

the  
**Groundwave**

Special Issue  
May 1971



A PUBLICATION OF  
THE OTTAWA AMATEUR RADIO CLUB

GROUNDWAVE IS THE OFFICIAL BULLETIN OF THE OTTAWA AMATEUR RADIO CLUB.

The club is a non commercial association of radio amateurs devoted to the promotion of interest in amateur radio communication and experimentation in the Ottawa regional area, and to the advancement of technical competence and achievement of the club members.

The Ottawa amateur radio club holds regular meetings on the first Wednesday of each month for the months of September through June.

The meetings are normally held at the National Research Council auditorium, Sussex Drive, Ottawa, Ontario.

Visitors are always welcome.

OTTAWA AMATEUR RADIO CLUB EXECUTIVE

1970-71

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A PUBLICATION OF  
THE OTTAWA AMATEUR RADIO CLUB

GROUNDWAVE

May 22, 1971

It was felt, by the executive of the Ottawa Amateur Club, that Docket no. 19162 which concerns an amendment of Part 97 of the United States Federal Communications Commission's rules by providing for an expansion of the high frequency amateur bands beyond their present limits, should be brought to the attention of all Club members.

This will mean an expansion into the portion of the bands now used by Canada and other countries and may have serious effects on our use of these bands.

We are therefore printing two submissions which have been submitted by the Canadian Amateur Radio Federation as well as a submission from Noel Eaton, The Canadian Director of the American Radio Relay League.

Both of these submissions were sent on to the Department of Communications in Ottawa who had agreed to process them for the Canadian Societies. It was believed that by the submission of these through the DOC there would be added weight and perhaps the FCC will be very careful in their deliberations.

The Ottawa Clubs have been very strong in their opposition to the expansion of the American Phone bands and we are supporting the enclosed submissions.

In conclusion, I would like to point out that the closing date on the Docket is June 1st so if you wish to make a separate submission you must do so at once and in 16 copies directly to the Federal Communication<sup>Comm.</sup>, Washington, D.C. 20554 or get a letter off to the Dept of Communications, Ottawa, Ontario and let them know your feelings.

73

Larry

VE3GGA.

In the Matter of

) DOCKET NO. 19162

Amendment of Part 97 of the  
Commission's Rules to provide  
for expansion of the high frequency  
amateur bands.

To: The Commission

PETITION FOR RECONSIDERATION

The Canadian Amateur Radio Federation, the national organization representing the Amateur radio operators of Canada through their Provincial societies, submits this petition for reconsideration as provided by Section 1.415 of the Rules of the Federal Communications Commission. This petition is based on comments made to the Federation by the Provincial societies, Amateur radio clubs and individuals, in particular in response to a preliminary brief made by the Federation and the full text of Docket 19162 both of which received wide circulation throughout Canada. This petition represents the unanimous views of the member societies of the Canadian Amateur Radio Federation.

1. Amateur radio in those bands below 144 MHz., is both a national and international resource, a resource limited by frequency allocations determined by the INTERNATIONAL TELECOMMUNICATIONS UNION, in whose deliberations each subscribing nation, the United States and Canada for example, has but one vote. Within the regional allocations each sovereign nation has the power to independently allocate shared frequencies to various services and modes of information transmission. With authority goes responsibility. The moral responsibility for protection and full utilization of this limited resource by all nations clearly rests with the administrations representing the largest amateur bodies and most affluent societies of the world.
2. In Docket 19162, the United States of America is placed in the unenviable position of abrogating the rights of all other amateur operators of the world, by unilaterally proposing to take a lion's share of the radiotelephone frequencies available solely for its own use, in an attempt to alter or ameliorate the undesirable results attributable to the present United States licencing policies.
3. In the majority of other countries, relative to United States' amateur standards, the average amateur is using low power, poor quality receiving equipment, and unity-gain antennae. He cannot operate, except with extreme difficulty, in any segments populated by United States telephone operators, except when propagation conditions are poor. The amateurs of Canada have a special problem due to their close proximity to the United States. Inter-Canadian telephone communications are confined to those frequencies outside the bands used for United States telephone operation. All other Region II countries will have a similar problem.

