QUANTA

VOLUME 7 ISSUE 3 APRIL 1990

CONTENTS

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. Alternativaly 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
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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.

SUBGROUPS

Title	Location	Date	Contact
Essex	Rayne Village Hall Gore Road Rayne Nr. Braintree	2nd Sunday Every Month 2.30 onwards	John Mason 'Karama', London Rd Billericay, Essex Tel (0277) 651593 or Dave Walker Tel (0707) 52791
Solent	Delta Leasing Ltd. Garfield Road Bishops Waltham	1st Saturday Every Month 1400 to 1800	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 Neots 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 Middlewitch 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 Berkenhead Tel (051) 652 7366
Northampton	Kingsthorpe Community Centre	2 to 5pm every 2nd Saturday	Terry Harman 304 Obelisk Rise Northampton Tel (0604) 842875

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
Lancashire	Lisieux Hall Social Club Dawson Lane Whittle le Woods Chorley	1st Monday each month	Steve Hutton 44 St.Mary's Road Bamber Bridge Preston, PR5 6TE

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

CALENDAR

April 28th	Seeheim-Jugenheim, Germany	Alternative Micro Show
April 28th-29th	New Horticultural Hall, Westminster, London	All Formats Computer Fair 10 - 5 Sat, 10 - 4 Sun
June 22nd-24th	Thetford	Quanta Workshop
October 20th-21st	Worthing	Quanta Workshop

EDITORIAL

Several people have commented to us, that the magazine appears to be particularly biased towards the 'Tinkerers' rather than the users. What you must remember is that the magazine is made up of YOUR letters. We do not ask members to write articles, they are a selection of letters sent to the editor. O.K. so you feel that you do not have the knowledge to pass onto others, then why not let me know what you would like to see in the magazine, or the topics you would like to see covered. I could then print a list of the most popular topics to encourage members to write on these subjects.

Bulletin boards are becoming ever more popular among our members, but we do not have a collective list of the boards you are operating. If you are running a board, please let us know, and I could then print a list, so the rest of us know of your existence.

You may have gathered by now, that I am very short of articles for next months magazine. I could manage all of three pages for the next months issue, without boring you by repeating the same subjects over and over. Please ensure that you get your articles to the editor by the 15th of each month, for possible inclusion in the following months issue.

The workshop at Portishead on Sunday 4th March was a great success. Not only did the sun shine on us, but there was also a very good turn out of traders and members. Many thanks to Chris Gregory and his team for all their effort in providing the best workshop we have yet attended. The 'Birds Eye View' articles appear to have left their mark. Congratulations.

The reported bug in Taskmaster in the February magazine, has been undergoing further investigation. It appears that there is a compatibility problem between the Atari, the QL drivers and Taskmaster, but as yet, it is not clear where the problem lies. As and when the problem is located and hopefully fixed, we will let you know.

Sarah Johnson

SOUTH-EAST's FIRST WORKSHOP

On the weekend of October 20-21 1990 there should be a QUANTA WORKSHOP. The venue is the Windsor House Hotel, Windsor Road, Worthing.

As it is at a hotel there will be accommodation available for those that wish to stay for both days. It should be possible to find a wide variety of suitable accommodation in the town, so why not bring down the family? The town of Worthing is an ideal spot to explore the county of Sussex from, so while you are busy tapping keys, splashing out on some new soft/hardware, or just 'busy' chatting, the rest of the family can be out and about in the town or country.

We have the conference suite from Saturday morning to late Sunday afternoon, so come one come all. A little birdie tells me that this will be the South-East's first Workshop, so do come and support us.

By the way the hotel is accessible by public transport, a short bus ride from the main Worthing Central Station which is in turn only one change, or less, from London Victoria .

On another subject, is there any one else out there that would be interested in forming a sub group and lives within a short drive of Worthing/Horsham. If so please ring me after 18:00 hrs.

Andrew Knights, "Kitlands", 57 King's Stone Avenue, Steyning, Sussex, BN44 3PJ.
Tel: (0903) 812820

THE ESSEX SUBGROUP - HAS MOVED INTO THE NINETIES

The better than 30% response to the Questionnaire sent out by the Subgroup at the end of 1989, to all known members of Quanta living in their area, confirmed the perceived need to move to a more readily accessible location for meetings, reaffirmed that Sunday afternoons are the most generally acceptable day and time, enabled a new venue to be found and, identified appreciable interest in setting up a Subgroup Bulletin Board.

The first meeting at the new venue, Rayne Village Hall was held on Sunday 11th February when despite severe weather some 11 members turned out.

Subgroup meetings will now be held at 2.30pm on the Second Sunday in each Month at Rayne Village Hall, Gore Road, Rayne, Essex. Rayne is situated on the north side of the A120 between Great Dunmow and Braintree.

Thanks to the enthusiasm of Ron Dunnett the Bulletin Board requested by subgroup members - 'QUBBE' (QL Users Bulletin Board in Essex) - came into operation, 24 hours a day, on 1st March. It is of the ringback type - the telephone number is 0376 47852.

The next meeting of the subgroup will be held on Sunday 8th April when the main topic for the meeting will be QPAC2. It is intended that the topic for the May meeting will be desktop publishing.

John Mason, "KARAMA", London Road, BILLERICAY, Essex, CM12 9HJ
Tel: (0277) 651593 or Dave Walker - Tel: (0707) 52791.

NEW SUB GROUP IN LANCASHIRE

If you live in Central Lancashire and would like to join our new sub-group, please contact me direct. We intend to meet on the first Monday of each month in the delightful setting of a huge old barn in Chorley, which has been converted into a social club. It is a little out of the way, and can be difficult to find without a map, so if you would like to come along, let me know and I will be delighted to send you one.

The address is:

Lisieux Hall Social Club, Dawson Lane, Whittle le Woods, CHORLEY

The room upstairs will be all ours for a small fee to cover heat and light. Oh! Incidentally, I am the steward of the club and can recommend the ale! I am sure there must be many of you out there who would enjoy meeting people with like interests, and who have problems to solve, just like I have!

Father Christmas (i.e. me!) bought me Text87, and despite struggling with it for hours and hours, I can't get it to do what I want. I would be grateful for some help from someone on the spot, so to speak, who can show me what I'm doing wrong.

Steve Hutton, 44 St Mary's Road, Bamber Bridge, Preston, PR5 6TE
22.1.90

QL CONNEXIONS

I am particularly interested in Amateur Radio - call sign is G3JLX - and would like to see any software or hardware projects relating to this subject. The Qontrol II Board I have contains 24Ø bit fully programmable ports plus 2 control lines for each. I should like to know how this could possibly be used for RTTY or maybe 'Packet' Radio. Colin Opie's series (QL Connexions) in QL World promised to publish articles on the uses of the Qontrol II board but this has not happened.

I have not been able to travel to the workshops due to ill health, but Dennis Briggs and I have had several chats about this and that - mainly MIDI, in which I am also interested. Any information on music programs and MIDI interfacing would also be helpful.

Ray Dawson, 4 Douglas Road, Hazel Grove, Stockport, SK7 4JG
Tel : (Ø61) 483 Ø372

BACK TO THE FUTURA (MEDUSA ?)

As rumours of a new Sinclair super-machine named 'QL' began to spread amongst Italian computer freaks in late 1983, I started to imagine what it would be like to program on such a challenging and powerful micro, whose operating system and BASIC were rapidly winning the attention of several PC magazines.

It was not until 1986 though, that I could lay my hands on the long-craved QL and it was really disappointing that the first surge of enthusiasm should soon be faced with "a few problems".

Apart from the unlucky choice of the Italian version (the MGI ROM did not take long to "display" its bugs and incompatibilities) other considerations came to foster the gloom of QL owners: in addition to a very limited (and almost waning) software range and a gradually declining high-street support (it would take utmost care to detect the ever-fewer articles about the QL and equally great patience to read them over and over pretending to have a good lot of information) there was, for Italian QL users, the geographical separation from the QL's native land, which amounted to scanty knowledge of what 'was going on' for the QL in the UK. Hints of an imminent Amstrad takeover presaged nothing brighter and despite (or because of!) Sugar defeat tasted really bitter.

Nevertheless I decided to 'upgrade' my QL to JS and did go on experimenting with SuperBasic, PEEKing QDOS' awesome intricacies as well as trying to make sense and use of the few software packages available in Italy at the time.

By now those efforts seem to have been worthwhile. The QL did survive and is now thriving as never before, boasting its range of potentialities through the unrelenting dedication of a selected following and the true commitment of quality software / hardware producers: a new lease of life which the QL demanded and its faithful owners deserved.

What now perhaps seems to be lacking, at least to me, is a more versatile kind of hardware support, to finally match the proven quality of SuperBasic and QDOS (merits to Jan and Tony!) and free them from the vexing restrictions imposed by the original hardware design. Regardless of the wide range and sophisticated quality of hardware add-ons currently released for the QL, I think there's the need for a better motherboard design, a self-contained unit possibly substantiating all firmware graphics, speed, sound and I/O enhancements long projected but never actually gained. So far as I know, not even the acclaimed and valuable THOR series meets all the above requirements.

Their power and flexibility notwithstanding, both Strong Computer's Atari ST QL emulator and Tebby's planned QL compatible OS shouldn't, I think, be applauded as a definite solution (no reference intended). Perhaps they fail to provide some sort of alternative hardware standard, guidelines on which QL programmers might depend their products and outline future software developments.

Browsing latest reviews, I get the impression that QL software products are gradually pushing ahead of standard circuitry, and their excellent performances seem to increasingly suffer from hardware restrictions.

It's perfectly sensible that software producers should on the whole avoid considering all extras, and while commonly accepted upgrades (disk drives or memory expansions) are certainly welcomed, (and to some extent required) there seem to be a number of firmware hardware features doomed to be left unchanged.

Speed is perhaps one major concern here. It transpires that speed on the QL can't be properly increased, no matter which 68xxx processor be used. Even the legendary 68020 seems heavily curbed by the limited QL circuitry which it's made to confront with. Again, the ultimate target of the average QL user remaining that of serious programming, I shouldn't think it debasing to have improvements in the area of sound, graphics and interfacing options.

What I (and arguably many other QL owners) would like is a NEW board, designed to finally get rid of all hardware quirks (lock-ups, key-bouncing and the like), to make the most of (possibly extended & revised) QDOS and SuperBasic while keeping use of all excellent software (and perhaps hardware) so far produced and allowing for new, even better packages. I don't think all this is just a daydream: the market is there, various hard/firmware design solutions are probably already available (under development anyway) and, mostly, an enthusiastic host of ace programmers is there to get the substance out of it all.

