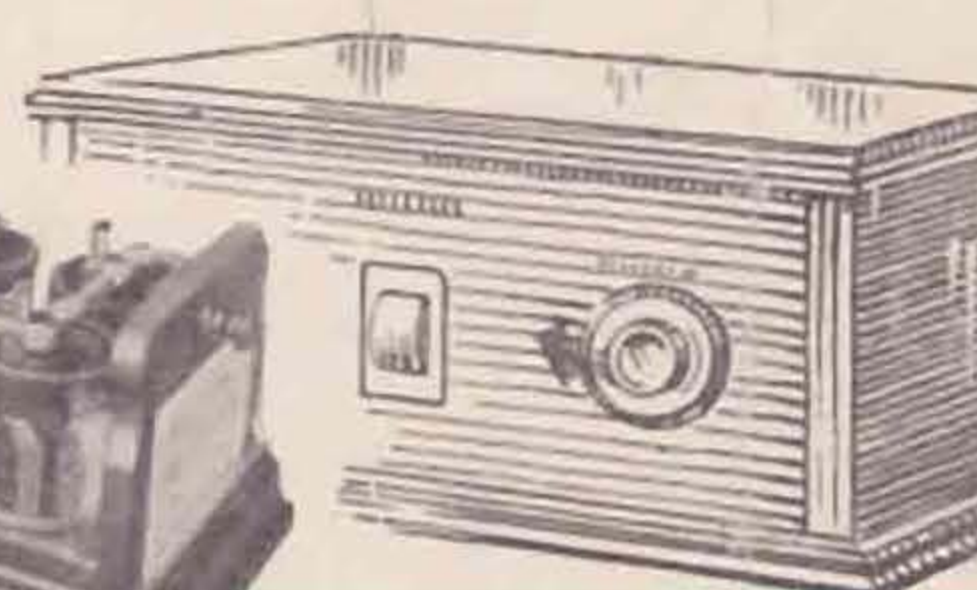
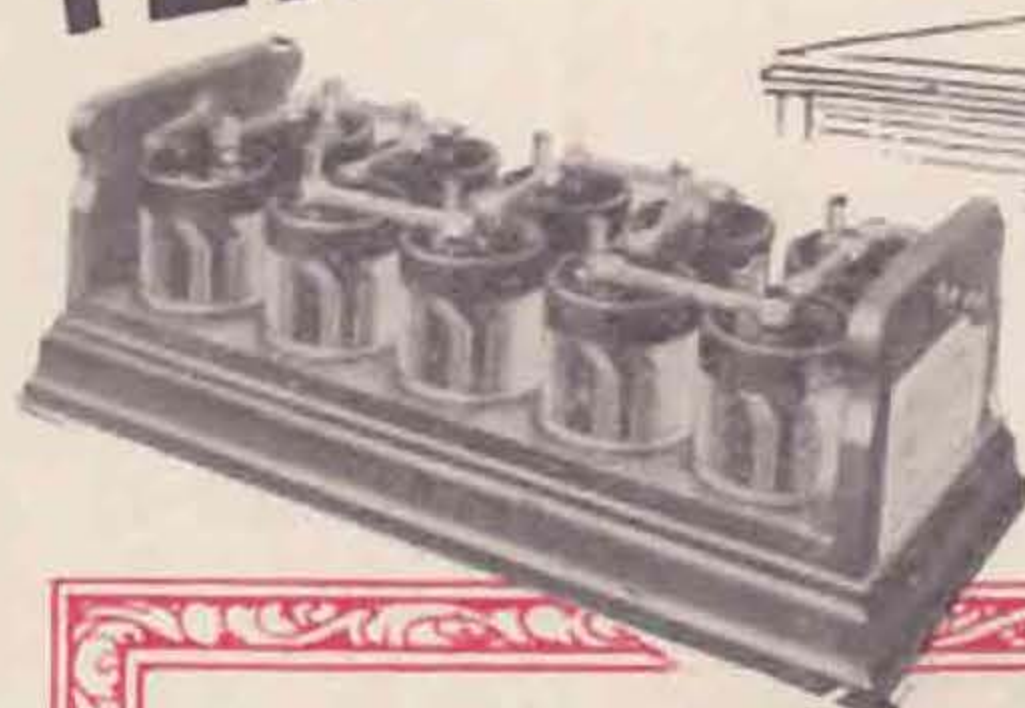


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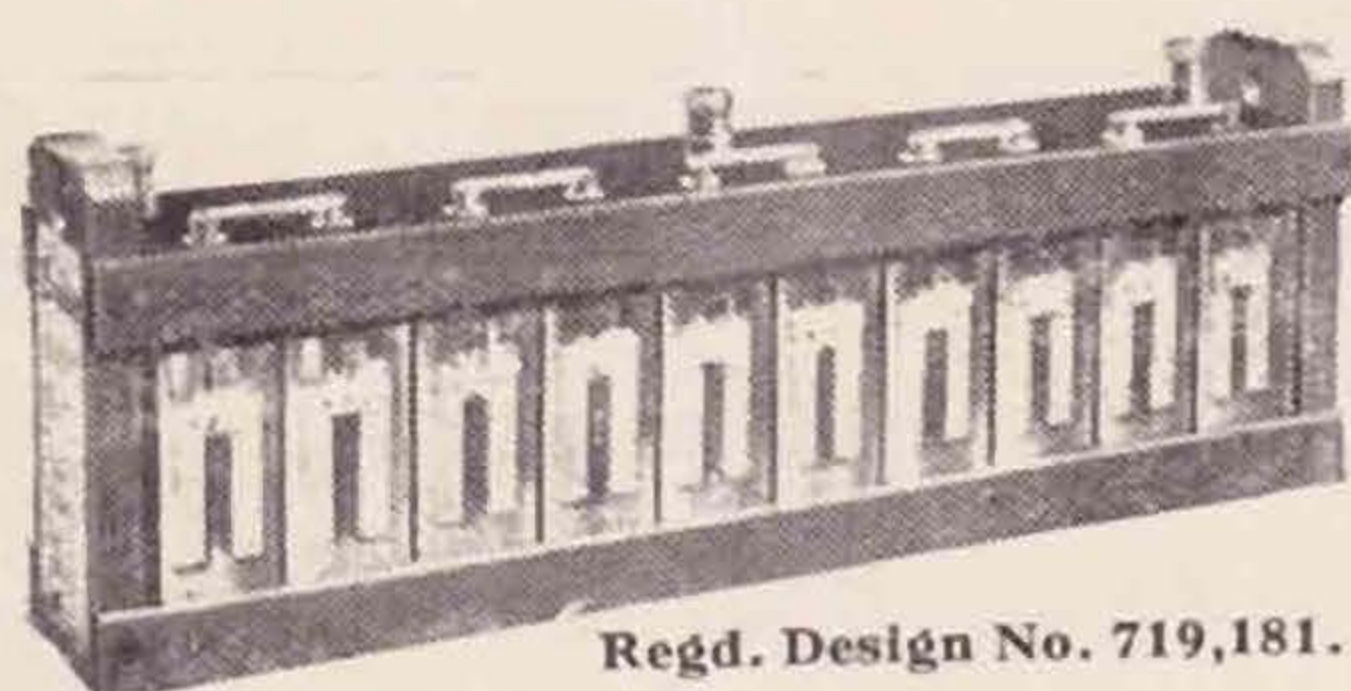


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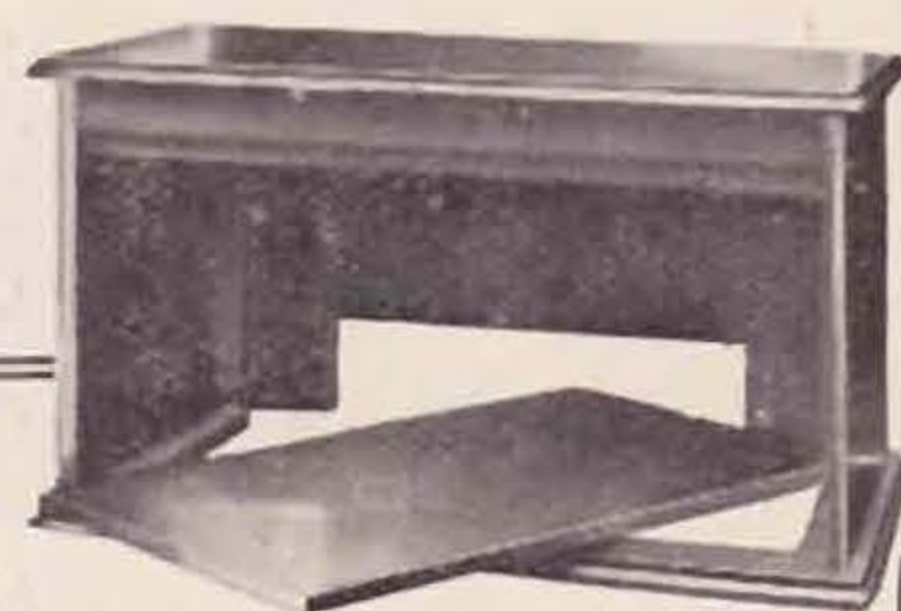
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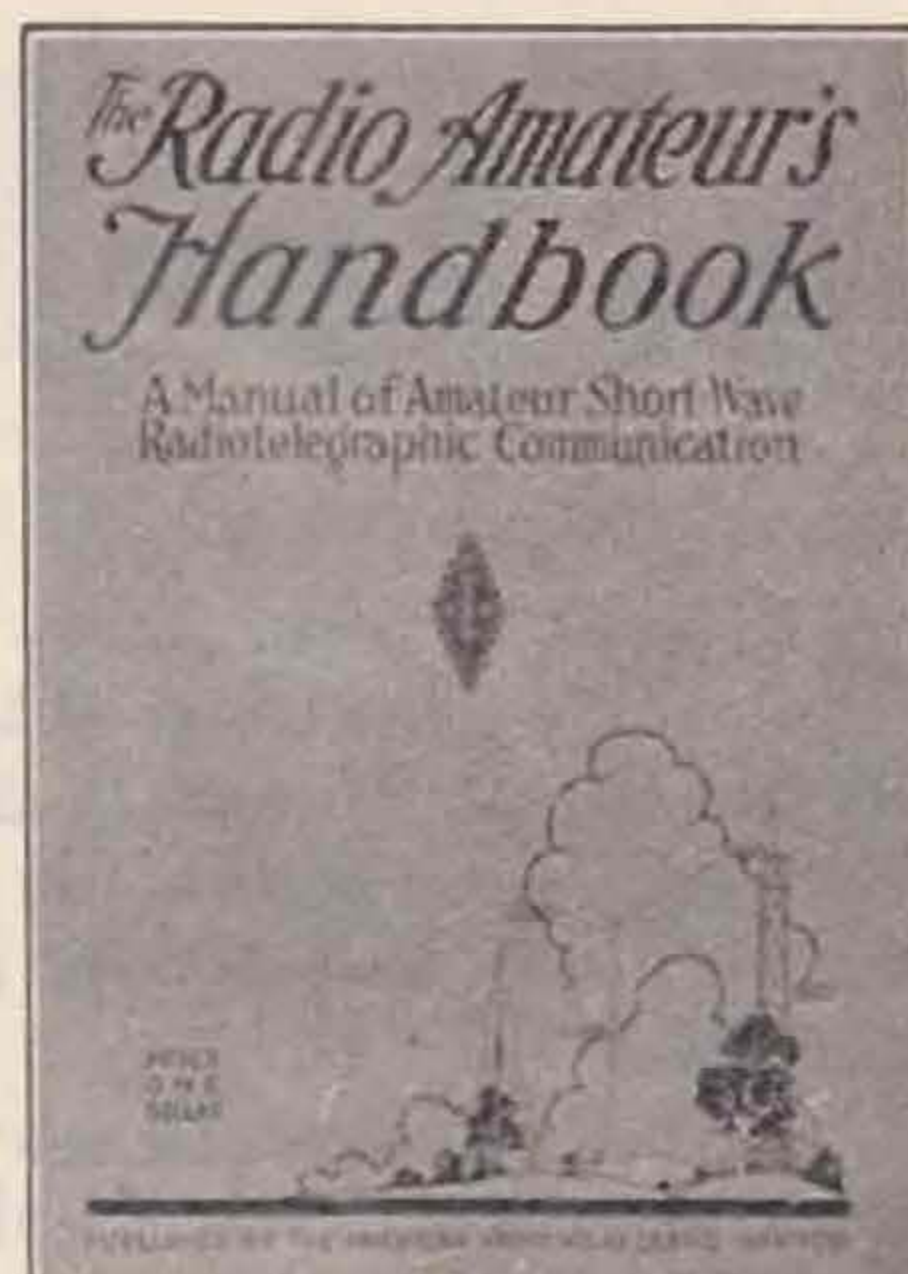
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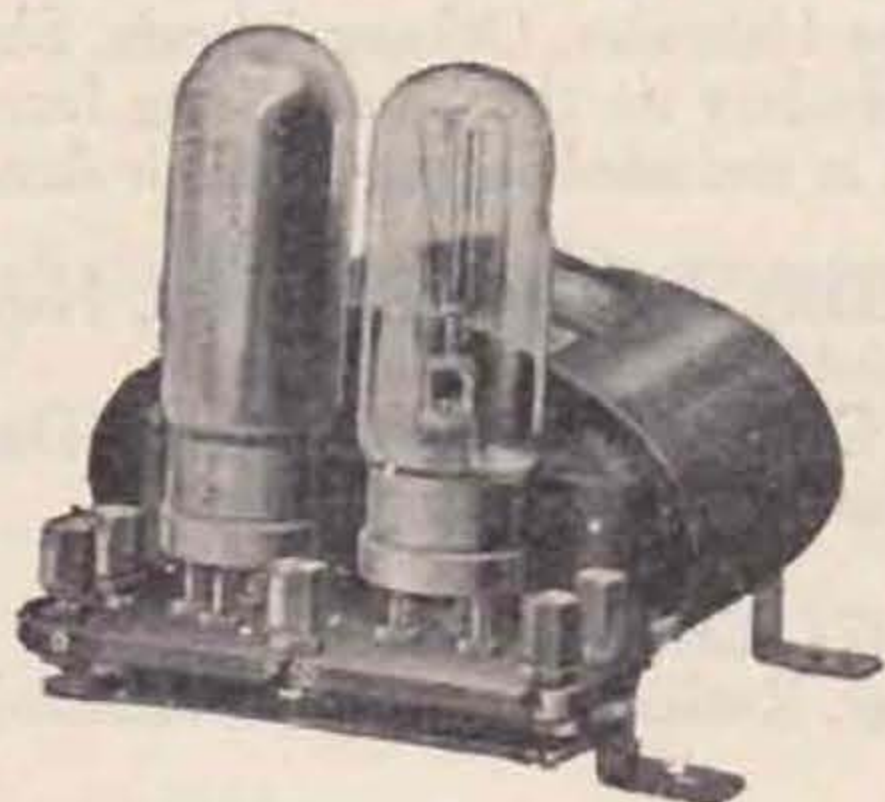
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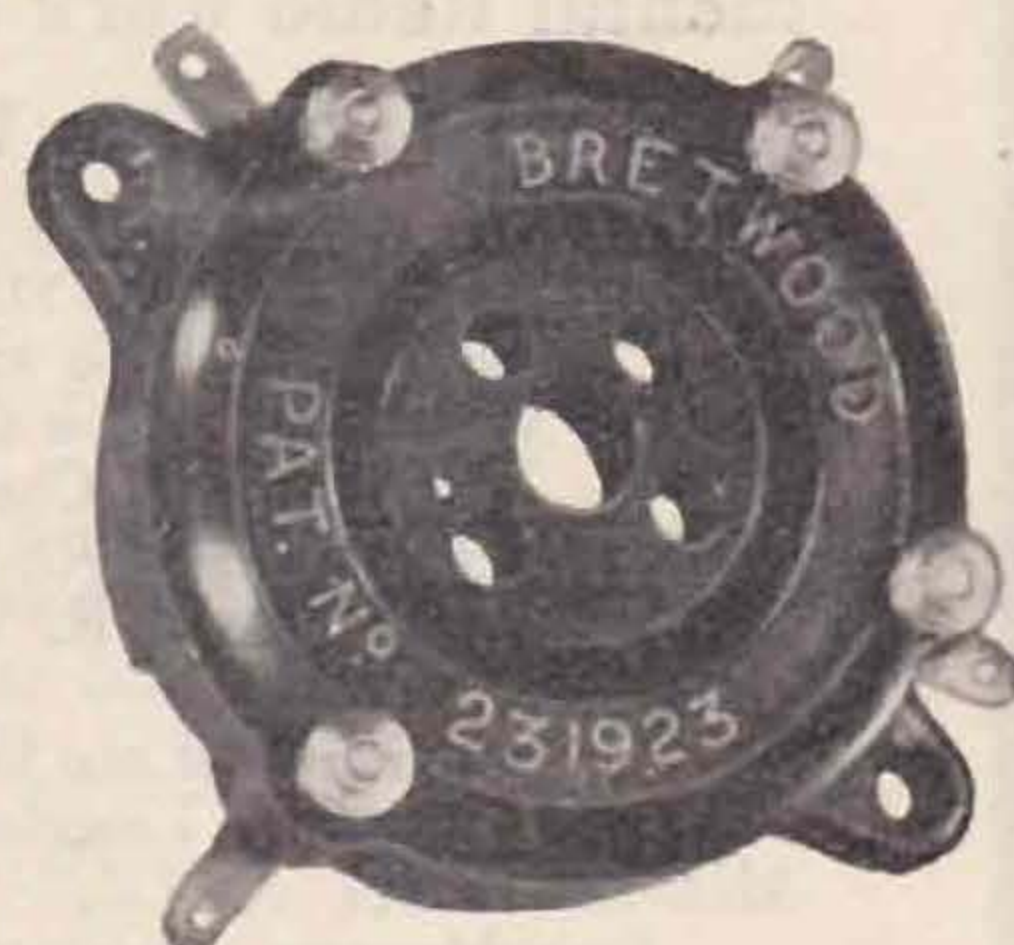
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The Section is governed by a Committee which is elected annually in accordance with rules approved by a Convention held at the Institute of Electrical Engineers, London, in September, 1926, and the Constitution is democratic in character.

The policy of the Section is to accept to its Membership any person or persons who are able to satisfy the Committee that they are interested in Radio Art, or who in their opinion are persons whose Membership is desirable in the interests of the Amateur Experimenter.

The "Bulletin" is published by amateurs for amateurs. The Section is the body recognised by the British Postmaster-General as being representative of the aims and objects of the experimenter. Through its agency great concessions have been obtained in the matter of licences in the past. We have members in every corner of the earth, and we welcome inquiries from prospective Members at all times. A bona fide interest in experimental Radio work is the only essential qualification.

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T. & R. Bulletin

Devoted to the Interests of the Radio Amateur Experimenter.

THE INC. RADIO SOCIETY OF GREAT BRITAIN,
53, Victoria Street, S.W.1



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Vol. 2. No. 10.

EDITORIAL

Thank You !

WE have had many letters in response to our grumble last month regarding the lack of ideas from members concerning the Convention, and these we are bearing in mind in our future discussions. We hope shortly to present to members the results of these discussions, and to let you know full details as to dates, etc. We thank you !

The Amateur Movement and What It Means.

During the past few months we have added many new members to our numbers, and it seems not out of place to say a few words to these and to all members as to the meaning of our movement. There seems to be an idea in some quarters that the aims of our movement cease at the radio experimenter stage, and that there is nothing else in it. This idea we are out to kill at the earliest possible moment. The movement means far more than merely brother experimenters banded together in the pursuit of one common end in the world of radio science. It means a movement which is filled with a spirit of esprit-de-corps and good fellowship, and one which has for an aim the benefit of the British Empire. Whatever our shade of political opinion, we cannot, so long as we are Britishers, get away from the fact that our Empire is our first consideration, and that whatever good work we are able to do either individually or collectively, is a step forward to a better understanding of the world and its people. Such an ideal can only have one end—the prospects of a period of universal peace and good fellowship. The manner in which this is going to benefit the Empire and, incidentally, the whole world, is not difficult of understanding. Great Britain has long been known as a just and honest country in all its dealings, and if the British amateur or the members of our movement are able to do anything in the matter of putting the seal to this knowledge, then we shall have accomplished much.

In knowledge comes understanding, and the radio amateur has an opportunity of knowing his neigh-

bours which was never available to his ancestors. We must see to it that every member proves that he acknowledges the first principle of the radio amateur, and is a gentleman in all his dealings, especially on the ether. He should always be ready to obey the unwritten code of the amateur when on the ether, *i.e.*, never do anything which is likely to spoil the amusement of broadcast listeners or interfere with any other tests which might be in progress.

This is but a small portion of the obligations of the amateur. He has in his keeping the ability of making himself such an authority on radio matters and such opportunities to become a useful and learned member of the community in all electrical and radio matters that he should not lightly undertake the assuming of the honoured name of "amateur" unless he is fully prepared to devote himself whole-heartedly to the cause which we all have at heart—better and better radio.

