
Spectrum Management

Terrestrial Radiocommunication Agreements and Arrangements

Paging Operations in the Band 929-932 MHz

Note

All persons making use of this consolidation are reminded that the documents included herein are provided only for convenience of reference. This consolidation is for the guidance of those engaged in radiocommunications in Canada. The information contained in this document is subject to change without notice. While every reasonable effort has been made to ensure accuracy, no warranty is expressed or implied. For more details, please contact the Terrestrial Services Frequency Management Division (International Systems).

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.

All notes in square brackets [] were added for clarification purposes.

Prepared by:

Industry Canada
Radio Regulatory Branch
300 Slater Street
Ottawa, Ontario
K1A 0C8

Publication Date: December 1993

Our file
3407.wp

July 22, 1992

Mr. Bruce Franca
Deputy Chief Engineering
Office of Engineering and Technology
Federal Communications Commission
2025 M Street N.W.
Washington, D.C. 20554
U.S.A.

Dear Mr. Franca:

As discussed during the FCC/DOC Technical Liaison meeting June 22-23, 1992 we have reviewed the interim coordination considerations for the band 929-932 MHz.^{1,2} These considerations between the two Agencies include:

- (1) sharing arrangements for both FCC and DOC in portions on the band 929-932 MHz within 75 miles of the border; and,
- (2) steps to be followed for FCC requests for coordination within 250 miles of the border.

Both these actions were required so as to:

- (1) identify frequencies for each country's use for paging operations within 75 miles of the border and;
- (2) protect Canadian fixed systems in this band.

Since protection to Canadian fixed systems is no longer required, the following amendments are made to these interim coordination considerations.

-
1. *Interim Coordination Considerations for the Band 929-932 MHz*, dated September 14, 1983.
 2. *Further Interim Coordination Considerations for the Shared 931-932 MHz*, dated February 10, 1987.

- (1) Subject to section 2 below, no coordination requests from the FCC are required within 250 miles of the border in the bands 929-930 MHz and 931-932 MHz.
- (2) Within 75 miles of the Canada/U.S. border, coordination is not required with the other country for use of the frequency blocks in the geographical zones identified for each country in the two Interim Arrangements 1.2, noting that the frequency 931.0875 MHz is available for exclusive Canadian use and frequency 931.8625 MHz for exclusive American use.
- (3) Special coordination arrangements may be initiated by either Agency and implemented subject to the approval of both Agencies.

Please confirm your acceptance of the above amendments as an understanding between our two Agencies by signing below and returning to me one signed copy.

Yours truly,

Robert W. McCaughern
Deputy Director General
Engineering Programs Branch
DOC

I agree

August 11, 1992
Mr. Bruce Franca
Deputy Chief Engineer
Office of Engineering and Technology
FCC

INTERIM COORDINATION CONSIDERATIONS FOR THE BAND 929 - 932 MHz

Considering FCC allocation to paging in the band 929-932 MHz and protection to existing fixed assignments and future usage of this band in Canada, the following interim steps will be used to process FCC requests for coordination within 250 miles from the border:

- 1) DOC will immediately process all coordination requests from the Common Carrier Bureau which are beyond 75 miles from the border, taking into account existing Canadian fixed stations.

W. Harris/FCC will provide DOC, at the next FCC/DOS Liaison Committee meeting to be held in October 18 and 19, 1983, a frequency assignment plan within 75 miles of the border in the One MHz allocated for Common Carrier paging.

- 2) DOC will immediately process applications from the Private Radio Bureau in the band 929.5 to 930.0 MHz within 75 miles of the border and in the band 929.0 to 930.0 MHz beyond 75 miles of the border and less than 250 miles of the border, taking into account existing Canadian fixed stations. The Private Radio Bureau/R. Foosaner, agrees to withhold assignments in the band 929.0-929.5 MHz within 75 miles from the border.
- 3) Based on interest shown in Canada for extending the U.S. 900 MHz nationwide paging into Canada, this matter will be further discussed in the FCC/DOC Technical Liaison Committee and considered in the development of sharing methodology for this band.

The above steps will be used in the interim for FCC coordination request for paging in the band 929-932 MHz pending establishment of a sharing arrangement for this band taking into account Canada's suggestion for a block sharing arrangement and the current frequency assignment plan of the Common Carrier Bureau. It is agreed that the sharing arrangement will be based in the basic principle of equal cross-border sharing of the band 929-932 MHz. This principle will include discussions concerning the re-assignment of existing fixed stations where necessary in order that equitable sharing may be achieved.

Discussions on the sharing arrangements will begin immediately with the targets of establishing the points of consideration and approach to be followed at the October 1983 meeting of the US/Canada Technical Liaison Committee followed by completion of the discussions by the end of December 1983.

G.R. Begley
Engineering Prog.
DOC

P. Davis
Spectrum Policy
DOC

R.W. Jones
Operations Br.
DOC

R. Foosaner
FCC, Chief
Private Radio Bureau

September 14, 1983

**FEDERAL COMMUNICATIONS COMMISSION
WASHINGTON, D.C. 20554**

April 20, 1988

R.W. McCaughern
Deputy Director General
Engineering Programs Branch
Department of Communications
300 Slater Street
Ottawa, Ontario
K1A 0C8

Dear Mr. McCaughern:

This is in response to your letter of October 2, 1987, concerning coordination of 929-932 MHz paging systems and exchange of frequency 931.8625 MHz for 931.0875 MHz.

