

KLEIN BROADCAST ENGINEERING, L.L.C.

dedicated to improving the science and technology of radio & television communications

JULY 2008

ENGINEERING STATEMENT & EXHIBITS

**IN SUPPORT OF AN
APPLICATION for FM BROADCAST STATION CONSTRUCTION PERMIT
AUXILIARY ANTENNA
TO MODIFY AN EXISTING AUXILIARY ANTENNA AUTHORIZATION
RBG LAS VEGAS LICENSES, L.L.C.
KOAS(FM)
FCC FACILITY ID# 25692
FCC FILE Number: BXLH-20011018AFZ
FM CHANNEL 289 C / 105.7mHz
DOLAN SPRINGS, ARIZONA**

INTRODUCTION and ENGINEERING STATEMENT

**RBG Las Vegas Licenses, L.L.C., the licensee of FM Broadcast Station
KOAS(FM), Dolan Springs, Arizona, has retained the firm of Klein Broadcast
Engineering, L.L.C., to prepare this Engineering Statement and Exhibits in support
of its request to modify the Auxiliary Antenna for Station KOAS with the facility
proposed herein.**

**The applicant requests its FM Broadcast Station License Auxiliary Antenna
authorization be modified with the facilities presently licensed as FM Booster
Station KOAS-FM1 and as specified herein. The FCC File Number for the KOAS-
FM1 facility is BLFTB-20050331AWQ, FCC Facility ID# 132721. All of the
proposed operating parameters as specified in the above captioned FM Booster
Station Authorization are specified for the modified Auxiliary Antenna Facility for
Station KOAS.**

ENGINEERING STATEMENT & EXHIBITS cont'd page two: KOAS AUX

THE REQUESTED FACILITY

The proposed Class C Auxiliary Antenna facility is specified as follows:

Geographic Coordinate Site Location: NL: 36-08-55 / WL: 115-09-15 (NAD-1927)

Overall Antenna Support Structure Height above Ground Level:	350 meters
Height of Radiation Center Above Mean Sea Level:	966 meters
Height of Radiation Center Above Ground Level:	346 meters
Height of Radiation Center Above Average Terrain:	314 meters
Ground Level at Site Above Mean Sea Level:	620 meters
Effective Radiated Power H&V:	2.5 kW
Tower Structure Registration (ASR) Number:	Not Required*

The antenna support structure is located atop the Stratosphere Hotel in Las Vegas, Nevada. The structure has existed for more than a decade. The actual antenna support structure atop the hotel roof is 40 meters in height and is exempt from registration.

The KOAS Auxiliary Antenna Facility as proposed herein is the equivalent of a maximum Class C3 facility with 2.5kW ERP at 314 meters HAAT.

THE EXHIBITS

Exhibit E-1 is an FCC FM Channel Spacing Study demonstrating the proposed Auxiliary Antenna facility for KOAS complies with the spacing requirements for an Auxiliary Antenna Facility to be used only for emergency operation when the main KOAS facility is not operational for maintenance, repairs or replacement of the main antenna facility.

ENGINEERING STATEMENT & EXHIBITS cont'd page three: KOAS AUX

Exhibit E-2 is a contour map with two separate contours plotted thereon. The first contour is the 60dBu f(50,50) contour produced by the presently licensed KOAS Main Facility (FCC File Number BLH-20040729AMU). The second contour in this exhibit is the 60dBu f(50,50) contour produced by the proposed KOAS Auxiliary Antenna Facility. This contour is completely contained within the 60dBu f(50,50) contour for the KOAS Main licensed facility as required by 47 C.F.R. Section 73.1675(a)(1)(ii) and demonstrates compliance with same.

