

will see competition of a character similar to that now applying in our more limited radio spectrum. The Radio Corporation activities, it appears to us, are only an example which will be followed by the entire industry in time. We also regard it as likely that, although patents may be an important part in the Radio Corporation structure, by the use of alternative methods or by licensing, a competitive field will be built up.

RESULTS OF UNIFICATION

TO THE radio manufacturer, the combination of these now separated industries promises an immensely increased volume of business and less seasonal fluctuation in production. To the home user of radio equipment, it will offer a more versatile source of entertainment of both aural and visual character. To the artist, it means greater opportunity to participate in a much wider range of activity, instead of restriction to a single field of entertainment, such as recording, radio, screen, or theatre. The unit of sale in radio equipment will rise manifold, and a billion dollar industry will soon appear. Every element of the industry will enjoy greater prosperity, proportionate to the greater diversity and service which it renders.

WGY Protests New Allocation Plan

THE most vociferous objections to the allocation plan have been advanced by WGY, which has been allotted a "daytime only" channel, which it may use up to the point that it interferes with KGO. Under the Commission's definition of sunset, this is three hours after sunset in the East, limiting WGY to transmissions up to about eight P. M. in winter and nearly eleven P. M. in summer. If KGO stands by for one hour after sunset, WGY gains most of the important hours when it serves its more distant listeners. The Commission points out, in answer to WGY's protests, that the First Zone, and particularly New York State, has more than its share of powerful stations and that there is one station of 30,000 watts and one of 50,000 watts within a hundred and fifty miles of WGY. Certainly, if the principle of equitable division among zones and subdivision of zone quotas according to states by population is to be ob-

served, there must be time sharing of one form or another on the part of at least one of the powerful stations in the First Zone with a station in another zone, so long as there are but eight exclusive channels per zone. WGY was selected for such sharing, no doubt, because it is not the original source of chain programs but acts principally as a relay station. Had WJZ or WEAJ been selected for sharing with a Pacific coast station, the effect would have been a great hardship upon the largest broadcasting audience in the world.

WGY HAS NATIONWIDE POPULARITY

WGY has pointed out that it is one of the pioneer stations with the most widespread audience of any station in the United States. RADIO BROADCAST's questionnaires certainly support the contention that WGY has the most enthusiastic "distance" audience of any station in the country. The requirements of equitable distribution are, however, inescapable. The exclusive channels of the First Zone cannot be assigned exclusively to chain stations or only to those within service range of New York City. The only alternative offered the Commission is to suggest a time-sharing arrangement by WGY with one of the New York stations, either WJZ or WEAJ. While this might be satisfactory to WGY, it certainly would be a blow of such serious proportions to New York listeners that it accounts for the fact that the Commission did not consider that course. The original engineers' plan, calling for fifty exclusive channels, provided room not only for WGY in the First Zone but better allocations for additional leading stations in all zones. Reduction of the cleared band to forty channels has complicated greatly the problem of providing adequately for all the good stations in all the zones.

One way out of the present situation might be a more liberal definition of "sunset." The Commission has ruled that daytime stations shall close down at the average time for sunset during a given month, at the point where the western station, subject to interference, is located. However, night broadcasting conditions do not prevail immediately upon the setting of the sun, but only after quite complete darkness. Therefore, the same sundown regulation as is used for the lighting of lights on motor cars may be more

suitable for broadcasting regulation. The addition of an extra evening hour at such peak times as ten and eleven P. M. would greatly lighten the economic burden now placed upon stations limited to daytime broadcasting. We urge that experiments be made to determine the proper time for establishing an official broadcasting sunset, because we believe this offers a loophole for improving the position of the worthy stations, now compelled to sign off just at the hours when they begin to have a fighting chance to make enough revenue to meet their expenses.

The Chicago stations which protest and ask for better channel assignments do not receive much sympathy from the average broadcast listener. Chicago stations have dominated the dials for too long a time in the memory of the broadcast listener to cause anything but glee when it is announced that the Commission has somewhat reduced the proportion of ether territory assigned to stations in that city. Chicago has had its way about radio long enough and it will be a relief to listeners, who like dial twisting, to find something other than Chicago stations on the clear places.

Reasons for the 300-Mile Chain Regulation

THE regulation of the Commission, requiring that the same program shall not be duplicated in the exclusive channels by stations separated by less than three-hundred miles, has, for the time being, been waived, pending further investigation of the subject. Some months ago, in considering the problem of the frequent duplication of chain programs in the few clear channels, we pointed out that an ideal solution lay in limiting the number of exclusive channels assigned to stations of the same chain to four or five widely separated points, requiring that the bulk of chain broadcasting be conducted on regional rather than nationally clear channels. In practice, however, such regulation leaves an insufficient number of high-grade, independent stations, now carrying non-chain programs, to fill the clear channels thereby freed.

Some form of regulation is necessary, however, if the real objective of the clear channel is to be accomplished. The distant listener, beyond the high-grade service range of any broadcasting station, depends upon the nationally cleared channels for his program service. If he finds all stations within his range on these cleared channels radiating the same program, the fundamental objective of giving the rural listener the best broadcasting service and the greatest variety through cleared channels is not achieved. It was such a consideration which caused the Commission to pass the 300-mile separation regulation. The principal reason that the regulation adopted failed is that there is an insufficient number of high-grade independent stations to fill the cleared channels; not that there is anything fundamentally wrong with the regulation itself.

The Fight for Short-Wave Allocations

SECRETARY of War Dwight S. Davis has requested the Federal Radio Commission to set up a new amateur band between 5000 and 10,000 kc. This proposed band is to be used for amateur work in cooperation with Army radio stations. Oldtimers will remember that one of the first broadcasting stations in New York was WJZ, operated under the supervision of the Army with the cooperation of a committee of amateurs. This station did its



VIEW OF SAN FRANCISCO RECEIVING STATION AT DALY CITY, CALIFORNIA, SHOWING ROTABLE LOOP AERIALS. THIS STATION IS OPERATED BY THE FEDERAL TELEGRAPH FOR THE RECEPTION OF MARINE SIGNALS