

AGREEMENT RELATING TO  
ASSIGNMENTS AND USAGE OF TELEVISION BROADCASTING  
CHANNELS IN THE FREQUENCY RANGE  
470-806 MHz (CHANNELS 14-69)  
ALONG THE UNITED STATES-MEXICO BORDER

Considering the discussions held in Mexico, D. F., on February 21 and 22, 1980, and in Washington, D. C., on October 15 and 16, 1980, between representatives of the Governments of the United States of America and the United Mexican States on the subject of the allocation of ultra high frequency bands to the land mobile service and to the television service, and bearing in mind also the relevant provisions of Article 31 of the International Telecommunication Convention (Malaga-Torremolinos, 1973), and of Articles 6, 7, and 8 of the Radio Regulations (Geneva, 1979), both Governments have agreed on the respective usage of television broadcasting channels in the frequency range 470-806 MHz (Channels 14-69), in accordance with the following provisions:

A. Scope of Agreement

1. This Agreement shall govern the assignment and utilization of the fifty-six (56) channels in the ultra high frequency broadcasting band in the United States of America and the United Mexican States at locations within 320 kilometers (199 miles) of the land border between the two countries.

Upon entry into force of this Agreement, it will supersede any previous agreement on the assignment of ultra high frequency channels to land border television stations which exists between the United States and Mexico.

2. In determining whether a given station assignment is included within the area described in paragraph A.1 above, the location of the station will be determined by the transmitter location. When there may be difficulty because of uncertain geographical information in determining with precision whether or not a given transmitter site is within the area described in paragraph A.1 above, the country in which the station is to be located will furnish the other country the best information available regarding the location of the proposed site. If the other country has any question regarding the site, it will so inform the proposing country within 30 days of receipt of the above described information. Any differences of opinion as to whether the proposed station assignment is within the area described in paragraph A.1 above, shall be resolved before operation of the station in question is authorized.

B. Power of Stations

1. The maximum effective radiated power in the horizontal plane of any station authorized pursuant to this Agreement shall not exceed 5 megawatts (5000 kilowatts).

2. Lower power than stipulated above may be authorized to stations by either country, but the authorization of lower power shall not prevent the authorization of the maximum permissible power at a later-date, except for specially negotiated short-spaced allotments.

C. Antenna Height

The maximum antenna height above average terrain between 3.2 and 16 kilometers (2 and 10 miles) is 610 meters (2000 feet). Where this limit is exceeded, the maximum power permitted must be reduced in accordance with the graph attached as Figure 1.

D. Offset of Video Carrier Frequency

In order to obtain the most favorable possible desired to undesired signal ratio and the maximum service areas in any group of three stations operating on the same channel, the video carrier frequency of two of such stations shall be offset by plus or minus 10 kiloHertz respectively. The carrier frequency offsets shown in Tables A and B are adopted.

E. Frequency Tolerance

The operating frequencies of stations assigned pursuant to this Agreement shall be maintained within  $\pm 1$  kiloHertz of the normal or offset frequencies required under Tables A and B.

F. Allotment Plan

The channel allotments shown in Tables A and B are agreed upon.

G. Transmitter Locations

Any television transmitter shall be located to serve the city to which the channel is assigned and to promote the overall efficiency of the allotment plan. Each country shall observe the distances specified in Table C in establishing transmitter sites for the stations serving the cities set forth in Tables A and B; provided, however, that upon agreement of both countries in particular instances, other distances may be used. Specially negotiated short-spaced assignments shall be included in Tables A and B and shall be identified with an asterisk (\*) and their operating limitations noted. In determining whether a proposed transmitter site complies with the distances shown in Table C, the following procedures shall obtain.

a. In situations where transmitter sites have not been established in the other country, the distances shall be measured from the proposed transmitter site in one country to the centers of the corresponding cities in the other country. --

b. When transmitter sites have been established in the other country and the particulars thereof duly notified, the distances shall be measured from the proposed site in one country to the established sites in the other country.

#### H. Changes in the Tables

1. It is the intention of the Governments of the United States of America and the United Mexican States that changes may be made in the attached Tables A and B when they will further the purposes of this Agreement and will be conducive to maintaining maximum efficiency in the use of television channels.

2. Either country desiring to effect a change that will result in a more satisfactory technical arrangement of its facilities shall notify the other country of the proposed change in writing. If there is objection to the proposed change, such objection shall be made in writing to the proposing country within 30 days of the receipt of the notice of the proposed change. If no such objection is made within 45 days from the date of the written notifications or upon resolution of the difference which gave rise to such objection, Tables A and B or both shall be considered to be amended to conform with the proposed change.

