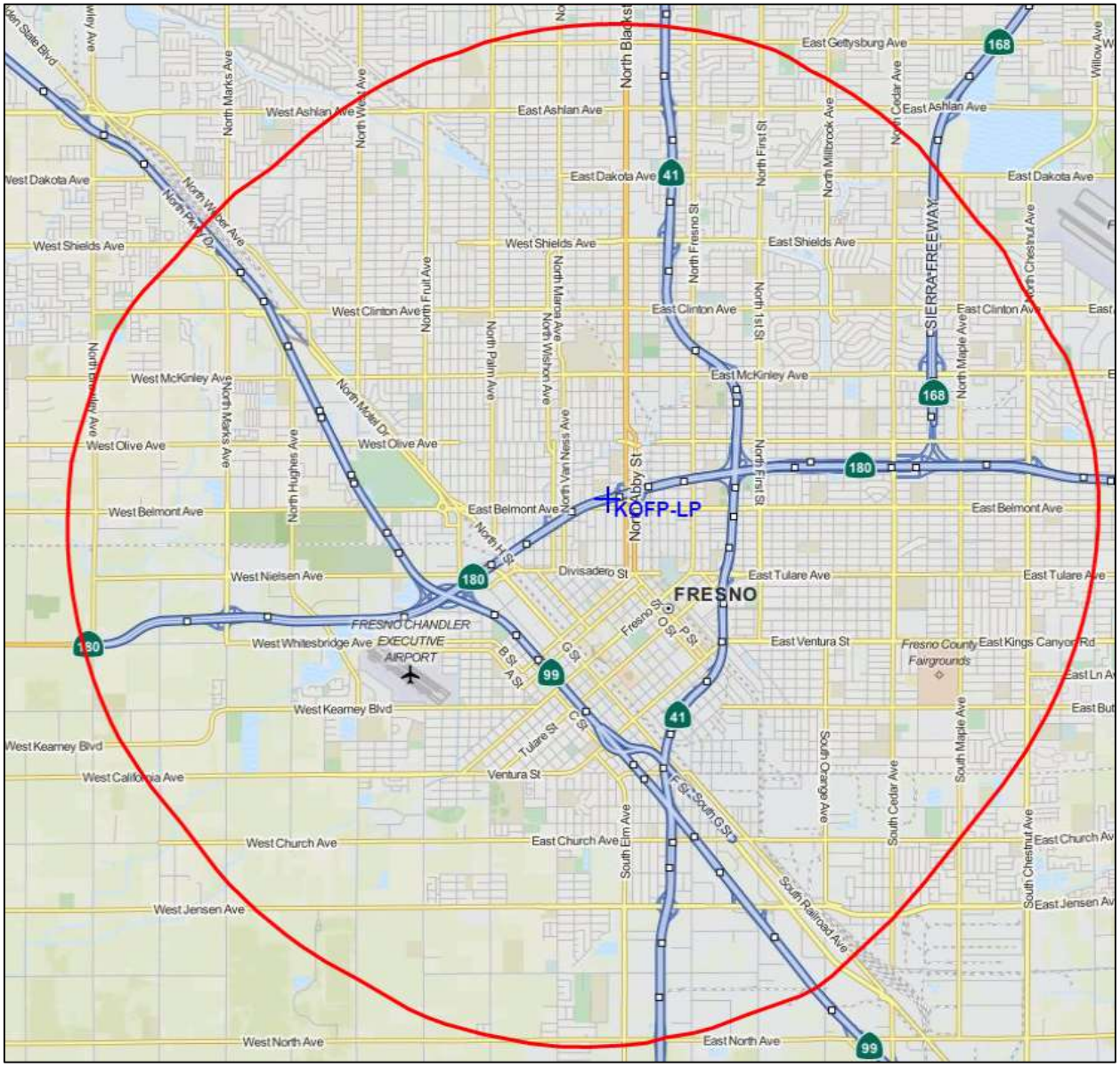
REC Broadcast Services
11541 Riverton Wharf Rd.
Mardela Springs, MD 21837
844.REC.LPFM/202.621.2355
recnet.com

