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CANADA

CANADIAN PROPOSALS

REGIONAL ADMINISTRATIVE MEETING BROADCASTING CONFERENCE (REGION 2)

SECOND SESSION - RIO DE JANEIRO, 1981

OTTAWA, CANADA

MAY 1981



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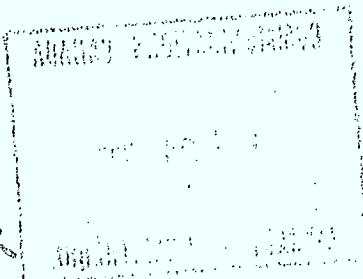
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Section 1

Foreword

The proposals by Canada have taken account of the Report to the Second Session of the Conference and have included those matters that were not addressed by the First Session such as the text of the Regional Agreement.

The Canadian requirements for broadcasting stations to be included in the plan have been submitted in accordance with the schedule established by the First Session. In submitting these requirements, account has been taken of the broadcasting stations currently operating in Canada, of those broadcasting stations authorized to begin operation in the near future, and of the foreseen longer-term need for new stations. These requirements reflect existing and future needs for broadcasting stations in Canada. We also recognize that there is a need to accommodate the requirements of all of the countries in the Region in an equitable manner.

While accepting the technical criteria and data as contained in the Report to the Second Session, Canada is nevertheless proposing some minor changes as a result of further technical studies.

Also included in these proposals are a resolution and a recommendation addressing two important miscellaneous items that must be dealt with by the Conference. Also included in these proposals is a resolution which pertains to a procedure to be used during the period following the Conference and prior to the coming Final Acts. The other pertains to the preliminary preparations for the Regional Administrative Radio Conference (RARC) in 1985 which will deal with the frequency band 1605-1705 kHz.

In preparing these proposals, Canada is grateful to the Inter-American Telecommunications Conference (CITEL) which has provided an ideal forum of multi-lateral meetings where Administrations in the Region were able to exchange views and arrive at preliminary understandings. We believe that through the efforts of CITEL, the work of the Conference will be eased considerably and this in turn will greatly contribute to the success of the Conference.

Section 2

Proposed Regional Agreement

Canada proposes that the attached text be adopted by the Second Session of the Conference, as the new Regional Agreement.

Based on the agreement for Regions 1 and 3, this text contains certain modifications to accommodate the different circumstances in Region 2. It was discussed during a number of meetings of the Working Group on Radiobroadcasting under Permanent Technical Committee II of the Inter-American Telecommunications Conference.

PREAMBLE

In order to facilitate relations among the Member Countries of Region 2, mutual understanding, and cooperation on broadcasting in the medium frequency band;

in order to improve the utilization of the frequency band allocated to the medium frequency broadcasting service and to achieve a satisfactory broadcasting service in all the countries;

recognizing that all countries have equal rights, and that, in the application of this Agreement, the needs of each country shall be fulfilled as far as possible;

recognizing that the protection of mutually accepted services is a major objective for all countries, attempting thereby to bring about better coordination and the use of more efficient facilities;

the delegates of the member states of the International Telecommunication Union listed below, meeting in Rio de Janeiro at a Regional Administrative Radio Conference convened under the provisions of the International Telecommunication Convention (Malaga-Torremolinos, 1973) adopt, subject to approval by the competent authorities of their respective countries, the following provisions relating to the broadcasting service in Region 2 for the medium frequency band:

.....
.....
.....

ARTICLE 1

Definitions

For the purposes of this Agreement the following terms shall have the meanings defined below:

Union:	The International Telecommunication Union;
Secretary-General:	The Secretary-General of the Union;
I.F.R.B:	The International Frequency Registration Board;
C.C.I.R:	The International Radio Consultative Committee;
Convention:	The International Telecommunication Convention (Malaga-Torremolinos, 1973);

Radio Regulations: The Radio Regulations annexed to the Convention (until the new edition of the Radio Regulations is published, reference should be made to the Final Acts of the World Administrative Radio Conference, Geneva, 1979);

Region 2: The geographic area defined in number 394 of the Radio Regulations;

Master Register: The Master International Frequency Register;

Agreement: The whole of this Agreement including its Annexes;

Plan: The Plan and its appendices forming Annex 1 to this Agreement;

Contracting Member: Any Member of the Union which has approved or acceded to the Agreement;

Administration: Any governmental department or service responsible for discharging the obligations undertaken in the Convention and the Radio Regulations.

