# ATLANTIC CITY - ACT V 

## By JOHN CLCARRICOATS (G6CL),

BY now mosit mombers will huve soing knowledge of the final decisions reached at the Atlanatio City Conferemee. Immediately the news became known on September 11 a circular was issued to the Regional and County Representatives as well as te those sections of the technical press interested in Amatens Radio. The effect of this circulave was to stop the manyr rumours which heve been "going the rounds ${ }^{"}$ in recent weeks. Unfortunately a new type of rumour started up almosit immediately and as a ressult Hendquarters wasted much valuable times in denying that the new bands were operative immediately. We find it difficult to undersitind why levelheaded members should imagine for one moment that; an opoch-making international treaty, such as the one whioh has just been signed, cun take effeci fit once.

To deter any further enquiries we wish to state that the new frequency allocations are unlikely to comb into effect until January l, 1949.

As expected the closing stages of the Conference were hectic in the extremes. Towards the end of August it becamo incrensingly clear that the deadlock which had prevailed in the Working Group dealing with frequency ailocations must be broken if the Conference was to finish on September 15.

## The 1.7 and $3.5 \mathrm{Mc} / \mathrm{s}$. Bands

There is little need to enlarge upon what has been reported carlier in regsard to the "top-bund " other than to record that the U.K. proposal which confers upon European countries the xight to allocate 200 $\mathrm{kc} / \mathrm{ma}$, in that band to amateurs, went through withouth further opposition. We do not yet know where the now band will be located, but it seems probable that it will fall between 1750 and $1950 \mathrm{kc} / \mathrm{s}$, to permit of doubling into a portion of the $3.5 \mathrm{Me} / \mathrm{s}$. band.
The $3.5 \mathrm{Me} / \mathrm{s}$. band is to be extended in Europe by $50 \mathrm{kc} / \mathrm{s}$. This mearns that the portion botween 3635 and $3685 \mathrm{ke} / \mathrm{s}$, which was denied to us uncter the terme of the Cairo Conference Convention, wiil be opened up, giving us a clear rum from 3.5 to 3.8 Mc/s. The banad will, as at present, be shared with other gervices, but we are confident that this arrangement will be much more satisfactory than the original U.K. proposal thate the band shonld be reduced to $100 \mathrm{ke} / \mathrm{s}$ on an exclusive amatear basis.

## The $7 \mathrm{Mc} / \mathrm{s}$. Band

The "carving-up" of the $7 \mathrm{Mc} / \mathrm{s}$. batad went according to plan. Our only comment is that we think tho amateurs of Europe deserved better treatment thana they received from those nations which persist in flooding the ether with broadcasts that are listened to by mythical sudiences. Firanikly we doubt whether more than a mieroscepic proportion of Nortli American and Australasian listenera obtain any real pleasure or entertainment value from $7 \mathrm{Mc} / \mathrm{s}$. browdcast/s. As for European audiences we adhere to our previeusly expressed view that they are not interested in propaganda brondeasta thinly veiled as entertainment.

However, it is no use erying over spilt milk. The diplomats beat us and we mast grin and bear it. We shall nevertheless be interested to learn later on how the European broadcasters fare when they begin to pump programmes into those Regions where arnateurs will still be using the full $7 \mathrm{Mc} / \mathrm{s}$. band. As far as North America is concerned we cannot help thinking that the tens of thousands of arnateurs who use that band will swarny them out.

## GIENEIRAL SECRETARY

## The $14 \mathrm{Mc} / \mathrm{s}$. Band

For the reason that we regard the loas of $50 \mathrm{kc} / \mathrm{s}$. at the bigh frequency end of $14 \mathrm{Mc} / \mathrm{B}$. as our most serious reverso, we propose quoting at length from the official report of the 22 nd Meeting of Commitiee 5 . It was at that meeting the decigion was taken to reduce the width of the band and to permit thes U.S.S.R. to operate fixed stations between 14250 and $14350 \mathrm{kc} / \mathrm{s}$.