Whilst I feel pleased and interested in the huge number of activities currently promoted for the QL, and truly appreciate the healthy spirit of enterprise informing the QL scene, I can't but regret the demise of Sandy's "Futura".

Even though some of the features planned for that wondrous machine are apparently being filtered to standard QLs (see POINTER environment, SPEM keyboard etc.) I don't think they are eventually going to make up an alternative standard, as to really get the most of those enhanced features an almost drastic hardware upgrade would be necessary in the long run.

It might be argued that the QL derives its present success from being a composite system, tailored to different needs and budgets. Yet I don't think a major hardware upgrade would spoil such an image: rather, it would reinforce it and extend it to potential users.

What I do hope, all things considered, is that some solution be eventually found for the "Futura" (or the rumoured 68020 Medusa SuperQL from QVIEW) to become available in some form, both to QL users wishing to plug into a more powerful (yet compatible) system and, concurrently, to first-rate software houses already supporting QLs.

PROLOG FOG

I find it odd, actually a bit unfair, that after a strenuous six-year existence on the market, and the new lease of life of the present time, no proper PROLOG interpreter (or compiler) should (for all I know) be readily available for the QL.

Neither the relative newness of that language, nor perhaps the specialist involvement it appears to imply can account for the scarce attention PROLOG has received. Among such high-sounding names as FORTRAN, BCPL, APL, C, PASCAL, LISP and FORTH, PROLOG seems to date the main missing item. It isn't presumably a fact of heavy machine requirements, as versions of PROLOG running on 512K machines are a reality.

DP's PC Conqueror advert in QL World reportedly states a number of AI-oriented language packages (PROLOG Professional - MICRO PROLOG - LISP ..) working fine under the emulator. While DP's excellent software does give would-be PROLOGers a chance to plunge into the wealth of PC implementations, on standard (non-ATARIsed) QLs speed remains a thorny matter. I wonder what the speed of PROLOG programs running under Conqueror on a "common" QL would be (perhaps someone might give hints). In terms of overall efficiency (that is beyond simple experimenting), I expect that a dedicated 68008/QL PROLOG implementation would prove best, unless we all upgrade to some 68020 Super-super QL to come.

Provided there's no hidden market policy to the contrary, I think PROLOG may profitably (and hopefully) figure among future software developments for the QL. Wouldn't it be great to give QL users the chance to combine the revived strength of their systems with yet another powerful (and future-headed) programming tool ?

LISP, PLEASE

Being a relatively newcomer to the language, I was impressed by its powerful programming strategy. Once initial snags are overcome, BASIC prejudices removed and you start to get the hang of it, you feel somehow open to new fields and unprecedented things.

I've been using Metacomco's LISP interpreter for some time now and found it worthy in many respects. Perhaps what I miss more is a built-in "compile" option which, on remarkably slow hardware as is that of the QL, would mean lots in term of speed (if only at the expanse of flexibility).

At the moment I'm trying to emulate some COMMON LISP functions not implemented in the Metacomco package (DOLIST, DO*, LET*, CATCH, THROW). I need them to easily follow programming techniques and examples introduced in "Natural Language Processing In LISP" by G.Gazdar and C.Mellish. (Addison-Wesley, 1989). Suggestions of any LISPian kind would be much appreciated, especially from COMMON LISP wizards.

I recently got Mr. Wilfried Säcker's WS-LISP interpreter from the Library. I find the package is well-designed and a recommendable intro to the LISP environment; it even includes options unavailable in Metacomco LISP (e.g. GENSYM, DRM). I've got WS-LISP v 1.8 and would like to know whether further developments are in the pipeline.

MINERVA 1.66
It DOES work wonders. Once fitted (permanently) in my QL it made everything much slicker and a good deal more reliable. I still have Lightning SE ROM plugged in for faster text handling: that makes up an electrifying upgrade combination.

So far, the "incompatibilities list" remains blank. Having tested under MINERVA several pieces of popular software (including games) no catch was encountered, except for erratic (yet harmless) screen display while using the overdrive configuration facility. Provided you make a reasonable usage of the new two mode option I expect no serious problems should come from this OS.

I haven't yet investigated the new aspects of the system (reviews about these sound generally positive and for now I'm inclined to trust them). The system main overhaul seems in itself a great advantage over past bugs and slugs. Definitely no regrets about giving my old JS couple the push.

No drawbacks on the hardware front either. My QL system includes 512K SPEM internal expansion, 192K QEPROM board, MP disk interface with QFLP upgrade and MC speech synthesiser. The lot is connected to the SPEM Futura - style keyboard and housed inside a matching case. MINERVA harmonises perfectly with everything, including PCB modifications suggested in QUANTA and QL World to crashproof the QL (capacitors, tantalums and the like).

PCB MODIFICATIONS
Following suggestions on QUANTA (September 89) and QL World (November 89) I had my QL PC board made into an almost new hardware layout. The only components that couldn't be properly fitted were the 200pf capacitor on IC21 (when soldered to the indicated pins it made the QL display go haywire) and the 0,1uf capacitor on the 8749 CO-Proc (everything looked fine at first but I found out the ENTER SPACE ARROWS row of the keyboard had been cut off - perhaps due to the presence of the CAPSLED QView kit or to non-standard Futura keyboard ?). (Incidentally my QL is Issue 6). Occasional problems occurred with screen display going unexpectedly striped and speaker noisy, after which the machine obviously locked up. It appears all this hassle was caused by the CPU not being tightly pressed in location and no more trouble ensued after that was carefully performed. (Any suggestions about securing the CPU for the clumsy ones like me who keep tossing their QL case all over the place ?)

MC SYNTHESISER
I'm writing a SBASIC program to make my MC synthesiser interface utter Italian (and at a later stage English) words without having to manually convert them into phonemic strings each time. The program adds a procedure, SAY_ITALIAN, having as parameter a simple string to be pronounced:
e.g. SAY_ITALIAN 'AMORE' would automatically convert single letters into appropriate combinations of English phonemes (something like AA1 AA1 AA1 MM1 MM1 AO1 AO1 RR1 EH1 EH1) to get the best possible effect (unfortunately the MC i/f doesn't allow pitch/tone controls). Italian consonant clusters GN GL sound a bit weird, as do R and Z sounds, but the final outcome is acceptable.

You may use the SAY proc to cheer up editing of BASIC files, with your synthesiser reciting each line as the listing appears on the screen. I'll be having a go at English words in the near future (English pronouncing Dictionary in hand) and provided parsing doesn't get too harsh and bulky coping with pronunciation exceptions I hope to have a SAY_ENGLISH proc working some day.

SEIKOSHA SP800 and TEXT 87
After months of vain sweat I eventually found a way to get my SEIKOSHA SP-800 9 dot matrix to correctly print almost the entire Character Set Table 2, including accented characters and many more (£ sign, math symbols) in ANY option (bold, underlined, italic, enlarged, elite, pica, condensed etc). I modified the FX80 driver to cope with extended char set and re-assembled it using GST assembler. Now I've got two twin drivers (DRAFT and NLQ) for all needs. Do drop a line if interested.

CAR STICKERS
Here are a few suggestions for car-stickers slogans. While it seems natural that "Archimedes users do it at their own RISC", the following might apply to the QL or QUANTA:

QL owners do it SUPERBasicalLY
QUANTA members do it EASEly
QL users do it with CARE
QL owners do it tranQUILLy
We at QUANTA do it THORoughly
QUANTA freaks do it on ICE
IQL is measured by paraMETERS
QL wizards MOVE. to the BIT
Quanta EXECutives do it as a JOB

Keep up the superb work !

Davide Del Bello, Via Verdi 5 - 24060 CASAZZA (BG), ITALY, 035/810213
20.1.90

IN PRAISE OF MICROVITEC

A few weeks ago I started to get multi-coloured flashes on the screen of my Mitrovitec Cub 653 Monitor which I have had longer than I can remember, possibly about 1984/5 and which is used for some hours on most days.

By eliminating other causes I found that it was the monitor which was at fault and, as I had reason to be in Bradford, decided to call at the factory to see what could be done. The factory is in the Bolling Road, to the south of the Bradford-Wakefield road, not far from the town centre.

The result was that, after about an hour and a quarter, when I was allowed to be with the technician testing it, I emerged with a monitor which, for some weeks now, has been as good as ever. The cost was very satisfactory - less than the installation of a new membrane in the QL.

The explanation given was that some of the components had started to let too high voltages through and the tolerance limits had been passed. I was told that the 653 is no longer made, but that a one-off could be made to order, at a reasonable price.

The usual disclaimer about shares or relatives in the firm are made by a very satisfied customer who received very courteous treatment from the half-dozen members of the staff with whom I came into contact.

Arthur Nunn, 32 Westholme Road, Masham, Ripon, North Yorks, HG4 4EX
14.2.90

LIBRARY - IN A FLASH!!

I thought that I'd write in to detail my dealings with the quanta library and how impressed I am with the content. I rang Mr. Johnson (as all good users should) and after the initial shock of my request (I wanted 9 disks) he said he would do the job. So eagerly, one Saturday morning I sent my cheque and disks not expecting a reply for many moons mainly due to the fact that Monday was a Bank Holiday. Imagine my delight when no sooner than the following Thursday a package arrived. A hearty thanks to Mr. Johnson for his assistance.

I am very impressed with the contents of the library, although I have had some problems with a few of the programs supplied. For example, on the mandelbrot disk, a program called manvoy_bas stops with the message "bad name at 520". This line is S_load#6. I've checked the listing and can't find a procedure s_load#6 (he says showing his naivety), so basically I am lost. Also the Worm adventure on the strategy disk_1, the program stops at line 160, with the bad name message. Continuing gives "at line 1180 buffer full". No idea! I realise that I should be worrying the head librarian with these problems, but I was wondering whether any users had encountered similar problems. Apart from that I am very impressed with the content of the library, especially the CAD programs and shall be sending for the rest of the library soon. (beware Mr. Johnson).