We agree to the procedures you have outlined for 929-932 MHz coordination of U.S. paging requests between 75 miles and 250 miles from the U.S./Canada border with two modifications. We request that where you have stated 75 miles, this be restated as "line A". As you are probably aware, this will facilitate our coordination process as our computer programs are already written based on "line A". We also wish to include a statement that this proposal would not alter the *Further Interim Coordination Considerations for the Shared 931-932 MHz* signed February 10, 1987.

We shall consider the exchange of frequencies as final.

Thank you for your consideration of this matter.

Sincerely,

Bruce A. Franca
Deputy Chief Engineer
Office of Engineering
and Technology

cc: Wendell R. Harris - Common Carrier Bureau
Ed Jacobs - Private Radio Bureau
Veena Rawat - Department of Communications

FURTHER INTERIM COORDINATION CONSIDERATIONS FOR THE SHARED 931-932 MHz

For paging frequencies in the 931-932 MHz band (allocated in the U.S. for common carrier paging), the FCC and the DOC agree that the equal access principle will apply for the sharing of this band and the principles used in the 800 MHz band will apply.

Therefore, between 81 degrees W. and 85 degrees W. including Detroit and Cleveland 26 out of the 37 available paging frequencies will be processed as such by the DOC for coordination purposes within 75 miles of the border. Between 78 degrees W. - 81 degrees W., including Buffalo, and between 73 degrees W. - 75 Degrees West, 11 paging frequencies will be processed within 75 miles of the border. In other areas, a maximum of 19 frequencies will be processed by the DOC. These frequencies will be contiguous and restricted to the lower end of the 931-932 band with 25 kHz channel spacing.

In Canada, between 73 degrees W. to 75 degrees W. and 78 degrees W. to 81 degrees W., including Montreal and Toronto/Niagara Falls/St. Catharines, respectively, 26 out of 37 available paging frequencies will be processed by the FCC for coordination purposes within 75 miles of the border. Between 81 & 85 degrees, 11 frequencies will be available for paging in the Windsor area.

In all other areas, a maximum of 18 frequencies will be processed by the U.S. These frequencies will be contiguous and restricted to the upper end of the band 931-932 MHz with 25 kHz channel spacing.

In the U.S., the three frequencies 931.8875, 931.9125, and 931.9375 MHz have been allocated for nationwide paging. Canada also intends to use these frequencies for nationwide paging.

The authorization of each network organizer for the use of these nationwide frequencies will be conditioned as follows:

United States Condition

This authorization is subject to the condition that, in the event a Canadian system using the same frequency as granted herein is authorized in adjacent territory in Canada coordination of all transmitter installations, which are within 75 miles of the U.S.-Canada border, shall be required to eliminate any harmful interference that might otherwise exist and to insure continuance of equal access to the frequency by both countries, including the use of time-sharing or other techniques.

Canada Condition

This authorization is subject to the condition that, in the event a United States system using the same frequency as granted herein is authorized in adjacent territory in the United States coordination of all transmitter installations, which are within 75 miles of the U.S.-Canada border, shall be required to eliminate any harmful interference that might otherwise exist and to insure continuance of equal access to the frequency by both countries, including the use of time-sharing or other techniques.

W. Harris
Assistant Bureau Chief/International
Common Carrier Bureau
FCC

N. Ahmed
Director General
Engineering Program Branch
DOC

February 10, 1987

Spectrum Management

Terrestrial Radiocommunication Agreements and Arrangements

Provision of Trans-Border Radio Paging Service by United States and Canadian Licensees to Subscribers Across the Border

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.

All notes in square brackets [] were added for clarification purposes.

Prepared by:

Industry Canada
Radio Regulatory Branch
300 Slater Street
Ottawa, Ontario
K1A 0C8

Publication Date: December 1993

**FEDERAL COMMUNICATIONS COMMISSION
WASHINGTON, D.C. 20554**

June 25, 1971

AIRMAIL

In reply refer to:
6320-C

**Mr. W.J. Wilson
Director-General
Telecommunications Regulation Branch
Department of Communications
Ottawa, Ontario**

Dear Mr. Wilson:

This refers to your letter of January 14, 1971, file 6209-260 (RRP), the Commission's letter of June 8, 1970, file 6320-C, and informal discussions between our respective offices, concerning the provision of trans-border radio paging service by United States and Canadian licensees to subscribers across the border.

The Commission has similar concern that, in principle, it would be indeed undesirable to permit a radio paging service of one country to be offered subscribers in the other country if the latter country objects. The Commission concurs that such objection should be well founded so that potential subscribers in an area are not denied service which might otherwise be available.

We are in mutual accord that each country should, on a case-by-base basis, assess the impact of trans-border radio paging service on its domestic radio services and either agree to, or object to, the provision of such service. Further, the authorization to a licensee to provide service across the border must be temporary and subject to termination upon notification by the neighbouring country that such service is no longer required.

