

# Consolidated Engineering Statement

## TX Donna K235CI height/power change

Robert Moore  
8/17/2021

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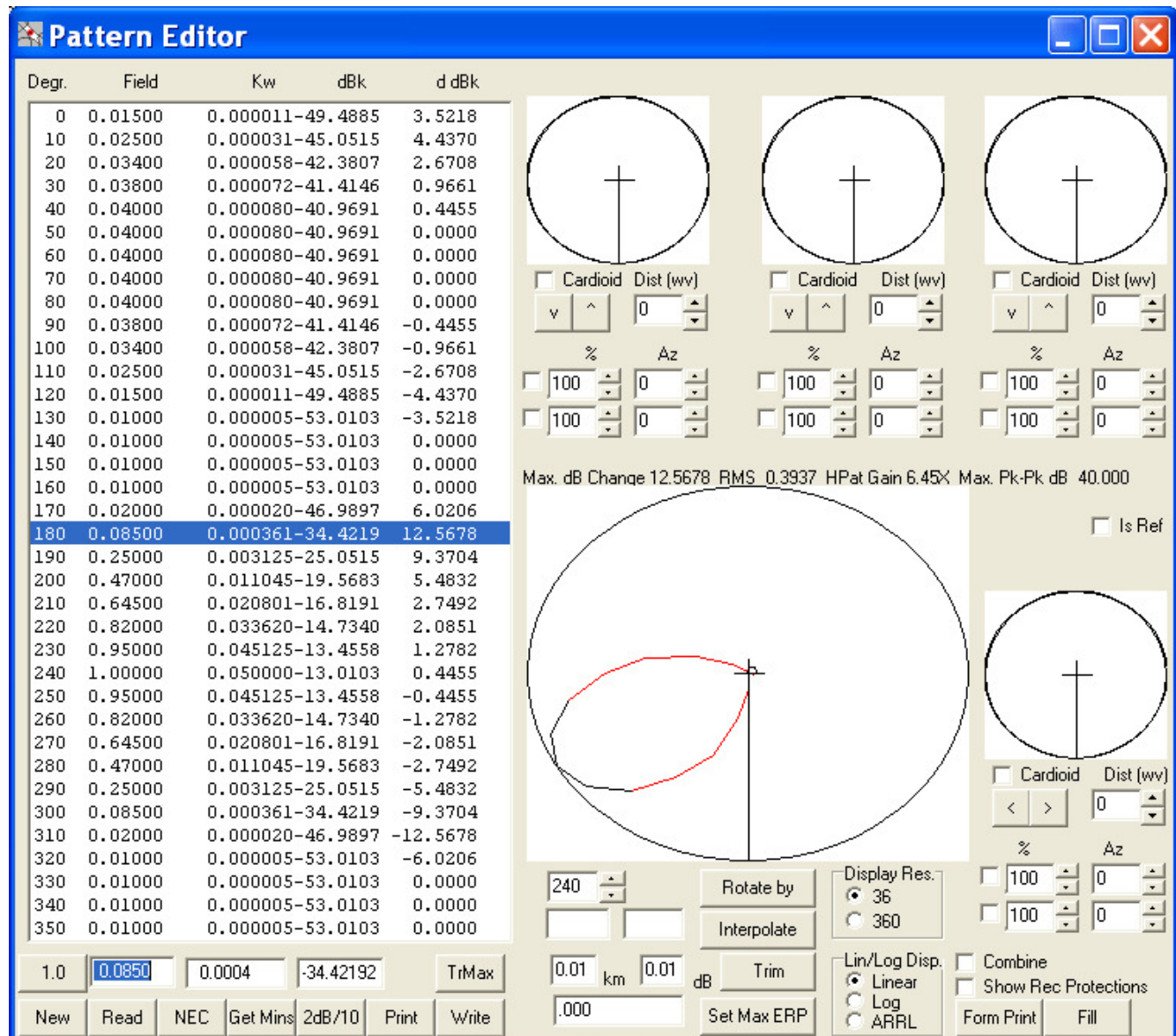
### Abstract

This application proposes increased power and reduced height. The site and antenna remain the same, The application is intended to restore our Spanish service to this distressed community while a new site is acquired.