The recompense which will be reaped by the true amateur is enormous. In every corner of the earth to which he may happen to travel he will receive a hearty welcome from others of his fraternity. He has but to display that little diamond-shaped emblem to secure entry to the hearts and doings of brother amateurs of every nationality—truly a remarkable state of affairs, and one well worth working for. The spirit of freemasonry which exists amongst radio amateurs is unlike anything that has ever been known in any other scientific body. See to it that this never changes, and that wherever possible these bonds are strengthened, rather than weakened. This should not be difficult, for radio knows no nationalities or class or creed, but what it is equally at home with it. The ether and our spirit of good comradeship is the bond which ties us all together. So here's to it everyone, let us all do our bit for the good of the cause ! Before all things, remember that the amateur is an experimenter and not an ether hog, and, being an amateur, he is also a gentleman of the ether. Remember, also, that radio is the maker of friendships—and let others know about it. All those who term themselves amateur radio experimenters are welcome to our Society—we have room for many hundreds yet. It is up to you to fill these vacancies as early as possible.

It is hardly necessary to say that above all the amateur observes the terms of his licence at all times.

Special Notices Concerning Post Office Licences.

Many transmitting licences are now due for renewal, and the following notices are published for the guidance of all members. The decisions contained therein were discussed at a meeting of the T. & R. Committee held on Friday, January 25, 1927, after which it was agreed that they should be put into force at once.

1. TRANS-OCEANIC LICENCES, 44-46 METRES AND 23 METRES.

(A) In view of certain representations made by the Post Office, it has been decided that no *new* trans-oceanic licences or other special facilities will be recommended by the Society for the time being, but that all applicants for extended facilities should confine their attentions to the waveband 90-100 metres for contemplated trans-oceanic work.

(B) All existing 44-46 metre and 23 metre trans-oceanic licences will be renewed for one year upon application being made to the Hon. Secretary, T. & R. Section Radio Society of Great Britain, 53, Victoria Street, S.W.1, who will cause suitable representations to be made to the General Post Office in respect of member applicants.

(C) In the event of any holders of existing licences of the description signifying that they do not wish for a renewal of their facilities for trans-oceanic work, consideration will be given to the applications of members which are at present lodged with the Society as to whether they are suitable cases to fill the vacancies thus caused. Each individual case will be dealt with entirely on its merits, and priority of application does not necessarily mean that the applicant's submissions will be recommended.

2. TRANS-OCEANIC LICENCES 90-100 METRES.

Applications for extended facilities on this waveband will receive consideration (see (B) above).

3. 32 TO 34 METRES.

It has been decided that this wave-band will be retained by the Society for the very special research work, and no individual applications for licence facilities on the wave-band will be recommended to the Post Office unless they come under the heading. The applicant must also satisfy the Committee that he is well equipped both in training and apparatus and is able to carry out research work of a very special nature, and that the knowledge of his subject is above the average.

Research Section.

Fading on Short Waves.

The attention of all members of the Research Section and all those interested in the Fading Effects of Short Waves, is asked in connection with work at present being done on the subject of Sunset Fading, by BRS34, taking observations on 5VL, 5AD, and 5KU. Several progressive tests have been carried out between 5KU and BRS34 and the curves of signal strength reveal many interesting details.

As the number of stations working in these tests is very small the results may not be of much general interest until other stations participate.

This work needs a system of receiving and transmitting stations on which the period between late afternoon and night can be spent on periodic

transmissions at intervals of 15 or 20 minutes or so. As soon as a few more members signify that they wish to carry out these tests, week-end schedules can be arranged and a chain of stations be set working so that the fading effects at all distances can be investigated.

The whole thing will not take up a great deal of each operator's time, as all that is required is the assurance that a signal will be transmitted at a series of scheduled times and that the same adjustment of apparatus will be adhered to throughout the evening's test.

Will anyone who is able to be on the air during the evening each week-end please write to BRS34; A. Hine, 81, Chaworth Road, West Bridgford, Notts., or to 5KU: R. Pollock, 4, Glenhurst Avenue, London, N.W.5, and state the wavelengths and power they can use on the Sunset Tests? As the reception work is centred on Nottingham, we should like to hear from receivers as well as transmitters for this work. QRP stations are as welcome as QRO stations, as we are not so much concerned with signal strength as we are with variations in signal strength.

Thanking all those who have helped in our recent tests,
BRS34, G5KU.

Forthcoming Experiments.

A programme of interesting experiments is in course of preparation at Headquarters, and these comprise the following:—

May, 1927.—International Relay Party (see page 8).

June-July, 1927.—Tests and experiments in connection with solar eclipse extending from and including June 27 until and including July 1.

Mid-July, 1927.—A series of short-wave reception experiments on certain selected amateur stations transmitting in various foreign countries.

Early Autumn, 1927.—QRP telephony tests on various wave-lengths. It is hoped to make these experiments as profitable and interesting as it is possible to make them, and the organisation of the first on the list is already receiving careful attention. These will be conducted in conjunction with certain other work of the Radio Research Board (Department of Scientific and Industrial Research).

Another Method of Keying.

By G2BL.

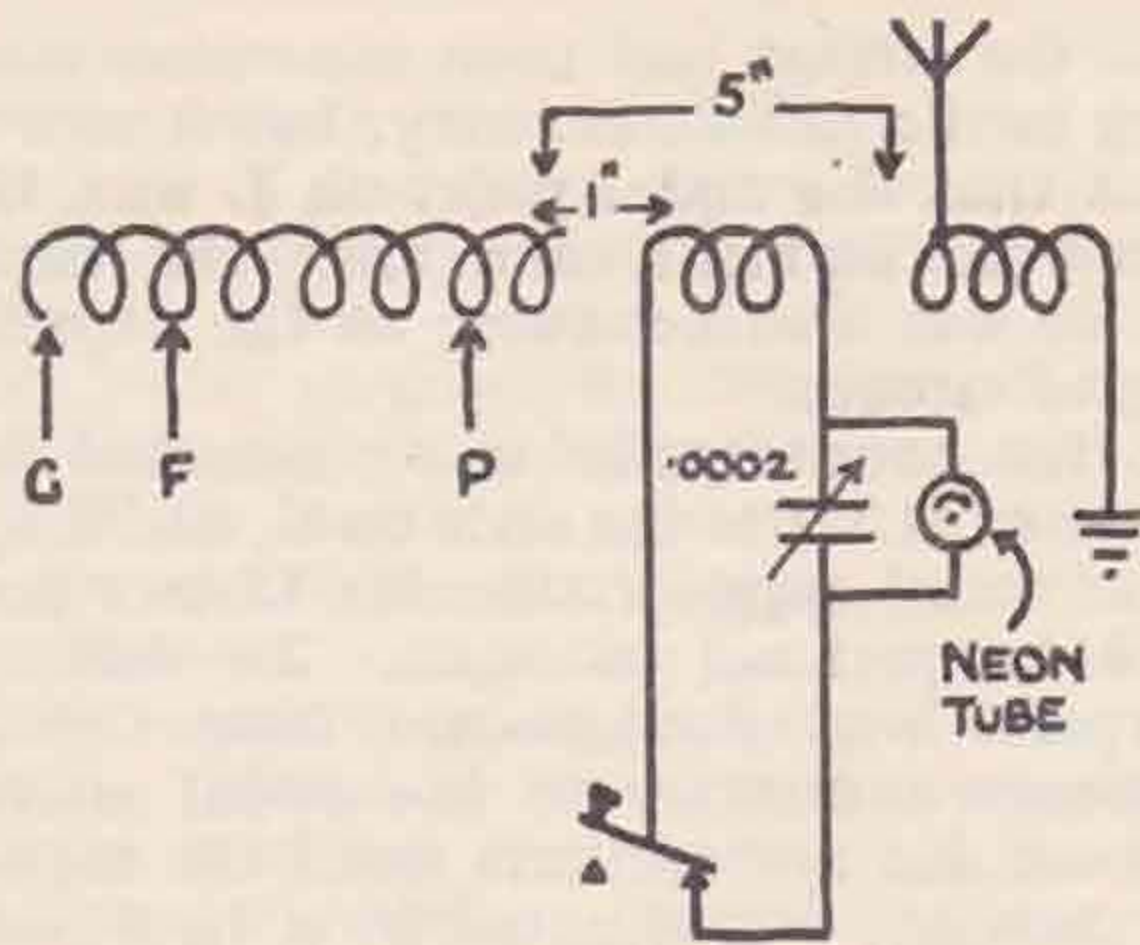
For the past three months the method of keying by total absorption of the emitted radiation has been used at this station.

It was adopted owing to the fact that only a very small *series-wound* motor was, at the time, available for driving an Evershed D.C. generator, and the method of keying ordinarily used (*i.e.*, key in grid circuit) was impossible owing to the variable load, and, therefore, speed of the motor when keying.

The diagram shows the method applied to a loose-coupled Hartley circuit, but it is equally applicable to any other circuit.

The absorption coil should be of the *same* diameter as the oscillator coil.

Total absorption is obtained by tuning the circuit to the wavelength in use. On 45 metres $4\frac{1}{2}$ turns, 6in. diameter, and a .0002 variable receiving



condenser are used. The tuning is critical and should be adjusted until *very* slight or *no* alteration of the plate current takes place when keying. A Neon tube may be shunted across the variable condenser, which will assist in tuning, and give visible indication of absorption.

When the key is down, no loss of radiation due to the proximity of the absorption coil to the oscillator coil can be traced.

The method has the following advantages:—

- (i) No spacing wave.
- (ii) Note absolutely steady, and steady load on generator.
- (iii) May be used for reasonably remote control (without relay) without alteration of circuit constants.
- (iv) No sparking at key contacts.

Hertz Antennas.

By A. G. Wood (5RZ).

THE purpose of this short article on Hertzian Antennas is in the first instance to set on record one or two interesting results which have come to light; and, secondly, in the hope that some authorities on this subject will be good enough to clear up a number of points which are raised.

The writer has been working on the 45-metre band with considerable success, using the usual form of Hertz as shown in Fig. 1. The resonance point on this system was 44.5 metres. Now it was found, as expected, that the loudest signals were reported when the transmitter was tuned to this wavelength and that the strength dropped off on either side. It was found, however, when working to schedule with an American station in New Jersey that the best results were consistently given when the transmitter was tuned to 47 metres and that at the other end of the scale, *i.e.*, 43 metres, the strength had dropped to practically nothing. This result was checked on a number of nights, always with the same result. Yet by experiment with a station situated at Sheffield both during the daytime and at night the first result held—maximum strength when tuned to resonance.

From these results it would appear that detuning this particular Hertz resulted in shifting the angle of radiation, thus giving better reflection at a distance. It would be extremely interesting to hear anyone else's experiences in this connection.

I have just installed a new Hertz with a theoretical lay-out as in Fig. 2. Now, according to text-books,

the current voltage curves of the half-wave antenna as in Fig. 1 are as Fig. 1A, and presumably, therefore, the current-voltage curves of Fig. 2 will be as Fig. 2A. If this is the case, how is it that an ammeter connected across the point A in Fig. 2 will give a reading? Again, is the circuit LC tuned to the operating wave, which should also be the fundamental wave of the aerial? Does not the ammeter A simply measure the current in the feeder circuit? During the short time I have spent on this system I have not been able to obtain satisfactory results from it, but by joining the two feeders as in Fig. 3 and tapping the joined feeders on to the plate coil of the transmitter, a very fine current is induced in my receiving aerial, which is shown by connecting a tuned lamp circuit to its lead-in. Yet even with this system it has not been possible to raise a single American station on one of the best nights I have ever heard. The old system in Fig. 1 would raise any station in the first four U.S. districts without effort and with an apparent radiation measured in the same way of less than half that of Fig. 3.

Just one other point. It was not possible to get the necessary length in Fig. 2, so small loading coils were inserted at the points X, or as shown in Fig. 4. Is this likely to have a detrimental effect on the radiating properties of the system?

I feel certain that there are a number of experimenters like myself who are working in the dark on this subject and would welcome very much any light that could be thrown on it. In the meantime I think my old half-wave Hertz is going back once more!

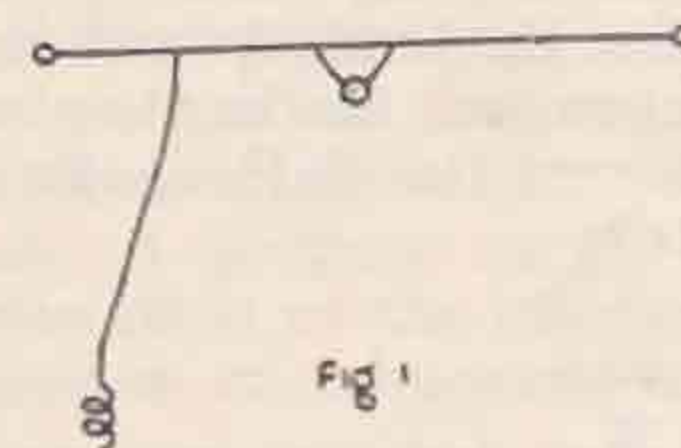


Fig. 1

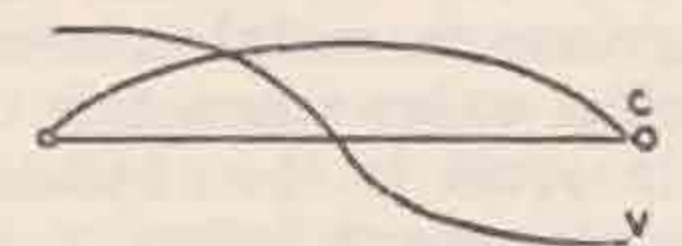


Fig. 1A

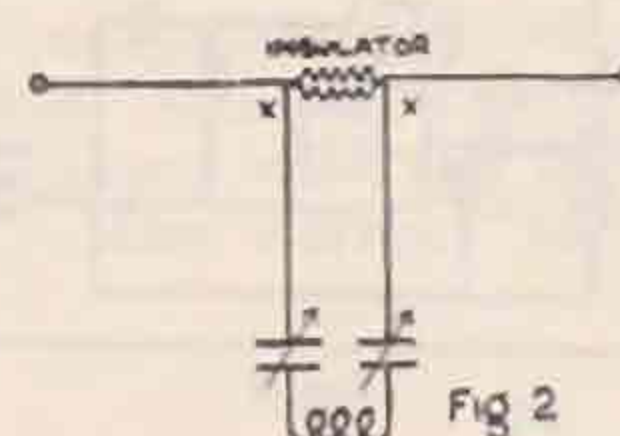


Fig. 2

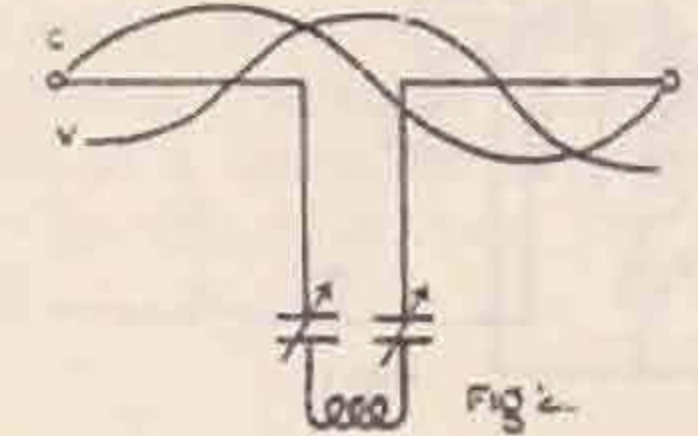


Fig. 2A

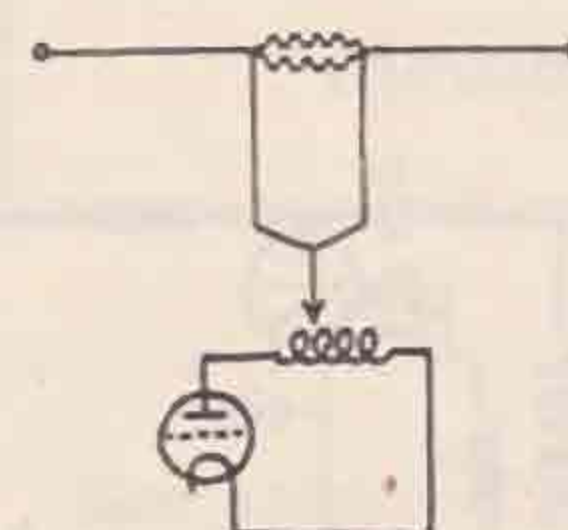
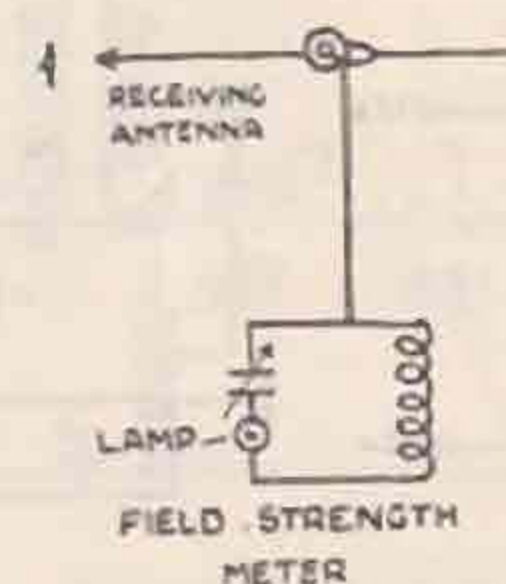


Fig. 3

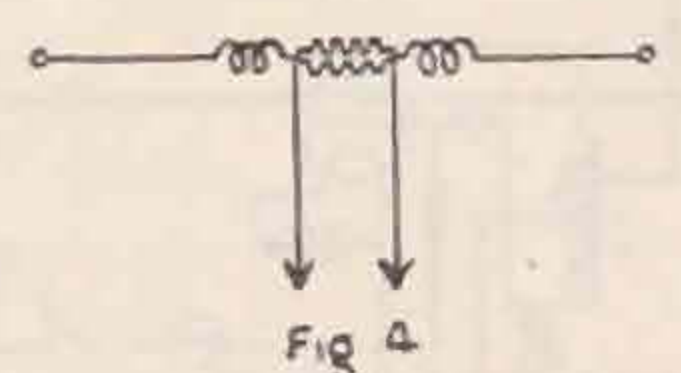


Fig. 4

C.W. Transmssion.

By L. F. HUNTER (5RF).

WHEN installing an amateur C.W. transmitter one is faced with the problem of deciding upon the best circuit to employ. The writer when in this position pondered over various circuits and came to the conclusion that the "Colpitts" was likely to prove most efficient.

It was built up and gave good results (not, however, until a soldered water-pipe earth had been replaced by a one or two-wire counterpoise). The circuit first used was as shown in Fig. 1, but it occurred to the writer that there must be a node of potential at some point along the aerial inductance coil. This became obvious when the circuit was re-drawn as in Fig. 2, from which it will be clear that the capacity formed by the aerial and counterpoise is in series with the variable capacity, C.

The counterpoise terminal and one side of C is connected to filament and forms a node of potential. Corresponding to this node of potential in the capacity of the oscillatory circuit another exists at some point on the inductance, and this was found and utilised for the purpose of feeding power to the anode of the triode. By removing the anode blocking condenser C, and radio frequency choke and connecting the positive H.T. terminal to a clip which is placed at the voltage node on L the circuit became a series fed "Colpitts." (See Fig. 3).

The writer found, as he anticipated, a slight increase in aerial current for the same power input to the valve when this change was made, this being put down to the elimination of the R.F. choke and its attendant losses.