Station: A medium frequency broadcasting station.

ARTICLE 2

Frequency Band

The provisions of this Agreement shall apply to the frequency band 535 to 1605 kHz allocated to the broadcasting service under Article 8 of the Radio Regulations.

ARTICLE 3

Execution of the Agreement

1. The Contracting Members shall adopt for their stations operating in Region 2 in the frequency band referred to in this Agreement, the technical characteristics specified in the Plan.
2. The Contracting Members shall not alter the technical characteristics of the assignments in the Plan, introduce new assignments into the Plan, or bring the assignments of the Plan or new stations into use, except in accordance with Articles 4 and 5.
3. The Contracting Members undertake to study and put into practice the measures necessary to avoid or to reduce any harmful or objectionable interference that might result from application of this Agreement.

ARTICLE 4

Procedure for Modifications to the Plan

1. In the present Article the expression "assignment in accordance with the Agreement" means any frequency assignment appearing in the Plan, or for which the procedure of this Article has been successfully applied.

2. When a Contracting Member proposes:

- to change the characteristics of a frequency assignment to a station shown in the Plan, whether or not the station has been brought into use, or
- to introduce a new assignment into the Plan, or
- to bring into use a new station not appearing in the Plan, or
- to change the characteristics of a frequency assignment to a station for which the procedure in this Article has been successfully applied, whether or not the station has been brought into use, or
- to cancel a frequency assignment to a station;

the following procedure shall be applied before any notification is made under the provisions of Article 12 of the Radio Regulations (see Article 5 of this Agreement).

3. Proposed Changes in the Characteristics of an Assignment, Introduction of a New Assignment or the Bringing into Use of a New Station.

3.1 Any administration proposing to change the characteristics of an assignment, introduce a new assignment or bring a new station into use, shall seek the agreement of any administration that has an assignment in accordance with the Agreement in the same channel or in adjacent channels with separation up to 30 kHz and that is considered adversely affected in accordance with the provisions of 3.9.

3.2 An administration proposing to change the characteristics of an assignment, introduce a new assignment or bring a new station into use shall so inform the I.F.R.B. and notify the characteristics of the modification or new assignment in the format specified in the Plan.

3.3 If the modification proposed is of a type described in 3.12 the information sent to the I.F.R.B. shall contain a reference to that paragraph.

3.4 In cases not specified in 3.12, in order to seek the agreement contemplated in 3.1, the interested administration shall, at

the same time, inform the I.F.R.B. of the names of the administrations with which it considers an attempt must be made to reach an agreement, and the names of those whose agreement has already been obtained.

3.5 The I.F.R.B. shall determine, by using Annex [] to the Agreement, those administrations whose assignments in accordance with the Agreement are considered adversely affected in accordance with the provisions of 3.9 and shall immediately forward the results of its calculations to the administration proposing the modification to the Plan. The I.F.R.B. shall add the names of these administrations to the information received, and shall publish all the information in a special section of its weekly circular.

3.6 The I.F.R.B. shall send to the administrations listed in the special section of its weekly circular a telegram informing them of the publication and shall forward the result of its calculations to them.

3.7 The I.F.R.B. shall also determine the effect of the proposed modification on pending modifications already received by the I.F.R.B. which have not yet been included in the Plan. The I.F.R.B. shall forward the results of its calculations to the administrations whose proposed modifications would adversely affect, or would be adversely affected by, other pending modification proposals not yet included in the Plan.

3.8 An administration that considers it should have been included on the list of administrations whose frequency assignments are considered to be adversely affected may request the I.F.R.B. to include it on that list, within 30 days from the date of publication, indicating the reasons therefor. A copy of the request will be sent to the administration proposing the modification to the Plan.

3.9 Any assignment in accordance with the Agreement shall be considered adversely affected when appropriate calculations determine that objectionable interference occurs as a result of a proposed modification to the Plan. The calculations determining the possibility of objectionable interference shall be based on Annex [] to this Agreement.

3.10 An administration may request from an administration proposing a modification to the Plan, the supplementary information identified in Annex []. Similarly the administration that proposes a modification to the Plan may ask any administration for such supplementary information as it may consider necessary to determine whether objectionable interference will be caused. The administration asking for supplementary information shall inform the I.F.R.B. of its request.

