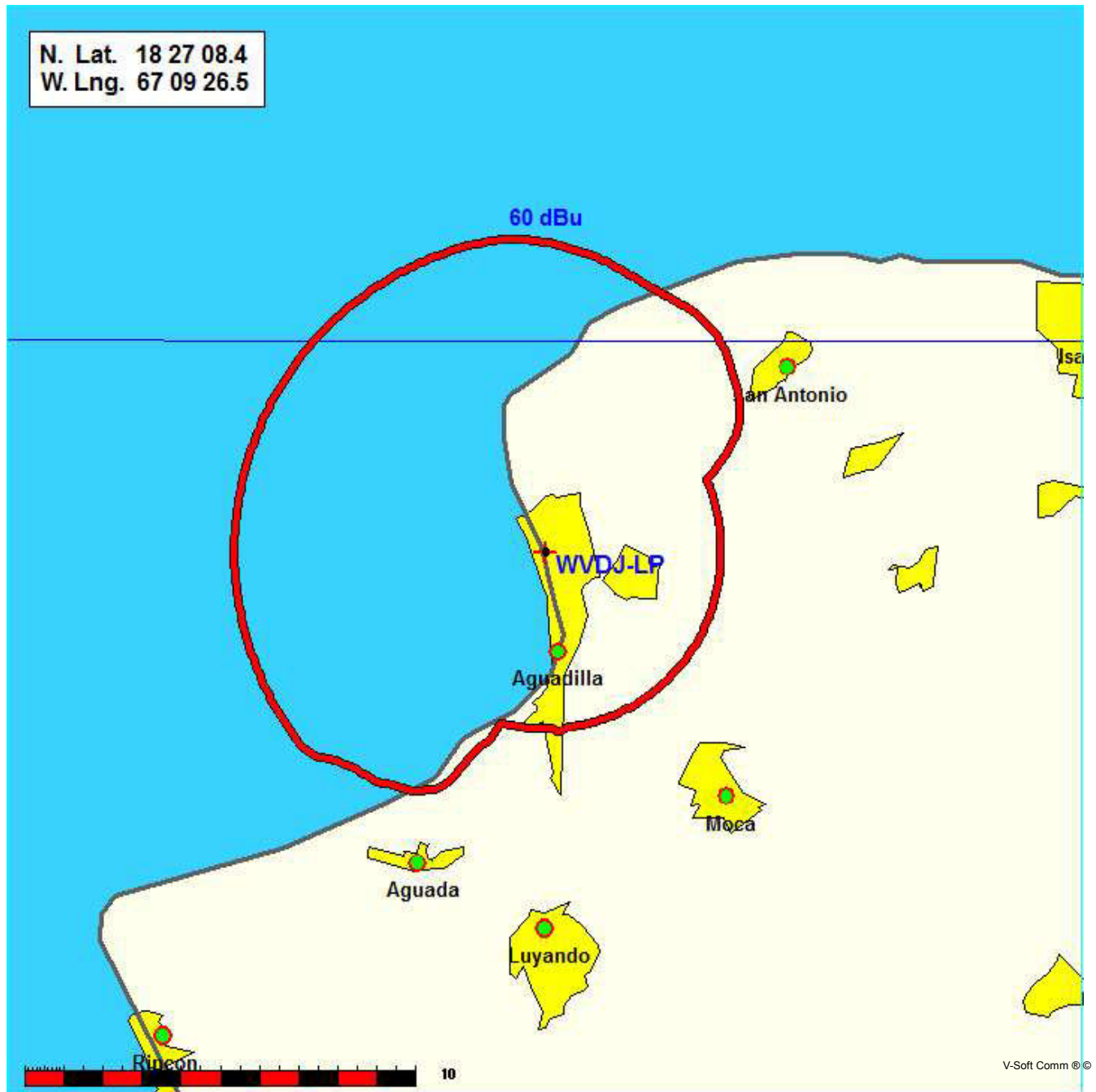


60 dBu contour  
Taller Cultural Jaycoa, Inc.

Coverage Study - GLOBE 30 Sec  
04-12-2018

WVDJ-LP CH300 L1, 0.042 kW, 46.0m HAAT, 92.4m COR AMSL  
Service Contour = 60 dBu. Population = 41,944





***RCR BROADCAST CONSULTANT***

***& COMMUNICATION SERVICE***

**HOW TO READ THE FM COMPUTER PRINT-OUT**

**Translator Reference Station**

The computer printout should be self-explanatory for the most part. The parameters of the station being checked, (reference station) are printed in the heading. The 60 dBu protected contour is predicted from the Commission's F(50-50) table. Contour distances are in kilometers and are predicted using the Commission's TVFMINT FORTRAN subroutine. When interference contour distances are less than 16 kilometers the F(50-50) tables are used. If signal contour distances are less than 1.6 km the free-space equation is used.

