

Federal Communications Commission Washington, D.C. 20554 <p style="text-align: center;">FCC 302-FM</p>	Approved by OMB 3060-0506 (June 2002) FOR FCC USE ONLY
<p>APPLICATION FOR FM BROADCAST STATION LICENSE</p> <p>Read INSTRUCTIONS Before Filling Out Form</p>	FOR COMMISSION USE ONLY FILE NO. BXLED - 20130808AAN

Section I - General Information

1.	Legal Name of the Applicant PASADENA AREA COMMUNITY COLLEGE DISTRICT		
	Mailing Address 1570 E. COLORADO BLVD.		
	City PASADENA	State or Country (if foreign address) CA	ZIP Code 91106 -
	Telephone Number (include area code) 6265857201	E-Mail Address (if available) FCCFILING@MPR.ORG	
	FCC Registration Number: 0005085204	Call Sign KPCC	Facility Identifier 51701
2.	Contact Representative (if other than Applicant) JOHN CRIGLER		Firm or Company Name GARVEY SCHUBERT & BARER
	Telephone Number (include area code) 2022982521	E-Mail Address (if available) JCRIGLER&GSBLAW.COM	
3.	If this application has been submitted without a fee, indicate reason for fee exemption (see 47 C.F.R. Section 1.1114): <input type="radio"/> Governmental Entity <input checked="" type="radio"/> Noncommercial Educational Licensee/Permittee <input type="radio"/> Other <input type="radio"/> N/A (Fee Required)		
4.	Facility Information:		
	a. <input type="radio"/> Commercial	<input checked="" type="radio"/> Noncommercial	
	b. <input checked="" type="radio"/> Directional	<input type="radio"/> Nondirectional	
	c. Community of License:		
	City: PASADENA	State: CA	
5.	Program Test Authority:		
	<input checked="" type="radio"/> Requesting program test authority.		
	<input type="radio"/> Station operating pursuant to automatic program test authority (47 C.F.R. Section 73.1620(a)(1)).		
6.	Purpose of Application:		
	<input checked="" type="radio"/> Cover construction permit (list most recent construction permit file number -- starts with the prefix BPH, BNPH, BMPH, BPED, BMPED, or BMPED):	BMXPED-20120410AAE	
	<input type="radio"/> Modify an authorized license (list license file number -- starts with the prefix BLH, BMLH, BLED, or BMLD):	-	
	<input type="radio"/> Amend a pending application If an amendment, submit as an Exhibit a listing by Section and Question Number the portions of the pending application that are being revised.		[Exhibit 1]

NOTE: In addition to the information called for in this section, an explanatory exhibit providing full particulars must be submitted for each question for which a "No" response is provided.

Section II - Legal and Financial

1.	Certification. Applicant certifies that it has answered each question in this application based on its review of the application instructions and worksheets. Applicant further certifies that where it has made an affirmative certification below, this certification constitutes its representation that the application satisfies each of the pertinent standards and criteria set forth in the application instructions and worksheets.	<input checked="" type="radio"/> Yes <input type="radio"/> No
2.	Licensee/Permittee certifies that all terms, conditions, and obligations set forth in the underlying construction permit have been fully met.	<input checked="" type="radio"/> Yes <input type="radio"/> No See Explanation in [Exhibit 2]
3.	Licensee/Permittee certifies that, apart from changes already reported, no cause or circumstance has arisen since the grant of the underlying construction permit which would result in any statement or representation contained in the construction permit application to be now incorrect.	<input checked="" type="radio"/> Yes <input type="radio"/> No See Explanation in [Exhibit 3]
4.	Character Issues. Applicant certifies that neither licensee/permittee nor any party to the application has or has had any interest in, or connection with: a. any broadcast application in any proceeding where character issues were left unresolved or were resolved adversely against the applicant or party to the application; or b. any pending broadcast application in which character issues have been raised.	<input checked="" type="radio"/> Yes <input type="radio"/> No See Explanation in [Exhibit 4]
5.	Adverse Findings. Applicant certifies that, with respect to the applicant and any party to the application, no adverse finding has been made, nor has an adverse final action been taken related to the following: any felony; mass media-related antitrust or unfair competition; fraudulent statements to another governmental unit; or discrimination.	<input checked="" type="radio"/> Yes <input type="radio"/> No See Explanation in [Exhibit 5]
6.	Anti-Drug Abuse Act Certification. Applicant certifies that neither licensee/permittee nor any party to the application is subject to denial of federal benefits pursuant to Section 5301 of the Anti-Drug Abuse Act of 1988, 21 U.S.C. Section 862.	<input checked="" type="radio"/> Yes <input type="radio"/> No

I certify that the statements in this application are true, complete, and correct to the best of my knowledge and belief, and are made in good faith. I acknowledge that all certifications and attached Exhibits are considered material representations. I hereby waive any claim to the use of any particular frequency as against the regulatory power of the United States because of the previous use of the same, whether by license or otherwise, and request an authorization in accordance with this application. (See Section 304 of the Communications Act of 1934, as amended.)

Typed or Printed Name of Person Signing ROBERT B MILLER	Typed or Printed Title of Person Signing ASSISTANT SUPERINTENDENT/SENIOR VICE PRESIDENT
Signature	Date 8/8/2013

SECTION III - PREPARER'S CERTIFICATION

I certify that I have prepared Section III (Engineering data) on behalf of the applicant, and that after such preparation, I have examined and found it to be accurate and true to the best of my knowledge and belief.

Name KATE ENGLISH	Relationship to Applicant (e.g., Consulting Engineer) TECHNICAL CONSULTANT	
Signature	Date 8/2/2013	
Mailing Address DOUG VERNIER TELECOMMUNICATIONS CONSULTANTS 401 MAIN STREET SUITE 213		
City CEDAR FALLS	State or Country (if foreign address) IA	Zip Code 50613 -
Telephone Number (include area code) 3192668402	E-Mail Address (if available) KENGLISH@V-SOFT.COM	

WILLFUL FALSE STATEMENTS ON THIS FORM ARE PUNISHABLE BY FINE AND/OR IMPRISONMENT (U.S. CODE, TITLE 18, SECTION 1001), AND/OR REVOCATION OF ANY STATION LICENSE OR CONSTRUCTION PERMIT (U.S. CODE, TITLE 47, SECTION 312(a)(1)), AND/OR FORFEITURE (U.S. CODE, TITLE 47, SECTION 503).

