

# QUANTA

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## QUANTA

### INFORMATION ON THE GROUP

Membership of QUANTA, the Independent QL User Group, is by subscription to the group's newsletter, which is published monthly. Membership details are obtainable from the Secretary. Membership of the group is open to anyone with an interest in the Sinclair QL and compatible systems.

Members requiring assistance with problems related to the QL may write to or 'phone a Committee member. An attempt will be made to put them in touch with a member who can help with the problem. Alternatively send a note to the Editor, and the problem will be mentioned in the newsletter.

Workshops will be arranged from time to time in various parts of the country. Copies of the group's constitution and annual accounts are available from the Secretary.

The group maintains a software library. Most of the programs are free to members. Library lists and programs are available from the Sub-Librarians.

### HONORARY OFFICERS OF THE GROUP

Chairman	Alex Tegg School of Information Systems, University of East Anglia University Plain NORWICH NR4 7TJ	Membership Secretary & General Secretary	Philip Borman 62 Prospect Avenue Rushden Northants NN10 9DH Tel (0933) 410277
Newsletter Editor	Sarah Johnson The Corner House Loxley Warwick CV35 9JT Tel (0789) 842543	Treasurer	Sydney Humphreys Wychwood, The Street Bramerton, NORWICH Norfolk NR14 7DW Tel (05088) 463
Software Librarian	Leighton Davies Glanmor, Brynna Rd Pencoed BRIDGEND CF35 6PD Tel (0656) 860398	Industry Liason Officer	Dennis Briggs 53 Gilpin Road Admaston TELPORD Shropshire TF5 0BG Tel (09522) 55895

Submissions to the Editor should be on a Microdrive or disk - any format, in a 'jiffy' bag or similar. Please include a paper copy where possible. Submissions for the library should be sent in a 'jiffy' with return postage to the Quality Controller, David Johnson, The Corner House, Loxley, Warwick. Tel (0789) 842543

The opinions expressed in the newsletter are those of the contributors, and are not necessarily those of the Editor or Committee Members.

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SUBGROUPS

Title	Location	Date	Contact
Essex	Rayne Village Hall Gore Road Rayne Nr. Braintree	2nd Sunday Every Month 2.30 onwards	John Mason 'Korama', London Rd Billericay, Essex Tel (0277) 651593
Solent	The College of Maritime Studies Warsash, In the Fire & Safety Centre	1st Saturday Every Month 1500 to 1900	Graham Evans (042) 121 3350 or Eric London (0329) 663501
Sweden	Physics Dept Chalmers University of Technology Goteborg	2nd Saturday Every Month 1100 to 1400	Johan Boman Toftaasgatan 73 S-421 47 Vastra Frolunda, Sweden
Mid Anglia	Robinson Hall Lolworth Cambridge	7.30 to 11.30 Every 2nd Monday	Peter Rowell 347 St Nechts Rd Hardwick, Cambs Tel (0954) 210692
Leicester	Ancient Order of Forresters 35 St Nicholas Place Leicester LE1 4LD	8.15 every 2nd Tuesday of each month (ex July)	Peter Ash 53 Woodland Road Leicester LE5 3PG Tel (0533) 766857
Birmingham	Holloway Pub Holloway Head Just off inner Ring Road. Central Birmingham	7.30 every 1st & 3rd Monday	Mike Bedford White 16 Westfield Road Acocks Green Birmingham B27 7TL Tel (021) 708 2560
Mid Cheshire	The Merlin Pub Middlewich Road Crewe	Every Monday 7.00	Alex Robertson 12 Bude Close Crewe, Cheshire Tel (0270) 500565
Merseyside	3 Barnard Road Birkenhead	Alternate Mondays	Don James 3 Barnard Road Oxton Birkenhead Tel (051) 652 7366
Northampton	Kingsthorpe Community Centre	2 to 5pm every 2nd Saturday	Terry Harman 304 Obelisk Rise Northampton Tel (0604) 842875

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East Anglia	Guildhall Thetford	2nd Saturday Every Month 6.30 to 11.30	George Katsoulis 167 St Johns Way Thetford, Norfolk. Tel (0842) 753843 Geraint Jones Tel (0842) 762406
Quantox (Oxon/Berks/ Bucks/Wilts)	Anyone interested in continuing with this group, please contact John. Due to poor attendance, meetings are currently suspended.		John Humphries 12 Paddock Close Wantage, Oxon OX12 7EQ Tel (02357) 69858
South-West	Dartmoor Motel Ashburton Devon	Next meeting Sunday 11th March 2.30 to 7.00	Roy R. Johnson Flat 2 66 Victoria Road Exmouth, EX8 1DV Tel (0395) 275290
Bristol	Portcullis Fishponds	Sundays every 4th week	Chris Gregory 7 Argyll Street Eastville Bristol Tel (0272) 513653
Newcastle -on-Tyne		1st Sunday each month	Denis Crowe 15 Midhurst Road Newcastle-on-Tyne NE12 9NU Tel (091) 2665175

If your sub-group is not mentioned here, write to the editor with full details for inclusion in future issues.

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## CALENDAR

March 4th	Bristol, Portishead	Quanta Workshop
March 24-25th	Northampton	AGM and Workshop
April 28th	Seeheim, Germany	Alternative Micro Show
June 22nd-24th	Thetford	Quanta Workshop

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## ALTERNATIVE MICRO SHOW

We are looking at taking a 15 seater minibus, over to the show in Germany. It will mean leaving Northampton early Friday morning, returning late on Sunday. Anyone interested in booking a seat, please contact Phil as soon as possible. Seats will be allocated on a first come, first served basis.



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### EDITORIAL

We are around to the A.G.M. time of year again. This is YOUR chance to influence your club and to voice your opinions or suggestions. Yes, I know I have a vested interest, but only to see the club survive, with as many people as possible getting as much as they can from it. It is not just for the 'high-brow computer boffins', but for all members, whatever their QL interests maybe. Please try to come along or at least make sure that you send in your proxy form. Enough of this, or I will be accused of campaigning. We hope to see as many of you as can possibly make it, at the usual Northampton venue.

Now for a word of warning. It has been brought to our attention, by the returned envelope to one of our members. The envelope was marked with a Post Office stamp, stating that P.O. Box 3, Shildon used by S.U.B. has 'finished'. It would appear that S.U.B. no longer have use of this box.

We have had several enquiries from our overseas members about obtaining Minerva. Stuart McKnight tells me that these are now available to you, as long as you pay in Sterling. Using, for example, a Eurocheque or International Money Order for £25, to Quanta members, plus sufficient to cover the post and packing to your part of the world.

Sarah Johnson

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### SAGE PUDDING?

I am a relatively new member of Quanta (Feb 89) and use the QL to run the accounts, administration and recipes of companies involved in the building industry. The utensils I use at the moment are QL, Trumpcard, twin NEC drives, Citizen 120D printer and Philips mono monitor.

The ingredients I use are Lightning (new version), Flashback (new version), Taskmaster, Quill and Abacus. Then I stir in the Command\_cmd file from Taskmaster which I have changed so that it sets up the screens for the Psion programs and activates in Superbasic TK2, Alt key functions, Lightning extentions and the screen save file for Sidewinder. I then add extra Flashbacks, The Editor, Eye Q Archive and Sidewinder depending on taste. The whole mix blends well and is cooked in a microdrive oven.

I have recently purchased Sagesoft's Integrated Accounts, an ingredient which I hoped would blend with Taskmaster but the method of addition seems to rule this out. I then tried to add it alongside Taskmaster in Superbasic but this resulted in FLP2 being continually accessed. I would be grateful if anyone could tell me what is wrong with my mix.

### QL KNIT?

I have followed the QL knitting machine scene over the last four years with varying degrees of interest and would like to make a few disjointed observations. Firstly if your monitor ceases to work where do you get it repaired?

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I have a Prism QL colour monitor which stopped working but have found no one in my area who is remotely interested in repairing it. Also I noticed an advert in Quanta for a monitor which would give VGA type resolution for the QL. This would greatly enhance the designs for my construction site designer knitwear collection but I didn't think this was possible. Has anyone followed up this avenue?

Secondly, over the years, alternative's to Quill and Archive patterns have appeared but not Abacus and Easel. Whilst I understand that in the early years there was little point since they looked good and wore well enough, there is now an EXCELlent opportunity to produce a SUPERCALCulating bedSPREAD/SHEET with a really zippy name like 321?! I think such a move would help prolong the life of the QL.

Thirdly, I joined the QL pattern Users And NiTters Association at the Alternative Micro Show in London last February and greatly enjoyed the show. Since then there have been no workshops or shows in or around London to my knowledge. If there are any plans for an event within striking distance of the M25 road barrier I would be grateful for news of it.

Finally, my thanks to contributors to Quanta and QL World who keep me going and a special thanks to DP and Care for a professional service. If there are any users in or around Sutton, Surrey I would be glad to share experience's.....computer one's that is!

Andy Fenlon, 32 Lumley Rd, Cheam, Surrey  
Tel: 01-641-4746

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### THANKS

Thank you for publishing my letter in the January edition of QUANTA (Questions - Answers? p.26) it created quite a flurry of response through my letterbox (the postman is still using the crutches), and rather than break the ever depleting bank balance by individual replies (much as I prefer the personal touch) to every single person that was kind enough to send me all sorts of information with regard to some of the questions I had asked in the article (which would probably take a week or two even without considering cost, there were that many!) would you please be kind enough to publish this thank you aimed at everyone who was good enough to reply to my plights of dilemma. Thanks all, with the utmost sincerity.

Brian Richardson, 24 Is-y-llan, Llanddarog, Carmarthen, Dyfed. SA32 8NX  
14.1.90

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### GO EAST YOUNG (NO)MAN!

The rapidly expanding East Anglia group is to stage the next Quanta workshop -- at the Anchor Hotel, Thetford. Dates set for the event are 22, 23 and 24th June; please pencil these in to your diary now and full details will be posted in the next issue of the magazine. In the wake of the recently held Papworth workshop, in the Mid Anglia region, the next venue will be the furthest east any workshop has been held to date.

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Geraint Jones and George Katsoulis who are the key figures in planning the event recently scored an interesting advance in QL communications. They have 'networked' a machine to a Canon AP400 non-portable electronic typewriter, with interface, so that it not only prints files from a QL, and Z88 incidentally, but also acts as a data terminal to input into the Psion four via a multitasking Exchange program. The latter involved writing a machine code routine for coding the typewriter character set to those of the QL.

John Fenton, 17 Little Ditton, Woodditton, Newmarket, CB8 9SA.

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### QUANTA MID ANGLIA SUB-GROUP

Our January meeting proved to be very busy with 19 persons attending, two of these were prospective new members for Quanta. We were pleased to welcome Mr Roy Jackson, a Quanta member from Watford, who paid us a visit. Geraint Jones and George Katsoulis from the East Anglian Sub-group also attended.

We always try to assist new users of the QL with any problems they may have, and many members are willing to give tuition with Psion and other software. As usual, the soldering irons, side cutters, pliers and screwdrivers were in use for modifications and upgrades. My new Schon cased Minerva QL was in use most of the evening, as was my other QL, but not by me.

We were very pleased to welcome our old friend Tony Tebby, who is always in great demand by the members.

