

First came
the snow...



ABUG #45

MARCH 1987

CONTENTS

Diary	1
Computers for Architects	1
Watford Co-Pro Adaptor	2
User Shows	3
What's in the Mags?	4
Pokes	5
Cover Credits	5
For Sale & Wanted	5

DIARY

The next few meetings will be held on:

1 April
15 April
6 May
20 May

The venue for these meetings is not yet certain - hopefully there will be an announcement at this week's meeting. We must apologise to members for the sudden change of venue for the last two meetings. We were only told during the 18 February meeting that the room in the Shakespeare would not be available for the next meeting - apparently the landlady was having some form of dispute with the brewery. This involved the Chairman and one or two members of the Committee in a frantic search for a room for the next meeting. As you will probably have discovered if you are reading this, they were able to book a room at the Park Baths on City Road, one of our old haunts, while they looked for something more appropriate (ie with a bar).

We need somewhere that can be reached fairly easily by all our members, that is fairly cheap (not more than £8 a night), and which has facilities for members to quench their thirsts. We hope we have found such an establishment, and an announcement will be made this evening.

COMPUTERS GIVE ARCHITECTS

A NEW VIEW OF BUILDINGS

A team at Strathclyde University has developed a computer-aided design system which allows architects to combine images of their designs with photographs of the building site, (dirty post-cards?), and even to produce videos (modern dirty postcards) of the views a person would see walking through a new development (no sound of course).

It also offers one off the most sophisticated models in Europe for predicting the amount of energy a new building will require. (This is assumed to mean heat energy not 10 labourers and a 'bricky').

The Department of Architecture and Building Science set up a unit in 1969 (always up-to-date with the latest news), under the directorship of Professor Tom Mavers, to promote the use of computers in architectural research, teaching and practice and called the Architecture and Building Aids Computer Unit, Strathclyde (ABACUS).

ABACUS has paid particular attention to the energy consumption of buildings - which use over half the primary energy delivered in Europe. Its software suite, ESP, (a thinking armchair?), is one

of the most advanced models available to simulate the energy behaviour of buildings and the plant within them (talk to your plants....this one answers back saying "it ain't arf 'ot in 'ere").

Research organisations in each of the EEC member states have implemented ESP, and the International Energy Agency has accepted it in its validation studies. The commercial applications range from investigating condensation in housing to establishing guidelines for designing low-energy hospitals.

Perhaps the most exciting of ABACUS's advances is using computer graphics to visualise designs. One of its programs, BIBLE, generates 'wire-line' perspective views of proposed buildings and automatically superimposes them onto site photographs. To generate the appropriate view the architect specifies the camera position, the focal length of the camera lens and the enlargement of the photographic print; BIBLE plots a view of the building which is correctly scaled and positioned for the "photomontage".

Another program, VISTA, produces fully coloured, textured and lit perspective views. Having specified the form and fabric of the building, the architect can choose to view it from any position (back to the postcards?), and at any time of the day or year (ain't some of 'em lucky!). The program, for each surface of the building in turn, computes the angle of the eye and the angle of the sun and chooses, from a palette of 16.8 million, (BBC+++++?), the appropriate colour.

The above article was taken (excluding comments) from July/September 1985 edition of LINK-UP, the magazine of the British Association for the Advancement of Science.

Frank Webster

WATFORD CO-PRO ADAPTOR

A number of members have expressed an interest in this device (who'll be the first to buy one?). If you are thinking of getting one, it might be worth your while investing £1.50 in the current A & B, where there is a six page review of the whole system, including the 512 and the GEM packages. The following is Watford's provisional specification, abridged from that published in Solinet #6:

The Co-Pro adaptor will allow you to connect the new co-processor boards for the BBC Master externally to any BBC (B, B+ or Master). The adaptor plugs in the tube port, like a second processor. Master users can have two co-processors available at once.

The 512K co-processor gives you a degree of compatibility with the best selling personal computers on the planet Earth, the IBM PC. The package supplied comes complete with DOS+, an operating system that supports both IBM PC-DOS and CP/M 86.

The 512K co-processor comes complete with the acclaimed graphics environment operating system, GEM. With GEM you are freed from typing in complex commands to manage your software files; using the mouse supplied, you simply move the pointer around the screen selecting various icons and pull down menus.

Under the GEM environment, powerful utilities GEM PAINT and GEM WRITE are supplied. GEM PAINT provides you with a very flexible word-processor, that has commands similar to the popular WORDSTAR, as well as the facilities for freely mixing text and graphics produced on GEM PAINT.

With the 65C102 'Turbo' co-processor, your BBC micro is turned into one of the fastest 8 bit computers there is. The Turbo will give you a speed increase of 100% over the standard B or B+. The card also provides 64K of memory, of which 44K is addressable from BASIC or VIEW 3. The facilities of the Turbo card are identical to the 6502 second processor, so all software written to use this, will work with the Turbo card. Avid Elite fans should note that this includes the latest 2nd processor version of Elite, which is in full colour. Hi-BASIC 4, the second processor version of the Master's BASIC is supplied on disc along with HI-EDIT and buffer software.