Section III - Engineering			
TECHNICAL SPECIFICATIONS			
Ensure that the specifications below are accurate. Contradicting data found elsewhere in this application will be disregarded. All items must be completed. The response "on file" is not acceptable.			
TECH BOX			
1.	Channel: 207		
2.	a. Effective Radiated Power:	10 kW(H)	10 kW(V)
	b. Maximum Effective Radiated Power:	kW(H)	kW(V)
	(Beam-Tilt Antenna ONLY) <input checked="" type="checkbox"/> Not Applicable		
3.	Transmitter Power Output: 4.64 kW		
4.	Antenna Data		
	Manufacturer	Model	Number of Sections
	ERI	LP-4C-DA-HW	4
			Spacing Between Sections (wavelength)
			0.5
NOTE: In addition to the information called for in this section, an explanatory exhibit providing full particulars must be submitted for each question for which a "No" response is provided.			
CERTIFICATION			
All applicants must complete this section.			
5.	Main Studio Location. The main studio location complies with 47 C.F.R. Section 73.1125.	<input checked="" type="radio"/> Yes	<input type="radio"/> No
		See Explanation in [Exhibit 6]	
6.	Transmitter Power Output. The operating transmitter power output produces the authorized effective radiated power.	<input checked="" type="radio"/> Yes	<input type="radio"/> No
		See Explanation in [Exhibit 7]	
APPLICATIONS FILED TO COVER A CONSTRUCTION PERMIT.			
Only applicants filing this application to cover a construction permit must complete the following section.			
NOTE: In addition to the information called for in this section, an explanatory exhibit providing full particulars must be submitted for each question for which a "No" response is provided.			
7.	Constructed Facility . The facility was constructed as authorized in the underlying construction permit or complies with 47 C.F.R. Section 73.1690.	<input checked="" type="radio"/> Yes	<input type="radio"/> No
		See Explanation in [Exhibit 8]	
8.	Special Operating Conditions. The facility was constructed in compliance with all special operating conditions, terms, and obligations described in the construction permit.	<input checked="" type="radio"/> Yes	<input type="radio"/> No
		See Explanation in [Exhibit 9]	
	An exhibit may be required. Review the underlying construction permit.	[Exhibit 10]	
APPLICATIONS FILED PURSUANT TO 47 C.F.R. SECTIONS 73.1675(c) or 73.1690(c).			
Only applicants filing this application pursuant to 47 C.F.R. Sections 73.1675(c) or 73.1690(c) must complete the following section.			

9.	<p>Changing transmitter power output. Is this application being filed to authorize a change in transmitter power output caused by the replacement of omnidirectional antenna with another omnidirectional antenna or an alteration of the transmission line system? See 47 C.F.R. Sections 73.1690(c)(1) and (c)(10).</p>	<p><input type="radio"/> Yes <input type="radio"/> No</p>
10.	<p>Increasing effective radiated power. Is this application being filed to authorize an increase in ERP for a station operating in the nonreserved band (Channels 221-300)? See 47 C.F.R. Sections 73.1690(c)(4), (c)(5) and (c)(7).</p> <p>If "Yes" to the above, the applicant certifies the following:</p>	<p><input type="radio"/> Yes <input type="radio"/> No</p>
	<p>a. Spacing Requirements. The increase in ERP was authorized pursuant to MM Docket 88-375 (Class A stations) OR the facility complies with the spacing requirements of 47 C.F.R. Section 73.207.</p>	<p><input type="radio"/> Yes <input type="radio"/> No</p> <p>See Explanation in [Exhibit 11]</p>
	<p>b. International Coordination. The transmitter site is greater than 320 km from the Canadian or Mexican borders OR coordination for the station's international class is complete.</p>	<p><input type="radio"/> Yes <input type="radio"/> No</p> <p>See Explanation in [Exhibit 12]</p>
	<p>c. Interference. The requirements of 47 C.F.R. Section 73.1030 regarding notification to radio astronomy installations, radio receiving installations and FCC monitoring stations have either been satisfied OR are not applicable.</p>	<p><input type="radio"/> Yes <input type="radio"/> No</p> <p>See Explanation in [Exhibit 13]</p>
	<p>Exhibit required. If the proposed facility must be notified to the entities set forth in 47 C.F.R. Section 73.1030, the applicant must provide a copy of the written approval for the ERP increase from the affected entity.</p>	<p>[Exhibit 14]</p>
	<p>d. Multiple Ownership Showing. The increase in ERP will not require the consideration of a multiple ownership showing pursuant to 47 C.F.R. Section 73.3555.</p>	<p><input type="radio"/> Yes <input type="radio"/> No</p> <p>See Explanation in [Exhibit 15]</p>
	<p>e. Environmental Protection Act. The proposed facility is excluded from environmental processing under 47 C.F.R. Section 1.1306 (i.e., the facility will not have a significant environmental impact and complies with the maximum permissible radiofrequency electromagnetic exposure limits for controlled and uncontrolled environments). Unless the applicant can determine compliance through the use of the RF worksheets in Appendix A, an Exhibit is required.</p>	<p><input type="radio"/> Yes <input type="radio"/> No</p> <p>See Explanation in [Exhibit 16]</p>
	<p>By checking "Yes" above, the applicant also certifies that it, in coordination with other users of the site, will reduce power or cease operation as necessary to protect persons having access to the site, tower or antenna from radiofrequency electromagnetic exposure in excess of FCC guidelines.</p>	
11.	<p>Increasing vertically polarized effective radiated power. Is this application being filed pursuant to 47 C.F.R. Section 73.1690(c)(4) to authorize an increase in the vertically polarized ERP for a station operating in the reserved band (Channels 200-220)?</p> <p>If "Yes" to the above, the applicant certifies the following:</p>	<p><input type="radio"/> Yes <input type="radio"/> No</p>
	<p>a. TV Channel 6 Protection Requirements. The facility complies with the spacing requirements of 47 C.F.R. Section 73.525(a)(1).</p>	<p><input type="radio"/> Yes <input type="radio"/> No</p> <p>See Explanation in [Exhibit 17]</p>
	<p>b. Environmental Protection Act. The proposed facility is excluded from environmental processing under 47 C.F.R. Section 1.1 306 (i.e., the facility will not have a significant environmental impact and complies with the maximum permissible radiofrequency electromagnetic exposure limits for controlled and uncontrolled environments). Unless the applicant can determine compliance through the use of the RF worksheets in Appendix A, an Exhibit is required.</p>	<p><input type="radio"/> Yes <input type="radio"/> No</p> <p>See Explanation in [Exhibit 18]</p>

	By checking "Yes" above, the applicant also certifies that it, in coordination with other users of the site, will reduce power or cease operation as necessary to protect persons having access to the site, tower or antenna from radiofrequency electromagnetic exposure in excess of FCC guidelines.	
12.	Decreasing effective radiated power (non-reserved channel). Is this application being filed pursuant to 47 C.F.R. Section 73.1690(c)(8) to authorize a decrease in the ERP for a station operating in the nonreserved band (Channels 221-300)?	<input type="radio"/> Yes <input type="radio"/> No
	If "Yes" to the above, the applicant certifies the following:	
	a. Community Coverage . The proposed facility complies with the community coverage requirements of 47 C.F.R. Section 73.315 where the distance to the 3.16 mV/m contour is predicted using the standard prediction method in 47 C.F.R. Section 73.313.	<input type="radio"/> Yes <input type="radio"/> No See Explanation in [Exhibit 19]
	b. Auxiliary Facilities. The authorized or pending auxiliary facilities for this station comply with 47 C.F.R. Section 73.1675(a).	<input type="radio"/> Yes <input type="radio"/> No See Explanation in [Exhibit 20]
	c. Multiple Ownership Showing. The decrease in ERP is not requested or required to establish compliance with 47 C.F.R. Section 73.3555.	<input type="radio"/> Yes <input type="radio"/> No See Explanation in [Exhibit 21]
13.	Decreasing effective radiated power (reserved channel). Is this application being filed pursuant to 47 C.F.R. Section 73.1690(c)(8) to authorize a decrease in the ERP for a station operating in the reserved band (Channels 200-220)?	<input type="radio"/> Yes <input type="radio"/> No
	If "Yes" to the above, the applicant certifies the following:	
	a. Community Coverage . The proposed facility complies with the community coverage requirements of 47 C.F.R. Section 73.1690(c)(8)(i) where the distance to the 1 mV/m contour is predicted using the standard prediction method in 47 C.F.R. Section 73.313.	<input type="radio"/> Yes <input type="radio"/> No See Explanation in [Exhibit 22]
	b. Auxiliary Facilities. The authorized or pending auxiliary facilities for this station comply with 47 C.F.R. Section 73.1675(a).	<input type="radio"/> Yes <input type="radio"/> No See Explanation in [Exhibit 23]
14.	Replacing a directional antenna. Is this application being filed pursuant to 47 C.F.R. Section 73.1690(c)(2) to replace a directional antenna with another directional antenna?	<input type="radio"/> Yes <input type="radio"/> No
	If "Yes" to the above, the applicant certifies the following:	
	a. Measurement of Directional Antenna. The composite measured pattern and measurement procedures comply with 47 C.F.R. Section 73.1690(c)(2). Exhibit required.	<input type="radio"/> Yes <input type="radio"/> No See Explanation in [Exhibit 24] [Exhibit 25]
	b. Installation of Directional Antenna. The installation of the directional antenna complies with 47 C.F.R. Section 73.1690(c)(2). Exhibit required.	<input type="radio"/> Yes <input type="radio"/> No See Explanation in [Exhibit 26] [Exhibit 27]
15.	Deleting contour protection status. Is this application being filed pursuant to 47 C.F.R. Section 73.1690(c)(6) to delete contour protection status (47 C.F.R. Section 73.215) for a station operating in the nonreserved band (Channels 221-300)?	<input type="radio"/> Yes <input type="radio"/> No
	If "Yes" to the above, the applicant certifies that the facility complies with the spacing	<input type="radio"/> Yes <input type="radio"/> No

