
Spectrum Management

Terrestrial Broadcasting Agreements and Arrangements

Agreement Between the Government of Canada and the Government of the United States of America Relating to the TV Broadcasting Service and the Associated Working Arrangement

Note: Table B has been updated since this
document was originally signed.

Note

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The agreements and arrangements contained herein have been negotiated under the authority of the Government of Canada by the Department of Communications whose spectrum management and telecommunications programs have been transferred to Industry Canada.

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CANADIAN EMBASSY
CANADA

AMBASSADE DU

Washington, November 3, 1993

Note No. 192

Dear Secretary Christopher,

I have the honour to refer to the Agreement between Canada and the United States of America effected by the Exchange of Notes dated on April 23 and June 23, 1952 -- in force on June 23, 1952, as amended by the Exchange of Notes dated February 26 and April 7, 1982 on the allocation of channels for television broadcasting (the 1952 Agreement); and to the recent discussions between representatives of both governments concerning the use of the 54 to 72 MHz, 76 to 88 MHz, 174 to 216 MHz and 470 to 806 MHz frequency bands for television broadcasting. Furthermore, I have the honour to propose that the above-mentioned Agreement be replaced by the following.

In order to prevent undue interference between stations in the respective countries, the allotment and assignment of channels in areas adjacent to the border of Canada and the United States of America shall be in accordance with the conditions set forth herein and in the attached Working Arrangement.

For the purpose of this Agreement, the expression "Administrations" refers to the Department of Communications for Canada and the Federal Communications Commission for the United States of America. The Administrations shall exchange information and co-operate with each other for the purpose of minimizing interference and obtaining maximum efficiency in the use of television broadcast channels. To this end, the Administrations have accepted the attached Working Arrangement, including its Annexes. Tables A and B of Annex VI of the Working Arrangement may be revised by direct correspondence between the Administrations. The Administrations shall, as necessary, review the Working Arrangement and its implementation in the light of domestic and international developments. Amendments to the Working Arrangement, other than revisions to Tables A and B of Annex VI, shall be accomplished by Exchange of Notes between the two Governments.

The Honourable Warren M. Christopher
Secretary of State
Department of State
Washington, D.C.

Notification of proposed revisions to Tables A and B shall be made to the other Administration in accordance with the provisions of the Working Arrangement. Assignments made within 400 kilometres of the border shall be in accordance with these Tables, as revised, and shall be notified in accordance with the provisions of the Working Arrangement.

Assignments made at points which are more than 400 kilometres from the nearest point on the border of Canada and the United States of America will normally have no international significance and need not be notified except in cases of unusual operating parameters where the possibility exists that interference could be caused to stations of the other Administration.

This Agreement may be amended through Exchange of Notes between the two Governments.

Either Government may terminate this Agreement at any time by giving written notice to this effect at least one year prior to the date contemplated for such termination.

Upon entry into force the present Agreement shall supersede the 1952 Agreement as amended.

If the foregoing proposals are acceptable to the Government of the United States of America, I have the honour to propose that this Note and the Attached Working Arrangement, which are authentic in English and French, and your Note in reply shall constitute an Agreement between the Government of Canada and the Government of the United States of America, which shall enter into force on the date of your reply.

Accept, Mr. Secretary, the renewed assurances of my highest consideration.

John de Chastelain
Ambassador

**WORKING ARRANGEMENT FOR ALLOTMENT AND ASSIGNMENT OF VHF AND UHF TELEVISION
BROADCASTING CHANNELS UNDER THE AGREEMENT BETWEEN THE GOVERNMENT OF THE
UNITED STATES OF AMERICA AND THE GOVERNMENT OF CANADA RELATING TO THE TV
BROADCASTING SERVICE**

EFFECTIVE DATE: MARCH 1, 1989

Contents

Item	Page
1. Preamble	1
2. Definitions	1
3. Basic Principles	3
4. Tables and Figures - Explanation	5
5. Procedures for Notification	7

Annex

- I Channel Designation
- II Zones I & II - Canada and the United States
- III Computation of Distance and Azimuth
- IV Table I - VHF and UHF Co-channel Protection
Table II - UHF Protection Criteria
Super Power Stations
- V Figures 1- 6 - Propagation Curves
- VI Table A - Canadian Channel Allotments
Table B - United States Channel Allotments

1. Preamble

Mutual undertakings concerning the allotment and assignment of television broadcast channels by Canada and the United States in the area lying within 400 km of their common border are set out in the Agreement between the Government of the United States of America and the Government of Canada relating to the TV broadcasting service (1989 TV Agreement). The Arrangement set out herein states the basis upon which the Canadian and U.S.A.

Administrations shall consider responses to border area television channel allotments and assignments proposed by the other Administration pursuant to the Agreement.

2. Definitions

2.1 Channel Designation

TV broadcast channels are 6 MHz wide and are allotted in the frequency bands 54 to 72 MHz, 76 to 88 MHz, 174 to 216 MHz and 470 to 806 MHz. Refer to Annex I for channel designations. Frequency band 608 to 614 MHz, Channel 37, is allocated to the Radio Astronomy Service, and is therefore not available for broadcast use.

2.2 Primary Assignment

A primary assignment is a protected station assignment authorized or operating on an allotted channel.

2.3 Secondary Assignment

A secondary assignment is an unprotected station assignment authorized or operating on a channel in accordance with Section 2.14.

2.4 Unlimited Allotment

An unlimited allotment is one on which a station may operate with standard parameters.

2.5 Limited Allotment

A limited allotment is one on which a station for any reason is required to operate with less than the standard parameters.

2.6 Effective Height Above Average Terrain (EHAAT)

Effective height above average terrain is the height of the centre of radiation of the antenna above average elevation of the terrain between 3 and 16 km from the antenna for 8 radials spaced evenly each 45 degrees of azimuth starting with true north.

2.7 Effective Radiated Power (ERP)

Effective radiated power is the product of the antenna input power and the power gain of the antenna relative to a half-wave dipole.

2.8 Standard Parameters

Standard parameters are an EHAAT of 300 metres and a maximum ERP, in any horizontal or vertical direction, of 100 kW for Channels 2-6, 325 kW in Canada and 316 kW in the United States¹ for Channels 7-13, and 1,000 kW for Channels 14-69.

2.9 Maximum Parameters

For limited allotments, the maximum parameters are the maximum values of EHAAT and ERP determined from the distance between allotments and assignments in accordance with protection requirements of Section 3. For unlimited allotments, the maximum ERP for channels 2-13 shall not exceed the values in Section 2.8 and for channels 14-69 shall not exceed 5000 kW.

2.10 Operating Parameters

Operating parameters are the EHAAT and ERP actually used.

2.11 Directional Antennas

Directional antennas are those which are designed or altered to produce a non-circular radiation pattern in the horizontal plane.

2.12 Zones

For co-channel allotment purposes and optimum use of channels, both Canadian and the United States of America border areas are divided into two zones as described in Annex II.

2.13 Protected Contour

The protected contour is the Grade B contour, i.e. 47 dBu (dB above 1 uV/m) for channels 2-6, 56 dBu for channels 7-13 and 64 dBu for channels 14-69, but not exceeding distances as specified in Section 3.1.

¹ The reason for this power difference is that, in the United States, the maximum power is specified as 25 dBk (dBk is decibels above 1 kW), which equals 316 kW, while in Canada the maximum power is specified as 325 kW, which equals 25.1 dBk.

2.14 Low Power Television Broadcasting Stations

Low power television broadcasting stations are secondary assignments which operate with a transmitter peak envelope power not exceeding 50 watts VHF and 500 watts UHF in Canada, and 100 watts VHF and 1,000 watts UHF in the United States. These stations operate on a non-interference non-protected basis with respect to existing or future primary assignments; however, they are assigned on a protected basis with respect to each other according to their date of notification. Refer to Section 5.4.

3. Basic Principles

3.1 Calculation of Protected Contour

- 3.1.1 For channels 2-6, 7-13 and 14-69, the distances to the protected contours shall be based on maximum allowable parameters and are calculated using the F(50,50) propagation curves in Figures 1, 3 and 5 of Annex V respectively, but shall not be considered to extend beyond 89 km for channels 2-6, 82 km for channels 7-13, or 70 km for channels 14-69. However, these limitations shall not apply when calculating interference from secondary assignments.
- 3.1.2 When the field strength corresponding to the protected contour extends beyond the boundary of the country in which the station is located, protection shall terminate at the border. That portion of the boundary lying within the protected contour shall be considered as the location of the said contour for purposes of protection.
- 3.1.3 For protection purposes, the boundary of a country shall be deemed to encompass only its land area including islands.

3.2 Co-channel Protection

- 3.2.1 VHF and UHF co-channel protection criteria are specified in Table I of Annex IV.
- 3.2.2 If a proposed or existing allotment under consideration is located within either the Canadian or the United States Zone I, the Zone I minimum separations and maximum F(50,10) field strength values in Table I shall be used. If said allotments are in Zone II, the Zone II minimum separations and maximum F(50,10) field strength values shall be used.
- 3.2.3 Objectionable interference shall be considered to exist if the F(50,10) field strength value at the protected contour exceeds the appropriate maximum F(50,10) field strength value given in Table I.

3.2.4 Although there is no limit on the maximum value for EHAAT, in cases where the EHAAT exceeds 600 m, the ERP for an unlimited allotment must be reduced so that the distance to the F(50,10) interfering contour is equivalent to that resulting from the maximum permitted ERP for the channel proposed and an EHAAT of 600 m. The F(50,10) interfering contour shall be determined using the appropriate maximum F(50,10) field strength value from Table I.

3.3 Other Channel Protections²

- 3.3.1 For VHF first adjacent channels, the minimum distance separation between Canadian and United States allotments shall be 95 km.
- 3.3.2 For UHF channels having restricted relationships known as the "taboos", the minimum distance separations between Canadian and United States allotments are as follows:

- First Adjacent ($n \pm 1$)	90 km
- Intermodulation ($n \pm 2,3,4,5$)	30 km
- Local Oscillator Radiation ($n \pm 7$)	95 km
- Intermediate Frequency Beat ($n \pm 8$)	30 km
- Sound Image ($n \pm 14$)	95 km
- Picture Image ($n \pm 15$)	120 km

Where "n" is the number of the reference channel.

- 3.3.3 The use of operating parameters greater than standard parameters shall be allowed for channels 14-69, provided the ERP does not exceed 5000 kW and the protection criteria in Table II of Annex IV are met.

3.4 Computation of Distance and Azimuth

Where transmitting antenna sites have been established the distance and azimuth shall be determined using the coordinates of the transmitter sites. If a transmitter site has not been established the community's reference coordinates (the post office or if not existant, the coordinates of the centre of the city) shall be used. Refer to Annex III for the method of calculating distance and azimuth.

² Due to the frequency spacing which exists between Channels 4 and 5, between Channels 6 and 7, and between Channels 13 and 14, the minimum distance separations between first adjacent channels shall not be applicable to these pairs of channels.

3.5 Directional Antennas

Directional antennas may be used by stations on limited allotments to render protection to other stations or by stations on unlimited allotments to provide better service. The radiation from a directional antenna must not exceed the notified radiation pattern value in any direction where protection is being provided. In all other directions, the radiation may not exceed the notified pattern value by more than 2 dB. Moreover, the ratio of maximum to minimum fields of a directional antenna shall not be greater than 20 dB except where terrain will present a reception problem due to signal reflections. Where beam tilt is used, the effective radiated power shall be that calculated using the maximum radiation from the antenna in the plane of maximum radiation. Use of a directional antenna on an unlimited allotment shall not change the location of the protected contour (as defined in Section 3.1.1), which remains based on operation with an omnidirectional antenna.

3.6 Circular or Elliptical Polarization

All TV stations shall normally use horizontally polarized antennas; however, circular or elliptical polarization may be employed. The maximum ERP in any plane of polarization shall not exceed the maximum permissible ERP.

4. Tables and Figures

4.1 Allotment Tables

Tables A and B of Annex VI contain all Canadian and U.S. allotments, respectively, on Channels 2 through 69 made to communities within 400 km of the common border.

4.2 Table I

Table I specifies the minimum separations and the maximum interfering F(50,10) field strength value permitted at the protected contour for VHF and UHF co-channel allotments and assignments, based on channel offset and non-offset operation.

4.3 Use of Table I

- 4.3.1 The minimum separations for each zone must be satisfied.
- 4.3.2 Determine the azimuth and distance to the most restrictive point(s) on the protected contour.
- 4.3.3 Using the EHAAT, and maximum ERP at the pertinent azimuth, the maximum co-channel field strength must not exceed the value in Table I, using appropriate F(50,10) curves.

4.4 Table II

Table II specifies the protection criteria for UHF assignments whose parameters exceed 1000 kW ERP and/or 300 metres EHAAT.