3.11 Comments from administrations on the information published in compliance with the provisions of 3.5 shall be sent either directly to the administration that is proposing the change or through the I.F.R.B., but the I.F.R.B. must always be informed that comments have been made.

3.12 The agreement mentioned in 3.1 is not required if the proposed modification either:

- entails no increase in effective monopole radiated power in any direction, or
- relates to a change in the site of the station within the tolerances specified in Annex [] to the Agreement, or
- involves notification of a new station on the same frequency, submitted simultaneously with the notification of the cancellation of an assignment under 4.1, provided that no objectionable interference is caused to assignments in accordance with the Agreement or such interference does not exceed that previously caused.

In such cases, the administration intending to modify the Plan may put its project into effect, subject to the application of the relevant provisions of Article 12 of the Radio Regulations.

3.13 Any administration that has not forwarded its comments to the administration that is proposing the modification or to the I.F.R.B. within a period of 60 days following the date of the weekly circular referred to in 3.5, shall be considered to have agreed to the proposed change. This time limit may be extended by 60 days for an administration that has requested supplementary information in accordance with the provisions of 3.10, unless the information identified in Annex [] was already forwarded and the I.F.R.B. so informed.

3.14 If in seeking agreement an administration makes changes in its proposal, the provisions of 3.2 and the consequent procedure shall again be applied.

3.15 If no comments have been received on expiry of the periods specified in 3.13 or if an agreement has been reached with the administration that submitted comments, the administration proposing the modification may proceed with its project and shall inform the I.F.R.B. of such action indicating the final characteristics of the assignment and the names of the administrations with which agreement has been reached.

3.16 The I.F.R.B. shall publish the information received under 3.15 in a special section of its weekly circular and indicate the names of the administrations with which the provisions of this Article have been successfully applied. The frequency assignment concerned shall enjoy the same legal status recognized for an assignment in accordance with the Agreement.

3.17 Should the administrations involved fail to reach agreement, the I.F.R.B. shall conduct such studies as those administrations may request; the I.F.R.B. shall inform the administrations of the findings of its studies and shall submit appropriate recommendations for resolution of the problem.

3.18 Any administration may, during application of the procedure for modification of the Plan or before initiating such procedure, request assistance from the I.F.R.B., especially in securing agreement of another administration.

3.19 If, after application of the procedure described in this Article, the administrations concerned are unable to reach an agreement, they may resort to the procedure established in Article 50 of the Convention. The administrations also may apply, by common agreement, the Optional Additional Protocol to the Convention.

3.20 In any case, the pertinent provisions of Article 12 of the Radio Regulations shall apply for notification of the assignment and subsequent technical examination by the I.F.R.B. If no agreement has been reached when the assignment is notified in accordance with Article 5, the I.F.R.B. shall proceed to list it in the Master Register with a symbol to indicate that the assignment is listed subject to the condition that no harmful interference will be caused to assignments in accordance with the Agreement.

3.21 The I.F.R.B. shall keep an up-to-date master copy of the Plan as modified by application of the procedure specified in this Article.

3.22 The I.F.R.B. shall inform the Secretary-General of any modifications to the Plan. The Secretary-General shall publish new editions of the Plan at appropriate intervals, not to exceed three years. Modifications to the Plan shall be published by quarterly recapitulative supplements keeping the same format.

4. Cancellation of an assignment.

4.1 When an Administration decides to cancel an assignment in accordance with the Agreement, the administration shall immediately notify the I.F.R.B. The latter shall publish a notice of this cancellation in a special section of its weekly circular. The notice shall include the following information:

- Frequency
- Call sign
- Location (city, state and geographical coordinates)
- Station power
- Actual or planned date of shutdown
- Hours of operation

An assignment shall be considered cancelled from the date indicated in the I.F.R.B. weekly circular.

4.2 Simultaneously with the notification of the cancellation of an assignment, the notifying administration may notify a new assignment on the same frequency as the cancelled assignment, provided that the conditions specified in 3.12 are met.

ARTICLE 5

Notification of Frequency Assignments

1. When an administration proposes to bring into use an assignment in conformity with the Agreement, it shall notify it to the I.F.R.B. in accordance with the provisions of Article 12 of the Radio Regulations. Any such assignment recorded in the Master Register as a result of application of the provisions of Article 12 of the Radio Regulations shall bear a special symbol under the Remarks column and a date under column 2.a or under column 2.b.