	requirements of 47 C.F.R. Section 73.207.	See Explanation in [Exhibit 28]
16.	<p>Use a formerly licensed main facility as an auxiliary facility. Is this application being filed pursuant to 47 C.F.R. Section 73.1675(c)(1) to request authorization to use a formerly licensed main facility as an auxiliary facility and/or change the ERP of the proposed auxiliary facility?</p> <p>If "Yes" to the above, the applicant certifies the following:</p>	<input type="radio"/> Yes <input type="radio"/> No
	<p>a. Auxiliary antenna service area. The proposed auxiliary facility complies with 47 C.F.R. Section 73.1675(a).</p>	<input type="radio"/> Yes <input type="radio"/> No See Explanation in [Exhibit 29]
	<p>b. Environmental Protection Act. The proposed facility is excluded from environmental processing under 47 C.F.R. Section 1.1 306 (i.e., the facility will not have a significant environmental impact and complies with the maximum permissible radiofrequency electromagnetic exposure limits for controlled and uncontrolled environments). Unless the applicant can determine compliance through the use of the RF worksheets in Appendix A, an Exhibit is required.</p>	<input type="radio"/> Yes <input type="radio"/> No See Explanation in [Exhibit 30]
	<p>By checking "Yes" above, the applicant also certifies that it, in coordination with other users of the site, will reduce power or cease operation as necessary to protect persons having access to the site, tower or antenna from radiofrequency electromagnetic exposure in excess of FCC guidelines.</p>	
17.	<p>Change the license status. Is this application being filed pursuant to 47 C.F.R. Section 73.1690(c)(9) to change the license status from commercial to noncommercial or from noncommercial to commercial?</p>	<input type="radio"/> Yes <input type="radio"/> No
	<p>If "Yes" to the above, submit an exhibit providing full particulars. For applications changing license status from commercial to noncommercial, include Section II of FCC Form 340 as an exhibit to this application.</p>	[Exhibit 31]
<p>PREPARERS CERIFICATION ON PAGE 3 MUST BE COMPLETED AND SIGNED.</p>		

Exhibits

Exhibit 6

Description: MAIN STUDIO LOCATION

THE MAIN STUDIO IS LOCATED IN PASADENA, CALIFORNIA, THE COMMUNITY OF LICENSE.

Attachment 6

Exhibit 7

Description: TRANSMITTER POWER OUTPUT

TPO = ERP/(EFF*GAIN)

ERP = 10 KW

EFF OF TRANSMISSION LINE = 93.3%

GAIN OF ANTENNA = 2.308

TPO = 10/(0.933*2.308)

TPO = 4.64 KW

Attachment 7**Exhibit 8****Description:** CONSTRUCTED FACILITY

THE FACILITY WAS CONSTRUCTED AS AUTHORIZED IN THE UNDERLYING CONSTRUCTION PERMIT BMXPED-20120410AAE.

Attachment 8**Exhibit 9****Description:** SPECIAL OPERATING CONDITIONS

THE FACILITY WAS CONSTRUCTED IN COMPLIANCE WITH ALL SPECIAL OPERATING CONDITIONS, TERMS, AND OBLIGATIONS DESCRIBED IN THE CONSTRUCTION PERMIT BMXPED-20120410AAE. PLEASE SEE ATTACHMENTS:

1. ANTENNA MANUFACTURER'S PROOF OF PERFORMANCE FOR DIRECTIONAL ANTENNA.
2. AFFIDAVIT OF SURVEYOR.
3. AFFIDAVIT OF ENGINEER.
4. REPORT OF RF FIELD STRENGTH MEASUREMENTS.

THE RELATIVE FIELD STRENGTH OF NEITHER THE MEASURED HORIZONTALLY NOR VERTICALLY POLARIZED RADIATION COMPONENT DOES NOT EXCEED AT ANY AZIMUTH THE VALUE INDICATED ON THE COMPOSITE RADIATION PATTERN AUTHORIZED BY THE CONSTRUCTION PERMIT. THE PRINCIPAL MINIMA BETWEEN 210 AND 290 DEGREES DOES NOT EXCEED 1.6 KW.

THE APPLICANT REQUESTS PROGRAM TEST AUTHORITY.

Attachment 9

Description
<u>Exhibit #9, Special Operating Conditions, Attachment #1 - Antenna Proof of Performance</u>
<u>Exhibit #9, Special Operating Conditions, Attachment #2 - Surveyor Affidavit</u>
<u>Exhibit #9, Special Operating Conditions, Attachment #3 - Installer Affidavit</u>
<u>Exhibit #9, Special Operating Conditions, Attachment #4 - RF Field Measurement Report</u>

***Directional Antenna System
for
KPCC, Pasadena, California***

February 6, 2013

Electronics Research Inc. is providing a custom fabricated antenna system that is specially designed to meet the FCC requirements and the general needs of radio station KPCC.

The antenna is the ERI model LP-4C-DA-HW configuration. The circular polarized system consists of 4 half-wavelength spaced bays using one driven circular polarized radiating element per bay and two horizontal parasitic elements per bay. The antenna was tested on a 14" o.d. pole, which is the structure the station plans to use to support the array. All tests were performed on a frequency of 89.3 megahertz, which is the center of the FM broadcast channel assigned to KPCC.

Pattern measurements were made on a sixty-acre antenna pattern range that is owned and operated by Electronics Research, Inc. The tests were performed under the direction of Thomas B. Silliman, president of Electronics Research, Inc. Mr. Silliman has the Bachelor of Electrical Engineering and the Master of Electrical Engineering degrees from Cornell University and is a registered professional engineer in the states of Indiana, Maryland and Minnesota.