CP Modification for **KOFP-LP**
FRESNO, CA
IDEFUA FOUNDATION FOR AFRICAN ARTS AND CULTURE
BNPL-20131107AKT

PROPOSED 60dBu F(50,50) SERVICE CONTOUR



FRESNO, CA – Channel 277L1 (103.3 MHz) ~ ERP 0.013 kW
Elev: 88.1 meters ~ RCAGL: 87.4 meters ~ RCAMSL: 175.5 meters ~ HAAT: 84m (GLOBE)
Overall tower height: 96.9 meters – ASR: 1216979
NAD83 Latitude: 36° 44’ 04.6” NL – Longitude: 119° 47’ 30.0” WL
NAD27 Latitude: 36° 44’ 04.8” NL – Longitude: 119° 47’ 26.5” WL
No AM stations within 3km

R E C NETWORKS
CHANNEL REPORT

NAD27 LATITUDE: 36 - 44' 04.8" - LONGITUDE: 119 - 47' 26.5"
CHANNEL: 277 - CLASS: LPFM(LP-100)

CHAN	FREQ	CALL	LOCATION		CLS	DIST	REQ	CLEAR	BEAR
223	92.5	KFGD-LP	FRESNO	CA	L1	9.1	0.0	9.1	49.7
: FIG GARDEN POLICE PROTECTION DISTRICT									
274	102.7	KHGE	FRESNO	CA	B	26.8	0.0	26.8	69.4
: CAPSTAR TX, LLC									
* Does not meet third adjacent channel spacing under LCRA Sect 7.									
275	102.9	KDPT-LP	DOS PALOS	CA	L1	80.5	0.0	80.5	290.2
: DOS PALOS RADIO									
275	102.9	KHMQ	KING CITY	CA		132.4	0.0	132.4	245.1
: HISPANIC TARGET MEDIA INC.									
276	103.1	KAAT-FM1	MERCED	CA	D	76.1	13.0	63.1	3.0
: CASA MEDIA PARTNERS, LLC									
276	103.1	KAAT	OAKHURST	CA	B1	80.9	74.0	6.9	9.9
: CASA MEDIA PARTNERS, LLC									
277	103.3	KSCU	SANTA CLARA	CA	D	202.9	24.0	178.9	290.2
: SANTA CLARA UNIVERSITY									
277	103.3	KOFP-LP	FRESNO	CA	L1	0.4	24.0	-23.6	320.5
: IDEFUA FOUNDATION FOR AFRICAN ARTS AND CULTURE									
: Currently authorized facility									
277	103.3	NEW	FRESNO	CA	L1	5.5	24.0	-18.5	128.0
: DOWNTOWN ASSOCIATION OF FRESNO									
: Time share agreement- Simultaneous operation prohibited									
277	103.3	KATM	MODESTO	CA	B	167.3	112.0	55.3	304.4
: RADIO LICENSE HOLDING CBC, LLC									
277	103.3	KZPO	LINDSAY	CA	B1	98.7	87.0	11.7	120.0
: ESTATE OF LINDA WARE, CYNTHIA RAMAGE, EXECUTOR									
277	103.3	KVYB	SANTA BARBARA	CA	B	245.6	112.0	133.6	183.5
: CUMULUS LICENSING LLC									
279	103.7	KFBT	HANFORD	CA	B	20.4	67.0	-46.6	170.5
: CAPSTAR TX, LLC									
280	103.9	KBDS	TAFT	CA	A	181.9	0.0	181.9	170.5
: RADIO CAMPESINA BAKERSFIELD, INC.									
280	103.9	KDJK	MARIPOSA	CA	A	91.0	0.0	91.0	346.8
: RADIO LICENSE HOLDING CBC, LLC									
280	103.9	KBOQ	SEASIDE	CA	A	191.3	0.0	191.3	265.6
: MOUNT WILSON FM BROADCASTERS, INC.									