#### I. Use of Channels 55-69 Inclusive

Either country may make assignments to stations with effective radiated root mean square (RMS) powers not in excess of 100 watts at locations in excess of 40 kilometers (25 miles) from the common border on Channels 55-69 inclusive without notification to the other country. Assignments at 40 kilometers (25 miles) or less from the border will be notified in accordance with paragraph J of this Agreement.

#### J. Notification of Station Assignments

1. Each country shall notify the other any assignment of a television station within 30 days following the date of grant of

authorization of such television station within the scope of this Agreement. The notification shall include the following information:

- ✓ a. Transmitter location (city, longitude and latitude);
- ✓ b. Channel number, including offset designator, as case may be;
- ✓ c. Video carrier frequency;
- ✓ d. Antenna height;
- ✓ e. Effective radiated power in the horizontal plane;
- ✓ f. Call letters.

2. Subsequent notifications shall be made within 30 days of the grant of any authorization to modify the particulars for a station which has been notified pursuant to paragraph J.1 above.

3. The date of entry into regular operation of any station shall be notified within 30 days following such a date.

K. Cooperation and Exchange of Information

The administrations of the respective countries will exchange information and cooperate with each other for the purpose of minimizing interference and obtaining maximum efficiency in the use of television channels.

L. Tables A, B and C and Figure 1

The following Tables A, B and C and Figure 1 are an integral part of this Agreement.

M. Enter into Force

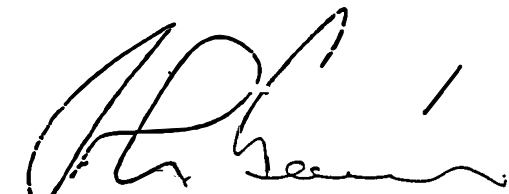
This Agreement shall enter into force upon receipt by the Government of the United States of America of notification from the Government of the United Mexican States that the formalities required by national legislation have been completed.

N. Termination

This Agreement may be terminated by either Party by giving a written notice of termination to the other Party. Termination shall take effect one year after the date of the receipt of the notice thereof.

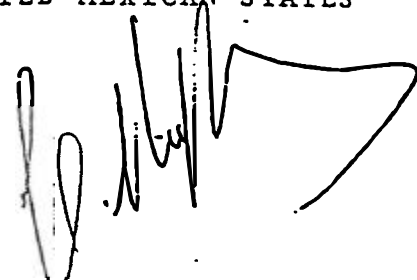
Done in duplicate at Mexico, D. F., in the English and Spanish languages, both versions being equally authentic, this -- 18 day of the month of June of the year One Thousand Nine Hundred Eighty-Two.

FOR THE GOVERNMENT OF THE  
UNITED STATES OF AMERICA



John Gavin  
Ambassador

FOR THE GOVERNMENT OF THE  
UNITED MEXICAN STATES



Lic. Emilio Mujica Montoya  
Secretary of Communications  
and Transportation

Enclosures:

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1. Tables A, B and C
  2. Figure 1
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TABLE A

## MEXICO

## Baja California

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El Golfo	<u>56</u>			
Ensenada	<u>17</u>	<u>23</u>	29+	
Mexicali	<u>14+</u>	<u>20+</u>	32+	<u>38</u>
San Felipe	30+			
San Quintin	<u>36</u>			
San Telmo	<u>18+</u>			
Santo Tomas	<u>59</u>			
Sauzal	<u>35</u>	<u>41</u>	<u>61</u>	
Tecate	<u>49</u>	<u>67</u>		
Tijuana	<u>21-</u>	<u>27</u>	<u>33</u>	<u>45-</u> ... <u>57</u>

## Chihuahua

Chihuahua	14-	<u>20</u>		
Ciudad Camargo	17	<u>23</u>		
Ciudad Cuauhtemoc	<u>16+</u>	<u>22+</u>		
Ciudad Delicias	44-	50-		
Ciudad Jimenez	<u>19</u>	<u>25</u>		
Ciudad Juarez	<u>20+</u>	<u>32-</u>	<u>44</u>	<u>56</u>
Hidalgo del Parral	15+	21+		
Las Minas	17+	23-		
Las Palomas	27+			
Meoqui	<u>56</u>			
Nuevo Casas Grandes	<u>18+</u>	24+	<u>30</u>	
Ojinaga	<u>15</u>			
San Buenaventura	<u>21-</u>			

## Coahuila

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Ciudad Acuna	<u>34</u>	40+	<u>58</u>	
Cuatro Cienegas	<u>53</u>			
Monclova	<u>29</u>	<u>35</u>		
Muzquiz	<u>41</u>	<u>47</u>		
Nueva Rosita	<u>17-</u>	<u>23+</u>		
Parras	17+	23-		
Piedras Negras	<u>22</u>	<u>28</u>	<u>46</u>	
Sabinas ..	<u>59</u>	<u>65</u>		
Saltillo	<u>25-</u>	<u>44-</u>		