All distances are derived by the method detailed in Sec. 73.208 of the Rules and Regulations as amended in Docket 80-90. The column labeled "\* OUT \*" shows the greatest distance in kilometers of overlap (or smallest distance of clearance) between the reference station's interference contour and the database station's protected contour. Negative distance figures in this column indicate outgoing contour overlap. Since translators are able to receive interference there is no "In" or incoming column in this report.

Listed antenna heights and power are the specific antenna heights and power from the FCC database.

Under the "AZI" column, the first row of numbers indicate the True North azimuths from the reference station toward the database stations, while the numbers in the second row indicate the reverse bearings from the database stations to the reference station. Bearings are calculated using spherical trigonometry.

The columns labeled "INT" and "PRO" contain the distance in kilometers of the appropriate interference contour and the protected contour of a data base station.

For I.F. relationships the minimum spacings the "OUT" columns change its significance. The letter "R" stands for the minimum required distance in kilometers, while the letter "M" in the next column displays the available clear space separation in kilometers. Minimum separation distances when displayed are taken from Sec 73.207 of the rules as amended. Canadian and Mexican separation distances, U/D ratios and protected contour values are from the US/Mexican Working Agreement and the US/Canada Working Agreement".

The first three letters of the "TYPE" column identify the current FCC status of the stations. The fourth letter will be a "D" if the facility is directional. "Z" indicates a 73.215 directional. An "N" indicates it is a 73.215 station that operates with an omni-directional antenna. The fifth letter will be an E, H or V depending on the type of antenna polarization. The sixth letter will be a "Y" if the antenna uses beam tilt or an "X" if the commission is not sure, otherwise it will be an "N" or left blank.

## RCR BROADCAST CONSULTANT

CHANNEL REPORT  
Taller Cultural Jaycoa, Inc.

REFERENCE			DISPLAY DATES
18 27 08.4 N.	CLASS = L1		DATA 02-07-18
67 09 26.5 W.	PR & VI Spacings to 2nd Adj.		SEARCH 03-17-18
----- Channel 300 - 107.9 MHz -----			

Call	Channel	Location		Azi	Dist	FCC	Margin
WVDJ-LP	LIC 300L1	Aguadilla	PR	143.0	1.09	23.5	-22.4
ALLO	USE 299B	Carolina	PR	92.5	116.50	122.5	-6.0
WVPJ-LP	LIC 300L1	Mayaguez	PR	179.8	25.18	23.5	1.7
WQBS-FM	LIC 299B	Carolina	PR	96.1	144.85	122.5	22.4
1777915	APP-D 300D	Arecibo	PR	86.2	49.69	25.5	24.2
WJED-LP	LIC 300L1	Guanica	PR	153.1	58.74	23.5	35.2

-----  
Reference station has protected zone issue: Arecibo  
All separation margins include rounding

# ARECIBO OBSERVATORY

The William E. Gordon Telescope  
Angel Ramos Foundation Science and Visitor Center



March 19, 2018

Mr. Eng. Ricardo Cruz Ríos  
Broadcast Engineering Consultant  
[superq98@gmail.com](mailto:superq98@gmail.com)

Re: La Voz Del Jayacoa  
WVDJ-LP

Dear Eng. Ricardo Cruz Rios:

Thank you very much for the copy of your FCC application sent to us in accordance with the Puerto Rico Coordination zone agreements. We have considered the technical aspects of your application and find that your installation/path originating is unlikely to cause harmful interference to the passive use of the Radio Astronomy bands at the Observatory. We therefore have no objection to your proposed installation.

