Australian Move

CO-ORDINATION OF STATIONS

TO COMBAT BOREDOM

A FURTHER stage in the co-ordination (which involves financial amalgamation) of broadcasting services in Australia was reached on May 21, when the Broadcasting Company of Australia Pty., Ltd. (3LO, Melbourne), announced that arrangements had been made whereby that company obtained the controlling interest in the Adelaide station (5CL). It has taken some time for the companies concerned to come to an amicable agerement, as was requested by the Commonwealth Postmaster-General some months ago. The effect of the co-ordination of the services of 3LO and 5CL is that it is now possible for artists to be engaged for a longer period than was the case formerly, when the companies were under different management.

5CL, Adelaide, has at last agreed to join forces with 3LO, and the organisation will help further to bring about that cohesion in broadcasting from "A" class stations in Australia. Negotiations are still in progress with the Queensland Government station (4QG), but no difficulty is expected to arise in bringing an agreement to finality there.

This done, broadcasting begins the second great phase of its career in Australia (states the Sydney "Wireless Weekly"). No invention in many decades has travelled so far or so fast as radio. Men have been forced to devise methods for its application as the greatest entertainer in history in a space of time that has often been given to the organisation of a single theatrical company. This measure of success has been so great as to destroy the onlooker's sense of proportion. So much has been done that it appears to the outsider that much more could have been accomplished. Radio has succeeded so smoothly to the throne of entertainment that it has become a commonplace. Greater obstacles, greater failures would still have kept it among the world's wonders. Now it is a toy for schoolboys, who have ceased to marvel at a thing they can so easily manipulate.

Future Developments.

WHAT is to be the development in the future? The co-ordination of "A" stations will allow of much more closely-knit programmes. There has been a great deal of loose criticism of the programmes of the big stations, often on the part of the officials. It has never been dealt with in detail. A little trouble in examining the basis of the criticism will serve to show its shallowness.

As a type of fault-finder, let us take the recent utterances of Mr. Haldane, of the P.M.G.'s Department, who actually hinted that the Commonwealth Government had the power to withhold revenue from stations that were not up to the mark in the class of entertainment they supplied. He went on to say that people were beginning to prefer the "B" stations, which were not in receipt of any revenue, and which broadcast only gramophone selections and advertisements.

Meaning of the Criticism.

CLOSELY examined, this criticism boils down to the charge that much is put on the air by "A" class stations with which people are bored. Further, that no one who listens to a "B" station is bored. Stripped of verbiage, this is the plain meaning of the criticism which is only an echo of that voiced in letters to the Press.

Let us consider it, and weigh its justice. In the first place, there is not a similar station in the world against which the same charge of boredom is not levelled. And the charge can be sustained. Not a man lives, however, whatever his experience, or however wide his knowledge of psychology, who can devise a programme which is to last for about 18 hours and appeal to such divergent taste from that of the moron to that of the savant, and which will not bore at least portion of the immense audience.

It is precisely because "A" stations have this big field to cover that they must necessarily contain boring details. When women's work is being demonstrated, for example, how is it possible to avoid boring men who happen to be listening. As far as possible these sectional interests are catered for at times of the day when it is expected that the greatest proportion of listeners will be those specially interested. To make every item successful, however, is impossible. Later, market reports come on. Of course, thousands of city dwellers give an exasperated curse, shut off their instruments and take pen in hand to write to the daily papers or the P.M.G. They don't bother to give details of the part that bored them. They simply write: "The programmes are getting worse and worse."

A Broadcasting Duty.

IF the broadcasting of gramophone records was the criterion for successful entertainment, it would surely pay the big stations to dismiss their bands, throw out their singers, let half their staff go into unemployment, and buy a good gramophone. But the opposite is their course. They are charged with the duty of broadcasting public events, the views of distinguished visitors, explanations of live public questions, racing and sporting results, market and weather reports, and a score of other things that must necessarily be broadcast, though it is known beforehand that half of the customers will be bored, and another quarter will write to the papers.

IT is through co-ordination that it is now possible for an Australian listener who feels bored by a talk from one station to tune over to another which is transmitting music.

The co-ordination between 3LO, Melbourne, 3AR, Melbourne, and 5CL, Adelaide, commenced on Monday, the 18th instant. Market reports are given at 8 o'clock by 3AR because farmers do not arrive home from the field until 7 p.m. While these reports are being given, the other station, 3LO, Melbourne, puts on music.

The Exponential Horn for Perfect Reproduction

The two diagrams below illustrate the article on front cover of this issue.