4.5 Use of Table II

- 4.5.1 The minimum separations specified in Section 3.3.2 must be satisfied.
- 4.5.2 If the separation is less than the value shown in the Table II column entitled "Maximum Separation Requiring Study", proceed to the following, more detailed calculations.³
- 4.5.3 The values in the "Reference Distance"⁴ column in Table II indicate the point nearest to the protected station at which the field strength value specified in the column in Table II labeled "Maximum Field Strength At Reference Distance" may occur. Where the reference distance from the Table extends beyond the boundary of the country in which the station is located, the applicable field strength value may occur on that portion of the boundary lying within the reference distance. For this procedure, the boundary of a country is considered to encompass only its land area, including islands. Objectionable interference is considered to exist if these criteria are exceeded.
- 4.5.4 The field strength of the proposed station at the reference distance is determined, based on the maximum ERP at the pertinent azimuth and EHAAT, using the F(50,10) curves in Figure 6 if the study is co-channel, and using the F(50,50) curves in Figure 5 if the study is not co-channel.

4.6 Use of Figures 1 to 6

- 4.6.1 Figures 1 to 6 are based on an effective power of 1 kW radiated from a half-wave dipole in free space which produces an unattenuated field strength at one kilometre of about 107 dB above 1 uV/m (221.8 mV/m). For an ERP other than 1 kW, the ordinate scale (field strength in dB above 1 uV/m for 1 kW ERP) should be changed by the appropriate dB value.
- 4.6.2 The F(50,50) curves in Figures 1, 3 and 5 give the estimated field strength in dB above 1 uV/m exceeded at 50% of the locations for at least 50% of the time for channels 2-6, 7-13 and 14-69, respectively.
- 4.6.3 The F(50,10) curves in Figures 2, 4 and 6 serve the same purpose as Figures 1, 3 and 5 except that they give the estimated field strength exceeded at 50% of the

³ The separations in this column were calculated based on maximum parameters of 5,000 kW ERP and 600 metres EHAAT for the proposal.

⁴ The reference distances are based on standard parameters of 1,000 kW ERP and 300 metres EHAAT.

locations for at least 10% of the time for channels 2-6, 7-13 and 14-69, respectively.

5. Procedures For Notification

5.1 General

- 5.1.1 Proposed assignments, allotments and changes thereto, shall be notified by an exchange of correspondence between the Federal Communications Commission and the Department of Communications; such proposals may be presumed to be acceptable if they conform to the technical criteria set out in this Arrangement. Each Administration shall have forty-five (45) days, from the date of receipt of the notification, to reply thereto. If an objection is raised in this period, the letter shall state, with as much particularity as the circumstances permit, the basis for the objection. The proposing Administration may then have an opportunity to meet the stated objection by suitable amendments to its proposal. If no reply is sent within the 45 day period prescribed, a notified proposal shall be considered approved. In all cases, notification procedures shall be completed prior to domestic grant of authorization.
- 5.1.2 Each calendar quarter, the Administrations shall forward to each other a recapitulation of all notifications made during that three month period. Each year both Administrations shall exchange, verify and reconcile the complete database.

5.2 Notification of Changes to Allotments

- 5.2.1 Notification of changes to allotments shall contain community name, state or province, reference coordinates and pertinent channel changes.
- 5.2.2 Proposed allotments which do not conform to the protection criteria set out in the Arrangement may be established upon written acceptance by both Administrations.
- 5.2.3 The notifying Administration shall specify whether the notified allotment is unlimited or limited to protect allotments and assignments in the other country and it shall state the applicable limitations.

5.3 Notification of Station Assignments

Notification of station assignments or changes in operating parameters of existing stations shall set out the actual operating parameters which shall be employed (refer to Section 5.5). These may be less than the maximum allowable parameters for the allotment. The use of lesser operating parameters initially shall not preclude the later use of the parameters on which the allotment was accepted.

5.4 Assignment of Low Power Television Stations

- 5.4.1 Proposed low power television stations within 32 km of the common border which are not on allotted channels in accordance with the Agreement shall be referred to the other Administration for approval (refer to Section 5.5). A co-channel protection ratio of 45 dB shall be provided at the Grade B contour of the protected station using the appropriate F(50,10) curves⁵. Moreover, any proposal which is located more than 32 km from the border but whose F(50,10) interfering contour based on its specific parameters, would fall within the territory of the other country, shall be referred to the other Administration for approval. Proposals for low power stations not on allotted channels, at locations in excess of 32 km from the border, whose interfering F(50,10) contour would not fall within the territory of the other country, may be authorized without referral or notification.
- 5.4.2 Should any interference be caused by a low power television station to a primary or previously notified low power television assignment, the offending station must immediately change to a suitable channel or cease operation. The use of a channel by a low power television station as defined herein shall not prejudice in any manner the use of this channel for a primary assignment, and shall not constitute a basis for objection to a proposal by the other Administration for a new or modified allotment or primary assignment.

5.5 Assignment Data to be Notified

Notification of assignments or proposals needing referral shall contain the following information:

- Name of Applicant (optional)
- City, State or Province
- Transmitter location (Latitude and Longitude)
- Call Sign (where available)
- Channel Number, including offset (if applicable)
- Maximum visual effective radiated power and beam tilt angle (if applicable)
- Transmitter Power (for low power television stations)
- Antenna:
 - (i) effective height above average terrain (EHAAT)
 - (ii) make and type
 - (iii) horizontal pattern, if a directional antenna is proposed

⁵ The specification of a channel offset and a co-channel protection ratio of 28 dB may be used upon written acceptance by both Administrations.

5.6 Technical Coordination

Technical coordinations concerning allotments and assignments shall normally consist of an exchange of letters between the Department of Communications of Canada and the Federal Communications Commission of the United States of America. In the event that the matter cannot be resolved by correspondence, a meeting shall be arranged.

Annex I**Channel Designation**

Channel No.	Frequency Band (MHz)			Channel No.	Frequency Band (MHz)		
VHF				UHF			
2	54	-	60	36	602	-	608
3	60	-	66	37	608	-	614*
4	66	-	72	38	614	-	620
5	76	-	82	39	620	-	626
6	82	-	88	40	626	-	632
7	174	-	180	41	632	-	638
8	180	-	186	42	638	-	644
9	186	-	192	43	644	-	650
10	192	-	198	44	650	-	656
11	198	-	204	45	656	-	662
12	204	-	210	46	662	-	668
13	210	-	216	47	668	-	674
				48	674	-	680
				49	680	-	686
				50	686	-	692
14	470	-	476	51	692	-	698
15	476	-	482	52	698	-	704
16	482	-	488	53	704	-	710
17	488	-	494	54	710	-	716
18	494	-	500	55	716	-	722
19	500	-	506	56	722	-	728
20	506	-	512	57	728	-	734
21	512	-	518	58	734	-	740
22	518	-	524	59	740	-	746
23	524	-	530	60	746	-	752
24	530	-	536	61	752	-	758
25	536	-	542	62	758	-	764
26	542	-	548	63	764	-	770
27	548	-	554	64	770	-	776
28	554	-	560	65	776	-	782
29	560	-	566	66	782	-	788
30	566	-	572	67	788	-	794
31	572	-	578	68	794	-	800
32	578	-	584	69	800	-	806
33	584	-	590				
34	590	-	596				
35	596	-	602				

* Channel 37 is allocated to the Radio Astronomy Service and is not available for broadcast use.

Annex II**Zones I & II****CANADA**

Zone I: consists of that area between Windsor and Quebec which is located within the confines of the USA-Canada border and the following lines: beginning from the west at the intersection of the common border and the North Latitude 44°10'; thence in a straight line northeast to the point of intersection of 77° West Longitude and 46° North Latitude; thence following the 46° North Latitude until the 75° West Longitude; thence in a straight line northeast to the point of intersection of 72° West Longitude, and 47° North Latitude; thence following the 47° North Latitude to the point of intersection with 71° West Longitude; thence following the 71° West Longitude southwards to the common border.

Zone II: consists of that portion of Canada within 400 km of the USA-Canada border which is not in Zone I.

THE UNITED STATES

Zone I: consists of that portion of the United States located within the confines of the following lines drawn on the United States Albers Equal Area Projection Map (based on standard parallels 29.5° and 45.5°; North American Datum); beginning at the most easterly point of the State boundary line between North Carolina and Virginia; thence in a straight line to a point on the Virginia, West Virginia boundary line located at North Latitude 37° 49' and West Longitude 80° 12' 30"; thence westerly along the southern boundary lines of the States of West Virginia, Ohio, Indiana and Illinois to a point at the junction of the Illinois, Kentucky and Missouri State boundary lines; thence northerly along the western boundary line of the State of Illinois to a point at the junction of the Illinois, Iowa and Wisconsin State boundary lines; thence easterly along the northern State boundary line of Illinois to the 90th meridian; thence north along this meridian to the 43.5° parallel; thence east along this parallel to the USA-Canada border; thence southerly and following the international border until it again intersects the 43.5° parallel; thence east along this parallel to the 71st meridian; thence in a straight line to the intersection of the 69th meridian and the 45th parallel; thence east along the 45th parallel to the Atlantic Ocean. When any of the above lines pass through a city, the city shall be considered to be located in Zone 1.

Zone II: consists of that portion of the United States within 400 km of the USA-Canada border which is not in Zone I.

Annex III

Computation of Distance and Azimuth

1. Computation of Distance

The distance between reference points is considered to be the length of the hypotenuse of a right angle triangle, one side of which is the difference in latitude of the reference points and the other side the difference in longitude of the two reference points, and shall be computed as follows:

- 1.1 Convert latitude and longitude into degrees and decimal parts of a degree. Determine the middle latitude of the two reference points (average the latitudes of the two points).

$$\text{LATM} = \frac{\text{LAT1} + \text{LAT2}}{2}$$

- 1.2 Determine the number of kilometres per degree of latitude difference for the determined middle latitude.

$$\text{LATK} = 111.108 - .566 \cos(2 \text{ LATM})$$

- 1.3 Determine the number of kilometres per degree of longitude difference for the determined middle latitude.

$$\text{LONGK} = 111.391 \cos(\text{LATM}) - .095 \cos(3 \text{ LATM})$$

- 1.4 Determine the North-South distance in kilometres.

$$\text{LAT} = \text{LATK} (\text{LAT1} - \text{LAT2})$$

- 1.5 Determine the East-West distance in kilometres.

$$\text{LONG} = \text{LONGK} (\text{LONG1} - \text{LONG2})$$

- 1.6 Determine the distance between the reference points by the square root of the sum of the squares of the distance obtained.

$$\text{DIST} = (\text{LAT}^2 + \text{LONG}^2)^{1/2}$$

where:

LAT1 & LONG1	= coordinates of one location in decimal degrees
LAT2 & LONG2	= coordinates of second location in decimal degrees
LATM	= middle latitude between points
LATK	= kilometres per degree of latitude difference
LONGK	= kilometres per degree of longitude difference
LAT	= north-south distance in kilometres
LONG	= east-west distance in kilometres, and
DIST	= distance between two reference points in kilometres

In computing the above, sufficient decimal figures shall be used to determine the distance to the nearest kilometre.

2. Calculation of Azimuth

In some instances, it is necessary to calculate the angle or azimuth between true north and the connecting radial from one reference point to another.

2.1 Convert latitude and longitude into degrees and decimal parts of a degree.

2.2 Determine the arc length in degrees between the two reference locations.

$$d = \cos^{-1} [\sin(LAT2) \sin(LAT1) + \cos(LAT2) \cos(LAT1) \cos(LONG1-LONG2)]$$

2.3 Calculate the azimuth. (If the second location is west of the initial location, subtract the result from 360° ; i.e., $360 - AZM$).

$$AZM = \cos^{-1} \left[\frac{\sin(LAT2) - \sin(LAT1) \cos(d)}{\cos(LAT1) \sin(d)} \right]$$

where:

LAT1 & LONG1	= coordinates of initial location in decimal degrees;
LAT2 & LONG2	= coordinates of second location in decimal degrees;
d	= arc length between locations in decimal degrees;
AZM	= angle between true north (0° degrees) and the connecting radial in decimal degrees in a clockwise direction.

In computing the above, sufficient decimal figures shall be used to determine the azimuth to the nearest degree.

Annex IV**Table I****VHF and UHF Co-channel Protection**

	ZONE I		ZONE II	
Channel	Minimum Co-channel Separation	Maximum F(50,10) Field Strength at Protected Contour	Minimum Co-channel Separation	Maximum F(50,10) Field Strength at Protected Contour
2-6 offset carriers	275 km	38 dBu	305 km	32 dBu
	371 km	21 dBu	411 km ¹	15 dBu
7-13 offset carriers	275 km	41 dBu	305 km	36 dBu
	376 km	24 dBu	411 km ¹	19 dBu
14-69 offset carriers	250 km	46 dBu	280 km	41 dBu
	353 km	29 dBu	387 km	24 dBu

¹ Since the maximum coordination distance under this Arrangement is 400 km from the border, stations beyond that distance need not be coordinated.