Sincerely yours,

Angel M. Vázquez  
Spectrum Manager

AV:ws

Cc: PRCZ files [File #00180030048]

**Antenna Height Above Average Terrain Calculations -- Results****Input Data**Latitude **18° 27' 8.35"** NorthLongitude **67° 9' 26.51"** West (NAD 83)Height of antenna radiation center above mean sea level: **94.2** meters AMSLNumber of Evenly Spaced Radials = **360** 0° is referenced to True North**Results**Calculated HAAT = **46 meters**Antenna Height Above Average Terrain calculated  
using 1 km **GLOBE terrain data****Individual "Radial HAAT" Values, in meters**

0°	90.8 m	120°	-109.0 m	240°	94.2 m
1°	90.3 m	121°	-101.2 m	241°	94.2 m
2°	89.9 m	122°	-93.7 m	242°	94.2 m
3°	89.5 m	123°	-87.0 m	243°	94.2 m
4°	89.0 m	124°	-80.6 m	244°	94.2 m
5°	88.3 m	125°	-74.2 m	245°	94.2 m
6°	87.9 m	126°	-67.8 m	246°	94.2 m
7°	87.4 m	127°	-61.6 m	247°	94.2 m
8°	86.8 m	128°	-55.7 m	248°	94.2 m
9°	86.3 m	129°	-50.1 m	249°	94.2 m
10°	85.7 m	130°	-45.0 m	250°	94.2 m
11°	85.2 m	131°	-40.2 m	251°	94.2 m
12°	84.5 m	132°	-35.7 m	252°	94.2 m
13°	83.6 m	133°	-31.4 m	253°	94.2 m
14°	82.8 m	134°	-28.2 m	254°	94.2 m
15°	82.1 m	135°	-25.9 m	255°	94.2 m
16°	81.5 m	136°	-24.5 m	256°	94.2 m
17°	80.9 m	137°	-22.9 m	257°	94.2 m
18°	80.2 m	138°	-19.9 m	258°	94.2 m
19°	79.6 m	139°	-15.6 m	259°	94.2 m
20°	79.0 m	140°	-11.5 m	260°	94.2 m
21°	78.5 m	141°	-9.0 m	261°	94.2 m
22°	78.1 m	142°	-8.4 m	262°	94.2 m
23°	77.7 m	143°	-8.6 m	263°	94.2 m
24°	77.4 m	144°	-7.5 m	264°	94.2 m
25°	77.1 m	145°	-4.4 m	265°	94.2 m
26°	76.8 m	146°	1.0 m	266°	94.2 m
27°	76.6 m	147°	7.1 m	267°	94.2 m
28°	76.5 m	148°	12.2 m	268°	94.2 m
29°	76.5 m	149°	16.1 m	269°	94.2 m
30°	76.5 m	150°	19.5 m	270°	94.2 m
31°	76.6 m	151°	22.4 m	271°	94.2 m
32°	76.7 m	152°	24.5 m	272°	94.2 m
33°	76.6 m	153°	25.6 m	273°	94.2 m
34°	76.4 m	154°	25.6 m	274°	94.2 m
35°	76.1 m	155°	24.5 m	275°	94.2 m

