

War and Peace

Manawatu Station

The Radio Year

Controlling Traffic

League of Nations Union

Improvements to Plant

A Candid Criticism

Pittsburg System

A SERIES of lectures has been arranged by the Auckland branch of the League of Nations' Union for broadcasting from 1YA. The titles of the lectures and the speakers are as follow:—

January 16—"Introductory Remarks" by Mr. Bernard Martin.

January 23—"Humanitarian Activities," by the Rev. W. G. Monckton, M.A.

January 30—"Peace," by Sir Geo. Richardson.

February 6—"Work of the International Labour Office," by Mr. Tom Bloodworth.

February 13—"The League and Economic Progress," by Mr. N. M. Richmond, B.A.

February 20—"Women and Children of War," by Mrs. John Cook, J.P.

February 27—"Security and Disarmament," by Mr. W. T. G. Airey, M.A.

March 6—"Closing Thoughts," by Mr. E. C. Cullen, S.M.

THE Manawatu Radio Club, which operates 2ZIF, Palmerston North, the oldest broadcasting station in the Dominion, is planning improvements to its transmitting plant. A new generator is to be installed almost immediately, while a 2 h.p. 3-phase motor to drive it has been presented to the club. The extra valves have all been secured, and a special portable amplifier is also under construction for relay work. With this amplifier three microphones can be used simultaneously for special work. The club's revenue last year was £252, and after providing for the cost of the new generator it begins the New Year with a deficit of £10.

The annual report states that the station was lately ordered by the Post and Telegraph Department to reduce the power by half on Sunday night. A protest has been lodged, but to no avail. A proposal to apply for a night each week, in addition to Wednesdays and Sundays, is under consideration. 2ZIF claims to be the only amateur station in New Zealand with an orchestra of its own.

Farming with Radio

"LONG distance" farming as part of the tremendously enlarged field for radio with heavy demands for skilled radio men, is foreseen by Dr. Lee De Forest, famous as a pioneer worker in the field of broadcasting, who predicts that radio control of distant mechanisms will constitute an important phase of radio in the future.

"I can visualise many tasks performed by aid of radio control in the future," Dr. De Forest said recently. "In fact, out in the Middle West, where I was born, I can picture the farmer seated in an observation tower, controlling one or more tractors by ultra short-wave radio. The country is so flat that at a few feet elevation a man can see for miles. A transmitter on the tractor itself can flash back a signal to the farmer, indicating the exact state of affairs and how the orders are being carried out just as the electric switch and signalling system in railroad flashing back an indication to the switch tower that a given order has been carried out.

"Of course, there is the question of providing the necessary wave-lengths. To-day, with an overcrowding ether, there appears little chance to squeeze out additional channels, particularly for many individual uses. And yet I am by no means discouraged in my dream; I have great hopes for ultra short-wave radio, combined with directional or beam effects, as a means of securing all the necessary channels for localising application.

"I am sure history will repeat itself, for just as the earlier radio application had to do with actuating a bell or tap recorder and performing other mechanical work, so the future of the radio art will also have to do with controlling machinery. There are greater opportunities ahead for the radio-trained men than we can imagine to-day."

"THERE is a feeling of satisfaction," says the radio editor of the Auckland "Star," in reviewing the year's achievements, and as an introduction to a candid criticism of the work of the R.B.C.:—

"AS the year 1929 draws to a close one is inclined to look back upon radio achievement throughout the Dominion during the past twelve months. Generally there is a feeling of satisfaction in the retrospect, for New Zealand broadcasting during the year has made considerable progress in many avenues, even though it has failed to reach heights comparable with those attained in Britain and Australia.

"Our programmes certainly have improved—and there was urgent need of improvement. The result has been reflected in a steady increase of licenses, which have now topped the 50,000 mark, and, what is more important, promise to stay well above that mark. Programmes, however, are still lacking in that finish and "balance" which are essential to thoroughly enjoyable entertainment. There is frequent evidence of want of sufficient rehearsal and careful programme building, features upon which the Broadcasting Company might well concentrate much attention during the coming year.

"The undertaking of long-distance relays has been the most outstanding success of 1929. All four stations have undertaken this work, and have done most creditably under initial difficulties which had to be faced. Next year should see big extensions of relay programmes, and there will be a general wish for regular exchanges between Auckland and Wellington.