PAPWORTH WORKSHOP. We had a successful meeting at Papworth with around 200 members attending the Workshop. Many thanks to the QMAS members who helped prepare the Hall on the Friday night, it is a pity that the trade do not have as much enthusiasm as our members. I wonder if they are expecting "Appearance Money" as free stands do not seem enough incentive. However, apart from the fact that members were unable to purchase from the traders concerned, we were pleased to see QJump and QView in attendance. Minerva's seem to be the order of the day and the majority of machines are now fitted with it.

SUB-GROUP MEETING (FEBRUARY). Our sub-group goes from strength to strength, 23 members were in attendance which sets a new record. We were pleased to have Tony Tebby with us to demonstrate the new QPAC2 which is far in advance of QRAM. Some members have expressed a wish for more frequent meetings so I am considering Sunday afternoon once a month as well as the usual Monday evenings. Please ring me for details. We were pleased to welcome Phil (secretary) who has now moved to Rushden which puts us within range.

Peter Rowell, Organiser, QMAS.  
Tel: (0954) 210692.  
13.2.90.



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### EPISTLE TO THE QUANTA ( QUANTI?)

PREAMBLE:- Many thanks to all on the Committee - editor, librarians, workshop organisers, and those that do the important background work that have kept Quanta thriving. It is very much appreciated - even if most of us don't run our fingers over the keyboard to write in very often.

ARCHIVE & FLASHBACK are a great pair, complementing each other very well. I use Archive a great deal in my work and find the program very powerful for large jobs and OK for small databases, but the speed of access when wanting to do a visual check of the information stored, or a one off examination, (due to the need to write &/or load up the procedures) a bit off putting. This is where FLASHBACK came to the rescue. Using the IMPORT routine in Flashback I can access the same data that is stored in my \_dbf files, but much quicker, in Flashback. The best of both worlds - powerful programming features, multiple databases/files, and mail merge with print formatting in Archive AND speed of access using the same databases with Flashback.

A use I'd overlooked for Flashback, until I was 'chatting' to the Fenman on Fen Tiger (via the Quanta Tandata Modem), was for storing all my Archive procedures for quick & easy access with additional notes added - it will make a tremendous difference to program development when I've organised all the procs in this way. I'd previously used the EDITOR Special Edition, and still do, but the immediacy of access/viewing with Flashback speeds the whole job up as well as reducing the frustration of searching for items only half remembered. I can scroll through the procs via the FLASHBACK one line per record screen, stop off to examine it closer and read any notes I've made. The relevant field can then be transferred to EDITOR while the notes made stay within the Flashback file for reference. Again the best of both worlds.

#### ARCHIVE, FLASHBACK & THE QUANTA LIBRARY DATABASE.

After converting the QUANTA library database to Flashback even better things are possible. You can scan/search through the database very quickly, almost instantaneous but that's not the best of it! You can read the individual record for more detail AND THEN, by ESCaping from Flashback to SuperBasic, you can get the relevant disk, run most of the programs or read the associated DOCS and then switch back to Flashback to continue browsing. A word of warning, though. Because it's so easy & quick to trial run a program and then go back to browsing it's habit forming in the extreme!!!

THE QUANTA LIBRARY - This is a must for everyone worth many times the small copy charge. I got mine at the last Quanta/Northern Sinclair Show courtesy of a very helpful and extremely patient Sarah "Captain" Johnson. If Sarah has a way of increasing participation she has my support.

QUANTA MODEM - Thanks are due to Phil Borman for getting this bargain for Quanta members (& to Tony Firshman et al for the free software). I had nothing to do with Modems etc. prior to buying one but have thoroughly enjoyed its use (yes I have seen my first phone bill since I started - not too bad considering how infectious the activity is and I know how to do it cheaper now). I did have a slight problem with the serial cable to the Modem (I knew it was going too well, and I'm used to getting the exception to the rule - I mean with only two out of all those sold having faults I just had to have the other one) and this gave erratic results but Phil sorted this out very quickly, thanks.



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[A hint for other Tandata users - if you are getting erratic responses check the edge connectors. Separate the units and LOOK INTO the sprung clips section that slides down onto the interface boards. I found that a few of my "springs" had not sprung back and therefore were not making proper contact with the interface board. The careful use of a small screwdriver soon solved the problem.]

QL BOARDS - A brief note about a few I've contacted. QLSUB (V): very chatty and helpful. I liked the split screen 'chat' facility. FEN TIGER(V): another good board with a helpful Fenman and split screen 'chat' (I'm a little worried about the signing off screen, the 'ferryman' in my mythology ferried the dead across the river - as in "who pays the ferryman?") ATAVACHRON (V) : get beamed up to this one - very wide ranging, plus Tebby, Dr. Jon etc. with many interesting QL snippets . PEACE (V) : interesting info/tip for Qmod/Qcall plus many other worthwhile items. TF SERVICES (T) excellent scrolling board. Masses of info & helpful chat. A must. The only problem I have is that it is a long distance call from Yorkshire.

RE TERRY GOULDS COMMENTS ABOUT QUANTA WORKSHOPS - I have only been to two QUANTA workshops, both attached to Northern Sinclair Shows, but I hope my experience will cause him to think again about continuing with QUANTA and joining in. The first one I went to I felt a little like he seems to have done. There I was, knowing no-one, with fairly limited knowledge of the intricate mysteries of the black box surrounded by people who seemed to not only know each other but also what they were talking about. At the end of my first visit I had a fairly long chat with Dennis Briggs, a name I'd read about but didn't know. He proved to be very helpful, informative and interesting.

On my second visit I "framed" to introduce myself and talk to others in the QUANTA area. This I did, once the early rush for Modems had died down, and found everyone very helpful, Phil Borman, Mr. & Mrs Johnson, Dennis Briggs, and many others whose names I never did find out. The QUANTA committee and other members I talked with, and whose brains they let me pick, were just waiting for someone to start up a conversation or ask a question - remember they have nothing to sell and are freely sharing their knowledge. I hope Mr. Gould reconsiders. It is worth that effort to break the ice, even if it does feel a bit like jumping in at the deep end without being able to swim!

PETER JONES BEGINNERS' GUIDE - Continue with your efforts please. I use something similar with Archive and would find a sort of cut down version of Jan Jones book very useful.

QL SUPPLIERS - I have received good and helpful service from, Miracle Systems, Digital Precision, Tony Firshman, Dennis Briggs, Sector Software, Qjump. In fact all those that I have bought from have been very good in their dealings with me.

QL FUTURES - I'm glad to hear that Tony Tebby is still working on a possible upgrade path for the black box and I very much like the idea of a QUANTA buy-out/take over of Sugarstrad suggested by Freddy Vacha? I'd even put some money up myself - such things are dreams made of! I still find it hard to believe that a man dedicated to making money could not see the possibilities of the QL with its excellent expert/program/system base just waiting for the injection of a relatively little money to knock the opposition for six. A Super Sugarstrad!

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If there was some way to get the rights to the QL it would still make the basis of a world beating Peoples Computer with QUANTA, a la Jonathan Oakleys suggestion, holding a standardising/licencing brief. A real "open" computer - possibly the chance of a world first of a genuine "user market led & driven" machine rather than a machine that depends largely upon marketing hype and not a great deal of substance.

As a little light relief I offer the following "sticker" suggestions:-

QLers DO IT IN BLACK  
QLers DO IT WITH ADD ONS  
QLers F1 TO 5 ( DANE might appreciate this one )  
QUANTA MODEM OWNERS DO IT ALL NIGHT

John B. Parkin, 13 Effingham Rd., Harden, Bingley, West Yorkshire, BD16 1LQ  
Tel: (0535) 274160

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### BEGINNERS COURSE ON QPTR

One of the packages most important and also difficult to learn for the QL is the QPTR Pointer Toolkit from Qjump. I always wondered why no one has problems with it as there was no space devoted to it in the Quanta Newsletter. But I realised that the time has come to do something about it, as I receive heaps of letters asking for help and advice from around the world, when offering my own QPTR Quick Reference Guide covering the SuperBASIC extensions. Most owners seem to have hoped for a tool for having this funny little pointer in their own programs, and were not aware of the new environment and concepts introduced by QPTR, and then realised that it is more than an evenings work to learn, to quote from the manual. So they gave up. The package sits magnificent on the bookshelf, and surprised themselves by using the odd Paint demonstration program every now and then, that lets you draw great freehand pictures (even bigger than the screen) with the mouse. Finally the supplied SuperBASIC demo programs are written in some sort of assembler style, and are rarely documented.

QPTR was intended for software companies wishing to use the Pointer Environment in their own programs. Did they assume when writing the manual that everyone had at least three university courses in computer science, and could afford not to be at work for about five days a week....? As I am, in fact, studying computer science I had less problems, but nevertheless it took me more than one year of rather unregular sessions with these programs, heaps of listings, various manuals (not to mention the vast amounts of coffee for these endless dark nights) to get programs to run correctly under Qptr. As I think I am now able to write QPTR progs reasonably well, I will start to introduce the basic use of QPTR, but I have to assume that anyone who wants to follow this, is familiar with SuperBASIC (especially the concept of procedures, parameter passing, and internal data blocks; if you have problems with one of these, go out and get the definitive SuperBASIC handbook by Jan Jones, which has recently been reprinted by Quanta) and has Qram (as this is the QPTR program to refer to).

Those of you who really started to read the manual, came across a section headed 'concepts'. Most of the terms explained there (e.g. application spacing list, window definition, window working definition, window area, uhhh...) are not relevant to the SuperBASIC programmer, so don't worry too much about it, or take an aspirin.

To write programs that use the pointer environment from SuperBASIC isn't easy, although Qjump supplies many extension to convert the data structures. But I can't recommend to use the extensions listed in the Window Manager section of the SuperBASIC part of the manual, as this will result in setting up large amounts of arrays and headaches. To simplify the set up process, just use the SuperBASIC procedures included in the demo programs. In general, these procedures fill the arrays, passed as parameters when called, from the DATA part to follow, which is easy to set up. To extract these procedures (from now on, I will call this 'skeleton' the base program), load Qjumps program demo\_bas from your medium, DLINE TO 19999, RENUM 32200,2 and save it on your working disk (mdv) as baseprog\_bas. To use one of the following examples, the base program has to be loaded/ merged.

Before you start to type your window definition (yes, this is all you have to do), make up your mind of how it should finally look, say what colours and items will be needed, how large should it be, etc. For this time, lets start with a simple window with three (loose) item in it, for entering a filename, for example. The two others are the obligatory OK,-and ESC.

One word about items. The concept of QPTR defines several items. First there are loose items. Obviously this term has been chosen because loose items may appear anywhere (in the boundaries of the window) on their own. Then there are sub-menu items, which are all collected in one sub-window and always have a standard form (note that these items may be treated in a different way and may have special possibilities, for example they may be moved (scrolled/ panned) in the sub-window etc.). Both kinds of items have an associated state, which is either available (where a border is drawn when the pointer is in its area, which is then called the current item), selected (where, in Qram, the item appears on red background when it has been hit) or unavailable (there won't appear a border, when the pointer is on hit, like a deleted file in Qram). There is yet a third kind of item, the information item. Information items are passive, they just have to inform the user about something (the text 'GRAM utilities' on top of the main menu is an information item). Items need not to be text only, they can also be sprites, patterns etc.

