

CONFIRMATION OF ACCEPTANCE

The attached *Arrangement Between the Federal Communications Commission of the United States of America and the Department of Communications of Canada Concerning the Use of the Bands 849-851 MHz and 894-896 MHz Along the United States-Canada Border* is accepted as an understanding between our two agencies. This Arrangement will become effective on August 31, 1992, and is to be applied provisionally until the definitive entry into force of a replacement for the *Agreement Concerning the Coordination and Use of Radio Frequencies Above Thirty Megacycles per Second*, with Annex, as amended.

Thomas P. Stanley
Chief Engineer
Federal Communications Commission

August 18, 1992

David Mulcaster
A/Assistant Deputy Minister
Research and Spectrum
Department of Communications

August 28, 1992

**ARRANGEMENT BETWEEN THE DEPARTMENT OF COMMUNICATIONS OF CANADA
AND THE FEDERAL COMMUNICATIONS COMMISSION OF THE UNITED STATES OF AMERICA
CONCERNING THE USE OF THE BANDS 849-851 MHz AND 894 TO 896 MHz**

1.0 *Scope*

- 1.1 This arrangement between the Department of Communications of Canada and the Federal Communications Commission of the United States, herein referred to as the Agencies, covers the coordination and operation of air-to-ground radio services operating in the bands 849-851 MHz and 894-896 MHz.
- 1.2 This arrangement is subject to review at any time at the request of either Agency.
- 1.3 This Arrangement will be applied provisionally until the definitive entry into force of a replacement for the *Agreement Concerning the Coordination and Use of Radio Frequencies Above Thirty Megacycles per Second*, with Annex, as amended¹

2.0 *General Sharing Arrangements*

- 2.1 Both countries shall have full use of the bands 849-851 MHz and 894-896 MHz for air-to-ground radio services in accordance with the provisions contained in this arrangement.

3.0 *Channelization*

- 3.1 The bands 849-851 MHz and 894-896 MHz shall be channelized and divided into ten channel blocks as set forth in Appendix A.
- 3.2 Each channel block shall be divided into control and communications channels with a guardband between the control and communications channels, as shown in Appendix A.
- 3.3 Each Agency may vary the number of control channels and communications channels in each channel block based on the requirements in each country.
- 3.4 The authorized channel bandwidths for each control channel and each communications channel shall be 3.2 kHz and 6.0 kHz, respectively.

1. Exchange of Notes at Ottawa, October 24, 1962. Entered into force October 24, 1962. USA: *Treaties and Other International Acts Series* (TIAS) 5205; CAN: *Canada Treaty Series* (CTS) 1962 No. 15.

Agreement Revising the Technical Annex to the Agreement of October 24, 1962 (TIAS) 5250/CTS 1962 No. 15). Effected by Exchange of Notes at Ottawa, June 16 and 24, 1965. Entered into force June 24, 1965. USA: TIAS 5833 / CAN: CTS 1962 No. 15.

4.0 *Station Locations / Channel Plan*

- 4.1 Agencies may assign frequencies to ground stations to provide service to airborne mobile stations, as set forth in paragraphs 4.2 to 4.4, below:
- 4.2 No prior coordination is required for ground stations within 885 km (550 miles) of the United States/Canada border provided they are located within 8 km (5 miles) of the coordinates specified in the attached Appendix B and assigned frequencies from the channel block specified for that location. Any ground stations using the same channel block must be located within 3.2 km (2 miles) of each other.
- 4.3 Ground stations within 885 km (550 miles) of the United States/Canada border not located within 8 km of the coordinates specified in Appendix B or using frequencies other than those specified for that location may be implemented only subject to the approval of both Agencies.

Coordination of such ground stations will be undertaken by the system operators prior to request for approval by the Agencies.

- 4.4 No prior coordination is required for ground stations beyond 885 km of the United States/Canada border.

5.0 *Technical Requirements*

5.1 *Effective Radiated Power*

The effective radiated power (ERP) of airborne mobile stations shall not exceed 30 watts. Except as specified in section 6 below, the ERP of ground stations shall not exceed 100 watts.