On the other items mentioned for consideration in our letter of June 8, 1970, any conceivable problem which might arise with respect to frequency coordination or transborder operation can be handled readily on an individual basis.

The use of wirelines or radio to control a transmitting station in the other country, e.g., the situation reportedly encountered with Quest Communications, Ltd., is a specific problem which must be avoided. Such use would be in conflict with the Commission's Rules, which specify that any control point, such as a message center, answering service, must be authorized by the Commission and shown on the base station licence. It is recognized that your information indicates that Quest Communications maintained an answering service in Niagara Falls, Ontario. However, it is our understanding that an answering service, Telephone Answering Service of Niagara Falls, New York, has been

used as a dispatching agent by Quest, which, if true, would be contrary to the Commission's Rules. Whether or not Quest used an answering service in either Ontario or New York State is rendered moot by other considerations, since Commission licensees in the area can provide a comparable service.

Assuming that we are in agreement with the principles stated in paragraphs 2, 3 and 4, above, clarification of how the paging service may operate within the framework of existing Rules and Regulations is required. It is our view that calls originating in the United States placed directly to a control point and base station in Canada to page subscribers, the United States would be permissible, as well as those calls originating in Canada and placed to a control point and base station in Canada to page subscribers in either country. Calls originating in the United States placed to a control point and base station in the United States to page subscribers in either country, as well as calls originating in Canada placed to a control point and base station in the United States to page subscribers in either country would be permissible.

You have suggested that we may wish to consider a different approach to situations where the communication common carriers involved are engaged in the business of providing a public landline telephone service, and those which are not. In examining such situations, keeping in mind that radio paging is a one-way signalling service and such service would be provided by a licensee of the other country when comparable service cannot be furnished by a licensee of the same country, the need for a different approach for public landline common carriers than for radio common carriers is not readily apparent. It would be helpful if an explanation were furnished so that the significance of this distinction between landline and radio communication common carriers can be further studied. You may wish to discuss this point by telephone to expedite the exchange of views, since this item appears to be the only obstacle to drafting the principles of an agreement whereby radio paging, as discussed herein, might be implemented.

Accordingly, your comments and views will be appreciated.

Sincerely yours,

Raymond E. Spence
Chief Engineer

**Berger Building,
Ottawa, Ontario
K1A 0C8**

**Chief Engineer,
Federal Communications Commission,
Washington, D.C. 20554**

**6320-C (Your file)
6209-1
6209-260 (RRP)**

August 9, 1971

Dear Sir:

This has reference to your letter of June 25, 1971 and to previous correspondence exchanged concerning the provision of trans-border radio paging services by Canadian and United States licensees to subscribers across the border.

We are in agreement with the principles outlined in your letters of June 25, 1971 and June 8, 1970. These principles are as follows:

- 1) It would be undesirable to permit a radio paging service in one country to be offered to subscribers in the other country, if the latter country objects.**
- 2) Such objections should be well founded so that potential subscribers in an area are not denied service which might otherwise be available.**
- 3) Each country should, on a case-by-case basis, assess the impact of trans-border radio paging service on its domestic radio services and either agree to, or object to, the provision of such service.**
- 4) The authorization to a licensee to provide service in the other country must be temporary and subject to termination upon notification by that country that such service is no longer required.**
- 5) The use of wirelines or radio from one country to control a transmitting station in the other country would not be permitted.**
- 6) Any equipment furnished subscribers in the other country would be required to meet the technical standards specified by that country.**

It is considered that any conceivable problem which might arise with respect to frequency co-ordination or trans-border operation can be resolved on an individual basis. Further, it is agreed that the same approach would be employed for both types of communication common carriers, i.e., those providing a public landline telephone service and those which are not.

It is recognized that each application received by either Administration, which proposes trans-border operations, would be referred to the other country for co-ordination. Subject to favourable co-ordination the following communications would be permitted.

- 1) Calls originating in the United States placed directly to a control point and base station in Canada to page subscribers in either country;
- 2) Calls originating in Canada and placed to a control point and base station in Canada to page subscribers in either country;
- 3) Calls originating in the United States placed to a control point and base station in the United States to page subscribers in either country;
- 4) Calls originating in Canada placed directly to a control point and base station in the United States to page subscribers in either country.

If you agree with the foregoing, it is suggested that your letter of June 25 and this reply might constitute an informal agreement under which cases of trans-border radio paging operations could be dealt with.

We are prepared to take appropriate action on the case at Niagara Falls, NY/Niagara Falls, Ont. involving a Canadian station licensee, upon receipt of your formal comments. Similarly, we are prepared to provide you with formal comments on the case involving a United States station licensee in the Detroit, Michigan/Windsor, Ontario area.

An early reply to this letter would be appreciated.

Yours truly,

W.J. Wilson
Director-General
Telecommunications Regulation Branch.

**FEDERAL COMMUNICATIONS COMMISSION
WASHINGTON, D.C. 20554**

August 20, 1971

In reply refer to:
6320-C

AIRMAIL

**Mr. W.J. Wilson
Director-General
Telecommunications Regulation Branch
Department of Communications
Ottawa 4, Ontario**

Dear Mr. Wilson:

It is agreed that your letter 6209-1 6209-260(RRP) dated August 9, 1971, taken together with my letter of June 25, 1971, constitute an agreement under which cases of trans-border radio paging operations can be dealt with.