WAIVER REQUEST if NECESSARY 47 C.F.R. Section 73.315

The facility proposed herein does not cover the KOAS Principal Community, Dolan Springs, Arizona, with 70dBu coverage. The facility requested is for an Auxiliary Antenna Facility for Station KOAS and is therefore not required to cover the principal community with 70dBu service. The proposed Auxiliary Antenna Facility is for use for emergency purposes only at such times the KOAS Main Licensed Facility is off air for maintenance, repair or replacement of its antenna. If the Commission determines a waiver of 47 C.F.R. Section 73.315 is necessary, the applicant requests the waiver to the extent necessary to allow the proposed facility be granted for use as an Auxiliary Antenna Facility only.

The terrain data used to generate the contours found in this application came from the DMA 3 Arc Second Digitized Terrain Datafile, Conus.

ENGINEERING STATEMENT & EXHIBITS cont'd page four: KOAS AUX

Exhibit E-3 is a Polar Plot and Tabulation of the proposed directional antenna pattern for the Auxiliary Antenna Facility subject of this instant application. This is the same directional antenna pattern is presently authorized for KOAS-FM1 FM Booster Station. The polar plot and tabulation of the directional antenna parameters were generated by the manufacturer, Electronics Research, Inc., and were developed from actual measurement data taken at the ERI Antenna Test Site.

WAIVER REQUEST if NECESSARY 47 C.F.R. Section 73.316

The directional antenna as proposed herein exceeds the parameter limits listed in 47 C.F.R. Section 73.316 of the Commission's Rules. The proposed antenna has a measured pattern minima of -24.73dB at 269 degrees true. The applicant requests the Commission grant a waiver of 47 C.F.R. Section 73.316 of the Rules if necessary to allow the operation of the proposed directional antenna system for emergency Auxiliary Antenna use only. The Commission has previously, on numerous occasions granted such waivers where the proposed directional antenna was specified for Auxiliary Antenna use only.

Exhibit E-4 is a copy of the KOAS existing FCC FM Broadcast Station Auxiliary Antenna License, FCC File Number BLXH-20011018AFZ, that is to be modified as specified in this instant application. It is included to aid Commission staff in the processing of this application for Interim Facility.

ENGINEERING STATEMENT & EXHIBITS cont'd page five: KOAS AUX

Exhibit E-5 is a copy of the KOAS-FM1 FM Booster Station License, FCC File Number BLFTB-20050331AWQ, also included as an aid to Commission staff in the processing of this instant application.

Exhibit E-10 is a complete and comprehensive RFR study and analysis of the requested KOAS Auxiliary Antenna facility proposed herein. It shows compliance with the Commission's Guidelines of Human Exposure to Non-ionizing RF radiation.

This Engineering Statement and attached Exhibits clearly support the grant of the requested KOAS Auxiliary Antenna as specified.

Respectfully submitted,

**Elliott Kurt Klein,
Consulting Broadcast Engineer
RBG Las Vegas Licenses, L.L.C.
FM Broadcast Station KOAS
Dolan Springs, Arizona**

29 July 2008

Klein Broadcast Engineering, L.L.C.
 Job: KOAS-AUX 20080724.fmj
 Master Database: 2008_Jul_24.fmd
 Lat: N36:08:55 Lon: W115:09:15 NAD-27(Proposed KOAS Auxiliary Site Coordinates)
 Channel: 289 Class: C3
 Status: Licensed, Construction Permit, Application, Addition, Vacant/Reserved
 Channels: Co-Channel, 1st Adj, 2nd Adj, 3rd Adj, IF, TV6
 Range: 100 km
 Comments: Proposed KOAS Auxiliary Antenna proposed as Class C3 facility with 2.5kW ERP at 314 meters HAAT
 Description:

Page 1 of 1
 Date: 7/25/2008

Callsign	Latitude (NAD27)	Longitude (NAD27)	City	State	Serv	Channel	Class	ERP	HAAT	Status	73 207 Min	73 207 Clear	73 215 Min	73 215 Clear	Adjacency	Distance	Bear
KOAS	N35:50:11	W114:19:03	DOLAN SPRING	AZ	FM	289: 105.7 MHz C		100.00	537	LIC	237	-154.10	226	-143.10	Co-Chan	82.90	115
*NEW	N36:31:16	W116:16:50	AMARGOSA VA	NV	FM	290: 105.9 MHz C1		80.00	93	CP	144	-34.74	133	-23.74	1st Adj	109.26	292
*KQRT	N36:20:00	W115:21:41	LAS VEGAS	NV	FM	288: 105.1 MHz C2		50.00	19	LIC	56	-28.30	50	-22.30	3rd Adj	27.70	318
*STAT:ADDN	N36:39:05	W116:24:55	AMARGOSA VA	NV	FM	290: 105.9 MHz C1		0.00	0	ADD	144	-17.86	133	-6.86	1st Adj	126.14	296
KOAS-FM	N36:08:55	W115:09:15	HENDERSON	NV	FM	289: 105.7 MHz D8		2.50	0	LIC	0	0.00	0	0.00	Co-Chan	0.00	000
NEW	N36:07:44	W115:11:22	LAS VEGAS	NV	FM	291: 106.1 MHz DX		0.01	0	APP	0	3.85	0	3.85	2nd Adj	3.85	235
NEW	N35:49:04	W116:09:05	TECOPA	CA	FM	288: 105.5 MHz A		6.00	26	APP	89	8.14	72	25.14	1st Adj	97.14	248
NEW	N36:09:22	W115:15:35	LAS VEGAS	NV	FM	291: 106.1 MHz DX		0.04	0	APP	0	9.54	0	9.54	2nd Adj	9.54	275
NEW	N36:14:27	W115:04:01	WINCHESTER	NV	FM	236: 95.1 MHz DX		0.17	0	APP	0	12.90	0	12.90	IF	12.90	037
NEW	N35:50:48	W116:13:24	TECOPA	CA	FM	288: 105.5 MHz A		0.00	0	RSV	89	13.06	72	30.06	1st Adj	102.06	251
STAT:ADDN	N35:50:48	W116:13:24	TECOPA	CA	FM	288: 105.5 MHz A		0.00	0	ADD	89	13.06	72	30.06	1st Adj	102.06	251
NEW	N36:10:46	W114:59:48	LAS VEGAS, EA	NV	FM	291: 106.1 MHz DX		0.01	0	APP	0	14.57	0	14.57	2nd Adj	14.57	076