6.0 *Low Power Operation*

- 6.1 Agencies may assign a channel to a ground station, at a location not specified in the block channelling plan contained in Appendix B, for the provision of radio service to aircraft on the ground. The following restrictions apply:
- 6.2 The ERP of a ground station transmitter authorized under the provisions of this section shall not exceed 1 watt.
- 6.3 Such channels may not be used to provide service to aircraft in flight.

- 6.4 Such channels shall not be assigned within 480 km (300 miles) of a location specified in Appendix B for that frequency or within 480 km of any other locations and channels coordinated by either Agency as per paragraph 4.3.
- 6.5 No interference is caused to any ground station providing service to aircraft in flight.
- 6.6 Such operations shall not claim protection from any ground station operation providing service to aircraft in flight.
- 6.7 Operators in each country are advised to consult with the operators in the other country regarding their use of the low power systems within 480 km of the Canada/U.S. border to ensure interference-free operations. Should any difficulties arise that cannot be resolved between the operators, respective agencies in each country may be called upon to assist in resolving the problem.

APPENDIX A

GROUND TO AIR CHANNELS (Center frequency in MHz)

Channel Number	Channel block number				
	10	9	8	7	6
C-1	849.0055	849.2055	849.4055	849.6055	849.8055
C-2	849.0115	849.2115	849.4115	849.6115	849.8115
C-3	849.0175	849.2175	849.4175	849.6175	849.8175
C-4	849.0235	849.2235	849.4235	849.6235	849.8235
C-5	849.0295	849.2295	849.4295	849.6295	849.8295
C-6	849.0355	849.2355	849.4355	849.6355	849.8355
C-7	849.0415	849.2415	849.4415	849.6415	849.8415
C-8	849.0475	849.2475	849.4475	849.6475	849.8475
C-9	849.0535	849.2535	849.4535	849.6535	849.8535
C-10	849.0595	849.2595	849.4595	849.6595	849.8595
C-11	849.0655	849.2655	849.4655	849.6655	849.8655
C-12	849.0715	849.2715	849.4715	849.6715	849.8715
C-13	849.0775	849.2775	849.4775	849.6775	849.8775
C-14	849.0835	849.2835	849.4835	849.6835	849.8835
C-15	849.0895	849.2895	849.4895	849.6895	849.8895
C-16	849.0955	849.2955	849.4955	849.6955	849.8955
C-17	849.1015	849.3015	849.5015	849.7015	849.9015
C-18	849.1075	849.3075	849.5075	849.7075	849.9075
C-19	849.1135	849.3135	849.5135	849.7135	849.9135
C-20	849.1195	849.3195	849.5195	849.7195	849.9195
C-21	849.1255	849.3255	849.5255	849.7255	849.9255
C-22	849.1315	849.3315	849.5315	849.7315	849.9315
C-23	849.1375	849.3375	849.5375	849.7375	849.9375
C-24	849.1435	849.3435	849.5435	849.7435	849.9435
C-25	849.1495	849.3495	849.5495	849.7495	849.9495
C-26	849.1555	849.3555	849.5555	849.7555	849.9555
C-27	849.1615	849.3615	849.5615	849.7615	849.9615
C-28	849.1675	849.3675	849.5675	849.7675	849.9675
C-29	849.1735	849.3735	849.5735	849.7735	849.9735
GB	from 849.1765	849.3765	849.5765	849.7765	849.9765
	to 849.1797	849.3797	849.5797	849.7797	849.9797
P-6	849.1813	849.3813	849.5813	849.7813	849.9813
P-5	849.1845	849.3845	849.5845	849.7845	849.9845
P-4	849.1877	849.3877	849.5877	849.7877	849.9877
P-3	849.1909	849.3909	849.5909	849.7909	849.9909
P-2	849.1941	849.3941	849.5941	849.7941	849.9941
P-1	849.1973	849.3973	849.5973	849.7973	849.9973

GROUND TO AIR CHANNELS (CONTINUED)
(Center frequency in MHz)