Concerning the operations by Quest Communications, Ltd., as discussed in the fifth paragraph of my June 25th letter, a careful review of all the available information has led this office to conclude that continuation of trans-border paging by Quest is unnecessary owing to the availability of a comparable domestic service and, in the light of the aforementioned agreement, is objectionable.

At your convenience, the Commission would be pleased to receive the formal comments you have mentioned regarding the operations in the Detroit, Michigan, area by Radio Relay Corporation. You may wish to note that this Corporation has been directed to discontinue any transborder operation.

Sincerely yours,

**Raymond E. Spence
Chief Engineer**

Sharing of Frequency 931.4375 MHz for Nationwide Paging Operations

TRAA

**FEDERAL COMMUNICATIONS COMMISSION
WASHINGTON, D.C. 20554**

In reply refer to:
1600D2-JSG

March 29, 1993

Dr. Robert W. McCaughern
Room 1306
Department of Communications
300 Slater Street
Ottawa, Ontario
K1A 0C8

Re: 900 MHz Frequency Exchange in the Vicinity of Buffalo, N.Y.

Dear Dr. McCaughern:

In accordance with our conversation of February 25, 1993 at the offices of the Federal Communications Commission in Washington, D.C., we are writing this letter to request that the United States and Canada exchange the use of the frequencies 931.1375 MHz and 931.4375 MHz in the Buffalo, N.Y., and Toronto, Quebec, geographic areas.

Specifically, we are requesting that in the United States above "Line A" and between 78° and 81° West longitude and in Canada below "Line B" and between 78° and 81° West longitude that the United States exchange the use of frequency 931.1375 MHz for the use of frequency 931.4375 MHz and that Canada exchange the use of frequency 931.4375 MHz for the use of frequency 931.1375 MHz.

If you agree to this frequency exchange, the changes will be associated with the agreement for sharing between Canada and the United States regarding common carrier use in the 931-932 MHz paging band.

Sincerely,

Wendell Harris
Assistant Bureau Chief, International
Common Carrier Bureau

Sharing of Frequency 931.4375 MHz for Nationwide Paging Operations

TRAA

6209-2-04(DOST)

July 21, 1993

Mr. Wendell Harris
Federal Communications Commission
Assistant Bureau Chief, International
Common Carrier Bureau
Washington, D.C. 20554

Dear Mr. Harris:

This is in response to your letters, reference 1600D2-JSG, to Mr. R.W. McCaughern, dated 16 March 1993 and the amended version of 29 March 1993, regarding the exchange of certain 900 MHz paging frequencies. These letters have been passed to me for reply.

We have reviewed the agreement dated 24 June 1993, between Rogers Cantel Mobile Inc. and Skytel Corporation, to share the frequency 931.4375 MHz in the border area between 75° and 81° W longitude. We have no objection to the intent of this agreement. However, our acceptance of it is dependant upon successful evaluation of Cantel's applications and the issuance of licences to install and operate radio stations in this area. We expect to receive these applications shortly and we will notify you when the licensing of stations in this area is approved.

If this is acceptable to you, then the exchange of frequencies proposed in your letters will not be necessary and we can consider establishing an understanding between our two Agencies for the use of this frequency in the area between 75° and 81° W longitude. At that time, we may want to consider obtaining an agreement for the use of this frequency in the entire border area between 71° and 85° W longitude.

Should you wish to discuss this matter further, please contact me at (613) 991-0179.

Sincerely,

ORIGINAL SIGNED BY
P. HILL

Patrick Carrey
Manager, Terrestrial Services
Spectrum Management Operations

Sharing of Frequency 931.4375 MHz for Nationwide Paging Operations

TRAA

1600D2-JSG

6209-2-04(DOST-I)

September 14, 1993

Mr. Wendell Harris
Assistant Bureau Chief, International
Common Carrier Bureau
Federal Communications Commission
2025 M Street N.W.
Washington, D.C. 20554
U.S.A.

Dear Mr. Harris:

This is further to our letter dated 21 July 1993 concerning the shared usage of the paging frequency 931.4375 MHz.

In our July 21 letter we stated that we may wish to consider obtaining an agreement for the shared use of this frequency in other border areas. At this time, we would like consideration to sharing this frequency nation-wide. We believe this proposal to be of mutual benefit to the paging industry and the general public in Canada and the United States.

If you agree, detailed coordination for the equitable use of this frequency would be carried out by the Canadian and U.S. service providers.

I would appreciate your confirmation by October 1, 1993 so that we may advise our service providers.

Yours truly,

ORIGINAL SIGNED BY
MAURICE NUNAS

Maurice Nunas
Director, Spectrum
Spectrum Management Operations

Sharing of Frequency 931.4375 MHz for Nationwide Paging Operations

TRAA

**FEDERAL COMMUNICATIONS COMMISSION
WASHINGTON, D.C. 20554**

**In reply refer to:
1600D2-JSG**

November 29, 1993

**Mr. Mike Connolly
Director, Spectrum Management Operations
Industry and Science Canada
300 Slater Street
Ottawa, Ontario, Canada
K1A 0C8**

**Re: 6209-2-04
1600D2-JSG**

Dear Mr. Connolly:

We have reviewed your letter of September 14, 1993 (6209-2-04) requesting consideration of an arrangement for the sharing of frequency 931.4375 MHz nationwide. Upon review, we find that allowing the use of this frequency across the entire border is mutually beneficial to both countries. However, we propose that coordination of the use of frequency 931.4375 MHz be consistent with those procedures established for frequencies 931.8875 MHz, 931.9125 MHz and 931.9375 MHz and that the change be made part of the bilateral agreement. We consider this change to the bilateral agreement effective upon your written confirmation.