NEW	N36:10:44	W114:59:47	MOAPA	NV	FM	291: 106.1 MHz DX		0.00	0	APP	0	14.59	0	14.59	2nd Adj	14.59	077
STAT:ADDN	N37:21:07	W115:19:30	ALAMO	NV	FM	288: 105.5 MHz C2		0.00	0	ADD	117	17.40	106	28.40	1st Adj	134.40	353
NEW	N36:00:29	W115:00:20	HENDERSON	NV	FM	236: 95.1 MHz DX		0.10	0	APP	0	20.55	0	20.55	IF	20.55	139
KSNN	N36:52:39	W114:21:20	LOGANDALE	NV	FM	291: 106.1 MHz C1		100.00	298	APP	76	31.98	70	37.98	2nd Adj	107.98	041
KSNN	N36:52:39	W114:21:20	LOGANDALE	NV	FM	291: 106.1 MHz C1		0.00	0	RSV	76	31.98	70	37.98	2nd Adj	107.98	041
K288FN	N36:19:15	W115:34:15	CHARLESTON	PNV	FM	288: 105.5 MHz DX		0.01	0	LIC	0	42.06	0	42.06	1st Adj	42.06	297
NEW	N35:47:05	W116:08:41	TECOPA	CA	FM	291: 106.1 MHz A		0.00	0	APP	42	56.05	36	62.05	2nd Adj	98.05	246
STAT:VACN	N35:50:48	W116:13:24	TECOPA	CA	FM	291: 106.1 MHz A		0.00	0	VAC	42	60.06	36	66.06	2nd Adj	102.06	251
NEW	N35:50:55	W116:13:40	TECOPA	CA	FM	291: 106.1 MHz A		0.00	0	APP	42	60.37	36	66.37	2nd Adj	102.37	251
KNYE	N36:11:52	W116:02:08	PAHRUMP	NV	FM	236: 95.1 MHz A		6.00	-28	LIC	12	67.48	12	67.48	IF	79.48	274
K288FS	N36:12:25	W115:57:35	PAHRUMP	NV	FM	288: 105.5 MHz DX		0.14	0	LIC	0	72.76	0	72.76	1st Adj	72.76	275
K236AS	N35:28:14	W114:55:13	SEARCHLIGHT	NV	FM	236: 95.1 MHz DX		0.00	0	LIC	0	78.14	0	78.14	IF	78.14	164
KHRQ	N35:26:09	W115:55:22	BAKER	CA	FM	235: 94.9 MHz B1		1.40	393	LIC	14	91.27	14	91.27	IF	105.27	221
KHRQ	N35:26:10	W115:55:25	BAKER	CA	FM	235: 94.9 MHz B1		1.45	404	CP	14	91.30	14	91.30	IF	105.30	221