{David has answered his queries with these programs. S_LOAD is a command in the turbo toolkit file called TURBO_TK_CODE which is with the program. This is loaded by the BOOT_MAND file. Problems with programs should be addressed to the quality controller, giving him as many details as possible, including what equipment used. SJ}

Pascal Corner.
I have written simple programs to write a file of records to disk and then another program to read them back to the screen. Unfortunately, I have been having problems with them and although the assignment that I had to do them for has long since passed (It was done on an IBM but I thought I'd try it using my QL) I would be very interested in an explanation from any members.

```
program datafile;
type person = record
     name : array[1..20] of char;
     deptcode: array[1..3] of char;
     worksno : integer;
   end;
   var personnel :file of person;
       current : person;
       choice  : char;
   begin
    attach(personnel,'flp2_informl_dat');
    rewrite(personnel);
      repeat
       write('Input a Max.20 Character name :');
       readln(current.name);
       write('Please Input a 3 character Deptcode :');
       readln(current.deptcode);
       write('Please Input a Worksno :');
       readln(current.worksno);
       write(personnel,current);
       write('Input More Records? ( Y or N )');
       readln(choice);
       choice:=upper(choice);
      until (choice='N');
    close(personnel);
   end.

program datafile;
var Same as first prog.

  begin
   attach(personnel,'flp2_informl_dat');
   reset(personnel);
   while not eof(personnel) do
   begin
      read(personnel,current);
      write('Current Name is ');
      writeln(current.name);
      write('Current Deptcode is ');
      writeln(current.deptcode);
      write('Current Worksno is ');
      writeln(current.worksno);
    end;
  close(personnel);
end.
```

The problem is that when the records are written to the screen (in the first or second program) the first two field (the character fields) are written as blocks. I read recently of a similar situation in certain implementations of 'C'. Writing programs similar to mine caused the integers to appear as normal, but the names had disappeared to be replaced by blocks. They explained that the character pointers only hold addreses and when you load the program again, these addresses are meaningless. Is this the case with computer One pascal as well, and if so what can I do?

I read with interest the article from Geoff Wood regarding special interest groups within Quanta. I agree with him and would welcome any correspondence from users interested in pascal (PC or QL).

Review Of Conqueror

And now as they say for something completely different. Conqueror is the new accelerated PC emulator for the QL marketed by Digitial Precision. Having purchased the solution I was eagerly awaiting the successors arrival. Just after Christmas it arrived and I ripped open the packaging to find the conqueror presented in the form of a 3 1/2 inch disk (It is also available in 5 1/4 inch disk as well) and a 85 page manual. The program is not copy protected, so is easily copied on another medium. When the emulator is loaded along with the three Lightning modules, available memory is about 450K which is ample for most DOS applications. (unless you use very high powered software) The manual says that the conqueror can be multitasked but I haven't tried it. It is possible to run 3 copies of the conqueror in memory if you have the 768K trump card.

When the program loads the first thing you (well I) noticed was that the border seems to have disappeared. It hasn't it has just been given colour 128; which is invisible. This is an improvement as I was always a tiny bit distracted by the border. The annoying habit the solution had of leaving the QL borders around the edges of the screen have also gone.

The conqueror then behaves the same as the solution, as regards the installation of DOS. Namely pressing 1 boots DOS from flp1_ and pressing 2 boots DOS from flp2_. Other combinations include CTRL 1 or 2 for users with a non standard drive setup and of course W for those users fortunate enough to own winchesters. After about 50 seconds, the DOS time and date prompts appear and are usually quickly despatched. The increased speed of the screen printing is readily apparent. The text is printed in a jerky fashion as opposed to the smooth fashion of the solution. It is jerky due to the way the conqueror seems to print characters to the screen. The solution prints individual letters one at a time, whereas conqueror seems to wait until a word has been completed and then prints it out. Character input and deletion are also much faster. This means that transferring between lots of different directories and drives is much faster because you don't have to wait for the program to catch up.

Pressing ALT CTRL SHIFT and CAPS LOCK brings up the conqueror's supervisor routine. This routine includes a useful option to change the idle priority of certain parts of conqueror. The idle priority is the priority the job will run at for most of the time. The Graphics, text and BIOS priorities can be modified this way. The maximum it can be set to is 127. Other options on this menu are the ability to toggle fast floppy disk formatting and direct keyboard interrupts on or off and other options such as abort conqueror and return to Superbasic or to set the timer interrupts.

Nearly all the programs that I tried worked with the conqueror. These include PC Tools, Turbo Pascal (various versions) Dbase III+, most of the Norton utilities, (more later) Topspeed 2 which is a modula-2 compiler and some public domain software that I own. The only program that did not run successfully all the time was a little utility in the Norton utilities suite called SI. This gives System Information about the system you are using. If you run SI after a CLS command then everything is ok. If you don't on the other hand and the program scrolls lines up, when it gets to 'A search for active memory finds..'the message 'Conqueror start failure : screen job init failed.' The PC then transfers into a QL again with the message 'at line 230'. At line 230 What!?.

One thing that let the solution down a little was the screen refreshing with some word processors. Occasionally, page-up, page-down, up or down line commands produce 'ghost' characters left from previous lines or pages. Although it happens less often, the conqueror still does this. This is unfortunate as it seems the only major problem in what is otherwise an excellent program. The solution (if you'll excuse the pun!!) is to go to the setup screen and resume emulation. This refreshes the screen correctly.

The table below shows some speed comparisons between the two emulators. Readers might notice that I have neglected to include the basic benchmarks. In my view, it is a pointless gesture.

Operation	Solution	Conqueror
Load DOS	50 Secs	48 Secs
Format 3 1/2" disk	279 Secs	168 secs
Dir/w (48 files)	29 Secs	28.5 Secs
Load Turbo Pascal (v4)	73 secs	55 Secs
Compile 665 line prog.	120 secs	98 Secs
Page down (turbo pascal)	13.5 Secs	6 Secs
PC Tools (load)	25 Secs	23 Secs
PC Tools (Disk mapping)	36 Secs	29 Secs
Type <File> 57 lines	29 Secs	30 Secs
Print <file> 57 lines	107 Secs	95 Secs

My hardware setup is as follows:- QL with 512K trump card, twin 3 1/2 inch DS/DD drives, Phillips green screen monitor and version 3.30 of DOS.

All conqueror tests were conducted with the timer interrupts disabled and the default job priorities set. As you can see, some operations, namely disk formatting were considerably faster using conqueror. The major surprise was that typing a file to screen was a little slower.

Also supplied with the conqueror is a PD basic and Xover, a bi-directional file transfer and renaming utility. The manual is up to the usual high standard of DP literature, as well as having a trouble shooting section in the back. This is a very useful feature.

All in all, I am very pleased with the conqueror and would recommended it to anybody provided that you're not after a full blown PC.

John Richards, 27 Theobald Road, Canton, Cardiff
13.1.90

ARCHIVE: YOUR FLEXIBLE FRIEND

Since writing a brief note in the Quanta magazine about changing the structure of Archive database files, enough people have shown interest for me to think it might be worth publishing some of the key procedures, but bit by bit so as not to take up too much room in one issue of the magazine. Here, therefore, is the main procedure for creating a brand-new database on the fly from within a program.

I notice, incidentally, a comment in David McCullagh's letter (February Quanta) "Is Archive that much worse than Dbase ... ". I do a lot of programming in Archive (although chiefly in the MS-DOS version because of its speed and its provision of multiple index files), and did on one occasion look carefully at dBase III with the thought of 'moving up'. However, although dBase is a much bigger package, I have found I can do everything I want in Archive, and that in some ways it is much better to program in than dBase. For one thing, dBase has fixed length records, which means you have to guess how long your longest entry is going to be before you ever put any records into a database; and of course, most of your records will be shorter than the maximum length you have specified, and so will contain a lot of empty spaces after the data. dBase files are therefore much bigger than Archive ones, where the records are of variable length and only occupy the amount of space required by the actual data. It will be readily apparent, too, that any display or printout of data from dBase will need to do endless chopping off of empty spaces. So there is a lot of extra work involved in programming in dBase.

Another major drawback of programming in dBase is that it is not based exclusively on procedures, as Archive is. You thus lay yourself open to all the dangers of 'spaghetti programming' as in the bad old days of unstructured BASICs.

```
proc donew
  local fname$,f$,fn$,ftype$,fnm$
  REM *** Creates a brand-new database file
  cls
  let fname$=""
  while fname$=""
    print
    print "x to Xit, or"
    print "Drive and filename for this database file: x";cursorback$;
    input fname$
    if len(fname$)<1 or instr("Xx",fname$): return : endif
    endwhile
```

```
spoolon fname$ export :REM .. Open an export file
cls
let fn$="first"
let f$=""
while f$<>"x"
  print
  print blue$+"FIELDNAMES:"+black$
  print
  print "Please enter ";fn$;" fieldname, or x to Xit: ";
  input f$
  print chr(27)+"C":REM .. Saves cursor position
  while instr(f$," ")
    print chr(27)+"D";:REM .. Restores cursor position
    print chr(27)+"B";:REM .. Clears screen from cursor
    print blue$;"INVALID FIELDNAME: PLEASE RE-TYPE WITHOUT SPACES ... ";black$
    print "Please enter ";fn$;" fieldname, or x to Xit: ";
    input f$
    endwhile : REM .. while instr(f$," ")
  if len(f$)>0
    if instr("Xx",f$): let f$="x": else
      print at 11,0;"Will this be strictly numeric (n), ";
      print "or might it include letters too (l)?"
      setchoice;"l","ln"
      let ftype$=xchoice$
      if ftype$="l" and f$(len(f$))<>"$": let f$=f$+"$": endif
      if fn$="first": lprint """"+f$+"""";: else
        lprint ","""+f$+"""";
        endif
      let fn$="next"
      endif :REM .. if instr("Xx",f$)
    endif :REM .. if len(f$)>0
  endwhile :REM .. while f$<>"x"
lprint
spoolon screen :REM .. Closes spoolfile
error imp;fname$,fname$
let fnm$=fname$
while errnum()=21:REM .. If file already exists
  cls : print at 10,0;
  print blue$;"Sorry!  You already have a file called ";fnm$
  print "Please enter drive and new filename: ";black$;
  input fnm$
  error imp;fname$,fnm$
  endwhile
if fn$="next": close : endif :REM .. Closes newly imported database file
endproc
```

Proc donew refers to one or two subsidiary procedures, so here they are:

```
proc imp;f1$,f2$
  import f1$ as f2$
  endproc
```

```
proc setchoice;default$,possibles$
  local OK
  window;"choice"
  let OK=0: while not OK
    print blue$;"Which? : ";default$;cursorback$;black$;
    input xchoice$: REM .. xchoice$ is a global variable
    if len(xchoice$)<1: let xchoice$=default$: else
      let xchoice$=lower(xchoice$)
      endif
    if instr(possibles$,xchoice$): let OK=1: endif
    endwhile
  window;"full"
  endproc

proc window;w$
  if w$="copyright": print chr(20)+chr(0)+chr(0)+chr(80)+chr(6): endif
  if w$="choice": print chr(20)+chr(0)+chr(19)+chr(80)+chr(20): endif
  if w$="full": print chr(20)+chr(0)+chr(5)+chr(80)+chr(25): endif
  if w$="menu": print chr(20)+chr(18)+chr(5)+chr(67)+chr(24): endif
  if w$="fields": print chr(20)+chr(0)+chr(5)+chr(14)+chr(24): endif
  if w$="setfields": print chr(20)+chr(16)+chr(5)+chr(80)+chr(24): endif
  if w$="aliver": print chr(20)+chr(14)+chr(4)+chr(16)+chr(24): endif
  if w$="dir": print chr(20)+chr(0)+chr(4)+chr(80)+chr(12): endif
  if w$="setfile": print chr(20)+chr(0)+chr(12)+chr(80)+chr(20): endif
  cls
  endproc
```

Archive must also have been told about the following variables:

```
 blue$=chr(26)
 black$=chr(26)
 cursorback$=chr(8)
 datadev$= ... (whatever drive you work from; eg "flp2_")
```

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17.2.90

BOOKS ON ARCHIVE

In the February QUANTA a writer claimed that there were few books on ARCHIVE compared with the number of books on DBASE. Well DBASE probably has between 10 to 100 times as many users as ARCHIVE. Also they will have paid out up to £400 for their DBASE program rather than getting it free. Hence they have a much greater incentive than QL ARCHIVE users to pay out just a little more on books to help them use their investment properly. So publishers have rushed to provide as many DBASE books as will sell. In the circumstances the number of ARCHIVE books available is quite surprising.

