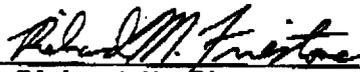


EXECUTIVE CORRESPONDENCE

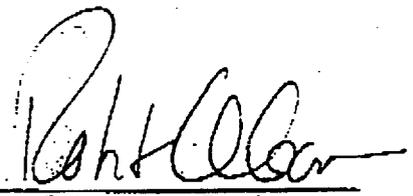
SEP 14 1992

FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY92-160
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FILEUNDERSTANDING CONCERNING CELLULAR RADIO SYSTEMS IN THE BANDS
824-825 MHz, 845-849 MHz, 869-870 MHz AND 890-894 MHz

1. The present provisions relating to cellular radio are acceptable for application by analog and digital systems in the new cellular expansion bands noted above. Specifically these provisions are as follows:
 - a) Section 5 of the Arrangement Between the Department of Communications of Canada and the Federal Communications Commission of the United States Concerning the Use of the Band 806 to 890 MHz along the Canada - United States Border (Arrangement);
 - b) Letter dated May 26, 1983, to Wendell R. Harris, Common Carrier Bureau, FCC, from G.R. Begley, Telecommunications Engineering Services, DOC; and
 - c) General Principles for Canada/U.S. Coordination of Cellular Systems dated June 12, 1985, and signed jointly by Albert Halprin, Chief, Common Carrier Bureau, FCC and by S.N. Ahmed, Director General, Engineering Programs Branch, DOC.
2. Recognizing that the current Arrangement referred in (a) above applies only between 806 and 890 MHz, our action herein extends application of that Arrangement to 894 MHz.
3. Any systems on either side of the border not conforming with the above agreed provisions will require coordination on a case-by-case basis.


Richard M. Firestone

Date: 12/4/89


Robert A. Gordon

Date: 8 Jan 90No. of Copies rec'd _____
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GENERAL PRINCIPLES FOR CANADA/U.S. COORDINATION OF CELLULAR SYSTEMS

1. The frequency bands are to be shared on an equal basis along the border, except as otherwise specified.

2. Compatible independent operation of the systems on either side of the border will be assured through coordination of the pertinent design aspects of the systems such as cell cluster configurations, coverage areas, interference ranges, cell channel compliments signalling channels and system housekeeping features such as supervisory audio tones and digital color codes. The system operators will carry out such coordination and if required in consultation with their respective FCC and DOC. The FCC and DOC respectively should be notified of the arrangements agreed to.

3. Except by agreement between both Agencies, the reliable service area of cells (defined to be 35 dB_v/m at the cell perimeter) will not extend across the border.

4. Recognizing that the system expansion plans will be different for systems along the Canada/U.S. border, the following general rules should be followed:

- a. The initial installations will normally use all channels designated in the plan for these installations before undertaking other expansion measures.
 - b. System expansion measures such as addition of cells, cell splitting and sectorization will not force major changes in the foreign system except by mutual agreement by the service providers.
5. Any changes to the notified arrangements including cell site locations, cell sectorization and cell splitting, will require consultation with the other operator and notification to the FCC and DOC.
 6. In the event a satisfactory arrangement is not reached, the respective Agencies should be informed and appropriate steps would be taken.
 7. Notwithstanding the above guidelines and the attached principles, each Agency reserves the right to take whatever measures it considers appropriate in the circumstances.
 8. Minimum technical factors to be considered are:

- ERP

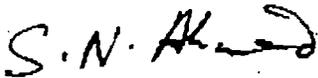
-
- antenna height
 - cell size
 - cell cluster configuration
 - frequency plan
 - coverage definitions
 - signal level at the coverage edge
 - interference range
 - basis of calculations
 - size of coordination zone
 - spectrum sharing relative to equal access
 - signalling/control

June 12, 1985

IMPLEMENTATION OF THE CELLULAR GUIDELINES

INTERNAL

1. Both Agencies will exchange copies of application for cell sites within 45 miles of the border.
2. Each agency will inform its affected applicant/operator as appropriate requesting him to contact the other country's applicant/operator and affect coordination as per the attached principles.
3. The applicants will be expected to arrive at a mutual arrangement and notify the respective Agency.