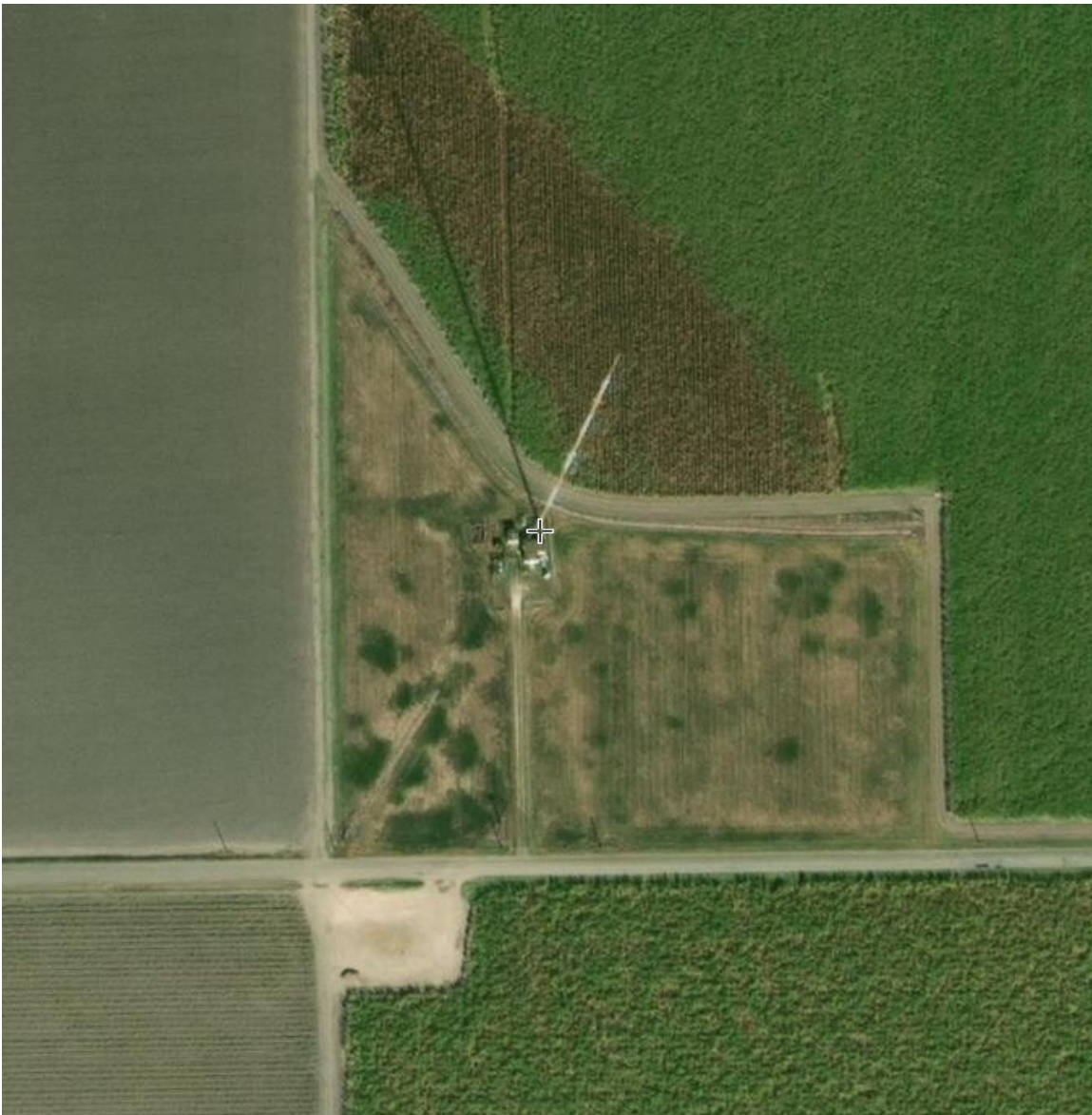
### Authorization

LIC K235CI 235D Donna , TX  
World Radio Network, BLFT20151123AIT 138169  
0.029D kW 0.0m HAAT 100.0m COR AMSL  
N Lat 261507.30 W Lon 975523.01

