DX Topics

(Continued from page 13.)

"This is but one of several powerful stations which have been building in Mexico with United States capital, and which are all, more or less, pirating Canadian and United States waves. One evening recently I listened to no less than four Mexican stations coming through on wavebands which were supposed to be "cleared channels" for Canadian and United States stations.

"Fans who would like to hear XER should have no difficulty in pulling it in at 735 kilocycles, which is a needle-point between the spots at which WSB and CKAC come in. The best time to dial for it is around 11.30 or midnight. The announcers make quite a polite row when they come in between numbers, and they tell you all about their high power and the reports of reception which they are receiving from distant points."

Short-wave News

SHORTWAVE station 12RO. located at Prato Smerado (Rome), Italy, has been heard quite a number of times of late at 5 a.m., operating on their original wavelength of 80 metres. It comes in at good strength and very clearly—quite the best early morning on the air just now.

Interesting tests are being carried out on Sunday evenings by a chain of New Zealand amateurs for stations on the 80-metre band. Six stations are generally in operation, namely:—ZL2AX, Palmerston; 2JX, Lower Hutt; 1FI, Te Puke; 2BE, Hastings; 3CW, Greymouth; and 2FR, Wellington. Considering the small amount of power these stations use, the strength at which they are received is really wonderful. Their percentage of modulation is well up to the standard of A class, B.C.L. stations, and is a great credit to the operators. It will be noticed by the calls of these stations that the tests cover practically the whole of New Zealand (with the exception of the fourth district), and it is interesting to note the relative strengths of all fones as reported from each station. The most consistent station of all six is ZL2AX, Palmerston North.

One of the Hawaiian group of stations was heard on Dec. 8, call KIO, with a special test programme coming in here at R8, but spoilt by an interfering beam station.

Perhaps in the near future we will be tuning our receivers to much higher frequencies, that is, 10 metres or below, and judging from Press reports of late, many radio engineers are concentrating on these frequencies. Some tells us they will be useless as regards transmitting over any great distances. It will be remembered we were told some years ago the same thing about the present short wavelengths but the results so far go to show how penetrating they are. The still higher frequencies may prove to be more penetrating. Some three year sago the General Electric Co. of America carried out tests of 24 hours duration on a wavelength of 10 metres. These tests were received here by me at good strength at certain periods, although fading periods were troublesome.

It will be also noted that the Dutch station PHI, then operating on 16.88 metres, could be heard in New Zealand at far greater strength than stations working on lower frequencies. It is a pity this station had to close. The original tests carried out by Holland and Java some years ago on two-way telephony on high frequencies were very consistent. Two-way contact could always be established. One thing noticeable on low wavelengths is the marked absence of interference. Static and interference from electrical appliances are almost absent. It is also interesting to note the peculiarities of local harmonics in that vicinity. The frequency is never steady, and has a tendency to change, which I think proves even though a station is crystal controlled, etc., frequency has a tendency to move. However, it is not noticed on the fundamental. Could not a few enthusiastic amateurs in New Zealand concentrate more on 10-metre work, and perhaps use a little fore. No doubt the "skip" would be a little troublesome. It would be an interesting experiment, because we have a band of Australian and American hams experimenting in this vicinity. We are well aware of the results of waves of 160, 80, 40, 30, and 20 metres, but we hear very little of 10 metres.

We have also read of late a great deal about reception of European stations on the broadcast band, and many listeners hold verifications from same. I have watched very closely reports of listeners with regard to the number of these stations that have been logged. This started at 5, then 12 and 16, but to cap all, I read a report in "Radio Record" of a listener who had logged 42. Judging from the number and the power used by these stations, the listener who logged 42 is evidently hearing some of the 500-watt Europeans. This is without doubt a record, although I was once ridiculed for reporting reception of a station on the broadcast band located in Madrid. Since then 5SW, Chelmsford, England, has been heard on a crystal set, but have been afraid to report same. All the same, I am quite in agreement with the Palmerston North listener who reported hearing European stations using a one-valve set. It can be done, especially with the new German station.—A. P. Morrison (Wellington).

[Can it?—Ed.]

The Morse Code

Nearing Its Centenary

FEW present-day listeners are sufficiently interested in the Morse code to take the trouble to learn it. Perhaps, too, they are wise in their generation, for the mastering of Morse necessitates the expenditure of no little time and mental energy.

The Morse code is universally used and understood. It is, also, getting well on toward its centenary, and perhaps the surprising fact about it is that it has never been superseded to any extent by any other system. Nowadays, a large proportion of commercial wireless traffic is conducted through the agency of Morse, and particularly through more or less mechanical systems whereby the code is transmitted at very high speeds.

Before Samuel F. B. Morse brought out his famous code, comprising a combination of two sounds varying in duration, crude telegraphic messages were transmitted and received by means of needle instruments, the deflections of one or more needles to one side or the other of an instrument dial making up a code of readable signals.