Channel Number	Channel block number				
	5	4	3	2	1
C-1	850.0055	850.2055	850.4055	850.6055	850.8055
C-2	850.0115	850.2115	850.4115	850.6115	850.8115
C-3	850.0175	850.2175	850.4175	850.6175	850.8175
C-4	850.0235	850.2235	850.4235	850.6235	850.8235
C-5	850.0295	850.2295	850.4295	850.6295	850.8295
C-6	850.0355	850.2355	850.4355	850.6355	850.8355
C-7	850.0415	850.2415	850.4415	850.6415	850.8415
C-8	850.0475	850.2475	850.4475	850.6475	850.8475
C-9	850.0535	850.2535	850.4535	850.6535	850.8535
C-10	850.0595	850.2595	850.4595	850.6595	850.8595
C-11	850.0655	850.2655	850.4655	850.6655	850.8655
C-12	850.0715	850.2715	850.4715	850.6715	850.8715
C-13	850.0775	850.2775	850.4775	850.6775	850.8775
C-14	850.0835	850.2835	850.4835	850.6835	850.8835
C-15	850.0895	850.2895	850.4895	850.6895	850.8895
C-16	850.0955	850.2955	850.4955	850.6955	850.8955
C-17	850.1015	850.3015	850.5015	850.7015	850.9015
C-18	850.1075	850.3075	850.5075	850.7075	850.9075
C-19	850.1135	850.3135	850.5135	850.7135	850.9135
C-20	850.1195	850.3195	850.5195	850.7195	850.9195
C-21	850.1255	850.3255	850.5255	850.7255	850.9255
C-22	850.1315	850.3315	850.5315	850.7315	850.9315
C-23	850.1375	850.3375	850.5375	850.7375	850.9375
C-24	850.1435	850.3435	850.5435	850.7435	850.9435
C-25	850.1495	850.3495	850.5495	850.7495	850.9495
C-26	850.1555	850.3555	850.5555	850.7555	850.9555
C-27	850.1615	850.3615	850.5615	850.7615	850.9615
C-28	850.1675	850.3675	850.5675	850.7675	850.9675
C-29	850.1735	850.3735	850.5735	850.7735	850.9735
GB from	850.1765	850.3765	850.5765	850.7765	850.9765
to	850.1797	850.3797	850.5797	850.7797	850.9797
P-6	850.1813	850.3813	850.5813	850.7813	850.9813
P-5	850.1845	850.3845	850.5845	850.7845	850.9845
P-4	850.1877	850.3877	850.5877	850.7877	850.9877
P-3	850.1909	850.3909	850.5909	850.7909	850.9909
P-2	850.1941	850.3941	850.5941	850.7941	850.9941
P-1	850.1973	850.3973	850.5973	850.7973	850.9973

AIR TO GROUND CHANNELS
(Center frequency in MHz)

Channel Number	Channel block number					
	10	9	8	7	6	
C-1	894.0055	894.2055	894.4055	894.6055	894.8055	
C-2	894.0115	894.2115	894.4115	894.6115	894.8115	
C-3	894.0175	894.2175	894.4175	894.6175	894.8175	
C-4	894.0235	894.2235	894.4235	894.6235	894.8235	
C-5	894.0295	894.2295	894.4295	894.6295	894.8295	
C-6	894.0355	894.2355	894.4355	894.6355	894.8355	
C-7	894.0415	894.2415	894.4415	894.6415	894.8415	
C-8	894.0475	894.2475	894.4475	894.6475	894.8475	
C-9	894.0535	894.2535	894.4535	894.6535	894.8535	
C-10	894.0595	894.2595	894.4595	894.6595	894.8595	
C-11	894.0655	894.2655	894.4655	894.6655	894.8655	
C-12	894.0715	894.2715	894.4715	894.6715	894.8715	
C-13	894.0775	894.2775	894.4775	894.6775	894.8775	
C-14	894.0835	894.2835	894.4835	894.6835	894.8835	
C-15	894.0895	894.2895	894.4895	894.6895	894.8895	
C-16	894.0955	894.2955	894.4955	894.6955	894.8955	
C-17	894.1015	894.3015	894.5015	894.7015	894.9015	
C-18	894.1075	894.3075	894.5075	894.7075	894.9075	
C-19	894.1135	894.3135	894.5135	894.7135	894.9135	
C-20	894.1195	894.3195	894.5195	894.7195	894.9135	
C-21	894.1255	894.3255	894.5255	894.7255	894.9255	
C-22	894.1315	894.3315	894.5315	894.7315	894.9315	
C-23	894.1375	894.3375	894.5375	894.7375	894.9375	
C-24	894.1435	894.3435	894.5435	894.7435	894.9435	
C-25	894.1495	894.3495	894.5495	894.7495	894.9495	
C-26	894.1555	894.3555	894.5555	894.7555	894.9555	
C-27	894.1615	894.3615	894.5615	894.7615	894.9615	
C-28	894.1675	894.3675	894.5675	894.7675	894.9675	
C-29	894.1735	894.3735	894.5735	894.7735	894.9735	
GB	from	894.1765	894.3765	894.5765	894.7765	894.9765
	to	894.1797	894.3797	894.5797	894.7797	894.9797
P-6	894.1813	894.3813	894.5813	894.7813	894.9813	
P-5	894.1845	894.3845	894.5845	894.7845	894.9845	
P-4	894.1877	894.3877	894.5877	894.7877	854.9877	
P-3	894.1909	894.3909	894.5909	894.7909	894.9909	
P-2	894.1941	894.3941	894.5941	894.7941	894.9941	
P-1	894.1973	894.3973	894.5973	894.7973	894.9973	