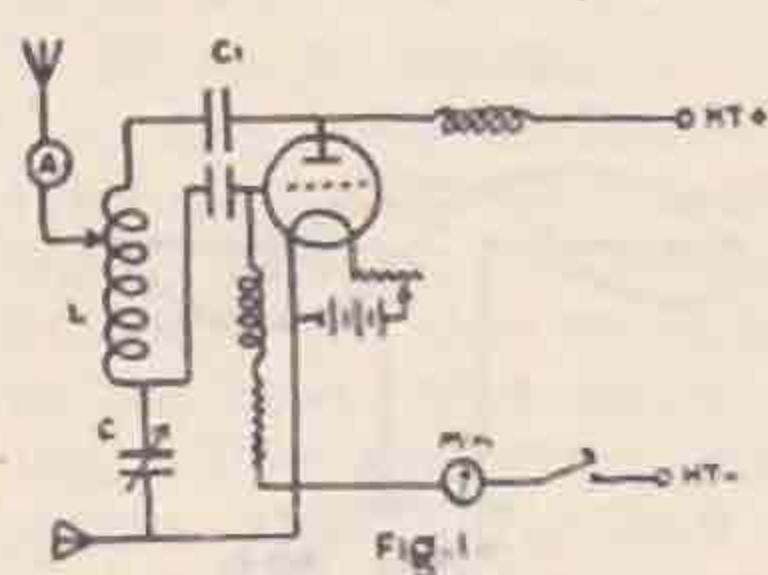


Fig. 1

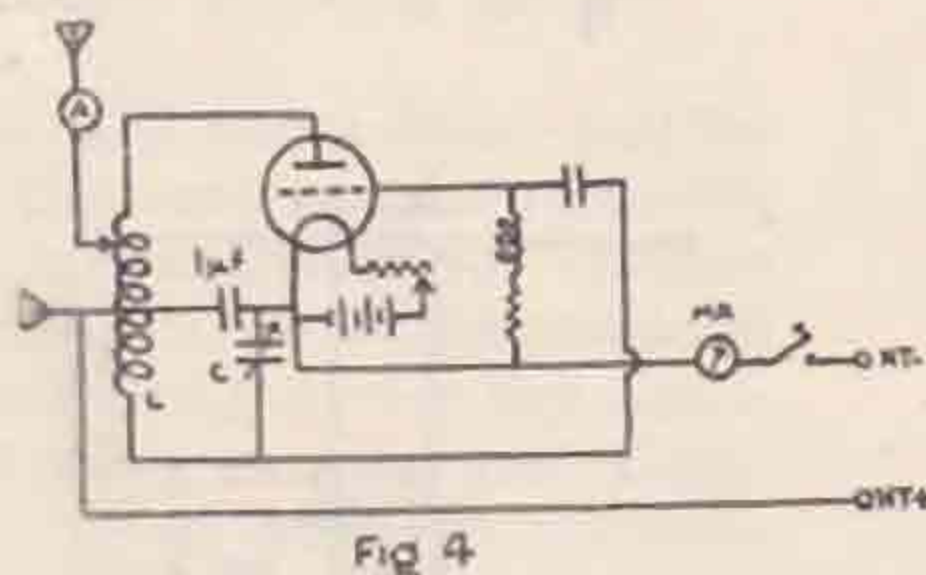


Fig. 4

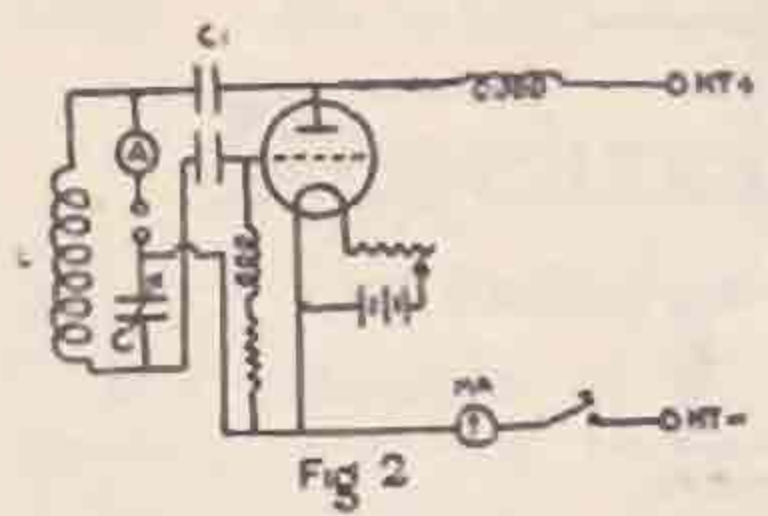


Fig. 2

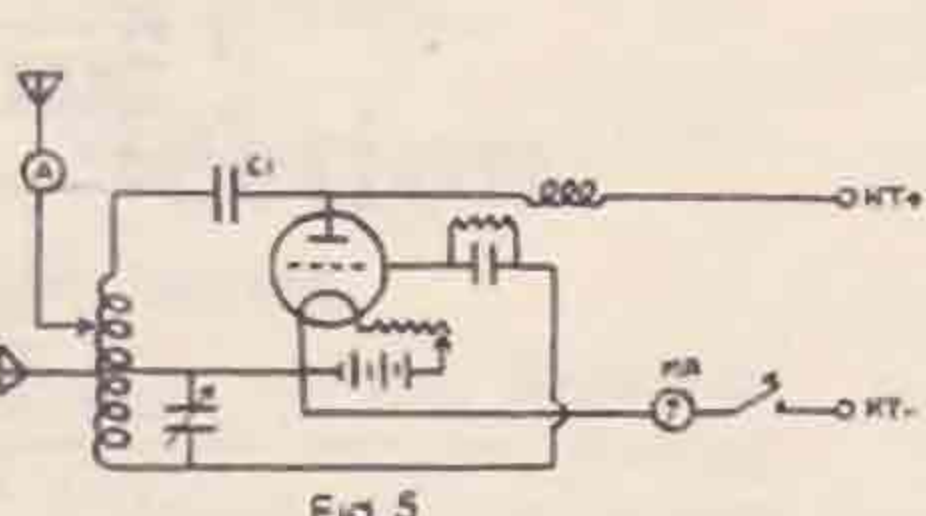


Fig. 5

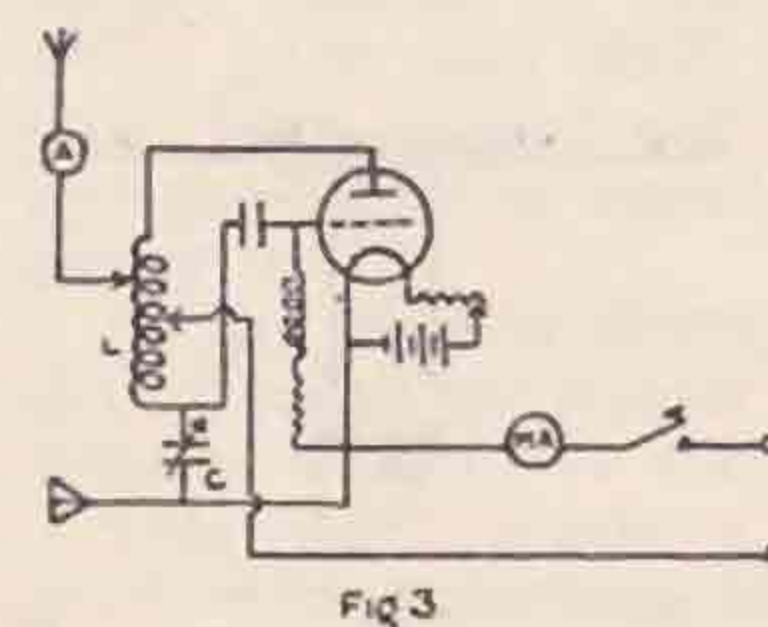


Fig. 3

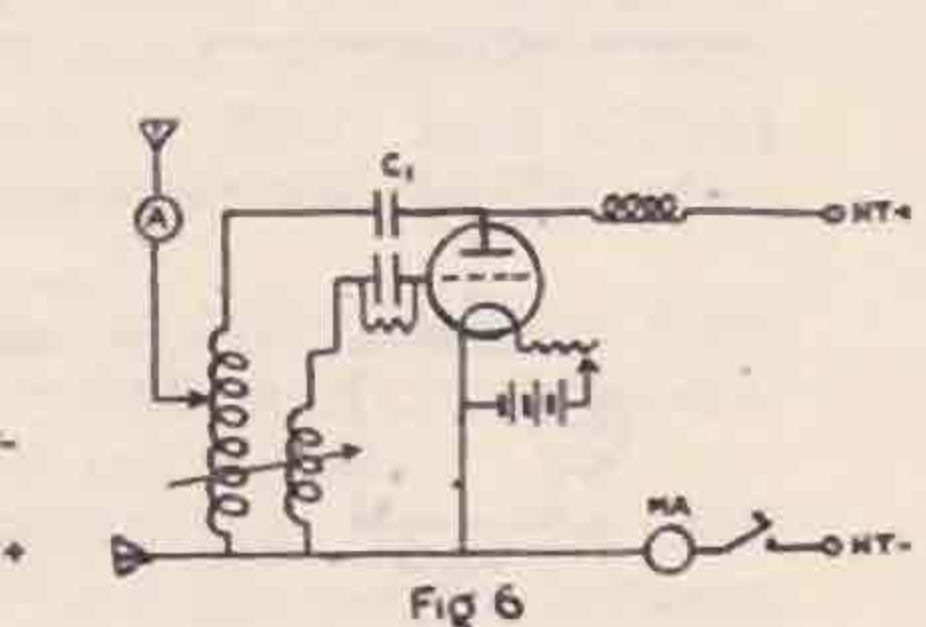


Fig. 6

So far the circuit had been somewhat simplified, resulting in increased efficiency, but it now became apparent that the nodal point on L was, in effect, connected to filament, and that the aerial condenser, C, was also behaving as the capacity in a tuned grid circuit.

Also, the counterpoise was connected (through the source of H.T.) to the node on L, and it appeared that the aerial series condenser C was no longer required to perform as such. To test this the counterpoise was disconnected from the filament and connected directly to the nodal point on L, but the set did not oscillate until the high-tension supply (battery) was shunted by a 1μ F condenser as shown in Fig. 4.

Now, from Fig. 4 it is obvious that these simple changes had resulted in a transition from "Colpitts" to a form of tuned-grid "Hartley" circuit, and no noticeable change had occurred in the functioning of the set. The 1μ F condenser was only necessary to bi-pass H.F. current across the H.T. battery. (Both grid and anode H.F. components.) To arrive at the well-known "Hartley" it was only necessary to change back to the shunt-feed system as shown in Fig. 5, where the grid circuit is changed to a series arrangement, thus eliminating the R.F. choke in the grid circuit. Next, the circuit was changed to the well-known "reversed feed-back" (see Fig. 6), no attempt being made to tune the grid circuit, and still the efficiency appeared to be the same, ignoring the variation due to shunt or series feed.

The above experiments were carried out using a constant wavelength of about 150 metres, and have served to convince the writer that, so long as due attention is paid to the elimination of losses wherever possible, there is not much to choose between any of the well-known circuits.

Short-Wave Work Under Difficulties.

By G2IH.

IT may happen that there are worthy members of our section, and also of that increasing body, the B.R.S., who cannot rig up any kind of transmitter owing purely to the physical impossibility of erecting any kind of decent aerial. Such was the fate of the writer a few months ago on removing to new premises, when a letter was published from him in the BULLETIN asking for advice on inside aerial transmission. No reply was received on the matter, and, in the hope that this small contribution might be of help to someone else in similar circumstances—well, here it is.

The premises on which the experiments were carried out are on a main thoroughfare, with the most noisy tramway system running past the door, the wires being only 18 feet from the front of the building; at the back is a goods yard, with no place to hang a wire on to.

To crown matters, the landlord of the property will not sanction the erection of any kind of mast, and so we were cut down to a small aerial in an attic under the roof. The total length available was 40 feet; accordingly the Hertz system was decided

upon, and a length of wire 36 feet long was run from one end of the room, being bent sharply at right angles at 28 feet so as to reach down to the coupling coil which consisted of 5 turns 3 in. diameter; so far so good, the total length available had been used, so we did the Columbus trick and cut off a 36 ft. length of rubber-covered flex, and coupled one end to the above coupling coil through a H.W. ammeter, and threw the other end out of the dormer window so as to hang down the side of the wall. About 15 feet from the coupling coil it rested on a strong iron snowguard, and where it was trapped through the window it was in close proximity with the huge sheet of lead which surrounds the whole of the dormer window and canopy over it.

The transmitter was a hastily constructed affair and used a Mullard 256 power valve (note: this valve has been in use over a fortnight up to the time of writing and handles 20 watts without heating, with 100,000 ohms grid leak), the input at the start being about 15 watts. The circuit is the old Hartley in its plainest form. Everything being in order, the key was depressed with a thumping heart behind it, and, presto, the ammeter slowed up to 0.47 amp. Good; now for some tests. A few test calls were sent out, and just as dark was falling a reply was obtained from S.M.V.R. at Malmo, who reported "Sigs dead steady, R6."

Since then, during the last fourteen days about 20 stations have been worked, including Nijni-Novgorod (R6 on two valves), the countries being Sweden, Russia, Germany, France, Italy, and, of course, Great Britain, although operating hours are curtailed owing to the fact that the tramway service is not cut off until 11.30 p.m. each night.

It is dead easy to tune such an aerial; all one does is to adjust the oscillator until the maximum current is showing in the aerial, then apply the wavemeter; if the wavelength is one meter too high, then cut 9 ins. off each end and again adjust until the maximum current is obtained. In order to steady things up the loose end of wire was taken into a bedroom window, pulled tight, and the window shut on the wire; the result is that the wave is dead steady, so much, in fact, that several QSL cards have been received stating "Your crystal control F.B." and certainly a wonderful degree of steadiness can be obtained by keeping the coupling coil loosely coupled.

One half of the above aerial is used for reception, and in this connection it may interest others to know that 2XAF operates a loud speaker (under favourable conditions) on the ordinary two-valve receiver; please note that the aerial is horizontal and on the same level as the receiver. In the absence of a vertical aerial the writer cannot draw any conclusions, but at times is struck by the great signal strength and also the absence of static at times when other stations only a short distance away are complaining badly of heavy static.

During the first tests, G5KZ, who was present, was so struck with the results obtained that he has tested out a similar aerial at his station with surprising results.

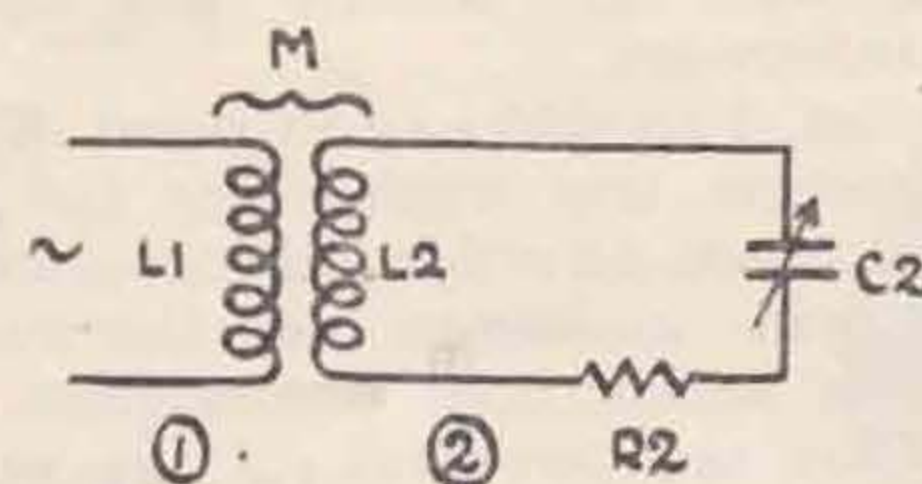
He has previously tried a large aerial 40 feet high and 80 feet in length, with the usual cpse, in an untuned state, tuned to 3rd harmonic, and with top span arranged as a Hertz aerial with the usual

feed wire, but now is using a short length of wire under the roof along with a zig-zag of wire arranged in the small operating room, the whole arranged to resonate at 45 metres in the manner of a Hertz oscillator with better results than any of the previous aerals, which leads one to think that only very few of the so-called Hertz aerals are functioning correctly, and the writer is of the strong opinion that in the absence of opportunity to try the feed wire at all points from the centre of the aerial to the very end (viz., 2XAF, KDKA) the use of the feed wire method is to be condemned owing to the large number of other waves sent out (listen on a B.C.L. aerial near by) and interference created thereby; against all this the aerial can be current fed at the centre (approx.) with better all-round results and with the confidence gained from the knowledge that the energy is on the right wave, and that he has directly on the table in front of him his H.W. ammeter to indicate the exact point of resonance, which is surprisingly sharply indicated. These remarks are intended to apply to either the direct coupling as used by the writer or the usual twin feed wires applied at the centre of the system; and, in conclusion, the writer would state that he is open to correction in the matter and would welcome other views.

Frequency "Pulling."

It is noted in the correspondence column of your January issue that Mr. G. L. Morrow (6UV) expresses slight misgivings as to the accuracy of the method of frequency measurement which I described in my article published in your November issue. I propose to give a slightly more detailed explanation of the effects questioned, with especial reference to "frequency pulling."

Suppose one has two circuits coupled together, as shown in the accompanying figure, the source of oscillation (1) being directly maintained by a valve, and the circuit (2) being variable through resonance with (1), by means of a variable capacity C2. The current induced in (2) will not be in



Have you introduced your new member? Thank you!

Stray.

The Stretford Radio Society, with headquarters near Manchester, is anxious to co-operate with any members of the T. & R. Section who are working on 8 metres.

phase with that in (1), but may be considered as being compounded of two currents, one which is in quadrature with that in (1), and another part which will be in phase or opposition with that in (1), according as C_2 is less or greater than the value required for resonance. It can be shown mathematically that the current in quadrature with that in the supply will be a maximum when X_2 , the reactance of circuit (2), is zero, *i.e.*, when (2) is in resonance with (1). The current in phase or opposition with that of the supply will be a maximum when X_2 equals $\pm R_2$, the plus or minus indicating the phase or opposition, and will be zero when X_2 equals 0. Now the effect of the former part of the current in (2) will be an apparent change in the resistance of (1), whilst the effect of the latter part will be an apparent change in the reactance of (1) equivalent to a certain amount of reactance transferred back, negative when C_2 is smaller than and positive when C_2 is greater than the resonance value. Now, since the effective reactance of (1) changes with C_2 , and also since it plays an important part in the determination of the frequency of the supply (assuming that the supply is not crystal controlled or otherwise stabilised) that variation of C_2 will introduce a detuning effect into the supply. This will take the form of an increase in frequency when C_2 is small, and a decrease when C_2 is great. This is the "frequency pulling" referred to, and it will be a maximum increase or decrease when the transferred reactance is a maximum negative or positive, *i.e.*, when X_2 equals $\mp R_2$. The frequency change will be zero when the coupling is small, and (2) is in resonance with (1).

If one has an oscillating receiver in the neighbourhood of the coupled circuits, and beating with same, then the change in frequency can be heard as C_2 is varied, and if the frequency is something like, say 10^7 cycles (at 30 metres) then a change can be detected when circuit (2) is literally yards away from circuit (1), although the change will only be a matter of about a hundred cycles. Perhaps it were as well to point out that if the figure given with my article were drawn to scale, then the "wonk" in the curve would be so small as to be almost invisible, and I am of the opinion that it is through this that Mr. Morrow has been led to doubt my statements.

In conclusion, I should like to point out that the article in question was written for the benefit of people who cannot afford to incorporate thermogalvo's, hot wire ammeters or thermionic voltmeters in their knockabout wavemeters, or whose transmitters are not powerful enough to light pea lamps or give direct reading on hot wire ammeters without coupling the meter so tightly as to introduce serious error. As regards the accuracy of this method of indicating resonance, let me state that if one places a make and break key in the absorption circuit, and determines resonance as indicated, by finding where no frequency change is occasioned by opening or closing the key, then one has entered new realms of precision, of the order of 1 in 10^6 , far far beyond the accuracy of most modern instruments, as against 1 in 10^3 accuracy when using the best thermo-galvo or similar device.

The mathematics of the subject may be found in (a) "Experimental Wireless," 1925, 18,348, and (b) "Journal I.E.E.," 1925, 397.

QSB.

By J. WYLLIE (GC5YG).

The following short article is inspired by Mr. Frank Neill's letter in the March issue of the BULLETIN, and is an attempt to explain away certain puzzling elements therein.

As the explanations are based largely on anatomy as related to the human organs concerned, and as I do not profess to serious knowledge of medical science, it is trusted that, if there are any slight technical inaccuracies in the article, our medical friends will deal tolerantly with me.

It will be remembered that Mr. Neill expressed himself puzzled by the fact that his signals are always reported stronger when a slight ripple is introduced in the note, as opposed to pure DC.

This same incontrovertible fact has been observed by others, and I believe the following to be the explanation. The human ear conveys to the brain the vibrations which we term sound. Now, of what does the mechanism of the ear consist? Roughly this: in the middle ear there exist several small bones which are attached to and vibrate in sympathy with the membranes known as drums. The incoming sound vibrations, therefore, by impinging on the drums, produce sympathetic vibrations in the middle ear mechanism, more or less, according to the amplitude of the sound vibrations received.

Now, any authority on acoustics will tell you that the vibrations produced by a policeman's whistle, or any other similar instrument in which a mechanical ripple is produced, are much more pronounced in character than those of a smooth-toned instrument, such as a flute.

This, then, is the explanation I submit. An R.A.C. signal (or DC with ripple) produces greater vibration of the ear mechanism than a pure D.C. note of similar strength at the point of origin, and hence, not only appears, but actually is much more loud to the human ear.

Coming—An International Relay Party.

A WORLD-WIDE CONTACT CONTEST TO BE HELD IN MAY

Arranged by F. E. HANDY, A.R.R.L. Communications Manager.

SELDOM a week goes by but that Warner or Kruse drop into the C.D. to ask for the latest dope on foreign contact. "How shall I send my X-Section test notices for amateurs in Ecuador, Austria, etc.? Who is most dependable and who can QSR promptly?"

Elsewhere in this issue are listed the stations known to be the "best bets" for good foreign contact as we go to press. While the larger countries can always be reached easily, not every foreign QSO is reported to the C.D., and this makes it difficult to get complete information on foreign contact points.

So why not an international party with some experimental test messages to see what we can do? This will give us all a chance to have some good fun, including both relaying and international Dx; it will serve as a starting point for the lining up of more definite contact for all foreign points; new contacts and friendships will be made. Among other things the contest will help the C.M. to answer some of the questions so frequently fired at him.

