

THE a.c. short-wave set is creeping into popularity in New Zealand. The adapter type seems to be giving place to the superheterodyne set which is placed between the aerial and the ordinary broadcast receiver. This enables tremendous amplification to be obtained, and "Switch" recently saw this system operated most successfully, and without any difficulty.

BECAUSE of the new beam aerial which has been installed at PCJ, Holland, the transmissions heard on Thursday, Friday and Saturday, which are primarily intended for Australia and New Zealand and surrounding territory, should be heard with increased strength. In Eastern Australia, however, signals are weaker than formerly, and it appears as though the path of the focussed signals is not correctly directed. What effect, if any, have New Zealand short-wave listeners noticed in the signals from PCJ?

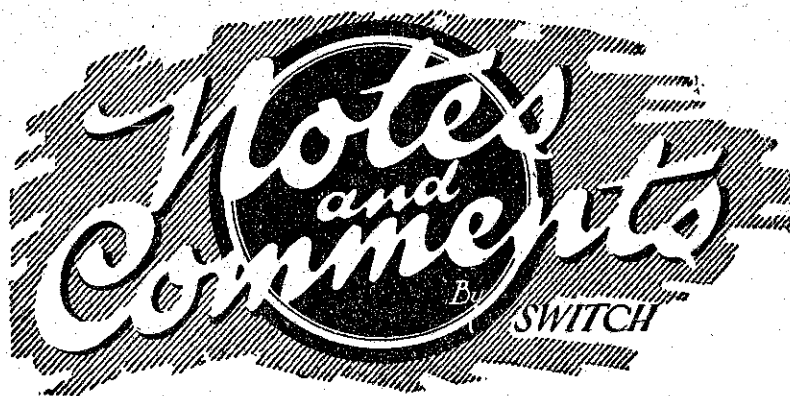
AFTER a lengthy attack of static, which rendered long-distance reception unpleasant, the atmosphere cleared toward the end of last week and the overseas stations were available for entertainment. On some evenings lately, after 10.45 p.m., the Japanese station JOHK has been louder than any of the Australian stations. 2FC, Sydney, has performed indifferently on relay on several occasions. There appears to be trouble on relay lines.

NEW ZEALAND shortwave listeners will soon hear from the Australian beam station some mysterious short-wave splutterings which may seem like a Morse transmitter out of control. The noise will emanate from the Marconi facsimile apparatus for the regular transmission of still pictures from Australia to England. The apparatus is to be installed at each end of the beam service.

A MELBOURNE writer says: "During the past two or three years dance music has progressed rapidly, until now the blare and wall of the early jazz bands seems a thing of the very distant past—fortunately. When jazz was first thrust upon the public the ambition of every dance band seemed to be to make as much discordant row as possible. . . ." Well, "Switch" would welcome the appearance of this reformation, but has not been able to detect any tendency in that direction, even when listening to the jazz band items broadcast from Melbourne.

THE B class station which is being erected in Wellington will not employ 500 watts power as was first intended. The proprietors have decided to use only low power, and the transmitter is being built locally by two amateurs who have an excellent reputation for technical skill.

THE surf clubs around Wellington would add considerably to the public enjoyment of carnivals if they used powerful a.c. sets on such occasions and put on the Saturday afternoon programmes from 2YA, Wellington. A



Melbourne visitor informs "Switch" that at Frankston beach, a few miles from Melbourne, there is a powerful amplifier which is audible at a distance of over a mile. Programmes and announcements are heard by crowds spread far along the beach.

A STATION which has lately improved out of all recognition, as heard by "Switch," is 2HD, Newcastle. The transmitter has completely lost its former huskiness. Owing to its wavelength being extremely short, 2HD gen-

### Reception Table for Australian Stations

FOR the guidance of those who wish to check their reception of the Australian stations, "Switch" prepares weekly a table showing the average relative strength with which he has obtained reception at 11.30 p.m. during the past week:—

2FC, Sydney .....	10
2BL, Sydney .....	10
4QG, Brisbane .....	8
2GB, Sydney .....	7½
3LO, Melbourne .....	7
3AR, Melbourne .....	5
2UE, Sydney .....	4½
3UZ, Melbourne .....	3½
3DB, Melbourne .....	3½
7ZL, Hobart .....	3
5CL, Adelaide .....	3
6WF, Perth .....	1½
2KY, Sydney .....	1½

The above figures are the points assessed, with 10 as the maximum.

erally has an accompaniment of peppy static, which rather detracts from the fullest enjoyment of the programmes.