S. N. Ahmed
Director
Engineering Programs Branch
Department of Communications



Albert Halprin
Bureau Chief
Common Carriers Bureau
Federal Communications Commission

300 Slater Street
Ottawa, Ontario
Canada
K1A 0C8

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Our file / Notre référence: OFFICE OF THE SECRETARY
6110-24

May 26, 1983

Mr. Wendell R. Harris
Deputy Chief, Policy and Program
Planning Division
Common Carrier Bureau
Federal Communications Commission
Room 546
1919 M NW
Washington, D.C. 20554
U.S.A.

Dear Mr. Harris,

I refer to your letter of April 12, 1983, concerning the application of the Western Union Telegraph Company d/b/a Buffalo Telephone Company for a RCC cellular system in Buffalo, New York, as well as our subsequent discussions on the general question of cross-border coordination of cellular systems.

As identified in our discussions, the Commission and the Department need to quickly arrive at an agreement on two aspects of the cellular system cross-border coordination question. First, we need to establish the wording of a clause which would be added to the authorization documents for cellular systems on either side of the border which would put the applicants on notice to the effect that cross-border coordination is required. Secondly, we need to establish and agree on the exact methodology to be used in coordinating and authorizing cellular systems in border areas.

Concerning the first item, it is agreed that the following clause, which was formulated in our discussions, should appear on authorization documents issued by both the Commission and this Department:

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Canada

ANNÉE MONDIALE DES
COMMUNICATIONS
WORLD COMMUNICATIONS
YEAR
AÑO MUNDIAL DE LAS
COMUNICACIONES
1983



'This authorization is subject to the condition that, in the event that cellular systems using the same frequency block as granted herein are authorized in adjacent territory in (Canada/the United States), coordination of any of your transmitter installations which are within 45 miles of the US/Canada border shall be required to eliminate any harmful interference that might otherwise exist and to ensure continuance of equal access to the frequency block by both countries.'

On the second point it is felt that we should meet as soon as possible to establish the cross-border cellular systems coordination methodology for both RCC and Wire-line systems.

I look forward to our continuing cooperation on this matter.

Yours truly,



G.R. Begley
Manager
Telecommunication Engineer
Services

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FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

EXCHANGE OF NOTES BETWEEN THE GOVERNMENT OF CANADA
AND THE GOVERNMENT OF THE UNITED STATES OF AMERICA
AMENDING THE AGREEMENT CONCERNING ALLOCATION OF
TELEVISION CHANNELS, DATED JUNE 23, 1952

Washington, Feb. 26 & April 7, 1982

In force April 7, 1982

ECHANGE DE NOTES ENTRE LE GOUVERNEMENT DU CANADA ET LE
GOUVERNEMENT DES ETATS-UNIS D'AMERIQUE MODIFIANT L'ACCORD
CONCERNANT L'ATTRIBUTION DE CANAUX DE TELEVISION EN DATE
DU 23 JUIN 1952

Washington, les 26 février et 7 avril 1982

En vigueur le 7 avril 1982

Canadian Embassy



Ambassade du Canada

WASHINGTON, February 26, 1982.

No. 77

Sir,

I have the honour to refer to the Exchange of Notes dated April 23 and June 23, 1952 between Canada and the United States of America constituting an Agreement regarding allocation of television channels and to discussions between representatives of interested agencies of our two Governments concerning the allocation of radio spectrum in the UHF band. They have proposed the following amendments to the above mentioned Agreement:

The band 806 to 890 MHz which includes television channels 70 to 83, shall no longer be used for television broadcasting but shall be allocated to the mobile radio services. The use of the band 806 to 890 MHz shall be governed by the Arrangement between the Department of Communications and the Federal Communications Commission appearing as Annex I of this Note. At an appropriate time in the future, this Arrangement shall be annexed to the Agreement concerning the Coordination and Use of Radio Frequencies Above 30 Megacycles per second as amended June 24, 1965.

... 2

The Honourable Alexander M. Haig, Jr.,
Secretary of State,
Washington, D. C. 20520.

The allotment of television channels within an area of 250 miles (402 km) on either side of the border between Canada and the United States shall be in accordance with Tables A and B appearing in Annex II of this Note. These Tables may be amended from time to time by an exchange of documents directly between the Federal Communications Commission and the Department of Communications as provided in paragraph H of the Canadian/USA Television Agreement of 1952.