Sincerely,

**Wendell R. Harris
Assistant Bureau Chief/International
Common Carrier Bureau**

Sharing of Frequency 931.4375 MHz for Nationwide Paging Operations

TRAA

1600D2-JSG

1030-9
6209-02-04(DOST-I)

December 22, 1993

Mr. Wendell R. Harris
Assistant Bureau Chief/International
Common Carrier Bureau
Federal Communications Commission
2025 M Street N.W.
Washington, D.C. 20554
U.S.A.

Dear Mr. Harris:

This is in reference to your letter November 29, 1993 and to discussions between representatives from both agencies relating to the establishment of an arrangement for the sharing of frequency 931.4375 MHz for nationwide paging operations.

On behalf of Industry Canada, we concur that the coordination and use of the frequency 931.4375 MHz be consistent with those procedures established for frequencies 931.8875 MHz, 931.9125 MHz and 931.9375 MHz.

Please accept this letter as confirmation of acceptance of this special coordination procedure as an understanding between our two countries.

Sincerely,

ORIGINAL SIGNED BY
M.D. CONNOLLYM.D. Connolly
Director, Spectrum
Management Operations

Confirmation of Acceptance

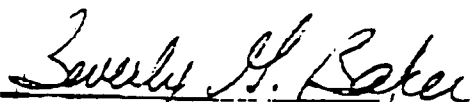
Special Coordination Procedure for the Use of Frequency 929.4125 MHz for Paging Operations in the United States within 120 km of the United States/Canada Border

Pursuant to the *Interim Coordination Considerations for the Band 929-932 MHz* signed on September 14, 1983, the Private Radio Bureau of the Federal Communications Commission is to withhold assignments in the band 929-929.5 MHz within 120 km (75 miles) of the United States/Canada border.

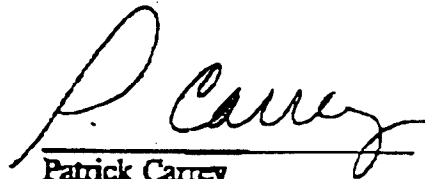
Considering that both our agencies have agreed in principle to the request from Keepage, the following conditions are to be placed on any authorization given to a U.S. licensee for the use of frequency 929.4125 MHz in the United States within 120 km of the U.S./Canada border:

- agreement be reached between the U.S. and Canadian licensees for each particular U.S. station before it is placed in operation;
- the Canadian licensees would have priority in the border areas, and the usage by the U.S. licensees would not impact on future Canadian operations;
- no service would be offered by the U.S. licensee within Canada, and
- in the event of any interference from U.S. operations to Canadian operations, the U.S. licensee would take immediate action to resolve the situation.

The above procedure between the Federal Communications Commission and Industry Canada entitled *Special Coordination Procedure for the Use of Frequency 929.4125 MHz for Paging Operations in the United States within 120 km of the United States/Canada Border* is accepted as an understanding between our two agencies. The Procedure will become effective on January 15, 1994.



Beverly G. Baker
Deputy Chief, Private Radio Bureau
Federal Communications Commission



Patrick Carrey
Terrestrial Services
Spectrum Management Operations
Industry Canada

Date: January 11, 1994

Date: January 11, 1994



Your file / Votre référence

Our file / Notre référence
3407549

JUL 22 1992

Mr. Bruce Franca
Deputy Chief Engineer
Office of Engineering and Technology
Federal Communications Commission
2025 M Street, N.W.
Washington, D.C.
20554 U.S.A.

Dear Mr. Franca,

As discussed during the FCC/DOC Technical Liaison meeting June 22-23, 1992 we have reviewed the interim coordination considerations for the band 929-932 MHz.^{1,2} These considerations between the two Agencies include:

- (1) sharing arrangements for both FCC and DOC in portions of the band 929-932 MHz within 75 miles of the border; and,
- (2) steps to be followed for FCC requests for coordination within 250 miles of the border.

Both these actions were required so as to:

- (1) identify frequencies for each country's use for paging operations within 75 miles of the border and;
- (2) protect Canadian fixed systems in this band.

1 Interim Coordination Considerations for the Band 929-932 MHz dated September 14, 1983.

2 Further Interim Coordination Considerations for the Shared 929-932 MHz dated February 10, 1987.



12
Since protection to Canadian fixed systems is no longer required, the following amendments are made to these interim coordination considerations.