AIR TO GROUND CHANNELS (CONTINUED)
(Center frequency in MHz)

Channel Number	Channel block number				
	5	4	3	2	1
C-1	895.0055	895.2055	895.4055	895.6055	895.8055
C-2	895.0115	895.2115	895.4115	895.6115	895.8115
C-3	895.0175	895.2175	895.4175	895.6175	895.8175
C-4	895.0235	895.2235	895.4235	895.6235	895.8235
C-5	895.0295	895.2295	895.4295	895.6295	895.8295
C-6	895.0355	895.2355	895.4355	895.6355	895.8355
C-7	895.0415	895.2415	895.4415	895.6415	895.8415
C-8	895.0475	895.2475	895.4475	895.6475	895.8475
C-9	895.0535	895.2535	895.4535	895.6535	895.8535
C-10	895.0595	895.2595	895.4595	895.6595	895.8595
C-11	895.0655	895.2655	895.4655	895.6655	895.8655
C-12	895.0715	895.2715	895.4715	895.6715	895.8715
C-13	895.0775	895.2775	895.4775	895.6775	895.8775
C-14	895.0835	895.2835	895.4835	895.6835	895.8835
C-15	895.0895	895.2895	895.4895	895.6895	895.8895
C-16	895.0955	895.2955	895.4955	895.6955	895.8955
C-17	895.1015	895.3015	895.5015	895.7015	895.9015
C-18	895.1075	895.3075	895.5075	895.7075	895.9075
C-19	895.1135	895.3135	895.5135	895.7135	895.9135
C-20	895.1195	895.3195	895.5195	895.7195	895.9195
C-21	895.1255	895.3255	895.5255	895.7255	895.9255
C-22	895.1315	895.3315	895.5315	895.7315	895.9315
C-23	895.1375	895.3375	895.5375	895.7375	895.9375
C-24	895.1435	895.3435	895.5435	895.7435	895.9435
C-25	895.1495	895.3495	895.5495	895.7495	895.9495
C-26	895.1555	895.3555	895.5555	895.7555	895.9555
C-27	895.1615	895.3615	895.5615	895.7615	895.9615
C-28	895.1675	895.3675	895.5675	895.7675	895.9675
C-29	895.1735	895.3735	895.5735	895.7735	895.9735
GB from	895.1765	895.3765	895.5765	895.7765	895.9765
to	895.1797	895.3797	895.5797	895.7797	895.9797
P-6	895.1813	895.3813	895.5813	895.7813	895.9813
P-5	895.1845	895.3845	895.5845	895.7845	895.9845
P-4	895.1877	895.3877	895.5877	895.7877	895.9877
P-3	895.1909	895.3909	895.5909	895.7909	895.9909
P-2	895.1941	895.3941	895.5941	895.7941	895.9941
P-1	895.1973	895.3973	895.5973	895.7973	895.9973