'QL ARCHIVE' by Ian Murray published by Century Communications in 1985 at £14.95. 356 pages. ISBN 0-7126-0633-5 This book was highly acclaimed when first published, as an excellent guide for beginners. Unlike a text book, it takes the reader through the needs of a mythical family wedding and its presumed database needs. It never loses track of the fact that beginners build on ideas but do so slowly. For example right to the end it shows the <ENTER> key depressions following user commands. A full review and publishers reply appears in August 85 QUANTA.

'ADVANCED ARCHIVE on your Sinclair QL' by Malcolm Davison published by Sigma Press in 1985 at £7.95. 200 pages. ISBN 1-85058-026-X
This book lives up to its name and it unsuited to beginners needs. The first half describes programming techniques and with special consideration to the human interface, date handling and reports. The second half gives the full ARCHIVE code for 9 applications such as slide synchronisation, expert system, personal accounts and Personnel Management suite. Whilst any one program may not be required, the techniques used may be studied and used elsewhere.

'MANAGING DATA WITH QL ARCHIVE' by Albert Russell published by Longman (a Pitman imprint) in 1986 at £7.95. ISBN 0-273-02602-X
This book uses textbook style and provides a reasonably clear guide to the commands. Some small procedures are developed, but not to the extent as in 'ADVANCED ARCHIVE'. The later publication date makes this the only ARCHIVE book to include the screen driver codes.

'ARCHIVE USERS REFERENCE MANUAL' by Stephen Morris published by Glentop in 1986 at £14.95. ISBN 0-90772-77-4
This book covers ARCHIVE on all computers it is available for, from QL through OPD, APRICOT to IBM. Thus many pages are consumed in giving the differing syntax that applies for other versions. The command descriptions, textbook style are clear enough, but procedure development is scantily covered and thus much of ARCHIVEs potential is omitted.

'DATABASE MANAGEMENT on the Sinclair QL' by Mike O'Reilly published by Hutchinson in 1985 at £7.95. 192 pages. ISBN 09-160551-2
This book in the Hutchinson series was directed to beginners. Also text book style, its general coverage of commands is sufficient if dull. I am doubtful if it is any clearer than the QL USER manual. The strength of this book is its consideration of screen design and the user interface with thoughts of how to handle function key presses. Much effort is expended in developing ARCHIVE look alike menu screens. The main weakness is that the author only had a pre-release version 2.0 ARCHIVE and consumes much space comparing it with version 1.

'INTO THE QL ARCHIVE' by J.W.Penfold published by Bernard Babini in 1985 at £2.50. 80 pages. BP 161. ISBN 0-85934-135-6
This short book starts like all beginners textbooks with what a database is and builds up to a simple database system. Others have critised the book for merely repeating what the QL User manual says. Such a criticism is true of most books. My view is that for the price this provides a reasonable beginners starting point, but not a patch on Ian Murrays book.

I don't know of any other QL specific books exclusively on ARCHIVE. Some books on ARCHIVE for other computers were published, including some by Stephen Morris published by Duckworth. These are very simplistic and only covered the use of immediate commands omitting any thought of programming, so they will not add anything to the QL Users Manual.

RECENT DETAILS ON ARCHIVE

The ARCHIVE books were published after the release of ARCHIVE 2.0, but none reprinted later. Thus features and bugs of later versions up to the final 2.38 remain unpublished, including the screen codes (other than Russell book) and the machine code interface. There are supposedly two sources of this information. Firstly the ARCHIVE Tutorial published by PDQL. Secondly the ARCH DEV manual, also available from PDQL. Perhaps someone could review these for QUANTA.

Some additional information on coding style and techniques is available as documents in the ARCHIVE section of the QUANTA library. Expansion of this area is probably the only way now in which the generally available information on ARCHIVE programming can now be expanded.

The Tony Firshman Services bulletin board has been discussing the differences between QL and PC ARCHIVE in its PSION conference area and also has two assembler code functions available for download. One allows you to generate sounds from within ARCHIVE, the other reads data from the serial port directly into an ARCHIVE database.

FINDING QL BOOKS IN YOUR PUBLIC LIBRARY

For UK members the public library will be the primary source of QL books. However not everyone may be aware of the many different places in which computer books may be found.

Public libraries shelve non-fiction books according to a subject classification scheme called Dewey. This assigns a major 3 digit subject classification which in turn has many sub-divisions. For a given book however even though a computer is involved the book may be shelved in the area of its subject, such as music or games. To the non librarian the rules governing this shelf allocation are by no means clear. Moreover the classification system is regularly updated, one such recent update has affected the main collection of computer books, though many libraries have yet to revise their own collection numbering.

CODE	
004	Specific micros) These are the new classifications
005	Computer programming) replacing 621.381959
	-- The main library collection will be housed here --
070.502	Desktop Publishing. Books on techniques and Ventura etc
303.48	Social implications. Also some artificial intelligence.
371.394	Teaching computers and programming methods
364.163	Computer fraud
510.285	Mathematics and computers
620.004	Computer aided design, CAD.
621.381	This will house your libraries main collection if they have not switched to 004/005. Even if they have switched there may still be some books that got missed out.

651.26	Office methods. After 004/005 this is the largest section on computers. Here you will find the books on databases and wordprocessing.
658	Business management. Like 651.26 but more about the impact on the business. Some more general books are here.
785.97	Computers and Music
793.74	Computer puzzles
794.74	Computer games and how to write them.
920 xxx	Biography section. Look here at 920 SIN to find the two books on Sir Clive Sinclair.

This list is not comprehensive. I compared the DEWEY computer classificatons with the stock of the EALING central public library and excluded those with no books.

OUTSIZE books. Don't forget that most libraries house big books separately, so some books in each classification might be shelved in another place.

Do ask the staff on the enquiry desk to help you find books. You make their job more interesting by asking unusual questions.

REGIONAL LIBRARY SPECIALISATION
In each library system one library is designated as the specialist in a given subject area and it buys and keeps a copy of most published books for its subject. So if your own branch does not have the book you want then maybe another one does, so place a reservation and you may have a pleasant surprise.

Even if your local library system lacks the book, then one library system can borrow from another or in the last resort from a central collection. Such loans however may take a long time to arrive but don't let that put you off.

USE IT OR LOSE IT!
Libraries keep books to lend. In all libraries and subjects other than the specialist collections described above, the staff make room for new books by carrying out an annual cull based on how many times a book has gone out. Typical 'keep' levels vary by library but if you come across a QL book in your library, then have a look inside at the form stamped with return dates. If it hasn't gone out for say 6 months then, irrespective of your own interest in it, take it out for a week just to ensure it remains in the library for the benefit of other QL users. Think not just of your own needs but those of new QL users and beginners who are still appearing as QL's old and new exchange hands and who would wish that book to be available for borrowing in a years time.

Moreover don't be put off by the additional work this creates for the staff. The only measure libraries have of their effectiveness is the number of books borrowed, so the more computer books issued the better justification they have for a bigger book buying budget.

QL books at FOYLES
Foyles are noted for many thing, including a large seemingly disorganised collection of computer books. What is less known is they do not take books off the shelves merely because customers have shown limited interest in buying them. Thus they still had a number of QL books available as of 24 Feb 1990:

- MANAGING DATA WITH QL ARCHIVE - Albert Russell, pub LONGMAN
- ARCHIVE USERS REFERENCE Manual - Stephen Morris, pub GLENTOP
- QUILL USERS REFERENCE Manual - Stephen Morris, pub GLENTOP
- ABACUS USERS REFERENCE Manual - Stephen Morris, pub GLENTOP
- WORD PROCESSING ON THE SINCLAIR QL - Mike O'Reilly, pub HUTCHINSON
- SINCLAIR QL COMPANION - Boris Allen, pub PITMAN
- THE SINCLAIR QL (pocket guide) - Guy Langden / David Heckingbottom, pub PITMAN

Those with XCHANGE on other micros will also find a few books of potential interest, again by Stephen Morris. Those with the OPD/TONTO will also find an introductory book.

Gerard T. Phelan, 17 Gunnersbury Court, Bollo Lane, LONDON W3 8JL
Tel: 01-993 3273
24.02.90

FUTURE JUSTIFICATION - RESPONSE TO MEDUSA

Jonathan Oakley's views in the February Quanta on yet another proposed QL compatible computer stirred me into writing. Something that all the proposed machines have in common is that they are expensive, often unnecessarily complex and you have to build many of them yourself. These projects will gain us no new QL owners and users.

What's needed is a one box system that people will really want to buy, which will appeal to both new and established owners and what better way to decide on the specification than to look at how people are using their QL's at the moment.

The norm seems to be an expanded QL, unused microdrives, 3.5 inch floppy disk, at least half a megabyte, printer port (serial, parallel or both), a yearning for a debugged ROM with Toolkit 2 facilities and a BASIC compiler plus easy expansion for hard disks *etc* if required later. I deduce this from reading Quanta, QL World and attending Quanta meetings.