Table II

**UHF Protection Criteria For
Assignments With Operating Parameters
Greater Than 1000 kW ERP and/or
300 Metres EHAAT**

Channel Relationship	Maximum Separation Requiring Study ¹	Reference Distance ²	Maximum Field Strength at Reference Distance
co-channel (one or both) stations in Zone I, with offset)	320 km	70 km	46 dBu
co-channel (neither station in Zone I, with offset)	350 km	70 km	41 dBu
±1	108 km	70 km	98 dBu
±2,3,5,8	45 km	15 km	103 dBu
±4	52 km	0 km	90 dBu
±7	121 km	48 km	78 dBu
±14	114 km	70 km	94 dBu
±15	145 km	70 km	77 dBu

¹ The separations in this column were calculated based on maximum parameters of 5,000 kW ERP and 600 metres EHAAT for the proposal.

² The reference distances are based on standard parameters of 1,000 kW ERP and 300 metres EHAAT.

Annex V

Figures 1 - 6

Figure 1

ESTIMATED FIELD STRENGTH EXCEEDED AT 50 % OF THE POTENTIAL RECEIVER LOCATIONS FOR AT LEAST 50% OF THE TIME AT A RECEIVING ANTENNA HEIGHT OF 9.1 METRES.

ESTIMATION DE L'INTENSITÉ DE CHAMP DÉPASSÉE À 50 % DES EMPLACEMENTS RÉCEPTEURS POSSIBLES, POUR AU MOINS 50 % DU TEMPS, POUR UNE ANTENNE RÉCEPTRICE DE 9,1 MÈTRES.

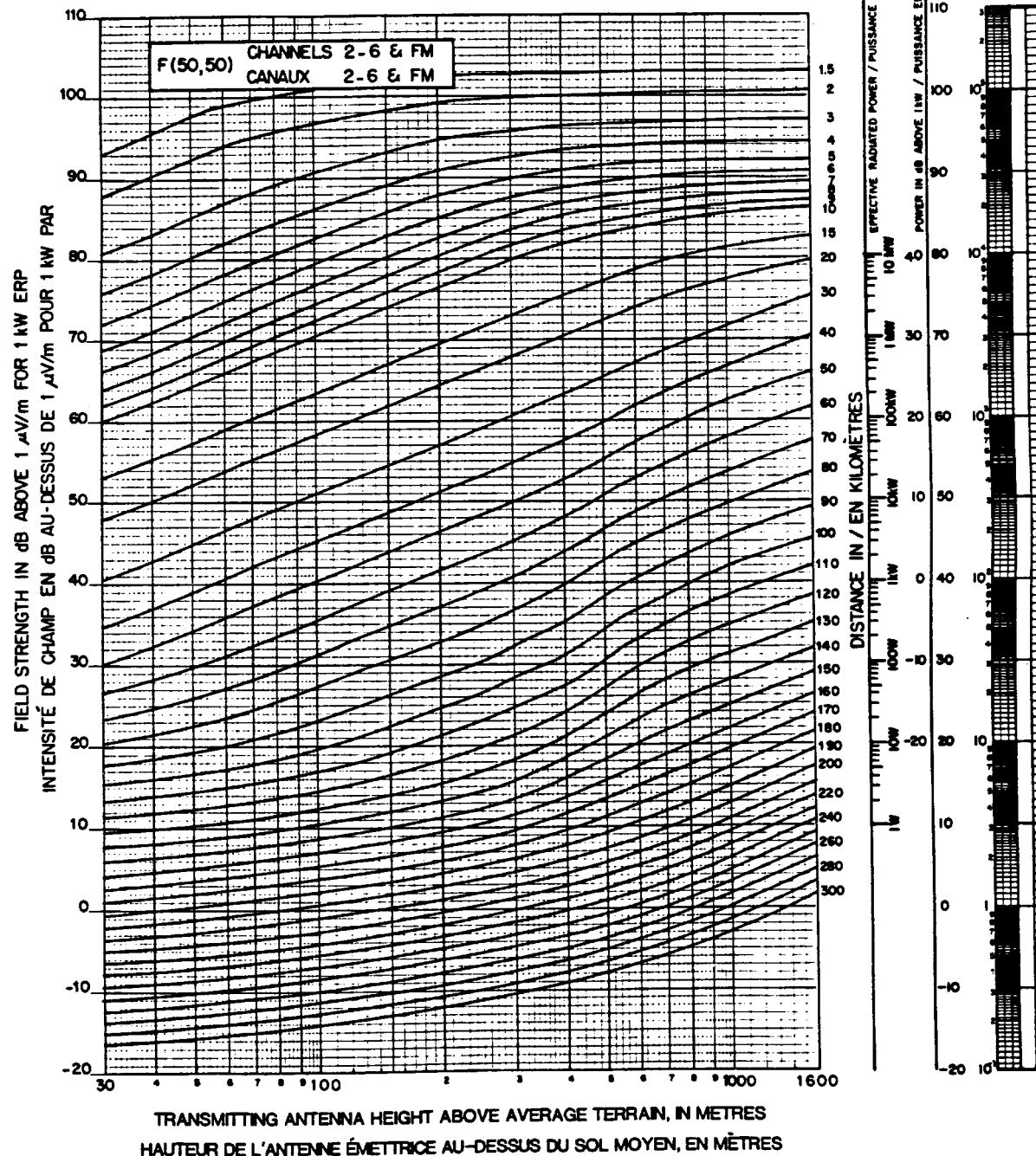


Figure 2

ESTIMATED FIELD STRENGTH EXCEEDED AT 50 % OF THE POTENTIAL RECEIVER LOCATIONS FOR AT LEAST 10 % OF THE TIME AT A RECEIVING ANTENNA HEIGHT OF 9.1 METRES.

ESTIMATION DE L'INTENSITÉ DE CHAMP DÉPASSÉE À 50% DES EMPLACEMENTS RÉCEPTEURS POSSIBLES, POUR AU MOINS 10 % DU TEMPS, POUR UNE ANTENNE RÉCEPTEUR DE 9,1 MÈTRES

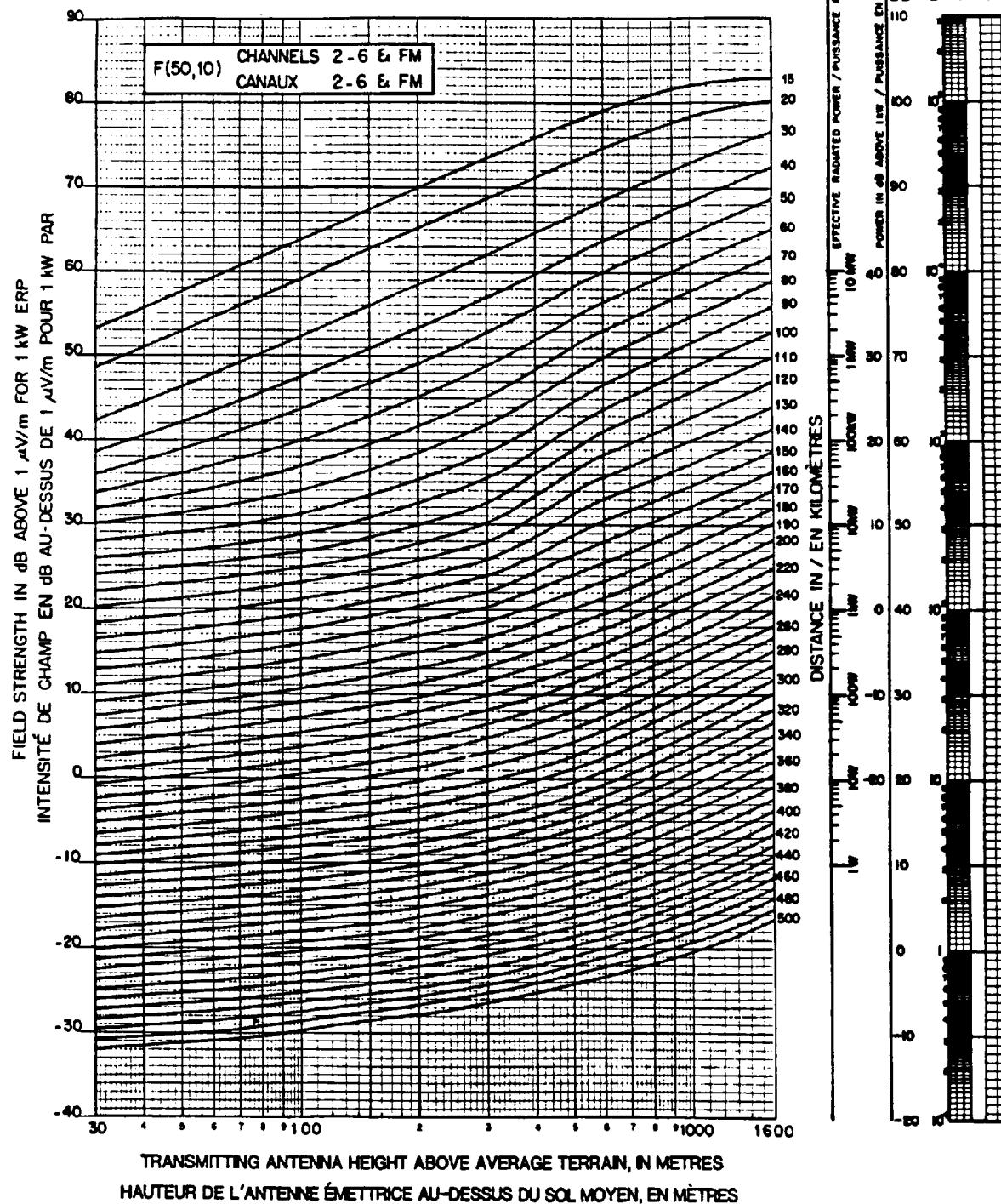


Figure 3

ESTIMATED FIELD STRENGTH EXCEEDED AT 50 % OF THE POTENTIAL RECEIVER LOCATIONS FOR AT LEAST 50% OF THE TIME AT A RECEIVING ANTENNA HEIGHT OF 9.1 METRES.

ESTIMATION DE L'INTENSITE DE CHAMP DEPASSEE A 50% DES EMPLACEMENTS RECEPTEURS POSSIBLES, POUR AU MOINS 50% DU TEMPS, POUR UNE ANTENNE RECEPTEURICE DE 9,1 METRES.

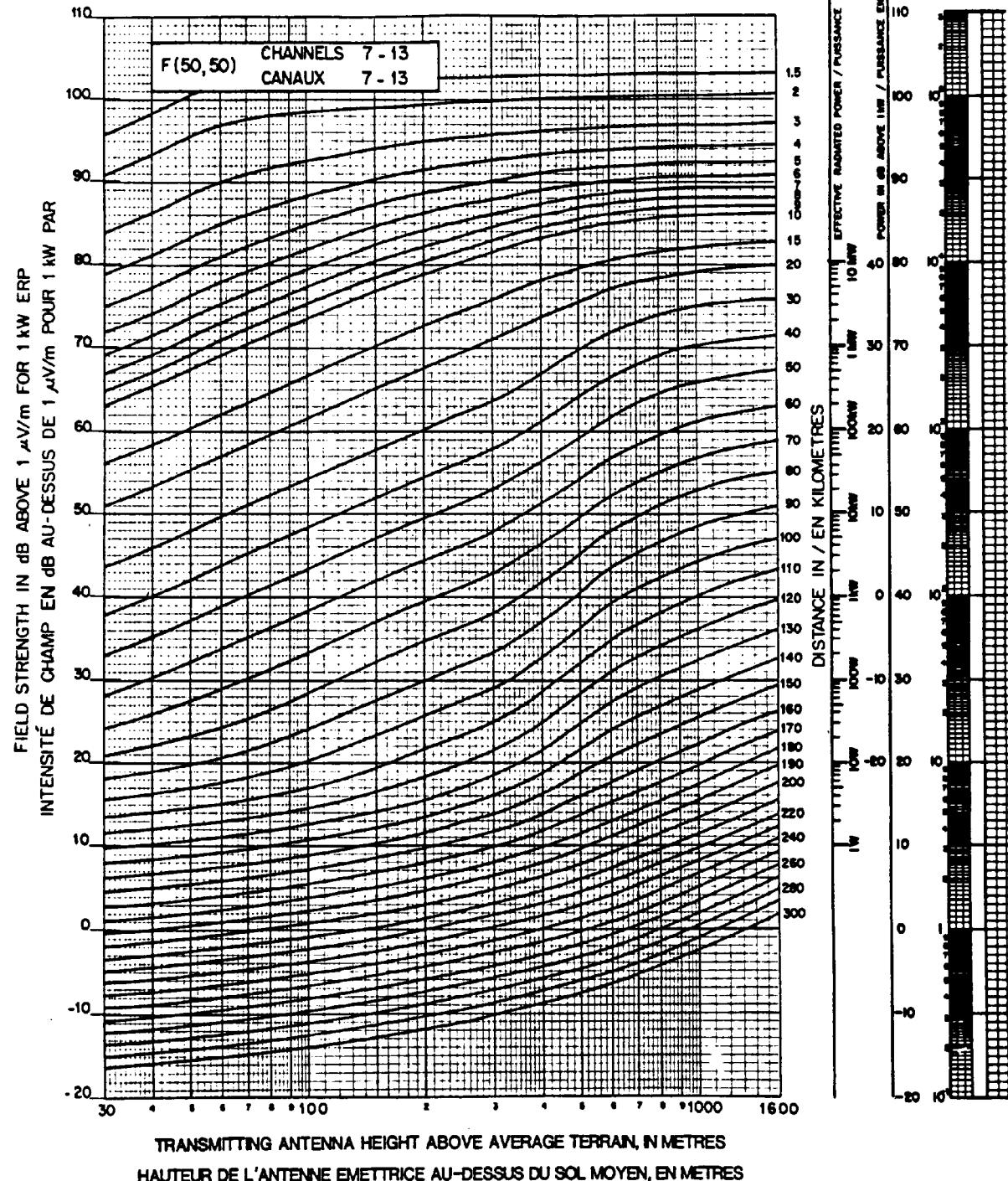


Figure 4

ESTIMATED FIELD STRENGTH EXCEEDED AT 50 % OF THE POTENTIAL RECEIVER LOCATIONS FOR AT LEAST 10 % OF THE TIME AT A RECEIVING ANTENNA HEIGHT OF 9.1 METRES.