2. When relations between Contracting Members are involved, equal consideration shall be given to all frequency assignments brought into use in accordance with the Agreement and recorded in the Master Register, regardless of the date that appears in column 2.a or column 2.b.

ARTICLE 6

Duration of the Plan

The annexed Plan has been established with a view to meeting the requirements of the broadcasting service in the band concerned until 31 December 1987.

ARTICLE 7

Special Agreements

To supplement the procedures provided for under Article 4 of the Agreement and to facilitate application of the procedures to improve utilization of the Plan, Contracting Members may conclude or continue special agreements in accordance with the pertinent provisions of the Convention and the Radio Regulations.

ARTICLE 8

Scope of the Agreement

1. This Agreement is binding upon the Contracting Members in their mutual relations, but not in their relations with noncontracting countries.
2. Should a Contracting Member make reservations concerning the application of any provisions of the present Agreement, the other Contracting Members shall not be obligated to respect these provisions in their relations with the Member that has formulated the reservations.

ARTICLE 9

Approval of the Agreement

Contracting Members shall notify the Secretary-General of their approval of this Agreement as soon as possible by depositing an instrument of approval; the Secretary-General shall immediately inform the other Members of the Union.

ARTICLE 10

Accession to the Agreement

1. Any Member of the Union in Region 2 that has not signed this Agreement may at any time deposit an instrument of accession. Accession shall apply to the Plan as it stands at the time of accession, and no reservation may be formulated. The Secretary-General shall be notified of the accession and shall inform immediately the other Members of the Union.
2. Accession to the Agreement shall become effective 30 days after the Secretary-General has received the instrument of accession.

ARTICLE 11

Denunciation of the Agreement

1. Any Contracting Member may denounce the present Agreement at any time through a notification sent to the Secretary-General, who shall inform the other Members of the Union.
2. Denunciation shall become effective one year after the date on which the Secretary-General received notification of denunciation.

ARTICLE 12

Entry into Force of the Agreement

This Agreement shall enter into force on January 1, 1983.

ARTICLE 13

Duration of the Agreement

The Agreement shall remain in effect until it is revised by a competent Administrative Radio Conference of Region 2.

Symbols: [] refers to information to be specified at the Conference.

Section 3

Canadian Requirements to be Included in the Plan

Canadian AM radio station requirements to be included in the regional plan which will be established at the Second Session of the Conference have been divided into two groups pursuant to Chapters 7 and 8 of the Report to the Second Session of the Conference.

The first group of Canadian requirements, known as the "basic inventory", is composed of all existing AM broadcasting stations with powers of 100 watts or greater in the band 535-1605 kHz and those forecast to be authorized by December 31, 1982. Most of these requirements were notified to the IFRB prior to the First Session of the Conference. Since that time, modifications to these requirements including the addition of new stations which are now forecast to be authorized in this period until December 31, 1982 have been notified in accordance with 7.3 of the Report to the Second Session. Canada reserves the right to make additional modifications to the basic inventory as needs arise up until the start of the Second Session.

The second group of Canadian requirements, known as the Phase 2 inventory, is composed of AM broadcasting stations in the band 535-1605 kHz intended to be authorized in the period between January 1, 1983 and December 31, 1987. Canada will submit these requirements to the IFRB in accordance with 7.4 of the Report to the Second Session. For a portion of these requirements Canada will specify suitable frequency channels on the basis of 10 kHz channel spacing.

Section 4

Technical Data Proposed to be Used
in the Preparation of the Plan and in the
Application of the Agreement

Canada proposes that the technical criteria and data, as contained in the Report to the Second Session of the Conference (hereinafter referred to as the Report) be adopted by the Second Session of the Conference, subject to corrections and changes as contained in Sections 4.1 and 4.2 of this proposal.

It is further proposed that all such technical criteria and data be re-arranged in the following general format for inclusion as an Annex to the Final Acts of the Regional Administrative MF Broadcasting Conference (Region 2) 1981:

- Chapter 1 - Definitions and Symbols
- Chapter 2 - Broadcasting Standards
- Chapter 3 - Ground-wave Propagation
- Chapter 4 - Sky-wave Propagation.