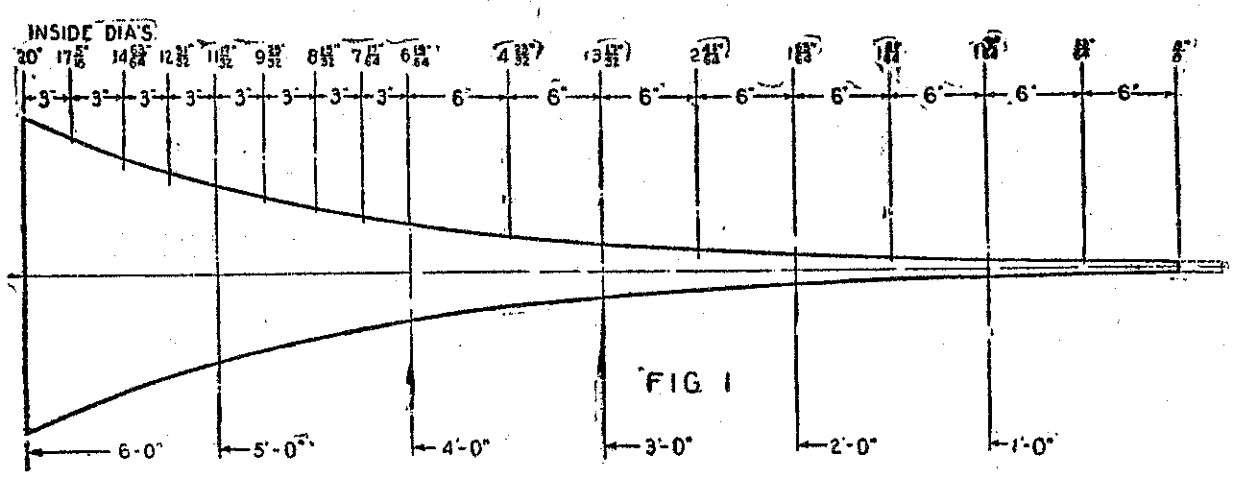

FIG. 1

Above are shown the widths of the six-foot exponential loudspeaker horn at suitable short intervals along its length. The material necessary for making one of these horns can be obtained from a single sheet of wall board. The pattern, which is shown in Fig. 1, is prepared and laid upon the wall board; and the latter is cut along the lines indicated, allowing on one side an extra lap equal to the thickness.

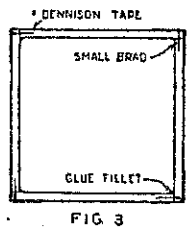

FIG. 3

Fig. 2 shows how the wall board is cut, the four pieces necessary being taken from the same sheet. Fig. 3 illustrates the method of making the corners of the square horn airtight

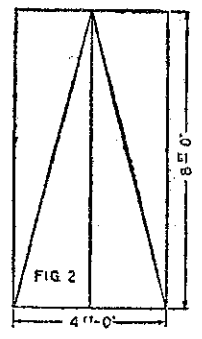

FIG. 2

Europe Lags

BEHIND U.S.A. RADIO

A CONTINENTAL LUXURY

IN a recent interview with Alfred Marchev, president of Temple, Inc., Chicago, some very interesting conditions about the radio situation in the European countries were brought to light. The facts that are presented are all the more important, because in the three months that Mr Marchev just spent in Europe, his investigations were made, not in the superficial way in which the average manufacturer sees conditions there, but as a former European knowing European conditions not only on the surface, but beneath. Mr Marchev's remarks come from below the surface, and can be taken as picturing true conditions, he having actually lived within the sphere where his remarks have their basis.

Europe is still four years behind America in radio. In other words, if we go back four years and think of the American receivers with many controls and do-dads, to the era of the dial twister, then we have a picture of the average set in operation in the European countries to-day. Those employing valves form only about 30 per cent. of the receivers in operation, 70 per cent being crystal sets with an average range of about twenty-five miles.

COMPARING the number of receivers in Europe, crystal sets and valve sets, with the sets in the United States, numbers are about equal. Leaving Russia out of the picture, the population of Europe is 350,000,000. This brings about a per capita ratio of three and one-half sets in the United States against one in Europe. The countries with the greatest number of receivers are England, Holland, Denmark, and Sweden, and the countries of less radio activity are France, Germany, Switzerland, Italy, and Austria.

Radio a Mystery.

THERE seems to be a popular misconception in the United States that many European nations, particularly Germany, are countries of mechanics, where radio is not only thoroughly understood, but where conditions in the United States are closely approached. This is wrong. In Germany, for instance, radio is a mystery. The principles are not generally understood, nor is any attempt made by the owner of receiving apparatus to correct any difficulties with the set himself, nor does he ever attempt to service it. If anything is wrong, the set is taken to the store from which it was purchased. This is carried so far that even when batteries need recharging this same procedure is gone through with. Why this condition should be so different from conditions in the United States is probably because the American has learned to help himself, while the European has grown to depend upon specialists, each in his respective line. In America a man will repair his own motor-car if minor difficulties develop, he will paint his own front fence, he may even paper the dining-room if he has the time—but these things are not only unheard of in Europe, they are never even thought of. In Europe, not only is radio a mystery, but the man who drives his own car is an exception—chauffeuring is a profession.

