

ENGINEERING STATEMENT-amended

Teleamerica Communications West Palm Beach Corp. is applying for a new Educational FM station on Channel 215 90.5MHz to serve Key West, Florida. This application proposes operation from an existing communications structure on the roof of a building ASR #1048660.

The proposed facility will use a circularly polarized antenna mounted on an existing tower so no new construction will be required and no disturbance of the ground will take place in construction of the station so no environmental effect can result from the installation. Because of the height above ground the power density on the ground will be low so the public access to the site need not be restricted. No one will be allowed to climb the tower when energized so there will be no employee exposure to rf levels above OET recommendations. See FM Model output attached.

The proposed facility meets all separation requirements for grant at the proposed location. Also the proposed operation will not cause prohibited overlaps of protected and interference contours towards any existing or authorized facility.

The proposed facility provides 60dBu or better signal over 100% of the community of Key West, Florida..

This amendment provides a FCC FM Model showing of RF levels below the OET65 recommended maximum public exposure. It also corrects the coordinates on the distance to contours coverage exhibit page.

Vir James Engineers

Project: NEW 215C3 Curves: VHF Low Band for 88 MHz to 108 MHz

Site Coordinates: 24-33-09 North 81-47-52 West

Site Elevation AMSL: (6 feet), 2 meters

Antenna HAAT: 32 meters

Antenna Center Above Sea Level: 32 meters

TV/FM Channel: 215

Directional Pattern

----- DISTANCES TO CONTOURS IN KILOMETERS -----

AZM	HAAT	ERP	70 dB	60 dB	54 dB	40 dB
(deg)	(m)	(kW)	(km)	(km)	(km)	(km)
			50,50	50,50	50,10	50,10

0-355	32	25.00	13.1	23.2	36.9	100.3

Key West is an island in the Florida Keys offshore extending into the Gulf of Mexico. The proposed Key West 215C3 operation 60 dBu contour encompasses the complete land area of Key West which is published as 16.4 square km and the population of Key west in 2010 was listed in the census population book as 24649 persons. The software does not find any centroid or block data in the proposed contour and does not give a valid popcount or area.

11-06-2021

Vir James Engineers

PAGE 1

FM Study for: KEYWEST

FCC Database Date: 9/23/2021

24-33-09

Location: KEY WEST, FL

Channel Class: C3

81-47-52

Contours calculated on direct line using 73.509(a)

[*] by Distance indicates directional antenna used in calculation.

[*] by HAAT indicates calculated as missing in database.

