

## Home data banks turn British on

It looks like an ordinary TV set. But pick up the phone, tie into computer central and the screen comes alive with breaking news from Reuters, the latest action on the stock market, weather reports, mail-order catalogues, tips on the best French restaurants in London and even how "Lucky Lady" did in the seventh. All it takes is the touch of a button on a hand-held keyboard.

The system, known as Prestel, came on line last month in Britain. Right now it is being test marketed by a few hundred users. But according to its designers, the computerized data retrieval system will be available to households all across the country sometime next year.

A brainchild of the British Post Office, which also operates the nation's telephone system, Prestel provides access to computer-based information through the regular telephone network. The master data bank can hold up to 250,000 "pages" of information, each page holding about 150 words. It costs the subscriber a bit more than 5 cents for the initial call to the computer, plus up to three cents for each page consulted. The charges automatically show up on the phone bill. In the test marketing, home users initially get a free usage period so that they can familiarize themselves with the system.

The post office is really just a middle man, putting the users into contact with more than 100 "information providers." These include the stock exchange, travel agents, the sports council and new "electronic publishing" companies that are exploiting the new medium. The information providers price each page of information, but some pages, like the weather reports and advertisements, are free. Others, like financial information, cost whatever their providers think they are worth. The post office automatically records how many pages, and which ones, each subscriber consults. From the revenue the post office subtracts the cost of running the service, takes its own profit and distributes the rest to the information suppliers. A provider whose information comes on screen quite often can make a tidy profit.

The system has considerable flexibility. With the "electronic encyclopedia" providers, for instance, it is possible to go through a question and answer sequence that will help a user grapple with a complicated legal maze or tell why the car won't start. If the central computer doesn't have the needed information, the user, by pressing a button, can send a message to the information provider asking for more details about a subject or a product offered for sale.

Cash transactions can even be worked out. For example, Currys, a chain of 480

shops specializing in large appliances such as television sets, washing machines and refrigerators, has supplied electronic pages that amount to a mail-order catalogue. By pressing the Prestel keyboard, a user can select and purchase a desired item, and specify the type of payment. Recording equipment notes the order, passes it on to Currys and the appliance is delivered direct to the customer.

Even electronic altruism is possible. A charity, Save the Children, has a page that urges the Prestel user to "Press a key to give 10 p." The user who does so will find a 10 pence (about 17 cents) debit on the next phone bill, and the money will go directly to the Save the Children Fund.

Problems, however, loom ahead for Prestel. At first, 1,500 sets were to have been installed by June 1 for test marketing. But problems with the TV-to-phone connection and the possibility of unwanted switching in the phone network due to Prestel-induced harmonics have forced the post office to a slow start. Only 100 sets are now in operation, and many of these are owned by information providers who are "stocking" the data banks. The post office predicts, however, that 1,000 trial sets will be in operation by the end of 1978. The British, moreover, have already granted the U.S. marketing rights for Prestel. The Insac Group Inc. of New York City expects to market the service in the United States by the summer's end.

The big question at the British Post Office right now is how many people will go for Prestel. Today, a TV set equipped with all the necessary extras costs about twice the price of a regular TV. But if demand increases, the price will fall. By 1980, the cost could come down to only a fraction more than a regular set. Even now, Prestel is cheap compared with conventional computer information services. Alex Reid, the post office director for Prestel, says it costs only about one-tenth the price of some computer services. At the beginning of public service next year, however, more companies than individuals may decide to pay for Prestel. Stockbrokers can have immediate access to market prices, bookmakers to race results, travel agents to timetables, journalists to reference books and directories.

But market research by the British Consumer Association suggests that those most excited about Prestel are the middle class—white collar and skilled blue collar workers. According to Richard Hooper of Mills and Allen Communications Ltd., one of the electronic publishing companies that acts as information providers for Prestel, people introduced to the system for the first time are "totally gripped by it. They're actually amazed by the technology." Yet whether amazement means profits, and thus a long life for Prestel, remains to be seen. Says Hooper: "My position now is that we're either on the brink of a new communications medium, or we're on the brink of disaster." □

## House to breeder: We want you

The House of Representatives last week rejected a proposal that would have given President Carter the power to kill plans for the Clinch River Breeder Reactor. The amendment, introduced by Representative Walter Flowers (D-Ala.), would have cut \$154 million from the CRBR and put up \$55 million to study an advanced breeder design.

Carter had backed the amendment. In return for ditching the CRBR, he agreed to a detailed three-year study for a bigger, safer breeder reactor. It might have been anywhere from 650,000 to 900,000 kilowatts in size, compared with the 380,000 kw of the CRBR. The study would have aimed at a reactor with more safeguards against terrorists seeking to obtain plutonium for use in primitive nuclear weapons. Another approach under consideration was to use a fuel, such as thorium, that would be less adaptable to bomb conversion.

With its action, however, the House has in effect preserved legislation that authorizes \$172 million for continuing the CRBR. But Carter has threatened to veto any legislation that would keep the CRBR alive.

Backers of the Flowers proposal argued that Congress wouldn't be able to override a presidential veto of a bill requiring that the CRBR be completed and that the compromise would not only keep the breeder program alive but would also hold out the hope for construction of an even larger breeder reactor. Carter vetoed the project last year and Congress managed to keep it alive only by putting funds into a public works appropriation bill that the President felt compelled to sign (SN:3/18/78,p.175).

"The bottom line is that if the President doesn't want it, it won't be built," Joe Keefe, an aide to Rep. Flowers, told SCIENCE NEWS. But like last year, the President's maneuvering ability may fall short.

In April Flowers offered a similar compromise to the House Committee on Science and Technology. But the committee modified it to require continued work on CRBR in addition to studying the possibility of a new type of breeder reactor.

The Senate hasn't voted on the CRBR this year, but last month the Senate Energy Committee gave Carter a victory by voting to allow him to kill the Clinch River project if he agrees to pursue a nonplutonium version of the breeder reactor.

Even if the CRBR is never built, it has already generated a mountain of conflicting information. To date, CRBR proponents claim that completing the project will cost \$500 million, while canceling it would cost \$800 million. Opponents cite Energy Department estimates that \$2 billion could be saved by killing the project. □