Recognizing that five Canadian television stations currently provide service in Southern Ontario and British Columbia in the band 806 to 890 MHz and that these stations utilize, in accordance with the 1952 Canadian /USA Television Agreement of 1952, channel 78, (854-860 MHz) in Windsor, channel 76, (842-848 MHz) in Kitchener, channel 79, (860-866 MHz) in Toronto, channel 72, (818-824 MHz) in Enderby and channel 77, (848-854 MHz) in Radium/Hot Springs, the United States agrees to protect reception of these stations in Canada from interference from other radio services operating in the band 806-890 MHz. Canada agrees to reassign as expeditiously as possible the three television stations located in Ontario. The two stations in British Columbia will be reassigned when their continued operation would impair the provision of mobile radio services along the border.

Prior to reassignment, each of the broadcast stations is to be protected as follows: the field strength of an interfering mobile radio signal at the station's calculated B contour (where the protected

contour crosses the border, that portion of the border lying within the contour shall be treated as the relevant segment of the B contour) is not to exceed 14 dBu for frequencies co-channel with the television channel utilized and is not to exceed 54 dBu in the two adjacent 6 MHz guard bands. The field strength of any interfering signals is to be calculated using the R6602 F(50,10) propagation curves at a receiving effective antenna height of 9.1 metres.

The Interim Arrangement for the coordination of U.S. land mobile radio stations operating in the 806-890 MHz frequency band in the vicinity of the border between Canada and the United States of America dated January 13, 1977 is hereby terminated.

Representatives of the United States and Canada will, at the request of the Canadian administration, negotiate amendments to the annexed arrangement in order to permit the introduction of mobile satellite operations in the band 806 to 890 MHz.

If the proposals outlined above are acceptable to the Government of the United States, I have the honour to propose that this Note, which is authentic in English and French, and your reply to that effect shall constitute an agreement between our two Governments which shall enter into force on the date of your reply.

Accept, Sir, the renewed assurances of my highest consideration.

A. L. ...

Ambassador

Canadian Embassy



Ambassade du Canada

WASHINGTON, le 26 février 1982

n° 77

Monsieur le Secrétaire d'Etat,

J'ai l'honneur de me référer à l'échange de notes datées des 23 avril et 23 juin 1952 entre le Canada et les Etats-Unis d'Amérique constituant un accord au sujet de l'attribution de canaux de télévision et aux discussions entre les représentants des organismes intéressés de nos deux Gouvernements en ce qui a trait à l'attribution du spectre radioélectrique dans la bande UHF. Nos représentants respectifs suggèrent les amendements suivants à l'accord ci-haut mentionné.

La bande de 806 à 890 MHz, laquelle comprend les canaux de télévision 70 à 83, ne sera plus utilisée pour la télédiffusion mais sera dorénavant attribuée au service de radiocommunications mobiles. Cette bande sera utilisée conformément aux termes de l'Arrangement entre le ministère des Communications et la Federal Communications Commission constituant l'Annexe I de cette note. A un moment opportun, cet Arrangement sera annexé à l'Accord relatif à la "Coordination et à l'utilisation des fréquences radiophoniques de plus de trente mégacycles par seconde" tel qu'amendé le 24 juin 1965.

L'allotissement des canaux de télévision dans un corridor de 250 milles (402 km) de chaque côté de la frontière entre le Canada et les Etats-Unis sera conforme aux Tableaux A et B constituant l'Annexe

Honorable Alexander M. Haig, Jr.,
Secrétaire d'Etat,
Washington, D.C. 20520

Washington, D.C. 20520

II de cette note. Ces Tableaux peuvent être modifiés périodiquement par échange de documents directement entre la Federal Communications Commission et le ministère des Communications tel que prévu au paragraphe H de l'Accord canado-américain sur la télévision de 1952.

Reconnaissant la présence de cinq stations de télévision présentement en service dans le sud de l'Ontario et ~~de la~~ *en* Colombie-Britannique dans la bande de 806 à 890 MHz et compte tenu du fait que ces stations utilisent, conformément aux termes de l'Accord canado-américain sur la télévision de 1952, les canaux 78 (854-860 MHz) à Windsor, 76 (842-848 MHz) à Kitchener, 79 (860-866 MHz) à Toronto, 72 (818-824 MHz) à Enderby et 77 (848-854 MHz) à Radium/Hot Springs, les Etats-Unis s'engagent à protéger la réception de ces stations au Canada contre tout brouillage pouvant être causé par les services de radiocommunications utilisant la bande de 806 à 890 MHz. Le Canada s'engage, pour sa part, à assigner de nouvelles fréquences aux trois stations situées en Ontario le plus rapidement possible. Quant aux deux stations situées en Colombie-Britannique, de nouvelles fréquences leur seront assignées dès que leur présence pourra constituer un obstacle aux radiocommunications mobiles le long de la frontière.