Here you are, OM! Here's a contest in which every amateur in the whole world can have a part—the only requirement, an amateur radio station. The contest will show which stations in each country are the star stations for two-way international work. There are test messages to relay which will insure that actual solid two-way QSO's are made. These messages are going to be entirely of an experimental nature so that all countries can take part whatever their regulations regarding the handling of



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53, VICTORIA STREET, WESTMINSTER, S.W.1

radiograms. Both operating and station performance will play a part and a great deal depends on the judgment of the individual operators. The tests will show which stations can do the best work in each part of the world. They will show which countries make the best record. The tests will show which stations in the United States can work most countries in the two weeks of the tests—also what stations can do the BEST work with any particular country.

Certificates will be awarded to the stations making the best score in each territory, country or locality *outside* the MAINLAND of United States and Canada. Certificates will also be awarded to stations in the United States and Canada. These certificates will appoint the stations that prove themselves best fitted for the post to be known as OFFICIAL FOREIGN CONTACT STATION—and there will be one such station appointed for every participating locality (see a list of international intermediates). It is possible for a U.S. or Canadian amateur to hold a certificate for *more* than one country, but every station has equal opportunity in the two weeks of the contest. A full report of the results and the scores of the highest stations in each country will be given in QST and the BULLETIN as soon as the results of the contest are in.

Participating stations in the United States and Canada will each be provided with suitable test messages just in advance of the contact contest—one message to be given an amateur in each of the foreign localities worked. The messages will each require an answer. As soon as received, the foreign amateur writes a reply, the text of which must be of eight or more words (five figures or fraction thereof count as one word). This return message can be given *only* to some other U.S. or Canadian amateur and will not count for anything in the score if returned through the same station. During the tests each U.S. or Canadian amateur will try to give as many countries a message as possible. Each U.S. or Canadian amateur can give but one message to each foreign country. There are going to be plenty of stations on the job, however, and therefore plenty of messages to go around. Just as soon as a few of the messages are off the hook, the North American gang will begin to look for replies because received messages count for more in their score.

Any wavelengths at all that are used by amateurs may be used in the contest. It may be helpful if the participants spend some time in advance of the tests in listening-in to note where everyone is located on the dial or even in digging some information out of the tables in the I.A.R.U. Department of back QST's to learn what wavelengths are used most by each foreign locality. 20-metres will undoubtedly play an interesting part in this contest as many countries are working on that wave already and find solid contact possible with very low power. The man with the one or two five-watters has just as good a chance of rolling up a big score as the chap with the high-power outfit. Perhaps you noted the simple outfit with which 1BIG won the Traffic Trophy. With the same set he has gone down to 20 metres and reports hooking some English stations. By proper adjustment and operation you can do the same thing.

Here is an example of the way things should go off under the rules of the contest—more of them later. Suppose at the start of the test oa2YI works n1BHW and takes 1BHW's particular message for Australia selected at random from his list of messages provided by A.R.R.L. HQ just before the tests begin. The stations finish the QSO and 1BHW looks for other countries to work while 2YI writes out an answer to give to some other station in the U.S. or Canada at the first opportunity. On his next QSO 2YI hopes to send this message and at the same time receive another message to boost his score all he can. If the message he takes on the second QSO happens to have the same text as the previous message, he can take it, but he must be sure to answer it differently before QSRing back to a U.S. or Canadian station. Late in the contest 2YI may work 1BHW again, and while unable to take another message from HIM, he can give 1BHW this message taken from any U.S. or Canadian station except 1BHW. 1BHW will know it is a different message because it will bear a different serial number than the one assigned the similar message by 1BHW. Every set of message assignments bears a cipher number which *must* be used in numbering the reply test message for identification and checking purposes.

Sample messages as sent by U.S. or Canadian amateur stations :—
TEST MSG FM NU/NC (Insert call).

NR 2271A32 (Insert date). — . . . —
WHAT IS THE WAVELENGTH OF YOUR TRANSMITTER
PLEASE — . . . —

Answer as worded by foreign amateur and sent to some other
U.S. or Canadian station :—

REPLY TEST MSG FM OA/OZ/EG/FO, etc. (Insert call).

NR 2271A32 (Insert date msg returned to U.S. or
Canada) — . . . — MY WAVELENGTH IS TWENTY-THREE
METRES TO BEST OF MY KNOWLEDGE — . . . —
(Sign your QRA if you wish for identification).

RULES OF CONTEST.

1. The contest opens May 9 at 0000 G.C.T. and closes May 23 at 0000 G.C.T. Only work falling between these dates and times will be counted—be sure to remember the dates, May 9 to 22 inclusive.

2. United States and Canadian amateurs may *each* send just ONE message to any foreign locality.

3. Evidence of more than one test message to any one country from a single U.S. or Canadian station will make a contestant ineligible for either a certificate or honourable mention. Other evidence of intentional infraction of the rules will make the contestant ineligible similarly.

4. United States and Canadian amateurs may receive only one reply test message from any one station in a foreign country. This rule is to prevent a single North American station from gaining a great number of points too easily and to give all contestants an equal chance with all amateurs outside the U.S. and Canada. Reply messages may be accepted from several foreign stations in each country—but only one message may be taken from any one station.

5. Reply test messages must contain *eight* or more words in the text. These replies are prepared by the contestant himself who exercises his own ingenuity to make each message different than other messages for checking purposes. Reply test messages are counted only when sent to a station in the U.S. or Canada other than the station from which the original message bearing the distinguishing serial number was received.

6. Credits: United States and Canadian stations—Successfully sending the test message counts 1 point.

Receiving a reply test message from abroad counts 3 points.

Stations in all other localities—

Successfully receiving the test message counts 1 point.

Successfully transmitting a reply test message to a United States or Canadian amateur station other than the one from which the original message was received counts 3 points.

7. Confirmation by mail is required of all participants at the close of the contest. Whether your score is 1 or 100 we want the dope for QST.

(a) United States and Canadian stations should return the message assignment sheets with the record showing when the message was sent, call of station to which message was given, date and wavelengths in the spaces provided on the assignment sheet. The copies of all messages received from foreign localities must be turned in as evidence of QSO with stations in the different localities. The information on time, call, date, and wavelength should also be included directly on each message.

(b) Foreign confirmations: Copies of all test messages received and copies of reply test messages must be turned in with the information requested under (a).

8. All reports should be mailed to the following address promptly at the conclusion of the contest: INTERNATIONAL CONTEST EDITOR, COMMUNICATIONS DEPARTMENT, 1711 PARK ST., HARTFORD, CONN.

9. The test message serial number must be used in the reply test message. It is suggested that foreign participants include name and QRA at end of their reply test messages for identification purposes. This is not a requirement necessary for proper credit, but it is desirable as is self-evident in a contest of this magnitude.

10. U.S. and Canadian amateurs must signify that they desire to enter the contact-contest by dropping a QSL card to the following address signifying their intention to participate. This will be acknowledged promptly, but the actual message assignments will not be given out until just before the start of the contest. Send your QSL card to this address early if you expect to participate in the first big international relay party: INTERNATIONAL CONTEST EDITOR, COMMUNICATIONS DEPARTMENT, 1711 PARK ST., HARTFORD, CONN.

Every foreign amateur will have a chance to make an unprecedented number of U.S. and Canadian QSO's!

Every U.S. and Canadian ham will be in on the fun!

Two weeks of opportunity to smash all previous records!

All amateurs in the world are cordially invited to participate.

COME ON IN, OM. Get your station in trim now and plan to grab off one of those certificates. U.S. and Canadian amateurs, get your QSL entry cards in early to make sure that your set of test messages is mailed you in time.

QRA & QSL Sections.

QSL Section.

This department is now running smoothly, but hopes for even better co-operation on the part of those members who have failed to forward stamped addressed envelopes for their cards.

Now, OM's, let me have them by the next post, so that I can say that my waiting file is a thing of the past.

Another word about envelopes, OM's. Don't send them too small; a card looks bad on the wall when it has been folded.

When sending cards for countries other than France, Belgium, Holland, Germany, Spain, please enclose a stamp to cover, when they can be forwarded.

Many thanks are due to the R.E.F. who sent over by hand the accumulated cards lying at J des 8, which cards have been duly sent to their owners.

R.E.F. are now handling cards for France, and their own cards are coming over regularly. Good stuff!

Below is the list of cards waiting for envelopes. Now, you chaps, by the next post, please!

Thanks.

QSL Manager,
Headquarters, R.S.G.B.,
53, Victoria Street,
Westminster.

				BRS.
5AV	5FI	6MS	5TH	20
5AX	6GC	6MK	5TC	49
5AL	5GH	6MQ	6TX	72
5AU	5GQ	5NW	6TD	65
2AFD	2GF	5NJ	6TN	4
2AFA	5HN	6NH	5UZ	11
2AUH	2HQ	6NF	5UN	19
2AMB	5HX	6NJ	6UV	9
5AT	6HZ	5OS	6UR	18
2AA	6HW	5OP	6UW	64
6AZ	6HH	2OO	6UZ	69
5BI	6HK	2OD	6UP	73
5BQ	2IT	6OD	2VS	56
2BD	6HF	2PT	2VQ	
2BV	5IN	2PZ	6VV	
2BZ	5IV	5PO	6VU	
2BWH	5IL	5PR	5VA	
2BJR	6IZ	6QH	2WL	
2BOW	6IW	6QL	2WR	
2BIP	6IG	6QZ	6WU	
2BZG	6IV	6QW	6WW	
2BOC	6JZ	5QZ	6WZ	
2BB	6JG	2QV	6WS	
5BC	6JC	2QN	5WG	
2BLM	2JC	2QS	5WQ	
5CZ	5KT	2QQ	6XL	
5CY	5KA	5RJ	6XV	
5CD	5KZ	5RZ	2XY	
6CD	2KF	5RV	2XA	
6CN	6KO	6RD	5XO	
2CB	2LP	2RX	2YX	
2CC	5LS	6RY	5YV	
6DN	5LI	6RW	6YS	
5DS	5LJ	6RM	6YM	
5DH	6LD	6SU	6YQ	
2DF	2MW	6SK	6YX	
2DX	2MF	2ST	6ZG	
2DC	5MU	6SG	2ZF	
			2ZZ	
			5ZC	

Most of the above-mentioned cards were cleared before March 15, but if the owner of any of the call letters mentioned has not received any since that date he should apply for them at once.

ORA Section.

I WOULD like to appeal this month for assistance from our members overseas. There are many ways in which they can help their society to maintain and increase the progress already achieved.

In this connection I would ask these members to assist me by seeing that important announcements, if possible, are re-published in their own country's amateur radio magazines. Although a new QRA for the QSL Section was given in last month's magazine, a large number of cards and letters for this Section are still being sent here.

All QSL cards should now be sent to:—

QSL Section,
R.S.G.B.,
53, Victoria Street,
Westminster,
London, S.W.1.

They can help us further by bringing our magazine and particulars of membership to the notice of their fellow countrymen who are interested in amateur radio. I am always pleased to forward from this Section a specimen magazine and application form to anybody interested on receipt of a post card request for same.

Now, what can you do for us this month? An article, a report on your country's amateur radio activities, a list of "G" calls heard, a new QRA, or perhaps you may have a suggestion to make about something?

I am asked to warn members that the majority of transmitters in Yugo Slavia are unlicensed, and all cards therefore should be sent under cover.

B. Gardarsson (NI3AG) informs me that Icelandic amateurs are now using the numeral 3, followed by two letters, for their call-signs.

There appears to be an ever-increasing number of ships working on short waves, and many of them are conducting tests with

amateurs. Obviously it is very difficult to get QSL cards to them all, and members will help me, if they will, when working such stations, ask for the QRA for their reports, and send it along to this Section on a post card.

BNSK1 (T. & R.) asks fellow members to look out for him at 21.00 G.M.T. on Saturdays.

I have received a letter from an old radio friend, Mr. J. R. Fallon, who will be remembered by many members as operator of UNOT. He asks me to publish his present QRA, so that old acquaintances may know where he is. At the time of writing his ship was off Cuba.

It is U.S.S. WHITNEY,
c/o Postmaster,
New York City,
New York,
U.S.A.

NE, a new IARU Intermediate given as "Unassigned," I note is being used by Newfoundland. I have to thank Miss B. Dunn (T. & R.) and G2KA for some excellent lists of QRA's not in the R.S.G.B. call book, which, although too numerous to publish, are nevertheless, most useful.

QRA's FOUND.

ARDI.—Norwegian whaler s.s. "Larsen," recently in Ross Sea, Antarctic, works on 33 metres, and can be heard here 07.00. 10.00 G.M.T. QSL to Norwegian Consul, Dunedin, New Zealand. (Inf. G2LZ).

VGJL.—Canadian ship "Commander." QSL to H. W. Turner, Crookgate House, Rawcliffe, near Garstang, Canada. (Inf. Miss Dunn, T. & R., and G2DB).

ODPK9.—Moree, Nakoelaweg 89, Bandoeng, Java. (Inf. G5XY and A. S. Williamson, T. & R.).

ER5AA.—143 Carol Davila, Bucarest, Roumania. (Inf. 2AHP).

B4VU.—Diricq, Rue du Progrès, Charleroi, Belgium. (Inf. G2ZC).

D7NL.—N. Jacobsen, Bredgade 29, Copenhagen. (Inf. G2ZC).

F18FOK.—R. Lebon, Section des Télégraphistes Coloniaux, Hanoi, Tonkin, French Indo China. (Inf. G2ZC).

EAS2.—L. Picallo, Establissements, Palma de Mallorca, Balearic Isles. (Inf. G2VJ and G2ZC).

CH2AS.—L. Schlegel, Casilla 17, Vina del Mar, Chili. (Inf. G5KL and 2AFG).

FM8JO.—Breand, Hammam, Bou Hadjar, Oran, Algeria. (Inf. G6CJ).

PIAO.—M. Pinheiro, 12 Rua Ferriera Chaves, Lisbon. (Inf. G6DR).

YS7DD.—S. Liebermann, Zagreb, Medulicéva 9, Yugo Slavia. (Inf. G6DR and G2ZC).

R1ORA.—K. Abolin, Zvezdinka, 23 App 1, Nijni-Novgorod, U.S.S.R., Russia. (Inf. L. L. Parry, T. & R.).

GLQ.—Ongar, Essex. (Inf. Miss Dunn, T. & R.).

SBCIT.—Capm. A. Bittencourt, Escola de Aperfeicoamento de Officiaes, Villa Militar, Rio de Janeiro, Brazil. (Inf. B. Smith, T. & R.).

QRA's.

G.

2AAM.—N. A. Champness, 6, Hale Gardens, Acton Hill, W.3.

2ABA.—E. P. Allen, Meadowcourt, Radcliffe-on-Trent, Notts.

2AFA.—E. Thomas, 7, Turdu Road, Morriston, Swansea, S. Wales.

2AVR.—E. R. Cook, Crooked Billet Street, Morton, Gainsborough, Lincs.

2BJC.—E. H. Pidcock, 31, King Edward Avenue, Worthing.

2BLQ.—H. Polley, 75, Clifton Road, Bangor, Co. Down, N. Ireland.

2AY.—W. H. Morris-Airey, 16, Villiers Road, Southsea, Portsmouth.

2NC.—F. G. Hughes, "Ashdene," Wells Road, Bath, Somerset. (Inf. G5GU).

2YQ.—54, Princess Avenue, Church End, Finchley, N.3.

5BD.—A. C. Simons, "Lynwood," Mablethorpe, Lincs.

5HR.—G. W. Henley, 526, Wandsworth Road, Clapham, S.W.8.

5KH.—Mr. Collings, 144, West Hill, Putney, London. (Inf. G5AD).

5KL.—O. B. Kellett, 11, Allerton Road, Southport, Lincs.

5UY.—D. B. Fry, The Laurels, Mayfield, Sussex.

5ZY.—T. Smith, Inverary, Whitehead, Belfast, N. Ireland.

6HP.—H. D. Price, 12, Hillcrest Road, Sydenham, London, S.E.26.

6KM.—S. Kember, 34A, Albert Bridge Road, Battersea Park, S.W.11.

6RB.—R. A. Bartlett, 3, Chertsey Road, Redland, Bristol.

6WN.—H. & L. Wilkins, "Hills View," 81, Studland Road, Hanwell, W.7.

6XH.—C. C. Stevens, Almora, Andover.

6XS.—J. Monckton, jun., 15, Berkeley Road, Bishopston, Bristol.

CHANGE OF QRA.

G.

2NQ.—Now 26, Woodlands Road, Middlesbrough.

5BV.—Now 22, Woodhayes Road, Wimbledon Common, London, S.W.

5CG & 5PX.—Now Gothic Cottage, Four Oaks Road, Four Oaks, Sutton Coldfield.

6HZ.—Now No. 1, Shirley Villas, La Rocque, Jersey.

6JH.—Now 10, Kingsmere Avenue, Levenshulme, Manchester.

6WS.—Now 38, Folkestone Road, Copnor, Portsmouth.
6YW.—Now 59, Marlborough Park North, Belfast, N. Ireland.
CHANGE OF CALL-SIGN.

2AGR.—Now G6FW.

2AZS.—Now G5KL.

2BAZ.—Now G6XS.

2BYN.—Now G6HP.

BB1.—Now B4BC. (Inf. G5PM).

ICAG1 & ICBG1.—Now NI3AG. (Inf. G5KL and A. S. Williamson, T. & R.).

I am indebted to Mr. A. Wust (EB4AG) for the following information and QRA's.

He informs me that the Belgian Government is now issuing official transmitting licences.

They intend to use the new I.A.R.U. intermediate EB, and they have formed a "Club des 4" for officially licensed amateurs.

Their president is Mr. A. Wust (EB4AG).

EB4AA.—R. Verstrepen, 23 rue Van Straelen, Antwerp.

EB4AG.—A. Wust, 99, Avenue Elisabeth, Berchem-Antwerp.

EB4AH.—R. Destrée, 38, rue de Suède, Brussels.

EB4AR.—R. Boël, 253 rue François Gay, Woluwe St. Pierre, Brussels.

EB4BC.—Lera, 46, Avenue Van Put, Antwerp.

EB4BX.—W. J. F. Stevens, 8 rue Josephlies, Antwerp.

EB4DA.—T. Jorssen, 15 rue de Witte, Berchem-Antwerp.

EB4GO.—G. Van den Eynde, 22 rue du Remorqueur, Brussels.

EB4RS.—R. Pirotte, 10 rue du Parc, Verviers.

EB4SF.—J. Mallinger, 15 rue de l'Athénée, Ixelles-Brussels.

EB4VU.—Diricq, rue du Progrès, Charleroi.

QSL cards for above may be sent direct or to:—

QTC, 38 rue de Suede,
Brussels,
Belgium.

Mr. Bruno Rolf, our forwarding agent for Sweden, has kindly forwarded a list of new Swedish QRA's:—

SMRI.—I. Johansson, Åsarp.

SMRJ.—T. Norrman, Drottninggatan 61, Hälsingborg.

SMRK.—N. Anckers, Mörbyvägen 3a, Stocksund.

SMRL.—A. Flygindustri, Stockholm.

SMRM.—Uppsala Radioklubb, Uppsala.

SMRN.—E. Hedlund, Smedjegatan 6, Västerås.

SMRO.—E. Cronvall, Ostermalmsgatan 75, Stockholm.

SMRP.—Djursholms Samskola, Djursholm.

SMRQ.—T. G. Arne Rundquist, Årjäng.

SMRR.—Aktiebolaget Flygindustri, Limhamn.

SMRS.—E. Barány, Järnbrogatan, 10b, Uppsala.

SMRT.—Th. E. Sjöstrand, S. Järnvägsg 8, Växjö.

SMRU.—B. Rudling, O. Storgatan 110, Jönköping.

SMRV.—Sture A. Malmberg, Storg 41-42, Falkenberg.

SMRW.—A. B. Unnerstad, Rörstrandsgatan 14, Stockholm.

QRA's WANTED.

TFHV, SWS, SS8MAX, EIN.

I also have cards and letters, stamped ready for forwarding to the undermentioned.

Can any member supply me with the QRA's to enable me to post them on?

G2BL, 2BIP, 2BJR, 2BV, 2BZG, 2GM, 2ZF, 5AL,
5BQ, 5WB, 5WG, 5YV, 6AZ, 6DL, 6GB, 6HW,
6JK, 6WL, 6ZN, NX1NX, NANDI, TNN.

OMISSIONS FROM LOG-BOOK.

We regret that we omitted from the Official Log Book and Diary the QRA of G2AM, who is A. Perl, Esq., B.Sc., of Victoria House, York Road, Hove. Members please note in Log Book.

G6BT.

QRA Section,

R.S.G.B.,

82, York Road,

Bury,

Suffolk.

USSR Short Wave Activities.

FEBRUARY.

IUA was practically silent. Business and BULLETIN "RA—QSO—RK"—QRM.

IAK same. Has obtained valves and has reconstructed his receiver; is now on the air.

IWW is now I2RA and is occupied greatly with his X-Her and BULLETIN "RA—QSO—RK."

ITP is now I5RA.

INN is in the course of reconstruction. Sometimes is working, but very rarely.

IWAG—now I3RA—is on the air irregularly. Changed his QRA.

3UP is on the air with two dull emitter type receiving valves; is reported to be R8 in his own town.

ONK is occupied with the construction of his QRD X-Her.

OSRA and O9RA established a mutual contact.

IAY, 2XX, 2QW, 2CW, 2NM, 2ZO are heard but I have no information on their stations.

OVY has several good PX's for his receiver.

Reports on Research.

Instructions for Contributors.