1. Subject to section 2 below, no coordination requests from the FCC are required within 250 miles of the border in the bands 929-930 MHz and 931-932 MHz.
2. Within 75 miles of the Canada/U.S. border, coordination is not required with the other country for use of the frequency blocks in the geographical zones identified for each country in the two Interim Arrangements^{1,2}, noting that the frequency 931.0875 MHz is available for exclusive Canadian use and the frequency 931.8625 MHz for exclusive American use.
3. Special coordination arrangements may be initiated by either Agency and implemented subject to the approval of both Agencies.

Please confirm your acceptance of the above amendment as an understanding between our two Agencies by signing below and returning to me one signed copy.

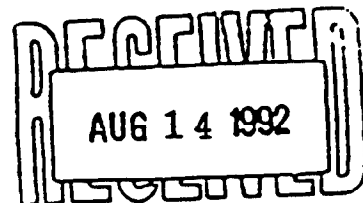
Yours truly,

Robert W. McCaugher
Deputy Director General
Engineering Programs Branch
DOC

I agree.

8/11/92

Mr. Bruce Franca
Deputy Chief Engineer
Office of Engineering and Technology
FCC



Military 6/12/89

Summary Concerning Status of Canada - US agreement on
Common Carrier Bureau paging band 931-932 MHz.

There have been three changes to the basic "above 30 MHz" agreement between Canada and the U.S. regarding common carrier use in the 931-932 MHz paging band. The first is the Interim Coordination Considerations for the Band 929-932 MHz which stated that the U.S. and Canada would establish an equitable block sharing of the band across the border, coordinate frequencies in this band within 250 miles for paging service, and to continue to discuss 900 MHz nationwide paging in both countries. This agreement was signed September 14, 1983, and also involved Private Radio Bureau in the 929-931 MHz band.

The second agreement, Further Interim Coordination Consideration for the Shared 931-932 MHz, was signed on February 10, 1987, by the FCC and DOC and defined certain zones within 75 miles on each side of the border where Canada and the U.S. would allocate the channels so that each country would have access to a greater number of channels in their major cities for border areas between Michigan and Maine. Of the 37 available paging frequencies, the U.S. got 26 for the region between 81-85 degrees N. Longitude for Detroit and Cleveland and Canada got the remaining 11. Canada got 26 for the Toronto and Montreal regions between 78-81 and 73-75 degrees N. Longitude and the U.S. got the remaining 11. For all other zones, the U.S. utilizes 19 channels and Canada utilizes 18 channels. This agreement also established three frequencies to be used by both countries for nationwide paging: 931.8875, 931.9125, and 931.9375 MHz.

The third agreement was confirmed in an FCC letter signed by Bruce Franca on April 20, 1988, and in a letter from Canada signed May 3, 1988, by Veena Rawat for R. W. McCaughern. This agreement stipulated that Canada would only require the US to coordinate US paging systems in the 929-932 MHz band within 250 miles of a 60 degree arc of the main azimuth or 100 miles for all other angles off the azimuth from a list of 11 receive locations which they provided, and within our "line A" for all other locations. This agreement also allowed the swap of one of our channels for one of theirs.

Canada has asked that a new agreement incorporating all of these changes be drafted and signed by the two administrations. We have agreed and Canada is suppose to provide us with the draft for our input.

Prepared by Michael Pollak
632-7834

WHAT THE U.S. GETS

931 MHz PACING AND THE US/CANADIAN AGREEMENT ABOVE LINE A AND EAST OF LINE C

Between 73 and 75 Degrees West 11 Frequencies
931.0125 to 931.2625 with 25 kHz channel separation

Between 78 and 81 Degrees West 11 Frequencies
931.0125 to 931.2625 with 25 kHz channel separation

Between 81 and 85 Degrees West 26 Frequencies
931.0125 to 931.6375 with 25 kHz channel separation

All other areas 19 frequencies
931.0125 to 931.4625 with 25 kHz channel separation



Communications
Canada

300 Slater Street
Ottawa, Ontario
K1A 0C8

May 3, 1988

YOU BY TELETYPE

4545-2

Mr. Bruce A. Franca
Deputy Chief Engineer
Office of Engineering and Technology
Federal Communications Commission
2025 M Street NW
Washington, D.C.

Dear Bruce:

This in response to your letter of April 20, 1988, concerning the coordination of paging systems in the band 929-932 MHz.

On the first issue raised in your letter, we have no objection on your request that the 75 miles be restated as "line A", since they virtually embody the same geographical area required for sharing of the band 929-932 MHz.

Regarding the issue of the coordination of U.S. paging requests between 75 and 250 miles of the border, it was not addressed in the document titled "Further Interim Coordination Consideration for the Shared 931-932 MHz" signed February 10, 1987. As you may be aware, this was stated in the "Interim Coordination Considerations for the Band 929-932 MHz" signed September 14, 1983. Since we have been using these interim documents for some time, I propose that we put together one agreement for this band based on these interim documents and finalize it to the extent needed. We will prepare a draft and send it to you for comments sometime in June, 1988. Until this agreement is finalized, we will continue to use the interim documents and the basis given in DOC letter of October 2, 1987 and your letter of April 20, 1988.