But lets start with the colours we wish to use in our window. As it seems to be fashionable to have white windows, lets assume white paper, green border and a rather small shadow. It is convenient to open one procedure for doing that, like DEF PROC init\_colours. Now we need an integer array for the window attributes or simply the main colours. So DIMension it with DIM std\_wattr%(3); I use the std\_index in case I have more windows with different colours. We now have space for four colour information, which are (starting with the 0 index) shadow width, border width, border colour and paper colour. The Baseprog offers one procedure to fill the array with these parameters, so continue with RD\_WATT std\_wattr%, followed by DATA 2,1,4,7 (you may use variables like green or white for the colours, what makes the definition more readable), where 2 is the shadow width, 1 is the border width, and 4 and 7 are border paper colour. Remember to have a RESTORE statement at the beginning of the procedure, to set the SuperBASIC data pointer to the DATA line.

Next there are the item attributes, or the colours of the item states. Say we want the current item to be highlighted with a black border, available items should appear black on white to look as normal as possible.



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Selected items are to be black on green, and unavailable horizontal green stripes on white, which is difficult to read, so that the user knows to keep his fingers (better the pointer) off it. This time we require a floating point array (for those who are interested: you may have a blob for, say unselected items, to drop through, and these are long word addresses). Now DIM std\_jattr(3,3) and RD\_IATT std\_jattr. Followed by DATA 1,0 (border is one pixel wide and black); DATA 7,92,0,0 (unavailable: white paper, 92 is the colour code for green stripes, and no blob or pattern); DATA 7,0,0,0 (available colour combination); DATA 4,0,0,0 (selected item). You certainly noticed that the form of this definition is DATA paper,ink,blob,pattern. That's all we need for now, so you can close the procedure with END DEF. (Note: I usually start the init\_ procedures with line number 20000, which leaves enough room for the main program and action routines.)

All loose items for each window are held in one list. It's best to open a procedure for each window DEF PROC init\_mainwindow. As you remember, we would like to have three loose items in our list. But as we might later wish to extend the program, lets define a variable to hold the number of items (m\_nlit=3), where m\_ is the index for the main window and nlit is the abbreviation for Number of Loose ITems (change it if you don't like it). Now we need a place to store the status of each item (which is an integer): DIM m\_flg%(m\_nlit-1). flg% stands for-Loose FLAGs, and -1 because we start counting the index from 0. Now we are ready to read the loose item list: main\_lot=RD\_LOTA(std\_jattr). As you see RD\_LOTA returns the address of the Loose Object Table (lot), which will be required later on. The parameter for this procedure are the items colours to be used by the loose items. Now we have a DATA list starting with the number of loose items (m\_nlit) and the items themselves.

A loose item in this list has a fixed form: DATA xsize, ysize, xorg, yorg, xjust, yjust, key\$, type, xxxx where size is the area occupied by the item in pixels, org is the origin of the top-left hand corner of the item relative to the TLH-corner of the window (in pixels), just is the justification of the item, key\$ is the key to press to select it (or the special codes for do, cancel, move etc.), type is the type of the item (0=text, 2=sprite, 4=blob, 6=pattern) and xxxx is a corresponding value (string for type=text, address for type=sprite/blob/pattern). See listing for the definition of our items.

We also want to tell the user what to do with this window, so we fill in an information saying 'Enter Filename:'. To do this, we have to set up an information object list simillar to the loose item list. main\_jot\_1=RD\_IOT reads the first information object table for the main window. As before, it is followed by the number of information items to be in the information window (very informative, isn't it?). The form of an information item is DATA xsize, ysize, xorg, yorg, type, ... the rest depends on what type of object you choose. For text: colour, csizex, csizey, string\$ (which should be obvious without further explanation); for blobs: pattern, blob; and for sprites: sprite (which is the address of the sprite).

We now need a window where the information should be written. It is defined by main\_jwt=RD\_IWT. As one may have more than one info window, the data part starts with the number of windows (1 in our case). And now the following definition (for each window): DATA xsize, ysize, xorg, yorg (no problem...), DATA shadow\_width, border\_width, bord\_colour, paper\_colour (as usual...), DATA pointer\_to\_jot (i.e. main\_jot\_1 in our case). That it.



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At last, as the SuperBASIC definition of the QPTR windows is bottom up (i.e. starts with the smallest object), we can now define the main window. `main_defn=RD_WDEFA(std_wattr%)` followed by `DATA xsize, ysize, xppos, yppos` (where `ppos` is the initial position of the pointer when the window is pulled down): `DATA pointer_sprite, _jot, _jw, _awt` (the `_awt` is the application window table and is not described here for reasons of space and time). Close the definition with `END DEF`.

The main program which controls the window has to call the definition procedures, then pulls down the window (or draws a primary window with a channel when compiled), reads the pointer and takes appropriate actions. This action-routine will be described soon...

If you have questions concerning QPTR or something else, please write and I will do what I can. I'm always interested to get in touch with other QPTR programmers for information and program exchange. By the way, I like the suggestion made by Geoff Wood concerning special interest groups. Anyone interested in a QPTR group should contact me directly.

Oliver Fink, Eckardtstr. 11, 6370 Oberursel, West Germany  
09.01.90

```

20000 : REMark QPTR beginners progs
20010 DEFine PROCEDURE init_colours
20020     RESTORE 20050
20030     DIM std_wattr%(3)
20040     RD_WATT std_wattr%
20050     DATA 2,1,4,7
20060     DIM std_jattr(3,3)
20070     RD_IATT std_jattr
20080     DATA 1,0
20090     DATA 7,92,0,0
20100     DATA 7,0,0,0
20110     DATA 4,0,0,0
20120 END DEFine init_colours
20130 :
20140 DEFine PROCEDURE init_mainwindow
20150     do$=CHRS(2) : cancel$=CHRS(3)
20160     text=0
20170     RESTORE 20210
20180     m_nlit=3
20190     DIM m_flg%(m_nlit-1)
20200     main_jot=RD_LOTA(std_jattr)
20210     DATA m_nlit
20220     DATA 26,10,130,2,0,0,do$,text,'OK'
20230     DATA 26,10,160,2,0,0,cancel$,text,'ESC'
20240     DATA 30*6,10,4,14,2,0,'F',text+256,'f1p1'
20250     main_jot_1=RD_IOT
20260     DATA 1
20270     DATA 15*6,10,0,0,text,4,0,0,'Enter Filename:'
20280     main_jwt=RD_IWT
20290     DATA 1
    
```

## QUANTA

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```
20300      DATA 15*6,10,4,2
20310      DATA 0,0,0,7
20320      DATA main_lot_1
20330      main_defn=RD_WDEFA(std_wattr%)
20340      DATA 190,30,30,30
20350      DATA 0,main_lot,main_iwt,0
20360 END DEFine init_mainwindow
20370 :
20380 DEFine PROCedure test
20390      init_colours
20400      init_mainwindow
20410      DR_PULD main_defn,-1,-1,m_flg%
20420      REPEAT loop
20430          RD_PTR main_defn,it%,sw%,ev%,xr%,yr%,m_flg%
20440          IF ev%662 THEN EXIT loop
20450      END REPEAT loop
20460      DR_UNST main_defn
20470 END DEFine test
```

---

### DOES YOUR TERMINAL SOFTWARE SUPPORT THE QCON V24 LINE?

If you have another modem apart from the TANDATA QMOD and want to use it with a terminal emulation other than QCONNECT you can still use the TANDATA QCON module with the modem connected to the RS232 (V24) socket. I have found the QCONNECT VT100 terminal to be excellent and when I log on to a VAX mainframe computer my DCL LOGIN.COM and associated files set up a full keypad for use with the VAX TPU (Text Processing Utility - very similar to EMACS in the Library). Apart from this facility, however, the VT52 terminals of Qualsoft and V. Rosenthal's QL52 (QUANTA Library COMMS disk) each have interesting features that make them worth experimenting with in other environments, and other VIEWDATA terminals may provide more than QCONNECT does. The later versions of Qualsoft terminals do, I understand, fully support the V24 line out of the QCON module so that any modem can be used with all the directory facilities. The cut-down version that was given free to QUANTA members who purchased the TANDATA equipment does not directly support the line but you can easily do yourself what the directory facility would do for you. Likewise QL52 can be used via the QCON line. All that I am about to say is explained at the back of the TANDATA User Manual; if you number the pages the information starts on page 23. For simply setting up QCON between a smart modem and the QL the commands are no more complicated than those commonly used to set up a printer: they start with an 'escape' character - in this case ASCII 31 (not the 27 used for other devices), and this is followed by another 'character' to identify the command being sent, after which come the command instructions. The only one we need to bother about at this stage is the INITIALISE command which I shall describe in a moment.

Because the QCON module is set up in this way, like a printer the settings will not change when the QL is reset. So, if you wish, you can actually run the QCONNECT program to set up the QCON interface, reset the QL to get back all the extra memory and your TOOLKIT and then run QL52 or your other favourite terminal. In this case you must, of course go straight to the terminal (ASCII, VT52 or VIEWDATA as appropriate) and, in the case of QL52, set the baud to 9600.

## QUANTA

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To send the INITIALISE command to the QCON module we first open the SER2 port with, for example, OPEN#5, SER2 and after sending the command this MUST be closed again with CLOSE#5 so that QCON can use the port. If you have TOOLKIT then the command can be sent with BPUT# otherwise you should use PRINT# in the usual way. Although the INITIALISE command is used to set up a large number of communication parameters we need only vary it to set the external baud rates for receive and transmit and, perhaps, to enable parity for some services. For all practical purposes we can initialise at 8-bit, no parity with X-ON/X-OFF flow control. BAUD in the following statements should be replaced by the character/numbers given below.