Avant qu'on leur assigne une nouvelle fréquence, chacune des stations de télévision doit être protégée en fonction des critères suivants: le champ électrique d'un signal brouilleur d'une station mobile, mesuré au contour théorique B (dans les cas où le contour protégé s'étend au-delà de la frontière, la portion de la ligne -
frontière située à l'intérieur ~~de la zone délimitée par le contour~~ sera

du

considérée comme constituant le contour B) ne doit pas dépasser 14 dBU pour les fréquences de même canal que celui utilisé par la station de télévision et ne doit pas dépasser 54 dBU dans les deux ~~canaux adjacents ayant une largeur de bande~~ ^{bandes de garde adjacentes} de 6 MHz. Le champ électrique du signal brouilleur doit être calculé en utilisant les courbes de propagation F (50,10) R6602 en prenant pour acquis une antenne réceptrice d'une hauteur effective de 9.1 mètres.

La présente met fin à l'Arrangement provisoire de coordination des stations de radiocommunications mobiles des Etats-Unis utilisant la bande de 806 MHz à 890 MHz près de la frontière entre le Canada et les Etats-Unis d'Amérique conclu le 13 janvier 1977.

A la demande de l'administration canadienne, les représentants des Etats-Unis et du Canada négocieront des amendements à l'arrangement apparaissant en annexe afin de permettre l'introduction d'un service mobile à satellite dans la bande de 806 à 890 MHz.

Si les propositions ci-dessus sont jugées acceptables par le Gouvernement des Etats-Unis, j'ai l'honneur de proposer que cette note, dont les versions française et anglaise font foi, et votre réponse à cet effet, constituent un accord entre nos deux Gouvernements, ledit accord entrant en vigueur à la date de votre réponse.

Agréez, Monsieur le Secrétaire d'Etat, les assurances renouvelées de ma très haute considération.

l'Ambassadeur,

Allen . G. G. S.

DEPARTMENT OF STATE
WASHINGTON

April 7, 1982

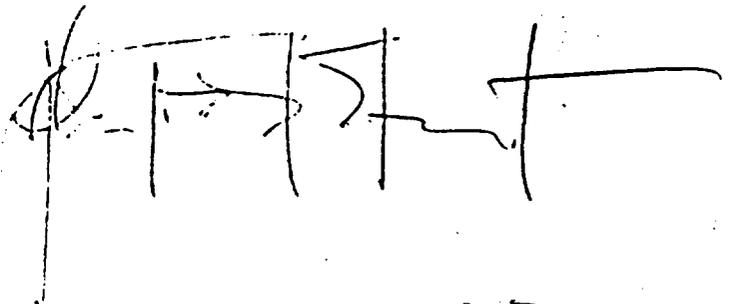
Excellency:

I have the honor to acknowledge the receipt of your Note No. 77 dated February 26, 1982 with annexes attached.

In reply thereto, I am pleased to inform Your Excellency that the Government of the United States of America agrees that the proposal contained in Your Excellency's Note is acceptable and that this Note in reply constitutes a modification to the Agreement relating to the allocation of television channels, which will enter into force on the date of this reply.

Accept, Excellency, the renewed assurances of my highest consideration.

For the Secretary of State:

A handwritten signature in black ink, appearing to be a stylized name, possibly 'P. H. D. H.', written over a faint grid or set of lines.

His Excellency

Allan E. Gotlieb,

Ambassador of Canada.

Arrangement Between
the Department of Communications of Canada
and the Federal Communications Commission
of the United States
Concerning the use of the Band 806 to 890 MHz
along the Canada - United States Border

1. Scope

This arrangement between the Department of Communications of Canada (DOC) and the Federal Communications Commission of the United States (FCC), herein referred to as the Agencies, covers the establishment and operation of land mobile radio services operating in the band 806 to 890 MHz along the Canada-United States border.