In openitig the meeting the Chairman (Col. A. H. Read of the U. K., successor to Cai. Sir Stanley Augwini recalied that two distirict proposals emerged from previous discusaionie, namely one for aillecating $400 \mathrm{kc} / \mathrm{s}$, excelusivety to ametense and the otice
 service. He added that ail dilegates had recomikised the deairabhity of alioeating this band on a world-wide bsals.

The delegate of the UNITBD STATES sald that the poolingi taken by hla colintry on this quiestion wins ton well kriown to need repastirig. Comntries which had opposed allocatirg tou kefh to the amateme servire had based then oppoation on the meeds of the fixed service. Whife recognizitg the needs of that service, which were as acute in the Enited States as in other countries, it dide not seviil that the siipht, percentage increase that thas fised service wotidi obtain in this part of the spectrum wonkl justiny such a surious lose to the amatoinx. The majority of conntrics had supported $400 \mathrm{kc} / \mathrm{s}$. for smateuiss at tine previous meeting when this question was studied, and he hoped tinst in this rase, as in many others, the: minority would join the majority in ailocating $400 \mathrm{kc} / \mathrm{s}$. to the amatew service on a worid-wide basis.

VENEZUELA reminded the Commiltiee that Sub-Committee 5h, in its flnat fepmert had unanimously acoepted the alication of $400 \mathrm{kc} / \mathrm{s}$. to the amateur scovice between 14000 and $14400 \mathrm{kc} / \mathrm{s}$., and Veneznelin still supported this proposut.