Morse, however, who started out in life not as a scientist, but as a portrait and scenic painter, gave to the world a new telegraphic instrument — his famous "Sounder"—in which a bar was attracted to and released by an electro-magnet.

It was the noises which this alternate attraction and liberation of the movable bar gave rise to which stirred up in the mind of its inventor the idea of constructing a code based on sound instead of on sight.

It is, indeed, a tribute to Morse's ingenuity that the Morse code of the present day is so little altered from the original code. Morse's code was subjected to International revision in 1851, since which time it has remained unchanged.

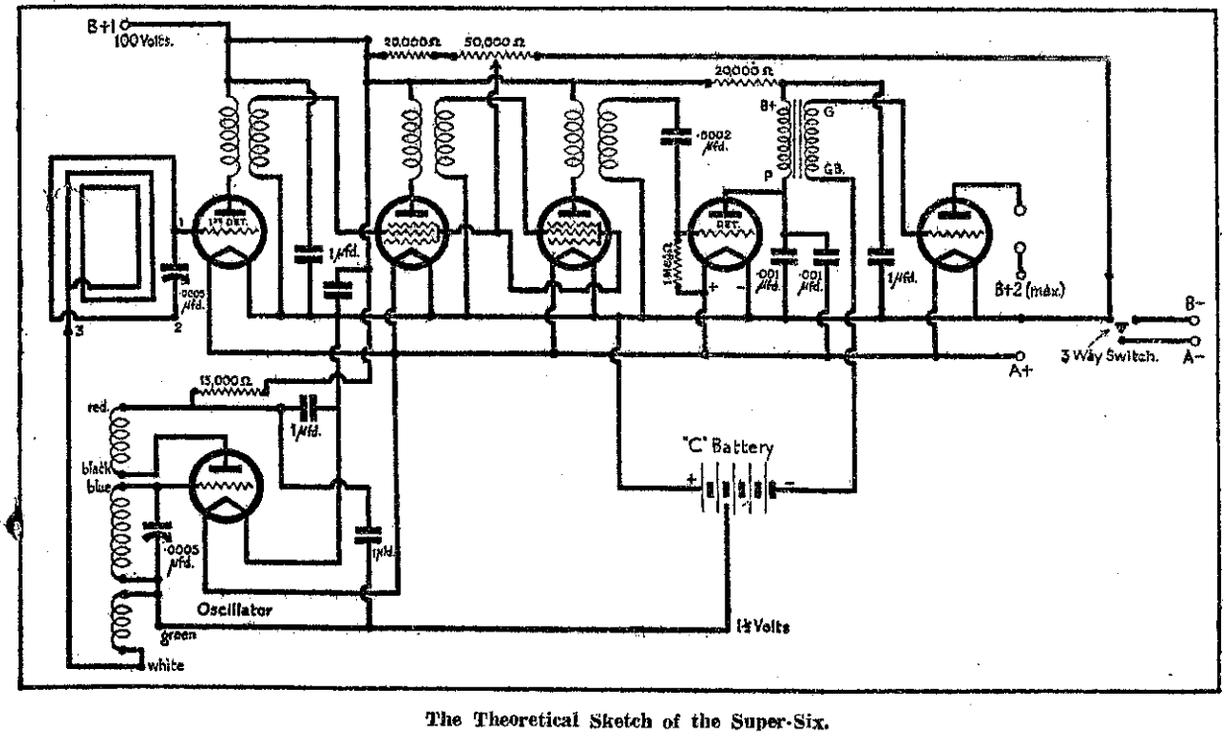
Interchange of Programmes

Between Europe and America

THE Columbia Broadcasting System of America has just completed arrangements for a regular interchange of programmes between the United States and five European countries—England, France, Austria, Hungary, and Czecho-Slovakia—to begin toward the end of this year.

Hitherto the vast majority of transoceanic broadcasts have been from east to west, the United States contributing comparatively little of its broadcasting talent to European countries, but under the terms of the present agreement the exchange programmes will be available on regular channels to both continents, with equal representation in the number of programmes transmitted. In addition, the Columbia Broadcasting System has made arrangements to broadcast in the United States the proceedings of the International Disarmament Conference to be held at Geneva next February.

The president of the Columbia network, who recently made an extensive tour through several European countries, said: "We shall endeavour to present to audiences both here and abroad the typical music, drama, and literature of each country—in fact, everything in art that can be broadcast—and in the intellectual sphere we shall introduce the best thinkers of the participating nations. . . . I anticipate no difficulty in securing appearances before the microphone of prominent European statesmen. They will give us particularly valuable intimate, first-hand accounts of international problems as they affect their respective peoples."



The Theoretical Sketch of the Super-Six.