```
For RX/TX at 1200/75   BAUD is 30
                  300/300   45
                  1200/1200 27
```

BPUT#5,31,22,206,39,BAUD,2,78,15 for TK users, or

PRINT#5,CHRS(31);CHRS(22);CHRS(206); and so on

After this initialisation BPUT# or PRINT# a few ASCII characters to get the modem lights to come on (TR RS CS light up on my WS3000); I usually do <ALT/ENTER> and <ENTER> to send the same lot again. BUT don't forget to close the SER2 port.

Donald Brett.

14.12.89

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### SCREEN DUMPS FROM UNCOMMON PRINTERS.

The following may be of interest to anyone who wants to dump QL screens to a dot matrix printer which is not included in the usual lists of printer drivers.

I recently bought a Data Products 8020 dot matrix printer: one of my aims was to be able to get screen dumps from Easel and the like. However, the printer is not Epson compatible and there was no suitable printer driver in the Psion suite nor in the Quanta Library programs, nor apparently in QRAM.

I found a well-documented Assembly Language program called OKIDUMP by Dave Walker (of 'Discover' fame) in the Quanta Library and tried modifying it to change the printer control codes from OKI to Data Products, but could not get my modified assembly listing to compile - I know almost nothing about machine code.

Browsing through the Quanta Library I came across "IMAGE" Version 2.4 by the same Dave Walker. This is a general purpose screen dump program which allows you to configure it to different printer control codes and when I eventually found out exactly what my printer needed, IMAGE provided a suitable screen dump routine. It is slow - it takes about 1/2 hour to dump a screen to the Data Products printer, but the most important thing to me is that it works. Furthermore IMAGE multitasks, so I suppose other tasks could be going on while the screen is being dumped.



## QUANTA

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Not only does IMAGE itself dump screens and screen-files in normal or inverse video, it also creates a routine which can be used for the GPRINT\_PRT routine in Easel. A further refinement is that it even allows you to define the pattern which is printed by the dot matrix needles to represent the various QL screen colours.

All in all, I am greatly impressed by IMAGE and can recommend it for anyone who is stuck for a screen dump for their dot matrix printer. My thanks to Dave Walker and the Quanta Library.

John Bottle, 20 Stone Lane, Yeovil, Somerset, BA21 4NN.  
27.12.89

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### REALISATION

I bought my Q1 at the age of 66 when I was contemplating a second and final retirement. The idea was to present me with a challenge and prevent my brain rusting up. In the event my retirement did not take place until three years later, but I have found the challenge to be very much there and as for my brain, well I doubt whether I ever had one. After three years I find that I have learnt very little about the capabilities of the Q1.

I joined Quanta some two years ago but did not have the courage to attend any of its workshops until late 89. Similarly I funk'd joining any group, even though at that time there was a group in Aylesbury. I feel sure that my story is true of many Q1 owners, and what fools we are to deprive ourselves of the help that could be so readily available and freely given. The result of this withdrawal has in my case been the wastage of a considerable amount of money by foolish buys, and the deprivation of a lot of pleasure and possibly friendship. When I did finally attend a workshop in Northampton it was not at all as I expected it would be. Firstly it was pretty informal and it was friendly. It is true that there were computer experts there, but it struck me that they wanted to help ignoramuses like me. Certainly I did not experience any feeling of being patronised, talked down to, or reluctantly suffered. It is also true that I did not learn a lot, but this was mainly because I had not fully appreciated the opportunities on offer.

There has in the past been talk of a beginners group, but I think the logistics of such a group would prove difficult, and also of regular space in the magazine. All of this must depend on us, because unless we are prepared to stand up and be counted, who is to know we are here, and what our needs really are. So come on those of you who like me belong to Quanta, like our Q1s but don't get the best out of them, and who are computer illiterates let us show ourselves.

Tommy Thompson, 15 Thrasher Road, Aylesbury, Bucks, HP21 8DZ.  
Tel: (0296) 431173  
29.12.90



## QUANTA

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### SCHON KBL 128 CASING FOR THE QL.

The casing is on sale as a project box for re-housing the QL, expansion card, disk drives, power supply etc. It is supplied with a backplane for the expansion port and has a steel chassis inside the attractive beige plastic case. The case is just long enough to house a QL PCB but you may have to clip off the pins of the backplane to get it in. It is best to make up two alloy plates for the front and back panels.

The QL PCB can be mounted at the back of the box, you will need to cut ports in the backplate to fit the various connectors. The ROM port must be big enough to take an EPROM cartridge. Ventilation slots will also be needed at the top of the backplate (6mm x 30mm) NOT in the top of the box as paper clips etc. could drop in and short something out.

Mount the PCB with 3mm machine screws and plastic spacers (3 - 5mm). You will have to remove the power connector and solder the cable to the PCB. Mount the QL PSU on the chassis in front of the PCB and with the alloy heatsink bolted to the side (use heatsink compound), a clip will have to be made to hold the transformer to the chassis.

Disk drives are mounted at the front left of the box with a port cut in the front plate to take the front of the two drives, plastic spacers may be needed to raise the drives to the correct height. The disk PSU can be mounted between the drives and the PCB. MDV's are fitted to the front plate with two small self-tapping screws for each drive (2mm screws, drill front plate 2.5mm holes and 1.5mm holes in the front of the MDV. the ports should be 35mm x 7mm. Two pieces of ribbon cable are needed to connect the MDV's to the sockets on the PCB.

LED's needed are 2 red for MDV's and 1 green or yellow for the power on (I have used an illuminated switch for power). An additional LED for CAPSLED if you use it (this could be mounted on the front panel or the keyboard). You can use the original QL oblong LED's or it may be easier to use 3mm round ones instead.

A four way Euro connector can be fitted to the backplate to connect the power switch (QL PSU & Disk PSU), Monitor, Printer and one socket spare. The backplane needs the chassis cut for clearance and the Trumpcard is fitted upside down with a bracket to support the other end screwed to the T/C case (2mm S/T screws) and the chassis (3mm machine screw). Fit rubber feet or wood battens to the bottom of the case to protect your desk from the case screws. Chassis and case need to be cut for the reset button and MDV extension socket. If you want to include a Hard Disk then this layout will leave room for it next to the Disk Drives. I use a Tonto keyboard with a 26 way ribbon connector and cable.

Great care will be needed in measuring, cutting and drilling. ALL MAINS LINES MUST BE WELL INSULATED and I recommend the use of (Ampliversal) crimp connectors as you will probably want to take it apart at some time. The finished job is neat and tidy, not like the usual collection of boxes and cables associated with the QL. One benefit of this job is that the QL runs a lot cooler as all heatsinks are enlarged by fastening to the chassis.

Peter Rowell, QMAS, Cambridge. 8.1.90.

## QUANTA

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### PRINTERS AND RE-INKING RIBBONS

Printer prices have fallen dramatically compared with some months ago; consequently, even though it couldn't be justified financially, I bought my first 24 pin printer recently, an 80 column Star LC 24-10.

The purchase was delightfully simple and (initially) painless. I rang Action Computer Supplies on their Free-phone number (0800 333 333) asked if an LC 24-10 was in stock and what was the cost. The price too good to miss so I passed them my credit card number and my order was placed by 'phone on a Wednesday morning in October '89.

Imagine my surprise (and delight) when the very next day a knock on my door soon after midday summoned me to sign for delivery of a Star LC-24 10. Of course, I suffered for my extravagance some weeks later, when a £274.85p item needed paying for in addition to my normal petrol, car repairs etc. on the monthly credit card statement. Even so, I rate it as a very good buy.

A few days ago I wanted a really crisp and smart letter. Inevitably a well known law attributed to Mr. Murphy (or was it S..'s Law) declared that a new ribbon was required to get the best from my new toy. Sadly, the card and 'phone trick at Action Computer Supplies failed, they were out of stock but due to receive a delivery at their warehouse the next day.

"Dennis Briggs says that you can re-ink ribbons yourself" I remembered reading in October's QL World. He was absolutely right. The ribbon casing for an Epson LX 80 is not identical to a Star LC-24 10 casing, so I secured two foam sponge pieces in slightly different but effective places. The end result was excellent.

A bottle of stamp pad ink was £0.81p, sponge pieces (household scraps) were free and a small plastic syringe cost £0.20p from a local chemist. No one could call this part of the exercise expensive. I have spare ink and a working ribbon giving crisp output, plus the ability to re-ink as required.

I also have a brand new ribbon that arrived a few days later, ah well.  
John Humphries, 12, Paddock Close, Wantage, Oxon. OX12 7EQ  
Tel: 02357 69858  
29.11.89

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### TEXT ALIGNMENT

Here is an idea of mine I sent to QL World recently. It deals with the problem of aligning text on a page. Especially in Quill when anything out of the ordinary is required such as columns. It is aimed at QL users/tinkerers developing personal publishing (I think the term Desktop Publishing is over used).

It can drive you hairless trying to match up columns of text, or get a suitable text position on the page with variable sizes of text. The main problem being that when you alter print sizes at the printer end it will not correspond to the screen image. Enlarged, Elite or Condensed print will all start at a different position on the hard copy when compared to the screen position.

## QUANTA

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However here is ONE possible solution to reduce (not necessarily eliminate) the numbers of printed copies produced to achieve the desired results.

Set up the page design you want to use. Lines per page etc.  
Set the page margins to an A4 page, (I use the following).

Pica	L = 10.	I = 10.	R = 70.
Elite.	L = 10.	I = 10.	R = 90.
Condensed.	L = 5.	I = 5.	R = 125.
Enlarged Pica.	L = 5.	I = 5.	R = 40.

Starting at the first cursor position. Reproduce the prompt line at the top of the screen. Your first line should read;

1.....2.....3.....4.....5.....6.....7

(depending upon the L/R margin settings). The second line should not contain any numbers;

.....

Now do a copy command for the second line only, three times (giving five lines altogether). Now do a copy command for all five lines. Until you have a screen full representing a pagefull ie 60 lines.

Now go back and renumber each line. When two figure number lines are needed you will have to delete the second full stop to balance the line again. Put your A4 sheet into the printer at its normal starting position, and print the page at the specified print size.

Now go to a high street print shop and get them to photocopy the page onto a clear acetate overhead projection transparency sheet. You now have a transparent overlay which you can use to easily calculate the desired screen position of the text to achieve the required page position of the print. I also find them useful when I want to leave a blank box area surrounded by text at a specific position on the page into which I can later fit a drawing etc. If any reader has difficulty in locating any of these acetate sheets I may be able to help them out.

I also have a request. Can any knowledgeable QUANTA member (and I know they are out there after reading the articles in each issue) advise me, if it is possible to convert a Siemens Inkjet PT89 printer so that it will print onto photocopying paper.

While I am writing. I am sure I speak for many QUANTA members wishing to thank Sarah Johnson and the other magazine production members and contributors for producing each issue, get well soon Roy. Lets face it without the QUANTA magazine QL users are not snowed under with choices of reading material.

To my fellow members who like me, may feel a bit inadequate, when we read but do not always understand, highly technical, but very helpful articles written for the benefit of everyone, by contributors who have undoubtedly devoted a good deal of brain time and valuable free time in pursuit of the answers to readers problems.



## QUANTA

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For my part I cannot, no matter how hard I try, understand programming. So I leave to my son. I use our QL as a tool, a device to produce technical literature for lectures. I recently made our system QL + Trumpcard + Disk Drives + Microdrive into a tower system.

Why not make a resolution this year to write just one article or letter to the editor, I plucked up the courage, so can you. I'm sure that everyone has something of interest to someone else. If we don't supply sufficient material !!

Dennis O'Connor, 16 Parsons Way, Wootton Bassett, Swindon, Wiltshire, SN4 8DA

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### MAKE QUILL WORK FOR YOU

My wife Carolyn is hoping to start writing professionally soon, so I couldn't put-off sorting out the word processor system any longer. There were three main areas of investigation - I thought I'd share my findings.

#### QUILL AND PAGING.

Normally, it is necessary to put the precise number of lines for the printer paper you are using into the "Lines/page" of the Printer Driver. The "Page size" in Quill's Design command is for calculating where it will insert the automatic page breaks. If this is less than "Lines/page" in the Printer Driver, then, at the end of each page, the Printer Driver will deliver more Line Feeds to move the paper on to where the top of the next sheet should be. It would seem that the Form Feed command is not used.

Carolyn needs printouts with various different type sizes and line spacings, so, to avoid having to have lots of Printer Drivers, I translate a little-used character into a Form Feed (ASCII code 12) in the Printer Driver, and always put this as the last character of the Footer. Bottom Margin must be zero or unwanted lines will appear at the top of the next page. You now need only a rough idea of how many lines will fill-out the page to set the Design "Page size" while Quill is running. The Printer Driver will not add extra Line Feeds if the number of "Lines/page" is less than the "Page size", so, with this system, set it low.

To increase reliability, I include a "Printer Reset" in the "Postamble Code" to make sure that the printer is always left in a standard condition. Any typeface and line spacing information in a document is put at the start of the Header so that the printer will get the information even if only one page is printed out. I translate another little-used character into the "escape" code (ASCII code 27).

If you have a standard QL you can save "Blank" documents with all the necessary Headers, Footers, Margins etc. which are Loaded before typing - or Merging - the text (although I have noticed some inconsistencies in the way "Design" information is handled after Saving a document). If, like me, you have Toolkit 2 you can have fun thinking up great long "ALTKEY" definitions to set-up and change these parameters at any time with a single ALT keystroke (see below).



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### IMPORTING TEXT INTO QUILL FROM A PORTABLE COMPUTER.

Carolyn prefers hacking away on an old Epson HX-20, then transferring the text to the QL for editing and printout. Sorting out RS232 information exchange can be a bit of a minefield for the beginner, especially as certain names are not consistent from device to device, but it is not impossible if you can already program, and is very satisfying when it works.

It would take a lot of space to give full details, but basically, you need a cable which will carry the data to the QL on one wire, a "handshake" wire which tells the portable when the QL is ready to receive, and, of course, an earth wire. After connecting up, its a case of running programs in each computer which will "OPEN" the RS232 ports, and "OPEN" a QL channel for storing the data on MDV or FLP.

Information transfer is by "PRINT#" and "INPUT#" statements. I first transfer the number of characters about to be sent, then send each letter individually as one character strings. I use a home-made word processor in the HX-20 so I know how to get at the data I need from memory, it would be more difficult with commercial software.

The idea is to get a file on to MDV or FLP which contains the text - with Carriage Returns (ASCII code 13) to mark paragraph ends. After that, you simply run QUILL and "Import" the file, (part of Files command) then sort out Margins, Justification, etc. which are left in a very non-standard way (this can be done quickly if you have Toolkit 2. See below).

### USING TOOLKIT 2 "ALTKEYS" WITHIN QUILL.

I didn't realise until recently that ALTKEY definitions could contain CHR\$( ) statements, and that more than one string can be included in the definition. If the strings are separated by a comma, then an <ENTER> will be included between the strings, if they are separated by an ampersand <& then the two strings will run together. This allows you to do much more than just add text (like your address) to a document. For example, if you include the following line in a "BOOT" program:-