The delegate of the U.S.S.R. said that either of the two alternatives would be acceptable to his country provided that in either case the U.S.S.R. had the use of $150 \mathrm{kc} / \mathrm{s}$. between 14000 and $14400 \mathrm{kc} / \mathrm{s}$. for the fixed service so that if $400 \mathrm{kc} / \mathrm{s}$. Were allocated to amateurs the U.S.S.R. would share $150 \mathrm{kc} / \mathrm{s}$. between the fixed and amateur services, while if amateurs were allocated $300 \mathrm{kc} / \mathrm{s}$. the U.S.S.R. would share $50 \mathrm{kc} / \mathrm{s}$. in thls way.
CANADA appreciated that it might be essential for the U.S.S.R. to share part of the band allocated to amateurs, but earnestly hoped that such sharing would not be contemplated by other countries. He considered that the allocation of $400 \mathrm{kc} / \mathrm{s}$. to amateurs, with $150 \mathrm{kc} / \mathrm{s}$. shared in the U.S.S.R. with the fixed service, was the most generally satisfactory solution.
FRANCE challenged the statement made by the United States regarding the majority which at an earlier meeting had expressed support for an allocation of $400 \mathrm{kc} / \mathrm{s}$. to the amateur service. If attention were confined in effect to the European region there was, on the contrary, a very strong majority in favour of $300 \mathrm{kc} / \mathrm{s}$. ; a regional allocation might therefore be a solution but this was clearly undesirable. The countries of the world falling into two broadly equal divisions-those wishing to allocate $400 \mathrm{kc} / \mathrm{s}$. to the amateurs and those wishing to allocate only $300 \mathrm{kc} / \mathrm{s}$.- it seemed that a reasonable compromise would be to allocate $350 \mathrm{kc} / \mathrm{s}$. to the amateur service. Looking at the question from the point of view of amateur solidarity, European amateurs would be very grateful to those of the United States if an increase of $50 \mathrm{kc} / \mathrm{s}$. in the band available to the former resulted from the latter accepting a $50 \mathrm{kc} / \mathrm{s}$. reduction of the band to which they had access. The delegate reminded the meeting that the Chairman of the Conference had said that no country could expect to see its requirements completely satisfled and that compromises were necessary in the case of every service.
The UNITED KINGDOM said that the fundamental problem was that of trying to meet the requirements of the fixed and maritime mobile services between 8 and $17 \mathrm{Mc} / \mathrm{s}$. Several countries had arrived at the conclusion that the needs of the fixed service were such as to necessitate some reduction of the amateur allocations being made in favour of the fixed service, and the Working Group, although they had not been able to arrive at a solution to the problem, had been led to the same conclusion. Already many countrics had rightly paid tribute to the services rendered by amateurs, but it must not be assumed from this that the width of the bands at present allocated to them must not be altered. Every service must accept changes at one Conference or the other and the Committee had already applied this principle in allocating $450 \mathrm{kc} / \mathrm{s}$. to the amateurs at $21 \mathrm{Mc} / \mathrm{s}$. On the same principle they ought to revise the 14 $\mathrm{Mc} / \mathrm{s}$. band. The United Kingdom had already said that she could accept any allocation between 300 and $400 \mathrm{kc} / \mathrm{s}$. on which unanimous agreement could be reached-it was now clear that unanimous agreement on $400 \mathrm{kc} / \mathrm{s}$. could not be obtained. At the same time it was necessary to have in mind the need for finding the best solution for the amateurs as a whole and to avoid favouring the amateurs in one part of the world at the expense of those in another part. It would therefore be better to come to agreement on a world-wide allocation of $350 \mathrm{kc} / \mathrm{s}$. than to allocate $400 \mathrm{kc} / \mathrm{s}$. in one part of the world and $300 \mathrm{kc} / \mathrm{s}$. in the other. The United Kingdom was strongly in favour of allocating 350 $\mathrm{kc} / \mathrm{s}$. to the amateur service, and $50 \mathrm{kc} / \mathrm{s}$. for the fixed service, on a world-wide basis. At the same time she would not object to the proposal made by the U.S.S.R. since that country, by reason of its vast size, might need a special solution.
EGYPT, BELGIUM, INDIA, NORWAY, CUBA, SWITZERLAND, AUSTRALIA, ITALY, SWEDEN, THE NETHERLAND's and DENMARK indicated that while they preferred their initial proposals they were ready to support the proposal advanced by France and the United Kingdom if in that way unanimous agreement could be reached.
CHINA and NEW ZEALAND supported $400 \mathrm{kc} / \mathrm{s}$. The latter country considered the arrangement for sharing this band (as proposed by the U.S.S.R.) to be most unsatisfactory. The amateurs of New Zealand would wish to communicate not only with those of China, the United States and Canada but also with those of all the European countries. The delegate appealed, therefore, to the U.S.S.R. to envisage exclusive world-wide allocation of the band allocated to amateurs.
The delegate of the U.S.S.R. said that the amateurs of the U.S.S.R. Would have wishes similar to those of the New Zealand amateurs. They would, moreover, be able to satisfy those wishes since the U.S.S.R. was prepared to allocate $400 \mathrm{kc} / \mathrm{s}$. to the amateurs. The fact that part of the band would be shared with the fixed service did not mean that the amateurs would not be able to use the whole of the band. The U.S.S.R. would use care in choosing the frequencies allocated to the fixed service. New Zealand, and other countries, should therefore feel no anxiety on this question.
The UNITED STATES pointed out that 34 countries had expressed their views at the earlier meeting. On the present occasion many of them had not yet spoken and it must not, therefore, be assumed that there was a majority in favour of the compromise proposal.
NETHERLAND INDIES, PHILIPPINES, the UNION OF SOUTH AFRICA, ECUADOR, the FRENCH COLONIES, PORTUGAL, PERU and the UKRAINE indicated their willingness to accept the compromise of $350 \mathrm{kc} / \mathrm{s}$. in the interests of unanimous agreement. The Ukraine emphasised how great were the needs of the fixed service in that country, which had been ravaged by the war and where, at present, radio was the only means of communication. Bearing in mind the progress that had been made in radio technique, the loss to the amateurs in this part of the spectrum, whose characteristics had now been
thoroughly studied, was very slight and was, moreover, compensated for by an increase in other parts of the spectrum. The Ukraine pressed, as Poland had done earlier, for the allocation of $350 \mathrm{kc} / \mathrm{s}$. to the amateurs, with a special note to cover the requirements of the U.S.S.R. and the Ukraine.
VENEZUELA pointed out that, with the reservation made by the U.S.S.R., only $250 \mathrm{kc} / \mathrm{s}$. would be allocated exclusively to the amateurs. The delegate asked how the U.S.S.R. proposed to allocate frequencies in this band to the fixed service so as not to interfere with the amateurs.