Antenna: 1 bay Scala CL-FM H-pol mounted, oriented 240 degrees



#: 1  
Dist: 0.05  
Az: 144  
ASR 1054542  
NAD27: 261505.74 975522.00  
NAD83: 261507.00 975523.00  
Site El: 18.0m Height 231.4m Top AMSL 249.4m  
Structure Type: TOWER  
Location: 1.2 KM. WEST NORTH WEST OF JUNCTION OF RT. 491  
AND MILE 13.5 ROAD, LAVILLA, TX  
Dates Construction: 03/11/1991 Action: 07/23/2012  
FAA Number: 98-ASW-2460-OE  
FAA Circular Number: Chapter: 1, 3, 6, 15, 21  
Owner: Entravision - Texas Limited Partnership  
Michael Rowles  
Suite 6000W, 2425 Olympic Boulevard Santa Monica  
Santa Monica, CA, 90404  
(310)447-3870  
wulloa@entravision.com--





Unfortunately the tower shown had to be demolished following a failure of an upper guy wire due to a lightning strike or corrosion rendering the tower unsafe to climb.

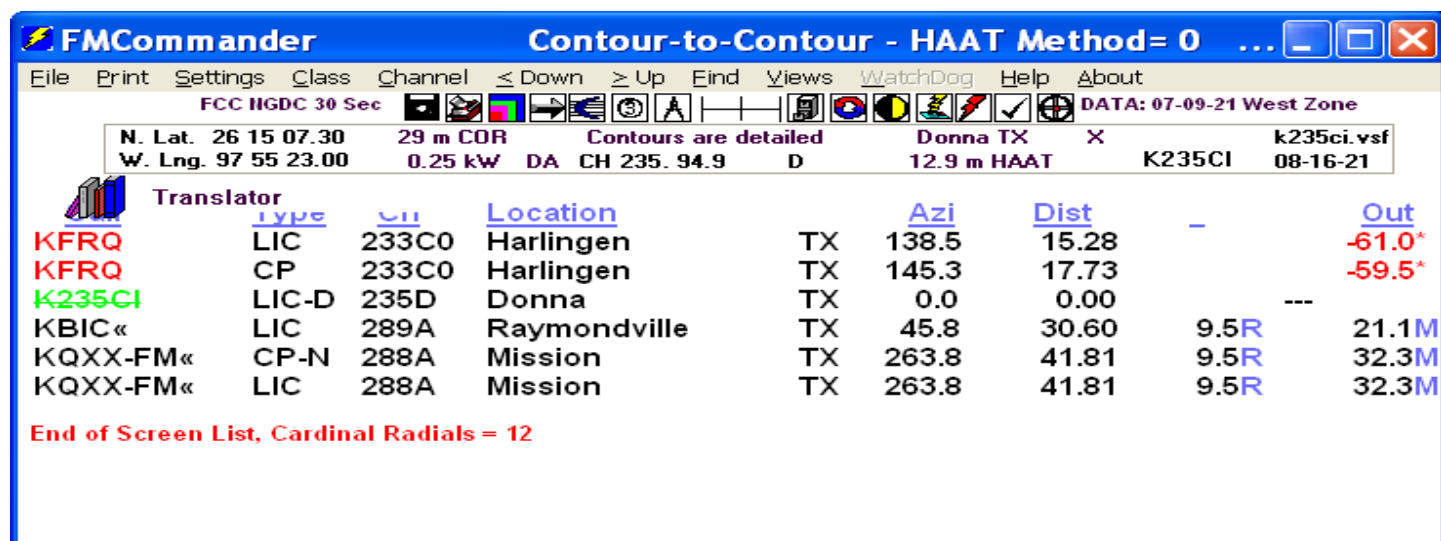




## **Proposed facility**

A temporary 40 foot tower is proposed in this STA is to be located at the same site as the ASR tower that was lost, and is therefore already cleared for tribal, historic and wetland approval.