Having examined in depth the issues involved in reducing the channel spacing from 10 kHz to 9 kHz, and considering that:

- financial and operational disruption resulting from conversion would outweigh the benefits since very few new stations could be accommodated in congested areas where they are most needed;
- service coverage in fringe areas would be considerably impaired, denying adequate reception to rural residents;
- existing incompatibilities could be resolved more cost-effectively by other means, such as a more widespread use of directional antennae;
- the potential for inter-regional interference is minimal and could be further reduced by the adherence to appropriate IFRB coordination procedures;

Canada therefore proposes that a 10 kHz channel spacing be adopted by the Second Session of the Conference.

- 4.1 PROPOSED CORRECTIONS TO THE ENGLISH VERSION OF THE ITU REPORT TO THE SECOND SESSION OF THE CONFERENCE. (FOR CORRECTIONS TO THE FRENCH VERSION OF THE ITU REPORT, REFER TO THE FRENCH VERSION OF THESE PROPOSALS).

CHAPTER 2

Page 7, item 2.3.4.1; "No station ~~which~~ has..."

Page 8, item 2.3.4.3; "...specified in paragraph 4.5.2 4.5 (Chapter 4)."

CHAPTER 3

Page 12, item 3.1.3.3a; "...conductivity σ_1 at distance..."

Page 13, item 3.2.1, definition of F_c ; "...Figure 4 and or Table III..."

Page 13; change item '3.3.2' to '3.2.2'.

Page 13, item 3.2.2; "...Table I and or Figure 2 may be used."

Page 15, item 3.2.2.10; "Figure 9 ~~shewas~~ shows the average..."

Page 15, item 3.2.2.12; insert note after equation " $b = b_T + \dots$ " as follows:
"Note that arc cos should be given the same sign as $\sin(b_R - b_T)$."

Page 16, item 3.2.2.13, first paragraph, second item; "...in this paragraph 3.2.2 3.2 shall..."

Page 17, Figure 1, right ordinate; for G_V from +3 to -3 dB, the marks should be opposite 424, 378, 337, 300, 267, 238 and 212 mV/m respectively.

Page 25, Figure 4, right scale label; "Field strength (dB(uV/m))"

Page 31, Figure 8 Map of magnetic declination (~~dotted curves east declination, continuous curves west declination~~)

Page 32, Figure 9 caption on right-hand side; "Time before ~~sunset~~ sunrise (hours)"

ANNEX D

Page 75; add sentence: "See table in section 3.1.2."

ANNEX E

Page 97, Introduction, third paragraph; "This Report includes a section giving Annex gives information on the mathematical methods used to calculate the field strengths using the Norton surface wave equation and the Bremner residue series. The report also contains a description of the various sub-routines used in the computer programme-and-a-Fortran of the programme."

Reason Annex E does not include a programme listing.

Page 97, item I - second sentence, change 'P₁' to 'p₁': "p₁ is the..."
- equation for b, reverse subscripts: "b = 2b₂ - b₁"
- equation for p, write: "p = πD cos (b₂)/Xλ cos(b₁)"

Page 98, item I.1) title; "p less than or equal to 0.65, b any value"

Page 98, item I.2), equation for u; change '+' to '=': "u = 1 - 2 p cos(b)..."

Page 99, item I.4); "...b greater than or equal to π/4 or p"

Page 100, first equation at top of page; remove all excess characters after 'D'.

Page 102, Reference 1; 'STEGON' to "STEGUN".

ANNEX F

Page 117, change 'NORTE' to 'NORTH' at top of Figure 2.

GENERAL NOTE: The chapter number should be included on all Figure and Table identifications, e.g., Figure 1 on page 17 would become Figure 3.1.

4.2 PROPOSED MODIFICATIONS AND CHANGES TO THE ITU REPORT TO THE SECOND SESSION OF THE CONFERENCE.

CHAPTER 1 Definitions and Symbols

No change.

CHAPTER 2 Planning

Sections 2.1 and 2.2 - Planning Principles and Methods

Canada continues to support these planning methods; however, they need not be included in the Final Acts since they deal only with the work of the Second Session.

Sections 2.3 - Planning Criteria

This section should be included in Chapter 4 "Broadcasting Standards" (see Annex B comments).

CHAPTER 3 Propagation

No change.