ESTIMATION DE L'INTENSITÉ DE CHAMP DÉPASSEE À 50 % DES EMPLACEMENTS RECEPTEURS POSSIBLES, POUR AU MOINS 10 % DU TEMPS, POUR UNE ANTENNE REÇEptrice DE 9,1 METRES

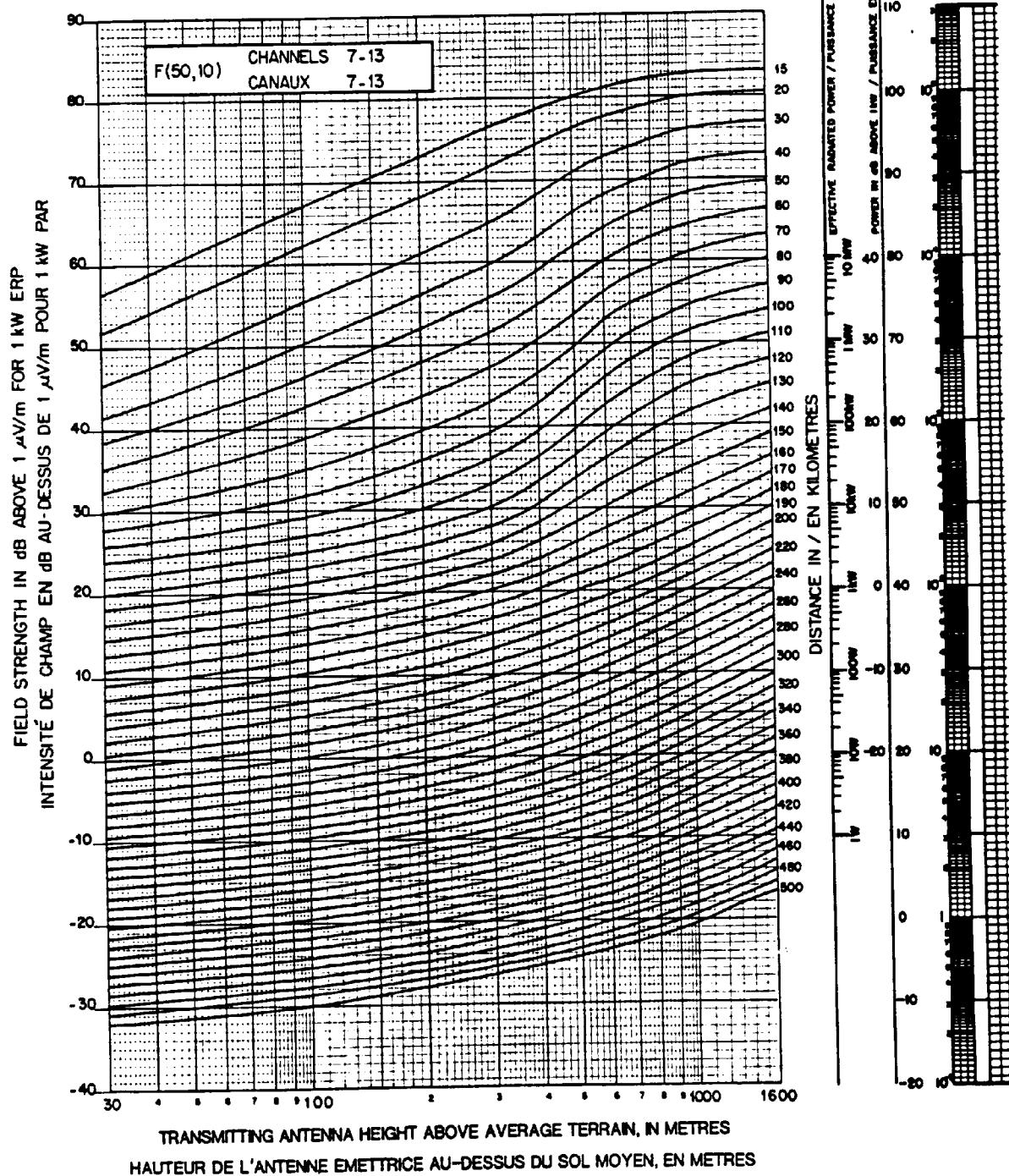


Figure 5
ESTIMATED FIELD STRENGTH EXCEEDED AT 50 % OF THE POTENTIAL RECEIVER LOCATIONS
FOR AT LEAST 50% OF THE TIME AT A RECEIVING ANTENNA HEIGHT OF 9.1 METRES.

ESTIMATION DE L'INTENSITE DE CHAMP DEPASSEE A 50% DES EMPLACEMENTS RECEPTEURS
POSSIBLES, POUR AU MOINS 50% DU TEMPS, POUR UNE ANTENNE RECEPTEUR DE 9,1 METRES.

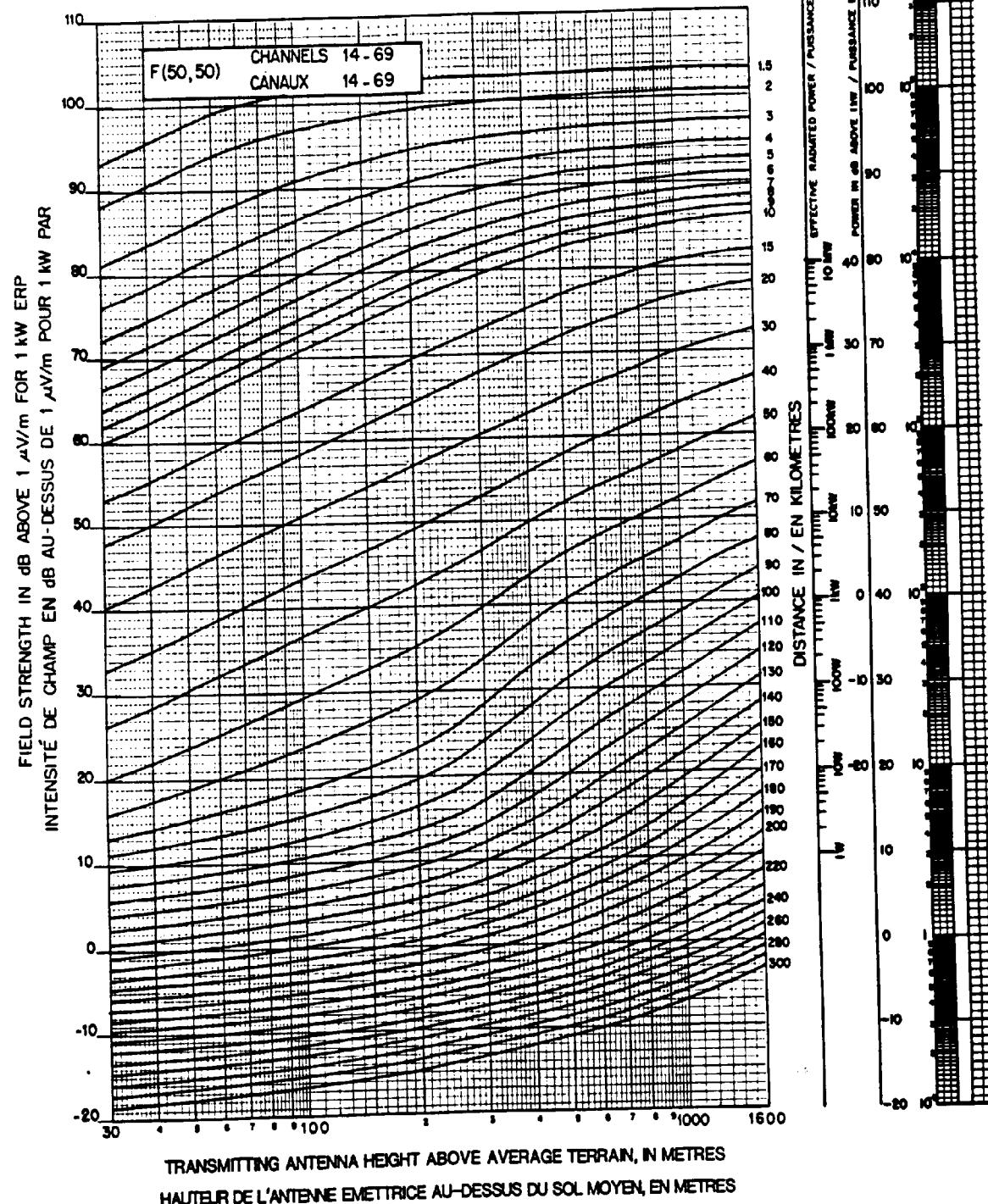
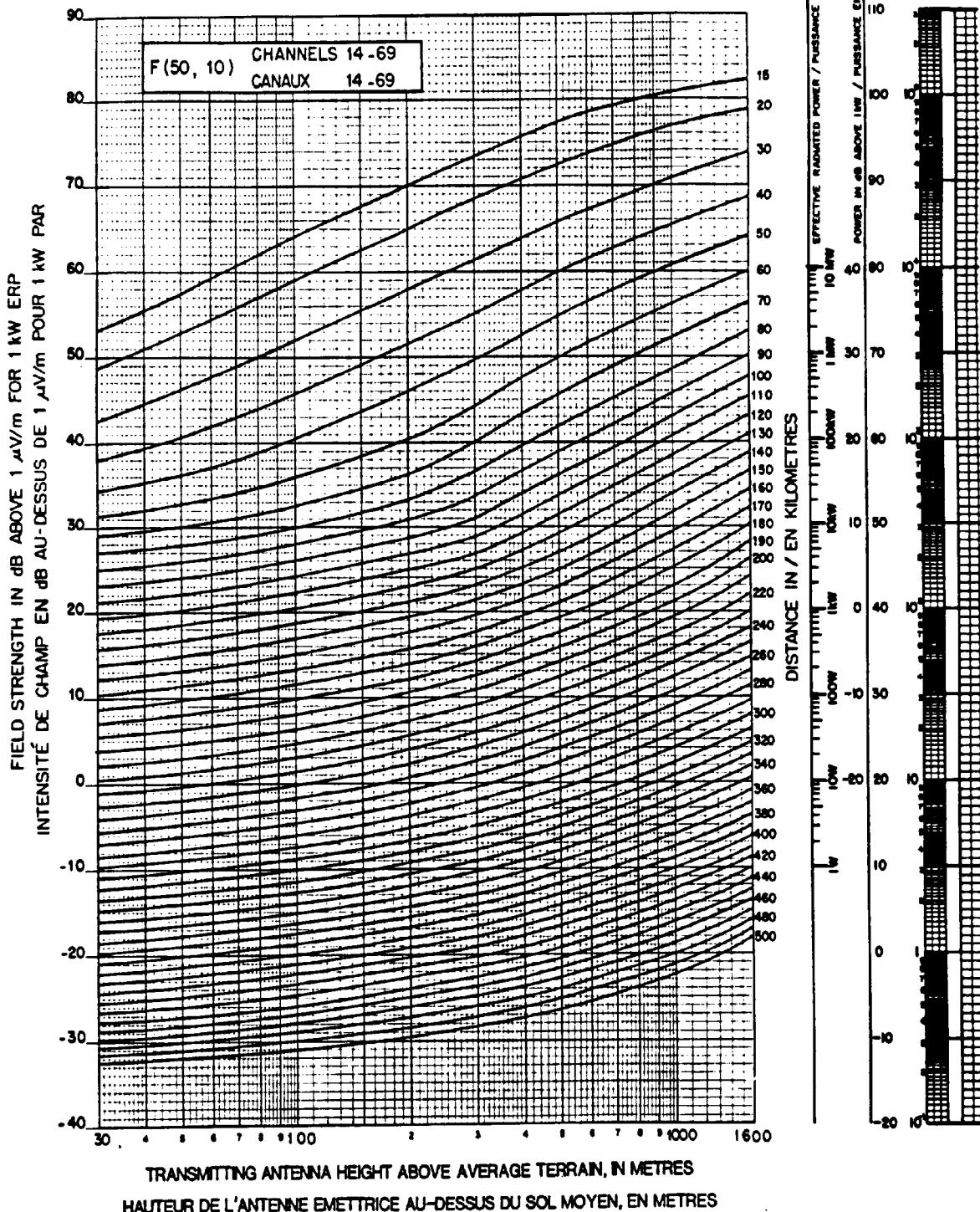


Figure 6

ESTIMATED FIELD STRENGTH EXCEEDED AT 50 % OF THE POTENTIAL RECEIVER LOCATIONS FOR AT LEAST 10 % OF THE TIME AT A RECEIVING ANTENNA HEIGHT OF 9.1 METRES.