4. The frequency allotment left for international use under this Docket, will force a re-alignment of all bands, both planned and unplanned, and will see an end to the Regional Band Plan sponsored by the International Amateur Radio Union under the leadership of the American Radio Relay League. This plan realistically divides the bands into United States telephone, international telephone, and exclusive telegraphy portions in the best interests of all amateurs throughout the world. The terms of the Docket are such as will create permanent antagonism between the amateurs of the United States of America and those of nearly all other countries. It will additionally generate friction within the ranks of the United States amateurs and will promote more divisions in their ranks than exist at present.
5. The amateurs of the world look to the amateurs of the United States of America for leadership, and respect that distinctly American national organization, the American Radio Relay League. The expansion proposed places that august body in an almost untenable position. It is the intention of the Canadian Amateur Radio Federation, in this brief, to comment on the terms of Docket 19162, to give the Canadian viewpoint, and to point out the inevitable undesirable consequences which will result if this Docket is implemented.
6. Docket No. 19162 brings out that, while it is possible to operate using telegraphy in the presence of telephone interference, the reverse is certainly not true. Operation under conditions of heavy interference is only possible when high quality communication equipment is employed. Unfortunately equipment of the necessary quality is sadly lacking in those areas where the International Amateur Radio Union has been fostering amateur radio activity in an attempt to increase communication capability and assist technological development. The recent disaster in Pakistan demonstrated the result of a lack of communications operators such as can be provided in the United States of America by amateur radio operators with their Hurricane Warning and Emergency Communication Networks. Amateur radio equipment of high quality and high power is readily available at moderate cost in the United States of America. Such equipment is available at greatly increased cost in most of the major countries of the free world. Many of these countries impose strict low power limitations for amateur radio operations. In many areas such equipment, or the components necessary to build such equipment, are either not available or are priced above the reach of the average amateur. In Canada, one of the more affluent countries, while equipment and components are available, their price is approximately fifty percent higher than in the United States of America. This prohibits their use by a large number of the amateur fraternity, especially those in the youthful, beginner category, on whose activities the future development of amateur radio and technology in general depends.
7. One aspect that must be considered is the long term political results of any effective curtailment of band use caused by this proposal in the large number of technologically inferior developing nations. These are the areas where the free world is in need of sympathetic rapport. It is to the amateurs and potential amateurs of these countries that the western world must look for leadership and understanding. The representatives of these countries will have little compunction in subsequently allotting those portions of the amateur bands that have, in their viewpoint, become virtually unusable to other than amateur use. This could create a series of situations such as exists today on the

amateur forty metre band, where the present frequencies allotted for telephone use in the United States of America and Canada are useless for communication after sunset due to the overwhelming interference from foreign broadcast services, many of which are merely propaganda outlets.

8. Occupancy of the high frequency spectrum by commercial and military communications is decreasing with the increasing use of cable and satellite facilities and extensive use of VHF/UHF repeater link-ups, and troposcatter. Within a few years it should be possible to extend the present amateur radio bands, and quite probably to obtain new bands for amateur operation and experimentation. This will require international agreement and co-operation. The process will be rendered much more difficult if the feeling grows that the amateurs of the United States of America and their administration are only interested in their own immediate well being and are not concerned with the development of amateur radio on the international level.
9. There are available, for total telephone use by United States amateurs, 615 channels, 3 kHz wide between 3500 and 30,000 kHz. The increased allotment proposed would make 741 channels available for this use; an increase of 126 channels with the main benefit accruing on 10 metres (50 channels) and 40 metres (25 channels). The Stanford Research Institute report (Amateur Radio: An International Resource for Technological, Economic and Sociological Development, August 1966) gives the relative band preference as:

80 metres - 23.3%;	40 metres - 20.0%;	20 metres - 18.2%;
15 metres - 9.1%;	10 metres - 9.7%;	Other Bands-19.7%.