```
100 ALTKEY "d",CHR$(240)&"du0","b0","p64","",""
```

then when "ALT d" is pressed with QUILL running, "Design" is selected, Upper and Bottom margins will be set to zero, and Page size set to 64. CHR\$(240) is the equivalent of pressing <F3> and the two commas followed by null strings at the end are to give the two <ENTER>s needed to quit the command after setting the last parameter.

The possibilities are endless. The above (without the second null string) is the beginning of a definition that I use to set up everything I need to prepare to print with a particular type size and line spacing. This includes putting the correct Escape codes in the Header, putting the Form Feed character into the Footer etc. (See above). CHR\$(195) is useful to include in the definition which sets the Header or Footer as it will remove any characters already there, before putting the required ones in. The only problem is that Headers and Footers are cycled round between "None", "Left", "Centre" and "Right" using "spaces" so you must know where you are starting from. It is best to switch the Header from "None" to "Left" as part of an initialising "ALTKEY" definition, after that, you can change what the Header will send to the printer any time you want with a single ALTKEY.

## QUANTA

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ALTKEYS really take the tedium out of jobs like switching Page numbering on and off. My most impressive one yet does all the tasks involved in Importing a document from disk - Importing the file, setting the correct Designs, Justification, Left and Indent Margins - except I don't bother trying to set the Right Margin. This would have involved having &CHRS(192), (<cursor left>) ninety times in the definition, so this is the only task that has to be done manually.

Steve Horn, 21 Benjamin Drive, Deanburn, Bo'ness, West Lothian, EH51 0QS.  
17.12.89

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### **BRAIN SMASHER** - A Review of Jochen Merz's Latest Mental Torture

Yes, Jochen Merz, that brilliantly sadistic German programmer has been at it again, and has come up with 'Brain Smasher' - a sinful case of understatement in two simple words.

The program comes extremely professionally packed with the few instructions required in a useful hard backed ring file - my instructions were in German but you'll probably be able to get them in English and French too.

The game looks ever so simple. The easiest part is choosing whether you want the on-screen information in English, French or German. Then you are faced with a grid full of various hi-res ideograms (pwitty pikchers), and you just have to get rid of them all by linking (identical) pairs by an imaginary line having not more than two kinks in it - a bit like a square 'U' shape - within a certain (fixed) time limit.

Simple, eh? HA!

Listen, I have enough to do with translation work, running a fan club, writing for newspapers, organising rock concerts, feeding two hungry humans and two yowling moggies without having all this hassle of sitting bog-eyed in front of a monitor at 4:30 a.m. trying to solve screen 3 for the twentieth time before the time runs out. I KID YOU NOT. My husband has started to wonder what keeps making me moan and groan in the living room in the middle of the night and has started looking at the cats in a peculiar way. Jochen, um Himmels Willen, put a Government Health Warning on this package.

Wait a minute, I think I know where I've been going wrong on screen 3. I shall now leave Quill and jump (with Taskmaster, crafty advertising) back into Brain Smasher...

Dane Kurth, Langgasse 51, CH-3292 Busswil, Switzerland.  
8.1.90

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### **TAB EDITOR**

With reference to a letter in the January edition of Quanta from David McCann the latter part of which concerns my program TAB-EDITOR which is being sold through QL World's Microdrive Exchange.

## QUANTA

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"Thanks to David for the favourable review. No, I haven't moved from the address given in the documentation supplied with the program, however, I can be a little difficult to reach on the phone; apart from the number given in the documentation, people wanting to contact me can also try a Cambridge number (0223) 64744.

Yes, a more substantial version of the program is available directly from me - it needs at least 256k of memory. A block save facility has been included and files can now be merged, columns can be set and text word-wraps within the column, page headers and footers up to 10 lines can be included, binary file editing is possible, the printer drivers can be configured in a more flexible way, simple maths calculations can be done with figures in a block or column, and the Tab to Quill conversion program now works properly, using the printer drivers to interpret embedded printer codes.

The program has been selling for over a year from the Microdrive Exchange and, as David indicated, seems to fill a particular niche. Quite a number of people have written to me saying they find the program very useful and asking for the expanded version. Some of the bugs that I've had to iron out have proved somewhat troublesome and there have been times when the backlog of mail has been a real headache - a full-time job as a computer lecturer hasn't made it easy.

However, I am prepared to continue improving and upgrading Tab\_Editor for those people interested in it. The latest edition has been Turbo compiled rather than QLiberated - QLiberator is very good and relatively cheap but Turbo is faster, produces more compact code and has better error handling. It can be obtained from me for £10 (I can put it on 3.5" disk or 2 microdrives, but cannot supply microdrives themselves).

If you have version 2 from the Microdrive Exchange and would like the improved and expanded version 3 please contact me at the address given and send me £10. If you already have Tab\_Editor version 3 but have one of the versions before 3T (the Turbo compiled one) and would like to upgrade please send me the relevant media (3.5" disk or microdrive).

### THOR XVI

I had a review of the THOR published by Quanta last year in which I mostly praised the machine and wished it a good future. I then waited with bated breath for the THOR to re-emerge. And so it appeared to in the summer with Dansoft ads in QL World offering a new version of ARGOS, upgrades and support for existing users, etc. There was speculation about how many and where it would be selling the THOR XVI, would the Soviets buy it, would it become THE truly European machine? The QL lives, long live the THOR?

Has any Quanta member yet had a reply from Dansoft? Has anyone seen the new ARGOS (6.40/1.07) ROM? Here I wait. Due to my job I've had to swallow my QL/THOR pride and go out and buy an IBM compatible (spit!) but am still prepared to spend some money on THOR products. However, Dansoft still fails to deliver the goods... A very great pity.

Richard Williams, 25 Keyes Road, London, NW2 3XB.  
8.1.90



## QUANTA

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### MINERVA SCREENS.

Like others, reporting earlier I found my acquisition of MINERVA excellent value for money and Stuart McKnight of QVIEW exceptionally helpful.

I had some difficulty however trying to figure out the workings of the two-screen mode. If there are others about, as thick as I, the short program below might help to clarify the concept (with the QL reset to two-screen mode, i.e. F3).

```
100 CLS #2:LIST:CLS:F$=FILLS('-',11):PRINT F$:' FIRST SCREEN ';F$
105 NS='Press CTRL & TAB to SEE the other screen (with no cursor) and return.'
110 PRINT'\NS\Enter :SET 1, then press CTRL & TAB to\ACCESS the second screen
(with a cursor).'
```

```
115 SET 1:OPEN #3:CON_512X202A0X0:PAPER #3;7:INK #3;0:BORDER #3; 2,7,4,2:CLS #3
120 CLS #3:SS=FILLS('*',18):PRINT #3:SS;' SECOND SCREEN ';SS\
(THIS, UPPER WINDOW IS CHANNEL #3)'
125 PRINT #3'\NS\Enter: SET 0, then press CTRL & TAB to return ACCESS to the
first screen'\(with a cursor):SET 0
200 DEFINE PROCEDURE SET(N)
210 MODE 96,-1:OPEN #0:CON_512X50A0X206
220 PAPER #0;N+3:INK #0;7:BORDER #0;N+1,7,0,N+1:CLS #0
230 END DEFINE
```

This is only a poor illustration from SuperBASIC, which really treats the 2nd screen as an additional window.

However, if you have Tony Tebby's Toolkit II, you can see a sample of the potential of the system when multi-tasking jobs, which is how it is really intended to work.

Use the SET 0 and CTRL/TAB to access SCREEN 1 (if currently in SCREEN 2 access), then ENTER the following two direct command lines:

1. CLOCK (& ENTER)
2. MODE 96,-1:OPEN #4;SCR\_200X10A0X100:CLOCK #4,'%h:%m:%s \$d, %d \$m %y' (& ENTER)

Now use CTRL/TAB to view the two different forms of the clock running on each screen, without appearing on the other. (SDATE will alter both clocks).

Joe Haftke, 7 Lansdown Road, Sidcup, Kent. DA14 4EF  
Tel: 01-302 6154  
9.1.90

---

### DATA TRANSFER WITH THE KERMIT PRODUCT D0120QUA

In my daily activity I have frequent requirements to transfer data between a variety of machines, usually VAX, SUN and IBM PC. Normally I use the KERMIT feature on those machines and find it a very useful Esperanto of file transfer. There are many other mechanisms for file transfer on specific machines, but none so universally implemented as KERMIT.

## QUANTA

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For a personal computer I much prefer to use the QL rather than the PC, and so I was very pleased to see of KERMIT's availability on the machine. I despatched post-haste for the library disks and set about testing the product.

Things did not go very smoothly and so, never having contributed to QUANTA previously, and having the special advantage of ready access to a VAX machine, I thought it would be useful to relate my experiences.

The KERMIT product is on 3 disks, 2 are documentation and one is sources and executables. If you are new to KERMIT, you will need to print the standard KERMIT description which is on disk 1. Everyone needs to print the specific KERMIT descriptions for the QL KERMIT programs on disk 2, and on disk 3 you will find two executables, one is for the Lancaster Kermit, and the other the Liverpool Kermit. I have used both of these to some extent, but for my purposes find the Lancaster one more useful. (I suspect that this version is derived partly from the Liverpool version with a lot of standard Kermit code added). The Lancaster program is 65K and the Liverpool version only 32K. Neither program seems to operate satisfactorily with Taskmaster and I have to run them stand-alone.

The communication environment is local direct connection to a MicroVax 2000 with direct connection at 1200 baud or via a Tandata QCONNECT box at 9600 baud.

The Lancaster version did not like the Tandata box and only worked on the 1200 baud direct line. Because you cannot tell it to ignore handshaking, you need to provide the QL with CTS signal by strapping the SER2 comms interface connection. The Liverpool Version worked with the Tandata box but only if you did not tell KERMIT that it was a Tandata box. However I needed to use Kermit the QL machine without the Tandata box and was pleased to see that the full serial port setting was available with this version.

At this point, I would like to appeal for HELP. When using both these KERMITs in simple teletype mode, quite frequently a number of characters get stuck in a pipe inside the QL serial interface. By this I mean that you type in data, but only see that data echoed from the remote computer several keystrokes later. I have been unable to discover any remedy other than to re-boot the QL. Can anyone advise an on-line fix for this problem. Incidentally in file transfer mode, this occurs less often.

For people using a modem, I would expect similar performance to the 1200 direct line, of course you may need to give the modem a permanent DTR signal ( strap 6 to 20).

Because of the facilities, I concentrated my tests on the Lancaster version. The relevant features were that the Lancaster version offers file transfer using wild-cards, and also the syntax seems more standard and familiar and permits the use of abbreviations. It also claims a binary file capability.

For starting the system, I found it necessary to set my screen to TV mode to get the program to work. You then get a prompt in Kermit and enter local commands to configure the system. In my case these are

```
set line 2
set speed 1200
connect
```

## QUANTA

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Then you are able to LOGON to the VAX computer, where you invoke the VAX version of KERMIT and give it the SERVER command. This sets up the VAX to respond to SEND and GET file requests from the QL.

A nice feature of the Lancaster system is the ability to define default device/directories for the local source and destination files.