Aeronautical and maritime mobile services in this band are not covered by this arrangement but will be the subject of future discussion at the request of either Agency prior to their introduction, in accordance with the principle outlined in paragraph 2.

2. General Sharing Principle

The frequency band covered by this arrangement and each of the sub-bands are to be shared on an equal basis along the border, except as otherwise specified.

3. Sharing Arrangements in the 806-821 MHz and 851-866 MHz Bands

3.1 The United States has the unrestricted geographic use of the frequency bands 806.0000 to 809.7500 MHz, 817.2500 to 821.0000 MHz, 851.0000 to 854.7500 MHz and 862.2500 to 866.0000 MHz in the Sharing Zones within the United States except as specified in paragraph 4.

Canada has the unrestricted geographic use of the frequency bands 809.7500 to 817.2500 MHz and 854.7500 to 862.2500 MHz in the Sharing Zones within Canada except as specified in paragraph 4.

3.2 There are three Sharing Zones:

a) Sharing Zone I:

This Sharing Zone is the area adjacent to the United States-Canada border East of longitude 121° 30'W and extending a distance of 100 km within either country. Within this zone, the Agencies may use their allotted portions of spectrum subject to the Effective Radiated Power (ERP) and Effective Antenna Height (EAH) limits of Annex A, Table A1.

b) Sharing Zone II:

This Sharing Zone is the area adjacent to the United States-Canada border between 121° 30' and 127°W longitude and extending a distance of 140 km within either country. Within this zone, the Agencies may use their allotted portions of spectrum subject to the Effective Radiated Power (ERP) and Effective Antenna Height (EAH) limits of Annex A, Table A2.

c) Sharing Zone III:

This Sharing Zone is the area adjacent to the Alaska-British Columbia/Yukon Territory border and extending a distance of 100 km within either country. Within this zone, the Agencies may use their allotted portions of spectrum subject to the Effective Radiated Power (ERP) and Effective Antenna Height (EAH) limits of Annex A, Table A1.

3.3 Protection Zone:

The Protection Zones are the areas adjacent to Sharing Zones I and III and extending from 100 to 140 km away from the United States-Canada border within both countries. There is no Protection Zone associated with Sharing Zone II.

- 3.4 Each Agency has full use of the 806-821 MHz and 851-866 MHz bands within the Protection Zone in their respective country subject to the condition that base stations not exceed the maximum Effective Radiated Power (ERP) and Effective Antenna Height (EAH) limits given in Annex A, Table A1.

Note: see Figure 1

3.5 Two Frequency Channeling Arrangements

Everywhere within the Sharing and Protection Zones, the Agencies will use the spectrum on the basis of a two frequency channelling plan with mobile station transmitters in the 806-821 MHz band and base station transmitters in the 851-866 MHz band.

3.6 Use of the 806-821 MHz and 851-866 MHz Bands Outside of the Sharing and Protection Zones.

Beyond 140 km from the border, the Agencies have unrestricted use of these bands.

4. Special Sharing Arrangements

In recognition of particular demographic circumstances, the Agencies agree on the unequal division of spectrum between Canada and the United States in the following two sectors:

4.1 a) Sector 1:

Sector 1 is defined to be the portion of Sharing Zone I in the United States and Canada, bounded on the West by 85°W longitude and on the East by 81°W longitude.

In this Sector, the United States has the unrestricted geographic use of the bands 806.0000 to 811.2500 MHz, 815.7500 to 821.0000 MHz, 851.0000 to 856.2500 MHz and 860.7500 to 866.0000 MHz and Canada has the unrestricted geographic use of the bands 811.2500 to 815.7500 MHz and 856.2500 to 860.7500 MHz.

b) Sector 2

Sector 2 is defined to be the portion of Sharing Zone I in the United States and Canada bounded on the West by 81°W longitude and on the East by 71°W longitude.

In this Sector, the United States has the unrestricted geographic use of the bands 806.0000 to 808.2500 MHz, 818.7500 to 821.0000 MHz, 851.0000 to 853.2500 MHz and 863.7500 to 866.0000 MHz and Canada has the unrestricted geographic use of the bands 808.2500 to 818.7500 MHz and 853.2500 to 863.7500 MHz.