EXHIBIT E-2 KOAS Main & Proposed Aux 60dBu Contour Analysis

Klein Broadcast Engineering, L.L.C.

Job: KOAS-AUX 20080724.fmj

Master Database: FCC CDBS 2008_Jul_24.fmd

Date: 7/24/2008

Lat: N36:08:55 Lon: W115:09:15 NAD-27 (Proposed Transmitter Site & Existing Site of KOAS-FM1)

Scale: 1:500000

Channel: 289 Class: C3

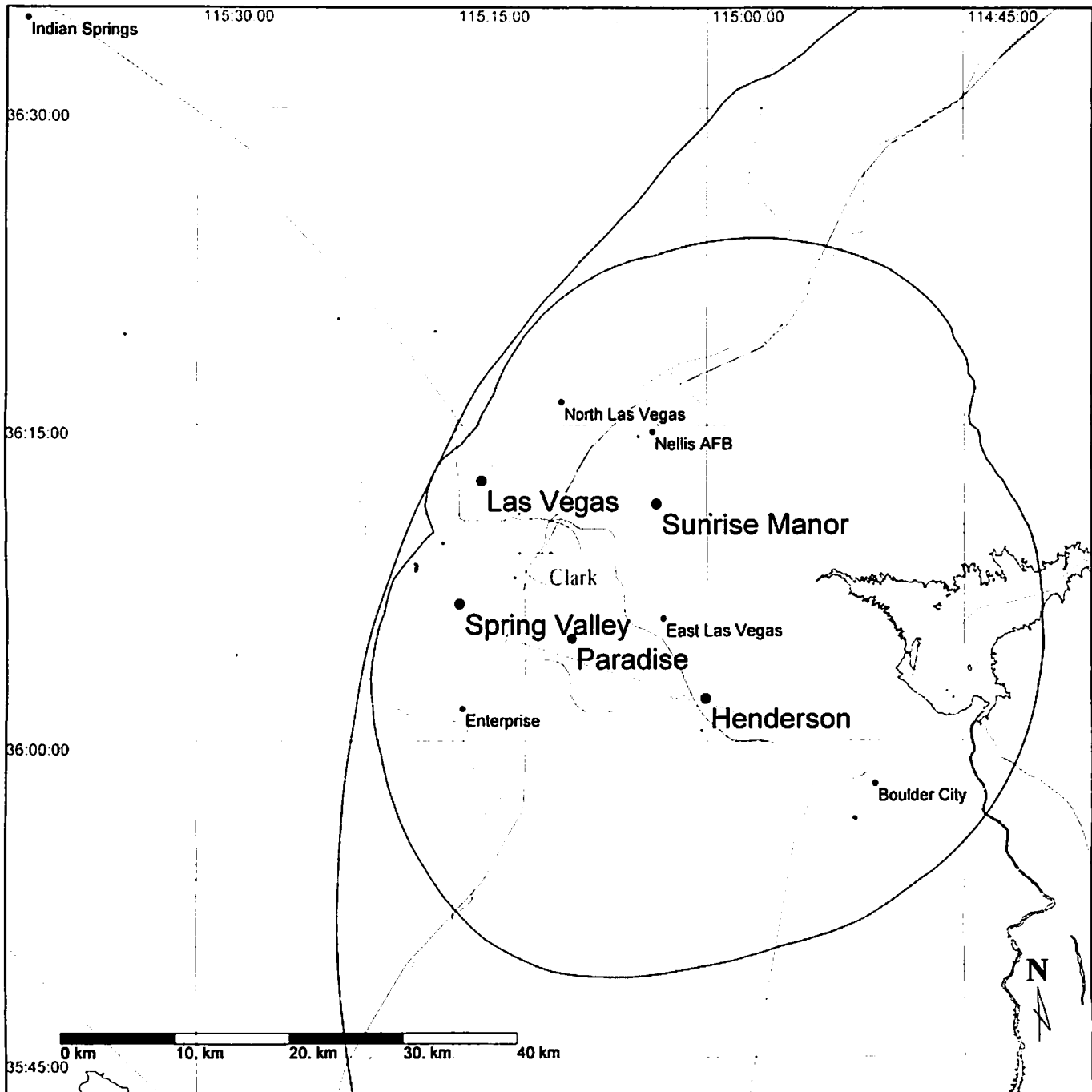
Status: Licensed, Application

Terrain Database: DMA 3 Arc Second Digitized Terrain Datafile, Conus.

Contour Prediction Method: FCC Standard f(50,50), 360 Radials.

Comments: No Comments

Description: EXHIBIT E-2 60dBu FCC SERVICE CONTOURS KOAS MAIN & PROPOSED AUX FACILITY



ERI® *Horizontal Plane Relative Field Pattern*

Electronics Research, Inc. 7777 Gardner Rd. Chandler, In 47610 Phone (812) 925-6000 Fax (812) 925-4030 <http://www.eriinc.com/>