ESTIMATION DE L'INTENSITÉ DE CHAMP DÉPASSEE À 50% DES EMPLACEMENTS RECEPTEURS POSSIBLES, POUR AU MOINS 10% DU TEMPS, POUR UNE ANTENNE RECEPTRICE DE 9,1 MÈTRES



Annex VI**Tables A and B****TABLES OF ALLOTMENTS WITH OFFSET DESIGNATION****Revised to January 1, 1989****Offset Carrier Designators:**

- Zero offset frequency (underscore)
 - + Plus 10 kHz
 - Minus 10 kHz
-

Annexe VI**Tableaux A et B****TABLEAUX DES ALLOTISSEMENTS AVEC DÉSIGNATION DU DÉCALAGE DE FRÉQUENCE****Mise à jour au 1^{er} janvier 1989****Désignation du décalage de la porteuse :**

- Décalage de fréquence nul (souligné)
- + 10 kHz au-dessus de la porteuse
- 10 kHz au-dessous de la porteuse

Table A – Tableau A**CANADA****ALBERTA**

City/Ville	Canal/VHF/Channel	Canal/UHF/Channel
Banff		<u>34</u>
Blairmore		<u>15</u> <u>31</u>
Brooks		30- 47+
Burmis	3 5-	<u>20</u> <u>47</u>
Calgary	2+ <u>4</u> 9+ 13-	<u>16</u> <u>32</u> <u>38</u> <u>49</u> <u>54</u>
Cardston		22+
Claresholm		<u>36</u>
Coronation	<u>10</u>	<u>41</u>
Coutts/Milk River	4-	24+
Drumheller	<u>12</u>	<u>19</u> <u>24</u> <u>53</u>
Etzikom	12+	<u>31</u>
Forestburg		27- <u>52</u>
Fort MacLeod		19+ <u>25</u>
Hanna		25+
High River		<u>44</u>
Innisfail		42+
Lacombe		44-
Lethbridge	7 10- 13+	<u>17</u> 23+ <u>28</u> <u>50</u>
Lougheed	7-	16-
Medicine Hat	<u>6</u> <u>8</u> 13-	21- 34+ <u>51</u>
Olds		30+
Oyen	2-	23-
Pincher Creek		<u>42</u>
Pivot	4+	
Provost		<u>18</u> <u>35</u>
Raymond		20-
Red Deer	6- 8+ 10+	<u>20</u> <u>26</u> 31-
Rocky Mountain House		19-
Rosemary	<u>11</u>	
Stettler		34-
Taber		15-
Vulcan		<u>27</u>

BRITISH COLUMBIA/COLOMBIE-BRITANNIQUE

City/Ville	Canal/VHF/Channel	Canal/UHF/Channel
Armstrong		26-
Ashcroft		49+
Bonnington	13+	
Burns Lake	4+ 7+	
Campbell River	7- <u>13</u>	14- <u>51</u>
Canal Flats	<u>12</u>	
Cassiar	7	
Castlegar		<u>41</u>
Chilliwack	3	14+ <u>30</u> <u>36</u> 47+
Clinton	9+	
Comox		20+ 54+
Courtenay	9-L(1) <u>11</u>	<u>49</u>
Cranbrook	3+5+L(2) <u>10</u> <u>13</u> L(3)	<u>24</u> <u>43</u> 59+
Crawford Bay	<u>5</u> L(4)	
Creston	<u>3</u> L(5)	44+
Duncan		<u>54</u>
Enderby		<u>16</u> <u>36</u> <u>47</u> <u>53</u>
Fernie	8L(6)	21+ 51+
Fort Fraser	6	
Fort St. James		<u>16</u>
Golden		41+
Grand Forks		36-
Hope		<u>38</u>
Houston	2+ 8	<u>23</u>
Kamloops	4+ 6+	22- <u>44</u> 50+
Kelowna	2 5-	<u>21</u> <u>45</u> <u>51</u> 69+
Kimberley		<u>27</u>
Kinnaird		<u>19</u>
Kitimat		<u>14</u> <u>19</u>
Lake Cowichan		<u>48</u>
Lillooet		23+
Merritt		41-
Nanaimo		<u>50</u> <u>60</u> <u>69</u>
Natal	<u>11</u>	
Nelson	3+ <u>9</u> L(7)	50-
New Denver		<u>17</u>
Oliver	3+ 8	43+
Ootsa Lake	<u>5</u> <u>10</u>	
Osoyoos		49-

BRITISH COLUMBIA/COLOMBIE-BRITANNIQUE

City/Ville	Canal/VHF/Channel	Canal/UHF/Channel
Parksville		44-
Peachland		29-
Pemberton	4-L(8)	
Penticton	<u>10</u> <u>13</u>	<u>17</u> <u>23</u>
Port Alberni	3+	36+ <u>41</u>
Port Hardy	6 <u>8</u>	
Powell River		<u>15</u>
Prince Rupert	6+ <u>7</u>	<u>22</u> <u>33</u> 43-
Princeton		<u>15</u> <u>20</u>
Radium		35+
Revelstoke		<u>17</u> <u>28</u> 52+
Rossland		43-
Salmon Arm	9-	<u>52</u>
Smithers	5+ <u>13</u>	34+
South Hazelton	9+L(9)	15+
Sparwood		
Spillimacheen		<u>33</u>
Squamish		<u>69</u>
Summerland		<u>55</u>
Terrace	<u>3</u> <u>11</u>	48+
Trail	8+ <u>11</u>	<u>22</u> <u>27</u>
Vancouver	2+ 8+ 10+	<u>14</u>
Vernon	7- <u>12</u>	<u>15</u> L(10) 21- <u>26</u> <u>32</u> <u>42</u>
Victoria	<u>6</u>	<u>52</u> <u>58</u> 63L(11) 68L(12)
Warfield		24- 42+
Whistler	13+	<u>29</u> <u>40</u> <u>46</u> <u>66</u>
Williams Lake		<u>30</u>
Wilson Creek		<u>15</u>
Woss Camp	<u>12</u>	<u>23</u>
100 Mile House	<u>3</u> <u>5</u> -	

MANITOBA

City/Ville	Canal/VHF/Channel	Canal/UHF/Channel
Alonsa		<u>14</u> 24+ <u>34</u> <u>46</u>
Altona		34+
Beausejour		23+
Birch River-Harte Mt	4- 10-	<u>17</u> 45+
Boissevain		29+
Brandon	4+ 5+	21+ <u>27</u> <u>43</u>
Carberry		49+
Carmen		<u>31</u>
Dauphin-Baldy Mt	6- <u>8</u> 12-	15+ 18+ <u>26</u>
Fairford	7-	40-
Fisher Branch	8- 10+	<u>32</u> 43-
Foxwarren	9 <u>11</u>	28+ <u>33</u> <u>50</u>
Gimli		<u>19</u>
Jackhead	5	<u>23</u>
Killarney		19+
Lac du Bonnet	<u>4</u> 5-	15+ <u>21</u> 26- <u>39</u>
Little Grand Rapids	9-	
Manigotagan		<u>22</u>
Matheson Island		<u>18</u> 29+ <u>41</u> <u>47</u>
McCreary	11	
Melita	9+	48+
Minnedosa	2-L(13)	17+
Morden-Winkler		<u>50</u>
Neepawa		39+
Oak Lake		<u>32</u>
Pembina Valley		<u>18</u> 28- 41- 47+
Pine Falls	<u>11</u> -	
Piney		<u>29</u>
Portage la Prairie	13+	<u>40</u> 53+
Roblin		48-
Russel		<u>22</u>
Selkirk		<u>17</u>
Ste Rose du Luc	3+	<u>38</u>
Steinbach		<u>45</u>
Swan River		29-
Vassar		24+ 41+ 47- <u>53</u>
Virden		<u>35</u>
West Hawk		22- <u>28</u> 40+ <u>46</u>
Winnipeg	3- 6- 7+ 9+	25+ <u>36</u> <u>42</u> <u>48</u> <u>54</u> <u>65</u>

NEW BRUNSWICK/NOUVEAU-BRUNSWICK

City/Ville	Canal/VHF/Channel	Canal/UHF/Channel
Allardville	<u>3</u>	51+
Bathurst		28+ 50-
Bon Accord	6-	<u>43</u>
Buctouche		49-
Campbellton	4- 7- 9- <u>12</u>	23- <u>35</u>
Caraquet		20+ <u>54</u>
Chatham	<u>6</u>	<u>40</u>
Chipman		<u>24</u>
Dalhousie		55+
Dorchester		50+
Edmunston	4- 13+	<u>26</u> <u>36</u>
Fredericton	5-L(14) 11+L(15)	<u>19</u> 41+ 47- <u>53</u> 59+
Grand Falls		<u>49</u>
McAdam		28- 51-
Milltown		32+
Moncton	<u>2</u> <u>7</u> <u>11</u>	16+ <u>27</u> 33- <u>39</u> 44+
Newcastle		34-
Oromocto		31-
Perth		30+
Richibucto		55-
Sackville		<u>66</u>
Saint John	4+ 9+ 12+L(16)	<u>17</u> 23+ <u>29</u> 35+ 69+
Salisbury		<u>21</u>
Shediac		<u>62</u>
Shippegan		43-
St Andrews		26+
St Leonard		<u>18</u>
St Quentin		52+
St Stephen		20+
Sussex		<u>57</u>
Tracadie		30-
Woodstock	3+	<u>50</u>

NORTHWEST TERRITORIES/TERRITOIRES DU NORD-OUEST

City/Ville	Canal/VHF Channel	Canal/UHF/Channel
Fort McPherson	<u>13</u>	
Inuvik	<u>6</u>	

NOVA SCOTIA/NOUVELLE-ÉCOSSE

City/Ville	Canal/VHF/Channel	Canal/UHF/Channel
Amherst		<u>22</u> <u>56</u>
Annapolis Royal		49+
Antigonish	9	<u>50</u>
Aspen	5-	
Bridgetown		<u>15</u>
Bridgewater	9-	<u>36</u>
Caledonia	2+L(17) 6+	21+ 42+
Canning	<u>10</u>	
Digby		18+ 52- <u>58</u>
Halifax	<u>3</u> <u>5</u> <u>13</u> L(18)	20- <u>26</u> <u>32</u> 38+ 43- 48+ <u>54</u>
Kentville		<u>30</u>
Liverpool	<u>12</u>	31+
Lunenburg		<u>60</u>
Middleton	8-	<u>46</u>
New Glasgow	4-	15- 34+ 47+
Parrsboro		40-
Pictou		<u>68</u>
Sheet Harbour	2+ 11+	29+
Shelburne	7+L(19)	28+
Springhill		<u>61</u>
Tatamagouche		58+
Truro		<u>18</u> <u>55</u>
Windsor		<u>51</u>
Yarmouth	3- 11-	<u>40</u> 45- 50-

ONTARIO

City/Ville	Canal/VHF/Channel	Canal/UHF/Channel
Armstrong	<u>10</u>	
Arnprior		<u>20</u>
Atikokan	7-	23+
Bancroft	2+	
Barrie	3+	<u>14</u> 24- 33- 46- 55+
Barry's Bay		19+ <u>39</u>
Belleville-Deseronto	6-	15- 35- 53+ 64+ <u>69</u>
Blind River		<u>18</u>
Brantford		34+L(20)
Brockville		45+
Chapleau	7+ 13+	<u>33</u>
Chatham		16- <u>48</u> L(21) <u>59</u> L(22) 64+
Cloyne		55
Cobourg		<u>66</u>
Collingwood		<u>42</u>
Cornwall	8+	31- 41+ <u>47</u> 52- 63+
Deep River	3-L(23)	<u>52</u>
Driftwood		22-
Dryden	4+ <u>6</u> 9-	<u>24</u>
Elliot Lake	<u>3</u> 7- 12+	21+
Espanola		22-
Exeter		14+
Fort Frances	<u>5</u>	<u>15</u> <u>25</u>
Gananoque		28-
Geraldton	7- 13+	
Goderich		33+
Gogama		<u>23</u> 29-
Golden Lake		41- 47-
Guelph		36+
Hamilton	11+	<u>65</u>
Hanover		<u>50</u>
Hawkesbury		39- 48+
Hearst	4- 5+ <u>7</u>	
Huntsville	8+L(24) 11- <u>13</u>	
Kapuskasing	2+ <u>10</u> <u>12</u>	19+ 41+
Kenora	2+ <u>8</u> 13+L(25)	<u>16</u> 38+ <u>44</u>
Kingston	11-	<u>19</u> 32- <u>38</u> <u>48</u> <u>58</u>
Kirkland Lake-Kearns	<u>2</u> <u>11</u>	
Kitchener	13+	<u>28</u> L(26) 39+ 56+L(27) 61-L(28)
Little Current		16-