On ten metres there is little congestion noted with the present allotment giving 400 channels for telephone use and, on 40 metres 8 of the channels proposed are to be used for inter-Region telephone communications. Considering the very large numbers of United States amateurs entitled to use the telephone modes for communications, their evident preference for operation on the 80, 40, and 20 metre bands and the small increase of channels proposed therein, there will be little or no relief from the congestion now present, while a maximum feeling of ill-will towards the United States will be created.

10. The amateurs of Canada are concerned with the probable effect of their continued operation if the proposals are implemented in full. They have no desire to be submerged by the amateurs of the United States of America and will request and continue to use distinctive sub-bands for telephone operation in order to maintain separate identity. They also have a need for relatively clear channels of telephone communication to serve the northern outpost stations whose personnel depend so much on amateur radio for contact with the outside world and for trans-Canada operations. Section 8 of the Docket notes that "the modest number of United States licences of (Extra Class) should not significantly affect foreign telephony operation therein and the greater possibility of establishing foreign contacts should be an incentive to qualify for the Extra Class licence". Following this statement to a logical conclusion,

the extra incentive would increase the numbers of Extra Class licences and thus put an end to the relative unoccupancy of these segments by the United States amateurs and force the amateurs of the rest of the world to again operate outside of the United States telephone frequencies. As a matter of interest, latest figures show that the number of Extra Class operators (12,000) is almost identical to the total number of Canadian amateurs of all classes. In addition, there is a small minority of United States amateurs who deliberately interfere with Canadian amateurs operating in the telephone segments now allotted for Extra Class use. The amount of this type of interference has been steadily growing since the Incentive Licensing programming commenced, particularly on the 80 and 40 meter bands. The amateurs of Canada can see no reason why this would cease if the present allotments were enlarged.

11. One of the main reasons for making the proposal is to provide greater incentive for advancement to higher class licences. A quick look at the allotments now given to the three classes and the allotment proposed does not bear out this intention. Under the present allotment, General/Conditional Class licences will gain 100 kHz; Advanced Class, 200 kHz; and Extra Class 100 kHz. If the increase on 10 metres is discounted (as this portion of the spectrum is only useful in periods of excellent propagation and no sound argument can be made for expansion as the United States telephone operators already occupy 70% of the total available frequencies), the classes will gain as follows: General - 100 kHz; Advanced - 75 kHz, and Extra Class - 75 kHz, thus giving the General Class more benefit than the other higher grade classes and lessening the present incentive for progression. This is clearly against the intent of Section 5 of the Docket.
12. The proposal allots 25 kHz for inter-Regional telephone communication in the 40 metre band. This may be worthwhile, in intent, to enable the amateur DX operator to more easily gain inter-Region contacts but this loss of frequencies for telegraph communications in a band that is very heavily congested solely to suit the purposes of a minority of amateur operators who are devotees of this phase of operating, cannot be justified. If this allocation is granted the amateurs of Canada will also request this privilege and, with the present telegraph interference, augmented by Canadian telephone interference, this portion will have little attraction for anyone. 7000 - 7100 kHz is the sub-band most extensively used for medium-haul telegraph communication and this mode of operation will undoubtedly continue to make full use of the whole available segment.
- 13(a). Consideration must be given to the use made of each band by the amateurs of the United States of America and other countries. The 20 metre band is the main band for international and inter-country contacts. All frequencies therein are heavily used during normal periods of activity and no expansion can be made without disrupting the working balance that the amateurs of the world have, over the years, achieved. Novice operation has never been contemplated on this band because of the effect such operation would have on either international telephone or international/domestic telegraph communication. Any change made here will create a maximum of ill-will and antagonism towards the United States of America.

13(b). The 10 and 15 metre bands are also extensively used for international and long-haul domestic communications but, in this regard, are only useful when propagation conditions are good to excellent. The present allotment on 10 metres (70%) is considered ample for continued use and future operation.

13(c). The 40 metre band is extensively used for medium-haul telegraph and, in the United States of America, for mobile operation but strong interference from international broadcasting stations precludes effective use of the 7100 - 7300 kHz segment during the hours of darkness. The proposed expansion of the telephone segment to 7150 kHz will leave no frequencies available for Canadian telephone use and the proposed 25 kHz for inter-Region operation is felt to be too large and of limited incentive.