Call City, State

Chan Class Freq kW Latitude Dist. Required

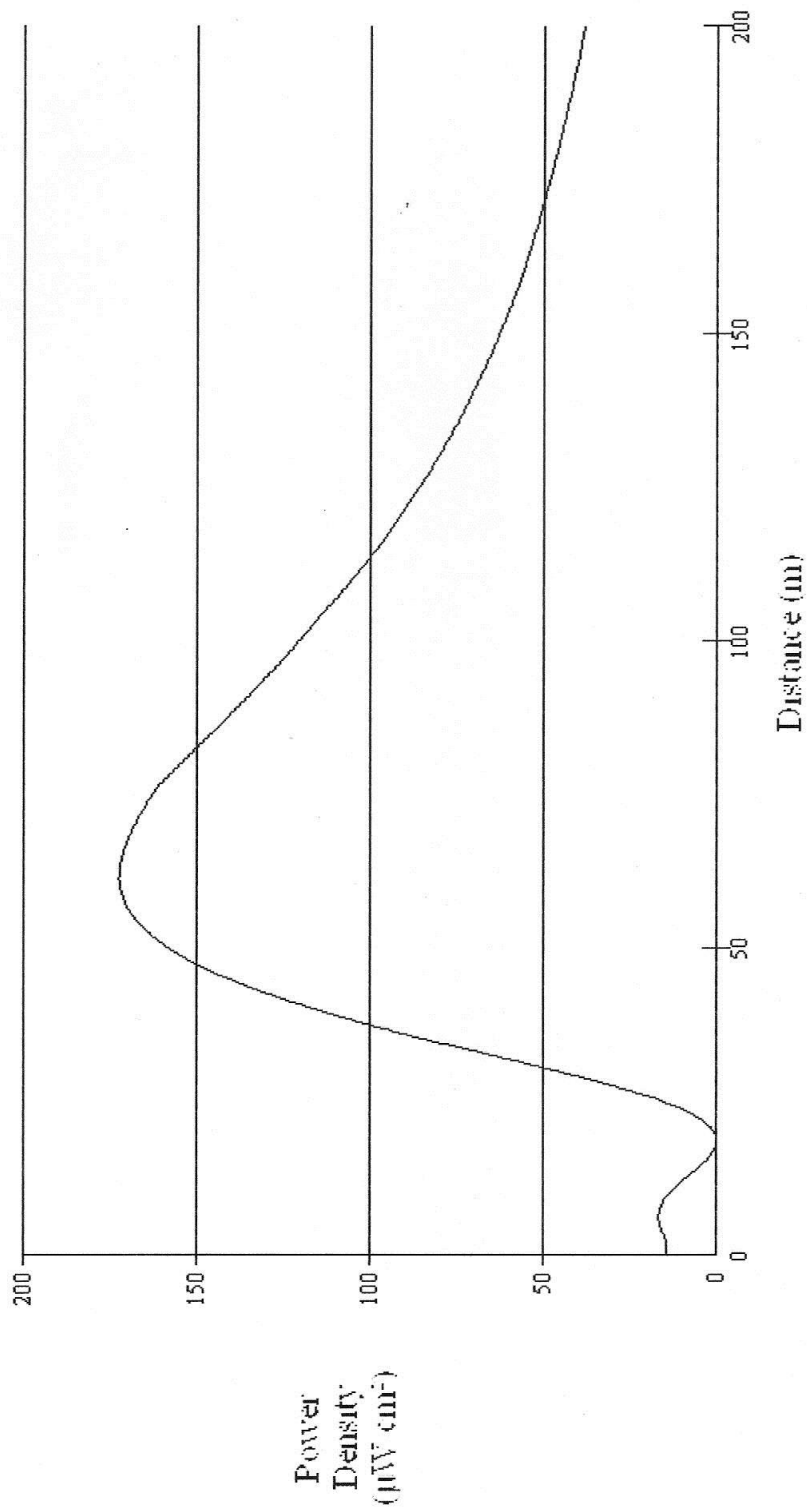
Status Proponent

File Number HAAT Longitude Azm. Clear (km)

>>>>>>> Study For Channel 215 90.9 MHz <<<<<<<

WKYZ	KEY COLONY BEACH, FL	269 C1	101.7	100 +	24-39-39	40.1	24	
LIC	Fac. No. 73170	BLH-20080825AAA	138		81-25-10	72.5	+16.1	CLEAR
WSOR	NAPLES, FL	215 C1	90.9	36	26-20-29	198.4	211	
LIC	Fac. No. 61506	BLED-20050510ACN	275		81-42-38	2.5	-12.6	SHORT
WSOR	F(50,10) 40 dBu =	145 km, KEYWESF(50,50)	60 dBu =	16 KM	+37 km	clear		
KEYWES	F(50,10) 40 dBu =	69 km, WSOR F(50,50)	60 dBu =	61 KM	+69 km			
WLFE	CUTLER BAY, FL	215 C1	90.9	100 +	25-19-31	164.7	211	
LIC	Fac. No. 76516	BLED-20090507ACP	72		80-24-16	58.4	-46.3	SHORT
WLFE	F(50,10) 40 dBu =	94 km, KEYWESF(50,50)	60 dBu =	16 KM	+55 km*	clear		
KEYWES	F(50,10) 40 dBu =	69 km, WLFE F(50,50)	60 dBu =	21 KM	+75 km*			
WKWM	MARATHON, FL	218 C3	91.5	12 +	24-39-40	40.2	43	
LIC	Fac. No. 122606	BLED-20080819AAB	141		81-25-10	72.5	-2.8	SHORT
WKWM	F(50,10) 100 dBu =	2 km, KEYWESF(50,50)	60 dBu =	16 KM	+22 km*	clear		
KEYWES	F(50,10) 100 dBu =	2 km, WKWM F(50,50)	60 dBu =	19 KM	+20 km*			

Power Density vs Distance



Office of Engineering and Technology

Distance (m):	<input type="text" value="200"/>	Antenna Type:	<input type="text" value="Jantrol 'Double V' (EPA)"/>
Horizontal ERP (W):	<input type="text" value="25000"/>	Number of Elements:	<input type="text" value="2"/>
Vertical ERP (W):	<input type="text" value="25000"/>	Element Spacing:	<input type="text" value=".6"/>
Antenna Height (m):	<input type="text" value="30"/>		