

ADVANCED BOOKING

Books already outnumber people by five to one. Al Baron discovers how the British Library is using Archimedes computers to track down printed information.

By the end of 1997 the vast British Library, one of the world's biggest, will have moved to a new location near London's Kings Cross. Readers will be able to sit at their desks and summon books by computer. Below ground, books will be retrieved by library staff, fed into containerised electric trolleys and transferred to the book delivery desk. When the books arrive, a light will come on on the reader's desk.

Computers were first installed in the British Library in 1976, and readers' terminals can presently access material only later than 1976, but the entire British Library catalogue is now on-line for staff usage, using an Acorn Archimedes-based system. But users can also link up to the On-Line Computer Center (OLCC) in Dublin, Ohio, which in turn offers access to 6,000 other US libraries.

British Library Automated Information Services (BLAISE) uses Acorn hardware, mostly Archimedes machines. The system has had many teething troubles and has been prone to crash at inconvenient moments, often for quite lengthy periods. The software, which was developed by the National Library of Medicine, Bethesda, USA, is called *Eihill* and is used continuously. It is very powerful but supports only about 30 users.

20 MILLION REFERENCES

At the press of a button users can have a staggering 20,000,000 references at their fingertips covering every conceivable aspect of knowledge from the 15th Century to the present day. *Express* asked Dr Robin Alston, the library's computer consultant, to search for 'computer crime', the subject of a recent *Express* article. The word 'computer' produced 114,493 references, 'computers' a further 39,354. Combining 'computers' and 'crime' reduced it to 15; this could have been expanded by entering further cross references: 'crimes', 'theft', 'fraud' and so on. Of these 15, a number of monographs were thrown up, a video and even an unpublished typescript. All were located in American libraries, but by redefining the search parameters it is possible to locate the same books (if available) in specific states or areas anywhere on the system.

If for example you wanted to locate every book on George Washington located in libraries in the City of New York, OLCC could give you a title and location print out in seconds. Several other European libraries >



The new British Library building, which will have eight storeys, will also have four storage basements running to a depth of 24 metres below ground. Manned by 650 staff, the air conditioned building will have 15 kilometres of open access shelving for reference books and a staggering 280 kilometres of closed access material.

THE BRITISH LIBRARY

The British Library is the world's leading reference library and one of mankind's major research institutions. As well as the Bloomsbury Reading Rooms, it encompasses the Science, Reference and Information Services, the National Sound Archives, the British Newspaper Library and several others.

At the Main Reading Rooms in Bloomsbury, the reader would until quite recently have had to search manually through the main catalogue or microfiche for

the books they desired, fill out an application form, then hand it in at the reservations desk. If a particular book is kept out-of-house, as many of the less-commonly used books are, they would have to wait until the following day before they could collect it.

This is still largely the case, but the Humanities and Social Science Reference and Information Catalogues from 1976 onwards are now being made available on-line. Although the original computer system was installed some

15 years ago, the catalogue has been available in this form to readers only since last year. As yet the giant Newspaper Library is not yet included on the on-line database.

Initially three terminals were installed in an annex near the advance reservations desk, now though there are five outlets situated behind the enquiry desk in the Main Reading Room. The SRI at Chancery Lane also has computer terminals for readers' and researchers' use.

HOME HUNTING

What information services can you reach from home? The main news and information service for research available in the UK is Profile, available on Telecom Gold and supplied by *The Financial Times*. With additional information from the BBC, *The Washington Post*, Associated Press, *The Economist*, *The Independent*, *The Guardian* and even TASS, Profile costs £2 a minute. However it has full text stories and key word searches, and even in 1984 held 500 million words so it's a goldmine for research.

FILEFINDER SERVICE

1. News on a company
2. Company Financial Information
3. Press Coverage of News, Issues and Events
4. Country News, Politics and Economics
5. Product and Market Information
6. Industry Information
7. International Trade and Finance
8. Business Opportunities and Tenders
9. Personalities
10. 1992 Single European Market Information
11. Advertising, Marketing and Media Information
12. Science and Technology

Enter number of selection
 ⌘ to exit FILEFINDER
 or HELP >

• The range of information available on-line on Profile.



• Archimedes computers are used to access the thousands of files available on the British Library's on-line reference service. With their fast RISC processors they are ideal for processing a large database.

are already on-line with OLCC, and in five years at most every major library in Britain will have joined.

During the demonstration Dr Alston was connected to OLCC for 13 minutes and the total cost was £9.88. This was at 11.30am, peak rate for telephone users. His assessment of that charge is that it is very reasonable. OLCC is not open continuously 24 hours a day, but it is accessible from London from about 11 o'clock in the morning till after midnight.

A database as large as OLCC has to be constantly updated, which means that it has to go off-line for a certain period each day.

It is also accessible to the home computer buff – you can write to Dublin today and open an account. The only prohibition for the home user is cost. It is not yet possible to tap into the British Library's database, but this will come in time.

BEYOND THE CD-ROM

At present the information available is largely in the form of book references and abstracts from a narrow range of journals. The next generation, which will possibly be available next year, will be the eraseable CD-ROM. This will turn the database into a small CD; it will be able to store text, digitised and video data as well as having an overwrite and correction facility.

The first texts to be stored in this way will be encyclopaedias and technical and scientific journals, but in 10 years or less it is not unrealistic to suppose that you'll be able to sit down at your home computer and flick through the complete works of Shakespeare, the latest best seller or even the current issue of *Pravda* on the screen.

Will the computer replace the book? Dr Alston for one is sceptical. "Who wants to read a novel or the daily

paper off a computer?" He goes on: "The book is actually one of the most marvellous inventions that man has ever made, and I think its use will go on for hundreds of years. Books and machines are complementary."

But researchers will have to adjust their thinking. Already a lot of academics have been queuing up to use the new system. In terms of time saved thumbing through clumsy manual catalogues the new information technology is already paying huge dividends for all library users.

At one time the problem for researchers was locating material. Now they have the even bigger problem of selecting it. Every year the British Library adds a staggering five miles of shelving! There are now many more books in the world than people. We're already outnumbered by about five to one, so computers are becoming essential just to keep track of the amount of paper. ■

ON-LINE REFERENCES

The British Library's BLAISE catalogues includes the following databases:

- Humanities and Social Sciences Catalogue – this includes much foreign language material.
- Conference Proceedings Index
- Music Catalogue (includes popular music)
- BLIS – The librarians' information service
- Eighteenth Century Short Title Catalogue
- BNB – three catalogues of British National Bibliography.
- Cartographical Materials – maps, atlases and globes, celestial as well as terrestrial.
- Whitaker – the books in print list
- SIGLE – (pronounced SIGG-ly) The System for Information on Grey Literature in Europe, described by Dr Alston as a very useful catalogue of 'grey' documents. Includes local authority documents, technical data etc.
- Books In Print (USA)
- Francis – a French-based system which includes considerable amounts of British and American material.
- National Newspaper Index – selected US newspaper indices from 1979.

Also include are computerised indices on religion, philosophy, much American material, a Middle East file and even a digest of world-wide news as seen from Moscow.

TEETHING TROUBLES

The current on-line system available to readers is very primitive; as well as being prone to crashes it is extremely limited in the material it can locate. The following searches are typical:

- A subject search for 'vampires' yielded 32 titles; the word 'vampire' only one; while 'vampirism' produce only "YOUR SEARCH WAS NOT SUCCESSFUL".

• A subject search for women criminals led to the following:

crime 510 titles
 selective review: women
 2 books found.

The same search entering 'women' as the subject term:
 women 6,320 titles
 selective review: crime
 3 books found!