Therefore, design a QL with at least half a megabyte of memory on board, put a 3.5 inch floppy disk where the microdrives are now, put a compatible operating system on board with Toolkit 2 facilities included and either include on ROM or make available separately a full compiler such as Turbo or QLiberator and above all keep it simple. I can't make up my mind if something like QRAM is needed as standard.

"Amstrad!", shouts someone from the back. But surely it's possible to design such a machine without the Sugar flying and breach of copyrights - look at what MGT have done with the SAM Coupe Spectrum compatible!

Another reply to this will probably be "cost!". It will probably rely on large production runs and a large working capital. A pity really that CST went their own way with the Thor which probably led to the loss of the other compatible of the period. Good luck to Thor International if they achieve mass market status, but I can't personally see that happening.

Couldn't the "experts" on the QL scene design the required computer and approach a large company to put it on the market, like some existing products came to being, such as the Atari Folio or whatever it's called now. This QL of mine has the qualities needed to present such a case, surely:-

British designed, true multitasking, especially with QRAM etc, superb modern structured BASIC (if debugged and Toolkit 2 facilities added on) which is supported by excellent compilers, very user friendly, open architecture (a posh way of saying the design doesn't restrict you too much, you can do pretty much what you like with it), an enthusiastic and dedicated installed user base, wide range of 'serious' software available, active user group in Quanta with regular workshops etc which are well attended, well documented, established third party support, built in networking facilities (especially good with Toolkit 2), built in disk drive, potential for being the British competitor to the ST and Amiga and so on... The list goes on.

Dilwyn Jones

TAXAN KAGA KP810 PRINTER / ATARI ST / QL EMULATOR PROBLEM

A problem can arise when connecting the printer to the paralel port of the Atari. The information below may be of some use to other members.

The information concerning the circuit board is not strictly true, it is necessary to remove the circuit board for replacement of the Resistor Network but the design of the machine is so good that it only needs the removal of 2 easy to get at screws, to take away the printer mechanical assembly and a further 2 screws to remove the circuit board, a minute or two at most.

There is a limited space between the components and therefore necessary to snip the legs off the orignal component and de-solder each pin individually but this was not a problem, I suppose really, that one could solder the new resistor, to the existing legs?, the remainder of the work being straightforward.

The modification part number has now been updated and should now read 140 - 978 or from Maplins the equivalent is RA30H the part only costs 20 pence and the 560 ohm resistor about the same price.

Taxan state that they have no objection to republishing the information as it was sent to them by an Atari user in the first place but they do stress, that they cannot give guarantees that the modification works, in my case it does.

I also would like to give a vote of thanks and credit to Taxan and their Customer Support, for their excellent service and instant, return of post replies, takes some beating that does, particularly when you consider they even returned the stamp that I sent them for a reply and were only too pleased to help with my problem, which I have had since I purchased the QL/Emulator board in August last year.

Brian Mc Nulty, 14 Millfield Road, Bridlington, East Yorks, YO16 5AS
18.2.90

We have had several customer enquiries relating to problems when using our KP810/KP910 with the Atari 520/1040ST computers.

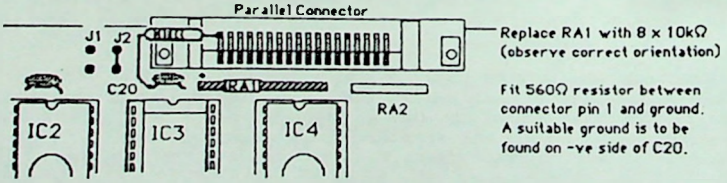
Apparently, the Yamaha-manufactured parallel printer control chip used in these machines drives the parallel port without additional buffering and cannot provide enough current to drive a number of printer types including ours.

Atari seem unwilling to do anything about it apart from stating that Epson printers work so 'buy Epson'. This is rather unhelpful to existing printer owners and a bit short sighted for Atari!

Fortunately, it is possible to modify the KP810 or KP910 to allow for correct operation with the Atari machines and details of the necessary modification follow. However, we do not consider our printer to be at fault and so this work is NOT a rectification, and it CANNOT be done under Warranty.

Any printers returned to us for modification will be charged for regardless of whether in warranty or not.

The mod is fairly simple and may be carried out without the removal of the main printer pcb. Basically, it involves fitting a 560Ω resistor between the $\overline{STB}$ signal (interface connector pin 1) and ground, and replacing a resistor network RA1 (8 x 1k) with another of higher resistance (8 x 10k). The mod should be carried out by a competant engineer as soldering to the main board is necessary and damage to the board caused during modification will void the warranty. Warranty will not be deemed void provided the modification is performed to an acceptable standard. (RS Components supply a suitable resistor network - Part Number 149-363.)



DM

MERGING DBA FILES WITH FLASHBACK SPECIAL EDITION

Some members may wish to amalgamate or merge FlashBack _dba files. With FlashBack this was not possible but now users of the new FlashBack Special Edition, using the flexible Report Generator, can do it easily. The procedure described below only works if the files have an IDENTICAL structure, i.e. the same fields in the same order, and do not contain sub records. The principles described here could also be used to 'massage' files into the same format for later amalgamation. With care in the choice and definition of the variables, the report layout could be modified into a form suitable for importing into Archive.

There are five stages in the basic process.

First stage : The creation of an 'index' record in the _dba files.
From within FlashBack create a new record in which the content of each field is the field name followed by a '$' sign. For example if Field 1 was 'Sname' it would become 'Sname$', likewise a Field 2, 'Fname' would become 'Fname$' ...etc. It is essential that this new record is made number 1 in the file and the file saved in that order. (See saving sub sets in WRITE in Instruct_dba.) Repeat this for all the files that you wish to merge.

Second Stage : The creation of the Template.
Load in the Report Generator. From the Report Generator menu take the Quill option. Using the standard procedures described in Report_dba create a file that looks like this one I prepared earlier!

```
~MAIN
[V1][F1W20][V2][F2W20][V2][F3W20][V2] ... [FnW20][V1]
~END
```

Adjust the line length in Quill to allow you to have ALL the [V]'s and [F]'s on one line. This is ESSENTIAL. (Note, the squiggle before the MAIN and END is the tilde.)

The variable [V1] (See Fourth stage for explanation) appears at the beginning and end of the line. All fields are separated by [V2]'s. In the above example the 'W20' allows for 20 characters per field. This can be varied to suit your field lengths. It does not matter if you over estimate but under estimation will cause incomplete transfer of data. This file should be saved as a normal Quill file (in case you want to make modifications to it later) and then 'printed' to disk having made sure that your printer_dat was removed. You have now created the Template or _lis file for the report you need to create. Quit from Quill.

Note : The above 'simple' Template is suitable for simple FlashBack files. If you have created a field that spreads over more than one line, say an address, then a modification is needed. The template would then look like.

```
~MAIN
[V1][F1W20][V2][F2f.W20][F2.W20][f2.W20][F2.W20][F3W20]   .... [V1]
~END
```

This Template will cope with a Field 2 which splits over four lines. By split I mean that an <ENTER> has been pressed and the line has not just word wrapped. The F2f. in the above line will transfer the first 20 characters of the first line of Field 2. The F2,'s will then transfer the subsequent lines of Field 2. It does not matter if you are over generous with these repeat lines as they are ignored if no lines are found. The contents of the multiple lines of Field 2 will be transfered as one continuous line.

Third stage : Alteration of the Default driver.
From the Report Generator menu take the Driver option and load the default driver. It is necessary to change the 'preamble' line. Move the cursor to it and edit the '(24)' out. Save the modified driver under its default name, Driver_drv.

Fourth Stage : Creating the Report_exp files.
From the Report Generator menu take the Report option. Modify the default configuration screen to refer to your _lis (Template) and _dba files. Set line 1 to show [V1] = '"' and line 2 to show [V2] = '","'. Note: [V1] is a " between two single quotes and simply puts a " at the beginning and end of the line. [V2] acts as a separator and puts a "," between fields. Set the Page Feed option to 'None' and Continuous to 'Yes'. Save your Configuration file for future use. Check to see that the Report is working to your satisfaction by checking the screen output. A typical report, suitable for conversion, would look like this:

"Company$","Address$","County$","Postcode$","Phone$"
"QL.World","Greencoat House","London","SW1P 1PG","01 834 1717"
"Quanta","Grosvenor Crescent","South Humberside","DN32 0QJ","0472 349850"
etc.

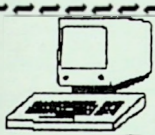
When you are happy with it re-run the report but this time divert the output to a file using the suffix _exp. Run the report again but now use the other _dba file(s).

Fifth stage : The Merging of Report_exp files.
Put your working FlashBack Special Edition disk in Flp1_ and from Basic 'lrun flp1_import_bas' and follow the prompts. Assuming that you have put your data disk into flp2_ change the device offered to flp2_ and select the first _exp file that you created. Choose an appropriate file name for the _dba you are creating. The field names will be shown in the left window. Tap the <ESC> key and follow the instructions. Say 'no' to the amalgamate sub records prompt. When the records have been converted answer 'yes' to the merge another file prompt and select the second _exp file. Repeat the process if necessary for other _exp files.

Proof of the Pudding
Read the resultant _dba file into FlashBack and you will see that the merging of the _dba files has been achieved. You will need to edit the Field names to remove the odd '$' signs but that is the only extra work required.

Alfred Kendall, 22 Langley Hill, Kings Langley, Herts
4.3.90

QUANTA - DESKTOP PUBLISHING



Whenever the media refers to Desktop Publishing there usually appears to be an abundance of noughts on the price. Hardware houses talk about the need for an "all-singing and all-dancing" item of equipment at a cost of ONLY £10-15,000 and which is not likely to work unless you have several other items of equipment, each at a similar cost.

However, the QL is quite capable of reducing all of those noughts to quite reasonable proportions although it is necessary to consider quite what you expect your machine to do!

If I can assume that, if you are considering Desktop Publishing, you already have a QL, printer and monitor/TV the next question is - what else do you need?

The answer is merely a piece of software that will produce what you are looking for and there are a few choices which will be covered as these articles progress. The subject is a large one which can't be dealt with in one article and, therefore, there could be a small series which may or may not be extended by members letters and questions.

Next - the earlier question of what you expect your machine to do. The QL is not a production printing machine and so it is inviting trouble if you ask it to behave like one. Having built your masterpiece it would be reasonable to treat your material as MASTER COPY from which you can take further copies by:

- Photocopying if the number of copies is below 200.
- Printing by a printing house for any number above 200.

So now we have our hardware and we know how we can reproduce our copy. The stage between - the actual production of the MASTER - is our original problem and which we'll get down to now.