## Nuevo Leon

Ciudad Anahuac	<u>49</u>	<u>62</u>		
Linares	<u>15</u>	<u>21-</u>		
Montemorelos	<u>45-</u>	<u>51</u>		
Monterrey	<u>16</u>	<u>22+</u>	28+	34-
Sabinas Hidalgo	<u>32</u>	<u>38</u>		

TABLE A (continued)

Sonora

Agua-Prieta	17+			--
Caborca	21-			--
Cananea	26	56		
Hermosillo	17-	23	29	35-
Magdalena	14	20-		
Naco	48			
Nacozari	25	31+		
Nogales	22	38+	50+	
Puerto Libertad	18	24-		
Puerto Penasco	19+			
San Javier	38-	44		--
San Luis Rio Colorado	44	50		---
Sonoita	25+	31-		
Ures	41	47		

Tamaulipas

#Ciudad Camargo	18	24		
#Ciudad Guerrero	66			
Ciudad Victoria	14+	20	26+	32+
Matamoros	14	54		
Nuevo Laredo	21	33+	45	
#Reynosa	17	36		
#Rio Bravo	42			
#San Fernando	19	25+		
#Valle Hermoso	52			

TABLE B

UNITED STATES

Arizona

Ajo	23-			
Coolidge	<u>43</u>			
Douglas	<u>28</u>			
Globe	14+			
Kingman	14-			
McNary	22+			
Nogales	16+			
Parker	17-			
Phoenix	15-	<u>21</u>	<u>33</u>	<u>39</u>
Prescott	<u>19</u>			--
Safford	<u>23+</u>			
Tucson	18-	27-	<u>40</u>	
Yuma	16-			

California

Anaheim	56-				
Barstow	35+				
Blythe	22-				
Brawley	<u>26</u>				
Corona	<u>52</u>				
Indio	19+				
Los Angeles	<u>22</u>	<u>28</u>	<u>34</u>	58-	68-
Oxnard	63+				
Palm Springs	36-	<u>42</u>			
Riverside	<u>46</u>				
San Bernardino	18-	24-	<u>30</u>		
San Diego	<u>15</u>	<u>39</u>	<u>51</u>	<u>69</u>	
Santa Ana	<u>40</u>	<u>50-</u>			
Santa Barbara	<u>14</u>	<u>20</u>	<u>32</u>	--	
Ventura	<u>16+</u>				

New Mexico

Alamogordo	18-			
Carlsbad	15+	25-		
Deming	<u>16</u>			
Hobbs	29+			
Las Cruces	22-	48+		
Lovington	<u>19</u>			
Roswell	<u>21-</u>	27-	33+	
Socorro	15-			



	Texas			
#Austin	<u>18+</u>	<u>24</u>	<u>36</u>	42-
Big Spring	<u>14</u>			
#Brownsville	<u>23</u>			
#Corpus Christi	<u>16</u>	28-	38+	
Del Rio	<u>24+</u>			
El Paso	<u>14</u>	26+	38-	
#Harlingen	<u>44</u>	<u>60</u>		
#Laredo	<u>27-</u>	<u>39</u>		--
#McAllen	<u>48</u>			--
Midland	<u>18</u>			
Odessa	<u>24-</u>	<u>30</u>	36+	
San Angelo	21+			
#San Antonio	23-	29+	41+	
#Victoria	19+	<u>25</u>		

TABLE C  
CO-CHANNEL SEPARATIONS

The minimum co-channel separation is 330 kilometers (205 miles) between co-channel allotments when both are designated by # in Tables A and B. The minimum co-channel separation is 280 kilometers (175 miles) in all other cases.

