

in his tests from 1-6 a.m. G.S.T.—DX42W (Lower Hutt).

[Power given in station lists is that used on regular schedule broadcasts. According to latest information from the P. and T. Department, 2ZL's power is 20 watts.—Ed.]

DX Competition Rules

Some Interesting Points

DX680C writes stating that the stations allowed for the competition should be collected during the one period only, as the old hands have a decided advantage over the newer ones. We must say that we cannot agree with this. In the first place the cost to dxers would be prohibitive. If they had to send away for verifications each period it would run up a tremendous postage bill. Furthermore, it would take a lot of time writing to the same station every six months. Incidentally, wouldn't we be popular with the stations? If we barred stations that had been entered, it would hardly be fair to the man who has a good log and who gets somewhere near the top in one competition and then is debarred from entering those stations again. We think that the rules as we have them now are both the simplest and the fairest. However, we see our correspondent's point. Many dxers, fairly new to the game, have within a very short time collected an excellent log, and it is only a matter of a year or eighteen months before they are in the running for the cup. Mr. Morley Staff-

Dxers! The September "Radio Log" is Out

THE September "Log" is full of matter that will be of interest to dxers. This issue has been enlarged and is particularly well illustrated with both diagrams and pictures. There is an interesting account of the new German wonder station at Muhlacker, which has recently been heard by Mr. Morley Stafford, of Gisborne. There are several pages of lively letters from correspondents, and these are crammed with information of vital interest to all dxers. There are revised schedules for Australian "B" class stations and notes concerning new stations which are expected on the air shortly. The list of amateur Q.R.A.'s is completed, together with amendments to the portion already published. There also appears a full list of the abbreviations used in radio parlance, together with the "Q" signals. Particularly now that the reception of European stations is improving, dxers will find the full-page radio map of Europe of great interest. It gives the locality of all the main stations and the number of miles distant they are from London, and we have explained how the dxer can determine how far he is from New Zealand. There is an interesting map of Japan, showing the location of all the Japanese stations, together with a complete official list of these.

The price of the "Log" is 6d. per copy, or 7d. posted, and is obtainable from all booksellers and dealers. Experience over the last two months has shown that there is a great demand for the "Log," and it would be advisable to secure your copy as early as possible.

ford, last period winner, has been dxing for only a very short period.

Another correspondent, F. C. Barnett, sent rules are fair for the following reasons:—

1. The Australian stations can be received fairly easily in daylight on the West Coast of both Islands. The average East Coast listener in most of the large towns has some difficulty even in logging the "A" stations in daylight.

A.: This does not altogether fit in with the results of the last two DX competitions. In the first case a listener on the West Coast won the Cup, and the next time one on the East Coast came first. Both winners had about the same number of stations received in daylight.

2. That a station once verified should count, although it changes its frequency; providing such station is still on the air, as the present and future changing of frequencies will give dxers much writing to do.

A.: There is something in this objection. We would like to hear from other dxers on the subject. We may possibly amend the rules, for it would certainly save complications.

3. I do not see any good reasons why all stations, New Zealand, and others, should not count for the competition.

A.: We bar the New Zealand and main Australian stations because some people use small regenerative sets, and if they have any trouble in working these stations they will cause interference to those with bigger sets.

Trade Jottings

Osram Valves

ONLY a short while ago a new range of Osram 2.5 volt replacement valves was introduced by the British General Electric Company to the New Zealand market. The principal valve of the range is the MY227, a replica of the standard 227, for it has the regular characteristics. Particularly careful attention has been given to the construction of this valve. The particular object in mind is to eliminate microphonic

tion section, a wave-trap, a two-valve set, and a three-valve a.c. short-wave set are described. The call section contains a good list of all stations likely to be heard by New Zealand listeners. The amateur transmitting section contains some really "good dope," and should be much appreciated by amateur and enthusiastic listeners. The book sells for 1/6, and is obtainable at most book-sellers.

An Interesting Valve

American Pentode

ONE of the features of American radio this season is the development of the output pentode. A similar valve was developed in Continental three years. Briefly, the pentode is an output valve with an extra grid like the screen-grid valve, and in addition a third grid attached to the filament. It then contains five elements, the three normal ones, and the two extra elements in the form of a grid. The addition of these grids results in the valves having a high amplification factor and being able to deliver a big power output. The a.c. resistance of the pentode is many times higher than that of an ordinary power valve and the result that a very brilliant and pleasing tone can be obtained. Furthermore, owing to the unusual amplification, this valve can eliminate an audio stage. The new American 247 type of valve delivers 2½ watts undistorted power output with 11.7 volts a.c. input. This compares with 1.6 watts output and 34.5 volts input with the ordinary 245 power valve. The American type valve uses the UY socket whereas the English and Continental use the ordinary UX socket with an extra terminal on the side. This extra terminal is connected to a high B+ voltage. The American valves operate on 2.5 volts, whereas the English and Continental employ 2, 4, and 6 volts.

The new pentode is almost four times as sensitive as the 245 power valve, a property of no small economic importance when considering output, detector overload and amplifications.

The Continental manufacturers make available a series of pentodes varying not only in the filament voltage, but also with the plate, there being available pentodes that will take from 150 volts to 550 on the plates. It is interesting to note that a Continental pentode with characteristics very similar to the new American valve has been available for some considerable time.

noises, and in achieving this a special band of double mica bonding top and bottom is incorporated. The second of the series, the MY224, has been similarly very carefully constructed, and is, indeed, a good valve. The 245 and 280 are both exact replicas of the American type valve, and are giving excellent service.

Commenting on the 280 valve one set manufacturer stated: "An MX280 was operating in the standard set, when a blocking condenser broke down. The rectifying valve became quite hot. It stood this for several minutes, and when the set was repaired again took its place in the socket. To our surprise it performed equally well as a new one tried immediately afterwards."

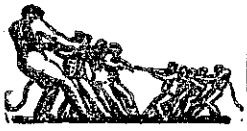
The Osram Manufacturing Company intend to follow up the American series by the 551 variable-mu and the 235 variable-mu, and also the 247 pentodes. It is hoped that these new valves will be shortly available on the New Zealand market.

Book Review

Scott's Radio Handbook

THIS useful little radio manual of 80 pages contains very much of interest to the home constructor and amateur transmitter. In the home construc-

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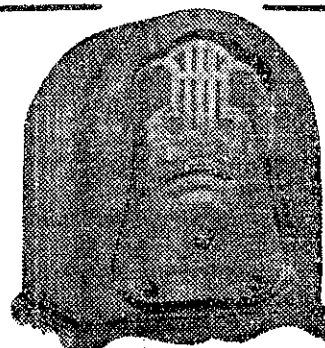
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