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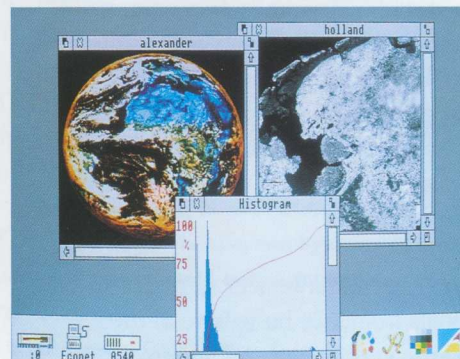
Cumana Score first at Bath University

The first site in the UK to use "Alexander", the Remote Sensing (RS) and Geographical Information System (GIS) software application, is the Geography division of Bath College of Higher Education at Newton Park. The equipment has been supplied by Cumana Ltd of Guildford following its recent appointment as an Acorn VAR. This appointment follows the recent merging of Simnett Multimedia division into Cumana headed up by Paul McKinnon.

The order, valued in excess of £20,000, heralds one of the first and most important applications for six Archimedes 540s, the Flagship machines from Acorn. Installed in conjunction with high resolution monitors, colour printing and image capture peripherals such as Lingenuity's Snapshot kit, the system offers the user a sophisticated introduction into Earth Sciences at a fraction of the "real-cost" bringing the techniques to within reach of potential users.

The Alexander software was developed, during a two year period, at the International Institute for Aerospace Survey of Earth Sciences (ITC) at Enschede (Netherlands) under contract by the Beleidscommissie Remote Sensing (BCRS) of the Dutch Government, and is being distributed by Cumana. Traditional systems that combine RS and GIS normally require dedicated computers that are extremely expensive. Thus there is little opportunity for the hands-on experience that is necessary for students and researchers to acquire skills in practical image processing, analysis and representation. The system takes full advantage of the Archimedes computer's multi-tasking, window-based RISC Operating System, making it easily accessible to students, leaving them free to concentrate on the principles of image manipulation rather than on the operational systems of the computer.

Alexander combines RS and GIS capabilities from the outset and includes a comprehensive help facility and tutorial package. It also allows work to be conducted on a whole set of images rather than on just one image and permits the use of all other RISC OS applications whilst it is operating. Furthermore, its images can be imported directly into other RISC OS applications.



**Paul McKinnon, Cumana Ltd, The Pines, Broad Street,
Guildford, Surrey, GU3 3BH. Tel: 0483 503121.**

Acorn 



ACORN COMPUTERS FOR AIRCREW APTITUDE TESTS

Acorn Computers Limited has won a £230,000 contract to supply computer equipment for the RAF Officer and Aircrew Selection Centre at RAF Biggin Hill.

The equipment supplied by Acorn includes 48 Archimedes workstations linked via an Acorn Econet network. These stations will run MoD copyright software to administer a range of psychometric aptitude tests, designed to test eye, hand and foot coordination. This is achieved by measuring responses from the rudder pedals and desk mounted keyboard/joystick assemblies. It is planned to start operation during June 1991.

Although the Archimedes computers operate in a RISC OS environment, the system package also has the capability of UNIX connectivity allowing RAF and MoD staff to carry out complex data analysis of the results.

Commenting on the contract, Acorn Computer's Tim Holland-Smith said "This installation, in conjunction with the MoD software, has great potential as a replacement for systems already used by commercial airlines in the selection of their aircrew and as a customised offering in the broad area of psychometric testing for personnel selection - where Acorn

Computers, via Psytech, a value added reseller, already has a substantial presence with Archimedes-based systems. This yet again amply demonstrates the suitability of Acorn equipment for specialised applications in the industrial and commercial world."

NEW PCATS GRAPHIC ENHANCER

The PCATS Graphic Enhancer, from The Serial Port, is a single width podule designed to enhance significantly the graphics capability of the Archimedes range of computers. A simple dealer upgrade needs to be carried out on the motherboard so that the Enhancer works with a range of Acorn models both old and new. A version for the A540 will be released shortly.

The Graphics Enhancer features 256 colours from a 24 bit palette in the desktop version with resolutions of up to 768 x 288 on a standard monitor and up to 640 x 480 (Super VGA) on a multisync monitor.

**Samantha Williams, QD Enterprises,
30-33 South Street, Chichester,
W Sussex, PO19 1EL.
Tel: 0243 531194.**

WESTLAND CREATES SOFTWARE TRAINING PACKAGE FOR ARMY

Westland System Assessment, a subsidiary of Westland Helicopters, has developed a low cost training system for artillery and mortar Observation Post (OP) training, which is used in conjunction with a video data projector and calibrated binoculars.

Westland has won an order from New Zealand for five Westland Indirect Fire Trainers (WIFT), which are hosted by the Archimedes system.

The WIFT software has been successfully installed at various locations in Britain, Ireland, Canada and Germany as a replacement for the large static terrain model known as the Puff Range.