```
Thus      set dev source flpl_
          set dev dest  raml_
```

are instructions to the local KERMIT to send files from flpl\_ and to receive files to raml\_. (These can be network devices).

To continue, once the VAX is in SERVER mode the user "escapes" back to local QL mode using the F2 key and you are then in local KERMIT command mode. Here various file transfer commands are available :

```
GET FRED.COM    will retrieve that file from the current VAX directory and store it
                 on your QL "dest" device under the name FRED.COM.
SEND AA.LIS     will send a file from your "source" device to the local Vax directory
                 as AA.LIS.
```

It is possible to give the destination file name on the GET & SEND command but this is not particularly useful and is not applicable to wild card requests. Also the use of underscore (\_) delimiters in QL file names loses the one-to-one file name correspondence. I mean that

```
SEND FRED_COM  results in a Vax file named FREDCOM.QL
```

Bearing in mind these restrictions the wild-card SEND & GET work well and are a boon for large scale file transfer. Thus:

```
SEND *.*      would send all files from the "source" device to the VAX directory with
               the same names. Similarly for GET *.*
```

The Lancaster system provides for the transfer of binary data to the VAX system. This is useful for transferring application program files which are in binary format and perhaps for doing long term data storage from the QL to the VAX. To facilitate this you must enter the command

```
SET FILE TYPE BINARY
```

on the VAX before you issue SERVER and on QL before you issue SEND /GET.

I tested this facility to some length, and at first I thought there were serious errors. However I have just performed two tests which were 100% successful (now using a different QL). However I would recommend anyone using this returns the data to source machine and compares, or uses some checksum feature.

The two tests involved transmitting container files containing executables. The first file was 12K and the second 47K. The file was transmitted from QL to VAX, back to QL, and then back to VAX. Then the two VAX files were compared. Also on the QL, the checksum in the container file was validated. This was completely successful. The data transfer rate achieved was about 50 bytes/second.



## QUANTA

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I have found the Lancaster Kermit program very useful provided that it is operated within the described conditions. (TV mode & standalone). Transfer of text files seems very good, but I feel that I need to check binary files until I get more confidence. Experienced users of KERMIT on other systems will feel at home with this QL KERMIT.

Note that KERMIT is a file transfer system - the dumb terminal mode required to start up the system is poor in this version.

Lastly if anyone has a solution for the problem with serial communications, please let me know.

Ian Hacking. Greenacres, Haverbreaks Rd, Lancaster, LA1 5BJ.

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### NUL DEVICE IN LIGHTNING

As a newcomer I wish to express my gratitude to all who make Quanta such an interesting association to belong to. The newsletter gives me the pleasure of being among intelligent people and having been a stranded user (or tinkerer?) for years I can't help but reproaching myself for not having joined earlier. I can enjoy almost anything except articles on Quill, mention of this package bitterly reminding me how the QL was let down. I seem to be the sole member from Turkey (as I make out from the list on page 28 of December issue).

Having acquired the Standard LIGHTNING I discovered that the 'nul device' can do more than gobble up stuff quickly. Prior to COPYING to RAM\_DISK (or SCR), LOADING (LRUN, MERGE included) or VIEWing etc. if the file is copied to nul, the process may well gain in speed and the duration of disk access is also reduced (benefits being dependent on hard/software and the situation of available memory etc.). All this started with me adding a "COPY dt\$,nul" to EDI from the Super Astrologer package, relying on the fact that QDOS 'remembers'.

I wrote about the innovation to D.P. after carrying out some tests (this required a lot of resets and with some keywords a stopwatch was used for timings) and received a letter from Mr. Sutton himself, explaining what is actually happening.

One has to see what benefits can be obtained with microdrives (I mainly use 3.5 in. disks but also have backups of anything important on MDVs - thanks to a warning by Bryan Davies). Though neither the cartridges nor the MDV units that I have are in the best possible condition I reckon that the results may well be adverse in some cases!

Anybody interested in having this 'nul trick' as a default whenever associated commands are issued? Maybe somebody with an assembler will provide us with this option.

Ismail Dogantug, 269 SOKAK 16/3, YALI, 35280 IZMIR, TURKEY  
23.12.89

## MORE C INVESTIGATIONS

Further to my letter printed in the December issue regarding problems with Metacomco C and assembler modules, I have done a bit more experimenting and the details are listed below.

1. I have written a small assembly routine which puts the value 12345 into D0.L and returns to C. This was assembled into raml\_test\_o.

2. A C module was then written to print a message, call the assembly routine then print the value returned from the assembly routine. This was compiled into ram2\_test.

3. The results are strange! If the linker control file has the line INPUT raml\_test\_o then CRUN fails to produce any output and the QL locks up. If, however, the link control file has the line LIBRARY raml\_test\_o then the CRUN command can be used and there are no lock ups.

EX works in a similar manner but it does not crash the QL every time - So far so good.

4. Using the version linked with the assembly module treated as a library, CRUN 'ram2\_test' prints out all the messages from the program, but, the value returned from the assembly module is printed as 0 and not 12345.

The same code, executed using EX raml\_test prints all the messages from the program and the correct value for the value returned from the assembly module ie 12345.

5. The conclusion seems to be include all assembler modules as libraries and use EX to execute the final C program if you want the values returned to be all that they should be!

The code follows for the various modules.

```

/*
 * This C module will be linked to TEST_O, the assembler module, to see if we
 * can get the two to talk to each other.
 */

#include "raml_stdio_h"
main()
{
    int x;
    printf("I'm here folks - running 'C'.\n");
    printf("Going in.....\n");
    x = bomb();
    printf("We're back again.\n");
    printf("By the way, bomb returned %d.\n", x);
    exit(0);
} /* end of main      */
/* end of C module */

```

## QUANTA

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\*  
\* This file is a single routine which may be called from 'C' to test out  
\* assembler modules. The routing passes 12345 back to 'C'.  
\*

```
      xdef  bomb
bomb  MOVE.L #12345,D0
      RTS
      END
```

\*  
\* end of assembly module.  
\*

### SOLUTION PROBLEMS.

In my letter, I mentioned a problem I was having with 40 track versions of MSDOS which could not be used to boot from. I received a letter from Mr DM Burns the next day with a possible solution.

The solution was to put