Yours truly,

R.W. McCaughern
Deputy Director General

ANNEX

PROCEDURE FOR COORDINATION OF
US PAGING REQUESTS IN THE 929-937 MHz BAND
BETWEEN 75 MILES AND 250
MILES FROM THE US/CANADA BORDER

1. Coordination beyond 75 miles will be required with the Canadian microwave links in List 1 appended.
2. Coordination distance of 250 miles will apply to an arc of $\pm 30^\circ$ from the receive azimuth as given in List 1.
3. For all other angles a coordination distance of 100 miles will apply.
4. The above criteria will also apply to "fill-in" paging stations beyond 75 miles of the border.
5. Existing coordination Interim agreements procedures will apply to all proposals within 75 miles of the border.

line "A"

NOTE: This Annex modifies the Interim Agreement for 931-937 MHz. This modification will be reflected in the final arrangement to be developed for this band.

• TERRESTRIAL MICROWAVE LINKS POTENTIALLY
AFFECTED BY U.S. 900 MHZ PAGING

NON-FREQUENCY DIVERSITY

FREQUENCY	SITE NAME	GEOG. COORD.	APPROX DIST. TO BORDER	AZIMUTH
930.820	BEAVER CREEK YT.	LAT. 62 21 58 LONG 140 52 04	5 MI	353.2°
Tx TO 892.0200	MOUNT DAVE	LAT. 62 35 40 LONG 140 35 36	1 MI	173.2°
930.820	BURWASH YT	LAT. 61 19 15 LONG 138 57 29	68 MI	132.1°
Tx TO 892.0200	DESTRUCTION BAY	LAT. 61 15 13 LONG 138 48 12	73 MI	312.2°
930.820	GRAHAM Camp 601	LAT. 49 14 51 LONG 090 35 06	70 MI	25.3° T
Tx TO 892.0200	CAMP 602	LAT. 49 33 50 LONG 90 21 15	82 MI	205.5° P
930.820	RIVIERE DU LOUP	LAT. 47 49 10 LONG 069 31 12	30 MI	42.1° T
Tx TO 892.0200	ST. ARSENE	LAT. 47 55 08 LONG 69 23 08	32 MI	222.1° P

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FREQUENCY DIVERSITY

FREQUENCY	SITE NAME	GEOG. COORD.	APPROX DIST. TO HEADER	AZIMUTH
930.820 946.340	SALTSPRING ISLAND	LAT. 48 45 57 LONG 123 30 39	12 MI	75.3° Tx
Tx TO PENDER ISLAND 892.0200 907.5400		LAT. 48 48 17 LONG 123 17 06	8 MI	255.4° Rx
930.820 946.340	DURION ONT.	LAT. 48 47 42 LONG 088 32 42	33 MI	41.3° Tx
Tx TO NIPICON 892.0200 946.3400		LAT. 48 58 18 LONG 88 18 24	48 MI	221.7° Rx
930.820 946.340	GAGNE ONTARIO	LAT. 48 43 33 LONG 092 53 36	12 MI	80.3° Tx
Tx TO MINE CENTRE ONT 892.0200 907.5400		LAT. 48 45 36 LONG 92 37 03	17 MI	259.5° Rx
930.820 946.340	JACKPINE ONT.	LAT. 47 56 48 LONG 084 11 37	80 MI	12.4° Tx
Tx TO MISSANABIE 892.0200 907.5400		LAT. 48 19 11 LONG 84 04 12	103 MI	192.5° Rx
930.820 946.340	MORSON ONT.	LAT. 49 05 50 LONG 094 19 05	18 MI	26.4° Tx
Tx TO NESTOR FALLS 892.0200 907.5400		LAT. 49 07 07 LONG 93 55 30	35 MI	263.4° Rx

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FREQUENCY	SITE NAME	GEOG. COORD.	APPROX DIST. TO BORDER	AZIMUTH
930.820 946.340	OPISHING ONT.	LAT. 48 14 18 LONG 001 52 18	170 MI	58.2° Tx
Tx	TO TIMMINS 892.0200 907.5400	LAT. 48 27 56 LONG 81 18 14	190 MI	238.6° Rx
930.820 935.000	CENTRALE BEAUXHARNOIS	LAT. 45 18 48 LONG 73 54 18	25 MI	255.1° Tx
Tx	TO POSTE MGR EMARD 892.8200 945.5000	LAT. 45 16 35 LONG 74 06 06	20 MI	75.1° Rx

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FEDERAL COMMUNICATIONS COMMISSION
WASHINGTON, DC 20534
April 20, 1988

R. W. McCaughern
Deputy Director General
Engineering Programs Branch
Department of Communications
300 Slater Street
Ottawa, Ontario K1A 0C8

Dear Mr. McCaughern:


This is in response to your letter of October 2, 1987, concerning coordination of 929-932 MHz paging systems and exchange of frequency 931.8625 MHz for 931.0875 MHz.

We agree to the procedures you have outlined for 929-932 MHz coordination of U.S. paging requests between 75 miles and 250 miles from the U.S./Canada border with two modifications. We request that where you have stated 75 miles, this be restated as "line A". As you are probably aware, this will facilitate our coordination process as our computer programs are already written based on "line A". We also wish to include a statement that this proposal would not alter the "Further Interim Coordination Consideration for the Share, 931-932 MHz" signed February 10, 1987.

We shall consider the exchange of frequencies as final.

Thank you for your consideration of this matter.