Azimuth	Field	ERP	HAAT	Contour	Latitude	Longitude
0	1.000	0.013	86.4	5.779	36.8032	119.7917
5	1.000	0.013	86.4	5.779	36.8030	119.7860
10	1.000	0.013	86.4	5.779	36.8025	119.7804
15	1.000	0.013	86.4	5.779	36.8015	119.7749
20	1.000	0.013	86.0	5.765	36.8000	119.7695
25	1.000	0.013	84.0	5.695	36.7977	119.7646
30	1.000	0.013	83.3	5.670	36.7954	119.7598
35	1.000	0.013	82.4	5.638	36.7928	119.7553
40	1.000	0.013	81.6	5.610	36.7899	119.7512
45	1.000	0.013	79.3	5.527	36.7864	119.7478
50	1.000	0.013	78.1	5.484	36.7830	119.7445
55	1.000	0.013	79.0	5.516	36.7797	119.7409
60	1.000	0.013	78.8	5.509	36.7760	119.7381
65	1.000	0.013	79.4	5.531	36.7723	119.7354
70	1.000	0.013	81.4	5.603	36.7685	119.7326
75	1.000	0.013	83.4	5.674	36.7645	119.7301
80	1.000	0.013	84.4	5.709	36.7602	119.7286
85	1.000	0.013	85.8	5.758	36.7558	119.7273
90	1.000	0.013	86.4	5.779	36.7513	119.7268
95	1.000	0.013	86.4	5.779	36.7467	119.7271
100	1.000	0.013	86.4	5.779	36.7422	119.7278
105	1.000	0.013	86.4	5.779	36.7378	119.7290
110	1.000	0.013	86.4	5.779	36.7335	119.7307
115	1.000	0.013	86.4	5.779	36.7293	119.7329
120	1.000	0.013	86.4	5.779	36.7253	119.7355
125	1.000	0.013	86.4	5.779	36.7215	119.7386
130	1.000	0.013	86.5	5.782	36.7178	119.7420
135	1.000	0.013	87.4	5.813	36.7143	119.7456
140	1.000	0.013	89.9	5.898	36.7106	119.7491
145	1.000	0.013	93.5	6.019	36.7069	119.7529
150	1.000	0.013	97.0	6.139	36.7035	119.7572
155	1.000	0.013	102.0	6.302	36.6999	119.7618
160	1.000	0.013	105.9	6.422	36.6970	119.7670
165	1.000	0.013	106.6	6.443	36.6953	119.7730
170	1.000	0.013	109.4	6.526	36.6935	119.7790
175	1.000	0.013	110.8	6.567	36.6924	119.7852

Azimuth	Field	ERP	HAAT	Contour	Latitude	Longitude
180	1.000	0.013	113.3	6.638	36.6916	119.7917
185	1.000	0.013	114.9	6.682	36.6914	119.7982
190	1.000	0.013	115.4	6.696	36.6920	119.8047
195	1.000	0.013	115.5	6.699	36.6931	119.8111
200	1.000	0.013	115.5	6.699	36.6947	119.8174
205	1.000	0.013	113.4	6.641	36.6971	119.8231
210	1.000	0.013	112.6	6.619	36.6997	119.8288
215	1.000	0.013	112.9	6.627	36.7025	119.8343
220	1.000	0.013	112.6	6.619	36.7057	119.8394
225	1.000	0.013	112.2	6.607	36.7092	119.8441
230	1.000	0.013	110.9	6.570	36.7133	119.8481
235	1.000	0.013	110.8	6.567	36.7174	119.8520
240	1.000	0.013	112.5	6.616	36.7215	119.8559
245	1.000	0.013	114.1	6.660	36.7259	119.8594
250	1.000	0.013	114.3	6.666	36.7308	119.8620
255	1.000	0.013	114.0	6.658	36.7358	119.8638
260	1.000	0.013	113.6	6.647	36.7409	119.8651
265	1.000	0.013	113.0	6.630	36.7461	119.8658
270	1.000	0.013	111.8	6.596	36.7513	119.8657
275	1.000	0.013	110.6	6.561	36.7564	119.8650
280	1.000	0.013	107.5	6.470	36.7614	119.8632
285	1.000	0.013	106.0	6.425	36.7662	119.8613
290	1.000	0.013	103.5	6.349	36.7708	119.8586
295	1.000	0.013	98.9	6.202	36.7748	119.8548
300	1.000	0.013	94.4	6.050	36.7785	119.8505
305	1.000	0.013	91.8	5.962	36.7820	119.8465
310	1.000	0.013	89.5	5.885	36.7853	119.8423
315	1.000	0.013	86.5	5.782	36.7880	119.8376
320	1.000	0.013	86.4	5.779	36.7911	119.8334
325	1.000	0.013	86.4	5.779	36.7938	119.8289
330	1.000	0.013	86.4	5.779	36.7963	119.8241
335	1.000	0.013	86.4	5.779	36.7984	119.8191
340	1.000	0.013	85.7	5.755	36.7999	119.8138
345	1.000	0.013	86.4	5.779	36.8015	119.8085
350	1.000	0.013	86.4	5.779	36.8025	119.8029
355	1.000	0.013	86.4	5.779	36.8030	119.7973