```
DEVICE = DRIVER.SYS /D:2 /F:0 /T:40
```

into CONFIG.SYS but it will still not boot up under solution, however, after copying MSDOS to a disk in this drive (using FORMAT d:/S) it will boot in an AMSTRAD (yuck) PC look alike.

The D:2 in the above line adds an external drive, in my case drive C:, which is 40 track 360K etc, but solution, on a re-boot, still can't boot from it - The error is the 'OH DEAR, you are trying to do something SOLUTION cannot emulate.....' message.

Thanks to Mr DM Burns for his help, but it still doesn't work even if I redefine drive a: or b: but it's not the end of the world.

If anyone out there knows a solution for my C problems with CRUN, or wants to try out the code for themselves then get in touch at the address below. If you send a disk (5 1/4" or 3 1/2") or an MDV cartridge I will send the source and compiled code along with the link control progs etc.

Norman Dunbar, 21 Ferguson Court, Bucksburn, Aberdeen, AB2 9AG.  
23.12.89

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### HARDDISK CONSIDERATIONS

My main interests are Assembly, C and QDOS. The programs that I use daily are Master Spy 1.7 (excellent), Metacomco C 3.02, Computer One Professional Monitor 2.02 (excellent), Hisoft Assembler 1.0 (fast), Metacomco Assembler 1.7, Qjump TKII 2.11 and Digital Lightning 1.13. I also own Metacomco Pascal and Lisp; Computer One Pascal and Assembler; Qjump Qmon; Hisoft MonQL and Digital Idis as well as other never used programs (ICE, GigaBasic & Desk, Eye\_Q, etc)



## QUANTA

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A word to soft/hardware manufacturers: include the version number of the product that you advertise. This is very important for those who want to upgrade. And, please, keep advertising...

I am considering buying an harddisk, but I don't know which. I wrote to Miracle, Rebel and ABC, but only the last one has replied (not fully answering my questions...). In the Quanta December issue, Terry Harman talks about the Rebel harddisk, but some points needs clarification. The `_CD` command has a global meaning? This is, all jobs will work with the current directory or can I assign different directories to different jobs? (see Erling Jacobsen MDD contribution on January issue. This could become a standard if it allows old software to work with defaults; it seems that the ABC product can allow this through embedded characters in the file name).

The 150K bytes transfer rate is nominal or real? Just measure the time it takes to LBYTE/SBYTE a 100 or 200K file in both a fragmented and non-fragmented disk... And what about support software such as PATH, COMPACT, BACKUP, RESTORE, FIND, TREE etc? And about future support? the ABC product relies on a standard IBM-PC controller/disk... Another point: why `mdvl`, `flpl`, `winl`, etc? in MSDOS you just type A,B or C and it is enough. The `flp_use` and `win_use` should accept a single letter for substitution, ex: `WIN_USE c`, and now I just type `SAVE c_myfile` instead of `SAVE winl_myfile`... This can seem ridiculous, but it increases productivity by reducing mistakes. If anyone of you has a hard disk, please send your comments, because hard disks can give a new breath to the QL scene.

Another interesting hardware item will be a full 16 bits 68000 (see J.W.Attwood contribution on the October issue). This, coupled with the already existing MEGA RAM from ABC and the ATARI ST cache controller, can turbo a QL by three...

About C, Assembler, Linker and Norman Dunbar's contribution in the December issue. I never had such problems, and I work with QLC and Metacomco Assembler 1.7. My ROM also says V3.02 and the compiler says V3.01. Have you changed the linker control file? see the Errata page 2. You have to add a "SECTION ASM" after the "SECTION TEXT", and "INPUT the\_assembler\_filename" after "INPUT startup". You must not give any SECTION directive in your assembler source.

There is a slight difference between EX and CRUN, but only when you supply arguments: CRUN pass all arguments between quotes to the program, including the program name, while EX only pass the arguments after the semicolon, not passing the program name. Thus, CRUN "myprog par1 par2" is equivalent to EX myprog:"myprog par1 par2", and within your program `argv[0]` points to myprog, `argv[1]` to par1 and `argv[2]` to arg2.

The unnamed job that you get after typing JOBS is the data area of the C program, and its length is equal to `_mneed` (see Errata page 1) if you specify it or the whole memory if you did not (this is a process that Quill also uses).

I have written in assembler a new "screen driver" to Emacs (it works only with Emacs and in colour) that runs at twice the speed of Lightning and I had no problem at all. I intend to submit it to the Library in the near future.

Joao Cardoso, Pr Sousa Caldas 102-42, 4400 VN GAIA, PORTUGAL. 11.1.90

## QUANTA

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### NETWORK SOLUTIONS

Writers to QUANTA and to QL World have asked why the network port on the QL often doesn't work. Certainly my machines - one an issue 5 board with the MGUK ROM, the other an issue 6 with the JS ROM - have never, until now, agreed to talk to each other. The fix may well be of general use, so I pass it on.

Bryan Davies's article in the January 1990 issue of QL World provided the clue. He suggested shorting the network out pin on IC 23 (pin 4) to ground and measuring the voltage swing at the port. Anything less than 3.6 volts points to low gain in the driver transistor and insufficient output to drive the network. My issue 5 machine checked out perfectly; the issue 6 board showed no output at all.

The fault was (eventually) traced to the board itself. The pad for R12 (R12 and R11 are underneath the heatsink) is exceptionally close to one of the thick tracks carrying +5 volts around the board. On my machine not only had this track been given a very heavy coating during the tinning process, but also, during assembly, R12's lead had been bent towards the thick track. Result - a solder bridge, a dead short between the base of TR2 and +5 volts, and a very dead TR2. I cleared the solder bridge with a sucker, used a Stanley knife to ensure that the join of R11 and R12 really was isolated from the thick track and replaced TR2 with a BC214L (as suggested by Bryan). Now the two machines talk very happily to each other over a tangled mess of speaker cable on the spare bedroom floor - there's probably about 20 yards there.

Russell Thomson, 19 The Maltings, Liphook, Hants, GU30 7DG  
1.1.90

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### MINERVA WITH TASKMASTER

I use Taskmaster and Spellbound, and Lightning, booted in reverse order. With some hesitation I ordered the Minerva 'heart transplant'. I have happily installed the EPROM and have found few bugs, non of which I should complain about because I have not given QView an opportunity to correct them. I was hoping that Minerva would highlight or cure a bug my system has had for some time.

I can crash the Editor (mine is not Special Edition but is V1.17) easily. I (re)boot the system and have the Editor available as one of the programs (I use ALT 1). After the menu has appeared I press ALT 9 which enters SBasic, and immediately ALT 1 which calls the Editor. My Editor crashes with a bad parameter error at line 0, does yours? If I try to use Taskmaster's ability to add a program to is utility/program list, then any subsequent attempt to add and then enter the Editor will also cause it to crash (again). It appears that any SBasic operations performed between the ALT 9 and ALT 1 will allow the Editor to work. Strange I thought!

I can happily report a cure but cannot explain the reason for the problem or its cure. The supplied boot program for Taskmaster contains as its last statements DLINE to 500. I replace this with the statement NEW, and the problem vanishes.

If anyone is still at a loss for storage boxes for micro-cassettes, I can recommend boxes in which transparencies are returned from processing. Perutz/Agfa I find particularly good if the inner dividers are cut out. For storing 3.5" disks, boxes of Terry's Neapolitan Chocolates are just the right size, and the contents are welcome as well!

Martin D Sandford, 25 Charlbury Road, Shrivenham, Swindon, SN6 8EE.  
10.12.89

(QView are aware of this problem and are investigating. SJ)

---

#### OLD WINCHESTER PROBLEM

I have a problem which I would like to throw in for our readers, to see if anyone can help. A couple of programs, specifically TEXT87 and CONQUEROR lock up when accessing the Winchester on my old THOR 1. I have no other problems with the Winchester, and have several meg. of programs and data which I access regularly without incident. Normally my Thor is exceptionally reliable.

Steve Sutton (who is already "on my case" as it were) provided me with a simple program for testing Winchester random access. This worked perfectly, until I tried running it against tasks which were doing lots of additional I/O (to the printer, in this case). Then I got lockups, but only after several minutes. (TEXT87 & CONQUEROR lock up almost immediately when writing).

Another problem which may (or may not) be related, occurred when we tried to copy a pre-formatted MS-DOS disk across the network. A small file copied correctly, but a large file (about 3M) only copied about 1.4M but didn't record an error. We tried to copy twice, using different methods, but with exactly the same result:- an output file size about half the input size, with no error reported. The resultant file size had no discernible "special" number (it wasn't even an exact number of K) and was EXACTLY the same size with both methods..