Directional Antenna System For KPCC, Pasadena, California

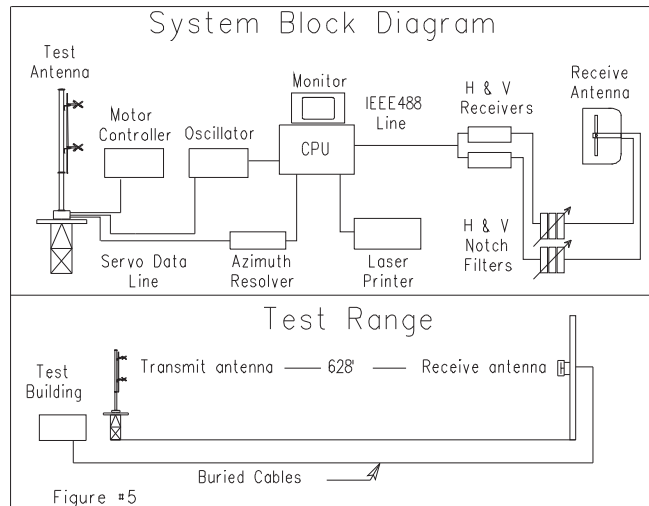
(Continued)

DESCRIPTION OF THE TEST PROCEDURE

The test antenna consisted of two bay levels of the circular polarized system with the associated horizontal parasitic elements. The elements and brackets that were used in this test are electrically equivalent to those that will be supplied with the antenna. A section of 1 5/8 inch o.d. rigid coaxial line was used to feed the test antenna, and a section of 1 5/8 inch o.d. rigid outer conductor only was attached above the test antenna. The lines were properly grounded during all tests.

The power distribution and phase relationship to the antenna elements was adjusted in order to achieve the directional radiation patterns for both horizontal and vertical polarization components.

The proof-of-performance was accomplished using a 14" o.d. pole with identical dimension and configuration including all braces, ladders, conduits, coaxial lines and other appurtenances that are included in the actual aperture at which the antenna will be installed. The structure was erected vertically on a turntable mounted on a non-metallic building with the antenna centered vertically on the structure, making the center of radiation of the test approximately 30 feet above ground. The turntable is equipped with a



motor drive and a US Digital angle position indicator. The resolution of this angle position indicator is one-hundredth of a degree.

The antenna under test was operated in the transmitting mode and fed from a HP8657D signal generator. The frequency of the signal source was set at 89.3 MHz and was constantly monitored by a Rohde & Schwarz ESVD measuring receiver.

Directional Antenna System For KPCC, Pasadena, California

(Continued)

A broadband horizontal and vertical dipole system, located approximately 628 feet from the test antenna, was used to receive the emitted test signals. The dipole system was mounted at the same height above terrain as the center of the antenna under test. The signals received by the dipole system were fed to the test building by way of two buried Heliac cables to a Rohde & Schwarz measuring receiver. This data was interfaced to a laser jet printer by means of a computer system. Relative field strength was plotted as a function of azimuth.

The measurements were performed by rotating the test antenna in a counter-clockwise direction and plotting the received signal on polar coordinated graph paper in a clockwise direction. Both horizontal and vertical components were recorded separately.

CONCLUSIONS

The circular polarized system consists of 4 half-wavelength spaced bays using one driven circular polarized radiating element per bay and two horizontal parasitic elements per bay. The power distribution and phase relationship will be fixed when antenna is manufactured. Proper maintenance of the elements should be all that is required to maintain the pattern in adjustment.

The LP-4C-DA-HW array is to be mounted on the 14" o.d. pole at a bearing of North 72 degrees East. Blue prints provided with the antenna will show the proper antenna orientation alignment. The antenna alignment procedure should be directed by a licensed surveyor as prescribed by the FCC.

Figure #1 represents the measured individual horizontal and vertical components, the composite maximum of either the horizontal or vertical component at any azimuth and the FCC filed envelope pattern. The horizontal plane relative field list for the composite pattern and the individual H & V components are shown as Figure #1 & 1A respectively. The actual measured pattern does not exceed the authorized FCC composite pattern at any azimuth. A calculated vertical plane relative field pattern is shown on Figure #3 attached. The power in the maximum will reach 10.000 kilowatts (10.000 dBk).

Directional Antenna System
For
KPCC, Pasadena, California

(Continued)

The power at North 210-290 degrees East does not exceed 1.6 kilowatts (2.041 dBk).

The RMS of the vertically polarized horizontal plane component does not exceed the RMS of the horizontally polarized horizontal plane component.

The composite horizontal and vertical maximum relative field pattern obtained from the measured data as shown on Figure #1 has an RMS that is greater than 85% of the filed composite pattern.

The clear vertical length of the structure required to support the antenna is 36 feet 5 inches.

The directional antenna should not be mounted on the top of an antenna tower that includes a top-mounted platform larger than the cross-sectional area of the tower in the horizontal plane. No obstructions other than those that are specified by the blue prints supplied with the antenna are to be mounted within 75 ft. horizontally of the system. The vertical distance to the nearest obstruction should be a minimum of 10 ft. from the directional antenna. Metallic guy wires should be a minimum distance of forty feet horizontally from the antenna.

ELECTRONICS RESEARCH, INC.



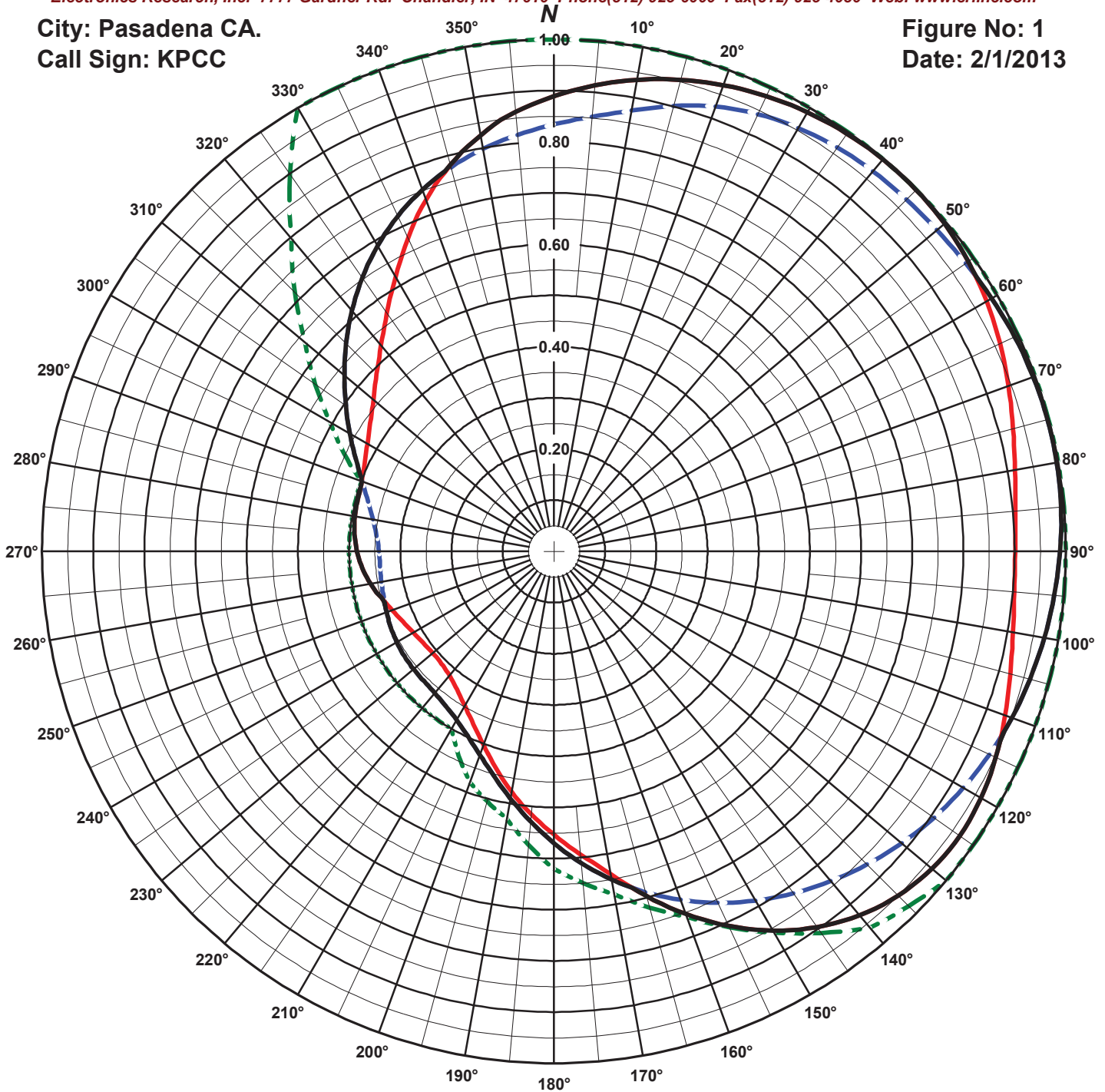
The Microsoft Word document on file electronically at Electronic Research, Inc. governs the specifications, scope, and configuration of the product described. All other representations whether verbal, printed, or electronic are subordinate to the master copy of this document on file at ERI.

