## L M Ericsson to Undertake First C.T.C. Installation in Portugal



C.T.C. office at Setil

C.T.C. installation Setil—Vendas

Companhia dos Camhinos de Ferro Portugueses (C.P.), the Portuguese Railway Company, has decided to introduce C.T.C. on the single-track line Setil-Vendas Novas (see map), which is important especially for goods traffic. This will be the first C.T.C. installation in Portugal. L M Ericsson is to supply and install the equipment under a contract worth some 3 million kronor.

The Setil-Vendas Novas line is 44 miles in length and has 11 stations. Each station has two tracks. The C.T.C. system will be of special type insofar as the points will not be under remote control. They will normally be positioned for left-track movement at the stations, but facilities will exist for local point operation, for example for shunting purposes. Despite this simplification it is anticipated that the introduction of C.T.C.

will substantially increase the capacity of the line and lead to a saving in manpower.

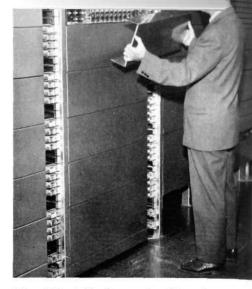
Only two stations receive their current supplies from the mains. The signalling equipment at all other stations will be operated from primary cells. This necessitates a very low current consumption; all signals will therefore normally be extinguished. They light automatically on the arrival of a train on the approach track circuit.

The C.T.C. office will be situated at Setil, and controls will be transmitted with a keyset. The entire plant will comprise about 90 signals and 90 track circuits.

All equipment is to be delivered during 1960, and the installation is to be officially opened on February 1, 1961.

## Modern P.A.B.X. for Oslo Newspaper

The Norwegian "Aftenposten" started to use its new telephone switchboard at the end of September. It is a crossbar type P.A.B.X. supplied by L M Ericsson, Stockholm, in cooperation with A/S Elektrisk Bureau, Oslo.



(Above) Mr. Reidar Hansen from Norwegian Telecommunications Administration, Oslo district, inspecting a crossbar switch in the new P.A.B.X.

The plant, comprising 300 extensions within the Aftenposten offices, has greatly improved the newspaper's communications.

The new switchboard makes it easier for the public to contact any member of the editorial staff. The latest news can be heard from an automatic telephone answerer. Through the automatic call-back service an extension user who meets the engaged condition when ringing another extension is connected as soon as the number becomes free.

A recent exhibition in Rome "VI. Rassegna Internazionale Elettronica Nucleare e della Cinematografia" was honoured by the visit of President Giovanni Gronchi. He is here seen with Sr. Luigi Baggiani, managing director of L M Ericsson's Italian subsidiary, F.A.T.M.E., admiring a model of the Ericofon.