FIGURE NO: 1

STATION: KOAS

LOCATION: DOLAN SPRINGS, AZ

ANTENNA: MP-2E-DA-HW-SP

STRUCTURE: STRATUS TOWER

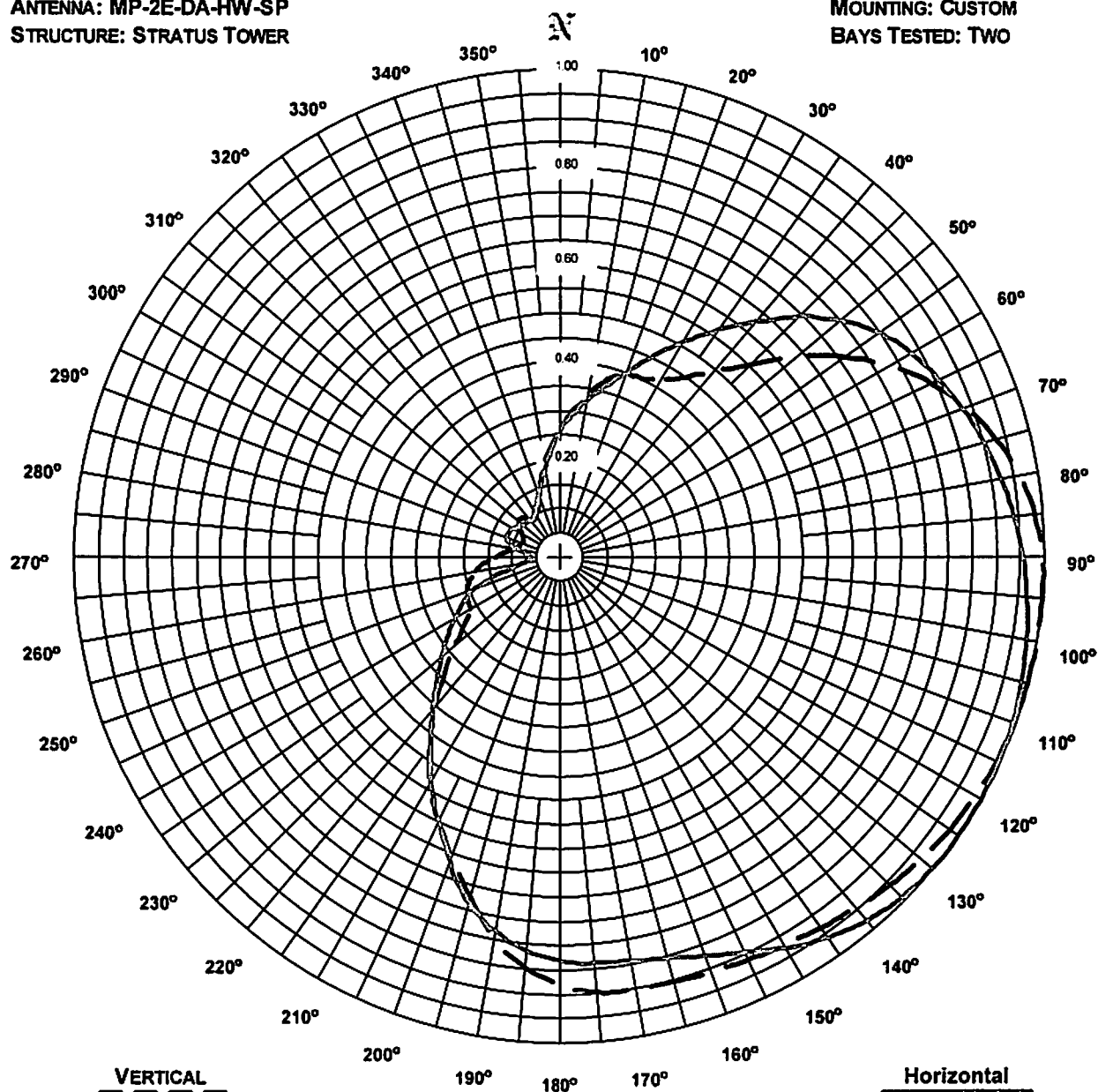
DATE: 11/22/2004

FREQUENCY: 105.7 MHZ

ORIENTATION: 126° TRUE

MOUNTING: CUSTOM

BAYS TESTED: TWO



RMS: 0.633
MAXIMUM: 1.000 @ 94° TRUE
MINIMUM: 0.084 @ 293° TRUE

RMS: 0.636
Maximum: 1.000 @ 122° True
Minimum: 0.058 @ 269° True

COMMENTS: MEASURED PATTERNS OF THE HORIZONTAL AND VERTICAL COMPONENTS.

ERI[®] Horizontal Plane Relative Field List

Electronics Research, Inc. 7777 Gardner Rd. Chandler, In 47610 Phone (812) 925-6000 Fax (812) 925-4030 <http://www.eriinc.com/>