Note: see Figure 2

4.2 Coordination Necessitated by the Special Sharing Arrangements

Where, as a result of these special sharing arrangements, portions of the allotted bands of both countries overlap, proposed frequency assignments in the overlapping portions will be coordinated between the two Agencies in accordance with the procedures specified in Arrangement A annexed to the Agreement concerning the Coordination and Use of Radio Frequencies Above Thirty Megacycles per Second as amended 24 June 1965.

4.2.1 Coordination is required for assignments in the 808.2500 to 811.2500 MHz, 815.7500 to 818.7500 MHz, 853.2500 to 856.2500 MHz and 860.7500 to 863.7500 MHz bands in the following overlap areas:

- a) The geographical area in Canada enclosed by the meridian of 81°W longitude, the arc of a circle of 100 km radius centered at the intersection of 81°W longitude and the southern shore of Lake Erie and drawn clockwise from the northerly intersection with 81°W longitude to intersect the United States-Canada border, and the United States-Canada border, and
- b) the geographical area in the United States enclosed by the meridian of 81°W longitude, the arc of a circle of 100 km radius centered at the intersection of 81°W longitude and the northern shore of Lake Erie and drawn clockwise from the southerly intersection with 81°W longitude to intersect the United States-Canada border, and the United States-Canada border.

The Agencies will channel and use the overlapping bands for assignments with 16 kHz or less necessary bandwidth on center frequencies spaced 25 kHz apart. The FCC will assign frequencies from 808.2625 to 811.2375 MHz, 815.7625 to 818.7375 MHz, 853.2625 to 856.2375 MHz and 860.7625 to 863.7375 MHz inclusive. The DOC will assign frequencies from 808.2750 to 811.2250 MHz, 815.7750 to 818.7250 MHz, 853.2750 to 856.2250 MHz and 860.7750 to 863.7250 MHz inclusive.

4.2.2 Coordination is required for assignments in the 808.2500 to 809.7500 MHz, 817.2500 to 818.7500 MHz, 853.2500 to 854.7500 MHz and 862.2500 to 863.7500 MHz bands in the following area:

- a) The geographical area in Canada enclosed by the United States-Canada border, the meridian 71°W; and the line beginning at the intersection of 72°W and the United States-Canada border, thence running North along meridian 72°W to the intersection of 45°45'N, thence running East along 45°45'N to the meridian 71°W, and
- b) the geographical area in the United States enclosed by the United States border, the meridian 71°W; and the line beginning at the intersection of 44°25'N, 71°W, thence running by great circle arc to the intersection of 45°N, 70°W, thence North along meridian 70°W to the intersection of 45°45'N, thence running West along 45°45'N to the intersection of the United States - Canada border.

The Agencies will channel and use the bands for assignments with 16 kHz or less necessary bandwidth on center frequencies spaced 25 kHz apart. The FCC will assign frequencies from 808.2625 to 809.7375 MHz 817.2625 to 818.7375 MHz, 853.2625 to 854.7375 MHz and 862.2625 to 863.7375 MHz inclusive.

The DOC will assign frequencies from 808.2750 to 809.7250 MHz, 817.2750 to 818.7250 MHz, 853.2750 to 854.7250 MHz and 862.2750 to 863.7250 MHz inclusive.

Note: see Figure 3

5. Use of the 821-851 MHz and 866-890 MHz Bands

Considering the uncertainties, at the date of this arrangement, concerning the use and extent of mobile systems in the cellular and reserved portions of the bands 821 to 851 MHz and 866 to 890 MHz in both countries and concerning the specific evolution of mobile systems in these bands, as well as the probable timing and location of such evolution, Canada and the United States reserve specification of sharing methodology, including that for the possible introduction of a mobile satellite system, for future discussion which may be held at the request of either country.

Agency

In the case of evolution of cellular systems in either country, the reliable service area of cells (defined for the purpose of this arrangement to be 35 dBuV/m at the cell perimeter) will not extend across the border. In any case where the interference contour of a cell (defined as 3 times the radius of the cell) would fall across the border, the responsible Agency will coordinate such cases with the other Agency prior to authorization.

The coordination procedure will be in accordance with the principle of equal access to the spectrum. The definition of reliable service area may be revised by mutual consent.