13(d). The 80 metre band is mainly used for short-haul communications and, in Canada, for mobile operation. This band is extensively used for traffic operation and emergency communications and has greatest occupancy during the evening hours. Canadian amateurs are now allotted 3725 - 4000 kHz for telephone operation but, due to the high level of interference from the United States telephone and Novice operators, nearly all activity is confined to 3750 - 3800 kHz. The Canadian amateur knows, from long years of experience, the difficulty of maintaining telephone communications in the presence of telegraph interference. With the expansion proposed, Canadian amateurs would be left with no, relatively interference free, frequencies for telephone use. For the past four years the amateurs of Canada have given freely of their time, labour and finances to increase amateur radio activity by the blind. In the short time this programme has been in force, approximately two hundred blind operators have qualified and been licenced. Their numbers are steadily increasing. The equipment used, because of its ready modification for sightless operation, is the mono-band HW series of equipment manufactured by Heathkit. However, the 80 metre version of this series has a lower frequency limit of 3750 kHz so that all sets will require modification to enable their continued use on a Canadian telephone band that would be requested outside the proposed United States portion. Additionally, the 80 metre band is the one used in Canada for mobile operation. Considerable ingenuity and modification is required to enable the available mobile antennae used to operate below 3800 kHz but drastic changes will be required to lower their operating frequency down to a new Canadian telephone sub-band.

13(e). In the three lower bands, used by 61.5% of amateur operators, under the changes proposed, the Canadian amateur operators will be left with the following frequencies available for use without interference from the United States Amateurs using telephony or the United States Novices.

80 metres - NIL (3725 - 3750 kHz shared with United States Novices)

40 metres - NIL

20 metres - 50 kHz,

compared to the 50, 50, and 100 kHz they now find necessary for operation.

14. There is no justification for continued Novice operation in the Canadian/International telephone sub-bands. Placing their operating frequencies outside of those normally used for telegraph communication has given them little contact with other amateurs and has led to a "blind leading the blind" situation. The reasoning behind the Novice programme is to give the Novice operator experience and increase his operating ability and this can best be accomplished by increasing their involvement with higher qualified amateurs. The Novice programme has never been accepted by the amateurs of Canada due, in no small measure, to the ever-present interference caused by their presence in the Canadian telephone sub-bands. The request is therefore made that full consideration be given to moving the United States Novice frequencies into those portions of the bands that are used for international telegraph operation.

15. The national amateur organizations, founded and administered by the amateur operators of each country, are the key to the continued spirit of international fellowship and co-operation. These bodies must be convinced of the necessity for expansion, that any change made in the existing sub-band allocations will have a minimum effect on the activities of their members and that they will be able to make the necessary changes to frequency allocations to cause the minimum amount of disruption to their present balance between telephone and telegraph communications. Speaking for the Canadian Amateur Radio Federation, the main problem will be to convince the amateurs of Canada that any changes made are justified and to ensure that the existing spirit of friendliness, goodwill and co-operation that exists between the amateurs of Canada and the United States of America continues unabated. This the Federation cannot do under the terms of Docket 19162.

16. CONCLUSION

The expansion of the United States telephone sub-bands will not alleviate the existing congestion as the number of telephone operators would increase overnight to fill the newly available frequencies. A reduction in the number of amateur classes permitted telephone operation in the 80, 40 and 20 metre bands would be of more value in achieving the desired incentive to progress to the higher classes. Docket 19162 does not deal with the cause of the congestion - the easy acquisition of telephone privileges available to the United States Amateur in contrast to the restrictions imposed by virtually every other country - but is attempting to alleviate the undesirable effects of what are purely United States policies at the expense of all amateur radio operators outside the United States of America and, indeed, at the expense of many United States amateurs:

Respectfully submitted,

K.E. Rolison, VE3CRL, Secretary  
Canadian Amateur Radio Federation.

P.O. Box 204, Amherst View, Ontario, Canada.

S.....

Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, D.C. 20554

In the Matter Of

Amendment of Part 97 of the )  
Commission's Rules to provide ) DOCKET NO. 19162  
for expansion of the telephony )  
segments of the high frequency )  
amateur bands )

PETITION FOR RECONSIDERATION

The American Radio Relay League, Incorporated is a non-profit corporation having as members amateur radio operators licensed by the Federal Communications Commission and the Canadian Department of Communications. The Canadian Division of the League, while legally the same as any other Division, is actually different in that its members are resident in Canada, and are licensed by and responsible to the Department of Communications, although their operating practices and activities are very similar to those of members resident in the United States.

It should also be mentioned that the Canadian Division holds its own membership in the International Amateur Radio Union, the federation of national amateur radio societies, separate and distinct from that held by the League for its fifteen American divisions. It is thus recognized by the amateur radio societies of the world as spokesman for its 3269 members, representing the majority of Canada's active radio amateurs.

For the foregoing reasons, the Canadian Division and its members must consider the subject proposal from a somewhat different viewpoint than the rest of the League. Certainly, it is unusual and probably unprecedented for the Canadian Division to file comment on what at first sight might be considered a domestic proposal of the Commission. But the changes in telephony privileges now proposed are of such far-reaching effect, not only in Canada, but throughout the world, that comment becomes necessary. It is simply impossible to change the operating privileges, habits and practices of the majority of the world's amateurs without affecting the remainder, and Canadian amateurs would be among those most concerned.

It is difficult to believe that the Commission would proceed with such a proposal, or even consider it, without prior consultation with the licensing authorities of other countries, particularly those close to the United States. Such consultation is normal in the case of other services, and in fact, agreements between Canada and the United States already exist covering broadcast, television, and other services in the H.F. and V.H.F. bands. Such consultation and agreement, even on an informal basis is considered to be most desirable in the present case, simply because of

the proximity of our two countries.

Nor does it seem reasonable that the Commission would propose such action solely as the result of fourteen petitions and a few letters; the total number of persons signing such documents must be an infinitely small percentage of the total number of American amateur operators. Certainly the proposal is not universally popular; at least two recent polls in their Division by Directors of the League have shown a majority opposing any change.

It must be brought to the Commission's attention that the proposal has already been the subject of much critical comment, both in Canada and in other countries; not only has it been discussed "on the air" but the foreign amateur press has treated it also. Such comment has been uncomplimentary in many cases and can only diminish the image of the United States and its amateurs in the eyes of the remainder of the world's amateurs. The Commission must surely be aware that, because of its size, economic strength, and technological pre-eminence, the United States is looked to by many countries of the world for leadership and guidance in telecommunications matters. Any action by the Commission to downgrade this image in the eyes not only of other amateurs, but also of their licensing authorities, would be most unfortunate. Such indeed was the case some eleven years ago, when the Commission took unilateral action to expand the American telephony allocation on the 14 MHz band from 14200 - 14300 MHz, to 14200 - 14350 MHz. At that time, there was very considerable criticism and hard feeling, both spoken, and printed, even though the expansion was relatively minor. Should the present proposal be implemented, the result can well be imagined.

It is particularly unfortunate that this Proposal should have been made at this time, when the World Administrative Conference on Space Communications is only a few weeks away. In preparation for this Conference, the League, as Headquarters Society of the International Amateur Radio Union, has been expending considerable time and effort in establishing close and harmonious relations with the National Amateur Societies in the rest of the world, particularly in the smaller countries. Much of this has been to encourage these societies to approach their own governments, requesting them to follow the example of the United States in supporting amateur radio at this Conference. It is believed that the present proposal, by engendering ill will among amateurs and societies, could seriously affect what has already been accomplished.

The practice of having larger telephony allocations in countries other than the United States is of long standing; even in those countries having no sub-band allocations whatever, the "gentlemen's agreements" developed by amateurs themselves have largely been respected, to the extent that telephony is seldom heard elsewhere. The reason is not hard to find; power limitations are in many cases much lower, and the high cost of linear

amplifiers, high gain antennae, etc., together with the much lower economic level in the countries concerned, makes their possession difficult, if not impossible, even where higher powers are permitted.