These Notes have now begun to assume great proportions and owing to the large number of stations involved, they take up a considerable amount of space in the BULLETIN. Moreover many members do not appreciate that Area Managers have plenty of work on hand and that if they rendered concise and pointed reports much time would be saved.

The following rules have therefore been prepared in order to assist both Area Managers and reporting members:—

- (1) *State total stations worked.*
- (2) *Give details of localities, i.e., whether G's, Z's, G.I.'s, U's, etc.*
- (3) *State power used.*
- (4) *State source of power supply, whether home-made A.C., D.C., Dry Batteries, etc.*
- (5) *Best D.X. for month and brief detail of report by the station worked.*
- (6) *Any remarks relative to your station, to be brief and not more than 30 words.*
- (7) *If you write your Area or District Manager and expect a reply, write on separate sheet of paper and enclose a stamped addressed envelope for the reply.*
- (8) *Your report must reach your Manager by the date mentioned at the head of his Notes from now onward.*
- (9) *Avoid the use of abbreviations and wrongly-spelled words.*
- (10) *Area Managers should submit their reports to Headquarters by the 16th of the month preceding publication.*

If it is apparent from the Manager's report that any member has not observed these rules or should a Manager report that a member is not observing them, the Editor reserves the right to delete the paragraph referring to his station.

London Area.

By G. A. EXETER (6YK).

THE reports this month are an increase on last, and I hope that we may soon see all the stations in this area sending in their month's work regularly. There are still many more to report, and will all those who have not already done so send me a card as requested last month.

I wish to thank all those who wrote me offering their services, and hope they will understand that I cannot reply to them all individually. The Northern Division has been allotted to Mr. Clarricoats (6CL) and the Eastern to Mr. Fuller (6LB), and will stations within their localities please report direct to them. We are still wanting a volunteer for the Southern Division. The actual localities these divisions cover will be published as soon as possible. Regarding reports, attention is drawn to last month's issue, and will all members please observe these rules. Reports should be brief and tabulated, and on no account should they be written in "Radiese"—please use plain English, as it is easier to decipher.

REPORTS.

5RZ is keeping nightly schedule at 23.45 with NUIGA, using

If your Subscription is due, you will help us by remitting without further demand.

crystal control on 45.2 power 100 watts, and he would welcome reports on signal strength. 6LB is QRT rebuilding, and rumour has it he is getting shocks from the Armstrong circuit. 6PG is using low-power on 23 metres, and has schedules with SMZV and GC6IZ on Sundays. He was QSO N13AG on 45 metres with 4 watts input, reported R5. Ex 2BAO is now licensed for 150-200, 45, and 23 metres with the call-sign 6WN. The month has been devoted to smoothing 240 volt RAC, and the note on 170 metres has been reported good DC, but has had no luck on 45. He says reception has been good on and below 20 metres. 5TD has at last got over the "pond" working NU2CTN on 7 watts, being reported R4. He worked 50 stations in one week, making the grand total 400. He was QSO LITIB, YS7XX, SMVJ, and the Faroe Isles. He also says the BZ's are very QSA. 5GU has had eighty QSO's working practically all Europe and more contacts than a whole year's previous working. He uses 10 watts of "mangle," and suffers from family QRM on that account. His best QSO was P1AW (R5) and he heard NU3QF calling him, but the QSO was doubtful. 2BWR has found a good receiving circuit (any dope for the Bull, OM?) and is building a crystal controlled transmitter to keep it company. 5KU is experimenting with a M.O. circuit, using two DET's with inputs up to 30 watts. QSO's Indo-China S. Africa, and two fine reports from Australia and Demerara B.G. tests with BRS34 on sunset QSS are yielding fine results. BRS34 would like more stations to help in these tests. 6HR reports little time to spare at present, but is keenly interested in T. & R. work. Several other stations sent in their names as being in this area, but gave no reports. HW? OM's. 6YK is at present QRT owing to very heavy business QRM, but hopes to be on C.C. very shortly. The following reports *via* 6CL: 2CB has been in Birmingham during the month, and only a few hours week-ends have been available. Latvia has been worked during daylight; he visited 6YD, 5SK, 6CI, and several BRS stations while in the Midlands. Our old friend 2YQ has returned from Rugby, and is doing good work with a few watts on 45 metres. Roumania has been worked (any other G station QSO here?). 6KS has little to report, except that he was QSO DF7JO at night and is happier now, as he was thinking his sigs straight to Mars after dusk! 5XO has been very busy during the month. 6CL has had domestic trouble, and his work has consequently suffered. His dry cells are giving out, and he has been working locals on inputs of around one watt. Some interesting correspondence has been exchanged with SMWF, D7LO, D7MT, and other stations. Will all North London stations report to 6CL by the 10th of each month, please? Thanks, OM's.

Irish Notes.

By 5NJ.

AT the outset of these notes this month I wish to remind transmitters and others situated in the Irish Free State that Colonel Dennis, 11B, has now been appointed area manager for that district, and all reports of GW stations should be sent direct to him by the 10th of each month. I should also like to take this opportunity of thanking my many friends in the South for so kindly reporting to me since this column was inaugurated, and I am quite sure that they will support 11B in the same manner. In Colonel Dennis the GW men have, as their representative, one of the most gentlemanly and enthusiastic, and really *genuine* experimenters with whom I have had the pleasure to deal. So all good wishes to you all. And now for reports.

6MU has at last worked South Africa, being QSO OA4X lately with 75 watts input. The schedule with YDCR is going exceptionally well, speech being used often without undue trouble. This contact takes place at 6 p.m. each evening. Other stations worked are FJ3U (British Somaliland), A2NO, where signals were R6, as well as an R9 report being to hand from Riga, and an R5 from the Australian 5th district.

6YW has returned to the key after a long absence, having now got settled in a new house with 220 volt D.C. mains at hand. He has been trying a current-fed Hertz antenna, 12 feet high at the centre, with the ends running down to within 2 feet off the ground. On 10 watts input, however, signals are R6 in most parts of the country and Northern Europe. 6YW wishes to thank all the GI stations who so kindly invited him to "pound the key" during the silence of his own station. Such kindness is very much appreciated, and it is at such a time that the real amateur spirit becomes apparent.

2BX will probably take the air again after Easter, using crystal control and QRO. It is probable that some work will be done on 23 metres, and the transmitter is at present being entirely rebuilt.

5WD has now got going on RAC, but is awaiting a transformer before getting things finally fixed up. Splendid work continues to be done, however, and on 4 watts India (DCR) and FM have been worked. On 3 watt input reports are to hand from FA.

5MO has worked a number of Continental stations on low power, doing very consistent work, though nothing outstanding. A start has, however, been made on 23 metres, and 5MO would be very glad indeed to hear from others interested in this wave.

6QD has worked India on about 10 watts, as well as sundry other nearer stations.

2AFD is still busy in the reception line, and reports good reception of the 5th district U.S.A. He has also actually heard GLKY working WIZ! Apparently the latter has ceased trying to QSO our friend "ABC!"

2AXO has also a large list of stations heard, these appearing on another page.

In the Free State only one report is to hand. 11B found conditions only moderate last month, but has worked a fair number of European stations and also U1ACI twice, using crystal control. He is at present reconstructing his transmitter for crystal work.

Just before concluding these notes I am going to record one of the nicest DX tests that I have ever taken part in. It is this: A few evenings ago I arranged to try and put 11B over to Australia. I got in touch with A7CW, and asked him to listen for 11B for five minutes. The test was a complete success, 11B being definitely heard in Tasmania when his input was 10.5 watts. This is probably an Irish record and shows what can be done by a little co-operation.

5NJ, on 75 watts input, has been in very regular contact with the Antipodes all month. A7CW has been worked on seven occasions, words being sent usually only once at about 20 words a minute. A morning and evening schedule is being run on Sundays and has proved of much interest. Other stations worked include A3XO, A7DX, A3BQ, OA6N, YDCR, etc., and recently four continents were worked within two hours.

In connection with the recent QRP tests, the results of which are just to hand as I write, I should like to congratulate all those GI stations who did so well. It was magnificent work, and shows that, although we were somewhat late in getting on the air over here, our low power men have certainly made up for any lost time. More power to all of you OM's, and my heartiest congratulations once again.

South-Western Notes.

By 2OP.

THE attention of contributors is drawn to the instructions published. Reports should reach me not later than 14th of each month. The acknowledgment of your report is its appearance in the BULLETIN. Do not expect long letters from me. My correspondence bag is enormous, but I endeavour to write a line to everybody as and when time permits. This month I have pleasure in welcoming 5BK to the Section.

The attention of members is drawn to the forthcoming A.R.R.L. International Relay Contest, which covers the world over, between May 9 and 22. Full particulars can be obtained from Headquarters or from me.

I appeal to you to get more members and more enthusiasm in the area so that we can get sub-area offices going. The motoring season is near at hand, and I should like to see and hear of personal liaison between members.

2AR is busy designing and building a new S.W. transmitter. I hope to get some interesting reports before long.

2OP has done nothing owing to the illness and death of his father. He will not be on the air for possibly some months owing to the work of winding up his father's business and affairs.

5BK has been using very low power and has worked practically all Britain with good reports.

5FS moved his QRA on March 18, and will be off the air for some time rebuilding. When he starts up again he will be on crystal control, and hopes to put out a good signal on low power. His new QRA is 155, Bishop Road, Westbury Park, Bristol.

5VL has worked 19 stations, G1, F2, D2, I1, SMI, P1, K1, EA1, EJ1, EAR1, U5, NE1, OHA (ship at Faroe Island). Power up to 45 watts. R.T. aerial altered from bent Hertz to semi-vertical straight type. New transmitter valves and generator being tried out. Heard AQE at 18.00 hours March 8, sending traffic R6.

6RB. May I again congratulate BRS27 on his new call sign. I sincerely hope that he will be as successful as a transmitter as he was a receiver. He has again received a large number of U stations, but has done little with A, O and Z stations. He hopes to be on the air by the time these notes are in print, and is busy getting the gear together. The very best to you OM.

6UG has little to report except the usual run of G's. He has worked EAR45 who was very QSA with power of 1 watt 110 volts D.C. mains. He reports a QSO with Australia, third district. He keeps a very complete log below 50 metres, and any stations desiring reports are welcome.

6YN has not decided on a permanent site for transmitter, but hopes to settle down shortly and shake the ether.

BRS28 reports weekly schedule tests are still running with IIER and NUSAXA with really interesting results. During the last three months a week-end schedule test has been conducted on 32/36 metres around midday. In concluding these, the following have been logged: Z3AI, Z2AE, A5HG, A7CS, P1HR, P13AC, Z3AR, P1BD, Z4AI, A2NO, Z2XA, A5WH, A4RB, Z4AA.

The following did not report: —2CI, 2CW, 2FB, 2GY, 2HQ, 2LF, 2NL, 2PL, 2ZG, 5CC, 6JO, 6PT, 6QW, 6RY, 6XZ.

Mid-Britain Notes.

(Prepared by G6JV.)

AN excellent suggestion comes from 2BAX, of Huntingdon. It is that we shall try to arrange a "Mid-Britain Conventionette." 2XV of Cambridge has come forward with useful suggestions and offers of practical help, and to cut a long story short, here is the proposal:—The idea is to choose a suitable country inn whose proprietors would undertake to cater for a party of Mid-Britons (complete with their O.W.'s and/or Y.L.'s, or other pets), and who would place the gardens at the disposal of the party for the day. Lunch and tea would be provided at a charge of approximately 5s. per head. The day chosen is Whit Monday, June 6, and 2XV will make it his business to organise the whole thing and to choose a central rendezvous.

You are asked, therefore, to write *at once* to 2XV (Chandos, Gt. Shelford, Cambs.), and to tell him of how many your party will consist. According to the response, a further announcement will be made in the May BULLETIN.

Kindly note that letters must reach 2XV by April 30. We are most grateful to him for undertaking this and now O.M.'s what about it? Do you fancy the idea, and are you going to make a jolly day of the First Mid-Britain Conventionette?

[By the way, if the gang must have tin-whistles, and other Q.R.M. machinery, remember that the Conventionette won't be held at the I.E.E. and there won't be a Woolworth's round the corner.]

Shropshire (Via 5S1).

6TD reports that work has been impeded by trouble with the house lighting and this has caused shortage of power.

5S1 reports "flu" only.

Leicester and Hereford (Via BRS49).

H. L. Palmer remarks that he cannot think where the "Hams" in these counties have got to and asks for reports by 5th of the month. He welcomes Mr. D. T. Beattie, BRS79, to the gang and introduces this member as one who has done some excellent reception under adverse conditions.

Cambridgeshire (Reports to G2XV).

5YX sends in his first report and summary of his first month's activities on the air. Fourteen Yanks, Iceland, Newfoundland, Rumania and India on 45m., not to mention Europeans on 23m.—seems good enough for ten watts. F.B. O.M.

2DB reports fairly good telephony on 45m., but wants to know the bait used to hook Yanks.

5YK is comparing a D.E.T.1 with a T.50. His 23m. signals have been reported by U2CC. The 23m. aerial is of the "Zeppelin" type and he is now testing this system against the usual aerial and counterpoise on 45m. and 23m. He has a crystal but so far does not report favourably upon its behaviour.

5JO has started on 160m. He is suffering from floods in the cellar where generator is housed (try the ceiling O.M. Hi.)

2XV has been handicapped by a recent accident to the right hand but has managed to keep most schedules. He has worked seven Yanks, also ZSAR and Tasmania A7CW.

Huntingdonshire (Report to G2XV)

Apparently amateur radio has been heard of in this country, because a report has come to hand from 2BAX of Huntingdon, to the effect that he is suffering untold agonies from a landlady who refuses to allow even an indoor aerial (what about the bedstead O.M.!!)

Another T. & R. member in this town, Mr. A. R. Maddox, is reported to have ordered a brand new set of parts for a lo-loss, short-wave, receiver, so it is evident that the "Radio germ" is beginning to do its work around the locality. Now who is going to be the first to send me a real DX transmission report from Hunts? Get to it, gang!!! G2XV.

Warwickshire (Reports to 2BPI)

BRS3 and BRS29 both report exceptionally good DX conditions. The former states that U2AFV (E. A. Roberts, 7448, Amboy Road, Tottenville, N.Y.), wishes to arrange tests with G stations on 80-90m.

6CI has increased his power and has worked India.

5SK has made several more contacts with the States and 6CC wishes he could do the same.

BRS10, 2BLM and 2AFS report good reception.

2BMW has been playing round with the mains and has successfully blown the house fuses.

2BVL has been practising Morse and expects to take his test soon. 2BPI is re-designing his shack.

The Warwickshire lads want T. & R. badges for their cars and motor cycles.

[What about this, Mr. Editor.—Organiser PSE?—G6JV]

How many wanted?—Ed.

Worcestershire (Reports to 6AT)

6AT says he expects to have more time to devote to his sub-area shortly and hopes to add to the T. & R. membership. He has returned to the M.O. drive and has done useful fone on low power. He offers to report on Transmission from 7m. upwards subject to arrangement.

Staffordshire (Via 5UW)

2KK has worked the usual Europeans, and maintained a schedule with USEQ.

2VG has been working fone on 45 metres, but has done little DX. 2WN reports working 3 Italians, 2 Austrians, making fourteen countries worked with one-watt input. 2WN hopes to QRO shortly.

5CW does not report.

6BH has been QRW with 'flu. Nothing to report.

6UZ has now managed to get his fone fairly clear and reports are better, but owing to business QRW has done little DX. He has a QRP set which gives R5-7 signals throughout Europe.

2TN, 2NV, 5NU, 6OH did not report. Please O.M.'s, even if you have nothing outstanding to report, send a line to 5UW before the 10th of the month.

Wolverhampton and District.

20Q reports much QRW during the month, but has managed to QSO seven U's, with 10 watts input. He reports conditions consistently good for DX U.S.A., but no luck with BZ.

5LK reports being QRW with business, and does not expect to transmit for some months. He states that the BULLETIN is A1 for keeping him in touch with amateur activities.

5PR is constructing, and hopes to get going as soon as removal to a new QRA is effected.

5UW has a good month's DX to report. He has QSO'd 23 U's in 1, 2, 3, 4 and 8 Districts. A QSO with A1DCR, India, completes the W.A.C. Input has been 45 watts and considerable fone work has been done throughout Europe at week-ends.

6HT has no DX to report, but has been trying to get his crystal to oscillate. Eventually it did, and "bust" in the process.—Bad luck, O.M.

6PB says he has been QRT for some time, but promises to start again on 150-200 metre band, very soon.

2RR does not report, but 5UW's receiver tells him of 2RR's activities, which consist of good fone tests on 150 metres.

2AWJ, 5AF, 6MZ, 2AAD, have not reported.

Norfolk (Reports to 6ZJ)

2BWB, of Costessey, suggests that the Norfolk gang should arrange to meet occasionally at some suitable place and has undertaken to organise this. Further particulars next month. He, too, has been playing with the mains with the usual result—darkness and domestic QRM.—It was a five amp. fuze, too (temporary input one kilowatt.).

5UF is reconstructing and preparing a new mast. He hopes to obtain 45m. permit shortly.

2AAS is building a new transmitter and 2BLA has not reported.

6ZJ has been working on QRP, while his 40-watter is undergoing surgical treatment. He gives a good account of the DEP215 as a QRP valve.

6JV is working away with the Zeppelin-Hertz 32m. full wave antenna and has worked South Africa and U.S.A. again, but if he does not bring these notes to a speedy close he fears that the Editor may take a violent dislike to the colour of his whiskers. [Didn't know he had any. Last time we saw him they were disappearing.—Ed.]

Northern Notes.

Area Manager: S. R. WRIGHT (2DR).

AT the moment of writing I have not seen the Lancashire reports, but the remainder do not show any signs of great activity, and there seems reason to suppose that it has not been a very good DX month. American and Brazilian stations have been quite active, and although they have been heard on almost every night, they have been mostly R2 to R3, and unless the location is good or the power fairly high, it has not been possible to effect many QSO's. 6YQ again holds the record for the month, and has exceeded his last month's work. Personally I should be interested to know whether 6YQ ever goes to sleep, and how long he is on the key per month. It would appear that the first figure will be small, and that the second will be large.

Sub-area managers would observe the length of these notes last month, and also the new rules laid down for the sending of reports. It is up to them to cut down my arduous task as much as possible, and send in their reports in as brief a manner as possible, carefully weeding out any extraneous matter therefrom. The thing is becoming too big now to publish anything but bare and unvarnished facts!!

Now for the reports.

Star Station This Month.

(G6YQ).

Mr. G. A. Massey, Hillside, Prestatyn, N. Wales.
(For details see Cheshire).

Yorkshire.

(Reports to 2DR).

6TY worked 17 new stations last month, but no DX work. Power 16 watts. Is putting up a 50ft. mast, and is very QRW owing to business. He has worked 234 stations since June last, and had 331 QSO's.

6OO has worked new countries as follows: Poland, Canada, Yugo-Slavia, Spain and Iceland on 8 and 10 watts, and made his 15th contact with U.S.A. This is good work for the power and a bad location.

2YU, employing 5 to 7 watts, had 79 QSO's, during February, mostly Europeans. Best DX was 1AY and 1DM (Italy). Reports average R6.

6YR has not been as busy as usual this month, but worked F8PP Marseilles (R7) and YSEJ7WW (R5) on 3.6 watts from his 17 months' old dry batteries. He will shortly be on the air with a hand-driven Evershed generator.

5US has had several good QSO's with U.S.A. on 10 watts and a poor aerial, first and second districts giving him R4. Has built a new transmitter, and will be using two valves in parallel soon. He complains he has never yet heard NZ or Australia in Ilkley, and thinks it must be a blind spot. It is not for want of trying, I am sure.

6BR has been observing bearing variations on long waves, but has found time to QSO four NU's, three second and one first district. An R5 report has been received from Hong Kong. Will GC2SR please note he has been heard there (Hong Kong) also?

6DR (good call that OM!) is a new one, so welcome to the fold. He started in on February 1 with 5 watts, RFB, L.S.5 valve. He states that his aerial is 40in. high! A misprint, I think. Anyway, he has made an excellent start and has been QSO with 20 European countries, also U.S.A. third district, Iceland and Algeria all with 5 watts. He is now QRO to 8 watts. Keep it up. His QRA is—D. E. Scarr, "Hollydene," Hailgate, Howden, Yorks.

BRS26 turns in the astounding total of 650 stations logged, 313 of them being NU's. He reports hearing P9AB again, and he gave his QRA as Macau, China (30 metres). You have more patience than I, OM! Do you get pencils at wholesale terms?

5KZ reports moderately good conditions all month. Has made 40 QSO's, including 9 NU's, and a schedule with NE8RG (Newfoundland) since February 19. Average report from NU's is R4, input 15 to 18 watts, and the aerial is a twin-feed Hertz only 18ft. high.

2IH, I regret to say, is very seriously ill with pneumonia and pleurisy, but I am glad to say he has weathered the worst, and is progressing. Hope you are soon on the key again OM, and 73's.

6XL has been busy on constructional work, but has been QSO with five new countries (European) using 6 to 9 watts. Finland gave him R5 on 9 watts. A steel mast is ready for erection here to make the aerial 50ft. high.