The U.S.S.R. recalled that when the discussion started the U.S.S.R. had pressed for $200 \mathrm{kc} / \mathrm{s}$. for amateurs and $200 \mathrm{kc} / \mathrm{s}$. for the fixed service. However, they had now agreed to accept, reluctantly, an increase of the band for amateurs up to a maximum of $400 \mathrm{kc} / \mathrm{s}$. on condition that the U.S.S.R. be allowed to use part of the band for the fixed service as well, because of their special geographical difficulties. By carefully selecting the frequency appropriate to the time of day and the distance to be covered, and using directional aerials, satisfactory sharing could be assured. The delegate asked all the other countries to extend the same sympathy to the U.S.S.R., as regards this difficult problem, as a number of countries had already shown.

CANADA asked: (a) whether the U.S.S.R. would agree to accept a power limitation; (b) whether the U.S.S.R. would agree to operate their fixed services on a non-interference basis.

The delegate of the U.S.S.R. said that he could appreciate the difficulties and uncertainties of those countries which were in favour of allocating $400 \mathrm{kc} / \mathrm{s}$. to amateurs but were nearly ready to accept $350 \mathrm{kc} / \mathrm{s}$. He had already expressed the U.S.S.R.'s readiness to take the necessary technical steps to minimize the possibility of interference. The U.S.S.R. would carry out their responsibilities in this connection and he thought that if his statement were recorded in the present report, that would constitute a sufficien guarantee. (The italics are ours.-ED.)

The delegate of the UNITED STATES said that his country could not consider accepting the compromise proposal unless it was absolutely certain that agreement could not be reached on the basis of $400 \mathrm{kc} / \mathrm{s}$. for the amateur service. He recognised the validity of the remarks made by the United Kingdom regarding the usefulness of the $14 \mathrm{Mc} / \mathrm{s}$. band to amateurs for long-distance communications, and he fully agreed that the amateur allocation must be made on a world-wide basis. Regarding the statement made by the U.S.S.R. as to the sharing of $100 \mathrm{kc} / \mathrm{s}$. in the U.S.S.R. between the amateur and fixed services, he assumed that the frequencies assigned to the fixed service would be used solely for internal domestic communications, since it was clear that other countries would be unable to participate in fixed service transmissions from the U.S.S.R. on these frequencies. (The italics are ours.-ED.)

He was now compelled, although very reluctantly, to agree that the majority were prepared to accept a world-wide allocation of $350 \mathrm{kc} / \mathrm{s}$. and $50 \mathrm{kc} / \mathrm{s}$. to the amateur and fixed services respectively, with a note permitting the U.S.S.R. to share 100 of the $350 \mathrm{kc} / \mathrm{s}$. allocated to amateurs between the amateur service and U.S.S.R. fixed services. In the light of this majority opinion the United States was now prepared seriously to consider this compromise solution on the condition (a) that it was accepted unanimously and ( $b$ ) that the facilities for sharing in the U.S.S.R. were not extended to other countries, since the amateur allocation would then no longer be exclusive but extensively shared and this would be entirely unacceptable to the United States.

CHINA said that she would bow to the inevitable and reluctantly accept the compromise solution.

