

What 1935 May Bring

Practical Commercial Television Transmission Of Moving Pictures Expected Within 12 Months

NOBODY can afford to neglect radio at the present time, no matter how slight may be his interest in it as a form of home entertainment. We have come to a great turning point in radio technical matters, and very soon the ordinary man in the street may be made to realise that what the scientists are planning for the forthcoming year will have a great effect, not only on his entertainment, but on the more vital aspect of his existence.

Seated in the comfort of his local picture theatre, a man may occasionally ponder on the progress of television and wonder how long it will be before radio brings living pictures into the home. He may just occasionally feel that it wouldn't be a bad plan if he could stay at home by his own fireside and see the entertainment and the events of the world flashed on his own television screen. On wet nights the necessity for going even round the corner may make him wish that scientists would hurry the progress of television.

The technical deficiencies of his present radio receiver may sometimes makes him feel that we are still a long way off from finality in aural broadcasting, quite apart from any development that may be made in the broadcasting of moving pictures.

The man in the street must have a vital interest in the progress of radio for the forthcoming year if he gives any thought at all to his own comforts.

The greater entertainment value of broadcasting in the home, when television supplements the at present incomplete form of transmission, will result in a revolution of the whole entertainment industry. The immense chains of picture theatres all over the country obviously could not be shut up without having serious repercussions in many other industries, and some re-arrangement of television reception would be necessary to ensure that, although millions of people all over the country could be assured of the best entertainment and news services in their own homes, there would still be sufficient inducement to go to outside sources for new forms of entertainment, doubtless also resulting from broadcasting and television.

Any radio listener is justified in asking the broadcasting authorities how far we are from the time when a revolution of this kind may take place. Already we have had a taste of the chaos which can result from rapid radio development without sufficient forethought.

Even the local broadcasting stations do not always come in free from interference, and on the best sets to-day it is sometimes impossible to get a very large number of foreign stations without others constantly jamming and heterodyning, so that there is no real pleasure in distant station listening. In Europe at least this ether chaos has come about because nations, to justify national pride, have been in too much of a hurry to put new broadcasting stations on the air.

There is, after all, a very definite limit to the wavelength band which can be used for ordinary broadcasting without calling for very special apparatus to receive the programmes. The wavelength bands which to-day we know as the medium and long-wave are those which can be received on a comparatively simple

type of apparatus. It is by no means so simple to receive broadcast programmes if they are transmitted on short and ultra-short waves, and yet there are so many stations jammed in the medium and long-wave bands that soon we must of necessity have recourse to the short and ultra-short waves in order to find positions in the ether for all the stations transmitting programmes.

There is a kind of ether policeman controlling the erection and broadcasting power of wireless stations all over Europe. This is the International Broadcasting Union, which by bringing pressure to bear indirectly through the Governments of the various countries endeavours to keep the radio peace and prevent too much station jamming.

The result is that ordinary receivers are not selective enough. There is now no novelty in ordinary radio sets and people are constantly complaining that unless sets are made more selective so as to receive a large number of programmes free from interference, the pleasure of radio reception will soon wear off. This development must always take place when the novelty of a new invention begins to wear off.

The stage has been reached when, in the motoring world, cars are regarded as a convenience rather than a novelty. Cars are now used to-day for business purposes and time-savers, and only very occasionally as a direct source of pleasure. Even people who motor through the countryside and to the coast frequently do so only because that form of transport is more convenient and comfortable than others. The same stage has now been reached with radio broadcasting, and it is the entertainment provided rather than the wonder of the method that appeals. If the entertainment value is seriously reduced by interference broadcasting as a whole begins to lose its value.

There is already so much jamming on the ether with broadcasting stations which are transmitting only sound that I think you will realise the problem we shall be up against when television is on the air as a new form of entertainment provider.

When television is on the air each programme distribution centre will need two entirely different wavelengths, one for television and the other for sound broadcasting. At the moment, if ordinary radio transmission methods are not revolutionised, the only way out seems to be by the use of short waves. Then aural broadcasting will continue more or less on the present wavelengths and the short waves will be used for the transmission of pictures.

This will mean a big development during the forthcoming year, for although short wave reception is becoming increasingly popular it can at the moment bear no comparison to ordinary broadcast reception on the medium and long wave. Special apparatus is necessary and at the moment rather more skill is needed to operate a shortwave receiver than to control a medium or long wave outfit.

Certainly during the next twelve months we shall look forward to big changes in receiver technique. The