There are many uses for a Desktop Publishing program and, sometimes, the uses may determine which Desktop Publishing program you decide to use as one program may provide what you want either better or easier than another. A list of possible uses would be:

Newsheets	Leaflets	Posters	Line Drawings	Circulars
Tickets	Forms	Pamphlets	Labels	Letter-Headings

etc.

For simplicity let us assume that our need is for an A4-sized(the approximate size of your computer printer paper) newsheet. Your newsheet needs to look the part and involves the use of:

1. Prominent headings
2. An identifying picture or logo
3. Columnar structure
4. Paragraph headings
5. Editorial
6. Illustrations (if space permits)

Items 1 and 3-5 present little difficulty but items 2 and 6 need to be thought about as space needs to be reserved for illustrations - although the software will enable shrinking/enlargement in order to strike a satisfactory balance between everything on your newsheet.

Having reserved the required space (the procedure will be explained later) the next requirement is to decide upon the size of type that will be needed to get the material that you need on to the sheet. The type will be of a size that your readers can, in fact, read with comfort but not so large that you can't get all of your information on to the sheet.

Typesetting used to be a somewhat tedious job carried out with little pieces of lead type by compositors but Desktop Publishers have a distinct advantage today as, if they make a mistake or change their minds, altering the material, the type size or the positioning can be a job requiring a few seconds instead of several hours.

The next article will deal with print sizes and Clip Art for logos.

Bob Gingell

HYPERCARD

I have a few ideas which I think might interest those of you looking for QL related projects to do. Take them with a pinch of salt if you wish, but I think there could well be sufficient demand for commercial success.

Hypercard is a program now being much emulated by those in PC land. Essentially, through what I have read as I have never seen it in action, it is a type of programming utility come database. The difference is that it gives you a series of pages which are linked in a user definable way (i.e. some underlying logic) and often presented in a graphical manner. All the ground level routines are provided for you so that it is not necessary, for example, to write a routine to recognize the keyboard, for each different 'program'. In a way it is much like what QDOS would have become had it been allowed to develop in time with modern hardware. As a concept it is a valuable way of integrating graphics and information on a single group of records which also mimics natural thought processes in its tree-like structure.

GRAPHICS BOARD

An enhanced graphics board would have obvious attractions to all. Perhaps one that could emulate, as one of its modes, ST and Amiga screen displays would have the widest use. If, as I believe, many of us will switch to these machines in the future and use the QL emulator, then programs could be written with future-proof built in and a growing user base to boot. If Tony Tebby's SMS-2 for the ST appears, then that upgrade path is secure. Furthermore, if Minerva becomes available for the ST as hinted in these pages then what began as a tentative step becomes a charge.

I have often wondered whether it would be possible to use the full complement of colours available, on the chip that Sinclair used. Like all Sinclair bodges, the chip could produce 16 colours in mode 8 and 8 in mode 4 (including blue), but the lines were cut in order that circuit complexity be kept to a minimum and hence cost. Obviously, a colour graphics card would be best utilised if small and plugged into the circuit board proper as the address lines and expansion slot in most machines are already fully used (Trumpcard, disks etc.,). Adequate power would also need to be made available.

Another solution would involve producing a fully buffered backplane which would need to include a patch to correct the JM (and earlier) ROM fault which only allows two expansion peripherals to be attached. I believe Rebel produce one such creature. Another one I have heard of, without the software patch, is produced by a fellow QUANTA member. This is a fully buffered expansion port, 10 by 16 cm in size, which uses Schmidt triggers and allows 16 expansion modules to be placed anywhere in memory with no reduction in speed. Richard Corke, who produces it is a sole trader on the Enterprise Allowance scheme and can be contacted at 305 Haigh Road, Aspull, Wigan WN2 1RR. If he included a Minerva ROM and power supply I am sure he could find many willing purchasers.

QL ACCELERATOR BOARD

In the same vein, it has also struck me (along with Armin Dietrich) as slightly odd that given that full 68000 chips are so cheap why there has never been a cheap accelerator board for the QL. Never, is not strictly true as CST must have created such a device when they produced the Thor 1 and used it on the original QL board. (However, it was never cheap).

I think it would need to be a bit more complicated than simple chip substitution as there are some 8 more address lines on the full 68K and not using them would negate the increase in speed to be obtained by processing data in 16 bit chunks rather than the 8 on the 68008. Furthermore, there is the clock speed of the chip to be considered as there are both 16MHz and 8 MHz speeds. The way the system appears to work in such boards for the ST involves using double the clock speed along with a cache memory.

WORD PROCESSING PLUS

The quality and number of text or word processors for the QL ensures that we are well catered for. Yet, the world has moved on since many of these programs were written and many new facilities have been introduced. These include the ability to incorporate illustrations as well as text into documents.

Before you all get terribly excited, I should hasten to add that I already have Text87 and am well aware that one can indirectly load into it illustrations using the utility Pounted89. However, it appears to be such a ludicrously convoluted process as well as being limited to graphics of 84 x 96 pixels. You have to create a new fount with the maximum dimensions, load in the screen display and divide the picture into the appropriate segments. Then, you must save the fount, boot up Text87 and load in the new fount - et voila, you have an illustration! Do it all again for another picture. I did warn you that it was convoluted!

Furthermore, many programs for the PC can now be configured for other non-Latin scripts. I include those that use Persian script (Arabic, Urdu and Persian) as well as Hebrew, Sanscrit, Thai and Chinese. In many of these languages there are additional problems of script being written right to left. None of these are insurmountable problems, however, as Locoscript is available in Persian and Hebrew versions. I understand that this would be an uneconomic project presently, in the way QL machines are distributed, but imagine if SMS-2 or Minerva had routines built in for bi-directional editing and other non-standard scripts. The new markets for these modified Atari ST machines would include half the world's population, including rich Arabs fearful of being left in the rush to computerise.

QDOS EMULATORS

I believe that the current Datasenter-based QL emulator for the Atari ST utilises the display chip that comes with the QL. I understand that the supply of such chips is very limited. I am also led to believe that the new Amiga emulator does not require such hardware as the screen drivers have been rewritten by a German lad to make them compatible with that machine's hardware though I believe that there is still some problems in obtaining 1:1 correspondence between screen pixels on both machines such that QL circles appear ellipsoid on the Amiga.

This does not decry, however, from the very real achievement that this is. While the code in large part is still that present in the ROM we have at last a full RAM based emulator for the QL on another machine. If this can be done for the Amiga, so can it be done for the Atari ST. The design of QDOS makes this a logical development. I wish QVIEW and Tony Tebby all the best in their respective ventures for producing even better QL-compatible systems for these machines. I can barely control my anticipation.

I know of no other machine whose users have garnered their energies to port over the hub of their machine (QDOS) to other more modern ones. Most people are stuck with the hardware, always intimately linked with the capabilities of the operating system. This shows how much QDOS was future proof, if proof was ever needed. Unfortunately, Amstrad's ownership of QDOS will prevent us proclaiming or making widespread the use of this superior system. Yet, there may be a way to circumvent this. Even more modern and super fast machines use RISC (reduced instruction set chip) CPUs which can run at the speed of mini if not mainframes, not the old CISC (complex instruction set chip) architecture found in the 68000 family. One of the attractions of the latter family was that Motorola had a clear upgrade path with each subsequent chip being downwardly compatible so that software need not be re-written. However, even Motorola has had doubts and introduced its own RISC chip. The attraction of these beasts is that they are superfast, primarily because they are fairly 'dumb' and have limited instruction sets ('vocabulary'). What a CISC will do in one instruction may take several on a RISC CPU, but there will always be an overall speed increase because the really basic instructions such as moving data, the ones that are used most often, are all done much faster. In effect the microcoding, the pre-programming built into the hardware of a CISC, has to be supplied for a RISC machine code program - not difficult if macro assemblers are used.

What does this have to do QL/QDOS emulation, you ask? I think the important word here is EMULATION. It may be possible to emulate the 68008 chip in software. Though I suspect there will be no startling speed increase at least QDOS would run on it. This would still not get round copyright restrictions, however, as the QDOS code would still be the same. The other way to do this would be to compile QDOS's 68008 code into the language of the RISC CPU. This would effectively be a translation and while copyright law is a minefield, even Amstrad would think twice about prosecuting code which ran QDOS on an alien CPU. I also believe that significant speed improvements would result when the code is fully optimised. Alternatively, the transputer or a "clump" of transputers (note the collective noun) could do this interactively with each chip delegated a specific task. As yet there is no machine using this chip though the price has come down significantly in recent years.

I hesitate, however, in mentioning the RISC machine which immediately springs to mind for this task. It is the Acorn Archimedes. It is now down in price and very, very fast. It's RISC OS is untried, prone to crashes and has limited multi-tasking. QDOS is tried and tested, multi-tasks in its sleep, has oodles of software and could easily muscle in on an as yet tiny user base and overwhelm it with its superior architecture (pun intended). There would be poetic justice indeed, enough to bring a smile to the face of Sir Clive Sinclair, in porting the QL's system software to the Acorn machine.

Sohail S Bhatti, 11 Bower Avenue, Wardle, Rochdale, OL12 9QW
29.1.90

SCREEN DUMPS FOR THE SEIKOSHA GP700

I would like to thank all members who contacted me on where to aquire Seikosha GP700A coloured printer ribbons, and as sugested by most of these members an order was placed with 'ACTION COMPUTER SUPPLIES' at 5-6 Abercorn Commercial Centre, Manor Farm Road, Wembley, Middlesex. HA0 1BR. (Very good service here).

The last person to contact me was most helpful in that he mentioned he'd a GP700A but had not used the printer for sometime, well I suppose the Seikosha is a bit old hat now, and I did acquire mine new and probably less than half price (£500+ 1985) in November 88 from The Alternative Micro Show at Aston University's sports and leisure centre Birmingham.

However this member also mentioned that he might still have a screen dump routine that he wrote to enable him to dump screens from Easel. I myself had also been trying to get screen dumps to the GP700 but with abysmal results, so I wrote back asking if he could lay his hands on this routine, and if he was still active with the QL would he copy the routine over to cartridge for me, or alternatively write it up for Quanta as there may be some other members with this printer (I know one over in Suffolk) that right Stephen!.

A few days later I recieved by post a package containing my cartridge, full of printer drivers and screen dump routines for the GP700, a few sample print-outs, plus a source listing, (many thanks Peter). My attention was drawn to the fact that Tony Firsman of TF Services, London gets credit for his assembler code page 14, 'QUANTA' Dec:86 and which can be added to any routine (64k) including screen dumps, to allow them to be installed and used within the ' PRINT ' command in EASEL.