APPENDIX B

CANADIAN BLOCK CHANNELLING PLAN LIST OF REFERENCE SITES AND ASSOCIATED CHANNELLING PLAN

LOCATION	N. LATITUDE	W. LONGITUDE	CHANNEL BLOCK
Vancouver, B.C.	49° 11'	123° 06'	10
Kelowna, B.C.	49° 52'	119° 18'	8
Calgary, Alta.	51° 05'	114° 00'	9
Edmonton, Alta.	53° 32'	113° 29'	2
Herbert, Sask.	50° 25'	107° 13'	10
Broadview, Sask.	50° 22'	102° 34'	9
Winnipeg, Man.	49° 52'	97° 15'	8
Fort Frances, Ont.	48° 36'	93° 25'	2
Thunder Bay, Ont.	48° 27'	89° 15'	10
North Bay, Ont.	46° 21'	79° 28'	3
Mississauga, Ont.	43° 37'	79° 40'	10
Montreal, Que.	45° 27'	73° 43'	8
Halifax, N.S.	44° 51'	63° 32'	9
Edmunston, N.B.	47° 24'	68° 15'	10
Sault Ste. Marie, Ont.	46° 31'	84° 20'	1
Toronto, Ont	43° 40'	79° 23'	5
Stephenville, Nfld.	48° 33'	58° 35'	8

UNITED STATES BLOCK CHANNELLING PLAN
LIST OF REFERENCE SITES AND ASSOCIATED CHANNELLING PLAN

LOCATION	N. LATITUDE	W. LONGITUDE	CHANNEL BLOCK
ALASKA			
Anchorage	61°11'06"	149°54'42"	8
Cordova	60°33'00"	145°43'00"	5
Ketchikan	55°21'20"	131°42'33"	5
Juneau	58°21'18"	134°34'30"	4
Sitka	57°03'30"	135°22'01"	7
Yakutat	59°30'30"	142°30'00"	8
ALABAMA			
Birmingham	33°23'24"	86°39'59"	2
ARIZONA			
Phoenix	33°35'39"	122°05'12"	4
Winslow	35°01'17"	110°43'02"	6
ARKANSAS			
Pine Bluff	34°10'56"	91°56'18"	8
CALIFORNIA			
Blythe	33°36'39"	114°42'24"	10
Eureka	40°42'59"	124°12'09"	8
Los Angeles	33°56'45"	118°23'03"	4
Oakland	37°51'12"	122°12'30"	1
San Francisco	37°41'15"	122°26'01"	6
Visalia	36°19'36"	119°23'22"	7
COLORADO			
Colorado Springs	38°44'39"	104°51'56"	8
Denver	39°46'45"	104°50'49"	1
Hayden	40°29'04"	107°13'08"	6
FLORIDA			
Miami	25°48'27"	80°16'30"	4
Orlando	28°26'53"	81°22'00"	2
Tallahassee	30°24'02"	84°21'18"	7

LOCATION	N. LATITUDE	W. LONGITUDE	CHANNEL BLOCK
GEORGIA			
Atlanta	33°39'05"	84°25'54"	5
St. Simons Island	31°09'22"	81°23'14"	6
HAWAII			
Mauna Kapu	21°24'24"	158°06'02"	5
IDAHO			
Blackfoot	43°11'34"	112°20'57"	8
Caldwell	43°38'45"	116°38'44"	10
ILLINOIS			
Chicago	41°46'49"	87°45'20"	3
Kewanee	41°12'05"	89°57'33"	5
Schiller Park	41°57'18"	87°52'57"	2
INDIANA			
Fort Wayne	40°59'16"	85°11'31"	7
IOWA			
Des Moines	41°31'58"	93°38'54"	1
KANSAS			
Garden City	37°59'35"	100°54'04"	3
Wichita	37°37'24"	97°27'15"	7
KENTUCKY			
Fairdale	34°04'48"	85°47'33"	6
LOUISIANA			
Kenner	30°00'44"	90°13'30"	3
Shreveport	37°27'09"	93°49'38"	5
MAINE			
Holden	44°44'20"	68°42'05"	6
MASSACHUSETTS			
Boston	42°23'15"	71°01'03"	7

