

And All the World Wondered

AT zero hour on Wednesday last was staged the most remarkable broadcast that has been enacted in the annals of radio. Six stations, the most distant separated by 10,000 miles, talking to one another as though connected by a telephone line, friends who had been separated for fifteen months chatting from continent to continent and exchanging pleasantries, bore striking testimony to the efficiency of radio broadcasting. Two days previously a small band of explorers who had participated in the most unusual expedition of the age, had made their appearance in our southern city. They had come from the vast snowy wastes that had up till their advent defied prolonged exploration. New Zealand welcomed them—through her radio Australia and their homeland, America, welcomed them. Never has there been accorded anyone such a welcome—probably not again for many years will such an event take place. It was wonderful—an awe-inspiring night that will live for ever in the memory of that vast audience of all nations and creeds.



NEW ZEALAND listeners will never forget the thrilling moments of last week. Those who heard the two-way conversations between Dunedin and New York will remember the occasion and prize it as one of their most valued experiences. The occasion of Rear-Admiral Byrd speaking to New York on his return from the Antarctic had a dual significance which will never happen again, and it completed in the most dramatic manner possible the important part which radio has played in the Antarctic expedition.

The speeches which were made in Dunedin and relayed to Wellington were rebroadcast throughout Australia, America, Canada, England and even in Germany. It was truly a most remarkable achievement. The number of people who listened in can be counted only in millions.

Apart from the interest attached to Rear-Admiral Byrd's share in the proceedings, the importance of the event, so far as it was confined to connecting Dunedin with New York for duplex radio telephony, was outstanding. It was, of course, the presence of Rear-Admiral Byrd which gave inspiration to the project and made the efforts worth while. The unlikelihood of there ever being any other incentive of a similar nature makes the one occasion more memorable.

Extensive Preparations.

FOR weeks past preparations have been in progress and tests have been made in anticipation of Rear-Admiral Byrd broadcasting. The problem to be overcome was how to make connection with New York. The only way which appeared to be practicable was to use the Sydney short-wave station of Amalgamated Wireless (2ME) to relay 2YA's transmission to AF, Schenectady. This plan was tested out, and then an extension was made to Dunedin requiring the use of 500 miles of telephone line and submarine cable. The whole scheme bristled with technical difficulties, on top of which were the uncontrollable atmospheric conditions. Fortunately, at this time of the year, reception in America is satisfactory, though not at its best, the best season for overseas reception there being now on the wane.

Listeners who heard the two-way conversations, although for the most part laymen in all matters pertaining to radio, could not help but wonder how it was possible for a New Zealand station to broadcast what was being said in the local studio and what was being said in America at the same time. The layman pronounced it all as marvellous and the more he tried to solve it all, the more confused he became. He heard 2YA speaking to New York, and he heard New York replying. That in itself was wonderful, but that was the simplest of the problems. It was when he heard the announcer at 2ME, then 3YA and then 4YA all taking a share in the conversation and all being broadcast from the local stations, that the "plot thickened."

It was, of course, all made possible by the use of relay lines connecting all the New Zealand stations. Excellent

to 2XAF and answer him immediately, his voice and the voice of the announcer at 2XAF being broadcast and heard by all New Zealand listeners.

Such is the speed of radio waves that although the voices of the speakers at 4YA went a round about way via Wellington and Sydney to New York, while the reception from 2XAF was direct, the difference in time was, of course, imperceptible.

Receiving Instrument

THE receiver in use at 3YA was a single control shortwave super-heterodyne set built specially by the Broadcasting Company's chief engineer for the purpose of shortwave rebroadcasts. The advantage of this type of receiver is that it can be set on two stations, marked by two stops on the dial, so that a single short turn can bring in either station. The cap-

Preliminary Testing.

THE final test before the big night when Rear-Admiral Byrd was to speak took place on Monday and was encouragingly successful. 2YA, 3YA and 4YA all took a share in conversing with 2XAF and 2ME. Those who spoke from 3YA were Mr. A. R. Harris and Mr. A. G. Henderson, of the United Press Association of New Zealand. These conversations were broadcast by all New Zealand stations and whetted the interest of listeners to hear the doings of the following evening.

As reception was direct and conditions were favourable, the voice of the American announcer, Mr. A. B. Hitt, was particularly clear. When final arrangements were being made, including a roll-call of all stations taking part, at 12.30 a.m. the following day, Mr. Hitt stated that a sound film was to be made and that a copy would be sent to the Broadcasting Company.

When the Moment Arrived.

ONE can well imagine the tension, even of listeners, as the radio zero-hour, 12.30 a.m. on Wednesday, March 12, approached. This was evident in the emotion betrayed by Mr. Adolph Ochs when he commenced to speak, realising as he did the part he played as one of the principals on an epoch-marking occasion. But all soon quickly settled down and the conversation was marked by the familiarity which exists between friends.

Mr. J. Ball, of 2YA, was the first to speak for New Zealand. He greeted 2ME and then 2XAF. "I am putting you right through to 4YA, Dunedin," he added.

Mr. A. B. Hitt (2XAF): All right. Thank you.

Mr. Ball: We wish you the best of luck.

From 400 miles further south at Dunedin, the voice of Mr. A. R. Harris came over the wire, greeting 2XAF.

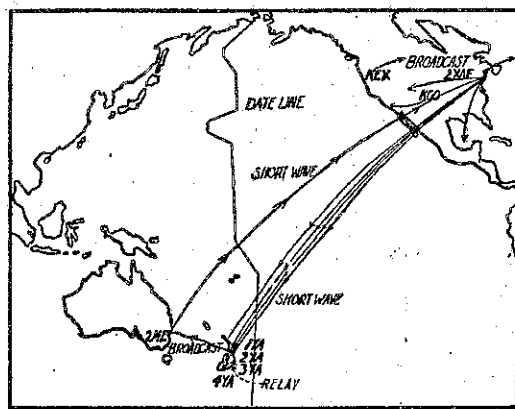
"How are you receiving us to-day?" asked Mr. Hitt.

"Very strongly," replied Mr. Harris. "How are you receiving us?"

"Much better than yesterday," came the reply from New York.

Mr. Harris said the Broadcasting Company was very glad to be able to co-operate in carrying out a two-way conversation with America and thanks were due to the Post and Telegraph Department for the assistance which had been given in placing telephone lines at the disposal of the company so that the New Zealand stations could be linked together and speech relayed from Dunedin to 2YA, Wel-

How
Two Continents and Two Islands
took part in a broadcast that amazed the world.
Illustrating the vital part played by New Zealand



when
**ADMIRAL
BYRD**
spoke to his home
from
DUNEDIN
through
**WELLINGTON,
SYDNEY
and
NEW YORK**

relay lines had been made available to the Broadcasting Company by the Post and Telegraph Department and made possible inter-communication between the stations. Each station had its own listening post where the 2XAF's transmission was received and relayed to the studio where it was superimposed on what was being broadcast from that station.

Thus, the announcer at 2YA, sitting with headphones on, was able to listen

ability of the set was demonstrated by 3YA during the test on Monday evening when 2ME and 2XAF were conversing.

By the quick turn of the dial at the conclusion of the remarks by each speaker the conversation from both stations was heard. Otherwise, two receiving sets would have had to be used and the reception by each, relayed to the station, superimposed on the broadcast from 3YA.