# Interference study



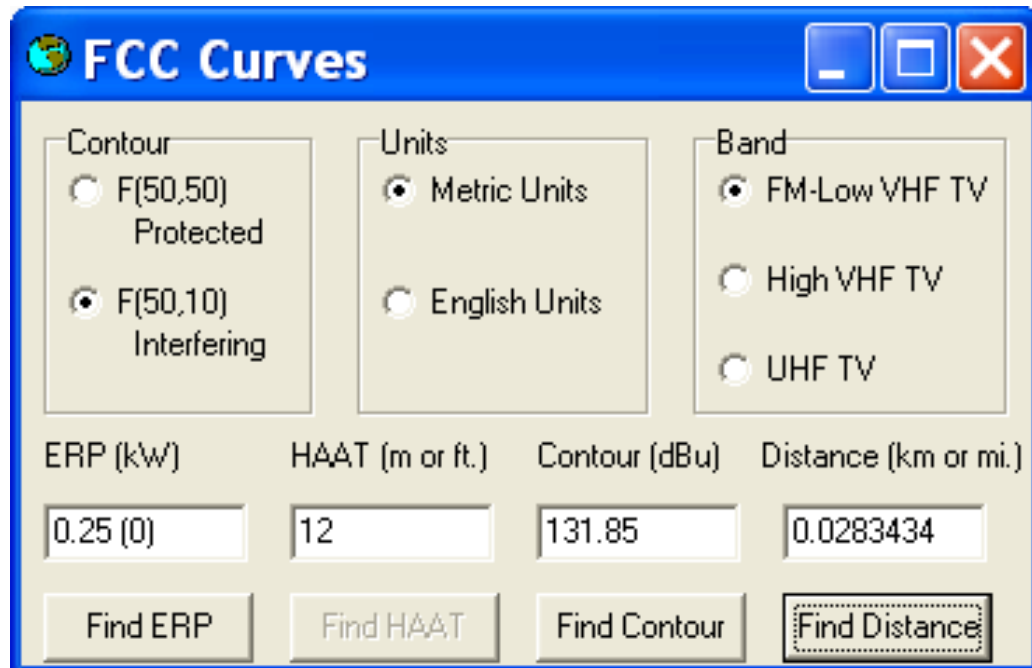
World Radio Network, Inc.

Reference 235Tr ERP 0.250 kW HAAT 12.2 m COR 29 m AMSL  
261507.30 N 94.9 MHz Average protected F(50,50) 7.1 km  
975523.01 W Donna, TX

ChnCl	Call	Stat	Azi	Dist	FacId	Lat	*OUT*	Sig	dBu
	Pwr	COR	HAAT		ARN	Lon	Req.	Margin	
	Owner			City		St			
233C0	KFRQ	LIC	138	15.27	56484	260856.30	-60.70	94.05	See text below
	100.000	367	353	BLH19870728KC		974917.99			
	Entravision Holdings			Harlingen		TX			
233C0	KFRQ.C	CP	145	17.70	56484	260715.00	-59.19	91.85	See text below
	100.000	380	362	0000095083		974919.00			
	Entravision Holdings			Harlingen		TX			
235Tr	K235CI	LIC	0	0.00	138169	261507.30			This facility
	0.029D	100	84	BLFT20151123AIT		975523.01			
	World Radio Network,			Donna		TX			
289A	KBIC	LIC	46	30.61	11082	262638.20			
	1.800	137	130	BMLED20040317AA		974209.00	9.50R	21.11M	
	Christian Ministries			Raymondville		TX			
288A	KQXX-F	CP	264	41.82	36168	261239.80			
	5.700	96	54	BP20181213ACD		982020.69	9.50R	32.32M	
	Ihm Licenses, LLC			Mission		TX			
288A	KQXX-F	LIC	264	41.82	36168	261239.80			
	5.700	96	54	0000096284		982020.69	9.50R	32.32M	
	Ihm Licenses, LLC			Mission		TX			

## Second Adjacent No Population Waiver

Note that the minimum (and thus most fragile) of the two second adjacent entries is 91.85 dBu. Thus the associated interfering contour is 40 dB greater, or 131.85 dBu F(50,10). This contour travels 0.028 km (92 feet).