CHAPTER 4 Broadcasting Standards and Transmission Characteristics

Section 4.1 - Channel spacing and carrier frequencies

Consensus could not be reached on this topic during the First Session of the Regional Broadcasting Conference, Buenos Aires, 1980. The matter has therefore been referred to the IFRB and to a Panel of Experts, in order that an appropriate comparative report on 9 kHz and 10 kHz channel spacings be prepared for submission to the Second Session (see Resolution A).

This Regional Plan is based on 10 kHz channel spacing and on carrier frequencies divisible by 10 kHz.

Section 4.2 - Class of Emission

No change.

Section 4.3 - Bandwidth of Emission

4.3.1 For 9 kHz channel separation

The Plan will be drawn for a necessary bandwidth of 9 kHz. For 9 kHz necessary bandwidth, only 4.5 kHz audio bandwidth could be obtained. While this might be an appropriate value for some administrations, others which employ or wish to employ more sophisticated or wider bandwidth systems may use occupied bandwidths of the order of 20 kHz (approximately 10 kHz audio frequency bandwidth). Any administration whose station is adversely affected by such operation may require the modification of interfering station's emissions in order to eliminate the interference.

4.3.2 For 10 kHz channel separation

The Plan will be drawn for a necessary bandwidth of 10 kHz. For 10 kHz necessary bandwidth, only 5 kHz audio bandwidth could be obtained. While this might be an appropriate value for some administrations, others which employ or wish to employ more sophisticated or wider bandwidth systems may use occupied bandwidths of the order of 20 kHz (approximately 10 kHz audio frequency bandwidth). Any administration whose station is adversely affected by such operation may require the modification of the interfering station's emissions in order to eliminate the interference.

Section 4.4 - Nominal usable field strength
No change.

Section 4.5 - Channel protection ratios

4.5.1 - Co-channel protection ratio

The Plan ~~will be~~ is based on a co-channel protection ratio of 26 dB.

4.5.2 - Adjacent channel protection ratios

4.5.2.1 For 9 kHz channel separation

- protection ratio for the first adjacent channel : 5 dB*
- protection ratio for the second adjacent channel : -29.5 dB

4.5.2.2 For 10 kHz channel separation

- protection ratio for the first adjacent channel : 0 dB
- protection ratio for the second adjacent channel : -29.5 dB

4.5.3 - Protection ratio for stations belonging to a synchronized network

The Plan ~~will be~~ is based on a value of 8 dB.

* Smaller values for the first adjacent channel protection ratio, such as 0 dB, may be used, subject to agreement between the countries concerned or affected.

Reason for changes to Chapter 4

All references to a 9 kHz channel separation have been removed since Canada is proposing the retention of a 10 kHz channel separation.

CHAPTER 5 Radiation Characteristics of Transmitting Antennae

No change. Should be included in Annex F.

CHAPTER 6 RSS Addition of Weighted Interference Contributions to Determine Usable Field Strength

No change. Retain as an Annex to the Final Acts because it describes an approved method to determine usable field strength.

CHAPTER 7 Basic Inventory of the Requirements of Administrations

To be deleted since the procedure described deals with the preparations for the Second Session.

CHAPTER 8 Procedure to be followed by the Board in Preparing the Second Session of the Conference

Canada continues to support this procedure for the preparation of the Second Session; however it needs not be included in the Final Acts.

ANNEX A Planning Method

Canada continues to support this planning method; however, it was prepared for the use of administrations during the inter-sessional period and Annex A need not be included in the Final Acts. However, the following revised texts of Sections 8 and 9 of Annex A are to be included in appropriate sections of Chapter 4, "Broadcasting Standards and Transmission Characteristics":

"Receiver image constraint"

In the initial evaluation of the frequency most appropriate for use by a station, an additional ground-wave protection consideration, the receiver image constraint, should be applied, since it minimizes the possibility for interference created by the characteristics of receivers within the service contours of stations in the same area.

However, in areas where usable channels are scarce, administrations may wish to implement assignments despite this constraint.

The mechanism which causes this constraint is the lack of image frequency rejection in most common receivers. A receiver tuned to frequency f will also receive a signal at f plus twice the intermediate frequency.

Protection against this interference mechanism requires the same level of protection as for the second adjacent channel.

