

A Modern All-Electric Receiver

Private Radio Broadcasting Stations

Lecture to Amateur Radio Society

Full List of Present Operators

AT the last meeting of the Amateur Radio Society Mr. Firth, of Kirkcaldie and Stains, lectured on and demonstrated a combination model of the Majestic all-electric radio receiver.

In opening his remarks the speaker stated that in 1928 the radio forecast was none too bright, and many were beginning to point out that radio was slackening up. It was then claimed that the introduction of the new Majestic had done much to stimulate interest in radio. It had answered three questions: First, it was unique, better, and distinctive in every way. Second, good reception was assured; and, third, the all-important price factor. The march of progress had seen the improvement in every direction in the reproduction of music, and it became evident that power supply would be necessary and power blocks for "A," "B," and "C" came into universal use. Distance is not now usually considered important, the stress being laid upon the better reproduction made possible through improved power valves and transformers.

"The following points are worthy of note in our modern receivers," said Mr. Firth. "The price is as low as compatible with efficiency and appearance—chassis, all-metal, well braced and completely shielded—speaker with large field coil and well built, power pack robust and able to deliver ample current, single dial control and smooth volume control, all valves A.C., cabinet a piece of furniture, selectivity sharp and clean cut, volume ample for any home without distortion."

Some 7500 persons are employed every day in the Griesly Grunow Com-

pany, of Chicago, who manufacture the Majestic. Thirty railway truck loads of raw material go into the plant every morning, and 32 truck loads of completed radio sets go out every night. That means 4000 complete radio sets are turned out every day. Approximately 94 tons of steel are used each day, 25,000 miles of enamelled wire are used for loudspeaker coils, 16,000 pounds of tinfoil and 12,000lb. of paper are daily required for the condensers,

Technical Features.

THE circuit is the balanced R.C.L. type with the new "raw A.C. valves." Volume control is effected in the input circuit in such a manner so that there is no time to lag as in the case of a filament voltage control as when using a 227 type of valve as R.F. The antenna trimmer which permits adjusting the input circuit to bring it into exact resonance with the other three tuned circuits is an excellent selectivity control.

The valves used are the standard A.C., the R.F. and audio being the "raw" type and the detector the five-prong indirectly heated.

A useful feature in the power pack is the line voltage control, which automatically adjusts the primary to the surges of the A.C. from the mains. This prevents the valves being burnt out through overloading.

The power unit provides both filament supply and "B" and "C" power. The rectifiers are UX281, and combined with chokes and condensers makes an excellent rectifier. The inductance of the magnetic field of the dynamic speaker is used as a choke in the "B" voltage supply. The speaker is of the electro-dynamic type, and will faithfully

	Power input to aerial.	Wavelength, metres.	Transmissions.
Auckland District:			
12B—La Gloria Gramophone Co. Auckland	24	275	7 to 10 p.m., Monday.
12Q—L. R. E. Keith, Esq., Auckland	20	253	4 to 6 p.m., Sunday; 8 to 10 p.m., Monday; 8 to 10 p.m., Thursday.
Wellington District:			
2YB—The Radio Broadcasting Co. of New Zealand, Ltd.	100	244	Mon., Wed., Sat., Sunday.
2ZF—Palmerston North Radio Club, Palmerston N. .	20	285	6.15 to 9 p.m., Wednesday; 3-4.30 p.m., 7-9 p.m., Sunday.
2ZK—D. A. Morrison and Co., Wanganui	25	500	8 to 10 p.m., Wednesday; 8-5 p.m. Sunday (approx.).
2ZM—Atwater Kent Radio Service, Gisborne ..	60	250	Tuesday, Thurs., Sunday.
2ZQ—N. R. Cunningham, Ltd., Masterton	50	254	8-10.30 p.m., Mon., Wed., Saturday.
Canterbury District:			
3ZC—Home Recreations Broadcasting Service, Ltd., Christchurch	250	250	Mon., Wed., Thurs., Friday, 10-11 a.m., noon-2 p.m.; Tues., 10-11 a.m., noon-2 p.m., 2.30-4.30, 6.30-11.30 p.m.
Otago District:			
4ZB—Otago Radio Association, Dunedin	10	277.8	8-10 p.m., Thursday.
4ZL—Radio Service, Ltd., Dunedin	60	245	8.30-10.30 a.m., 12.30-1.30 p.m., 2-3 p.m. daily, except Sunday.
4ZM—J. D. McKewen, Dunedin	10	277.8	10-11.30 p.m., Monday.
4ZO—Barnett's Radio Supplies	20	277.8	12.1 p.m., 5.6 p.m. daily, except Sunday.

fully reproduce a wide range of frequencies. Grid bias is accomplished by applying a positive potential to the filaments and earthing the grids. This has the same effect as applying a negative bias to the grid.

Having finished his lecture, Mr. Firth demonstrated. With an aerial comprising a wire thrown across the roof and an improvised earth the receiver was able to bring in Auckland at quite good strength, though unfortunately power noises were very bad in that particular area. Christchurch and 2BL were both heard. 2YA came in at great strength and with good quality.

Switching over to the gramophone pick-up by merely rotating the dial till it reached its limit, Mr. Firth entertained by several well reproduced gramophone records and demonstrated that the set was capable of delivering a greater volume than could be needed or a whisper barely audible. In conclusion, the speaker was accorded a very hearty vote of thanks for his interesting and instructive lecture.

Byrd from a hotel at the famous watering place, Atlantic City.

KDKA have requested 2ME, Sydney, to endeavour to rebroadcast this interesting event.

I am indebted to Mr. Morrison, Brooklyn, for this news item. He heard it while the two stations mentioned were carrying out a duplex telephony test this (Saturday) afternoon.

Mr. Frank Kellogg Heard

JUNE 14th is the anniversary of the birth of the American flag. The celebration of this, under the auspices of the American Legion, was broadcast by the National Broadcasting Company through a network of stations from "coast to coast," and heard by the writer from station 2XAD.

The first speaker, name not heard, traced American history with appropriate music faintly in the background; the officer in charge of the American Legion was next heard.

Soon after 2 p.m. the Secretary of State, Mr. Frank Kellogg, was introduced. A very interesting address followed on the world's peace.

In speaking of talk of war between the United States and Great Britain, Mr. Kellogg said: "War between Britain and the United States is unthinkable, and should be impossible." Later, he referred to bad feeling between these two countries being caused by irresponsible people in both America and Britain. Mr. Kellogg spoke for nearly half an hour, every word being clearly heard, and followed with great interest.

For Byrd in Antarctica

A SPECIAL broadcast for the Byrd expedition is promised from KDKA on June 23 (Sunday), when a party of film stars of the Paramount Film Company will send messages to Commander



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MODEL 71.—Post-Colonial period design with instrument panel of matched Burl Walnut framed by a panelling of Bird's-eye Maple and matched Burl Stamp Walnut. Seven valves, completely shielded, using R.F.L. balanced circuit. Majestic Super-Dynamic Speaker. Volume control instantaneous in action. Single dial control.

PRICE, with Valves and all ready to attach to aerial, Main Ports (Auckland, Wellington, Christchurch and Dunedin) £48
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