5SZ has done little DX this month. Twice on the key for four NU's. Power 120 watts. Some 180 metre phone has also been done. Congratulations on being elected to the A.R.R.L. W.A.C. Club, which means that 5SZ has worked every continent in the world.

2DR has been trying the current-fed Hertz with good results. The usual Europeans and four first and one third district NU's were worked with 75 watts from the generator. A much inferior aerial and 24 watts from an R.A.C. unit produced seven NU's in three short sittings, first, second, third and fourth districts. The QSB earned "flowers" from several U.S.A. stations.

Northumberland, Durham, Cumberland, and Westmorland.

(Reports to 2AIZ).

2CC is working schedule with sundry places, but has nothing to report of general interest.

2NQ, formerly at Stockton-on-Tees, has a new QRA—26, Woodlands Road, Middlesbrough. Please note: He will be on the air from here very soon.

5LH is pounding the brass commercially.

6QT is QRW business. Is doing a little on 4 watts. He thanks 6YQ for help received.

6YV got R6 from Canada on 15 watts 23 metres, and has worked several NU's on this wave. He is QSOKM1 (Nigeria).

BRS68 reports speech from ET1B (ex LIT1B) when using 10 watts.

Mr. J. G. Carlson sends a report of world-wide DX reception. What about applying to H.Q. for a BRS, OM?

2AIZ has nothing to report, 'flu having claimed his undivided attention of late.

Many hams owe 2AIZ a reply to his recent letters. More reports wanted by the 8th of the month, please.

Nottingham, Derby and Lincoln.

(Reports to 5CD.)

2BLG has nothing to report.

2BZT may shortly join the "OA brigade"; good luck OM.

2AHP is busy with a transmitter for 1 metre, and gets it to work with 2 watts, using a Cossor power valve.

5DM is doing a little on low power 45-metre phone.

5KW is shortly going on to crystal control, but is QRW business.

5OD is about to get going on 45 metres and wants reports.

5QT is QRW varsity, but will open again in April.

2UQ is doing good DX on 45 metres, but sends no detailed report.

5CD has not descended to 45 work yet, but hopes to get going soon.

BRS34 sends a very good report. He found conditions very good at the beginning of February, several ninth district NU's being heard at good strength.

Lincoln hams are requested to roll up. Are there only two hams in this county?

Cheshire and North Wales.

(Reports to 6TW.)

2MF is working on 150-metre phone and QSO'd six stations over 200 miles distant with an input of 5 watts. He is working every Wednesday night during April at 23.00 and requests reports.

6YQ again holds the star position with 61 NU's, C3UL and Jamaica to his credit on 5 watts. 12 of the NU's were worked on 25 metres. Two reports have been received from the sixth district U.S.A. It is interesting to note that between February 1 and 8, 38 contacts were made with U.S.A., and only 11 between February 8 and 28. He requires reports from G's to investigate skip distance. Good work OM.

2SO is anxious to carry out tests with DX stations between 1,900 and 2,300, and is on 45 every night except Saturday and Sunday. Look out for this station, please. He has done excellent European work on 'phone and CW.

6TW is busy with aials and seems to have struck oil at last. Most of Europe has been worked on 45. 'Phone on 150 band is used at week-ends to exchange details of work with the Cheshire gang.

5PO did not report.

Lancashire and Isle of Man.

(Reports to 5XY.)

2QV is busy with aials and has worked one NU and the usuals. 5BH will be heard on crystal control within the month.

2SW reports working 67 NU's from January to date. Please note new method of sending reports OM. (March BULLETIN.)

5MQ is well in the running for the QRP trophy, and has worked 32 NU's and one C on 45, and also NU and Europe on 23, using only 6 to 9 watts from 180 volts H.T. accumulators.

5XY has not been on the air much, but he seems to have been busy while he was there. 3SB, 4SA, 13NU, 2NZ, 10A, Syria ARSLHA and the best Java ODPK9. This on 130 watts D.C. generator.

5XD is QRW exams.

Hi! Lancashire. Why this sudden falling off?

Special Notice.

Will all hams please note that all reports must reach the various collectors by the 8th of each month. Read the March BULLETIN rules for sending reports, and stick to them, making reports as brief as possible and to the point.

Collectors.

Reports to reach me not later than the 12th on the month. Cannot include copy reaching me after that date in future.

23 Metre QRP Reports.

Per Radio NU8ALY Via 6YQ.

The following G stations have been heard by 8ALY during February, both in and out of QRP test hours on 23 metres:—2CC, 2KF, 2AO, 5HS, 6YQ.

8ALY will be glad to work any G on schedule on 23 metres.

Scottish Area Notes.

By 5YG.

DISTRICT managers' reports by 8th of the month, please? February does not appear to have produced anything very phenomenal in the nature of DX, but on the whole conditions throughout the area appear to have been considerably better than in the preceding month. The effects of the terrific gale of January 28 are still very evident, particularly in No. 1 District, where there appears to be a severe epidemic of what I might call "aerial-itis," practically every station being affected to some extent.

I would wish to call the attention of all stations to the instructions laid down on page 14 of the March issue of the BULLETIN regarding traffic notes. If these instructions are rigidly adhered to it will lighten enormously the work at this end. Please see to it, OM's, as the beginning of the month sometimes constitutes a nightmare for your A.M. I shall probably issue to District Managers a special form for this purpose, and it will in all likelihood be in your hands ere this issue reaches the printer.

It is with regret that I have to announce the impending departure south of one of the No. 1 District stations. 6JS leaves this month for England, and below will be found his last report via Scottish Area HQ. Let me have your new QRA, OM, and I will put you in touch with your new District Officer.

I am very glad to extend a hearty welcome to two new BRS members, Mr. Wilkie (BRS69), Aberdeen, and Capt. W. F. How (BRS71), St. Andrews. Glad to have you, OM's.

By the way, have you noticed the number of U stations who are calling "CQ 'Gc'" at present? We are sure becoming popular.

I am informed that there are at present two stations authorised to use the call-sign 2BB, one in No. 3 District and the other in Northern Ireland, so that the only difference lies in the prefix, which please note,

I have pleasure in acknowledging a visit from BRS6.

No. 1 District (by 2WL).

STATION REPORTS BY THE 5TH OF THE MONTH.

2FV.—This station is now definitely transferred to 24, India Street, Glasgow. Mr. Hay is seriously up against the aerial problem,

as practically all the aerial accommodation is taken up by the large aerial belonging to the Caledonian Wireless College, of which he is one of the principals. Presently a short vertical wire 18 ft. long is in use, but as this is tuned to the fundamental on 45 metres, and runs parallel to the down lead of the large aerial at about 10 feet from it, it is far from satisfactory. A special aerial system for transmission of polarised waves on 23 metres is in course of construction.

2WL is "in bad" with the municipal authorities because of his aerial, which crosses a thoroughfare. It has to come down, and he is busy erecting one on the roof, the effective height of which will be about 10 feet. Very little transmitting has been done, but several good reports have been received, R7 from YS7DD (4 watts) and America on 3 watts (this in course of attempting a schedule with U1AOF). A crystal has just been received, and will be put into operation immediately.

5YG.—Just prior to changing his QRA, a little work was done with a very low power hook-up, and an R4 report was received from GI when the input was just half a watt.

6JS has been experimenting with a new form of Hertz aerial. A series of tests are in progress using three DE5b valves in parallel, and the efficiency appears to be greater than with valves of a lower impedance.

6MS has aerial trouble, being surrounded by 'phone wires and BCL aerials.

6NX also reports aerial defects. Can anyone explain the following? When his AA registers pt 3 amps he receives good reports within 500 miles, but no DX. On the other hand, when the AA gives a low reading, or none at all, DX is excellent. How cum? He has not managed to get his sigs across to U.S.A. this month, but European QSO's have been numerous, also his signals are reported by YDCR.

The following stations did not report:—2MG, 2TT, 5YQ, and 6OW.

No. 2 District (by 6IZ).

STATION REPORTS BY 5TH OF THE MONTH.

2VX has nothing to report, business QRM being too severe at present. He is putting up a new stick, and also hopes to make use of the A.C. mains which are available at his new QRA.

6IZ reports working the Danish ship OFT when off the coast of Greenland. 30 watts were used, and signals were reported "R7 FB." A number of new continentals have been worked, and out of 42 QSO's 30 reported R6. Following a 'phone test, 14 reports were received from various parts of England. A schedule has been begun with U2AUL. The aerial system has been changed from Hertz to a single wire inverted "L," but it is too early to say whether any improvement has been effected.

6VO has been experimenting with C.C., but proposes to go back to an M.O. circuit for a little by way of variety. No DX to speak of has been done.

BRS69, in spite of the collapse of his aerial proper in the gale, had a very good month's reception on an aerial only eight feet high. He reports reception of good signals from the Pacific and Indian Oceans. Illness, however, spoiled the latter part of the month for him. (QSA nw, OM?)

The following stations did not report:—2JZ and 6GQ.

No. 3 District (by BRS6).

STATION REPORTS BY 5TH OF THE MONTH.

2BB is now "tearing holes in the air" with his C.C. sigs. He is not yet working at full pressure, but hopes to do so soon.

2SR has begun C.C. A crystal with a fundamental of 132 metres is placed across the grid circuit. The transmitter is then tuned for control on third harmonic. Tuning is by plate condenser and is very critical. The load must be kept steady, viz.: Keying must not be done in the leak as the crystal will not jump in and out of oscillation in a hurry. The key is placed in the counterpoise, but as this method brings spacing and marking waves too close together, advice is sought. The above arrangement is felt to be crude. Mr. Sharp confesses to insufficient skill to carry out the Goyder method. DX consisted of a 3-day schedule with YDCR, who reported R4, R7 and R7. A 3-day schedule with Z4AA and Z4AM. Z4AA reported reception via 2RG, and Z4AM was heard by 2LZ giving 2SR R5-6.

5JD is now on 45 metres, but working is confined to daylight hours. Good reports have been received, but it is disconcerting to find DC and RAC given for the same transmission.

6KO has been QSO "NE," and India twice during the month. He also reports that seven consecutive test calls produced seven "U" QSO's. The eighth test failed and broke a remarkable sequence. Signal strength was reported 3-R6, 2-R4, and 2-R3. Good old Hand Gen!

BRS6.—Busy at Varsity, but hooked a new member.

BRS71.—A welcome newcomer to No. 3 District. Captain How is available at any time on demand for QRV.

The following stations did not report:—5NW, 5WT and 6GY.

No. 4 District (by 2TF).

STATION REPORTS BY THE 5TH OF THE MONTH.

2TF.—Business QRM too severe for radio this month.

2BFQ.—QRW at Varsity.

BRS62.—Ditto.

The following stations did not report:—5BA, 5HC and 5IP.

Dutch Notes.

Prepared by EnOCX.

THIS is the first time that Dutch "hams" appear in the "BULL." The circumstances under which we are experimenting over here are rather bad. March has proved to be a bad month, as again some of us have fallen victims of the mighty hands of the Postmaster-General. But are we downhearted? No! Holland belongs to the few countries in Europe where transmitting is still forbidden, but, in spite of that, there exists a heap of pirate transmitters. The most of their calls are Zero calls, a few having PC followed by a number. The calls beginning with PB belong to licensed stations of district-clubs of the Dutch Society for Radiotelegraphy (N.V.V.R.). Those beginning with PA are stations at the laboratories of the Technical High School at Delft. POB2 is the station of the technical school at Haarlem. And last of all, the many commercial short-wave stations should not be forgotten: they are all working Dutch East and West Indies. And now to amateur activities in this country:—

EnOWM.—This is one of our star QRP stations working all Europe with an input of about 1.5 watts.

EnOTH.—Also a QRP man, reaching out f.b. Worked once an American station with a little more than four watts.

EnOF3.—After testing for a long time, this OM succeeded in working U.S.A. three times in one night. Input 9 watts.

EnOC0.—Is now rebuilding, but worked YS7XX on phone with 1.7 watts.

EnPC9.—What is the matter with your "crystal" set OM! Does it perk now? Good luck!

EnOWB.—Is now out of the game for a short time. Hope you will be soon on the air again, OM!

EnOCU.—Only finds time to work a few times a month. Also with QRP about 7 watts input. His QRA is surrounded by BCL's, and he is trying to get out on indoor aerials with same power. Already worked French 8SST and got a report from eg2BYN.

Irish Free State Notes.

By 11B.

ONLY one station has reported this month; we must do better next month, OM's.

11B has put up a Hertz aerial and was R3 with YDCR on a poor night. On his old aerial he has been QSO YDCR six times during the past two months and YACS once, and has been R5 in India—f.b. OM. He has also worked Iceland three times, R5-6, and Newfoundland twice, R6. He has also a report from Canada of QSA sigs at 09.00 G.M.T. This is good work. 11B has not been attempting much DX work, and has found conditions on the whole poor and very erratic. Most of his time has been occupied with experiments in crystal control, the trouble being the very limited amount of H.T. current available from his M.L. anode converter, but it is hoped that he is now on a fair way to success. Only one U station, 1ACI, has been worked on 9 watts c.c., but he has been QSO nearly all Europe on 5 watts c.c.

Channel Islands Notes.

By G2ZC.

GENERAL conditions during February on short wave reception have been decidedly better than of late, and a marked improvement was noticed during the last week. Some nights were peculiar, inasmuch that some G stations were heard calling and working as late as 22.30, and, on a few evenings, U.S.A. stations were heard coming in well at an early hour. On 17th N13AC was heard CQ-ing at 21.53, but in the middle of a CQ his transmission came to an abrupt halt. (Another valve, OM?—G2ZC). A new QRM menace is a station giving five "M's" as his call, who is a full R9 here on 44 metres, and who calls CQ, QRK? for over an hour at a time, giving "Heures Xmission Jeudi, Vendredi et Samedi—9A10, 15A16, 21A22." He uses Rect. A.C. It is pleasing to note the ever increasing number of foreign stations using D.C., amongst which have been heard French, Danish, Italian, Swedish, Belgian, etc., and in one case crystal control! More stations using the prefix U-EA4 have been heard, whose identity is still a mystery. Some vary it by EA, and one by EL; all call "test," and most of them use D.C., though none ever seem to QSO anybody. EA4ED QSO'd ELEETAO on 21st—the latter is often logged calling "test" during daylight, as do the other EA's, which, of course, points to a limit of range. G6PU has been the means of enrolling several new members to the T. & R. on the mainland (F.B., OM.—G2ZC). F8JZ has been putting out excellent fone, and many G stations might copy his identification system. He whistles his call, on one note, in morse, thus making it clear to everyone, no matter of what nationality.

TRAFFIC REPORTS.

G5GW is still at Portsmouth (QRA, H.M.S. Excellent) doing a course, and is not on the air.

5WZ not being "active," has nothing to report.

2ZC, on QRP, is getting such good QSB reports, that he hesitates about crystal control, which had been seriously thought of. On 8 watts he worked his first U, on 22nd, at 21.28 (3rd Dist.), being given R4, pure es vy stedi D.C. Other new countries worked were Esthonia, Austria, Finland, Newfoundland and Balearic Islands, on 8 watts, and Yugo-Slavia was also worked on the same input. Sweden, Denmark, France, Belgium, and England have been worked on from 6 to 4 watts. 2ZC is collecting data on directional blindspotting on 45 metres, and asks anyone who works him to pay particular note as to QRK, QSS and WX. Input is always given from 2ZC during QSO.

Since the last BULLETIN appeared, both Sweden and Ireland have been raised several times, though why this should suddenly happen is a mystery.

6HZ is still erecting his station at his new QRA, and has nothing to report.

6PU and 6OX have not reported. (Please let me have something.—2ZC).

French Notes.

By EF8PY.

THE "big boy" 8JN is not very active; he contemplates doing some useful work on 5 metres.

Our best DX station is 8QRT, who has done splendid work; he was recorded R6 in Australia on 33 metres, and was QSO SP50A of Lima.

8YOR has worked several stations of the 6th district U.S.A., being received R5-6.

British members are specially asked to look after the sigs of 8FIZ.

One of our DX-breakers, 8KF, is leaving France for the States, where he expects to get some useful hints on crystal control (till now, there is not a single French station using it).

8FT has had a system giving the same tone as c.c. without crystal, and with the same acuteness and steadiness.

8GZ was received in Canada R7, using no aerial and no earth. 8GZ wants to know "steady" hams for schedules, being understood these hams to be at least 4,000 miles away.

In the QRP side, 8VVD was received R4 in Berlin, input 0.56 watt.

4BM was QSO 0FT, a ship between Greenland and Iceland; he got a report of R4 when his input was 1.5 watt. The same ham made a test on an indoor aerial, QRH 20 metres, input 2, 2 watts, and got a report R6 from SMSV.

There is in France a strong rush towards the 5-metres band. The R.E.F. (Réseau des Emetteurs Français) organises a new section for it. Are ready for the job: 8BF, 8CT, 8JN. Any "G" ham interested in it must send his QRA to SPY or the R.E.F. for data on the tests (receiving and transmitting). Note that all correspondence for R.E.F. is QSR'ed through courtesy of the T. & R. Section.

On the reception side, we can note good reception of the Western districts of the U.S.A. R284 got 6OI and 6BZF at 07.30; 8EI says he got thirteen 6's and 7's in a few days.

73s es best of luck to all of you.

Danish Notes.

By D7MT.

ONLY few of our stations have worked this month, and we are going to start a transmitter club for experimenters, but information about this will first reach the May issue of the "BULL."

7BD has worked a lot of different stations and has received a report from AiDCR and this with raw AC (Naughty boy.—Ed.).

7BJ is doing laboratory work with quartz crystals. He has nothing to report.

7BX has been on the air on Saturday nights and has done some DX work, having worked AiDCR several times with input down to 3 watts. He has also been QSO U.S.A. several times with good results. Max. input 27 watts.

7EW is QRW and is very rarely on the air. He is making a new H.T. supply and hopes soon to work with about 70 watts pure DC!

7FJ has received a report from AiDCR and works now with AC! Hi! (Hope he copies 7EW.—Ed.).

7VO (Faroe Islands) is rather regular on the air after 22.00 G.M.T. He has worked NU-1BKE; one of his masts has got cracked in a storm.

7MT is now also QRW and also rarely works. He has worked NU-2FO and AiDCR with an input of 13 watts, but he finds that the "five watter" works just as well and has now QRP'd again, and has later worked DCR with 6-7 watts; he finds that DCR is a "local DX" for Denmark (on 5,000 miles. Hi!). It seems to be a wonderful receiving aerial he uses. The whole of Europe tells him that his QRK are just the same on this little affair as on the big. Please observe data on his QSL card, and you will wonder!!

FZM has now changed his transmitter QRA and transmits occasionally with about 100 watts icw, here from Copenhagen. He has worked several nu stations.

JAPANESE STATION WANTS SCHEDULE.

To the Editor of T. & R. BULLETIN.

DEAR SIR,—I have been asked by Radio DCR, of Rawalpindi, to forward the following message to British amateurs and would be glad if you could find room for it in the BULLETIN.

To:—CQ-G.

"J-KZB, Japan, tests on 38 metres on Tuesdays, Thursdays and Fridays. 08.00 to 13.00 G.M.T.; also tests on 20 metres. Schedules wanted. QRO: 500 watts.

(signed) KZB."

I have since discovered the full address of KZB is as follows:—

Mr. Imaoka, Research Laboratory, Tokyo Electric Co., Kawasaki, near Yokohama, Japan.

Yours faithfully,

E. MEGAW.
(Radio G16MU).

Arden, Fortwilliam Drive,
Belfast.

Calls Heard.

New Scheme to encourage World-Wide Interest.

Contributors Please Note.

For some time past we have considered the question as to how the usefulness of "Calls Heard" can be enhanced. The number of lists submitted has increased so considerably that we have been compelled to make the following decision:—

1. In future no Calls Heard emanating from "G" stations or which have their origin with members residing in the British Isles will be published.

2. Instead, our Calls Heard columns are open to Foreign amateurs only or those in the Dominions.

3. Those British members or members resident in the British Isles who have lists of Calls Heard which they desire to be published will render amateurs a service by communicating them to members abroad saying what they wish. A number of contributors to Calls Heard who handle such lists will be found in back numbers of the BULLETIN. Select the Q.R.A. which is best for your list and send it to that member.

4. In return we ask Foreign members or others who receive Calls Heard from our members to exchange their lists of "G" Calls Heard with them for publication in the BULLETIN. No Calls Heard received direct from the source of origin will be published.

5. All Calls Heard should be headed with name, station and Q.R.A. and nothing else should appear on the sheet except the Calls Heard which should be in BLOCK capitals and numbers and arranged under the various International Prefixes.