While amateurs in Canada have, in general, the same power restrictions as in the United States, equipment costs nearly half as much again; lower power is therefore more prevalent. Canadian amateurs, as do those in other countries, wish at times to communicate with each other, free of this interference, which is so severe because of our proximity to one another. It has become universal practice to operate in the "Canadian phone bands" except when wishing to communicate with amateurs in the United States, or foreign amateurs already operating in the American bands. Moving into the "American phone bands" is a recent development, brought about by the rapid growth in the use of transceivers, as distinct from separate transmitters and receivers.

Much of the pressure for expansion of the American voice sub-bands undoubtedly comes from congestion in the General/Conditional Class segments as a result of the Commission's institution of its own incentive licensing program in Docket 15928. The leadership displayed by the Commission in this matter has been the subject of considerable favourable comment in many countries; certainly Canadian amateurs must approve of it, since we have had a form of incentive licensing for many years, as a result of which approximately 70% of Canadian amateurs hold the highest grade of license available to them. But surely, if the Commission feels that it went too far in restricting the privileges of lower grade licenses, it should correct the matter by reverting to "Phase I" of the programme (in effect from November 1968 to November 1969), rather than by enlarging all the telephony sub-bands at the expense of its neighbours. It is not agreed that either action is necessary, since either would remove considerable incentive to up-grade, and thus negate the concept of incentive licensing.

It is not difficult to foresee the result should the present proposal be implemented; as they have in the past, Canadian and foreign amateurs will simply move lower in frequency by an equivalent or greater amount. Where regulation changes are required, they will be forthcoming; in Canada we have been assured of this by the Department of Communications. Eleven years ago, when the American 14 MHz voice sub-band extended, not only was the Canadian 14 MHz voice allocation expanded accordingly, but the 21 MHz, and 28 MHz voice sub-bands were extended by 100 KHz each. The Commission's view that such a move would be unlikely is completely in error; it is already being discussed in Canada and elsewhere, and, in fact, some amateur operators in Canada have already informally proposed making the entire amateur band available for any mode of transmission.

It is obvious that the Commission has not foreseen any such move, since, on the amateur 3.5, 7.0 and 21.0 MHz bands they have not provided

any space between United States voice sub-bands and frequencies for Novice Class licensees. The resultant interference between the two modes of operation can well be imagined; Canadian and foreign voice operators will experience extreme interference from Novice type A1 transmissions, while Novice licensees, crystal controlled and running low power, using simple antennae and low cost receivers, will face interference from much higher power single side-band, suppressed carrier transmissions. Such a condition already exists to some extent between 3725 and 3750 KHz, jointly occupied by American Novices and Canadian voice operators.

This failure to provide space for foreign and Canadian voice operation between American voice and Novice assignments is one of the most objectionable features of the Commission's proposal; it is particularly so on the 3.5 and 7.0 MHz bands because of the proximity of Canada and the United States. Moreover, it could easily have been avoided by some prior, even if informal, consultation between the Commission and the Department of Communications.

Since publication of the subject docket, the Director of the Canadian Division of the League has been the recipient of much comment from Affiliated Radio Clubs and members; objection has been universal, only one letter having been received from an individual amateur prepared to accept the proposal while not being in favour of it. Objection is strongest regarding proposals for the amateur 3.5 and 14.0 MHz bands, since these are obviously the ones in greatest use and which would be most affected, but extends even to the 28 MHz band, where some space is admittedly available.

Canadian amateur operators have always made extensive use of the 3.5 MHz band. The size of the country and the low density of population have precluded the use of other frequencies, such as 144 MHz., since they did not provide adequate coverage. It is perhaps the most widely used amateur band in Canada for internal communication, in spite of the fact that 25 KHz., (3725 - 3750 KHz) are shared with American Novice operators. While Canadian voice operation could, and undoubtedly would be moved to some lower portion of the band such as 3650 - 3700 KHz., in order to avoid Novice interference, there would be much less space available for other modes as a result. Technically there would be some problems with mobile antennae, and certain equipment not designed for these lower frequencies, such as the Heathkit HW-12 transceiver, but presumably these could be overcome. Admittedly, there is much congestion at the moment in the portion 3900 - 4000 KHz., where practically all Public Service Nets must of necessity operate, but this could be alleviated by reverting to Phase I of the incentive licensing program, i.e. extending the General/Conditional Class portion to 3850 - 4000 KHz.