36°	75.7 m	156°	22.9 m	276°	94.2 m
37°	75.1 m	157°	21.1 m	277°	94.2 m
38°	74.5 m	158°	20.0 m	278°	94.2 m
39°	73.9 m	159°	19.4 m	279°	94.2 m
40°	73.2 m	160°	19.8 m	280°	94.2 m
41°	72.4 m	161°	21.0 m	281°	94.2 m
42°	71.5 m	162°	21.8 m	282°	94.2 m
43°	70.5 m	163°	21.8 m	283°	94.2 m
44°	69.4 m	164°	21.2 m	284°	94.2 m
45°	68.1 m	165°	20.4 m	285°	94.2 m
46°	66.8 m	166°	19.0 m	286°	94.2 m
47°	65.5 m	167°	18.2 m	287°	94.2 m
48°	64.2 m	168°	17.7 m	288°	94.2 m
49°	63.0 m	169°	17.3 m	289°	94.2 m
50°	61.9 m	170°	18.9 m	290°	94.2 m
51°	60.9 m	171°	21.8 m	291°	94.2 m
52°	59.9 m	172°	25.9 m	292°	94.2 m
53°	58.8 m	173°	29.7 m	293°	94.2 m
54°	57.7 m	174°	32.4 m	294°	94.2 m
55°	56.4 m	175°	33.4 m	295°	94.2 m
56°	55.0 m	176°	33.6 m	296°	94.2 m
57°	53.5 m	177°	33.1 m	297°	94.2 m
58°	51.9 m	178°	32.4 m	298°	94.2 m
59°	50.2 m	179°	30.3 m	299°	94.2 m
60°	48.3 m	180°	26.3 m	300°	94.2 m
61°	46.1 m	181°	22.3 m	301°	94.2 m
62°	43.8 m	182°	18.3 m	302°	94.2 m
63°	41.5 m	183°	15.6 m	303°	94.2 m
64°	39.3 m	184°	14.3 m	304°	94.2 m
65°	36.9 m	185°	12.9 m	305°	94.2 m
66°	34.2 m	186°	13.6 m	306°	94.2 m
67°	31.2 m	187°	15.0 m	307°	94.2 m
68°	27.6 m	188°	15.4 m	308°	94.2 m
69°	24.2 m	189°	16.7 m	309°	94.2 m
70°	21.0 m	190°	18.6 m	310°	94.2 m
71°	17.9 m	191°	21.1 m	311°	94.2 m
72°	14.8 m	192°	24.6 m	312°	94.2 m
73°	11.8 m	193°	28.7 m	313°	94.2 m
74°	8.6 m	194°	33.2 m	314°	94.2 m
75°	5.3 m	195°	37.7 m	315°	94.2 m
76°	1.9 m	196°	41.4 m	316°	94.2 m
77°	-1.5 m	197°	43.5 m	317°	94.2 m
78°	-4.5 m	198°	44.4 m	318°	94.2 m
79°	-7.2 m	199°	45.6 m	319°	94.2 m
80°	-9.7 m	200°	49.0 m	320°	94.2 m
81°	-12.4 m	201°	54.1 m	321°	94.2 m
82°	-15.3 m	202°	59.8 m	322°	94.2 m
83°	-18.6 m	203°	64.2 m	323°	94.2 m
84°	-22.1 m	204°	67.2 m	324°	94.2 m
85°	-25.8 m	205°	69.3 m	325°	94.2 m
86°	-29.3 m	206°	70.9 m	326°	94.2 m
87°	-32.9 m	207°	72.5 m	327°	94.2 m
88°	-36.6 m	208°	73.7 m	328°	94.2 m
89°	-40.5 m	209°	74.5 m	329°	94.2 m
90°	-44.6 m	210°	75.0 m	330°	94.2 m
91°	-48.7 m	211°	75.4 m	331°	94.2 m
92°	-52.8 m	212°	75.9 m	332°	94.2 m
93°	-56.9 m	213°	76.6 m	333°	94.2 m
94°	-60.8 m	214°	77.7 m	334°	94.2 m
95°	-64.8 m	215°	78.9 m	335°	94.2 m
96°	-68.9 m	216°	79.9 m	336°	94.2 m
97°	-72.9 m	217°	80.3 m	337°	94.2 m
98°	-75.9 m	218°	80.4 m	338°	94.2 m
99°	-78.4 m	219°	80.6 m	339°	94.2 m
100°	-80.6 m	220°	81.0 m	340°	94.2 m

101°	-83.3 m	221°	81.6 m	341°	94.2 m
102°	-86.5 m	222°	82.6 m	342°	94.2 m
103°	-90.1 m	223°	83.8 m	343°	94.2 m
104°	-93.7 m	224°	85.0 m	344°	94.2 m
105°	-97.2 m	225°	86.4 m	345°	94.2 m
106°	-100.5 m	226°	88.2 m	346°	94.2 m
107°	-103.3 m	227°	90.3 m	347°	94.2 m
108°	-105.5 m	228°	92.1 m	348°	94.2 m
109°	-107.4 m	229°	93.2 m	349°	94.2 m
110°	-108.6 m	230°	93.7 m	350°	94.1 m
111°	-109.3 m	231°	94.0 m	351°	94.1 m
112°	-110.4 m	232°	94.1 m	352°	94.0 m
113°	-112.1 m	233°	94.2 m	353°	93.7 m
114°	-113.2 m	234°	94.2 m	354°	93.3 m
115°	-113.5 m	235°	94.2 m	355°	92.9 m
116°	-113.5 m	236°	94.2 m	356°	92.4 m
117°	-114.7 m	237°	94.2 m	357°	92.0 m
118°	-115.7 m	238°	94.2 m	358°	91.6 m
119°	-114.1 m	239°	94.2 m	359°	91.2 m

## FMpower Results

### '100 watt' LPFM facilities for equivalency determination:

Reference ERP = 0.100 kW ERP

Reference HAAT= 30 meters HAAT

F(50,50) 60 dBu protected contour at 5.6 km distance

**Equivalent ERP = 0.042 kilowatts (kW)**  
(rounded per [47 CFR 73.212](#))

Unrounded ERP = 0.042 kW for 46 meters HAAT

Low Power FM (LPFM) stations are authorized throughout the United States.

New Calculation?