"IN sports features the broadcasting of running accounts of wrestling contests was the most noteworthy development. In Auckland these accounts were most popular through the special capability of the announcer, but other centres were not so fortunate with their man at the microphone, and the descriptions suffered in consequence.

"There is still very general disappointment at the continuation of the system of announcing items without supplying the names of artists. This is unfair both to the artists and to the general public, and is a special handicap to those who, lying on beds of sickness, still like to listen-in to the nightly radio programmes. It passes the writer's comprehension how the Broadcasting Company can justify their present procedure. When a concert is relayed, the name of every artist comes over the air, yet when performers appear before the studio microphone they do so unheralded except in cold print. Does any other country adopt this method? Let us hope that the New Year will bring a needed change.

"As the 'small fry'—our cheerful little stations 1ZB and 1ZQ—listeners should be grateful for many a delightful programme of records. These small stations have done good service without monetary reward for it in the form of license revenue, and they are to be

"TRAFFIC eyes," which automatically control traffic lights when they "see" motor-cars, are in service in Pittsburg, U.S.A.

The purpose of the new system is to eliminate unnecessary traffic delays by giving the right of way continuously to traffic on a main street, interrupting the main traffic flow only when cars are actually waiting on the side street to cross the intersection.

Motorists on one street are given a green or "go" signal continuously until a car on the cross street comes within a sort distance of the intersection, at which time the traffic signal mechanism starts to operate and the lights go through one complete cycle, allow traffic on the one street to pass through, and then stop again with the green light on the other street. The lights then allow traffic to proceed uninterruptedly on the one street until the presence of cars on the other street justifies another change.

Since operation of the signals is regulated entirely by the actual necessities of the traffic law, it is expected that a considerable saving of time will result, especially at night, when delays for which there is no necessity occur.

The purpose of the installation, which is the first in the world, is to determine the practicability of the invention of Dr. Phillips Thomas, research engineer of the Westinghouse Electric and Manufacturing Company.

Simple instructions for operating the lights are given on signs maintained by the Pittsburg Traffic Planning Department. The signs read: "To get the green light, pull up to the line."

The automatic feature of the system is made possible by a new application of the photo-electric cell, or "electric eye," which literally "sees" motor-cars and regulates the signals accordingly. It is the motor-car's shadow, falling on an "electric eye" from an overhead lamp, that assures a sufficiently dense shadow, night and day. Traffic is regulated through this beam of light.

The new system is designed to set automatically right any unusual situation that might present itself. For instance, if an unusually large number of cars in one street threatens to hold up traffic in the other street inordinately long, the signals operate on a definite pre-arranged programme, giving each line of traffic a fair share of time.

congratulated upon the success they have achieved.

"The new year dawns with big hopes of radio progress. Revenue should now be assured, and broadcasting ought to be on a sound financial basis. Naturally we shall clamour for extended hours and better programmes, even while we express gratitude for past extensions, especially in the form of the dinner music sessions, which have given broadcasting a big lift in popularity. We look forward to increased relay facilities, provided with regularity, and in fact to a host of minor improvements which the Broadcasting Company indicates are under consideration. The hope of all listeners is that projected improvements will materialise, and that right soon."

Oscillating Valves

Creating Annoyance

APPROPOS our article in a recent issue of the "Radio Record" concerning the howling valve nuisance, we have received a complaint which runs:—

In view of the disturbance created by an oscillating receiver, I cannot understand why the "Radio Record" should publish diagrams of a three-coil regenerative receiver.

This is distinctly unfair, and shows lack of technical knowledge on the part of the writer. It is not only the home-constructed receivers that create annoyance. In fact, a properly neutralised home-built receiver can cause far less annoyance than a factory-made receiver which has had a new set of valves for which it is not neutralised.

We know of two owners of Browning-Drakes who live almost side by side, and the only disturbance created by either receiver is the very faintest breathing noise. A three-coil receiver cannot create a noise in the neighbourhood if it is correctly balanced and carefully handled. The whole trouble is that many of these receivers are not balanced properly, and, of course, create disturbance.

Then there is the enthusiast who alters his neutralising condenser to obtain greater sensitivity, with the result that his neighbours know of his experiments. A broken down by-pass condenser in the radio frequency stages of a neutrodyne will likewise create trouble. All the sets described in the "Radio Record" need annoy nobody, although a warning is always issued when there is the slightest possibility of the set becoming a nuisance to the neighbourhood.