WAIVER OF §73.807(a) REQUEST
SHORT-SPACED SECOND ADJACENT CHANNEL

KOFP-LP
Fresno, California
Channel 277L1 (103.3 MHz)

The proposed modification is second-adjacent channel short-spaced to full-power station KFBT, Fresno, California (Facility ID # 48776).[1]

KFBT operates on Channel 279B with 50 kW at 152 meters height above average terrain using a non-directional antenna. KFBT places a 79.1 dBu service contour at the proposed LPFM site.

Using GLOBE terrain data, the proposed LPFM site is at 84 meters height above average terrain therefore we will specify operation at 0.013 kW. Using the U/D method[2], the proposed LPFM station is predicted to produce an undesired interference overlap in respect to KFBT-FM to the proposed LPFM station's 119.1 dBu interference contour ("overlap zone"). At 13 watts ERP, the overlap zone extends to 28 meters from the radiation center.

The proposed LPFM site is on an existing tower on a rooftop of a tall building with a steep angled truss and other design features. While the Antenna Structure Registration suggests the highest point on the building without appurtenances is 77.4 meters, the design of the building would place the highest occupied point at least 6 meters below the highest point on the building without appurtenances or 71.4 meters above ground level.

The applicant proposes to use a single-bay Shively Versa2une broadband circularly polarized antenna. Per the antenna manufacturer's specifications the proposed antenna will place a 118.08 dBu interference contour at the 45 degree depression angle at 20.11 meters from the radiation center. As a result, all interference will exist only within small portions of the unoccupied portions of the building and in the open air outside the sloped roof of the building.

Based on these findings, the proposed modified LPFM station will not create any interference to listeners or potential listeners of KFBT. Therefore, the applicant is requesting a waiver of §73.807(a) in respect to KFBT.

Prepared by
Michelle Bradley
REC Broadcast Services
February 23, 2016

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[1] - Applicant is also co-channel short-spaced to LPFM construction permit BNPL-20131114BDN. The applicant is currently time-sharing with this permittee. Under the conditions of the current construction permit, operation is only permitted between 3:00pm and 3:00 am local time.

[2] - See *Living Way Ministries, Inc.* Memorandum Opinion and Order, 17 FCC Rcd 17054, 17056 (2002) at 5. *Recon denied* 23 FCC Rcd 15070 (2008).

Proposed Power:	**0.013** kW
Antenna Height AGL:	**87.4** m
Interference Contour:	**119.1** dBu
Artificial RX Antenna Height:	**71.4** m
Antenna Type:	Shively Labs Versa2une/6014/6016/ - 1 bay

Angle Below Horizon	Antenna Relative Field	ERP in kW	ERP in dBk	Distance from Ant to Interference Contour	Distance from Ant to Artificial Plane	Field Strength in dBu @ Artificial Plane	Distance from Ant to Ground Level	Field Strength in dBu @ Ground Level
5	**0.996**	0.013	-18.90	27.94	183.58	102.75	1002.80	88.00
10	**0.985**	0.013	-18.99	27.63	92.14	108.64	503.32	93.89
15	**0.967**	0.012	-19.15	27.13	61.82	111.95	337.69	97.20
20	**0.942**	0.012	-19.38	26.43	46.78	114.14	255.54	99.39
25	**0.910**	0.011	-19.68	25.53	37.86	115.68	206.81	100.93
30	**0.871**	0.010	-20.06	24.43	32.00	116.76	174.80	102.01
35	**0.826**	0.009	-20.52	23.17	27.90	117.49	152.38	102.74
40	**0.774**	0.008	-21.09	21.71	24.89	117.91	135.97	103.17
45	**0.717**	0.007	-21.75	20.11	22.63	118.08	123.60	103.33
50	**0.654**	0.006	-22.55	18.35	20.89	117.97	114.09	103.23
55	**0.586**	0.004	-23.50	16.44	19.53	117.60	106.70	102.85
60	**0.514**	0.003	-24.64	14.42	18.48	116.95	100.92	102.20
65	**0.437**	0.002	-26.05	12.26	17.65	115.93	96.44	101.18
70	**0.357**	0.002	-27.81	10.01	17.03	114.49	93.01	99.74
75	**0.273**	0.001	-30.14	7.66	16.56	112.40	90.48	97.65
80	**0.186**	0.000	-33.47	5.22	16.25	109.23	88.75	94.49
85	**0.096**	0.000	-39.22	2.69	16.06	103.59	87.73	88.84
90	**0.001**	0.000	-78.86	0.03	16.00	63.98	87.40	49.23