ERI[®] Horizontal Plane Relative Field Pattern

Electronics Research, Inc. 7777 Gardner Rd. Chandler, IN 47610 Phone(812) 925-6000 Fax(812) 925-4030 Web: www.eriinc.com

City: Pasadena CA.
Call Sign: KPCC

Figure No: 1
Date: 2/1/2013



Antenna Orientation: 72° True

Frequency: 89.3 MHz

Antenna Type: LP-4C-DA-HW

Antenna Mounting: Custom 20" ELL

Tower Type: 14" POLE

HORIZONTAL

RMS: .732

Maximum: 1 @ 42°

Minimum: .309 @ 228°

VERTICAL

RMS: .732

Maximum: .998 @ 76°

Minimum: .341 @ 266°

COMPOSITE

RMS: .753

Maximum: 1 @ 42°

Minimum: .346 @ 253°

FCC ENVELOPE

RMS: .805

Maximum: 1 @ 0°

Minimum: .4 @ 210°

Measured patterns of the horizontal and vertical components, with the composite maximum of either the the H or V components and the filed FCC envelope pattern BMXPED-20120410AAE.

ERI[®] Horizontal Plane Relative Field Pattern

Electronics Research, Inc. 7777 Gardner Rd. Chandler, IN 47610 Phone(812) 925-6000 Fax(812) 925-4030 Web: www.eriinc.com

Figure# 1

Date: 2/1/2013

Station: KPCC

Antenna: LP-4C-DA-HW

Location: Pasadena CA.

Antenna Orientation: 72° True

Frequency: 89.3 MHz

Number of Bays: 4

Azimuth	Envelope			Polarization Maximum	Azimuth	Envelope			Polarization Maximum
	Field	kW	dBk			Field	kW	dBk	
0°	0.889	7.906	8.980	Horizontal	180°	0.570	3.248	5.116	Vertical
5°	0.914	8.349	9.216	Horizontal	185°	0.529	2.799	4.469	Vertical
10°	0.935	8.746	9.418	Horizontal	190°	0.490	2.399	3.800	Vertical
15°	0.954	9.094	9.587	Horizontal	195°	0.454	2.060	3.138	Vertical
20°	0.969	9.389	9.726	Horizontal	200°	0.423	1.788	2.525	Vertical
25°	0.981	9.628	9.835	Horizontal	205°	0.398	1.586	2.003	Vertical
30°	0.990	9.809	9.916	Horizontal	210°	0.380	1.446	1.602	Vertical
35°	0.997	9.931	9.970	Horizontal	215°	0.368	1.357	1.327	Vertical
40°	1.000	9.993	9.997	Horizontal	220°	0.362	1.308	1.165	Vertical
45°	1.000	9.992	9.996	Horizontal	225°	0.359	1.286	1.094	Vertical
50°	0.996	9.917	9.964	Horizontal	230°	0.358	1.280	1.073	Vertical
55°	0.988	9.761	9.895	Horizontal	235°	0.357	1.272	1.045	Vertical
60°	0.988	9.752	9.891	Vertical	240°	0.355	1.257	0.994	Vertical
65°	0.993	9.856	9.937	Vertical	245°	0.351	1.235	0.918	Vertical
70°	0.996	9.927	9.968	Vertical	250°	0.348	1.209	0.823	Vertical
75°	0.998	9.960	9.982	Vertical	255°	0.349	1.220	0.864	Horizontal
80°	0.997	9.949	9.978	Vertical	260°	0.364	1.323	1.214	Horizontal
85°	0.994	9.889	9.951	Vertical	265°	0.375	1.410	1.491	Horizontal
90°	0.989	9.778	9.903	Vertical	270°	0.385	1.479	1.700	Horizontal
95°	0.981	9.628	9.836	Vertical	275°	0.391	1.529	1.844	Horizontal
100°	0.972	9.457	9.758	Vertical	280°	0.395	1.558	1.927	Horizontal
105°	0.963	9.269	9.671	Vertical	285°	0.396	1.568	1.954	Horizontal
110°	0.952	9.057	9.570	Vertical	290°	0.400	1.597	2.034	Horizontal
115°	0.952	9.069	9.576	Horizontal	295°	0.427	1.822	2.604	Vertical
120°	0.963	9.279	9.675	Horizontal	300°	0.460	2.117	3.258	Vertical
125°	0.968	9.368	9.716	Horizontal	305°	0.496	2.460	3.910	Vertical
130°	0.964	9.296	9.683	Horizontal	310°	0.534	2.855	4.556	Vertical
135°	0.951	9.044	9.564	Horizontal	315°	0.574	3.295	5.178	Vertical
140°	0.928	8.615	9.353	Horizontal	320°	0.614	3.766	5.759	Vertical
145°	0.896	8.028	9.046	Horizontal	325°	0.652	4.255	6.289	Vertical
150°	0.855	7.314	8.641	Horizontal	330°	0.689	4.743	6.760	Vertical
155°	0.807	6.516	8.140	Horizontal	335°	0.722	5.212	7.170	Vertical
160°	0.754	5.682	7.545	Horizontal	340°	0.751	5.646	7.517	Vertical
165°	0.697	4.856	6.863	Horizontal	345°	0.781	6.100	7.853	Horizontal
170°	0.651	4.239	6.273	Vertical	350°	0.825	6.805	8.328	Horizontal
175°	0.611	3.734	5.722	Vertical	355°	0.862	7.423	8.706	Horizontal

Horizontal Polarization:

Maximum: 2.317 (3.649 dB)

Horizontal Plane: 2.317 (3.649 dB)

Maximum ERP: 10.000 kW

Vertical Polarization:

Maximum: 2.308 (3.632 dB)

Horizontal Plane: 2.308 (3.632 dB)

Maximum ERP: 9.961 kW

Total Input Power: 4.316 kW

Reference: KPCC2M.FIG

This list shows the the maximum azimuth values of either the horizontal or vertical components.