ONTARIO

City/Ville	Canal/VHF/Channel	Canal/UHF/Channel
London	<u>10</u>	18L(29) <u>40</u> <u>53</u> L(30) 69+
Manitouwadge	8+	<u>15</u> 20-
Marathon	11-	
Mattawa		<u>26</u> <u>48</u>
Maynooth		51+
McArthur's Mills		33- 42+
Midland	7	
Niagara Falls		<u>55</u>
Nipigon		<u>16</u> <u>26</u>
North Bay	4- <u>6</u> L(31) 10-	32+ 45+ 50+
Opasatika		30+
Orillia		<u>43</u>
Ottawa-Hull	4+ <u>6</u> 9+ 13+	14- <u>24</u> 30+ <u>40</u> <u>49</u> 60+ <u>65</u>
Owen Sound	4+L(32) 12-L(33)	
Paris	6+	
Parry Sound		31-
Pembroke	5+	17-
Penetanguishene		34- <u>51</u>
Peterborough	12+	18-L(34) <u>27</u> <u>44</u> <u>54</u>
Pickle Lake	9	
Prescott		26-
Red Lake	7 10-	
Renfrew		<u>22</u>
Sarnia-Oil Springs		17+ 29+L(35) 34-L(36) 42-L(37) 51+ 63+L(38) <u>68</u>
Sault Ste Marie	2- <u>5</u>	<u>20</u> 26- 38- <u>44</u> 54+
Sioux Lookout	12+	
Smiths Falls		<u>36</u>
St Catharines		<u>60</u>
St Thomas		64-
Stevenson		22-L(39)
Stratford		44+
Sturgeon Falls	7+	29+
Sudbury	<u>5</u> 9+ 13-	<u>19</u> 25- <u>30</u> 35+ 41+ <u>47</u> 52-

ONTARIO

City/Ville	Canal/VHF/Channel	Canal/UHF/Channel
Temagami		<u>15</u> 44+
Thessalon		<u>36</u>
Thunder Bay	<u>2</u> 4- <u>9</u> <u>12</u>	14- 25- 30- 41-
Timmins	3- 6+ 7- 9-	26+ 48+ 54-
Tobermory		17- <u>26</u> 43+
Toronto	<u>5L(40)</u> 9	19- <u>25</u> 30-L(41) <u>41</u> 47+
		52+ <u>57</u> 63-L(42) 68+
Trenton		40+
Uxbridge		22+
Vermillion		<u>14</u> 20+
Wawa	9+	<u>16</u> 21- <u>27</u>
Welland		<u>20</u>
White River	12-	
Wiarton	2-	20-
Windsor	9-	26-L(43) 32+ <u>54</u> 60-
Wingham	8-	<u>45</u>
Woodstock		<u>31</u>

PRINCE EDWARD ISLAND/ILE-DU-PRINCE-ÉDOUARD

City/Ville	Canal/VHF/Channel	Canal/UHF/Channel
Charlottetown	8+ 13+	<u>25</u> <u>31</u> <u>42</u> 52+
Souris		19+
St Edward-St Louis	<u>4</u> 5+ 9+	
Summerside		36+ <u>65</u>

QUEBEC

<u>City/Ville</u>	<u>Canal/VHF/Channel</u>	<u>Canal/UHF/Channel</u>
Alma		16+ 32+ 48+
Asbestos		47-
Ayer's Cliff		42+
Baie Comeau	7-	<u>28</u> 34+ 40+ <u>52</u>
Bai St Paul		18+
Baie Trinite	12-	<u>17</u>
Bearn Fabre	<u>3</u>	18+ 27+
Beauceville	<u>6</u> L(44)	
Bolton-Est		55-L(45)
Buckingham		19+
Cabano		48-
Carleton	2- <u>5</u>	15+
Chandler	6+ 8-L(46)	<u>23</u>
Chapeau	11+	23+ <u>35</u>
Chicoutimi	2+ <u>6</u> 8+L(47)	24 <u>35</u> <u>40</u> <u>58</u>
Clermont		<u>41</u>
Cloridorme	8+ <u>11</u>	
Coaticook		62-
Cowansville		65+
Dolbeau		51+
Donnaconna		25-
Drummondville		36+ <u>53</u>
Escuminac		18+
Estcourt		<u>23</u>
Forestville		<u>25</u>
Gascons		32-
Gaspe	<u>7</u> 9+	18 35+
Gaspe Nord	5+	
Granby		27- <u>54</u> 59+
Grand Fonds		<u>31</u> 54+
Grande Vallee	6-	
Hull (see Ottawa-Hull, Ontario)		
Joliette		<u>43</u>
Jonquiere	4+ 12+	14- 19- 53-
L'Anse à Valleau	12+	
Lac Etchemin		17+ 55+
Lac Megantic		66+

QUEBEC

<u>City/Ville</u>	<u>Canal/VHF/Channel</u>	<u>Canal/UHF/Channel</u>
La Pocatiere		<u>28</u>
La Tuque	3- 9-	26+ 49-
Magog		<u>30</u> <u>68</u>
Manicouagan	<u>10</u>	
Maniwaki		15+
Matane	6+	14+ 43+
Mont Clmont	<u>13</u>	
Mont Joli		16- 27- 39- 45- <u>56</u>
Mont Laurier	3+	21- <u>27</u> 54+
Mont St Michel		16+ 33+ 38+
Mont Tremblant	<u>11</u>	
Montmagny		57- 68+
Montreal	2 6+ <u>10</u> <u>12</u>	<u>17</u> <u>23</u> <u>29</u> 35+ <u>46</u> 51- <u>56</u> <u>62</u>
Mt. Louis en Haut		<u>19</u> <u>29</u>
Murdochville	10-	21+ 31+ 47
New Carlisle		<u>45</u>
New Richmond		27+
Perce	11- 13-	14 40- 53-
Plessisville		29+
Port Daniel	7+	16-
Quebec	2+ <u>4</u> 5- 11+	15- <u>20</u> <u>33</u> <u>38</u> 65-
Rapides des Joachims	8-	
Rimouski	<u>2</u> 11-	18+ <u>22</u> <u>51</u>
Riviere au Renard	2+ 4+	
Riviere du Loup	7+ 9+	29- 50- <u>59</u>
Roberval	<u>10</u>	45-
Sept Iles	<u>3</u> 9- 11+ 13+	36+ 48+
Shawinigan		18- <u>55</u> <u>66</u>
Sherbrooke	<u>7</u> 9L(48)	14+ 24+ <u>50</u> <u>60</u>
Sorel		19- <u>64</u> 69-
Ste Adele		<u>15</u> 54-
Ste Agathe des Monts		32+ 42-
Ste Anne des Monts	8-L(49)	
Ste Marguerite-Marie	3-	
St Fabien de Panet	<u>13</u> L(50)	
St Felicien		43+
St Fulgence		<u>27</u>
St George-de-Beauce		19+

QUEBEC

City/Ville	Canal/VHF/Channel	Canal/UHF/Channel
St Hyacinthe		48-
St Jean-Iberville		<u>25</u>
St Jerome	<u>4</u>	<u>26</u>
St Michel des Saints	7+	
St Pamphile	3+	
St Prosper		50+
St Rene de Matane		<u>30</u> 41-
Stoneham		<u>44</u>
Temiscaming	12-	<u>22</u> 28+ 40+ <u>53</u>
Thetford Mines		<u>21</u> <u>32</u> <u>42</u> <u>52</u> <u>61</u>
Trois Pistoles		42+
Trois Rivieres	8L(51) 13-	16- <u>28</u> <u>39</u> L(52) <u>45</u>
Valleyfield		
Victoriaville		34- 58+ <u>63</u>
Ville de la Baie	9	30+

SASKATCHEWAN

City/Ville	Canal/VHF/Channel	Canal/UHF/Channel
Assiniboia		23-
Bellegarde		26- 54+
Biggar		29+
Broadview		49-
Canora		32-
Carlyle Lake	7+	47-
Colgate	<u>12</u>	<u>48</u>
Cypress Hills	2+	19-
Davidson		14+ <u>54</u>
Esterhazy		<u>19</u> <u>25</u> <u>41</u>
Estevan		33+
Eston		22+
Fort Qu'Appelle	7	<u>27</u>
Golden Prairie	10+	
Gravelbourg		39- 45+
Greenwater Lake	4+	26+
Humboldt		<u>22</u>
Indian Head		21+
Kamsack		54-
Kindersley		54+
Maple Creek		16+
Marengo		<u>15</u> <u>26</u> -
Melville		17-
Moose Jaw-Marquis	4- 7-	<u>16</u> <u>26</u> <u>42</u>
Moosomin		36+
Norquay	7- <u>13</u>	46+
Oxbow		34+
Ponteix	<u>3</u>	<u>22</u>
Regina	<u>2</u> 9- 11+L(53) 13-	<u>18</u> 24+ <u>29</u> <u>46</u>
Riverhurst	10-	<u>25</u> <u>43</u>
Rosetown		<u>40</u>
Saskatoon	4 8+ <u>11</u> <u>13</u>	<u>17</u> <u>23</u> <u>28</u> <u>33</u>
Shaunavon	7+	15+
St Brieux	7+	19-
Stranraer	3- 9	24-
Swift Current	5- 12-	<u>30</u> <u>36</u>
Unity		<u>27</u>

SASKATCHEWAN

City/Ville	Canal/VHF/Channel	Canal/UHF/Channel
Warmley	3-	
Watrous		36-
Weyburn		32+
Wilkie		16+
Willow Bunch	6- 10+	<u>21</u>
Wynyard	<u>6</u> 12+	41+
Yorkton	5- <u>10</u>	<u>14</u> <u>34</u>

YUKON

City/Ville	Canal/VHF/Channel	Canal/UHF/Channel
Clinton Creek	<u>8</u>	<u>22</u>
Dawson	<u>3</u> <u>10</u>	<u>14</u> <u>19</u>
Elsa	<u>9</u>	<u>15</u>
Faro	<u>8</u>	15+
Keno Hill	<u>13</u>	<u>20</u>
Mayo	<u>7</u>	<u>23</u>
Watson Lake	8+	14-
Whitehorse	2+ <u>6</u>	<u>14</u> <u>19</u>

L(1)	Limitation of 8.9 kW ERP, 147 metres EHAAT, with specified pattern to protect KCTS-TV Seattle, Washington.	L(1)	PAR et HEASM limitées à 8.9 kW et 147 m, avec le diagramme prescrit pour protéger KCTS-TV Seattle (Wash.).
L(2)	Limitation to protect KFFB-TV Great Falls, Montana.	L(2)	Limitation pour protéger KFFB-TV Great Falls (Mont.).
L(3)	Limitation to protect KECI-TV Missoula, Montana.	L(3)	Limitation pour protéger KECI-TV Missoula (Mont.).
L(4)	Limitation of 1 kW ERP and 31 metres EHAAT.	L(4)	PAR et HEASM limitées à 1 kW et 31 m.
L(5)	Limitation of 790 watts ERP at 610 metres EHAAT.	L(5)	PAR et HEASM limitées à 790 W et 610 m.
L(6)	Limitation to protect KPAX-TV Missoula, Montana.	L(6)	Limitation pour protéger KPAX-TV Missoula (Mont.).
L(7)	Limitation of 1.37 kW ERP, 427 metres EHAAT to protect KCFW-TV Kalispell, Montana.	L(7)	PAR et HEASM limitées à 1,37 kW et 427 m pour protéger KCFW-TV Kalispell (Mont.).
L(8)	Limitation to protect KOMO-TV Seattle, Washington.	L(8)	Limitation pour protéger KOMO-TV Seattle (Wash.).
L(9)	Limitation of 304 watts at -295.7 metres EHAAT to protect co-channel allotment at Ketchikan, Alaska.	L(9)	Limitation avec une PAR et une HEASM de 304 watts et -295,7 m pour protéger un allotissement sur le même canal à Ketchikan (Alaska).
L(10)	Limited to 1 Megawatt at 305 metres EHAAT or the equivalent in the direction of channel 15+ Centralia, Washington allotment.	L(10)	PAR et HEASM limitées à 1 Mw et 305 m ou l'équivalent dans la direction de l'allotissement du canal 15+ Centralia (Wash.).
L(11)	Limited to 1 Megawatt at 305 metres EHAAT or the equivalent in the direction of channel <u>64</u> Bellingham, Washington allotment.	L(11)	PAR et HEASM limitées à 1 Mw et 305 m ou à l'équivalent dans la direction de l'allotissement du canal <u>64</u> Bellingham (Wash.).
L(12)	Approved site: $49^{\circ} 21' 12''$ N.L. $122^{\circ} 57' 18''$ W.L.	L(12)	Emplacement approuvé : $49^{\circ} 21' 12''$ de latitude nord, $122^{\circ} 57' 18''$ de longitude ouest.

