends).

Or write to "Dilkhush", North Bank, Hassocks, W.Sussex BN6 8JG

WANTED

Copies of 80 Micro from 1st. issue, Jan. 1980 to Jan. 1982 inclusive, in reasonable condition.
Good price paid.

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FOR SALE

Tandy Keyboard to Printer Interface cable. Enables connection of Parallel Printer (Centronics Standard) to Model 1 keyboard WITHOUT THE NEED FOR AN EXPANSION INTERFACE. Genuine reason for sale (I have bought a combined disk/printer interface and no longer need this one).

The interface (Tandy Cat No. 26-1411) is boxed with full instructions and comes complete with approx 8ft printer cable. It takes its power from the keyboard and/or printer and needs no power supply of its own.

Price £30 ONO. Contact Adrian Hancock on Basilton (0268) 286893 after 6.00 pm. for details.

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Essex
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then from 2 September onwards.)

Milton Keynes Workshop July 1984

This was held for the second time at local community centre here in Stony Stratford.

I added a fourth day to try out the idea of putting on three specific courses, with the normal workshop on the Saturday and Sunday. The business content has now been moved to Swindon because of the better facilities available there. If I am honest the idea was not a great seller and perhaps the current membership is just a little too small to support these ventures.

cont P33

Brian asked me some time ago to write about my impressions.

I am still struggling with it. Using it for printing routine data is fine. Using it for simple letters is OK. BUT problem one is the "Top of Form" feature whereby it keeps track of the number of lines printed and if a CHR\$(12) is output, throws to a new page. With my Model 1 in BASIC all CHR\$(12)'s are converted by the computer into a series of line-feeds by calculating the difference between PEEK 16424 and PEEK 16425. So, no problem. But the Electric Pencil has its own driver and, I assume, DOES put out CHR\$(12)'s (or something) which causes the printer to do a page throw at awkward moments. I invested in NEWSRIPT with which this has been prepared. I was assured it had been modified to cope with a DMP2100. In my opinion, it hasn't. Partly because being written in Basic it is slow and can't feed the printer fast enough, but mainly because any writer of a word-processing program is up against a problem in the DMP2100:

The printer has 2 modes: Data Processing and Word Processing. All print fonts are available in both modes. The results of most paper feed instructions are different in the 2 modes. Half Forward Line Feed, Half Reverse Line Feed and Three-quarter Forward Line (for example) are set under Data Processing Mode when the control characters are output ie. the status of the printer is fixed at say $\frac{1}{2}$ Forward Feed (like this article) until a control code is fed to change it. If the printer is in Word Processing Mode and a control code is fed to it, that code is immediately executed but the printer stays in the 6 lines to the inch spacing mode.

NEWSRIPT puts the printer into the Word Processing Mode so, to print this effort at 8 lines to the inch, I had to incorporate into the text a control code to switch the printer back into Data processing Mode. If I then want to do something like a Half Line Feed at the end of each paragraph, I have to change the printer back to Word Processing Mode; output the Subscript Code available in NEWSRIPT; switch the printer back to Data Processing Mode. Oddly enough these changes do not change the printer out of 8 lines to the inch mode.

Please would somebody tell me why it is necessary for there to be a Data Processing Mode and a Word Processing Mode. Why could there not have been one Mode with different codes for the paper feeds as to whether the code is to change the status of the printer or the code is to be executed as a one-time action.

Despite the above I like my printer and NEWSRIPT but would be very wary about buying another word-processor. I read in the July issue about LeScript. But with an EPSON.

Also in the July magazine mention was made of the difficulty in reading some of the copy after it had been reduced. The following is page 16 printed on the DMP2100 at 8 lines to the inch and proportionally spaced. As you can see the text fits into very little more space. (The fractions $\frac{1}{2}$, $\frac{1}{4}$, $\frac{3}{4}$, are in the DMP2100's repertoire.)