Summary of ground-wave protection requirementsTABLE V

	Protected contour ¹⁾ (Nominal usable field strength) (uV/m)	Protection ratio (dB)	Level of interfering signal (uV/m) ¹⁾
Co-channel Daytime Class A	100	26	5
Co-channel Daytime Class B and C	500	26	25
Daytime and night-time First adjacent channel Receiver oscillator radiation constraint²⁾ Receiver image constraint³⁾ 10 kHz 9 kHz	500 500	0 5	500 280
Daytime and night-time Second adjacent channel <u>Receiver image constraint²⁾</u>	500	-29.5	15,000
Daytime and night-time Third adjacent channel	25,000	0	25,000

1) These values are valid for noise zone 1 but can be altered to be appropriate for noise zones 2 and 3 using the table of nominal usable field strengths (see Chapter 4, section 4.4).

2) Frequency plus or minus 450 900 to 460 920 kHz."

3) Frequency plus or minus 940, 920 or 930 kHz.

Reason

Recent studies in Canada and the U.S.A. on modern receivers indicated that:

- a) there is no longer a need for the receiver oscillator constraint;
- b) the receiver image constraint should be -30 dB for assignments on frequencies 900 to 920 kHz above that of the protected station.

Also, the 9 kHz channel spacing reference has been deleted.

ANNEX B Notes (See Chapter 2)

Section 2.3.1

Canada accepts this section, to be added to Section 2.3.1 of Chapter 2, but believes, however, that a more reliable service would result from the use of the sky-wave field strength 10% of the time throughout Region 2.

Section 2.3.3.1

Canada has no objection to the inclusion of this section in the appropriate chapter of the Final Acts.

ANNEX C Atlas of Ground Conductivity

Canada supports the inclusion of the latest version of the Atlas in the Final Acts.

ANNEX D Field-Strength Curves for Ground-Wave Propagation

Canada supports the inclusion of these curves in the Final Acts, with the addition of a note under the title to read: "see Table in Section 3.1.2".

ANNEX E Mathematical Discussion and Computer Program for Ground-Wave Curves

Canada continues to support these methods as useful technical background; however they need not be included in the Final Acts since the field-strength curves developed by these methods are included in Annex D.

ANNEX F An Introduction to Directional Antenna Pattern Calculation

To be retained. Canada believes this Annex to be useful in the calculation of directional antenna parameters. (see comments on Chapter 5).

ANNEX G Characteristics of Stations of Administrations which have not replied to IFRB Circular-letter No. 441

This Annex was prepared for the use of administrations during the inter-sessional period and need not be included in the Final Acts.

ANNEX H Form for Notifying Characteristics of Region 2 Broadcasting Stations in the Band 535-1605 kHz

To be retained as an Appendix to the Plan.

Section 5

RESOLUTION A

RELATING TO INTERIM MODIFICATIONS TO THE
PLAN ANNEXED TO THE REGIONAL AGREEMENT ON MEDIUM FREQUENCY
BROADCASTING FOR REGION 2.

The Regional Administrative MF Broadcasting Conference (Region 2),
Rio de Janeiro, 1981,

considering

- a) that, during the interim period between the signing of the Agreement and the date of its entry into force, proposals for modifications to the Plan as are contemplated in Article 4 may be expected to arise;
- b) that it is desirable to avoid the delays and complications which would be caused by an interim accumulation of unprocessed modifications;
- c) that it is therefore desirable to make interim provisions for appropriate modifications to the Plan;

resolves

- 1. that, if during the interim period between the date of the signing of the Agreement and the date of its entry into force, the administrations of Region 2 countries propose modifications to the Plan, the procedures provided for in Article 4 of the Agreement shall be applied;
- 2. that, in the interim, Article 4 shall apply only to:
 - modify the characteristics of an assignment,
 - introduce a new frequency assignment for a station,
 - bring a new station into service, or
 - cancel an assignment in the Plan
- 3. that, when the Agreement enters into force, the modifications resulting from this Resolution shall be treated in accordance with Paragraphs 3.15 or 3.20 of Article 4 depending on whether or not the agreement of interested administrations has been obtained.
- 4. that modifications to the Plan resulting from this resolution, which are being processed on the date the Agreement enters into force shall continue to be treated in accordance with the pertinent provisions of the Agreement.

REASON

to provide a procedure that will be required prior to the coming into force of the Final Acts.