6. Protection of Television Reception

In order to provide protection to the reception in Canada of certain Canadian television stations from interference, the FCC agrees to withhold authorization of the operation of land mobile base stations in frequency bands and geographical areas listed in Annex B. The Agencies reserve the right to initiate further discussion on Annex B.

ANNEX A
Limits of Effective Radiated Power
and Antenna Height

Effective Radiated Power (ERP) is defined as the product of the power supplied to the antenna and its gain relative to a half-wave dipole in a given direction.

For base stations in the Protection Zones and Sharing Zones I and III, Table A1 lists the limits of Effective Radiated Power (ERP) corresponding to the Effective Antenna Height (EAH) ranges shown. In this case, Effective Antenna Height is calculated by subtracting the Assumed Average Terrain Elevation given in Table A3 from the antenna height above mean sea level.

Effective Antenna Height (EAH)		ERP
Metres	Feet	Watts (Maximum)
0-152	0-500	500
153- 305	501-1000	125
306- 457	1001-1500	40
458- 609	1501-2000	20
610- 762	2001-2500	10
763- 914	2501-3000	10
915-1066	3001-3500	6
1067-1219	3501-4000	5
Above 1219	Above 4000	5

Table A1: Limits of Effective Radiated Power (ERP) Corresponding to Effective Antenna Heights of Base Stations in the Protection Zones and Sharing Zones I and III.

For base stations in the Sharing Zone II, Table A2 lists the limits of Effective Radiated Power (ERP) corresponding to the antenna height above mean sea level ranges shown.

Antenna Height Above Mean Sea Level		ERP
Metres	Feet	Watts (Maximum)
0-503	0-1650	500
504- 609	1651-2000	350
610- 762	2001-2500	200
763- 914	2501-3000	140
915-1066	3001-3500	100
1067-1219	3501-4000	75
1220-1371	4001-4500	70
1372-1523	4501-5000	65
Above 1523	Above 5000	5

Table A2: Limits of Effective Radiated Power (ERP) Corresponding to Antenna Heights Above Mean Sea Level of Base Stations in Sharing Zone II.

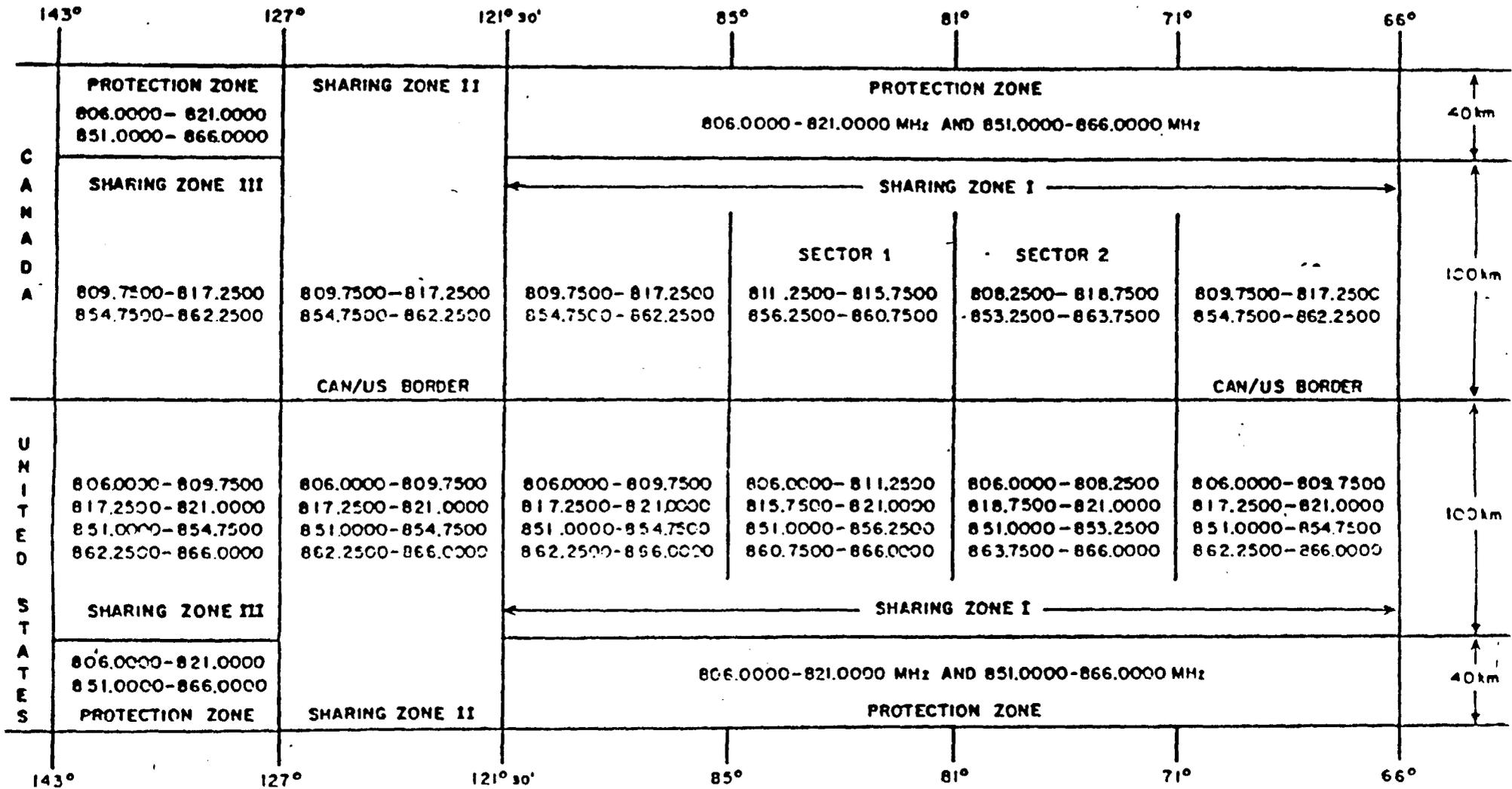
Table A3 lists the values of Assumed Average Terrain Elevations (A.A.T.E.) within the Sharing and Protection Zones on both sides of the United States-Canada border.