Although the small basic program sent to me has dumped to the GP700 in mode 4 colours, I've not been able to use the assembler or SuperCharged routines? Could this be due to compatibility between different machines, or Rom versions, mine's JS, or even having added Ram expansion 512k ??. o'h TK II on board as well.

So in between advising a member in Suffolk to try and contact someone better qualified than myself to get his GP700 dumping screens, I've now got a Star LC10 sitting alongside the Seikosha it also aching to capture screens from our favourite QLomputer, I'd be pleased to here from anyone dumping screens to the LC 10 Colour printer from QL or Spectrum+, as usual all postage refunded.

Mike W.Stone, 25 Broadwaters Drive, Kidderminster, Worc's. DY10 2RY
8.2.90

J_SPRING_CLEAN

Two versions of this bulk file-handling program of mine are now in the Library one in SuperBasic, the other compiled with Q_Liberator.

I have now found however, that sometimes, when RAM1_ (onto which the selected files are copied) is cleared for the next selection, the memory APPEARS not to be released. I have now sent to the Library revised versions of the program as "J_SPRING_CLEAN2" and "J_SPRING_CLEAN2_exc".

The problem no longer arises with either the Trump Card, or the Qflash ram disk system (the only two I have and could check). If some other ram disk system still suffers the problem, the only solution is to quit and run/execute the program. The cause was most helpfully diagnosed as Common Heap fragmentation by Laurence Reeves, one of the Qview trio of Minerva fame.

It is likely to affect other software, which employs ram-disks of significant size. It occurs when a ram-disk is set up first and floppy disks, microdrives, or ram disks are accessed later. It happens anyway with non-SuperBasic programs, because they work within the Common Heap. Laurence also suggested a cure in the shape of Tony Tebby's Toolkit II "del_defb" command, but it does not help with the compiled version.

This form of heap fragmentation does not actually prevent the memory being released (as can be proved), but this release is not visible to the standard "free memory" formula. The solution, now used by the program came, of course, from Tony Tebby. It consists of doing a hidden "dir" of a ram disk instead of using the standard "free memory" formula. This gives directly the free memory as a number of available sectors, each representing 512 bytes of free memory. The reclaimed memory is now shown correctly on the program "Menu", when RAM1 is cleared.

My grateful thanks to Tony and Laurence.

I have also added a fast option for deleting files. If the selection of files is made SOLELY for this purpose, only the file NAMES are copied to RAM1_, not the file contents. This is very fast, but such a selection must not be used for copying the files and the program prevents it being done.

I have also corrected a minor, but irritating bug in the previous SuperBasic version, which stopped the program, even if you wanted to re-run it from the Menu. Sorry. There is now also a boot program, "J_SPRINGboot", which runs/executes the two versions of "J_SPRING_CLEAN2" without a lot of typing.

Joe Haftke
Tel: 01-302 6154
{This updated version has not entered the library yet, but is available from David Johnson }

LIBRARY CORNER

Herewith this issue's mutterings on what we've been up to with your Library, please note the new Sub-librarian for the U.S.A. to replace Rich Bazan, who has now retired (from the Library!) due to pressure of work, I would like to extend my thanks to Rich for the excellent work he has done for us in the past. His replacement, Paul Holmgren, the new U.S. librarian was recommended by Rich as his replacement and I welcome him to the fold, his address is below.

Due to increased demand for the Library in Northern England and Scotland I am looking for a Sub-librarian to handle 3 1/2 AND 5 1/4 inch media. (3 1/2 inch is a MUST) To be located in the very North of England or Southern Scotland, You MUST be a QUANTA member, and judging by the amount of work David's getting from the North have PLENTY of free time available, I'm thinking a retired person would be ideal, it's hard (?) work (innit Dave?) must have a 'phone and a very local Post office (your Postie will require a strong back!).

Applications to the H/librarian please, (address in front cover of QUANTA) we are an equal opportunity employer! (no pay however).

List of current Sub-librarians

Johan Boman
Lilla Cedargatan 5
S-421 74 Via Frolunda
SWEDEN
Tel. TBA.
(3 1/2" disks)

Eros Forenzi
Via Valeriana 44
23010 BERBENNO
(SONDRIO) ITALY
Tel. 0342 492323
(3 1/2" disks)

Werner Donne
Torenstraat 14 / 7
B-3500. Hasselt
BELGIUM
Tel. 11272359
(3 1/2" disks)

Paul Holmgren
5231 Wilton Wood Court
Indianapolis
INDIANA 46254 U.S.A.
Tel. 317 291 6002
(MOST formats)

Kees van der Wal
Kwekerijstraat 22
2613 Ve Delft
The Netherlands
Tel. 31 015 140367
(3 1/2" disks)

Tom Erlandsen
Gerbeweg 31
CH-3280 MURTEN
SWITZERLAND
Tel. 037 715580
(Both formats)

Cliff Martin
Scotteswood Avenue
Chatham
KENT. ME4 6HB
Tel. 0634 406578
(3 1/2" disks)

Roy Brereton
94 Teignmouth Road
Clevedon
AVON. BS21 6DR
Tel. 0272 871917
(3 1/2" disks)

David Johnson
The Corner House
Loxley
WARWICK
Tel. 0789 842543
(Both formats)

James Methley
4 Parkside
LEA
PRESTON
PR2 1YS
Tel. 0772 736713
(5 1/4" 80 Trk disks)

Stephen Hewitt
Portsdown Vicarage
Portsdown Hill Road
PORTSMOUTH
PO6 1BE
Tel. 0705 375360
* CARTRIDGES ONLY *

THIS SPACE IS
RESERVED FOR
AN ADDITIONAL
SUB-LIBRARIAN
(FOR THE NORTH
AND SCOTLAND)
(Both formats)

NOTE. Both Formats = DS 80 TRK. 3 1/2 in. + 5 1/4 in. disks.

Library disks are based on 1440 sector media. Please consult the H/librarian for other formats prior to requesting programs.

There is NO CHARGE for the Guide _dbf, _prg, _scn files, BUT, if a separate disk is to be used when requesting the Guide, the disk copy charge is applicable. Try to request any up-dated Guide _dbf, _doc files with, say, your charged programs, or any part filled disk.

Since the revision of the Library system was carried out I have not heard much from you, the members, as to your thoughts on the new system. If you have any comments to make as to the new layout/guides, possible improvements etc, I would like to hear them. If you would like to write to me or to David it would be appreciated.

The 50p Copy Fee is for the disks the Librarian copies ONTO, not FROM. Part filled disks may be mixed to reduce the fees paid. However, PSION disks 2 & 3 CANNOT be mixed, not quite enough room.

The revisions to programs on SPECIALS_2 disk and QL-WORLD-INDEX required us moving QL WORLD INDEX which can now be found on SPECIALS_3 - where it can grow as much as it likes!

Additions to the Library include:-

KERMIT (a set of 3 disks in the COMMS section) will be held by - D. Johnson for UK members, P. Holmgren for the U.S.A., and the H/Librarian for all other requests.

Specials_0 Which contains Tony Tebby's P.D. software and the QDOS variables used by various professional software authors.

In the Utilities section we have added Util_gen_3 , Util_tkmc_2 , The Util_emacs_2 disk is revised by adding a set of some 23 Quill files derived from the massive (50 page) mss file, this disk is now full.

Prt_fonts_3 is new, as is Psion_3, and Specials_3.

This is a list of new & revised programs in the library along with the disks they appear on.

GAMES SECTION

WIZARD Games_gen_2 Author - ANON
We have NO instructions for this, a very good game, has over 40 files, if you can supply instructions please send to David (Q.C.).

CORE WARS Gms_strat_4 Author - P. Montrasio
Details of this game (?) appeared in QUANTA August 1989 Page 9.

UTILITIES SECTION

SPRING CLEAN Util_gen_2 Author - J. Haftke
A replacement for the File Handler suite by the same Author.

SEARCH Util_gen_3 Author - M & C Notarianni
Enables searches of any character string in ROM or RAM, faster than the same function in DP's Turbo toolkit.

AUTOLOADER Util_gen_3 Author - as above
A little program to convert LM object routines into data lines.

TREE_TASK Util_gen_3 Author - P.E. Parry
Produces a hierarchical tree of S/basic functions and procedures.

ACHILLES Util_drcpy Author - I. Jackson
A fast single drive copier for single drive system users.

KERMIT Comms_xfer_1 Author -
A set of 3 disks containing KERMIT, you will need to be well versed in communications protocols to use this.

UDEFCHAR Prt_fonts_3 Author - I. Jackson
A character editor, lets you make your own founts plus use the best of other founts available, highly recommended.

NSCR C.A.D_1 Author - E. Cogswell
This program moved from Charged_1 on expiry of Royalty period.

STAT_HBOOK Psion_2 Author - E. Peterson
An Archive based statisticians handbook, allows repeated calculations to 14 decimal places.

QL STOCK Psion_2 Author - I. Dominik
A revision by the same Author.

STD CODES Psion_3 Author - as above
An Archive based STD finder, finds the code which goes with a particular Town or City, or, finds the locality of a particular code, this suite is OVER half a disk's worth, and has over 35 files in total.

GRAPHICS SECTION

CLIP LIPT Graphics_2 Author - G. Summers
Enables P.D.2 clip art to be loaded to a normal QL screen, You are reminded that P.D.2 clip art is copyright.

SCREENF Graphics_2 Author - M & C Notarianni
A short program which allows loading of screens without typing the LBYTES_(drive_name_screen_name,131072) instruction in every time.

SPECLOAD Graphics_2 Author - as above
Aids in transferring Spectrum screens to the QL. (NOT TESTED)
Notes in the _doc file will assist, uses the Network.

STRETCH Graphics_2 Author - as above
Intended for use with SPECLOAD but can be used with QL pictures, it stretches a Loaded Spectrum screen to make circles look circular.

NOFLASH Graphics_2 Author - as above
This super program stops those awful flashing dots when changing screens from MODE 4 to MODE 8.

EDUCATIONAL SECTION

MORSE Educ_1 Author - I. Dominik
Simple to use Morse code tutor, repeats 'till you get it right.

JOES PROCS Educ_1 Author - J. Haftke
Some more procedure examples to aid beginners in S/basic.

LANGUAGES SECTION

PROLOG Languages_1 Author - H.L. Maliesingel
Another language for the QL. The writer has tried to give some help by examples and help files. You will need further info from books.

SPECIALSIST SECTION

WORDS Specials_1 Author - R.C. Myers
An upgrade by the same Author.