The amateur 7.0 MHz band is a rather special case; the Canadian voice allocation of 7150 - 7200 KHz is only gradually coming in to use for

daylight operation, while most of the band becomes useless after dark, due to broadcast interference. It is doubtful if adequate space is available for all types of licensees on this band, and objection must again be made to the Commission's proposals, since no space is provided for Canadian or foreign voice operation, clear of American voice and Novice operation. This band is very popular throughout the world for A1 transmission and the present proposal would seriously restrict such operation. There can be no real objection to the proposed "window" for inter-regional contacts between 7075 - 7100 KHz., in order to legalize such operation, except to question somewhat its width; with space on this band already at a premium, A1 transmission would be further compressed. It is suggested that on this band also, reversion to "Phase 1" may be the only answer.

Probably the most intensely used, and hence most congested amateur band is 14 MHz., it is available for some form of communication in some part of the world practically every day and throughout the twenty-four hours. It is very extensively used for long-range international contacts as well as medium and long range contacts within Canada and the United States, and is the main frequency used for traffic to and from the Canadian Arctic. Any attempt to expand the American voice allocations, however, would simply result in Canadian and foreign voice operation on even lower frequencies, probably as low as 14050 KHz, leaving an unreasonably small portion available for other modes. Any changes on this and higher frequency bands would affect the rest of the world during some part of the day, and would generate an enormous amount of ill will and consequent criticism. It is for this reason in particular that the Commission's proposal is considered objectionable and ill-advised.

The 21 MHz band is somewhat similar, but the congestion is by no means as severe as on 14 MHz. For this reason, expansion of the American voice sub-bands does not seem to be justified, but removal of the Novice licensees from some portion, say 21.200 to 21.250 MHz, of the foreign phone bands would be most acceptable to Canadian and overseas operators alike. This is another band on which reversion to Phase 1 of the Commission's incentive licensing programme might be the solution.

There does not seem to be any reason for expansion of American voice sub-bands on 28 MHz. There is little, if any, congestion, and practically all voice operation, world-wide, is in the portion 28.5 - 29 MHz., presumably because of the ready availability of commercial equipment having only one crystal for that portion of the band. If the Commission is serious in its desire to provide additional incentive for up-grading, it could be done by restricting the frequencies between 28.5 and 28.7 MHz to higher grade licensees, thus forcing more operation above 28.7 MHz where there is little or no operation at present.

There can be little or no objection to providing some space for Novice licensees on this band; the portion between 28.0 and 28.5 MHz. is

not heavily occupied, and some additional activity in this area seems desirable and justified. It should be noted, however, that Region 1 of the International Amateur Radio Union has embarked on a serious study of propagation in the auroral zone on this band. Canada is particularly involved, since several of the necessary beacons will be located in the Canadian Arctic. The frequencies set aside for this investigation are 28.150 - 28.200 MHz, and it is therefor suggested that Novice operation be higher in frequency, say 28.2 - 28.3 MHz. It is worthy of note that the United States Bureau of Standards in Boulder, Colorado has shown considerable interest in this project.

It is therefor requested, for the foregoing reasons, that the Commission reconsider the whole Proposal of Rule-making set forth in Docket 19162, and withdraw it in toto, with the possible exception of the "window" for inter-regional contacts on the 7 MHz. amateur band, and provision of some frequencies on 28 MHz. for Novice licensees. It is further requested that the Commission then enter into formal or informal discussions with other licensing authorities, particularly the Canadian Department of Communications, with a view to establishing some mutually agreeable plan to provide reasonable frequency allocations for the Amateur Service. It is believed that only in this way can the misunderstandings and ill will of the past be avoided.

All of which is respectfully  
submitted

The American Radio Relay League, Inc.,  
Canadian Division.

"Signed"

Noel B. Eaton,  
Director.

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