ERI[®] Horizontal Plane Relative Field Pattern

Electronics Research, Inc. 7777 Gardner Rd. Chandler, IN 47610 Phone(812) 925-6000 Fax(812) 925-4030 Web: www.eriinc.com

Figure# / .

DoæK12 210/ M

t æan: KPCLL

. : æ: : oKcC-4L-D. -HW

cnsoän: KCodoAe: o L. q

. : æ: : o Orië: æän: K71° True

Freyue: s8K93qMS Hz

Number nf Bo8dK4

. zimuar	Hnrzn: æl			Veräsol			. zimuar	Hnrzn: æl			Veräsol		
	FielA	kW	ABk	FielA	kW	ABk		FielA	kW	ABk	FielA	kW	ABk
0°	0ø93	7ø06	9ø90	0øM4	6ø60	9ø16	/ 90°	0øhM	Møh3	4øhh	0ø70	Mø49	hø / 6
h°	0ø / 4	9øM3	3ø / 6	0øh1	7ø / 6	9ø / 0	/ 9h°	0ø / h	1øh0	4øM1	0øh13	1ø733	4ø63
/ 0°	0øMh	9ø746	3ø / 9	0ø7h	7øø49	9øMh	/ 30°	0ø76	1ø70	Møh6 /	0øø30	1øM3	Mø00
/ h°	0øh4	3øø34	3øh97	0ø0 /	9ø / 1	3øø3 /	/ 3h°	0øMø	/ ø / 6	1øø1h	0øh4	1øø60	MøMø
10°	0øø63	3øMø3	3ø716	0øø1h	9øh47	3øM 9	100°	0øø01	/ ø / 7	1øø97	0ø11M	/ ø799	1øh1h
1h°	0øø9 /	3øø19	3øMh	0øø41	9øø90	3øø94	10h°	0øM71	/ øMø6	/ ø / 6	0øMø9	/ ø96	1øø0M
Mø°	0øø30	3øø03	3øø / 6	0øøhh	3ø / 6	3øh39	1 / 0°	0øMø9	/ ø / 1	0øM4	0øMø0	/ ø46	/ øø01
Mh°	0øø37	3øøM	3øø70	0øø6M	3øø91	3øø77	1 / h°	0øMM0	/ øø97	0øMø1	0øMø9	/ øMh7	/ øM17
40°	/ øø00	3øø3M	3øø37	0øø63	3øøM	3øø19	110°	0øM 7	/ øø0h	0øø1M	0øMø1	/ øMø9	/ ø 6h
4h°	/ øø00	3øø31	3øø36	0øø7M	3øø67	3øø61	11h°	0øM 0	0øø61	-0ø 69	0øMh3	/ ø96	/ øø34
hø°	0øø36	3øø / 7	3øø64	0øø77	3øh40	3øø3h	1Mø°	0øMø3	0øøhh	-0ø 39	0øMh9	/ ø90	/ øø7M
hh°	0øø99	3øø76 /	3øø3h	0øø91	3øøMø	3øø40	1Mh°	0øM 1	0øø71	-0ø 1M	0øMh7	/ ø71	/ øø4h
60°	0øø76	3øh13	3øø3 /	0øø99	3øøh1	3øø3 /	140°	0øM 7	/ øø06	0øø1h	0øMhh	/ øh7	0øø34
6h°	0øø6 /	3øø4 /	3øøh7	0øø3M	3øøh6	3øøM7	14h°	0øM1h	/ øøh7	0øø4M	0øMh /	/ øMh	0øø / 9
70°	0øø4h	9øø19	3øh09	0øø36	3øø17	3øø69	1hø°	0øMM6	/ ø 19	0øh14	0øMø9	/ øø03	0øø1M
7h°	0øø13	9øø1h	3øMh7	0øø39	3øø60	3øø91	1hh°	0øM43	/ ø 10	0øø64	0øM4	/ ø 96	0øø74 /
90°	0øø / h	9øMø9	3øø 16	0øø37	3øø43	3øø79	160°	0øMø4	/ øM1M	/ ø / 4	0øM41	/ ø 70	0øø9M
9h°	0øø0h	9øø 3 /	3øøMM	0øø34	3øø93	3øøh /	16h°	0øM7h	/ ø / 0	/ øø3 /	0øM /	/ ø 61	0øøh /
30°	0øø0 /	9øø / 6	3øøø34	0øø93	3øø79	3øø0M	170°	0øMøh	/ øø73	/ øø00	0øM41	/ ø 69	0øø74
3h°	0øø0M	9øø hM	3øø / M	0øø9 /	3øø19	3øøMø	17h°	0øMø /	/ øh13	/ øø44	0øM7	/ øø09	0øø / 3
/ øø°	0øø / /	9øøø34	3øø 99	0øø71	3øøh7	3øøh9	190°	0øMøh	/ øh9	/ øø17	0øMh3	/ øø99	/ øø39
/ øh°	0øø1M	9øøh10	3øøMøh	0øø6M	3øø63	3øø7 /	19h°	0øMø6	/ øh69	/ øøh4	0øM76	/ ø / 1	/ øhø0
// ø°	0øøMø	9øø76	3øø4M	0øøh1	3øøh7	3øøh0	130°	0øø00	/ øh37	1øøM4	0øMø9	/ øh99	1øøø9
// h°	0øøh1	3øøø3	3øøh76	0øøMø	9øø / M	3øøh /	13h°	0øøø9	/ øø64	1øø / 0	0øø17	/ øø11	1øøø04
/ 10°	0øø6M	3øø73	3øø7h	0øø14	9øøM4	3øøM 1	Mø0°	0øø1 /	/ øø63	1øø79	0øø60	1øø / 7	Møh9
/ 1h°	0øø69	3øøMø9	3øø / 6	0øø07	9øø / 9	3øø 49	Møh°	0øøMø	/ øø / 9	1øø19	0øø36	1øø60	Møø / 0
/ Mø°	0øø64	3øø36	3øø9M	0øø97	7øø66	9øøh9	M ø°	0øø60	1øø / 4	Møh /	0øøM4	1øøhh	4øøh6
/ Mh°	0øøh /	3øøø44	3øøh64	0øø6h	7øø91	9øø740	M h°	0øø30	1øøø /	Møø0M	0øø74	Mø3h	høø79
/ 40°	0øø19	9øø / h	3øøMhM	0øø4 /	7øø76	9øøø39	M1 ø°	0øøh1h	1øø760	4øøø3	0øø / 4	Mø766	høøh3
/ 4h°	0øø36	9øøø19	3øøø46	0øø / h	6øø43	9øøø17	M1 h°	0øøh63	Mø1M	høø3h	0øøh1	4øøhh	6øø93
/ hø°	0øøhh	7øøM 4	9øøø4 /	0øø799	6øøø1	7øøø16	Møø°	0øø / 3	MøøM	høøMh	0øø93	4øø4M	6øø60
/ hh°	0øøø7	6øøh / 6	9øøø 40	0øø7h7	høøMø	7øøh96	Mhø°	0øø74	4øøh4h	6øøh7h	0øø11	høø / 1	7øø70
/ øø°	0øøh4	høøø91	7øøh4h	0øø71h	høøh0	7øøø0 /	Møø°	0øøM	høøM /	7øø76	0øø7h /	høø46	7øø / 7
/ øh°	0øø37	4øøh6	6øøø6M	0øø93	4øø749	6øøø6h	Mhø°	0øø79 /	6øøø00	7øøøMh	0øø777	6øøM4	7øøø6
/ øø°	0øøø4 /	4øøø0h	6øøøMM	0øøøh /	4øøøMø	6øøø7M	Mhø°	0øøø1h	6øøø0h	9øøøM9	0øø739	6øøM71	9øøø4M
/ øh°	0øøø34	MøøM	høøø79	0øø / /	MøøM4	høøø11	Mhø°	0øøø61	7øøø1M	9øøøø6	0øøø / 7	6øøø69	9øøø40