With this as a background, it is easy to realise why European radio conditions are as Mr. Marchev found them.

In Europe there are three principal classes. The rich, the middle class, and the poor—a class distinction that America does not readily understand. The first class considers radio a luxury, the middle class hardly considers it at all, and the third class is entirely out of the picture. Radio in the United States, like the automobile, in its beginning was a luxury, then a pleasure, now a convenience, and like the automobile to-day, soon a necessity. Americans depend on it now for weather reports, market reports, news items, first aid calls and many other things. For the farmer, radio in America to-day is already a necessity. In Europe it is still a luxury, and it was but rarely in his travels that Mr. Marchev saw any kind of an aerial from the window of the train.

Use Mechanical Reproduction.

ABOUT the broadcasting situation, stations are located in the principal centres, and the chain idea also is used, but not as in our case to transmit exceptional programmes to all sections of the country, but rather to save expense on the talent. Talking machine record broadcasts are much in evidence, as are also talks along educational lines. Moscow has the best broadcasting station in Europe. Its concert orchestra broadcasts are far famed. As a matter of fact this station is looked upon in the same way that station KFI, Los Angeles, California, is thought of from eastern and middle sections of the United States. In other words, if the receiver will bring in Moscow it surely is a real receiver.

From the standpoint of the sets that are in use Europe is about four years behind the United States. That does not mean that inside of four years conditions there will closely approach the conditions in America to-day, because progress in Europe is much slower than it is in the United States. If it will take the United States five years to approach the saturation point in radio in America, it will take twenty years in Europe. The valve sets are nearly all regenerative circuits—sometimes trick circuits. The popular radio-frequency receivers of the United States are seldom found. Because of the broadest range of from 400 to 2000 metres sets must be made with interchangeable coils. Receivers, therefore, are sold without valves and without coils, the latter two items being extra equipment.

Germany, in particular, contains some rather tricky sets with multi-stage valves. One particular set takes care of two stages of radio-frequency by the first valve, detection and the entire audio system, which consists of a two-stage resistance coupled amplifier, is all contained in the second valve, and this is not a very large tube, either. It is about the size of a 280 valve.

[The above type of set is on the market in New Zealand.]

A. C. Not Used.

COMPLETE A. C. operation of receivers in Europe is a thing that is in the very dim and distant future, mainly because there is nothing that approaches a standardisation of available current. We are liable to find 110, 220, and probably a half-dozen other voltages used to a considerable extent in any one country on the Continent. As a result of this condition all electrical apparatus is comparatively high in cost. This will prove a considerable handicap to the ultimate A. C. operated receiver in England and on the European Continent.

From the standpoint of the sale of radio equipment in Europe conditions are very much like they are in the United States, and in the sale programme the jobber and dealers are to be found. The discounts granted by the manufacturer to the jobber vary, and may be anywhere from 40 per cent. to 50 per cent. and 10 per cent. off the list price. However, these discounts are never allowed on small orders as they are in the United States. A jobber, in order to be entitled to them, must take practically his entire season's allotment, or at least enter into a noncancelable contract for same. The dealer will buy radio equipment from his jobber anywhere from 25 to 33 per cent. off the list price. No standard discounts prevail.

As a general thing stores handling radio sets and accessories are exclusively radio stores. Radio is not to be found in department stores, furniture houses, or music stores as in the United States (and New Zealand).

GUIDE TO AIRMEN

NEW RADIO DEVICE.

A lighthouse of the ether to guide aeroplanes by visual radio had its first public exhibition recently at College Park, Md., outside Washington, U.S.A., and William P. McCracken, Jr., Assistant Secretary of Commerce for Aeronautics, and others, after trial flights, declared it marked a new and important advance in making aviation safe.

The device is mounted on an aeroplane lashboard to receive signals telling whether the aeroplane is on its course. Dr. J. H. Dallinger, who, with Harridan Pratt and F. W. Dunmore, of the Government Bureau of Standards, have developed the instrument which is the outcome of about eight years' experiments, announced later that the Pitcairn and National Air Transport Companies were installing machines to be in operation on the New York-Atlanta, and Cleveland-New York route by May 1.

To Be Installed Elsewhere.

The signal system, they said, will eventually be installed along all federal air routes. Officials witnessing the experiment declared they were delighted with results, explaining that the instrument marks an invisible but infallible course along which aviators can fly in rain, hail, snow or fog, despite visibility.

While the 70-foot tower sent out its stream of directional signals by radio a de Haviland aeroplane, piloted by Captain R. L. Meredith and carrying first W. W. Chalmers (R.), Representative from Ohio, and later Mr. MacCracken, swept the countryside, during which time twin indicators on the aeroplane's instrument board, housed in a case no larger than a matchbox, interpreted the radio waves in terms of visual signals, telling the flyers whether they were on their course and, if not, by how much they were off. The device has a range of 150 miles.