E.A.H. = Antenna Height Above Mean Sea Level - A.A.T.E.

Longitude (θ) (°West)	Latitude (θ) (°North)	Assumed Average Terrain Elevations			
		United States		Canada	
		feet	metres	feet	metres
65 $\leq \theta < 69$	$\theta < 45$	0	0	0	0
"	45 $\leq \theta < 46$	300	91	300	91
"	$\theta \geq 46$	1000	305	1000	305
69 $\leq \theta < 73$	all	2000	609	1000	305
73 $\leq \theta < 74$	"	500	152	500	152
74 $\leq \theta < 78$	"	250	76	250	76
78 $\leq \theta < 80$	$\theta < 43$	250	76	250	76
"	$\theta \geq 43$	500	152	500	152
80 $\leq \theta < 90$	all	600	183	600	183
90 $\leq \theta < 98$	"	1000	305	1000	305
98 $\leq \theta < 102$	"	1500	457	1500	457
102 $\leq \theta < 108$	"	2500	762	2500	762
108 $\leq \theta < 111$	"	3500	1066	3500	1066
111 $\leq \theta < 113$	"	4000	1219	3500	1066
113 $\leq \theta < 114$	"	5000	1524	4000	1219
114 $\leq \theta < 121.5$	"	3000	914	3000	914
121.5 $\leq \theta < 127$	"	0	0	0	0
"	54 $\leq \theta < 56$	0	0	0	0
"	56 $\leq \theta < 58$	500	152	1500	457
"	58 $\leq \theta < 60$	0	0	2000	609
"	60 $\leq \theta < 62$	4000	1219	2500	762
"	62 $\leq \theta < 64$	1600	488	1600	488
"	64 $\leq \theta < 66$	1000	305	2000	609
"	66 $\leq \theta < 68$	750	228	750	228
"	68 $\leq \theta < 69.5$	1500	457	500	152
"	$\theta \geq 69.5$	0	0	0	0

Table A3: Values of Assumed Average Terrain Elevation within the Sharing and Protection Zones on Both Sides of the United States-Canada Border.

CANADA/UNITED STATES SHARING ARRANGEMENT: 806-821 MHz AND 851-866 MHz BANDS



- NOTES: - ALL FREQUENCIES IN MEGAHERTZ
 - PROTECTION ZONES AND SHARING ZONE I AND III SUBJECT TO ANNEX A, TABLE A1 REQUIREMENTS
 - SHARING ZONE II SUBJECT TO ANNEX A, TABLE A2 REQUIREMENTS.