6. We will publish the Q.R.A. of any member resident abroad who can get British lists published.

EA-WY, PY, GP, AK, KE, MM, AB, ZZ, ES. EB—3xx. A2 H5, 4BC, 4VU, K4, 4QQ, V33, K44, O8, P7, P2, 4AR, Z1, 4XS, 4RS, 4CB, 4AA, B1, Z8, W1, H6, 4UU, Z9, O33, C9. EC—Irv. ED—7zg, 7ec, 7lk, 7bx, 7gn, 7bd, 7zm, 7ss, 7jo, 7di. EE—Ear1, ear6, ear18, ear19, ear26, ear28, ear48, ear53, ear54, ear55. EF—8jj, 8mm, 8gm, 8la, 8eo, 8wr, 8if, 8jc, 8kp, 8vv, 8ca, 8jf, 8fy, 8lz, 8zb, 8jn, 8jr, 8kz, 8jz, 8ku, 8ct, 8px, 8du, 8af, 8ih, 8lb, 8yy, 8pm, 8ef, 8cl, 8rv, 8il, 8bf, 8pj, 8sm, 8lc, 8fr, 8xix, 8uii, 8jrt, 8qrt, 8rec, 8tko, 8fiz, 8ren, 8sst, 8jnc, 8wel, 8akl, 8abc, 8taf, 8ynb, 8yor, 8gob, 8ycc, 8rlx, 8rld, 8pmr, 8pam, 8oqp, 8bbu, 8flm, 8wnm, 8jrk, 8wms, 8ger, 8rsn, 8hip, 8olu, 8lgl, 8vvd, 8brn, 8ppn, 8dri, 8jan, 4bm. EH—90c. EI—1ce, 1ax, 1pl, 1ch, 1ay, 1gw, 1rm, 1au, 1uvz, 1dm, 1di, 1dr, 1cr. EJ—7dd, 7ww, 7mm. EK—4jk, 4wl, 4xc, 4xy, 4wm, 4xu, 4hl, 4sah, 4uah, 4cl, 4adi, 4abr, 4xr, 4auc, 4dba, 4qz, 4au, 4abf, 4gd, 4sar, 4auk, 4qj, 4cmk, 4qrt, 4ld, 4uao, 4ka, 4lbs, 4ael, 4sa, 4uwr, 4dka, 4kbl. EL—1X, 1se, 1s, 1o, 1f. 1f. EM—smyg, smtn, smus, smsh, smia, smys, smuk, smuv, smwr, smua.

EN—opm, ost, ocmx, ohb, owj, odg, pc68, ogm, pa9, ovr, oth, oko, ofk, oflx, opz, onm. EP—1aj, 1ao, 1ay, 1ae, ES—2co, 2nm, 2nd, 7nb. ET—tpai, 2xa, kczi. EU—1ora. NU—1chr, 1bux, 1aah, 1aik, 1aqi, 1avr, 1avf, 1air, 1auc, 1asr, 1caw, 1bhm, 1cjc, 1cjj, 1cyq, 1cen, 1bqd, 1avl, 1ajx, 1bfx, 1blf, 1aen, 1aao, 1axa, 1aci, 1amp, 1sbz, 1aur, 1bdx, 1aal, 1afn, 1als, 1bpx, 1bbm, 1akm, 1axx, 1afm, 1arc, 1cnp, 1adm, 1aac, 1xam, 1csx, 1bhs, 1bft, 1afj, 1cuc, 1est, 1aff, 1blw, 1bcw, 1age, 1adl, 1ptw, 1aga, 1beo, 1ahv, 1cmx, 1bez, 1abz, 1afr, 1alr, 1awe, 1ici, 1cmf, 1bgs, 1bdw, 1abn, 1nl, 1xm, 1mp, 1ch, 1di, 1kk, 1mv, 1vc, 1dd, 1kf, 1rn, 1cb, 1yb, 1ic, 1av, 1rf, 1rd, 1ex, 1bz, 1ab, 1ql, 1gp, 1lu, 1ga, 1aq, 1ro, 1mr, 1lj, 1dl, 1es, 1qi, 1hj, 1wz, 2ava, 2ayw, 2cyx, 2beo, 2akz, 2buo, 2aqw, 2avr, 2ast, 2ahm, 2ary, 2cdr, 2cvq, 2bhs, 2aas, 2ayk, 2ago, 2ann, 2aul, 2cvj, 2aev, 2cyh, 2apd, 2arm, 2cuq, 2agu, 2cch, 2cjd, 2xaj, 2amj, 2cdq, 2cur, 2ahe, 2bur, 2cxl, 2aon, 2ahp, 2avw, 2cpo, 2apq, 2bbi, 2blm, 2azk, 2cvs, 2bzo, 2aub, 2ase, 2cns, 2apm, 2bbx, 2baa, 2ie, 2um, 2bm, 2md, 2sw, 2nz, 2eb, 2cc, 2uo, 2aa, 2ha, 2sb, 2dy, 2or, 2kx, 2dh, 2fo, 2xa, 2tb, 2uk, 2lt, 2tp, 2sf, 2iz, 2ga, 2xg, 2gk, 2pv, 2ch, 3ax, 3rw, 3jt, 3pf, 3eb, 3ue, 3ps, 3dw, 3gp, 3ut, 3jn, 3jo, 3bn, 3kr, 3ql, 3hg, 3lk, 3rf, 3qw, 3dh, 3ld, 3zw, 3hx, 3mk, 3cc, 3ce, 3gz, 3lq, 3uk, 3qg, 3py, 3tn, 3nc, 3bhv, 3any, 3bva, 2ajt, 3ahl, 3add, 3cbv, 3bwt, 3bms, 3cch, 3afw, 3ekl, 3cab, 3anr, 4jo, 4oy, 4aae, 4km, 4nr, 4gp, 4gz, 4we, 4ak, 4ll, 4eu, 4ft, 4iz, 4ck, 4if, 4hy, 4wj, 4nh, 4ry, 4ob, 4dd, 4rn, 4rm, 5va, 5ql, 5kc, 5zai, 7ua, 8aly, 8afq, 8bja, 8cnh, 8bau, 8bwu, 8don, 8bqi, 8abz, 8rhk, 8bzu, 8cot, 8acz, 8alg, 8adg, 8dan, 8dei, 8bbw, 8ane, 8bbe, 8xeu, 8akv, 8aul, 8auc, 8ut, 8kj, 8ew, 8rh, 8vx, 8lj, 8li, 8dg, 8gz, 8xe, 8ac, 9cyx, 9btr, 9aoj, 9bpb, 9cbit, 9bht, 9axb, 9eys, 9dxx, 9bzx, 9day, 9dkc, 9deg, 9arn, 9cpm, 9eev, 9nk, 9be, 9sa, 9xi. 9ev, 9cn. NC—1ad, 1da, 1dd, 2be, 2bg, 3kp. NE—Srg. NI—3ag. NJ—2px, 2ac. NM—cy, hw, lj. NQ—5az, 8kp. NR—cto. OA—3dc, 5wa, 7cw, 7dx. OD—pk9. OP—1au. OZ—2br, 2ac, 2xa, 3ac, 3ar, 4aa, 4am, 4ao, 4ar. AF—1b, hva. AI—dcr. FM—8st, 8os, 8vx, 8jo, 8mv, 8pmr. FO—A4Z. SA—bal, hd4, bg8, fe6, en8, db2. SB—1tm, 1bc, 1aw, 1ib, 1br, 1ar, 1aq, 1ak, 1ad, 1al, 1ay, 1be, 1af, 2ag, 2am, 2ig, 2av, 2au, 2ak, 2ax, 5aa, 2id. SC—2as, 2bl, cnwi. SU—2ak, 1cd, 1ak, 1fb. GI—6mu, 5zy, 6ja, 5nj. GC—6js. GW—3wa. P—9ab. S—ktr. Various—PKH, OCRU, SLLA, XO, LOR, KEL, FUE, VPS, ABI, SWS, NPG, VGJL, VBGJ, 98X, LW, TG5U, GLKY, OHK, LGN, OXZ, WKR, JES, OCMB, RAZ, KFQZ, RXY, DX8, WIZ. Heard during February, 1927—Pse QSL for full details to A. S. WILLIAMSON (BRS26), 106, Rushdale Road, Meersbrook, Sheffield.

CALLS HEARD DURING JANUARY AND FEBRUARY, 1927.

U.S.A.—1auc, 1ach, 1adm, 1aao, 1alr, 1asf, 1aw, 1bke, 1bkb, 1ch, 1cuc, *1caw, 1cr, 1dg, *1dm, 1di, 1ga, 1hc, 1bj, 1ia, 1ic *1li, *1lj, 1mv, 1my, *1on, 1rf, *1ry, 1vc, 1vz, 1wl, 1yaw, *1zl, 2amj, 2agt, 2ahm, 2cy, 2ctf, 2cma, 2dh, *2tp—3arm, 3ahl, 3ay, 3cn, 3hg, 3rs, 3gp, 3jo, 3ka, 3oo. 4ak, 4iz, 4hy, 4tk, 8am, 8acq, 8acz, 8adg, 8hx, 8lt, France—8abc, 8adg, 8ag, 8ct, 8cn, 8caz, 8di, 8ddh, 8dd, 8jf, 8jj, 8ku, 8kz, 8muz, 8oqp, 8prl, 8rl, 8tis, 8ufe, 8rid, 8vx, 8xu. Brazil—1af, 1ag, 1aa, 1aw, 1br, 1bc, 1dd, 1gw, 2ad, 2ar, 2am, 2ig, 4aa, 5aa. Argentina—DW4, HD4, BG8, DH5, CB8. Germany—4ab, 4acy, 4mca, 4sa, 4vah, 4wd. Holland—OCO, ODG, OPM, OWR, OPUE. Belgium—Z1, 4yz, O8, 4rs, k6. Sundry Calls—SUICD, SU2AK, SC2AS, EAR50, IIGW, IIVBG, FM8DD, FM8UT, FM8ST, FM8JU, FA8VX, FA8JO, FOA6N, LA1X, UIACDA, EINU, PIIXR, NAUIZK, PIBK, NJ2PZ, *NE2XT, *NN4WE, TPA1, AR8LHA, ER1BLA, P2AF, ANK, ANF, 9AXG, WLL, BDA, KKZ, CHIL, CLKY, XYZ, SPW, SGT, SSMW, SMUK, SMYG, VIZ. Logged by BRS10, W. H. TALBOT SMITH, 16, Farman Road, Coventry.

*Indicates below 23 metres.

British stations logged and reported on by request. A good card is waiting for you, O.M.!

U.S.A.—1aal, 1aao, 1abo, 1ach, 1adm, 1adp, 1aff, 1age, 1ahb, 1ajx, 1akm, 1alj, 1alr, 1aof, 1aqi, 1ara, 1auc, 1aur, 1avd, 1avf, 1axx, 1bhe, 1bhs, 1bjk, 1bkb, 1bop, 1bux, 1cd, 1ck, 1cmf, 1cmx, 1di, 1ga, 1ic, 1in, 1jn, 1kk, 1mv, 1nq, 1ql, 1rd, 1yp, 1xm, 2acz, 2aev, 2agp, 2agx, 2ahm, 2ajx, 2akk, 2amp, 2anv, 2aol, 2aqw, 2aub, 2avr, 2awq, 2axt, 2azs, 2bat, 2bax, 2bbx, 2bek, 2ber, 2bm, 2bur, 2cbg, 2cnm, 2cs, 2cuz, 2cwr, 2czr, 2dg, 2dy, 2fc, 2ff, 2gx, 2hc, 2jn, 2kx, 2ld, 2nm, 2nz, 2or, 2sc, 2tf, 2uk, 3ahl, 3ahw, 3ajt, 3au, 3bqj, 3bwj, 3bwt, 3cdh, 3cds, 3cdv, 3cj, 3gp, 3gv, 3qw, 3qy, 4ak, 4gz, 4ij, 4ll, 4ob, 4rm, 4ry, 4tu, 4tz, 5jd, 5jf, 5oa, 5ql, 5rh, 5zav, 6cc, 6jn, 7ek, 7tm, 8adg, 8afq, 8alo, 8aly, 8ax, 8axa, 8ayf, 8azh, 8bau, 8bbe, 8ben, 8bk, 8bou, 8bww, 8byb, 8byn, 8cbu, 8cc, 8eck, 8cns, 8cxj, 8djh, 8don, 8kw, 8wo, 8sf, 8wk, 8vd, 9aek, 9arn, 9auv, 9avi, 9bi, 9bqe, 9bre, 9cau, 9cpm, 9cn, 9day, 9dba, 9do, 9dr, 9dxx, 9ekc, 9eli, 9kd, 9lz, 9mn, 9so, 9xi. Canada—1ar, 1da, 1dq, 2be, 3bt, 3jm. India—ACS, DCR, 2zx. China—HVA, XO, AF1B. Japan—JES, JV. Australia—2bv, 2yx, 3dc, 3wm, 3xo, 5ax, 7cw, 7dx. New Zealand—1fb, 2bg, 2br, 2bx, 3aj, 3aj, 4aj, 4am, 4ao. East Indies—ANF, AND, ANE, PKH, PK9. South Africa—A3B, A3W, A3Z, A4L, A4X, A4Z, A5D, A5O, A5X, A5Z, A8P. Central America—MIAA, XC51, NJ2PZ, ND, HIK. Brazil—1aa, 1ab, 1ad, 1af, 1ak, 1al, 1aq, 1ar, 1av, 1aw, 1br, 1bv, 1ib, 2af, 2ag, 2ar, 2au,

2ax, 2ig, 5ws, sq1, sq4, CIT, SN1. Argentine—BA1, DW4, EN8, FC6, HD4. Uruguay—1fb, 2ak. Chile—2as. Miscellaneous—GFUP, ISL, KTC, KUMT, NAA, NUNV, RXY, WVC, ET2XA, OP, 3AC—(BRS3).

20 V

Great Britain—G—2ag, 2ay, 2cc, 2gy, 2hq, 2nh, 2oq, 2or, 2lj*, 2rg, 2vr, 2wj, 2xy*, 5ad, 5by, 5dc*, 5lb, 5nk, 5kz, 5li, 5nx, 5ma, 5kh, 5jw, 5ky, 5mq, 5qv, 5ym, 5yk, 5up, 5uw, 5yx, 5zg, 6dr*, 6er, 6bd, 6fa, 6yq, 6vp, 6lr, 6ug, 6js, 6ia, 6nk, 6rw, 6lt, 6ll, 6uz*, GC—6nx, 6ko, 6js, 2ar*. G1—2it, 5nj, 5wd, 5mo, 5zy*, 6mu*. 6ja, 6ai, 6wg, 6yw. GW—11b, 18b, 14b, 3nz. France. EF—8jj, 8bo, 8ud, 8ku, 8wi, 8ger, 8km, 8fo, 8kv, 8kp, 8wd, 8rg, 8xe, 8cd, 8xu, 8xuv, 8rid, FM, 8ay. Italy. EI—1ab, 1ay, 1ce, 1cn, 1dr, 1cy, 1gw, 1uu. Belgium. EB—V33, N33, Z33, W1, 4qq, 4co, 4cb, 4ww, 4zz, 4ai, 4yz, 6k. Holland. EN—"O," PM, "O" FK, "O" ST, PCMM, PCRR. Spain. EE—AR44, AR42, AR28, AR18, ARA. Austria. EA—JZ, AK, GP. Germany. EK—4abf, 4ua, 4gd. U.S.A., NU—1bzo, 1dio, 1anq, 1rd, 1bhm, 1aur, 2agn, 2ago, 2cvj, 2rs, 2ps, 2baa, 2bgi, 2cns, 2aff, 2azk, 2vo, 2um, 2vm, 2bm, 2bk, 2ags, 2akv, 3fd, 3bn, 3bh, 3tr, 4la, 4ovu, 4tu, 7eb, 7bcq, 8bh, 8afq, WIZ, KDKA, 2XAF, 2XD. Miscellaneous—D7BJ, EP1AE, 1AW, ELIT1B, ET8BR, PA1, EJ7WW, NMIAYS, NC1AD, SD, 2AR, ES1UU, X4GJ4, FE1BM, SMST, IRCL, LA1R, O1YD, SM5H.

* Indicates fone.

On O—V—1 Reinartz. Between 2-227 es 7-2-27. Pse QSL, O.M.'s, TNX.—C. B. CLELAND (2AXO).

India—A1, ACS, DCR. French Indo China—AF, 1B. Australia—OA, 3BQ, 5AX, 7DX. South Africa—FO, A4F, ASP. Canada—NC, 2GB, U.S.A.—NU, 1cia, 1kk, 1te, 2cyx, 4ob, 8adg. Russia—R, 10ra. Brazil—SB, 1al, 1aq, 1ar, 1ia, 1ib. Japan—JES, Java—EOD, PK9. Sundries—W, 2sw, NE8, RG, KEL, E, 7ac, EJ, 7mm, KTC, EF, JHP. Calls heard during February on O—V—1 received by LAWRENCE L. PARRY, 106, Church Road, Moseley, Birmingham.

Calls heard at G2XV, December 1, 1926 to February 15, 1927: 30-50 metres on O—V—2. NU—1amd, 1asf, 1axa, 1bhs, 1akm, 1ch, 1aap, 1aac, 1bkb, 1lj, 1bke, 1aqt, 1cmf, 1cd, 1adm, 2cvs, 2kx, 2ayj, 2agn, 2cka, 2fo, 2cyx, 2amh, 2ahm, 3cfn, 3na, 3ue, 3bwt, 4af, 4lb, 5kc, 6mu, 8ka, 8pae, 9xi, UAA7. SB—lib, 1ac, 1ax, 1aq, 1br, 1ak, 2ag, 2as, 5ab. OZ—2ak, 2gc, 3ar, 4ac, 4ar. OA—2ha, 2no, 2dy, 3xo. Various MF, 8PMR, FA8JO, EP1AJ, SA, FC6, Y2AK.—G. A. JEAPES, Gt. Shelford, Cambs., England (G2XV).

England.—G2cc, g2kf, g2lz, g2nm, g2od, g2xv, g2xy, g2jb, g2sz, g2vl, g2sa, g2nh, g2sw, g2it, g5by, g5dh, g5hs, g5kc?, g5qv, g5tz, g5lf, g5fq, g5ma, g5wq, g5uw, g5ms, g5nj, g6bd, g6uz, g6zm, g6ah, g6td, g6kk, g6ko, g6lj, g6vp, g6mu. France.—F8ca, f8ct, f8fj, f8gi, f8gm, f8hu, f8ip, f8jn, f8kf, f8ku, f8mn, f8ab, f8ix, f8jf, f8cn, f8xm, f8fu, f8fr, f8mco, f8mul, f8tby, f8tuv, f8(ui)i, f8tis, f8dnx, f8cax, f8yor, f8qrt, f8rbp, f8arm, f8hp, f8ctn, f8ma, f8mb. Others.—1lau, ilco, iler, ilgw, ilma, ilrm, ilay, ilcn, ilce, ilna, ildr, laix, s2co, smtn, sad, sfv, sgl, sgc, nowc, npck4, nofp, nohb, ear4i, ear6, ear28, b2, b3aa, b6m, b—5, bv33, b4zz, bh5, b4yz, b4rs, b4aa, k4mc, k4mc, k4c, k4xyk, k4yae, u2rv, 9te, rinn, oki, ct4, piaj, piaf, o.fz, jm3ab, cvm.—T. H. HARRIS "Westhook," 56, Mintare Avenue, Enfield, N. Sydney, Australia.

Calls heard by R. J. DRUDGE-COATES (Radio AIDCR), Rawalpindi India, January-February, 1927. Reinartz O—V—1:—England.—G—2dx, 2vr, 2kz, 2cc, 2gy, 2rg, 2od, 2lz, 2xp, 2jy, 2qm, 5by, 5hx, 5wq, 5uw, 5dh, 5ma, 5fq, 5up, 5xy, 5vl, 5yv, 5lf, 5ad, 5gq, 5tz(fone), 6uz, 6ta, 6br, 6bd, 6zm, 6yd. Scotland.—GC—2sr, 2wl, 5nw, 6ko, 6nw. Ireland.—GI—5wd, 6mu(fone), 6qd. Free State.—GW—11z, 18b. Australia.—A—2yj, 2rt, 2ms, 2no, 2yi, 2ij, 2tm, 3hl, 3at, 3dc, 3my, 3ot, 3nb, 3vp, 3al, 3bq, 3px, 4an, 5kn, 5bg, 5hg, 5ja, 5lf, 5ar, 6ag(fone), 6sa, 6mu, 7dx, 7cw, 7la, 7es, 7bq, 7ig. Belgium.—B—4rs, 4ar, K44, v33, bl. Denmark.—D—7mt, 7fj, 7zm, 7bx, 7bd, dnsc, doxz. France.—F—8ei, 8gi, 8ut, 8bz, 8jj, 8bp, 8ger, 8yor, 8udi. Germany.—K—4adb, 4adi, 4yae, 4yab, 4aca, 4sar. Holland.—N—0pm, 0qq, 0af, pb7a, 0az. Italy.—I—Ice, 1bw, 1na, 1bd. Japan.—J—1pp, 1sr, kzb. Java.—EI—pk1, pk9. Philippines.—PI—1hr, 1bd, 3ac, 3ab, 7ou, wucc, wuaj. Russia.—R—1nn, 2wd, reri. Sweden.—SM—tn, uk, uv, vj, rp, xr, yg, sktr, sic. South Africa.—O—a3z, a3a, a4l, a4z, a5x, 1sr, ktc. U.S.A.—U—1aao, 2ath, 3cvj, 6ckv, 8cau, 9cpu, wiz. Miscellaneous European.—Br5aa, 0ehk, 0ekl, 0eke, 0eth, s2nm, s2nd, s7nb, lalc, la4x, tpa1, icsni, cs2yd, cs2un, gf3. Asia.—1dh, ss2se, jm3ab, kfsx, kdgl, aelbk, fc8em, fi8fok, filb, bnsk1, bnsk2, wuat, ora.