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REQUEST TO USE GLOBE TERRAIN DATA

Using the alternative GLOBE terrain data in lieu of the FCC NGC-30 terrain data, the height above average terrain (HAAT) at this location has been calculated at 84 meters using 8 radials. At 84 meters HAAT, an LPFM station would be authorized at 13 watts ERP. The applicant is requesting operation at 13 watts ERP.

Input Data

Latitude **36° 45' 4.6"** North
Longitude **119° 47' 30"** West (NAD 83)

Height of antenna radiation center above mean sea level: **176.4** meters AMSL

Number of Evenly Spaced Radials = **8** 0° is referenced to True North

Results

Calculated HAAT = **84 meters**

Antenna Height Above Average Terrain calculated
using 1 km GLOBE terrain data

Individual "Radial HAAT" Values, in meters

0°	76.2 m
45°	69.2 m
90°	74.9 m
135°	83.9 m
180°	92.2 m
225°	96.1 m
270°	93.6 m
315°	84.8 m

'100 watt' LPFM facilites 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 = 0.013 kilowatts (kW)
(rounded per 47 CFR 73.212)

Unrounded ERP = 0.012 kW for 84 meters HAAT

Registration Detail			
Reg Number	1216979	Status	Constructed
File Number	A0251493	Constructed	01/11/1990
EMI	No	Dismantled	
NEPA	No		

Antenna Structure			
Structure Type	B - Building		
Location (in NAD83 Coordinates - Convert to NAD27)			
Lat/Long	36-44-04.6 N 119-47-30.0 W	Address	1060 FULTON MALL
City, State	FRESNO , CA		
Zip	93721	County	FRESNO
Center of AM Array		Position of Tower in Array	
Heights (meters)			
Elevation of Site Above Mean Sea Level		Overall Height Above Ground (AGL)	
88.1		96.9	
Overall Height Above Mean Sea Level		Overall Height Above Ground w/o Appurtenances	
185.0		77.4	
Painting and Lighting Specifications			
FAA Chapters 4, 5, 12 Paint and Light in Accordance with FAA Circular Number 70/7460-1K			
FAA Notification			
FAA Study	00-AWP-0734-OE	FAA Issue Date	05/26/2000

Owner & Contact Information			
FRN	0006159479	Owner Entity Type	
Owner			
Fresno Pacific Towers, Inc. Attention To: COLEEN COLE 290 Pismo Street San Luis Obispo , CA 93401		P: (805)544-4444 F: E:	
Contact			
		P: F: E:	

Last Action Status			
Status	Constructed	Received	03/11/2002
Purpose	Notification	Entered	03/21/2002
Mode	Mail In (Manual)		

Output from NADCON for station

North American Datum Conversion

NAD 83 to NAD 27

NADCON Program Version 2.11

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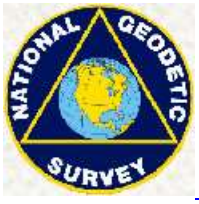
Transformation #: 1 Region: Conus

	Latitude	Longitude
NAD 27 datum values:	36 44 4.78343	119 47 26.47968
NAD 83 datum values:	36 44 4.60000	119 47 30.00000
NAD 27 - NAD 83 shift values:	0.18343	-3.52032(secs.)
	5.654	-87.343 (meters)

Magnitude of total shift: 87.526(meters)



NGS HOME PAGE