The delegate of the UNITED KINGDOM said that he had assumed that the proposed sharing of part of the amateur band in the U.S.S.R. was to provide for internal services. The undertaking given by the U.S.S.R. was extremely valuable and he wished to express the United Kingdom's gratitude for this undertaking and also for the helpful attitude the U.S.S.R. had shown in the discussion leading to a solution of the problem. Thanks were also due to the United States for the magnificent gesture they had just made.
CANADA asked for confirmation that the band shared in the U.S.S.R. between the amateur and fixed services would be $14250-14350 \mathrm{kc} / \mathrm{s}$. The CHAIRMAN replied that he understood that to be the position.

That then is the official story, which makes it clear, for all to see, why we have lost $50 \mathrm{kc} / \mathrm{s}$. in our most valuable DX band and why $100 \mathrm{kc} / \mathrm{s}$. of the remaining portion will be shared in the U.S.S.R. between the amateur and fixed services.

## The 21 and $28 \mathrm{Mc} / \mathrm{s}$. Bands

The decision to allocate to amateurs $450 \mathrm{kc} / \mathrm{s}$. on a world-wide exclusive basis between 21 and 21.45 $\mathrm{Mc} / \mathrm{s}$. will be warmly welcomed but we should not lose sight of the fact that in making this gesture the Conference also approved the reduction of the width of the $28-30 \mathrm{Mc} / \mathrm{s}$. band by $300 \mathrm{kc} / \mathrm{s}$. We recognise of course that the amateurs of North America have been restricted to the band $28-29.7 \mathrm{Mc} / \mathrm{s}$. ever since licences were re-issued after the war. The loss of those last $300 \mathrm{kc} / \mathrm{s}$. may not be regarded as very serious although we believe that many European amateurs will be sorry to see their one remaining interferencefree DX channel taken away.

## The V.H.F's

The position in regard to the 5 metre band remuins whchanged except thet it can now bo statoud oflicially that European amateürs $\overline{\mathrm{Br}}$ е not provided for in this part of the epectrum. Our hope lies with the G.P.O. Who havo agneed to explore the possibilities of emateira using cortain frequencies areund $60 \mathrm{Me} / \mathrm{s}$. on a non-interference basis.

The decision to allocate a band around 2 metres will be weleomed by all who are interested in V.H.F. technique. Already distañés up to nüurīy 600 miles heve been covered within the U.S. (where the band is opeñ to améteures sa there should be plenty of scope over here for those who are doubtrul about the future of 5 metre work.

Nothing much is known in smateur circles blout the belaviour of waves in the decimetric and centimetric ranges, but with four new bends shortly to become available we are confident that much fresh ground will be broken.

In deacribing the biañis abovie $150 \mathrm{Mc} / \mathrm{s}$. we butievu that it will be sdvisable to aclopt the metric notation. We suggest therefore that the following nomenclatury be uged:

| $420-$ | $460 \mathrm{Mc} / \mathrm{s}$ | $\cdots$ | 70 cms |
| ---: | :--- | :--- | :--- |
| $1,215-1,300$ | $"$ | $\cdots$ | 25 |
| $2,300-2,450$ | $"$ | $\cdots$ | 13 |
| $5,650-5,850$ | $"$ | $\cdots$ | 50 mms. |
| $10,000-10,500$ | $"$ | $\cdots$ | $30 \quad$. |

It is a Jittle unfortunate that harmonic relation ship has not been preserved at this part of the spectrum, but a perusal of the allocation table shows that certain frequencies in the 2 metre bund will triple into the 70 cmg . band whilgt certain frequencies in that bund will triple into the 25 cms band.

## Band Planning

Now that our fate has been settled for the next few years we can again turn to a consideration of band planning problems. We do not doubt that meny members have idens on tho subject, but we would sound the warning that, as far as the DX bands are concerned, no systern of brnd planning will bie successful uniess world-wide agreement is renched. With that thought in mind we are strongly of the opinion that the I.A.K.U. Societies should consider the many viewproints which ane hed both in this country and abrond, and if newessary a conference should be held for this purposse.