Hnrzn: æl Cnlorizoän: K
 S oximumK1øM 7 (Møø43 AB)
 Hnrzn: æl Clo: øK1øM 7 (Møø43 AB)
 S oximum ERCK/ øøø0 kW

Veräsol Cnlorizoän: K
 S oximumK1øMø9 (MøøM1 AB)
 Hnrzn: æl Clo: øK1øMø9 (MøøM1 AB)
 S oximum ERCK3øø6 / kW

Tnæ l: puaCnwerK4øM 6 kW
 Refere: seKPCLL1S øF1G

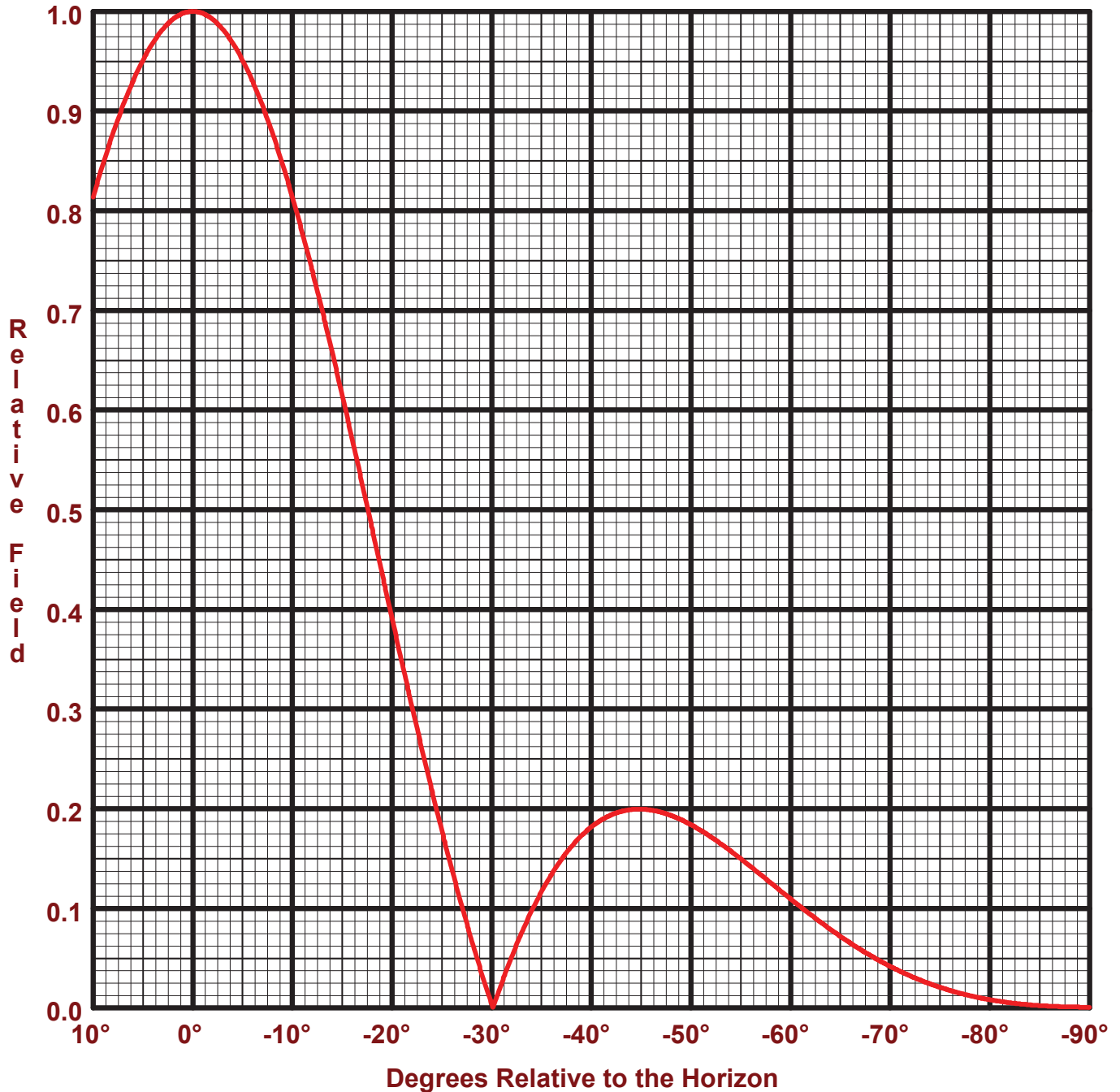
Tvid lidadvnwd æve øzimuav 5ølued fnr æve vnrzn: æl ø: A 5øeräsol snmpn: ø: ødq

ERI[®] Vertical Plane Relative Field Pattern

Electronics Research, Inc. 7777 Gardner Rd. Chandler, IN 47610 Phone(812) 925-6000 Fax(812) 925-4030 Web: www.eriinc.com

Figure No: 3
Call Sign: KPCC
Location: Pasadena CA.
Frequency: 89.3 MHz
4 bay LP-4C-DA-HW antenna

Date: 2/1/2013
H/V Power Ratio: 0.996
.5 Wave-length Spacing
0° Beam Tilt
0% First Null Fill



Horizontal Polarization:
Maximum: 2.317 (3.649 dB)
Horizontal Plane: 2.317 (3.649 dB)
Maximum ERP: 10.000 kW

Vertical Polarization:
Maximum: 2.308 (3.632 dB)
Horizontal Plane: 2.308 (3.632 dB)
Maximum ERP: 9.961 kW

Directional Antenna System for KPCC, Pasadena, California

(Continued)

ANTENNA SPECIFICATIONS

Antenna Type: LP-4C-DA-HW
Frequency: 89.3 MHz
Number of Bays: Four

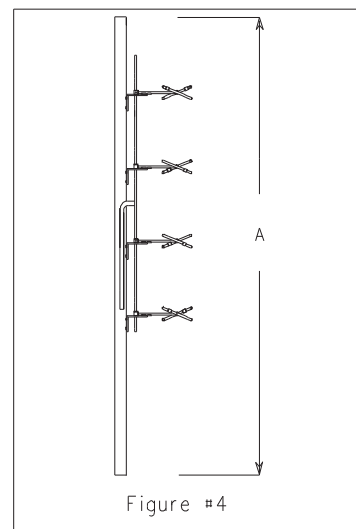
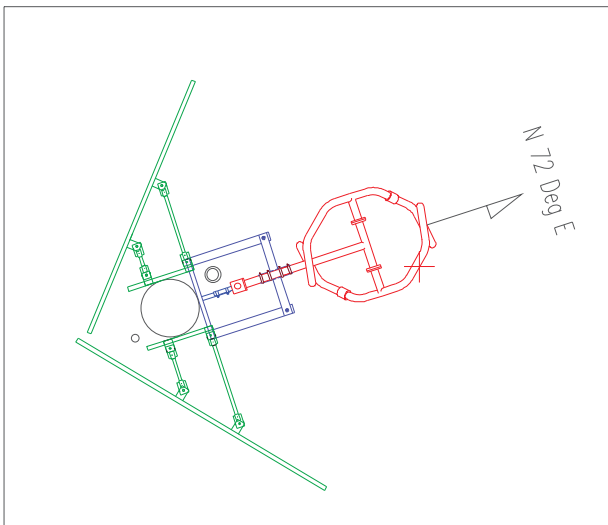
MECHANICAL SPECIFICATIONS

Mounting: Standard
System length: 20 ft 5 in
Aperture length required: 36 ft 5 in¹
Orientation: 72° true
Input flange to the antenna 3 1/8" female.