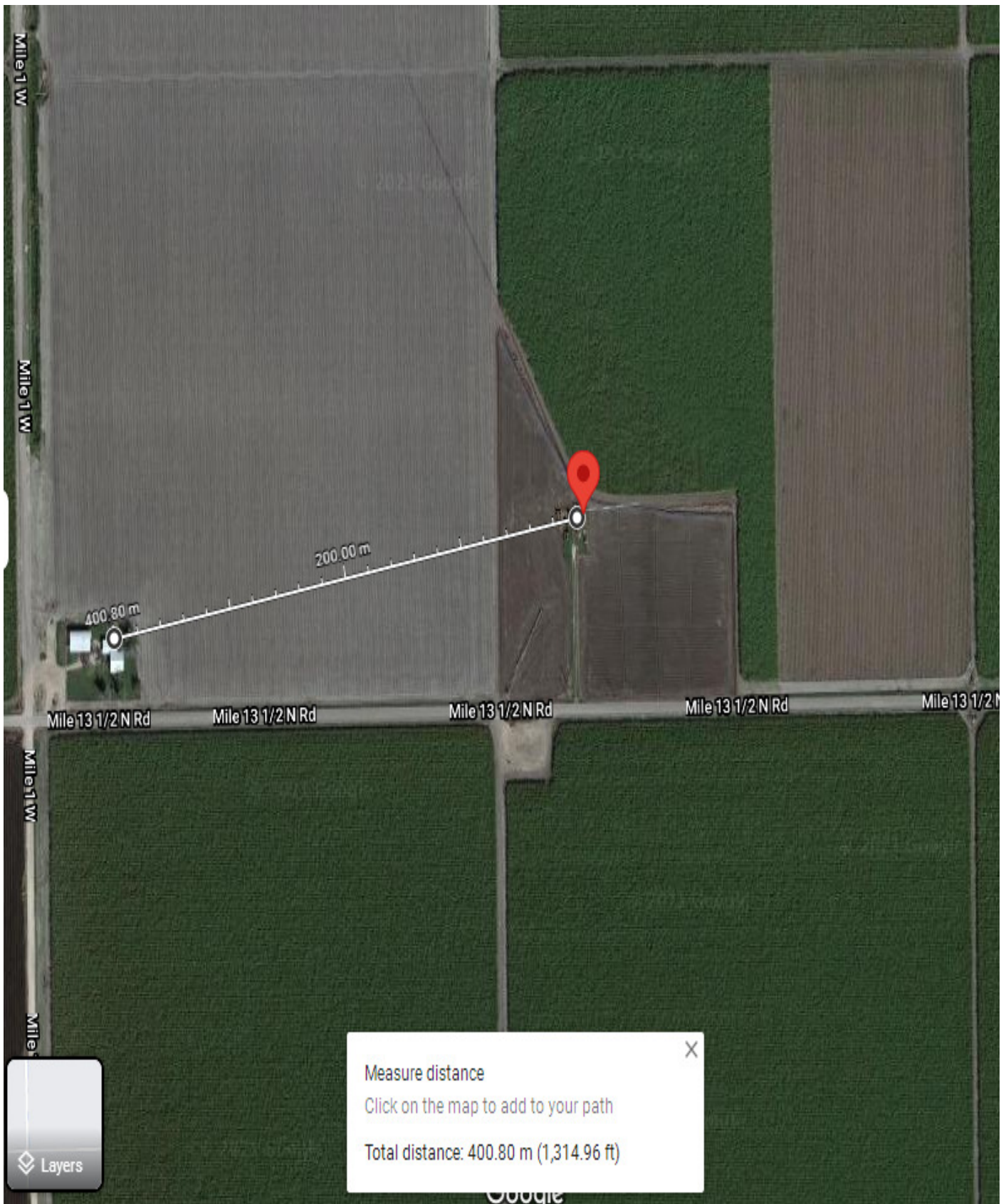


The screenshot shows the 'FCC Curves' software window. It has a blue title bar with a globe icon and standard window controls. The main area is divided into three sections: 'Contour', 'Units', and 'Band'. Below these are four input fields and four corresponding buttons.

Contour	Units	Band	ERP (kW')	HAAT (m or ft.)	Contour (dBu)	Distance (km or mi.)
<input type="radio"/> F(50,50) Protected	<input checked="" type="radio"/> Metric Units	<input checked="" type="radio"/> FM-Low VHF TV	0.25 (0)	12	131.85	0.0283434
<input checked="" type="radio"/> F(50,10) Interfering	<input type="radio"/> English Units	<input type="radio"/> High VHF TV				
		<input type="radio"/> UHF TV				

Buttons: Find ERP, Find HAAT, Find Contour, Find Distance

The distance to the nearest building is some 400.8 meters (and 123 meters to the nearest road).: Hence no second adjacent interference will be experienced.







## Mexican rules

The proposed facility will radiate only 0.03 Watts toward Mexico to the south (180 degrees) as shown in the antenna pattern graphic above. This is well below the 50 Watt maximum for translators near the border.

# Radiation Hazard

There will be two duplexed stations using this antenna. Both have negligible radiation on the ground.