```
FSERVE:COPY WIN1_MSDOS TO N2_WIN1_MSDOS and...  
COPY WIN1_MSDOS TO NETO_2 ... / ... COPY NETI_1 TO WIN1_MSDOS
```

Does anybody out there have any ideas?

#### WISH LISTS...

I have a considerable amount of QL software which I use quite extensively, and have developed an extensive "wish list" for some of my favourite pieces. Perhaps some of the software writers will read this and consider updating their products.

First of all, and something which will probably come now anyway, is Winchester compatibility. There is a lot of software which still only recognises 4 byte device names, whereas a Winchester directory tree can have device names much longer than that. Particular culprits are TURBO and SPELLBOUND, where I have had to put the programs and/or data on my root directory, when I would have preferred to put them on sub-directories. On the same theme, a Winchester directory tree gives you access to a lot more "devices" and gives you more ways of splitting up your data. I would like to see more variety allowed for devices, so that for instance a Desk Top Publisher might have its Fonts on one device, its patterns on another and its data on a third (which should be amendable dynamically from within the program).



## QUANTA

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SPELLBOUND is brilliant. I do quite a lot of WP type work, and I love the "while you type" checking; but I wish it would not switch itself of so easily. I understand the reason for this, but perhaps it could switch itself on again when you start a new word or at least BEEP a warning when it switches off.

TURBO TOOLKIT. I think this again is a wonderful adjunct to the brilliant TURBO compiler; and I particularly like the inclusion of the "run time version" for program writers; which only works with compiled programs. I would like to request though, that the "parameter passing" via EXECUTE etc... is enabled from BASIC. This would allow us to give "users" an easy "get you started" route, e.g. passing the device name of a parameter file, without having to write complicated CONFIGURE type programs, which directly amend the program source.

Also, I don't like the implementation of PIPES in TTK. I would like to see PIPES as named or numbered devices, to allow concurrent tasks to communicate without all that tedious messing around with SUPERBASIC channel numbers.

TEXT87. Another worthwhile program, and one of the few Word Processors on ANY machine which will handle proportional text properly. I have a few minor quibbles though:

DELETE WORD, it shouldn't also take out the following / preceding TAB STOPS. MARGINS should allow indented paragraphs as well as hanging. The "auto tab" option is a useful compromise, but it causes problems with QUILL imports; which I have to do quite often.

DELETE PAST LINE END. It's a real nuisance not being able to do this easily. FUNCTION KEYS. Almost everyone who uses this, will have used QUILL; so I think Fred should try to match his Functions, as far as possible, to those used by QUILL. E.G. move Refresh Screen to Shift F5; move Print Type Selection to F4 (preferably the multi-choice version).

I have used TEXT87 extensively and find that, now I have it set up the way I want it, it is an excellent program, and surprisingly easy to use. For those of you have doubts, I urge you to persevere. It takes a bit of getting used to but it's worth it.

### ADVICE FOR QUILL USERS

Having a Laser Printer really highlighted the shortage of Translate codes for Quill. I have come up with a partial solution, which others may find useful. What I have done, is set translates for ^esc (read that as control ESC) to ESC (27) and ^0 through ^7 to binary 1 through 7. Most Epson control sequences consist of ESC followed by a printable character followed by a parameter or number of parameters which are low binary numbers (usually 0, 1 or 2). I have found that this method allows me to get at most of the functions my printer is capable of. It does cause some trouble with the right margin, but for most purposes this should not present a problem.

THOR MOUSE. Finally; one last request for your readers. Does anyone out there know how to read the mouse on the old THORs?

Neil Taylor, Director, Taylor Made Systems Ltd.

71, Wellington Close, Hepworth Way, Walton-on-Thames, Surrey, KT12 1BB.

Tel: (0932) 241854

9.12.89

## QUANTA

### QL ENHANCEMENTS :- COMMENTS ON MEDUSA

Having nearly finished upgrading my QL to a 16 bit system using a 68000 processor, I was very interested to read Jonathan Oakley's proposed MEDUSA system to optionally use a 68020. In the light of my experience gained on the 68000 project, I would like to make the following comments and suggestions.

Although it is fairly involved to use a 68000 with the QL it can be achieved, giving a significant component cost reduction at the expense of greater board complexity. If I exclude the address decoders, buffer ICs, EPROMs etc. of my design, then the actual circuit to replace the 68008 by a 68000 uses 17 TTL ICs plus the microprocessor. The design used only standard 74LS TTL ICs as I was only making a one off board. It could be simplified using PALs; I estimate 7 ICs would remain as LS TTL whilst the remainder would be replaced by a lesser number of PALs. An address decoder controls whether the 8 bit adaptor is to be used or whether the 16 bit bus circuits are accessed directly, it can thus accommodate both the QL board circuits and any 8 bit expansion boards; a disk card in my case. The 68000 will run QDOS and QL software with no mods; it responds identically in machine code as the 68008 and the adaptor looks after conversion of 16 to 8 bits. The avoidance of separate firmware gives further savings to set against the cost of the larger board. Together this might make the 68000 justified, compared to the £100 cost of a 68020 and it could result in improved compatibility.

To cut costs it would be possible to retain the original QL board to provide video, serial ports, and even keyboard with an enhancement board plugged into the expansion port. I have recently realised that it is not necessary even to remove the 68008 from the QL as this can be disabled from the expansion connector. This is how my system is arranged, with original and new boards packaged in one box, but the enhancements can be operated plugged into an un-modified QL keeping the original case. I have done this extensively during testing to save the need for trailing wires connecting up the new keyboard and power to the new system. One advantage of keeping the QL board is that a commercial enhancement board need not have the QL ROM present on it in 16 bit form, thus avoiding copyright problems. The enhancement would then have 16 bit RAM at address \$000008 to \$00FFFF, and EPROM at \$000000 to \$000007 with vectors pointing to EPROM code at some other address. This contains a short boot code that copies from an image of the 8 bit QL ROM and rear cartridge at say \$FF0008 to \$FFFFFF, and writes it to \$000008 to \$00FFFF, before jumping to the normal start address read from the QL image. I have not used this scheme myself though I have no doubt that it would work. I have included a switch to allow the 68008 to run the QL board unexpanded when required. This allows copying between microdrives and floppies as the mdvs do not work with the 68000.

My system so far is only 640k byte but I believe that QDOS will allow RAM size up to the address range of the processor in use, permitting over 15 Mbyte with a 68000. This requires however that nothing but RAM exists from the start of screen RAM to the top of the 68008 range. The choice of 8 bit QL cards that could be retained is thus limited. I use a Miracle Disk card and that uses only addresses below screen RAM for both its EPROM and disk interface IC, and so causes no problems. If I need any more interfaces, these will be built as 16 bit using high addresses. It should be possible even on a 15M byte system, to run all software except those which only run on unexpanded systems.

## QUANTA

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So far I have not used my system other than for testing, as I am just completing the case, but the 2 times speed improvement certainly makes a big difference to the programs I have tried. If QVIEW can offer the MEDUSA at a reasonable price then I am sure its further features will be attractive enough to make it a good success.

John Attwood, 4 Rose Lawn, Bushey, Watford. WD2 1HW  
11.2.90

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### CONTRIBUTIONS TO LIBRARY.

I just had two programs accepted for the Library, which might be of interest to some members:-

#### JOES\_PROCS

This is an assortment of 20 PROCedures, which I have found useful over the years, ranging from very simple to quite complex. It is my response to requests for help for "beginners", giving the code, explanations and demonstrations of the PROCedures.

#### J\_SPRING\_CLEAN

It replaces my old 3 separate versions of "FILE\_HANDLER" in the Library viz. "FILE\_HANDLER", "FILE\_HANDLER\_TRP" and "FILE\_HANDLER\_TII", with additional facilities and improvements.

This menu driven program is designed for periodic (hence the name), fast and user friendly bulk deletion/copying/renaming of a number of files at a time. The maximum selection is 150 files, or memory limitation of ram disk size.

For "spring cleaning" deletion of redundant files, many such files from several media can be put in one bulk selection and then quickly deleted from all the media (since deletion of non-existing files takes no significant time).

Similarly, many files from different media can be backed-up as one selection with the same, or changed names.

The program will print directories (across the page, if preferred and with an option to order on first letter of file name, irrespective of upper, or lower case).

It takes advantage of the the capabilities of Trump Card, Qflash and Toolkit II, if present. A memory expansion of 256K minimum, a monitor display and a ram disk are essential for this program, which will be in the Library in a SuperBASIC and a Q\_Liberated version .

All comments on either program would be appreciated. I find it impossible to judge whether my past and present efforts have been of any earthly use to anyone in QUANTA.

Joe Haftke, 7 Lansdown Road, Sidcup, Kent, DA14 4EF  
Tel: 01-302 6154 or 01-300 1300 (01 will change to 081 from 6.5.90)



## QUANTA

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### LIBRARY NEWS

The latest additions to the QUANTA library have recently been issued to your sub-librarians, along with an updated library guide. Included with the programs is a revised version of the popular QLWORLD INDEX program. This program has been moved to a new disk, called SPECIALS\_3.

Please don't all rush at the same time to have your guides updated, remember your librarian only has a few hours a day to do the copying. Some of them have to work for a living also.

Are there any members who are able and willing to translate programs from the European languages to English on behalf of the library. Would you please get in touch with me as soon as possible. We are now receiving programs from other QL groups in Europe, and we would like to be able to add these to our library.

### CONTACT REQUESTED

Would the following members, or anyone who knows the whereabouts of those listed below, please get in touch with the Head Librarian, Leighton Davies

Mr. Jackson author of Forth79. Mr. Rose author of NLQ.  
Mr. Sokeer author of Lisp. Mr. Towers author of QLAD.  
Mr. P. Murphy author of Bunkered.

D. Johnson, The Corner House, Loxley, Warwick.  
Tel: (0789) 842543

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### FOR SALE

Sinclair QL JM Rom (No. D14-094752), in original packing with manual, power supply, Pision software. As new Hardly used. £70 Epson LX-80 dot matrix printer with manual, paper separator, tractor feed, 2 spare ribbons. Ex-display. As new, hardly used. £80. 2 centronics printer interfaces £9 each. 7 cartridges (hardly used) £4. Books: QL Programming (Deeson), QL Word Processing (O'Reilly) £1 each. 1 years Quanta issues. £160 the lot.  
Michael Picker  
Tel: (0296) 29667

### EXCHANGE

Microwriter Agenda system (with ni-cad charger), 32k ram pack, specialised serial cable and IBM transfer software and backup - all the above in vgc and still under guarantee - FOR good reliable QL system (JS preferably) - with a TrumpCard (no other interface considered).  
B. Sheehan  
Tel: (091) 271 4083 after 6pm

### FOR SALE

Solution PC-Emulator plus several useful Shareware programs for the PC. Also QL-Home Finance and QL-Touch 'N' Go Typing Tutor. Offers please.  
J.A. Otto, 12c Station Road, London NW10 4UE.  
Tel: 01-961 4902

FOR SALE

Merlin "Tonto". Made by ICL and based on QL with RAM disk, vastly superior QWERTY keyboard and number pad, battery back up for clock & calender, telephone, directories, modem (Glass Teletype & ViewData), autodial, auto-answer, file "date stamping" better than TKII, notepad, calculator etc. Plus Psion "XCHANGE" in ROM (Gives up to 8 of the Psion suite and uses minute amount of memory.), power pack and monitor (mono) unit, BASIC on cartridge, all manuals, leads and serial printer (probably an Epson RX80) giving NLQ or draft from pop-up menu plus choice of screen dumps. With some spares including ROM chips, voice chip and power pack & monitor. Reduced to £275 the lot.

QL with JS ROM and SPEM memory expansion to 640K, Guide, Psion suite V2.3, leads and PSU in original box £125. "Transform" box and 10 used mdvs £13. Serial to parallel printer lead £19. QJump RAMDisc on mdv £5. Task Swopper £12-50. TurboQuill+ for expanded QLs (V2.3) £10. RGB lead for direct access (dodges RF circuitry) to colour TV £7-50. Large heap of PCW, QL World, QUANTA newsletters and some odd books dating from 1984. Open to any reasonable offer that includes collection.

David Hughes

Tel: (0933) 663602

FOR SALE

Sinclair QL World; Mar 86 to July 88, excluding Aug 87 and Jan 88. £10 + £3 p+p. Please send S.A.E. to return money if already sold.

R.C. Myers, 18 Mirless Court, 45 to 56 Coldharbour Lane, Camberwell, London, SE5 9QW.

FOR SALE

Forced compatability requires sale of the following:

640K QL (Internal Sandy upgrade), complete with Schon IBM keyboard (recently fitted), Psion quartet (2.3), cables, power pack, manual etc. Sandy disk/parallel printer interface and double 3.5" disk drives. Phillips green screen monitor (Model 7001). Also Miracle Systems Centronics printer interface. LIGHTNING special edition on ROM disk. Z88 interface unit complete. Tandy modem with automatic dial unit and all necessary Qualsoft software. TEXT 87 on disk, plus tutorial disk. Touch Typist, Archivist, QL Turboquill, Recover, Software directory. Transform QL cover and MDV storage box complete with 20 mdvs. Sundry QL Worlds, QUANTAs and books. Spare (original) keyboard. All original software with manuals. PRICE £450 ono, including postage, insurance etc. May consider break.

Also ATT DAISY WHEEL PRINTER, cost new £450. Never used, any sensible offers?

Dave Baxter

Tel: (09603) 78204.

FOR SALE

Brother HR-10 Daisywheel printer, complete with tractor unit and lead for QL. Printer drivers and manuals in French, German and English included. Price £110.

Tommy Thompson, 15 Thrasher Road Aylesbury Bucks HP21 8DZ Tel: (0296) 431173

## QUANTA

### FOR SALE

90 5.25" disks in two disk boxes (80 & 40) £30 / offers. Centronics printer interface £15. Thirty-seven issues of QL World: April, June, Aug-Dec 1986, Jan to Dec 1987, Feb, May-Dec 1988, Jan, Mar-Aug, Nov, Dec 1989: £1 ea or £25 the lot. Adventure Creation Tool £5, Supercharge £10, Transfer Utility £10, Blag2 £5, Starplod £5 - all on 3.5" disk. Cartridge Doctor, Nucleon, Starplod, Here We Go, Bridgeplayer, Q Hyperdrive, Scrabble, QL Fictionary £5 ea - all on mdv. Books (Various) - enquire.

### WANTED

PC-style keyboard (Schon or Spem) - or JS QL with keyboard.  
Roy R Johnson, Flat 2, 66 Victoria Rd., Exmouth, Devon, EX8 1DW.  
Tel: (0395) 275290

### FOR SALE

Zapper & Eagle by Eldersoft £4, Inkwell Delux Typer (font editor, print utility) £6, GraFix (comprehensive printer driver) by PDQL £10, Serial 8056 Printer with leads, manual & large roll of paper £25.

John Arnold, Petersfield  
Tel: (0730) 67486 Evenings and weekends

### WANTED

Single disk drive and extension board to enable my lads to load their games from disk on their QL. Must be reasonably priced.

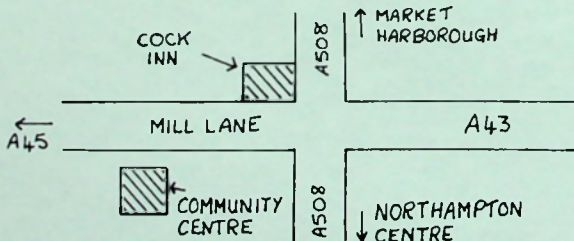
David Weston, 24 Howe Close, Wheatley, Oxford, OX9 1SS.  
Tel: (08677) 2832

### WANTED

GST Macro Assembler if it is complete with all the documentation.  
Joao Cardoso, Pr Sousa Caldas 102-42, 4400 VN GAIA, PORTUGAL

### NORTHAMPTON DIRECTIONS

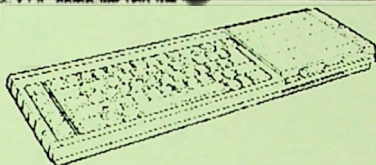
The QUANTA A.G.M. and workshop is at the KINGSTHORPE COMMUNITY CENTRE, NORTHAMPTON on March 24th and 25th. Access is easy from the M1 junction 16, or the A508 Market Harborough road. Follow the signs to Kingsthorpe, and you will reach some traffic lights at a cross roads with the Cock Inn (a Berni) on one corner. The community centre is just 50 yards away down Mill Lane, opposite the Kingsthorpe village sign. Ignore the "Authorised Personnel Only" signs, and drive through the green gates to unload. Parking is not allowed in this area, ONLY for unloading. Take the next turning on the left for a limited amount of parking.





# SINCLAIR Q.L. SALE

Now you can really afford to have a spare Sinclair Q.L. at our low prices. We have a quantity of JM & JS ROM Sinclair Q.L.'s to dispose of at very low prices. All units are boxed and tested prior to despatch, and come with a 30 day warranty.



The package contains the Q.L., Power supply unit, manual, and all cables. There is no software with these machines. Stocks of these machines are limited, so order now to avoid disappointment. Prices start from just £75.00p for the JM Rom to £85.00p for the JS Rom. Postage and packing costs an additional £4.00p. We are pleased to accept telephone orders with your ACCESS or VISA details. All stock immediate despatch.

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**JS ROM £ 85.00**

## Q.L. PRINTER INTERFACES

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**UK HOME COMPUTERS**  
82 Churchward Avenue, Swindon, Wilts. SN2 1NH.  
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