OTHER SEPARATIONS

(1)	(2)	(3)	(4)	(5)	(6)	(7)
Channel	32 Km 20 miles (IF beat) +/- 14	32 Km 20 miles (inter-modulation) 25 +/- 2-5	90 Km 55 miles (adjacent channel) +/- 1	95 Km 60 miles (oscillator) +/- 3	95 Km 60 miles (sound image) +/- 14	120 Km 75 miles (picture image) +/- 15
14	22	16-19	15	21	28	29
15	23	17-20	14, 16	22	29	30
16	24	14, 18-21	15, 17	23	30	31
17	25	14-15, 19-22	16, 18	24	31	32
18	26	14-16, 20-23	17, 19	25	32	33
19	27	14-17, 21-24	18, 20	26	33	34
20	28	15-18, 22-25	19, 21	27	34	35
21	29	16-19, 23-26	20, 22	28, 14	35	36
	30, 14	17-20, 24-27	21, 23	29, 15	36	37
	31, 15	18-21, 25-28	22, 24	30, 16	37	38
24	32, 16	19-22, 26-29	23, 25	31, 17	38	39
25	33, 17	20-23, 27-30	24, 26	32, 18	39	40
26	34, 18	21-24, 28-31	25, 27	33, 19	40	41
27	35, 19	22-25, 29-32	26, 28	34, 20	41	42
28	36, 20	23-26, 30-33	27, 29	35, 21	42, 14	43
29	37, 21	24-27, 31-34	28, 30	36, 22	43, 15	44, 14
30	38, 22	25-28, 32-35	29, 31	37, 23	44, 16	45, 15
31	39, 23	26-29, 33-36	30, 32	38, 24	45, 17	46, 16
32	40, 24	27-30, 34-37	31, 33	39, 25	46, 18	47, 17
33	41, 25	28-31, 35-38	32, 34	40, 26	47, 19	48, 18
34	42, 26	29-32, 36-39	33, 35	41, 27	48, 20	49, 19
35	43, 27	30-33, 37-40	34, 36	42, 28	49, 21	50, 20
36	44, 28	31-34, 38-41	35, 37	43, 29	50, 22	51, 21
37	45, 29	32-35, 39-42	36, 38	44, 30	51, 23	52, 22
38	46, 30	33-36, 40-43	37, 39	45, 31	52, 24	53, 23
39	47, 31	34-37, 41-44	38, 40	46, 32	53, 25	54, 24
40	48, 32	35-38, 42-45	39, 41	47, 33	54, 26	55, 25
41	49, 33	36-39, 43-46	40, 42	48, 34	55, 27	56, 26
42	50, 34	37-40, 44-47	41, 43	49, 35	56, 28	57, 27
43	51, 35	38-41, 45-48	42, 44	50, 36	57, 29	58, 28
44	52, 36	39-42, 46-49	43, 45	51, 37	58, 30	59, 29
45	53, 37	40-43, 47-50	44, 46	52, 38	59, 31	60, 30
	54, 38	41-44, 48-51	45, 47	53, 39	60, 32	61, 31
	55, 39	42-45, 49-52	46, 48	54, 40	61, 33	62, 32
48	56, 40	43-46, 50-53	47, 49	55, 41	62, 34	63, 33
49	57, 41	44-47, 51-54	48, 50	56, 42	63, 35	64, 34

TABLE C (continued)

## OTHER SEPARATIONS (continued)

(1) Channel	(2) 32 Km 20 miles (IF beat)	(3) 32 Km 20 miles (inter- modulation)	(4) 90 Km 55 miles (adjacent channel)	(5) 95 Km 60 miles (oscil- lator)	(6) 95 Km 60 miles (sound image)	(7) 120 Km 75 miles (picture image)
50	58, 42	45-48, 52-55	49, 51	57, 43	64, 36	65, 35
51	59, 43	46-49, 53-56	50, 52	58, 44	65, 37	66, 36
52	60, 44	47-50, 54-57	51, 53	59, 45	66, 38	67, 37
53	61, 45	48-51, 55-58	52, 54	60, 46	67, 39	68, 38
54	62, 46	49-52, 56-59	53, 55	61, 47	68, 40	69, 39
55	63, 47	50-53, 57-60	54, 56	62, 48	69, 41	40
56	64, 48	51-54, 58-61	55, 57	63, 49	42	41
57	65, 49	52-55, 59-62	56, 58	64, 50	43	42
58	66, 50	53-56, 60-63	57, 59	65, 51	44	43
59	67, 51	54-57, 61-64	58, 60	66, 52	45	44
60	68, 52	55-58, 62-65	59, 61	67, 53	46	45
61	69, 53	56-59, 63-66	60, 62	68, 54	47	46
62	54	57-60, 64-67	61, 63	69, 55	48	47
63	55	58-61, 65-68	62, 64	56	49	48
	56	59-62, 66-69	63, 65	57	50	49
	57	60-63, 67-69	64, 66	58	51	50
	58	61-64, 68-69	65, 67	59	52	51
67	59	62-65, 69	66, 68	60	53	52
68	60	63-66	67, 69	61	54	53
69	61	64-67	68	62	55	54

NOTE: The parenthetical reference beneath the distance figures in columns (2) through (7), inclusive, indicate, in abbreviated form, the bases for the required distance separations. The hyphenated numbers listed in column (3) are both inclusive.

Figure 1

MAXIMUM POWER versus ANTENNA HEIGHT

Antenna Height Above Average Terrain (Meters)

