



RADIO CONFERENCE IN MEXICO

SO great is the demand for radio channels by all nations that it has become necessary to institute some form of international control over their allocation. The International High Frequency Broadcasting Conference which has just been held at Mexico City (and which is seen in plenary session in the photograph on this page) was charged with the complex task of assigning frequencies and times of operation to all those countries of the world requiring them within the bands allotted by the 1947 Atlantic City Conference of International Telecommunications. New Zealand was represented at the Mexico City Conference by W. L. Harrison, Chief Engineer of the New Zealand Broadcasting Service, and E. H. R. Green, Chief Engineer of the Post and Telegraph Department. In an interview with *The Listener* on his return Mr. Harrison said that the conference had held its sessions in the Escuela Nacional de Maestros—in other words, the Teachers' Training College or Normal School—a building of ultra-modern design which for the

duration of the session houses the delegates representing 69 nations.

The language difficulty, inseparable from such an international gathering, had been surmounted by employing the technique of simultaneous interpretation, first used at the Nuremberg Trials and subsequently employed at sessions of the UN Assembly. The four official languages at the Mexico City Conference were English, Spanish, French and Russian. In each main conference there were four sound-proof booths occupied by the interpreters in the four languages. Each delegate spoke through a microphone connected to an amplifier and the interpreters listened through headphones. They, in turn, had microphones in their booths and translated the speeches phrase by phrase as they were delivered. These translations were then fed through low-powered radio transmitting equipment, using one transmitter for each of the languages. Each delegate was issued with a small battery-operated portable receiving-set fitted with headphones, volume control and channel selector. These receiving sets were housed in bakelite boxes of handy size

so that it was possible to move from one part of the conference room to another and still listen to the speeches. Plenary meetings were attended by about 200 delegates.

The working out of an assignment of frequencies to the various countries was a complicated business, since the plan had to indicate both the frequency and the number of hours a day each frequency could be used by each country. When one country finished with one frequency at a certain hour of the day, it might be taken over by another country. The plan included allocations in the 6-, 7-, 9-, 11-, 15-, 17-, 21- and 26-megacycle bands.

Fifty-one Nations Approved

The initial and principal difficulty facing the conference was that the requirements of all countries in channel-hours, when totalled up, came to about three times the available total as laid down by the Atlantic City Convention. The requirements of all countries, therefore, had to be modified in such a manner as to secure the approval of the majority. Several draft plans were dis-

cussed and the final draft was approved by 51 out of the 69 nations represented. But this plan showed the channel-hour allocations for one radio season only. To get the best reception at distant points the transmitting frequencies used by shortwave stations have to be changed throughout the year. Frequencies suitable for summer transmissions are unsuitable under winter conditions.

Sunspot activity, too, has its effect on frequencies, but as it is seasonal—with a cycle of about 11 years—its effects can be estimated and taken into account when predicting frequency requirements for a particular path across the world. Five further draft plans for other radio seasons, based on the Mexico City plan, are to be produced by a special committee which will meet in France very shortly. At the Mexico City conference, New Zealand secured election to this technical planning committee and will take part in the work involved. According to Mr. Harrison the frequency assignments made to New Zealand at Mexico City, though less than originally asked for, are regarded

(continued on next page)