U.S.A.—1aba, 1ajm, 1akz, 1amd, 1aox, 1atj, 1big, 1bux, 1bym, 1byv, 1caw, 1cjb, 1cmp, 1cu, 1hn, 1ic, 1ii, 1qb, 1rd, 1yb, 1zl, 2ahm, 2amd, 2aol, 2apa, 2gk, 2gp, 2jn, 2nz, 2tp, 3ds, 3jo, (6VZ). 8acy, 8ahc, 8ahj, 8ail, 8aj, 8aly, 8arg, 8axa, 8ax, 8ccr, 8cil (9CBX). Canada—1ar, 1dj (FM8ay). All above heard between February 6 and February 28. (BRS3.)

Calls heard at BRS34, February 1 to March 5 :—U.S.A.—NU—1gr, 1ux, 1td, 1wf, 1abn, 1abz, 1aof, 1asu, 1aur, 1avl, 1axa, 1azs, 1bvl, 1cce, 1cjc, 1cki, 1ckp, 1cmf, 1cuq, 2agn, 2ags, 2apd, 2avr, 2bzo, 2nm, 2xaf, 3bw, 3gp, 3jo, 3pf, 3bj, 3bwq, 4dd, 4nd, 4km, 4ob, 4rc, 8ru, 8aly, 8ama, 8ckh, 9mh, 9sj, 9cpm, 9oex, wik, wiz, kdka. Brazil.—SB—1ak, 1al, 1ar, 1ay, 2a2, 7ab. Belgian Congo—F.C—F2. England.—G—2ay, 2cc, 2cs, 2dl, 2gf,* 2un, 2wj, 2lj, 2xy, 5au, 5dh, 5dc *, 5fq, 5gq, 5gu, 5fl, 5iv, 5jw, 5ku, 5kz, 5sk, 5sz, 5td, 5up, 5uw *, 5wq, 5xh, 5yk, 5yx, 6bd, 6dr, 6fa, 6ja, 6ia, 6ry, 6ut, 6uz *, 6vp. Scotland.—G—6iz, 6js. Ireland.—GI—2it, 5mo, 6mu. GW—11b, 18b. France.—EF—8ay, 8bf, 8gi, 8eo, 8ho, 8sm, 8tw, 8ut, 8yy, 8esp, 8flm, 8gdb, 8sst, 8wel, ocdj, fw.

Belgium.—EB—08, v33, w1, z33, 4aa, 4ar *, 4ls. Holland.—EN—ohb, oly, ouc, pmm, perr, pett. Germany.—EK—4sa, 4wl, 4xk, 4abf, 4dba, 4uak, 4uao, agb. Poland.—ET—Paj. Luxemburg.—EX—1ax. Norway.—lf, lx. Italy.—EI—1ce, 1gw. Spain.—EE—ear19, ear28. Various.—Suc, sws, 1xv, b82, bsa, lor.—RBS34.—ALFRED HINE, 81, Chatworth Road, West Bridgford, Notts.

Correspondence.

Instructions to Correspondents.

We are always glad to hear from members. Correspondence published in these columns should be written clearly on one side of the paper and marked "For Publication."

All correspondence should be addressed to the Editor, T. & R. BULLETIN, who reserves the right to refrain from publishing any material which is lacking in general interest or for other reasons. Correspondence for publication will not be acknowledged.

Correspondence must be kept reasonably brief.

To the Editor of T. & R. BULLETIN.

U2BV is anxious to get QSO with G hams; he is on the air most nights, and welcomes reports where he cannot get QSO.

Yours faithfully,

W. M. LYON (BRS64).

37, High Street, Aberystwyth, Wales.

"BACKWASH" FROM W1Z.

To the Editor of T. & R. BULLETIN.

Whilst working C2FO last night, he asked me to pass the word to members who use 45 metres, to keep well up to 45. Many are too low, and he says the "backwash" from W1Z is terrific, and causes lots of trouble on reception of many G's.

73's,

P. JOHNSON (G5IS).

49, Carson Road, Dulwich, London, S.E.21.

MIS-USE OF CALL LETTERS.

To the Editor of T. & R. BULLETIN.

Would you be good enough to insert a note in the BULLETIN that some unkind person is using my call sign. I have received a number of QSL cards reporting on transmissions of 45 and 33 metres under my call sign. So far this year I have not been transmitting below 98 metres.

Thanking you,

Yours sincerely,

C. W. ANDREWS (2TP).

26, Melody Road, Wandsworth Common, S.W.18.

(EDITOR'S NOTE.—See our comments on Mr. Woodcock's letter elsewhere).

MIS-USE OF CALL LETTERS.

To the Editor of T. & R. BULLETIN.

I should like to call attention to the fact that some unauthorised person or persons continue to use my call letters; and QSL cards reporting my supposed transmissions on various wavelengths never used by my station arrive persistently.

It is certainly time something was done to put a permanent QRT on these unauthorised transmitting stations.

Yours faithfully,

T. Woodcock (600),

(A. Rad. A., T. & R. Section R.S.G.B., A.R.R.L.)

SELECTED BOOKS FOR MEMBERS.

- ALTERNATING CURRENT WORK: by A. SHORE, A.M.I.E.E. 163 pages, 86 diagrams, 7 illustrations. Price 3/6 net, post free 3/9.
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53, Victoria Street, S.W.1.

Santos, 8, George Street, Bridlington, E. Yorks.

(EDITOR'S NOTE.—We agree, but we know of no way of stopping this nuisance—even the publishing of this letter will merely make the station change the call sign, and he will then use somebody else's!)

RUSSIAN TESTS.

To the Editor of T. & R. BULLETIN.

I received the following message from EU1UA (Niji Novgorod) last night, via radio:—

Pse QSR letter to BULLETIN R.S.G.B. that Russian test 15-31 Marth at 21.23 G.M.T. All QSL please send via EU1UA.

Yours faithfully,

F. E. DOMINEV (G6FD).

19, Shooters Hill, Cowes, I.O.W.

(EDITOR'S NOTE.—The above arrived too late for insertion in March BULLETIN, but perhaps the QRA for reports is of interest to all who heard these tests.)

BORNEO WANTS QSO ENGLAND.

To the Editor of T. & R. BULLETIN.

I received a QSL card this morning from BNSKI (Mr. J. R. Barnes, Kuching, Sarawak, B.N. Borneo), on which he informs me that he is transmitting every Saturday night at 21.00 G.M.T. on about 37 metres. He would be glad of reports, and would like to QSO a G station.

Best 73's,

THOMAS H. STREETER, Jun. (BRS42).

School House, Alfold, near Billingshurst, Sussex.

ANOTHER ONE!

To the Editor of T. & R. BULLETIN.

DEAR SIR,—I should esteem it a favour if you would draw attention to transmitters and others through the medium of the BULLETIN, that the station working telephone, and giving the call sign 5VP, is not mine, as I am working CW Morse only. Thanking you in anticipation.

Yours faithfully,

G. H. KITCHEN, G5VP.

10, Beech Road,
Epsom, Surrey.

To the Editor of T. & R. BULLETIN.

DEAR SIR,—It is hoped that the following will be of some interest to the readers of the "BULL." Several times, listening to DX-stations, we hear them calling European stations, without being followed by a QSO.

DX-STNS, HRD, CALLING "E" STNS. SINCE FEBRUARY.

DATE	G.M.T.	CALL.	INF.
1-2-27	22.55	8NOX efnu 1AIR	en R030
	22.55	6TD gu 1BHM	en R030
	23.10	08 ebnu 2AYJ	en R030
13-2-27	00.10	2KZ gu 2CNJ	etc.
	00.10	6MU gi u 3LW	
	00.10	2CC egnu 1CKP	
	00.25	6IL egnu 1GR	
	00.35	5YX egnu 1AXA	
	01.30	5MA egnu 3QF	
26-2-27	01.30	5MA egnu 1AHV	
	23.40	2CC egnu 2UK	
	23.45	1CE einu 8ILY	
	23.50	5BY egnu 4OB	
	23.50	8UDI efnu 1ADM	
	23.55	2CC egnu 1AXA	
27-2-27	00.00	5BY egnu 3PF	
13-3-27	01.55	8TIS efnu 2ANX	
	02.00	6TA egnu 1ZV	
	02.10	4WW ebnu 8DNH	
C. C. VERBEEK, (en-LAB and en-R030).			

30, Tolsteegsingel.
Utrecht, Holland.

RADIO G2NT.

To the Editor of T. & R. BULLETIN.

SIR,—The letter from G6HF which appeared in the March issue of the BULLETIN has encouraged me to seek the courtesy of your columns for a similar purpose.

It is my invariable practice to send a QSL card to every station I work, in confirmation of our QSO. These cards are either sent direct or via the appropriate distributing agency. It appears that some of my cards have failed to reach their destinations, since in many cases I have had no acknowledgement of my cards or of the QRO's in respect of which they were sent.

I take it that the object of sending QSL cards is threefold. First, the card is sent as confirmation of the fact of working the station to which it is addressed. In this respect the card has a definite value, for the receipt of such a card from a station which has not been worked at once puts one on the track of possible "pirates" who may have been misusing his call-sign. I have had personal experience of the value of QSL cards from this aspect.

Secondly the QSL card furnishes information with regard to the QSO or test concerned of a more detailed character than circumstances will allow to be transmitted by wireless.

Thirdly, the cards form a pleasing and authoritative record of the activities of one's own station, and their use undoubtedly tends to foster good feeling between amateurs the world over.

I cannot help feeling that the real utility of the QSL card is apt to be hidden by the decorative use to which it is frequently put, and it may be that some amateurs have overlooked the real value of the card.

I venture to ask that you will be good enough to publish this letter, in the hope that it will remind some of those who are perhaps a little careless about sending QSL cards of the value of the latter to the recipients. I do not, of course, suggest that all the stations which I have worked, but from which I have not received cards, have failed to send them. No doubt many have been lost in the post.

Below is a list of stations from which I am still awaiting cards. I need not add that if my own cards to them have miscarried, I shall be only too delighted to send duplicates:—G—6NX, 5NN, 6HZ, 2VG, 2GF, 5RU, 6IA, 5KS, 6KA, LA—ZA, R—1UA, B—S4, S2, K6, 4RE, O5, K—75, 4MFL, 4XU, F8UT, 8PM, 8PAX, 8RBP, 8BA, 8IMR, 8LMM, 8GZ, 8PD, 8OCX, 8KZ, NO3, D7XU.—Yours faithfully,

A. C. C. WILLWAY,

Radio G2NT.

P.S.—I see from another letter in the same issue that my card to a Belgian Station has miscarried. I am, of course, sending another. This illustrates the value of a notice in your columns.—A.C.C.W.

ATTENTION!

To the Editor T. & R. BULLETIN.

SIR,—I note on page 17 of the February, 1927, T. & R. BULLETIN, that the address of the American Radio Relay League Headquarters is given as 1045, Main Street, Hartford, Conn. This is incorrect, and its present address is 1711, Park Street, Hartford, Conn.—Yours sincerely,

HAROLD P. WESTMAN,

Assist. Technical Editor, QST.

Executive Headquarters,
Hartford, Connecticut, U.S.A.

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A TESTIMONIAL.

To the Editor of T. & R. BULLETIN.

I beg to acknowledge receipt of your letter and one hundred sheets of T. & R. Section notepaper, for which I thank you. The quality of the paper and the heading is excellent. I am very pleased with it.

Yours faithfully,

JOHN V. PARSONS.

Holland House, Sutton Coldfield, near Birmingham.
(Ed. NOTE.—We have plenty more in stock!)

A METHOD OF MEASURING HIGH-FREQUENCY CURRENT.

To the Editor of T. & R. BULLETIN.

Re Mr. Aughtie's (6AT) letter in this month's BULLETIN. I believe there are one or two mistakes in the matter of that integral

$$\frac{1}{2\pi} \int_0^{2\pi} (a^2 + 2ab + b^2 \sin^2 \theta) d\theta$$

which, if it is going to simplify down to a result anything like the result given should read:

$$\frac{1}{2\pi} \int_0^{2\pi} (a^2 + 2ab + b^2 \sin^2 \theta) d\theta,$$

the mistake here, apparently, being that the printers mistook the symbol π (Greek letter "pi") for a "n."

In the result of this integration there has been another mistake, i.e.:

a^2 should read a^2 ,

and I am not quite sure whether Mr. Aughtie has arrived at the correct result, which I think should be:

$$a^2 + \frac{b^2}{2} \text{ not } a^2 + \frac{b}{2}$$

allowing for printers' errors.

Thanking you for the fine way the old "BULL" is shaping, and wishing you all the best.

Yours with 73's,

R. POLLOCK (5KU).

4, Glenhurst Avenue, N.W.5.

PURE DC AND DX.

To the Editor of T. & R. BULLETIN.

I have read with interest Mr. Neill's letter in the current issue of the BULLETIN regarding a pure DC note and DX.

A very good reply to Mr. Neill's queries is contained in Kruse's article in this month's QST, but I thought that readers might be interested in an experience of my own on this same subject. Two years ago I was carrying out some experiments with G2KF when I was at sea, about 400 miles west of Boston, Massachusetts. I was having difficulty in reading 2KF on account of his very pure DC note. There was a big sea running at the time, and I experienced difficulty in holding such a very pure signal. I asked Partridge if he could arrange to modulate the note in some way, and with his usual resourcefulness he inserted a buzzer in the grid circuit. From then on we were able to copy his signals with the greatest of ease, and he was far and away the best signal from Europe, even when we were in the interior ashore. It should be noted, however, in connection with the above that the desirability of modulating the signal was brought about by the fact that, at sea, it is sometimes extremely difficult to copy short wave signals due to the movement and other varying factors met with, especially if the ship's "earth" is being employed. I am still of the opinion, that a pure DC note is superior to all others always, provided that it remains absolutely constant in frequency. What we should really do is to concentrate our every effort on securing a steady output, which I believe to be the essence of success in all short wave working irrespective of the power employed.

Yours faithfully,

KENYON SECRETAN.

105, Castelnau, Barnes, S.W.13.

FRENCH QSL DIFFICULTIES SOLVED!

To the Editor of T. & R. BULLETIN.

I shall be obliged if you can grant a little space in your next issue to enable me to reply to the letter from Mr. J. Clarricoats, which appears in the March issue of the BULLETIN, under the heading "French QSL Difficulties."

He asks: "Is it not time that something were done by the T. & R. Section to officially get a line up on the French QSL difficulty?" He is obviously unaware that negotiations and correspondence have been going on between the Frenchmen and our old friend Jamblin for a considerable time, and that since the QSL Section was taken over by headquarters, the latter has renewed the efforts made by 6BT.

Mr. Clarricoats will be pleased to know that the efforts made by H.Q. have at last been crowned with success, largely as the result of the spade work done by friend Jamblin, and that the R.E.F., whose official organ is *Journal des 8's*, has at last definitely entered into an agreement with us to despatch, once weekly, all QSL's intended for British stations, which may come into their hands. He will also be delighted to hear that the hundreds of cards have been delivered to us *by hand*.

Yours faithfully,
H. A. Rock,
Secretary, R.S.G.B.

53, Victoria Street, S.W.1.

FIRST QSO SOUTH AFRICA-ENGLAND?

To the Editor of T. & R. BULLETIN.

DEAR SIR.—I wish to report that the first 23-metre South Africa-England QSO was effected by this station to-night at 18.24 G.M.T. when 5A5X was heard on 20 metres calling cq. Contact was established straight away. 5A5X was V5 here and he reported 2NH as V3. The input at 5A5X was given as 50 watts and the input hr at this station was 36 watts. 5A5X asked me to inform the R.S.G.B.

Yours sincerely,
E. A. DEDMAN, G2NH.

65, Kingston Road,
New Malden, Surrey.

To the Editor of T. & R. BULLETIN.

DEAR SIR.—On February 19, at 00.55 G.M.T., I heard FQ-PM calling a Brazilian amateur. His wave-length was 34 metres, strength R2 to R3, but pure D.C. note and very steady, so that his signals were very easy to copy. He did not receive any reply from Brazil, so I called him on 45 metres, but failed to raise him.

I see from the October, 1926, QST, that PM is the station of Mr. Edwin Cozzens, of the Presbyterian Board of Foreign Missions, and that it is situated at Ebolowa, Cameroun, West Africa. Apparently he is using the short-wave outfit which he took back to Africa with him after his visit to California, and is using the new I.A.R.U. intermediate for his locality, and not FO as he expected to use.

Yours faithfully,
B. J. AXTEN, G2VJ.

78, Ealing Road,
Wembley, Middlesex.

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Wallet against buying
new gear.**

SPEED.

To the Editor of T. & R. BULLETIN.

DEAR SIR.—May I reply through your columns to the report by G6YQ headed "Speed?" G16MK, who is an able and serious experimenter of some six years' experience, fares rather badly in that report. I would suggest that G6YQ should work G16MK—he would then be able to have all the speed he may require, and remove the 5 w.p.m. idea he has got from hearing the call given at that speed. G16MK is a new candidate to the T. & R. Section and will no doubt be a useful member. His QRA is "Parkville," Antrim Road, Belfast. Thanking you, best 73's O.M.—

I am, yours truly,

J. A. PORTER, G5JA.

61, Brudenell Road,
Hyde Park, Leeds.

Bulletin Standing Notices.

All members are asked to read carefully the following notices before writing.

Address all your correspondence to the particular Officer in whose province it is to deal with the matter under discussion. These are the Advertising Manager, The Hon. Organiser T. & R. BULLETIN; The Hon. Secretary, T. & R. Section; The Sales Manager, T. & R. BULLETIN; Secretary, Experimental Section; Q.S.L. Manager; Q.R.A. Manager, and the Chairman, T. & R. Section. Each one of these officers has his own Department and method of dealing with correspondence.

Always write your letters relating to different subjects on separate sheets of paper. Do not send in an order to the Sales Department and ask the Hon. Organiser a question in the same letter or ask a question about your licence. Also do not mix criticisms of the BULLETIN with criticisms of some other Department of the Section.

When sending cheques or postal orders do not embody payment in respect of several items in one sum, but make out separate sums for the various items.

Orders for all articles except enamelled emblems should be addressed to the Sales Manager and nobody else, and cheques should be made payable to Sales Department, T. & R. BULLETIN. Cheques and orders for enamelled badges should be made payable to the Secretary, Radio Society of Great Britain, and also subscriptions.

Questions concerning licence matters should be addressed to the Hon. Secretary, T. & R. Section.

Reports concerning other activities should be addressed to your Area Manager.

Changes of QRA should be addressed to C. A. Jamblin, Esq., QRA Manager, 82, York Road, Bury St. Edmunds, Suffolk, and these will be embodied in a monthly report in the BULLETIN, and will be noted by Headquarters.

QSL cards should be forwarded properly addressed and stamped in the case of known QRA's to QSL Manager, Radio Society of Great Britain, 53, Victoria Street, S.W.1. In the case of the free delivery countries, however, it is only necessary to address the card and not to stamp it.

When corresponding with the Hon. Organiser, T. & R. BULLETIN, and if a reply is required always send a stamped addressed envelope unless you are sending an article for publication. Replies cannot be guaranteed unless this rule is observed.

Read these notices month by month in order to ensure that no change takes place without your knowledge.



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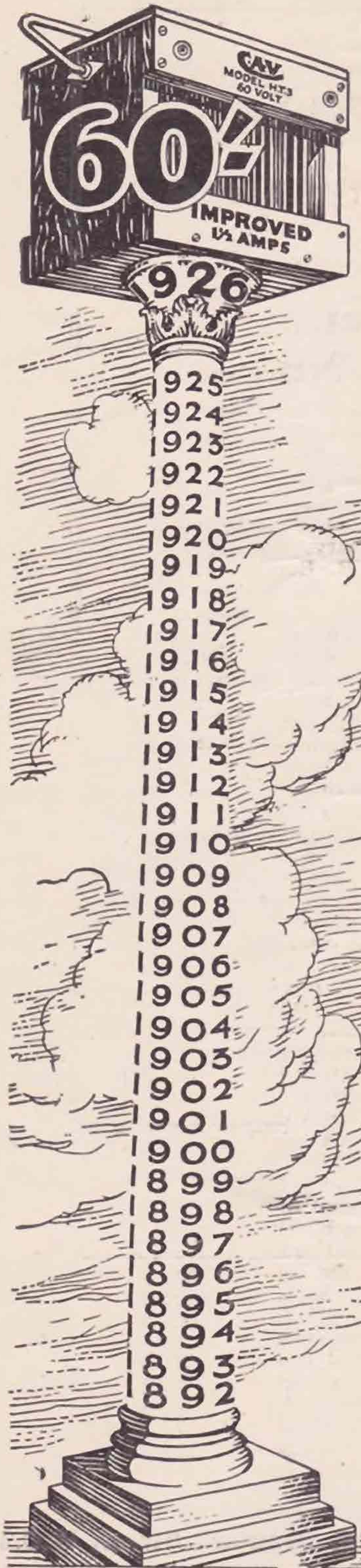
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*DO/40	6	2	500/1000	4,200	5 5 0
VO/50	9	4.4	800/1500	13,000	5 12 6
VO/150	11	6	1500/2500	24,000	6 10 0
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