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The next line is "jl" or "justify left" - each line starting in the first line like this. You can have "jr" for justifying on the right side only, or "jb" to justify both sides, as in a printed document like this, or "jc" for justify centre" - in other words print everything that follows in the centre of the page. Any of these commands can be put anywhere in the document (on a separate line from the text) and they apply from there until the next change.

The next line in my header file is a mixture of characters and hex numbers. The first one you get by pressing SHIFT-@, and the rest are the hexadecimal values for EPSON FX-80 printer control codes to go into superscript, to print "1", to backspace, to come out of superscript mode, to print a minus sign, to backspace, to go into subscript mode, to print a "2", and to come out of subscript mode - in other words, to print " $\frac{1}{2}$ ". That is the definition how to print a half as a vulgar fraction - something I use quite often. Once that has been defined LeScript will print a " $\frac{1}{2}$ " every time it comes across the character "\" in the text. You can use any one of 54 different keys to define special characters that way. Then there is a comment to remind me how to get the half in case I forget. Comments are not nearly as neat as in NEWSRIP where you just precede a comment by ".cm". You have to start with "off" to tell the printer to ignore what is coming, then write the comment, then "on" to tell it to resume printing.

The ability to use programmable function characters is really a very powerful thing because it means that if there is anything that your printer can do - anything at all - for which LeScript has not got a direct command, you can get LeScript to do it in the middle of your text - even your own designed graphics graphics.

Well, that's the way I do my printing set-up instructions, but you can also use the KSM, or Key Stroke Multiply, facility. With this you can programme 55 keys so that each one represents a whole phrase, sentence, or even paragraph. You use SHIFT-CLEAR-A-Z SHIFT-CLEAR-1-5, and all the punctuation and other special keys. If you want to include end of line markers - "ENTER", in other words - then you use a ";". So, the whole of my header file could be store in the KSM file as a single keystroke (plus SHIFT and CLEAR). They do not say in the manual what the maximum length of each one can be, but the sample one which comes with LeScript contains some which are nearly 500 characters long.

This file, LESCRIP/KSM, can be created and edited just like any other LeScript document, and if you wish to miss any letters out you just use an end of line marker.

There are about 30 separate printing commands covering such things as:-

AUTOMATIC LINE-FEED INSERTION if your printer needs that as well as a carriage R.

The BAUD RATE setting for SERIAL PRINTERS.

CHARACTER DENSITY for PROPORTIONAL SPACING. I understand from a friend that the left & right justified proportional spacing is absolutely accurate to the last dot, which, as a publisher, is one of his top priorities in a word processor. Part of a document can be proportionally spaced if you like, as this paragraph is.

TYPESETTING CONTINUED

It is just possible that there are still a few readers who are waiting with bated breath to learn how the saga of my typesetting adventures for my Bibliography have been progressing.

Devotees of the subject may remember that I was able, with some difficulty and by taking my machine to the Sun Printers in Suffolk, to transfer the data files from the RS-232 port in thence via an extremely complicated piece of software and coding to a typesetting machine.

I felt that there must be an easier way. Enter Serious Software of 55 East Street, London N1 (Tel. No. 253 8196. Contact Derek Kaye). Their original solution was to use a 'black box' that claimed to be able to read any disc from any machine. In practice it would only do this when an engineer, flown all the way from America, was holding it's hand, when he left this method no longer worked. Enter now the final panacea XENO-COPY.

XENO-COPY produce a number of programmes that enable alien disc operating systems to be readable by an IBM PC. Amongst these is a modified version of TRSDOS 1.3 called TRSDOS 1.3X. All that is required is for this modified version to be booted-up in a Model III and any data file you want converted COPIED to this 1.3X disc.

To all intents and purposes this modified disc behaves just like an ordinary TRSDOS 1.3 in that other discs can be FORMATTED and BACKED-UP to produce additional versions for other data files that require copying.