The minimum requirements to operate each add on card are as follows:

512K CO-PRO	65C102 Turbo
Acorn 1770 DFS ADFS	Acorn DNFS or Watford DFS 1.44 Single 40 track drive.
Twin double sided 80t drives	

The Co-Pro board is available from Watford Electronics and it costs £50 plus £5 p&p plus VAT, and should be at the Manchester User Show this weekend.

Solidisk are advertising what appears to be a similar device. Priced at £239 inc VAT, it is a boxed 512 upgrade and Tube adapter, with the similar features to the Watford product. However, bitter experience of previous new Solidisk launches warns us that it might not be in marketable condition yet! It will be interesting to see if it, and indeed Solidisk itself, will be at Manchester.

USER SHOWS

This weekend (20-22 March) it's the Electron & BBC Micro User Show (E&BMUS) in the Reynold Building, UMIST, Manchester.

Announced shows for the rest of the year are:

8-10, May New Royal Horticultural Hall, Westminster (E&BMUS)
23-26 July, Red Hall, Barbican, London (Acorn User Show)
13-15 Nov, Westminster (E&BMUS)

WHAT'S IN THE MAGS?

A & B COMPUTING, April 1987, Vol 4, #4, 108pp, £1.50

Features & Programs:

Operating systems, inc CP/M, CPN, MS-DOS, QDOS, PC DOS, DOS PLUS / File copying utility / RISC in educational computing / Econet / Databases for education / The Advisory Unit (formerly AUCBE) / Partial renumber utility for BASIC

Reviews:

Viglen Winchester system / CTS Graphics Pad / Vine Matrix Rom / Music Maestro, Keyboard Player & Songbird / Watford's Co Pro adaptor, Acorn's 80186 co-processor & GEM / MicroCODIL / Plus the usual games, inc maps for ThunderStruck, ThunderStruck 2 & The Last of the Free

THE MICRO USER, Apr 1987, Vol 5 #2, 164 pp, £1.25

Features & Programs:

Biomorphs evolution program / Discs / disc drives / Disc protection program / Pokes for Repton 3 / Assembler indirect addressing / TOSS / Hunkie-Egg game / Programming for the disabled / Number board / Power the Beeb from a car battery / IF ... THEN / Telecom Gold electronic mail / Program library / Ultracalc / Pseudocode / Ceefax / Sprites in assembler

Reviews:

Games / Viglen Master console / Maths programs / Spell-Master

ACORN USER, Apr 1987, #57, 186pp, £1.30 - "Music Special"

Features & Programs:

Indirection operators / ROM and RAM arrangement in the Master / Sideways memory testing / Music for Music 500 / Music editor / Composition in Ample / Sideways printing / Drawing with the Compact's Pointer ROM / Picture processing

Reviews

Games / R&D Speech Technology's Micro-Voice / Electron Slogger RAM board / Multi user adventures / Sortsoft's Menu Master / Avon's The Hotel Servant

Also, the April issue of Electronics Today International (£1.30) has an article on constructing a Midi interface for the Beeb.

Dave Brown

POKES

This list of pokes was published in a recent edition of Solinet, and I can't vouch for their accuracy! Do any members have any other pokes for 'popular' games? If you do, we'll publish them in the Newsletter.

Boffin:	?&2493 =	Number of lives
Mineshaft:	?&383f =	&EA, Infinite lives
Labyrinth:	?&36B8 =	Number of lives
Rocket Raid:	?&1C7B =	Number of lives
Jet Pac:	?&307B =	Number of lives
Snapper (Mk 1):	?&1AD1 =	Number of lives
Arcadians:	?&4EBE =	Number of lives
Fortress:	?&1348 =	Number of lives
Tempest:	?&2E2B =	Number of lives
Mr EE:	?&1ECB =	&EA, Infinite lives
Painter:	?&2590 =	&EA, ?&2591 = &EA, Infinite lives
Planetoid:	?&276B =	Number of lives/smart bombs
Meteors:	?&2211 =	Number of lives (max = 36)
Copter Capers:	?&245B =	Number of lives

In most of the above, you can *LOAD the main game file and do the poke, in some (like Planetoid) you can add a line to the Basic program which starts up the game.

"Alex"

COVER

This month's cover was designed by Ian Brown. If you want to draw a cover or write an article for the Newsletter, please contact Dave Brown or Pete Frith.

FOR SALE

Two cased 40 track disc drives. £40 each. Pete Frith.

Centronics dot matrix printer, 132 column. 17 inch platen, complete with BBC cable, spare ribbon, operator's manual, technical manual and 6000 sheets of wide listing paper.

Only £45.00 the lot. Phone Dinnington 563811.

WANTED

BBC Model B, preferably with disc drive. Phone Rotherham 546316.