AN Australian listener condemns the quality of the Australian broadcast programmes as follows:—

"After discontinuing listening for five years, I recently bought a new electric set, and was amazed to note the advance which radio engineers have made in the tonal quality of receivers. But, unfortunately, I cannot express the same appreciation about the broadcast programmes. They have improved to some extent, of course, but in my opinion the artists have not kept pace with the engineers."

LISTENERS have often remarked to "Switch" that static is much less obtrusive on the longer wavelengths,

in the vicinity of those of 2YA, Wellington, 2FC, Sydney, 3AR, Melbourne, and the Wanganui B class stations. An Australian listener has written to the Press urging that the more attractive programmes of 3LO, Melbourne, should be broadcast by 3AR, Melbourne, which is on a much longer and less static-infested wavelength. He states that on the night after the Melbourne Cup 3LO came in with a battery of static, while 3AR had only an unobtrusive background of noise. "Switch" consistently experiences far more noise on the shorter wavelengths.

THE desirability of using a power-valve in the last audio stage formed the subject of an argument between two Wellingtonians who are building their own sets. "A," who urged that a power-valve is practically indispensable, referred the matter to "Switch," as arbiter. "B" contended that an ordinary valve would accomplish all that was desirable for enjoyment of good tone and volume. "Switch" decided in favour of the power-valve. An ordinary valve will produce adequate volume for the average room, but it will not give quality because it must be operated too close to its peak loading. A power-valve insures quality under all normal conditions.

CHRISTMAS is now in sight, and radio traders are preparing for the gift season when fond parents purchase wireless sets for their children, or for the entertainment of the whole family. One Wellington trader informed "Switch" that he is going to make a special window display on lines shown in an American radio trade journal.

SENATOR MARCONI recently conducted successful experiments with automatic radio telephony from his yacht "Elettra" at Genoa. He will shortly make large scale tests by connecting the telephone systems between Rome and Cagliari by two powerful radio stations, thus enabling a person in Rome to ring up a number at Cagliari, 250 miles away. The impulses will be transmitted on short-wave, and once the connection is established the conversation will be carried on in the usual way. It will be entirely secret, as the system is based on the super-imposition of wireless waves, which can be intercepted, though not understood without special apparatus.

## Laboratory Jottings

### Marconiphone Pickup

THOSE who want a pickup that is medium in price, light on records and yet which reproduces well will be interested in the new Marconiphone instrument, for which A.W.A. are the New Zealand wholesalers. This instrument has the bent tone-arm, the principle of which was described in these columns some months back. By utilising this shape the track angle error is reduced to 3 degrees, with the consequence that there is a minimum of wear. While on test it was found that the friction between record and needle was much less than the standard, and without any trouble it tracked over grooves representing a note of 42 cycles a second. This is unusual. Furthermore the head, which is swivelled on the tone-arm, is light and the tone-arm counterbalanced. Further evidence that the instrument is constructed to wear records at a minimum rate is provided by the movement of the needle in the armature, which is far greater than normal.

The voltage output (1½ volts R.M.S.) is high, with the result that strong signals can be had with an average set of, say, two valves. Its output is about equal to that of high-grade instruments.

The tone is good, and giving emphasis to the bass notes is excellent for amplifiers that tend to clip this end of the scale. One measured bass reproduction took us down to 40 cycles, there being practically equal amplification between here and 4000 cycles. After this there is a decline until at about 5000 there is a sharp cut off. Thus the instrument tends to emphasise the bass without unduly thinning down the treble, and scratch cannot come through to any extent. There is an absence of peaks, and amplification is equal between the points mentioned.

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