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|-------|--|-------|---|
| L(13) | Minnedosa site to be located no less than 275 km from co-channel assignment at Grand Forks, North Dakota with site co-ordinates $48^{\circ} 08' 24''$ N.L., $97^{\circ} 59' 38''$ W.L. and limited to 100 kW maximum ERP and 305 metres EHAAT, or the equivalent, in the general direction of Grand Forks, North Dakota. | L(13) | L'emplacement de Minnedosa ne doit pas être à moins de 275 km du canal commun assigné à Grand Forks (N.D.) à $48^{\circ} 08' 24''$ de latitude nord et $97^{\circ} 59' 38''$ de longitude ouest, avec une PAR et une HEASM limitées à 100 kW et 305 m ou l'équivalent dans la direction générale de Grand Forks (N.D.). |
| L(14) | Limitation to protect WABI-TV Bangor, Maine. | L(14) | Limitation pour protéger WABI-TV Bangor (Maine). |
| L(15) | Specially coordinated short-spaced allotment with ERP limited to 50 kW at HAAT of 271 metres towards WMEM-TV Presque Isle, Maine. | L(15) | Allotissement à faible espacement ayant fait l'objet de coordinations particulières et limité à un PAR et HASM de 50 kW à 271 mètres vers WMEM-TV Presque Isle (Me.). |
| L(16) | Specially coordinated short-spaced allotment with ERP limited to 4.35 kW at 363.9 metres HAAT at azimuth of 247° towards WMEB-TV Orono, Maine with a maximum ERP of 35.5 kW at 145° azimuth. | L(16) | Allotissement à faible espacement ayant fait l'objet de coordinations particulières et limité à un PAR et HASM de 4,35 kW à 363,9 mètres à 247° d'azimut vers WMEB-TV Orono (Me). PAR maximale de 35,5 kW à 145° d'azimut. |
| L(17) | Limitation to protect WLBZ-TV Bangor, Maine. | L(17) | Limitation pour protéger WLBZ-TV Bangor (Maine). |
| L(18) | Limitation to protect WLBZ-TV Calais, Maine. Moreover, this channel shall not prejudice the future use of channel 13- at Calais, Maine. | L(18) | Limitation pour protéger WMED-TV Calais (Me.). De plus, ce canal ne doit pas nuire à l'exploitation future du canal 13- à Calais (Me.). |
| (19) | Limitation of 14 dBk at 549 metres (or equivalent) to protect WVII-TV Bangor, Maine. | L(19) | PAR et HEASM limitées à 14 dBk et 549 m (ou l'équivalent) pour protéger WVII-TV Bangor (Me.). |
| L(20) | Short spaced allotment to be specially coordinated with the United States. | L(20) | Allotissement à écart insuffisant qui doit faire l'objet de coordinations particulières avec les États-Unis. |
| L(21) | Approved site: $42^{\circ} 27' 00''$ N.L.
$82^{\circ} 05' 00''$ W.L. | L(21) | Emplacement approuvé :
$42^{\circ} 27' 00''$ de latitude nord,
$82^{\circ} 05' 00''$ de longitude ouest. |

L(22)	Approved site: $42^{\circ} 27' 00''$ N.L. $82^{\circ} 05' 00''$ W.L.	L(22)	Emplacement approuvé : $42^{\circ} 27' 00''$ de latitude nord, $82^{\circ} 05' 00''$ de longitude ouest.
L(23)	Limited to 10 kW ERP and 100 metres.	L(23)	PAR et HEASM limitées à 10 kW et 100 m.
L(24)	Limitation to protect WROC-TV Rochester, New York.	L(24)	Limitation pour protéger WROC-TV Rochester (N.Y.).
L(25)	Limitation to protect WIRT Hibbing, Minnesota.	L(25)	Limitation pour protéger WIRT Hibbing (Minn.).
L(26)	Approved site: $43^{\circ} 15' 35''$ N.L. $80^{\circ} 26' 39''$ W.L.	L(26)	Emplacement approuvé : $43^{\circ} 15' 35''$ de latitude nord, $80^{\circ} 26' 39''$ de longitude ouest.
L(27)	Limitation to protect co-channel station WTVS Detroit, Michigan.	L(27)	Limitation pour protéger WTVS Detroit (Mich.) sur le même canal.
L(28)	Approved site: $43^{\circ} 27' 00''$ N.L. $80^{\circ} 36' 08''$ W.L. Short spaced allotment to be specially coordinated with the United States.	L(28)	Emplacement approuvé : $43^{\circ} 27' 00''$ de latitude nord, $80^{\circ} 36' 08''$ de longitude ouest. Un allotissement à faible espacement doit faire l'objet de coordinations particulières avec les États-Unis.
L(29)	Approved site: $42^{\circ} 57' 20''$ N.L. $81^{\circ} 21' 20''$ W.L.	L(29)	Emplacement approuvé : $42^{\circ} 57' 20''$ de latitude nord, $81^{\circ} 21' 20''$ de longitude ouest.
L(30)	Short spaced allotment to be specially coordinated with the United States.	L(30)	Allotissement à faible espacement qui doit faire l'objet de coordinations particulières avec les États-Unis.
L(31)	Limitation of 100 kW ERP and 183 m EHAAT toward WCML-TV Alpena, Michigan at notified distance of 383 km.	L(31)	Limitation de 100 kW PAR et HEASM de 183 m à WCML-TV Alpena (Mich.) à une séparation de 383 km.
L(32)	Specially coordinated short spaced allotment with power limited to 3 kW towards WTOM-TV Cheboygan, MI. (using a directional antenna with an 11 dB null on a bearing of 298 degrees; maximum ERP of 38 kW at 105° true; EHAAT of 130.8 metres.	L(32)	Allotissement à faible espacement ayant fait l'objet de coordinations particulières et limité à un PAR de 3 kW vers WTOM-TV Cheboygan (MI.) à environ 298° d'azimut; un PAR maximale de 38 kW à 105° d'azimut; HASM de 130,8 mètres.

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| L(33) Limitation of 18 kW at 134 metres EHAAT over sector 224 to 258 degrees true to protect WJRT-TV Flint, Mich., and a limitation of 158 kW at 134 metres EHAAT, at an azimuth of 150 degrees true, to protect WICU-TV Erie, Pennsylvania. | L(33) PAR et HEASM limitées à 18 kW et 134 m dans le secteur de 224 à 258 degrés d'azimut pour protéger WJRT-TV Flint (Mich.) et PAR et HEASM limitées à 158 kW et 134 m à 150 degrés d'azimut pour protéger WICU-TV Erie (Pa.). |
| L(34) Limitation to protect co-channel allotment at Elmira, N.Y. | L(34) Limitation pour protéger un allotissement sur le même canal à Elmira (N.Y.). |
| L(35) Approved site: 42° 43' 21" N.L. 82° 10' 00" W.L. | L(35) Emplacement approuvé : 42° 43' 21" de latitude nord 82° 10' 00" de longitude ouest |
| L(36) Limited to 10 kW ERP at 98 m EHAAT to protect co-channel assignments WOSO-TV Columbus, Ohio and WNIT-TV South Bend, Ind., and Channel 20 assignment WXON-TV Detroit, Mich. | L(36) Limitation de 10 kW PAR et HEASM de 98 m pour protéger WOSO-TV Columbus (Ohio) et WNIT-TV South Bend (Ind.), et WXON-TV Detroit (Mich.) sur canal 20. |
| L(37) Approved site: 42° 42' 53" N.L. 82° 08' 12" W.L. | L(37) Emplacement approuvé : 42° 42' 53" de latitude nord, 82° 08' 12" de longitude ouest. |
| L(38) Assignment to be located not less than 93 km from WTVS, channel <u>56</u> , Detroit and 85 km from WGPR-TV, channel <u>62</u> , Detroit, Michigan. | L(38) L'assignation ne doit pas être à moins de 93 km de la station WTVS, canal <u>56</u> , Detroit, ni à moins de 85 km de la station WGPR-TV, canal <u>62</u> , Detroit (Mich.). |
| L(39) Approved site: 42° 03' 41" N.L. 82° 29' 05" W.L. | L(39) Emplacement approuvé : 42° 03' 41" de latitude nord, 82° 29' 05" de longitude ouest. |
| L(40) Limitation to protect WTVH Syracuse, New York. | L(40) Limitation pour protéger WTVH Syracuse (N.Y.) |
| L(41) Limitation to protect WUTV Buffalo, New York, channel 29- and channel <u>23</u> allotment at Buffalo, New York. | L(41) Limitation pour protéger WUTV Buffalo (N.Y.) canal 29- et un allotissement sur canal <u>23</u> à Buffalo (N.Y.). |

L(42)	Approved site: $43^{\circ} 38' 33''$ N.L. $79^{\circ} 23' 15''$ W.L. Short spaced allotment to be specially coordinated with the United States.	L(42)	Emplacement approuvé : $43^{\circ} 38' 33''$ de latitude nord, $79^{\circ} 23' 15''$ de longitude ouest. Allotissement à écart insuffisant qui doit faire l'objet de coordinations particulières avec les États-Unis.
L(43)	Approved site: $42^{\circ} 17' 42''$ N.L. $83^{\circ} 05' 00''$ W.L.	L(43)	Emplacement approuvé : $42^{\circ} 17' 42''$ de latitude nord, $83^{\circ} 05' 00''$ de longitude ouest.
L(44)	Limitation to protect WCSH-TV Portland, Maine.	L(44)	Limitation pour protéger WCSH-TV Portland (Maine).
L(45)	Limitation to protect WEDB-TV Berlin, New Hampshire on Channel 40-.	L(45)	Limitation pour protéger WEDB-TV Berlin (N.H.), sur canal 40-.
L(46)	Limitation to protect WAGM-TV Presque Isle, Maine.	L(46)	Limitation pour protéger WAGM-TV Presque Isle (Me).
L(47)	Limitation to protect WAGM-TV Presque Isle, Maine.	L(47)	Limitation pour protéger WAGM-TV Presque Isle (Me).
L(48)	Limited to 5 kW ERP in the direction of co-channel station WMUR-TV Manchester, New Hampshire, with EHAAT 618 metres, or the equivalent and specified directional antenna radiation pattern.	L(48)	PAR et HEASM limitées à 5 kW et 618 m ou l'équivalent dans la direction générale de WMUR-TV Manchester (N.H.), qui utilise le même canal, et diagramme de rayonnement d'antenne directive prescrit.
L(49)	Limitation of 100 kW ERP and 457 metres EHAAT at site $49^{\circ} 08' 06''$ N.L., $66^{\circ} 20' 12''$ W.L. to protect WAGM-TV Presque Isle, Maine.	L(49)	PAR et HEASM limitées à 100 kW et 457 m à $49^{\circ} 08' 06''$ de latitude nord et $66^{\circ} 20' 12''$ de longitude ouest pour protéger WAGM-TV Presque Isle (Me.).
L(50)	Limitation of 45 watts toward WMED-TV Calais, Maine and maximum effective radiated power of 1.114 kW at 25 and 240 degrees azimuth at 148 metres EHAAT. Moreover, this channel shall not prejudice the future use of channel 13- at Calais, Maine.	L(50)	Puissance limitée à 45 W dans la direction de WMED-TV Calais (Me.) avec un PAR limitée à 1,114 kW à 25 et 240 degrés d'azimut, à une HEASM de 148 m. De plus, ce canal ne doit pas nuire à l'exploitation éventuelle du canal 13- à Calais (Me.).