This 1.3X version is now loaded into an IBM PC which has been BOOTED with the Master XENO-COPY and lo! and behold your data is now loaded in the IBM. This ability could of course be used for a number of other purposes apart from typesetting.

With my text data now on the IBM it can easily be transferred to a LINATRON 202 typesetter using CORA which is a typesetting software interface. The principle is fundamentally very simple as it only requires the insertion of, say {M18H8F88} to produce Measure 18, Height 8 (pica) Font 88=Optima Bold. In addition however all other standard typesetting facilities are available for those who need them. In practice all these codes were added by myself before transfer from TRSDOS.

I enclose a sample of the coded text and its typeset appearance.

The cost of this service is 25p per 1000 characters plus the cost of the Bromide print-out and any initial translation work required if non-standard codes are used for International characters.

Chris Philip
19 Coolhurst Road
London N8

(* An excellent typesetting service is offered by Wordsmith. They can accept Wordstar files, with special Wordstar-like codes, which they can then translate into the codes used by the Linotron photo-typesetter. The price is 75p per 1000 characters. They can even accept files via the 'phone; I used this method recently when I needed a small job doing very quickly. Their 'phone number is (0458) 45359. LFH *)

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 {H11F731}A, J.L.y. {F729} See {H11F731}CHERTIER, F. M {F729}<
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 {H11F731}ACKALUSKY, James {F729}<
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 {H10F729}Handbook for Making Rockets and Fireworks.<
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 {H11F731}ALBERTI, Guisepe Francesco Antonio. {F729} (1712-1768)<
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 {H10F729}La Pirotechnia: o sia Trattato dei Fuochi d'Artificio.
 {F730}[Pirotechnics: or a treatise on artificial fireworks.] {F729}<
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A, J.L.y. See CHERTIER, F. M

ACKALUSKY, James

Handbook for Making Rockets and Fireworks.

A010.1
 Pageant Press: New York 1960
 27p. illus. 21cms.

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NUC Subject Catalogue. 1960

ADRIANUS, Romanus. See ROMANUS, Adrianus

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A020.1
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from P29

Discussing a workshop Policy with those members who very kindly stayed behind to clear up it was agreed to have two weekends next year - Swindon in March '84 and Milton Keynes in late August '84. This will space them out at around six months apart

Back to the July meetings. Leon did his two day course on the 68000 and Peter Knowles with some assistance from Adrian Sims did his course on Z80 graphics. His programs were quite something from a teaching point of view, and the machine code version was quite exceptional in its documentation. My accounts using Sternbers course had no takers, which I thought may have attracted 3-6 members. The systems room over the weekend was a little different to some in the past. There was an awful lot of serious activity. Model 4's also in serious use. Model 1 being used as a development system reading Model 2000 and IBM PC disks, machine code routines being written for DOTWRITER. The latter involved Tony Elvett, Don Bannister, Geoff Smith and others.

cont P35

SCRIPSIT +

Having only just moved from Floppy tape to a disk system, courtesy of Gnostic's \$25.00 uncased interface, I thought I would note down some observations on the program **SCRIPSIT +** as sold by another member, Geoff Smith.

On initialisation **Scrpsit +** asks if you want to try to recover any text lost after reboot. If you do there is a two character entry to try to get the text back. Geoff recommends that you disable the driver within DOS on the **Scrpsit +** disk as this interferes with both this command and the syntax of the help command. Of course **Scrpsit's** own lower case driver takes over.

First of all a help file is called using a new control character, @H and as the file is a file in **Scrpsit** format it can be extended as required.

There is also a word count facility called from the command line using (break) ?L which counts the words up to the current cursor position. A must for some students!

This implementation of **Scrpsit** has the usual facility of most extended **Scrpsit** versions of being able to embed control codes within a text line. However my printer, a Microline 82 A, is not able to make as full a use of them as would a newer printer. This facility is used by just typing @P control code @P then carrying on with the text. In order to keep compatibility with old files a format line may be entered containing printer control codes using the normal **Scrpsit** format line mode with PC to signify a control code as in this example:) PC=30 .