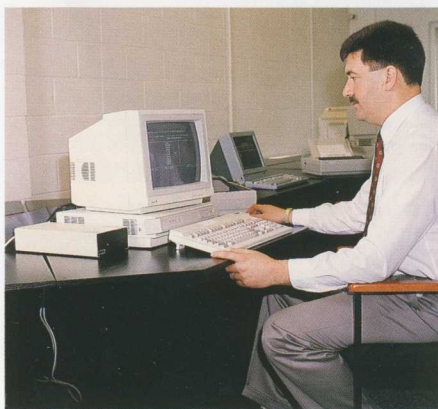
The WIFT system is a highly effective method of training at a unit level. WIFT is run on the Archimedes system and features lifelike simulations of multiple target and fire units, enemy fire and fall of shot. The power of the Archimedes computer is used to incorporate computer graphics and digitised sound. As well as helping trainees to learn the basics of OP training and practise tactical fire planning, it helps to reduce time and live ammunition wastage once trainees have progressed to a more advanced level.

DILLWELL TQM SYSTEM DRIVEN BY ACORN

INTO THE NINETIES

The ability of a company to organise itself into an efficient supplier / customer chain or Total Quality Management (TQM) is an essential element for success in the '90s and is considered to be the main reason why Japanese industry is so successful. Until recently software application support for TQM has been negligible. Dillwell Ltd and Cumbria Software Systems have over the past three and a half years developed a cost effective software package that fully supports the TQM philosophy in an Open System environment. The programme was initially written to be used on PCs but it soon became evident that the greater facilities available on multitasking software, such as on the Acorn R140, were necessary.

The entry level Dillwell TQMS system is therefore based on the powerful, yet cost effective, Acorn UNIX workstations using 32 bit RISC technology. A single Acorn R140 workstation can support three additional TQMS users via connected, terminals, and the Acorn R260 workstation, an additional four TQMS terminals. Both Acorn workstations can be linked to existing networks, mainframes and mini or micro computers supporting ISO standards, thus bringing all aspects of a company's organisation into one cohesive system.



Presswork Metals Ltd, a leading presswork supplier to the automotive sector of safety critical components, adopted the TQMS concept for all functions at its main plant in Co. Durham. Acorn UNIX workstations were chosen for their low capital yet high end user involvement.



Using Ethernet, Dillwell was then able to fully network the whole system. PCNFS cards were installed so that control units of a wide range of equipment from 3D CNC Co-ordinate Measuring Machines, tensile testing machines to the actual machine control systems of all manufacturing processes, were able to become active parts of the UNIX TQM network as well as the existing IBM type PCs engaged in running their DOS based IMS system.

ASCII files containing information were used to set up a database and build up product history files for further analysis. Presswork is using the TQMS system to develop absolute operator

control of the factory and the elimination of "paper mountains" normally associated with Safety Critical Record systems. This will result in considerable savings in quality costs and reductions in inventory and hence expand Presswork's worldwide customer base even further.

Interest in the TQMS package has been high from all varieties of industry sectors from steel plants to Laura Ashley. The software itself, made up of nine basic modules is continually being updated. Two new modules soon to be introduced are Quality Costs and Failure Mode and Effect Analysis.

**George Hadley, Dillwell Ltd,
Consultancy Training and Systems Centre,
Unit 3c, Townfoot Industrial Estate,
Carlisle Road,
Brampton CA8 1SW.
Tel: 06977 41400.**



NEW SIMIS GRAPHICS BOARD

SIMIS Ltd of Guildford has recently launched its new Archimedes graphics board. The AFB300 is designed to be easily configured with a number of Transputers and memory options.

Providing resolutions higher than 512 x 512, the AFB300 will meet application requirements ranging from simple frame buffers, to high performance graphics. For instance, a minimum specification board will typically cater for medium resolution graphics (512 x

512 multi-buffered) up to 1024 x 768 single buffered, while a full specification board will allow resolutions up to 1280 x 1024.

Memory configurations can be set for contiguous operations for systems that use automatic workspacing. Transputer options allow for simple advanced graphics processing and screen manipulation on the board. The video controller is fully software programmable and has a colour lookup

table which provides 256 colours from a palette of 16 million. The AFB300 may be ordered on its own or with any of the range of Eizo monitors (14" to 20" flexscan colour, or 17"/21" flexscan greyscale). SIMIS Ltd has put together an attractive range of packages for the OEMs/VARs market.

Chris Tubbs, SIMIS Ltd, 26 Chitty's Walk, Keen Park, Guildford, Surrey, GU3 3HW. Tel: 0483 233048.

GNOME PRODUCE NEW X SERVER

Gnome Computers Ltd has produced the !X-Arm X server developed in association with Acorn. The server provides a low cost means of turning an Archimedes Computer into an X terminal.

The !X server allows users to connect their Archimedes computers to a network of workstations running the industry standard X Window System. The server can be configured to display X applications run from remote workstations. Alternatively it may be used to log in to remote workstations via xdm. A powerful feature to aid the use in logging in over the network is

the server's ability to examine the network and report to the user a list of accessible workstations.

Security for communication over the network is primarily provided through DES encrypted authentication. The server may also be used with all other X Window System authentication methods, although these are not as secure.

The package, which can be run on all RISC OS-based Archimedes computers (with a minimum of 2 mbytes of memory) and is compatible with

Acorn's TCP/IP protocol suite, costs £199.00 plus VAT.

Gnome Computers Ltd, 25A Huntingdon Street, St Neots, Cambridgeshire, PE19 1BG. Tel: 0480 406164.

FORTHCOMING VAR EVENTS

• **MULTIMEDIA 91**
25 - 27 June

• **MILCOMP 91**
24 - 26 September

• **IMAGE PROCESSING 91**
29 - 31 October

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