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| L(51) Limitation of 12.5 kW maximum ERP and 196 metres EHAAT. | L(51) PAR et HEASM limitées à 12,5 kW et 196 m. |
| L(52) Approved site: 46° 29' 27"N.L.
72° 39' 00" W.L. | L(52) Emplacement approuvé :
46° 29' 27" de latitude nord,
72° 39' 00" de longitude ouest. |
| L(53) Limitation of 144 kW at 300 metres EHAAT or the equivalent in the direction of Channel 11- Williston, North Dakota. | L(53) Limitation avec un PAR et une HEASM de 144 kW et 300 m ou l'équivalent dans la direction du canal 11- à Williston (N.D). |

Table B – Tableau B**UNITED STATES/ÉTATS-UNIS****ALASKA**

City/Ville	Canal/VHF/Channel	Canal/UHF/Channel
Fairbanks	2+ 4+ 7+ 9+ 11+ 13+	
Juneau	<u>3</u> <u>8</u> <u>10</u>	
Ketchikan	<u>2</u> <u>4</u> <u>9</u>	
Sitka	<u>13</u>	

CONNECTICUT

Bridgeport	3+	43- 49-
Hartford		18- <u>24</u> 61+
New Britain		30+
New Haven	8	59+ <u>65</u>
New London		26+
Norwich		<u>53</u>
Waterbury		<u>20</u>

IDAHO

Coeur d'Alène		26+
Grangeville		15-
Lewiston	3-	
Moscow	12-	
Sandpoint		16+

ILLINOIS

Aurora		<u>60</u>
Chicago	2- <u>5</u> <u>7</u> 9+ <u>11</u>	<u>20</u> <u>26</u> <u>32</u> 38- <u>44</u>
Joliet		14- 66+

INDIANA

City/Ville	Canal/VHF/Channel	Canal/UHF/Channel
Anderson		67+
Angola		<u>63</u>
Bloomington	4	30- 42+ 63+
Elkhart		28+
Fort Wayne		15+ 33- 39- <u>55</u>
Ft Wayne-Roanoke		21+
Gary-St. John		<u>50</u>
Gary		56+
Hammond		62+
Indianapolis	6 8- 13-	20- <u>40</u> 59- <u>69</u>
Kokomo		29-
Lafayette		<u>18</u> <u>24</u>
Madison		60+
Marion		<u>23</u>
Muncie		17+ <u>49</u>
Richmond		43+
South Bend		<u>16</u> <u>22</u> 34- <u>46</u>

KENTUCKY

Ashland	25- 50- 61+
Covington	54+
Morehead	38+ 67-
Owenton	52+

MAINE

Augusta	10-	
Bangor	2- 5+ 7-	
Calais	13-L(1)	
Fort Kent		46+
Fryeburg		18+
Houlton		25+
Kittery		<u>39</u>
Lewiston	8-	35-
Millinocket		44-
Orono	12-	
Portland	6- 13+	26- <u>51</u>

MAINE

City/Ville	Canal/VHF/Channel	Canal/UHF/Channel
Presque Isle	8 10+	62+
Rumford		43+

MARYLAND

Cumberland	52+ <u>65</u>
Frederick	<u>62</u>
Hagerstown	25- <u>31</u> 68+
Oakland	36+

MASSACHUSETTS

Boston	2+ 4- 5- 7+	25+ <u>38</u> 44+ 68+
Boston-Cambridge		<u>56</u>
Greenfield		32+
Middleton		<u>62</u>
New Bedford	6+	28- <u>34</u>
North Adams		<u>19</u> <u>35</u>
Norwell		46+
Pittsfield		51+
Springfield		<u>22</u> <u>40</u> 57+
Vineyard Haven		58+
Worcester		<u>14</u> <u>27</u> 48+ <u>66</u>

MICHIGAN

Alpena	<u>6</u> <u>11</u>	
Ann Arbor		31+ 58+
Bad Axe		15- <u>35</u> 57-
Battle Creek		41+ 43-
Bay City	5-	19+ 61+
Cadillac	2	<u>27</u> <u>33</u>
Calumet	5-	22-
Cheboygan	4+	
Detroit	2+ <u>4</u> 7-	20+ 50- <u>56</u> <u>62</u>

MICHIGAN

City/Ville	Canal/VHF/Channel	Canal/UHF/Channel
East Lansing		23- 69-
Escanaba	3+	
Flint	12-	28- 66-
Grand Rapids	8+ 13+	<u>17</u> 35+
Iron Mountain	8-	17+
Ironwood		15- 24+
Jackson		18+
Kalamazoo	3-	52+ <u>64</u>
Lansing	6-	<u>47</u> 53-
Manistee		<u>21</u>
Manistique		15+
Marquette	6- <u>13</u>	<u>19</u>
Mount Clemens		38+
Mount Pleasant		<u>14</u>
Muskegon		54+
Onondaga	10-	
Petoskey		23+
Port Huron		46+
Saginaw		25- 49-
Sault Ste. Marie	8 10+	32-
Traverse City	7+	29-
West Branch		<u>24</u>

MINNESOTA

Alexandria	7	<u>24</u> <u>42</u>
Bemidji	9	26+
Brainerd		<u>22</u>
Crookston		<u>33</u>
Duluth	<u>3</u> 8 10+	21+ 27-
Ely		17-
Hibbing	13-	18-
International Falls	<u>11</u>	35+
Minneapolis-St. Paul	2- <u>4</u> 5- 9+ 11-	<u>17</u> 23+ 29+ <u>45</u>
St. Cloud		<u>19</u> 25- <u>41</u>
Thief River Falls	10	
Wadena		20-
Walker	12-	
Willmar		14-

MONTANA

City/Ville	Canal/VHF/Channel	Canal/UHF/Channel
Billings	<u>2</u> <u>6</u> <u>8</u> <u>11</u>	<u>14</u> 20+
Bozeman	7- <u>9</u>	
Butte	2+ <u>4</u> 6+	<u>18</u> <u>24</u>
Cutbank		14-
Glendive	5+ 13+	16-
Great Falls	3+ 5+	<u>16</u> <u>26</u> <u>32</u>
Hardin	4+	
Havre	9+ 11+	18-
Helena	10+ <u>12</u>	15+
Joplin		35- <u>48</u> 54-
Kalispell	9-	29-
Lewiston	<u>13</u>	
Miles City	3- <u>10</u>	
Missoula	8- 11- 13-	17- 23-
Wolf Point		17+

NEW HAMPSHIRE

Berlin		40-
Concord		21+
Durham	<u>11</u>	
Hanover		15+ <u>31</u>
Keene		52+
Littleton		49+
Manchester	9-	50- 60+
Portsmouth		17-

NEW JERSEY

Little Falls		50+
Newark	13-	<u>68</u>
New Brunswick		47+ <u>58</u>
Newton		<u>63</u>
Paterson		41-
Secaucus	9+	
West Milford		66-

NEW YORK

City/Ville	Canal/VHF/Channel	Canal/UHF/Channel
Albany-Schenectady	6 10- <u>13</u>	17+ 23- 29+ <u>45</u>
Amsterdam		39+ <u>55</u>
Batavia		51-
Binghamton	12-	<u>34</u> 40- 46+
Buffalo	2 4- 7+	<u>17</u> <u>23</u> 29- 49-
Carthage	7-	
Corning		<u>30</u>
Elmira		18+ 36-
Ithaca		<u>52</u> 65+
Jamestown		26+ 46
Kingston		62+
Lake Placid	5	34+
Massena-Norwood		<u>18</u>
New York	<u>2</u> <u>4</u> 5+ 7 11+	<u>25</u> 31-
Oneonta		<u>15</u> <u>42</u>
Plattsburgh		<u>57</u>
Poughkeepsie		54+
Rochester	8 10+ 13-	<u>21</u> 31+ 61+
Syracuse	3- 5- 9-L(2)	24+ 43+ 56+ 68-
Utica	2-	20+ <u>33</u> <u>59</u>
Watertown		<u>16</u> 50+

NORTH DAKOTA/DAKOTA DU NORD

Bismarck	<u>3</u> <u>5</u> 12-	17- 26+
Devils Lake	8+	22+
Dickinson	2+ <u>7</u> 9-	
Ellendale		19-
Fargo	<u>6</u> 11+ <u>13</u>	15-
Grand Forks	<u>2</u> L(3)	14+ 27+
Jamestown	7-	<u>23</u>
Minot	6+ 10- 13-	14- <u>24</u>
Pembina	<u>12</u>	
Valley City	4-	
Williston	4 8- 11-	15-

OHIO

City/Ville	Canal/VHF/Channel	Canal/UHF/Channel
Akron		23+ 49+ 55-
Alliance		45+
Ashtabula		<u>15</u>
Athens		<u>20</u>
Bowling Green		27+
Cambridge		44-
Canton		17- <u>67</u>
Chillicothe		<u>53</u>
Cincinnati	5- <u>9</u> <u>12</u>	19+ 48- 64-
Cleveland	<u>3</u> 5+ 8	<u>19</u> 25+ <u>61</u>
Columbus	4- 6+ 10+	28- <u>34</u> 56-
Dayton	<u>2</u> 7+	16+ 22+ 45
Defiance		65+
Hillsboro		24+ 55+
Lima		35- 44+ 57+
Lorain		<u>43</u>
Mansfield		47+ 68-
Newark		31- <u>51</u>
Oxford		14+
Portsmouth		<u>30</u> 42-
Sandusky		<u>52</u>
Springfield		26+ <u>66</u>
Steubenville	9+	62+
Toledo	11- <u>13</u>	24- 30+ 36- 40-
Youngstown		21- <u>27</u> <u>33</u> <u>58</u>
Zanesville		18-

OREGON

Astoria	7-	21
Corvallis	11-	
Pendleton	<u>2</u> 6+ 8- <u>10</u> <u>12</u>	24+ <u>30</u> 40-
Salem		<u>22</u> <u>32</u>
The Dalles		17-

PENNSYLVANIA/PENNSYLVANIE

City/Ville	Canal/VHF/Channel	Canal/UHF/Channel
Allentown		<u>39</u> <u>69</u>
Altoona	10-	23- <u>47</u> 57+
Bethlehem		60-
Clearfield	3+	
Erie	<u>12</u>	<u>24</u> 35+ 54+ 66+
Greensburg		40+
Harrisburg		21+ 27- 33+
Hazelton		<u>56</u>
Johnstown	<u>6</u> 8-	19+ 28+
Lancaster	8+	15+
Lebanon		55-
Pittsburgh	2- 4+ <u>11</u> 13-	<u>16</u> <u>22</u> 53+
Reading		<u>51</u>
Scranton		16- 22- 38+ 44- <u>64</u>
State College		29+ 59+
Wilkes Barre		<u>28</u>
Williamsport		20-
York		<u>43</u> 49+

RHODE ISLAND

Block Island		69-
Providence	10+ 12+	<u>16</u> <u>36</u> 64+

SOUTH DAKOTA/DAKOTA DU SUD

Aberdeen	9-	16-
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VERMONT

Burlington	<u>3</u>	22+ 33-
Rutland		28+
St. Johnsbury		20-
Windsor		<u>41</u>

WASHINGTON

City/Ville	Canal/VHF/Channel	Canal/UHF/Channel
Anacortes		<u>24</u>
Bellevue		33+ 51+
Bellingham	12+	<u>34</u> <u>64</u>
Centralia		15+
Everett		16-
Kennewick		42+
Morton		<u>39</u>
Pasco		19-
Pullman	10-	
Richland		<u>25</u> <u>31</u>
Rochester		26+
Seattle	<u>4</u> <u>5+</u> <u>7</u> <u>9</u>	22+ 45+ <u>62</u>
Spokane	2- 4- 6- 7+	<u>22</u> 28- 34-
Tacoma	11+ 13-	<u>20</u> <u>28</u> <u>56</u>
Vancouver		<u>14</u> 49-
Walla Walla		14-
Wenatchee		18+ <u>27</u>
Yakima		23+ 29+ <u>35</u> <u>47</u>

WEST VIRGINIA/VIRGINIE-OCCIDENTALE

Charleston	8+ 11+	<u>23</u> <u>29</u> 49-
Clarksburg	12+	46-
Fairmont		66-
Huntington	3+ 13+	33+
Keyser		30+
Martinsburg		<u>44</u> 60+
Morgantown		24-
Parkersburg		15- 39+ <u>57</u>
Weirton		50+
Weston	<u>5</u>	
Wheeling	<u>7</u>	<u>14</u> 41

WISCONSIN

City/Ville	Canal/VHF/Channel	Canal/UHF/Channel
Appleton		32+
Chippewa Falls		<u>48</u>
Colfax		28-
Eau Claire	13+	<u>18</u>
Green Bay	2+ 5+ 11+	26+ <u>38</u> 44+
Kenosha		55-
Manitowoc		16+
Marshfield		39-
Milwaukee	4- <u>6</u> 10+ <u>12</u>	18- 24+ <u>30</u> <u>36</u> <u>58</u>
Park Falls		36+
Racine		49+
Rhinelande	12+	
Rice Lake City		<u>16</u>
Sheboygan		<u>28</u>
Suring		14-
Superior	6+	<u>40</u>
Wausau	7- <u>9</u>	20+ 33-

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|---|---|
| L(1) Limitation to protect
CJBR-TV-1, Edmundston,
N.B. | L(1) Limitation pour protéger CJBR-TV-1,
Edmundston (N.-B.). |
| L(2) Limitation of 20 dBk at 305 m
EHAAT. | L(2) Limitations : 20 dBk et 305 m HEASM. |
| L(3) Limited to 100 kW maximum
ERP and 305 m EHAAT, or
the equivalent, in the general
direction of Brandon,
Manitoba. | L(3) Limitation de 100 kW PAR et de 305 m
HEASM ou l'équivalent, en direction
générale de Brandon (Man.). |