There is also a neat facility to enter DOS commands from the command line by preceding them with / as in :- /DIR 1. Having come to Radio Shack's Disk **Scrpsit** from Laurie Shields @Scrip I found the lack of a directory command very frustrating. Now this command allows quite a nice trick, you can type:

/LIST filename/ext:1

and the specified file can be read as the NEWDOS LIST command. Pauses are caused by pressing the right arrow, enter causes the listing to continue and the up arrow terminates the list. So you can be working on one text file and read another file part way through without losing your place in text or moving the cursor. How can one do without this? How did I do without it before?

Now we start getting to the bits which Geoff must be pleased with. There is an ability to use **Scrpsit** to build Macro files: these are nothing to do with the discussion 'Macro's in assembly' so loved by Leon; but an ability to write then execute a **Scrpsit** file which is used to modify a previous file already readable by **Scrpsit**.

Say you have been a bit stupid and decided to write a BASIC program using a lot of DATA statements which you've already typed in. You now decide that all the numeric data should have been typed as a string representation of the respective numbers:- "33", instead of 33. You could of course retype all the data or do what I did.

Save your BASIC program using:-
SAVE"filename/ext:1",A

from BASIC, in this state Scripsit can read the file and operate upon it. Make any modifications within Scripsit you require to other parts of the code, correct typing errors etc. Then execute a macro called say "MACRO/SCR" by typing (break) to get onto the control line then typing X MACRO/SCR. If your macro file contains the correct code all the " are put in for you. To confirm that all is well, the format line :

)Macro has been done

is placed at the start of the Scripsit page. Now this file is saved using:-

S,A filename/ext:1

then loaded back into BASIC as normal. A very good example of a complicated macro file is included with the program and its documents.

He has also added a command @0 which just repeats the last command. This is useful in that after finding one occurrence of say 'Scripsit' using (break) F)Scripsit then pressing @0 all the others can be viewed in order, this may be a faster method of doing a global replace for a small number of items than to use a macro file.

Another of Geoff's little mods is to include a page format preview and in conjunction with this a selective print ability whereby you can print, say, the middle page and the last page of a document.

There are also modifications to the cursor movement commands and a default extension of /TXT appended to an unextended file spec whether for the L or S commands.

After using this program for six weeks I have no hesitation in recommending it to other members of the group who currently use Scripsit to answer their word processing needs and to suggest to those who don't that they should reconsider Scripsit with these enhancements. For £20.00 this program does every thing that is promised and is very good value in these days of software being priced high for a fast profit. K. Robinson

from ASS

Pencil 2 seemed to undergo changes with Peter Knass doing the hacking, and John KilPatrick supplying the wood. I managed to get Laurie Shields to do the Profile and Visualc sessions which seemed to generate some considerable feedback. In the evening Geoff Smith took members through the techniques of patching Scripsit which again always provokes comment. The Dotwriter involment apparently started after this session.

Don Bannister very kindly did a session with Leo Knass on developins a modem into a finished product, with Leo going over the setting up and running of a bulletin board. They were alloted one hour and over-ran into lunchtime by 30 minutes

Carl Pabe also was very kind in doing a short session on the 64K Print buffer board, explaining the design and construction. One of our past members markets these boards for around 25.00 pounds and another can build them or just act as tutor over the phone.

Sunday consisted of talks on DOTWRITER with Tony Evetts, CP/M with Geoff Smith, Laurie Shields and Robert Vieira.

Blandford Forum August 1984

This was another great day out with talks on Newscrip by Pod Bullard, Telex on the TPS by Chris Cain, Data handling Derrick Rowe, Hard Disks on the TPS by Chris Cain and Disk Directories on CP/M by Leo Knass. Thanks again to Os and his team for a splendid relaxing day out. Ben Fox