astening

On the afternoon of May 2, 2YA, with the co-operation of Mr. F. W. Sellens, conducted a rebroadcast of short-wave station PCJ, Holland, which was broadcasting a special programme for Australian and New Zealand listeners. proved so successful that it has been decided that, conditions permitting, further rebroadcasts of this station will be carried out on Saturday afternoons. In view of this, the following article on station PCJ, Holland, should prove of decided interest to listeners.

> THE International Short Wave Broadcasting Service maintained by the Philips radio station, PCJ, is prob-

ably known to every short wave listening enthusiast in Zealand.

This unique experimental station, operating at Eindhoven, Holland, has been on the air on regular schedule since March, 1927. dedicates programmes to practically every country in the world, being materially assisted in this respect by the linguistic abilities of Mr. E. Startz, the station announcer, who speaks fluently in Dutch, French, English, German, Spanish and Portugese.

We have for some time been passing through an unfavourable period for long-distance short-wave reception, but within the past few months conditions have improved materially, and it would seem that

we are still on the upward trend of the cycle.

We may now expect occasional Saturday afternoon rebroadcasts of PCJ by 2YA, and with this in view an endeavour is being made to have PCJ dedicate special programmes for New Zealand at this time.

A feature of special interest is the new antenna system of PCI. The photograph below shows rather a maze of masts and wires. Three aerials are in regular use on the 31.28-metre wavelength.

(a) An ordinary "broadcast" antenna having no intended directional effect. Broadly speaking, it radiates equally in all directions.

(b) A new directional beam aerial radiating roughly east and west, pointing toward the Dutch East Indies on the eastern side and in a diametrically opposite direction on the west.

lso a beam aerial, directed to the south-(c) Also west and north-east. It is intended principally to reach the South American countries.

The five-wire aerial supported by the lattice steel towers in the left background is a long-wave one and not used by PCI.

It is of interest to study out on the terrestrial globe the effectiveness of these aerials as far as New Zealand is concerned.

Assuming aerial (b) to have the centre of its beam directed toward the centre of the Dutch East Indies group, and aerial (c) to radiate directly toward Dutch Quiana, we find that New Zealand is well in the beam in both As we are quite close to the true antipodal position of PCJ, the travelled distance of the signal to the New Zealand aerial is very closely the same for each

aerial, and practically independent of which way round the signal travels.

In the case of aerial (c) the signal may, of course, reach us via South America. i.e., from the northeast or via Antarctica -south-west.

Similarly with aerial

(b) the signal may come by a western or an eastern route, and at different hours of the day one or other becomes definitely the favoured route owing to the different distribution of daylight-dark areas crossed.

LL keen short-wave listeners should obtain access to a terrestrial globe and learn how to "orient" it so that

when placed in sunlight, the daylight and dark portions of the earth are accurately shown on the model globe as light and shadow.

The regular transmission times of PCJ converted to New Zealand mean time are:-

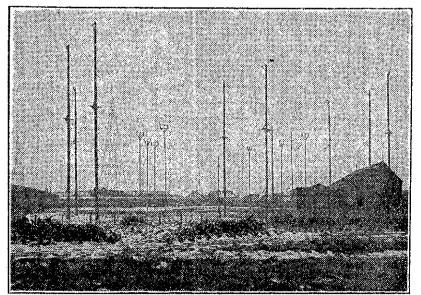
Thursday .. 4.30 a.m. to 7.30 a.m. Friday 1.30 a.m. to 5.30 a.m., and

9.30 a.m. to 1.30 p.m.

Saturday 5.30 a.m. to 7.30 a.m. 1.30 p.m. to 5.30 p.m.

New Zealand short-wave listeners will no doubt welcome the extension of PCJ's special transmissions to this part of the world, and help swell the PCJ collection of QSL cards-now reputed to be the largest in the world. Reports addressed to Philips Lamps (N.Z.), Limited, P.O. Box 1673, Wellington, will be forwarded on and all of these will be replied to with PCJ's QSL card.

It will be observed that these hours are coming in a part of the day when the programmes can The Friday probe enjoyed. grammes will be a distinct improvement on the present sche-



PCJ's transmitting aerial array.



Mr. E. Startz, the announcer of PCI.