Sincerely,


Bruce A. Franke
Deputy Chief Engineer
Office of Engineering
and Technology

cc: Wendell R. Harris - Common Carrier Bureau
Ed Jacobs - Private Radio Bureau
Yeena Kavat - Department of Communications

FURTHER INTERIM COORDINATION CONSIDERATION FOR THE SHARED 931-932 MHZ

For paging frequencies in the 931-932 MHz band (allocated in the U.S. for common carrier paging), the FCC and the DOC agree that the equal access principle will apply for the sharing of this band and the principles used in the 800 MHz band will apply.

Therefore, between 81 degrees W and 85 degrees W including Detroit and Cleveland 26 out of the 37 available paging frequencies will be processed as such by the DOC for coordination purposes within 75 miles of the border. Between 78 degrees W - 81 degrees W, including Buffalo, and between 73 degrees W - 75 Degrees West, 11 paging frequencies will be processed within 75 miles of the border. In other areas, a maximum of 19 frequencies will be processed by the DOC. These frequencies will be contiguous and restricted to the lower end of the 931-932 band with 25 KHz channel spacing.

In Canada, between 73 degrees W to 75 degrees W and 78 degrees W to 81 degrees W., including Montreal and Toronto/Niagara Fall/St. Catharines, respectively, 26 out of 37 available paging frequencies will be processed by the FCC for coordination purposes within 75 miles of the border. Between 81 & 85 degrees, 11 frequencies will be available for paging in the Windsor area.

In all other areas, a maximum of 18 frequencies will be processed by the U.S. These frequencies will be contiguous and restricted to the upper end of the band 931-932 MHz with 25 kHz channel spacing.

In the U.S., the three frequencies 931.8875, 931.9125, and 931.9375 MHz have been allocated for nationwide paging. Canada also intends to use these frequencies for nationwide paging.

The authorization of each network organizer for the use of these nationwide frequencies will be conditioned as follows:

United States Condition

This authorization is subject to the condition that, in the event a Canadian system using the same frequency as granted herein is authorized in adjacent territory in Canada, coordination of all transmitter installations which are within 75 miles of the U.S.-Canada border, shall be required to eliminate any harmful interference that might otherwise exist and to insure continuance of equal access to the frequency by both countries, including the use of time-sharing or other techniques.

Canada Condition

This authorization is subject to the condition that, in the event a United States system using the same frequency as granted herein is authorized in adjacent territory in the United States coordination of all transmitter installations, which are within 75 miles of the U.S.-Canada border, shall be required to eliminate any harmful interference that might otherwise exist and to insure continuance of equal access to the frequency by both countries, including the use of time-sharing or other techniques.

W. Harris
W. Harris
Assistant Bureau Chief/International
Common Carrier Bureau
FUC
AH

S. N. Ahmed
N. Ahmed
Director General
Engineering Program Branch
DOC

February 10, 1967

Interim Coordination Considerations for the Band 929 - 932 MHz

Considering FCC allocation to paging in the band 929 - 932 MHz and protection to existing fixed assignments and future usage of this band in Canada, the following interim steps will be used to process FCC requests for coordination within 250 miles from the border:

- 1) DOC will immediately process all coordination requests from the Common Carrier Bureau which are beyond 75 miles from the border, taking into account existing Canadian fixed stations.


W. Harris/FCC, will provide DOC at the next FCC/DOC Liaison Committee meeting to be held on October 18, 19, 1983 a frequency assignment plan within 75 miles of the border in the One MHz allocated for Common Carrier paging.


- 2) DOC will immediately process applications from the Private Radio Bureau in the band 929.5 to 930.0 MHz within 75 miles of the border and in the band 929.0 to 930.0 MHz beyond 75 miles of the border and less than 250 miles of the border, taking into account existing Canadian fixed stations. The Private Radio Bureau/R. Foosner, agrees to withhold assignments in the band 929.0 - 929.5 MHz within 75 miles from the border.

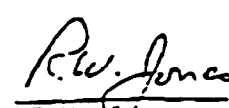
- 3) Based on interest shown in Canada for extending the U.S. 900 MHz nationwide paging into Canada, this matter will be further discussed in the FCC/DOC-Technical Liaison Committee and considered in the development of sharing methodology for this band.

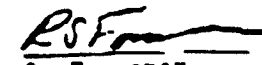
The above steps will be used in the interim for FCC coordination request for paging in the band 929-932 MHz pending establishment of a sharing arrangement for this band taking into account Canada's suggestion for a block sharing arrangement and the current frequency assignment plan of the Common Carrier Bureau. It is agreed that the sharing arrangement will be based on the basic principle of equal cross-border sharing of the band 929-932 MHz. This principle will include discussions concerning the re-assignment of existing fixed stations where necessary in order that equitable sharing may be achieved.

Discussions on the sharing arrangements will begin immediately with the targets of establishing the points of consideration and approach to be followed at the October 1983 meeting of the US/Canada Technical Liaison Committee followed by completion of the discussions by the end of December 1983.


G.R. Begley
Engineering Prog.
DOC


P. Davis
Spectrum Policy
DOC


R.W. Jones
Operations Br.
DOC


R. Foosner
FCC, Chief
Private Radio Bureau

September 14, 1983