

# The Ericsson Bulletin

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## Lennox Castle Mental Institution

 ONE of the finest and largest mental institutions in the Country has recently been completed under the control of the Glasgow Corporation Public Assistance Committee. Although the site is not more than twenty miles from this great industrial city, it is set in beautiful and peaceful surroundings. Nestling snugly on the foothills of the Campsie Fells, it is enclosed by woods and hills, and covers an area of approximately 1,350 acres. The estate takes its name from the historic family of Lennox. The present castle, which is an excellent example of the Scots Baronial type of building, was built by one of the Earls of Lennox in 1837. It has been retained and adapted for use as the nurses' home.

The project was conceived directly after the passing of the Mental Deficiency Act of 1913 but had to be suspended on account of the war. In the years following the conclusion of war the local authorities were discouraged against incurring capital expenditure, and it was not until 1925 that a real move was made. The estate of Lennox Castle was fixed upon as the site for the new mental institution in 1927 and purchased together with the castle. To inaugurate the erection of the new institution, the first sod was cut by the then Secretary of State for Scotland, the late Rt. Hon. William Adamson, on the 5th October, 1929.

The natural layout of the ground enabled the institution to be split into two parts—the male and female—with central administrative buildings. Provision is made for six hundred males and six hundred females, while the hospital section has beds for the treatment of one hundred patients. In each of the male and female sections there

are ten dormitory blocks, each capable of accommodating sixty patients. In addition, each of these blocks has a day room for the accommodation of these patients. There is also a central dining hall for each section, capable of seating six hundred, and the kitchens in the same buildings are equipped to provide meals for that number.

Attached to each of the male and female sections there are workrooms and workshops for the training of patients, and in the female section there is also a laundry equipped with the latest type of machinery capable of handling the needs of the whole institution.

The assembly hall is the only building in the whole institution that has any pretensions to architectural treatment, the others being planned and built from a strictly utilitarian point of view. It houses the administrative offices, the telephone equipment, and wireless controls. The entertainment hall can seat thirteen hundred persons and is equipped with cinema sound apparatus.

It will thus be seen that the environs are ideal and the arrangements and layouts of the various sections are on the most up-to-date lines. The machinery and equipment for an institution of this nature are many and varied and only the best procurable has been installed. It is therefore pleasing to record that Mr. Campbell Murray, M.I.E.E., Consulting Engineer, Glasgow, who was responsible for the mechanical and electrical engineering equipment, placed the order with Ericsson Telephones Ltd., for the supply of the telephone exchange.

The private automatic branch exchange installed, commonly known as a P.A.B.X., incorporates all the latest facilities applicable



to this type of board. The equipment comprises main frame, auto unit, miscellaneous apparatus rack, ringing panel and attendant's manual board. The power equipment was supplied by the British Post-Office, as is usual on this type of contract. The exchange is initially equipped to serve 90 extension lines, and all exchange calls are routed via the attendant's board.

The auto unit is typically illustrated on this page. The switching equipment provides for a maximum of 12 simultaneous conversations between extensions. Calls to or from the public exchange are made without holding switching equipment. A cross-connecting field between the line relays and connector multiple is provided on the rack for traffic reasons. The unit is totally enclosed in a sheet steel cabinet with

removable doors at front and rear; the whole being finished in a light grey enamel to give a pleasing appearance. The miscellaneous rack is also totally enclosed and accommodates the cord circuit and exchange line apparatus.

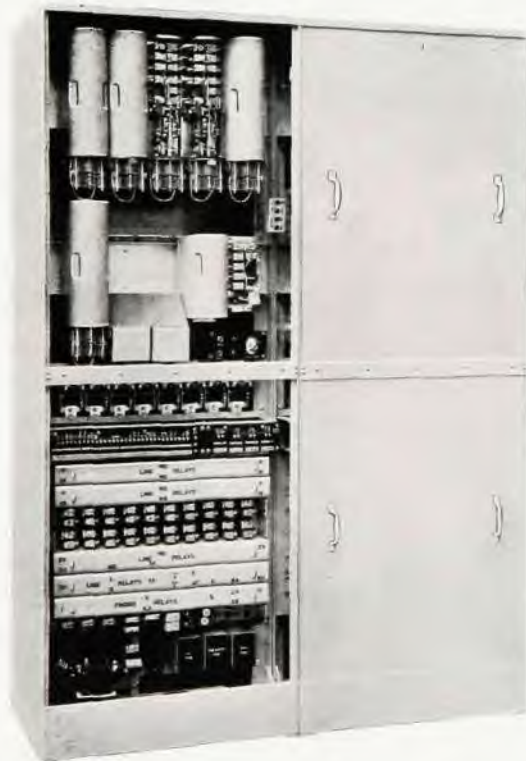
The manual board is of the floor pattern type with a capacity for 150 extension lines, 10 exchange lines and 12 cord circuits, the initial equipment being 90, 4 and 9 of these circuits respectively. Provision for night switching has been made on all exchange lines.

The line finders used are 50-outlet uniselectors and the connectors are two-motion switches of the 200-outlet type. All relays are the British Post Office (B.P.O.) "3000" type, incorporating twin contracts.

Alarm signals are provided to indicate :—

- (a) When a connector is taken into service and held for an excessive period before the call is proceeded with (permanent loops etc.), the circuit conditions are such that the switching equipment is released after a period of 30-60 seconds and the calling signal on the manual board associated with the extension glows. The extension lamp provides the alarm signal in this case.
- (b) Blown fuses.
- (c) Whenever a fault occurs which results in the permanent energisation of a release magnet. This alarm is retarded for a period no longer than 18 seconds.
- (d) Ringing current failure, indicating a fault on the ringing dynamotor.

All the above alarms are extended to the attendant's manual board.



The Type of Auto Unit Serving the Institution