LOCATION	N. LATITUDE	W. LONGITUDE	CHANNEL BLOCK
MICHIGAN			
Belleville	42°12'17"	83°29'09"	8
Flint	42°58'21"	83°44'22"	9
Sault Ste Marie	46°28'45"	84°21'31"	6
MINNESOTA			
Bloomington	44°51'30"	93°13'19"	9
MISSISSIPPI			
Meridian	32°19'10"	84°41'33"	9
MISSOURI			
Kansas City	39°18'37"	94°41'07"	6
St. Louis	38°42'45"	90°19'19"	4
Springfield	37°14'28"	93°22'52"	9
MONTANA			
Lewiston	47°02'56"	109°27'27"	5
Miles City	46°25'30"	105°52'30"	8
Missoula	47°01'05"	114°00'41"	3
NEBRASKA			
Grand Island	40°58'00"	98°19'11"	2
Ogallala	41°07'11"	101°45'37"	4
NEVADA			
Las Vegas	36°05'35"	115°10'25"	1
Reno	39°35'13"	119°52'55"	3
Tonapah	38°03'43"	117°13'24"	9
Winnemucca	41°00'39"	117°45'58"	4
NEW MEXICO			
Alamogordo	32°54'46"	115°56'41"	8
Albuquerque	35°03'05"	106°37'13"	10
Aztec	36°48'42"	107°53'48"	9
Clayton	36°27'29"	103°11'16"	5
NEW JERSEY			
Woodbury	39°50'01"	75°09'21"	3

LOCATION	N. LATITUDE	W. LONGITUDE	CHANNEL BLOCK
NEW YORK			
East Elmhurst	40°46'21"	73°52'42"	1
Schuyler	43°09'09"	75°07'50"	2
Staten Island	40°36'05"	74°06'35"	9
NORTH CAROLINA			
Greensboro	36°05'54"	79°56'42"	9
Wilmington	34°16'10"	77°54'24"	3
NORTH DAKOTA			
Dickinson	46°51'05"	102°47'35"	7
OHIO			
Patalaska	40°04'38"	82°41'57"	1
OKLAHOMA			
Warner	35°29'31"	95°18'25"	4
Woodward	36°24'42"	99°28'50"	9
OREGON			
Albany	44°38'24"	123°03'36"	5
Klamath Falls	42°06'30"	121°38'00"	2
Pendleton	45°35'45"	118°31'02"	7
PENNSYLVANIA			
Coraopolis	40°30'33"	80°13'27"	4
New Cumberland	40°11'30"	76°52'02"	8
SOUTH CAROLINA			
Charleston	32°54'10"	80°01'20"	4
SOUTH DAKOTA			
Aberdeen	45°27'21"	98°25'26"	6
Rapid City	44°02'36"	103°03'36"	5
Mitchell	43°41'25"	98°00'27"	10
TENNESSE			
Elizabethton	36°26'04"	82°08'06"	7
Memphis	35°01'44"	89°56'15"	10
Nashville	36°08'44"	86°41'31"	3

LOCATION	N. LATITUDE	W. LONGITUDE	CHANNEL BLOCK
TEXAS			
Austin	30°16'37"	97°49'34"	2
Bedford	32°50'19"	97°08'03"	1
Houston	29°54'37"	95°24'39"	9
Lubbock	33°37'06"	101°52'14"	7
Monahans	31°34'58"	102°54'18"	6
UTAH			
Abajo Peak	37°50'21"	109°27'42"	7
Delta	39°23'15"	112°30'44"	2
Escalante	37°47'19"	111°52'27"	5
Green River	38°57'54"	110°13'40"	3
Salt Lake City	40°39'11"	112°12'06"	1
VIRGINIA			
Arlington	38°52'55"	77°06'18"	6
WASHINGTON			
Seattle	47°26'08"	122°17'35"	4
Cheney	47°33'14"	117°43'35"	1
WEST VIRGINIA			
Charleston	38°19'47"	81°39'36"	2
WISCONSIN			
Stevens Point	44°33'06"	89°25'27"	8
WYOMING			
Riverton	43°03'37"	108°27'23"	9