ELECTRICAL SPECIFICATIONS

(For directional use)

Maximum horizontal ERP:	10.000 kW (10.000 dBk)
Horizontal maximum power gain:	2.317 (3.649 dB)
Maximum vertical ERP:	9.961 kW (9.983 dBk)
Vertical maximum power gain:	2.308 (3.632 dB)
Total input power:	4.316 kW (6.351 dBk)



CAL VADA

SURVEYING INC

June 17, 2013

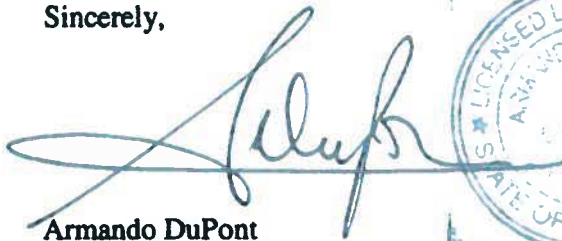
Mr. Lance Harper
Southern California Public Radio
474 South Raymond Ave.
Pasadena, CA 91105

Subject: Call Sign "KPCC" "Flint Peak"
FCC File No. BMX PED-20120410AAE

Dear Mr. Harper:

On May 8th, 2013, I, Armando DuPont, a California Licensed Land Surveyor #7780 examined the installation of the directional antenna system in Los Angeles, California "FlintPeak". I hereby certify under penalty of perjury that the antenna was oriented within plus or minus one degree of 72 True Azimuth as directed by the manufacturer.

Sincerely,



Armando DuPont

California Land Surveyor # 7780



6/18/13

ENGINEER'S CERTIFICATE

I, Lance E. Harper, hereby certify the following:

1. I am employed as Chief Engineer by Southern California Public Radio
2. I have been employed as the Chief Engineer for four years and as the Assistant Chief for 5 years prior by SCPR.
3. I obtained my, CBRE AM/FM and CBNT certificates from the Society of Broadcast Engineers in 2003
4. I oversaw the installation of the directional antenna system specified in the licensee's construction permit, BXPED-20111012ABG
5. The antenna system specified was installed pursuant to the manufacturer's instruction.

I declare under penalty of perjury that the foregoing is true and correct based on my personal knowledge.



Lance E. Harper June 25th,2013

RADIOFREQUENCY ELECTROMAGNETIC FIELD
AT KLAX, KKG0 AND KPCC TOWER ON FLINT PEAK
FOR PASADENA AREA COMMUNITY COLLEGE
DISTRICT, LICENSEE OF KPCC, CH207B, PASADENA,
CALIFORNIA

JULY 2013

By: BEEM CO.
ARCADIA, CA
626 446 3468

ENGINEERING STATEMENT OF JOEL T. SAXBERG

A number of auxiliary FM facilities have been installed on Flint Peak. These facilities are for standby operation purposes. There is only one FM facility that operates from Flint Peak as its main facility and that is KLAX-FM, 33 kW, 29m AGL with a directional ERI antenna.

On the KLAX-FM tower at the top antenna location is KLAX-FM, below this antenna is that of KKGO's auxiliary antenna which is 35 kW ERP at 18 m AGL. This antenna is vertical polarization only and is used for auxiliary purposes only. The bottom antenna position is KPCC, 10 kW, directional at 8.1 m AGL. Again this antenna is for auxiliary purposes only.

Power Density contributions around the tower base are from the main KLAX-FM antenna. The power density from KLAX-FM is 264 uW/cm² in the direction of the main antenna lobe. This is towards the southwest, south, and toward the southeast. The two auxiliary antennas are normally turned off as their main antennas are located on Mt Wilson. If the two auxiliary antennas are operating along with the main KLAX-FM the added power density around the tower base would be:

KLAX-FM	269 uW/cm ²
KKGO	50 uW/cm ²
KPCC	450 uW/cm ²
Total	769 uW/cm ²

The power density sum is in the direction of the main lobes of the two directional antennas, KLAX-FM and KPCC. KLAX radiates southwest, south and southeast. KPCC radiates in the direction of north, northeast, east, and southeast. Therefore the fields would not add as shown above. The added power density would be expected to be less than the 769 $\mu\text{W}/\text{cm}^2$ because of the directional characteristics of the individual antennas.

Adding the fields from KLVE and KSCA the on the second monopole would add 35 $\mu\text{W}/\text{cm}^2$ to the power density at the KLAX monopole. Therefore the total would be 804 $\mu\text{W}/\text{cm}^2$ or 80% of the MPE for occupation areas. The remaining FM self support structure is 197' from the KLAX-FM tower and this site has a higher ground elevation and some of the antenna have a lower ERP. The top antenna on the self supporting tower is KROQ with an ERP of 6.5 kW and 41m AGL. It would be categorically excluded from environmental processing as the power density at the tower base is less than 5%. KSWD is combined with KXOS. KSWD has an ERP of 5 kW at 38 M AGL. At the KLAX site we would expect from KSWD a power density of less than 5% or it would be categorically excluded from environmental processing. Two FM contributors would be left, KXOS 35 kW 38m AGL. And KKLA, 9.0 kW, 16m AGL which would produce a power density of 47 $\mu\text{W}/\text{cm}^2$ at the base of the KLAX-FM monopole. Adding these power densities would yield a total of 816 $\mu\text{W}/\text{cm}^2$. Assuming all of the FM auxiliary antennas to be radiating the combined power density would be less than 816 $\mu\text{W}/\text{cm}^2$.

The transmitter site is deemed to be a controlled site. It is fenced and has a locked gate. It would be unusual for all the antennas to be in the radiate mode, however, should they all be turned on. It is believed that

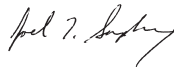
the site would meet the FCC guideline requirements for MPE limits for controlled areas.

ENGINEERING CERTIFICATION

JOEL T. SAXBERG deposes and says:

1. That he is President of Broadcast Engineering and Equipment Maintenance Company, "**BEEM CO.**", radio engineering consultants. **BEEM CO.** maintains offices at: 2322 S. Second Avenue, Arcadia, CA 91006. Telephone (626) 446-3468
2. That he was graduated from California State University at Los Angeles, February 1966, with a Bachelor of Science degree in Electronic Engineering.
3. That he has submitted many applications to the Federal Communications Commission for broadcast and auxiliary broadcast construction permits and licenses.
4. That his experience in broadcast engineering is a matter of record and he has spent over forty years working in the field of radio engineering.
5. That the attached report was prepared by him or under his direction and supervision. That he believes the facts stated therein to be both true and accurate. Statements that are based on information supplied by others are also believed to be true and accurate.
6. That he has performed field work on AM and FM broadcast transmitting systems throughout this country and continues to provide technical consulting services on a daily basis to broadcasters.
7. That he declares under penalty of perjury the foregoing is true and correct.

Executed 7/19/2013
on



Joel T. Saxberg