

**No. 22680**

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**MEXICO  
and  
UNITED STATES OF AMERICA**

**Agreement relating to assignments and usage of television broadcasting channels in the frequency range 470-806 MHz (channels 14-69) along the Mexico-United States border (with tables and figure). Signed at Mexico City on 18 June 1982**

*Authentic texts: Spanish and English.*

*Registered by Mexico on 20 January 1984.*

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**MEXIQUE  
et  
ÉTATS-UNIS D'AMÉRIQUE**

**Accord relatif à l'attribution et à l'utilisation de canaux de télévision sur les fréquences 470-806 MHz (canaux 14 à 69) le long de la frontière entre le Mexique et les États-Unis (avec tableaux et figure). Signé à Mexico le 18 juin 1982**

*Textes authentiques : espagnol et anglais.*

*Enregistré par le Mexique le 20 janvier 1984.*

## AGREEMENT<sup>1</sup> RELATING TO ASSIGNMENTS AND USAGE OF TELEVISION BROADCASTING CHANNELS IN THE FREQUENCY RANGE 470-806 MHz (CHANNELS 14-69) ALONG THE MEXICO-UNITED STATES 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 Mexican States and the United States of America 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),<sup>2</sup> 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 Mexican States and the United States of America 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 Mexico and the United States.

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 (5,000 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

<sup>1</sup> Came into force on 17 January 1983, upon receipt by the Government of the United States of America of a notification from the Government of Mexico confirming the completion of the national legal formalities, in accordance with section M.

<sup>2</sup> United Nations, *Treaty Series*, vol. 1209, p. 32.

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 (2,000 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 Mexican States and the United States of America 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. ENTRY 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 18th day of the month of June of the year one thousand nine hundred eighty-two.

For the Government  
of the United Mexican States:

[Signed]

Lic. EMILIO MÚJICA MONTOYA  
Secretary of Communications  
and Transportation

For the Government  
of the United States of America:

[Signed]

JOHN GAVIN  
Ambassador

Enclosures:

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

TABLE A. MÉXICO

*Baja California*

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

*Chihuahua*

Chihuahua	14 -	<u>20</u>	26 -		
Ciudad Camargo	<u>17</u>	<u>23</u>			
Ciudad Cuauhtemoc	16 +	22 +			
Ciudad Delicias	44 -	50 -			
Ciudad Jimenez	<u>19</u>	<u>25</u>			
Ciudad Juarez	20 +	32 -	44	<u>56</u>	
Hidalgo del Parral	15 +	21 +			
Las Minas	17 +	23 -			
Las Palomas	27 +				
Meoqui	<u>56</u>				
Nuevo Casas Grandes	18 +	24 +	<u>30</u>		
Ojinaga	<u>15</u>				
San Buenaventura	21 -				

*Coahuila*

Ciudad Acuna	<u>34</u>	40 +	<u>58</u>		
Cuatro Ciénegas	<u>53</u>				
Monclova	<u>29</u>	<u>35</u>			
Muzquiz	<u>41</u>	<u>47</u>			
Nueva Rosita	17 -	23 +			
Parras	17 +	23 -			
Piedras Negras	<u>22</u>	<u>28</u>	46		

Sabinas	<u>59</u>	<u>65</u>		
Saltillo	<u>25</u> -	<u>44</u> -	<u>50</u>	
<i>Nuevo León</i>				
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>		
<i>Sonora</i>				
Agua Prieta	<u>17</u> +			
Caborca	<u>21</u> -			
Cananea	<u>26</u>	<u>56</u>		
Hermosillo	<u>17</u> -	<u>23</u>	<u>29</u>	35 -
Magdalena	<u>14</u>	<u>20</u> -		
Naco	<u>48</u>			
Nacozari	<u>25</u>	<u>31</u> +		
Nogales	<u>22</u>	<u>38</u> +	50 +	
Puerto Libertad	<u>18</u>	<u>24</u> -		
Puerto Penasco	<u>19</u> +			
San Javier	<u>38</u> -	<u>44</u>		
San Luis Rio Colorado	<u>44</u>	<u>50</u>		
Sonoita	<u>25</u> +	<u>31</u> -		
Ures	<u>41</u>	<u>47</u>		
<i>Tamaulipas</i>				
# Ciudad Camargo	<u>18</u>	<u>24</u>		
# Ciudad Guerrero	<u>66</u>			
Cuidad Victoria	<u>14</u> +	<u>20</u>	26 +	32 +
# Matamoros	<u>14</u>	<u>54</u>		
Nuevo Laredo	<u>21</u>	<u>33</u> +	<u>45</u>	
# Reynosa	<u>17</u>	<u>36</u>		
# Rio Bravo	<u>42</u>			
# San Fernando	<u>19</u>	<u>25</u> +		
# Valle Hermoso	<u>52</u>			

TABLE B. UNITED STATES

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

*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>	50-			
Santa Barbara	<u>14</u>	<u>20</u>	<u>32</u>		
Ventura	16+				

*New Mexico*

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

*Texas*

# Austin	18+	<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	24+				
El Paso	<u>14</u>	26+	38-		
# Harlingen	<u>44</u>	<u>60</u>			
# Laredo	27-	<u>39</u>			
# McAllen	<u>48</u>				
Midland	<u>18</u>				
Odessa	24-	<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.

<i>Other separations</i>						
(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)
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
22	30, 14	17-20, 24-27	21, 23	29, 15	36	37
23	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



(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)
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
46	54, 38	41-44, 48-51	45, 47	53, 39	60, 32	61, 31
47	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
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
64	56	59-62, 66-69	63, 65	57	50	49
65	57	60-63, 67-69	64, 66	58	51	50
66	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

