

CERN Courier Archive: 1972

A LOOK BACK TO CERN COURIER VOL. 12, DECEMBER 1972, COMPILED BY PEGGIE RIMMER

LABORATORY II

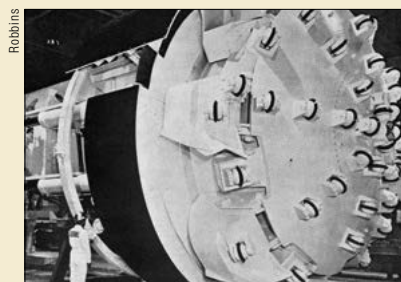
Two years on

Almost two years ago, CERN Council approved the "Programme for the Construction and Bringing into Operation of the CERN 300 GeV Laboratory". The SPS [Super Proton Synchrotron] project has now reached the stage where most of the design work on the accelerator components is complete. Many of the big contracts have been

placed. The laboratory buildings are almost ready for occupation. Several of the access shafts to the machine level underground have been dug to their full depth and the boring machine, which will chew its way around the 7 km circumference of the accelerator, is on site ready for action early next year.

● Compiled from texts on pp411–413.

A Robbins rotary tunnelling machine, "the mole", of the type that will bore the SPS tunnel.



CERN–France contract signed

On 9 December, after many months of careful preparation, the CERN Directors-General and representatives of the French government once again signed a formal piece of paper. In June [... there was...] the signature of an agreement concerning the legal status of the organization in France, referring to a contract concerning land made available to CERN for the development of Laboratory II. It is this contract that was signed at the beginning of December.

A ceremony took place at the Sousprefecture at Gex in the presence of representatives of the government, local authorities and CERN. The Directors-General of CERN thanked the French authorities and spoke about CERN's policy in the region. It is hoped to avoid becoming a foreign enclave and, on the contrary, to become integrated in

the life of the region.

The Laboratory II site is largely an open one and a scheme has been worked out for its management. This will involve regular contact with representatives of the local community to determine, for example, the conditions under which farming will be carried out on the site, and care will be taken to preserve the forests with the help of the Office des Forêts.

Another section of the contract concerns linking the two laboratories without passing via the customs posts. A tunnel will be dug underneath the RN 84 to be used by CERN personnel and for transporting equipment.

The contract makes 412 hectares available to CERN at a nominal rent of 100 French francs per year for 92 years. It is linked to the one concerning the use of the ISR site, which came in effect in 1965 and runs for a hundred years.



A contract concerning CERN's use of 412 hectares of land in France was signed at Gex on 9 December by A Alline (Ministère des Affaires Étrangères) on behalf of the French government and, behind him, CERN Directors-General WK Jentschke and JB Adams.

● Compiled from texts on pp417–418.

RUTHERFORD

Computing by telephone

After the "instant commissioning" of the Rutherford Laboratory's large new computer – an IBM 360/195 – at the end of last year, the machine has continued to operate reliably. Most of the software was taken direct from IBM, the laboratory adding a message-transfer system and an interactive terminal file-handling system.

The computer runs on a 24 hour, five-days-a-week schedule with two eight-hour periods at the weekend. About 20% of the computing time is assigned to the Atlas Computer Laboratory, the rest by other than high-energy physicists. The computing load is climbing, however, and round-the-clock operation seven days a week is about to start.

Five satellite computers control a variety of automatic measuring machines, graphics terminals and typewriters, connected through IBM 2701 interfaces by fast data links. In addition, remote

workstations (small computer, card reader, line printer) are connected via 2400 baud Post Office-leased telephone lines to a Memorex interface that can handle 24 bisynchronous lines and 72 asynchronous lines. The latter can also be accessed through the PO-switched public telephone network. Centres now connected are Glasgow, Birmingham, Oxford, Imperial

College, Durham, Westfield College, CERN, RSRS Slough [Radio and Space Research Station], ATLAS Laboratory and the Institute of Computer Science London.

UK-leased lines at 2400 bits per second cost between £1400 and £3250 per year; the CERN link is of the order of £4000 per year.

"Dial a computer" seems to be with us.

● Compiled from texts on pp421–422.

Compiler's Note



One reason often given for the World Wide Web having been invented at CERN around 1990 was the burgeoning need for the widely scattered high-energy physics community to share information and computing resources; LEP was operational and the LHC was just below the horizon. In fact, the community had been engaged in distributed computing for 20-odd years, employing (and is still employing) a medley of local, regional, research, academic, national and international networks, with communications protocols ranging from the home-grown to (eventually) the internet suite that underpins the web today.

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