BANK_BAS Specials_2 Author - as above
A complete revision of the Bank suite PLUS new programs.

QL WORLD INDEX Specials_3 Author - C. Adams
The latest version bang up to date.

This is the current list of disks available to date. (19-2-90)

Disk name	Contents	Notes
DUAL_GUIDE	(Archive Library Guides - issue 4)	Full
GAMES_GEN_1	(GENeral games)	Full
GAMES_GEN_2		360-
GMS_STRAT_1	(GaMeS advent/STRATegy)	Full
GMS_STRAT_2		Full
GMS_STRAT_3		Full
GMS_STRAT_4		720+
UTIL_GEN_1	(GENeral utilities)	Full
UTIL_GEN_2		Full
UTIL_GEN_3		990+
UTIL_TKMC_1	(ToolKits/MachineCode)	Full
UTIL_TKMC_2		990+
UTIL_DRCPY_1	(DiR & CoPY UTILities)	600+
UTIL_EMACS_1	(Micro-emacs V3.9p SOURCE FILES)	Full
UTIL_EMACS_2	(Run version. NON-SOURCE + new _doc's)	Full
COMMS_XFER_1	(COMMunicationS/transfer + KERMIT)	360-
PRT_FONTS_1	(PRinTer utilities & FONTS)	Full
PRT_FONTS_2		Full
PRT_FONTS_3	new '89	990+
C.A.D_1	(Computer Aided Design)	360-
PSION_1	(PSION utilities e.t.c.)	Full
PSION_2		720
PSION_3	new '90	600-
GRAPHICS_1	(Graphics programs)	Full
GRAPHICS_2		720
MATHS_1	(Maths e.t.c.)	Full
MATHS_2		720+
MANDEL_1	(MANDELbrot programs)	360-
EDUC_1	(EDUCational)	720+
LANGUAGES_1	(Forth, ' C ' e.t.c.)	600-
MISC_DEMO_1	(MISCelaneous & DEMOnstation)	720+
SPECIALS_0	(RESERVED - T.TEBBY + TRAPS ONLY)	720+
SPECIALS_1	(Specialist programs)	Full
SPECIALS_2	revised	500-
SPECIALS_3	new '90	990+
QDOS_JS_1	(JS ROM)	Full
QDOS_JM_1 & _2	(JM ROM)	Full
QDOS_JM_3 & _4	(Revised JM1 & 2)	Full
PAGE_DES	(Version 1)	Full
CHARGED_1 & _2	(THESE PROGRAMS ISSUED AS REQUESTED)	

Total charges at the moment for Charged_1 & _2 is £11.00

'Bye for now, watch this space . Leighton

Q.L. BULLETIN BOARD

This is the first time that I have written into the QUANTA newsletter and I hope that it will not be the last. Right now with the pre-amble out of the way I will get on with what I want to say.

I would like to inform all of the QUANTA members that have a modem, especially those that have bought the Tandata, there is a new Bulletin Board on line for you to access, the details of which follow:-

B/B Name	=	Q.U.B.B.E. (QL Users Bulletin Board in Essex)
B/B Type	=	Viewdata (1200/75)
B/B Tel No.	=	0376-47852 (Ringback)
B/B Hours	=	24hrs 7 Days a week

There is lots on the board for e.g. babble, hints and tips. For Sale, Wanted, QL News and lots more including software to download. Give it a try and leave a message to the Sysop about what you think of the board and if you can think of other items that might interest other QL'ers I will gladly try and introduce them onto the Board.

Ron Dunnett, Q.U.B.B.E. Sysop,
38 Brunwin Road, Rayne, Braintree, Essex. CM7 5BU.
Tel: (0376) 47852

Q.B.U.G. BULLETIN BOARD - BRISTOL

With advice and help from Tony Firshman (and later, Tony Price) Q.B.U.G. was started in October 1989. At first, the system comprised of a couple of disk drives, some P.D. software on the disks supplied by Tony Firshman and a telephone line that was shared by my wife! Since it's humble beginnings, the system has grown to include a 40 meg Miracle Hard disk and a dedicated telephone line.

Q.B.U.G. has a couple of special interest groups:- QUANTA (Area 22), Adventurer's section (Area 23) and a Bristol users group section (Area 10).

The 24 hour telephone number is:- (0272) 666187

Dave Fullerton, Q.B.U.G. Sysop,
45 South Street, Southville, Bedminster, Bristol, BD3 3AU
6.3.90

MINERVA PRICE INCREASE

We have been informed by the Mega Corporation, that the introductary offer price of £25 will cease by the 1st April. QUANTA price will become £35.00. Post and package for overseas members is £2.50 extra.

This will be the first production version of REAL MultiBASIC and accompanied with printed documentation. Foreign keyboard versions are available also. Visa and Master Card orders can now be accepted. Telephone (0480) 412884 24 hours a day.

SMALL ADS

WANTED
Spare parts for the I.C.L. One Per Desk or the Merlin Tonto.
David Warne, Ely, Cambs
Tel: (0353) 860645

WANTED
QL keyboard, Schon or similar PC style. Talent PCB1 printed circuit designer (3.5" disk). Also I would appeal for anyone with a manual and utilities disk for the CST SCSI hard disk interace to contact me urgently, as mine came without the vital parts.
Geoff Wood, NZ Embassy Iraq, NZ High Commission, Haymarket, London, SW17 4TQ.

WANTED
QL 640k memory expansion, with or without disk interface.
David Rudland, Lager, Station Rd, Dalbeattie, Kirkcudbrightshire, DG5 4AN.
Tel: (0556) 61060 2

FOR SALE
Software: Discover £7 (Flp), Touch Typist £5 (flp), Qmon £7 (Flp), Metacomco Assembler £7 (Mdv), Success and 8 CP/M progs including Forth, C, Pascal etc. £25 (6*flp), Pro Astronomer £5 (no manual), QL Meteor Storm £3 (mdv), QL The King £4 (mdv), QL-Cavern £4 (mdv), Arcanoid £4 (mdv), BJ in 3D land £4 (mdv), Tankbusters £4 (mdv).
Hardware: 256K Memory Expansion (No Disk Interface) £10
Books: Sinclair QL technical guide £4, Pascal For students £2, Practical guide to QL graphics and sound £2, Good programming with QL Superbasic £2, The Sinclair QL companion £1, Word Processing with QL Quill £2, Quick QL Machine Language £2.
Other: 80 Capacity 3 1/2 inch lockable disk box £3.
All Original Software and documentation Included. In the case of Success and other CP/M programs the documentation comes to over 250 pages.
Interested! Contact John Richards on (0222) 345710 after 6pm. (Except Tuesday evenings).

FOR SALE
The following QL accessories: 512k Expanderam, Cumana disk interface, QFlash ramdrive EPROM, 3.5" double-sided single-density disk drive (360K formatted) with PSU. Also software: Taskmaster, QFlash Ramdrive utilities, Keydefine, Speedscreen and others, with manuals where applicable. £170 the lot.
John Slatter, 5/6 Fenwick Terrace, Durham DH1 4JJ
Tel: (091) 386 9578

FOR SALE
JM QL with Miracle 512k Expanderam, Tandata modem stack, Centronics interface, 2 Joystick adaptors, microdrive cartridges and software £20 the lot.
Geoff Doherty, 30 Hazelwood Close, Mochdre, Colwyn Bay, Clwyd, LL28 5DZ
Tel: (0492) 40380 evenings.

WANTED
I am interested in software for the QL that can decode RTTY, MORSE, AMTOR, etc.
Saad M. Asim, 13 Tylney Road, Forest Gate, London E7 9LS

FOR SALE
JM QL complete with 2.35 software, trump card, 3.5" single drive, centronics interface, QL Decision Maker, QL Home Finance, Touch Typist, Speedscreen, The Solution, Lightening, Qram, Qpac, Qtype, Tuboquill +, Bank, Pacioli, Drawing Office, Page Designer 2, Front Page, Taskmaster, QD editor, ICE with mouse, sideways, Cash Trader, Eye Q, QL Stock Control, Sign Designer, Write Turn, Taxcalc, Image Processor, Spell and Number (childs games), 7 assorted QL books, approx 2 years oo QL World. £400 the lot.
Paul Tipton, Kon Julianaweg 90, 2264BE Leidschendam, Holland.
Tel: 070 3272847

WANTED
A reasonably priced friction feed Epson compatible dot-matrix printer (could have broken head) for use as a base for a scanner.
John Fenton, 17 Little Ditton, Woodditton, Newmarket, CB8 9SA.
Tel: (0638) 730140

FOR SALE
QL 768K Trump card, twin 3.5 Drives, Ice system and mouse, Taskmaster, PC-QL Link, Cables, Manual etc. - £250
QL 128K - £50. Brother HR5 Printer - £20. Spectrum 48K, Interface 1, Microdrive, Joystick, Tape recorder + software - £60. Psion Organiser II XP, Spell check, 64K Datapak - £100. Various disks and microdrive cartridges. All in good working order. Offers for all or part.
Peter Brooks, 28 Benares Rd, Plumstead, London, SE18 1HY
Tel: 01-854 5848

VERSATILE PRINTERS
EEC LTD have a limited supply of two Printers with special features, The STAR NL-10 and the C.ITOH DAISY WHEEL Printers.

The STAR NL-10 is unusual because it has a built-in Tractor-Feed, which makes the switching from sheet to continuous paper a simple matter of loading either. It's other special feature is of interest to users of more than one type of Computer, or users who are considering changing from one system to another. It has the ability to be made compatible with most known Computers by means of simple separate plug-in cartridges available as SERIAL, PARALLEL/CENTRONICS which includes IBM & PC, OR COMMODORE units.

The C.ITOH Daisy Wheel Printer, besides producing first class print output, has three features not usually found on this type of printer. It can print on A4 sideways as it has a 13 inch wide platen. This will appeal to accountants, and users of spreadsheets. It has three print densities 10, 12, & 15 characters per inch which again is of interest to people who want to pack a lot of text on a page. Lastly it has the ability to produce PROPORTIONAL PRINT, which gives the appearance of typeset print, as the space between characters varies with the character widths.

Felix Fonteyn for EEC LTD.
Tel: (0628) 22822.

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£20 each, or the SET with Instructions £40

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THESE ARE STILL AVAILABLE, INCLUDING CARTRIDGES. PLEASE PHONE FOR DETAILS OR ASK FOR PRICE LIST

LOW COST PRINTERS. WITH INSTRUCTIONS FOR QUILL, ABACUS, & ARCHIVE.

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