Station: KOAS
Location: Dolan Springs, AZ
Frequency: 105.7 MHz

Antenna: MP-2E-DA-HW-SP
Orientation: 126° True
Tower: Stratus Tower

Figure: 1
Date: 11/19/2004
Reference: koas2m.fig

Angle	Horizontal			Vertical			Angle	Horizontal			Vertical		
	Field	kW	dBk	Field	kW	dBk		Field	kW	dBk	Field	kW	dBk
0°	0.261	0.17	-7.70	0.268	0.18	-7.46	180°	0.828	1.72	2.35	0.879	1.93	2.86
5°	0.294	0.22	-6.66	0.301	0.23	-6.46	185°	0.810	1.64	2.15	0.845	1.79	2.52
10°	0.327	0.27	-5.73	0.337	0.28	-5.47	190°	0.780	1.52	1.82	0.797	1.59	2.00
15°	0.363	0.33	-4.82	0.377	0.36	-4.50	195°	0.736	1.35	1.32	0.723	1.31	1.17
20°	0.403	0.41	-3.91	0.399	0.40	-4.01	200°	0.667	1.11	0.46	0.657	1.08	0.33
25°	0.455	0.52	-2.87	0.405	0.41	-3.87	205°	0.598	0.89	-0.49	0.597	0.89	-0.50
30°	0.512	0.66	-1.83	0.420	0.44	-3.55	210°	0.536	0.72	-1.44	0.537	0.72	-1.42
35°	0.569	0.81	-0.92	0.452	0.51	-2.93	215°	0.470	0.55	-2.58	0.470	0.55	-2.58
40°	0.631	1.00	-0.02	0.498	0.62	-2.07	220°	0.412	0.42	-3.72	0.407	0.41	-3.83
45°	0.698	1.22	0.85	0.560	0.79	-1.05	225°	0.364	0.33	-4.79	0.342	0.29	-5.35
50°	0.752	1.41	1.51	0.638	1.02	0.08	230°	0.322	0.26	-5.86	0.287	0.21	-6.85
55°	0.801	1.60	2.05	0.715	1.28	1.07	235°	0.287	0.21	-6.88	0.242	0.15	-8.33
60°	0.834	1.74	2.40	0.783	1.53	1.85	240°	0.255	0.16	-7.89	0.217	0.12	-9.29
65°	0.859	1.85	2.66	0.841	1.77	2.48	245°	0.225	0.13	-8.99	0.211	0.11	-9.52
70°	0.883	1.95	2.89	0.890	1.98	2.97	250°	0.189	0.09	-10.48	0.206	0.11	-9.72
75°	0.904	2.04	3.10	0.931	2.16	3.35	255°	0.135	0.05	-13.38	0.197	0.10	-10.15
80°	0.923	2.13	3.28	0.962	2.31	3.64	260°	0.091	0.02	-16.81	0.182	0.08	-10.83
85°	0.940	2.21	3.44	0.984	2.42	3.84	265°	0.066	0.01	-19.69	0.162	0.07	-11.82
90°	0.955	2.28	3.58	0.996	2.48	3.95	270°	0.059	0.01	-20.66	0.138	0.05	-13.20
95°	0.968	2.34	3.69	1.000	2.50	3.98	275°	0.067	0.01	-19.47	0.118	0.03	-14.61
100°	0.978	2.39	3.79	1.000	2.50	3.98	280°	0.087	0.02	-17.27	0.102	0.03	-15.86
105°	0.987	2.44	3.87	1.000	2.50	3.98	285°	0.108	0.03	-15.35	0.091	0.02	-16.83
110°	0.993	2.47	3.92	0.997	2.49	3.95	290°	0.119	0.04	-14.52	0.085	0.02	-17.41
115°	0.998	2.49	3.96	0.993	2.46	3.92	295°	0.120	0.04	-14.47	0.085	0.02	-17.45
120°	1.000	2.50	3.98	0.987	2.43	3.86	300°	0.117	0.03	-14.67	0.092	0.02	-16.73
125°	1.000	2.50	3.98	0.978	2.39	3.79	305°	0.112	0.03	-15.04	0.106	0.03	-15.55
130°	0.998	2.49	3.97	0.968	2.34	3.70	310°	0.106	0.03	-15.52	0.114	0.03	-14.86
135°	0.990	2.45	3.90	0.956	2.28	3.59	315°	0.102	0.03	-15.86	0.115	0.03	-14.82
140°	0.976	2.38	3.77	0.942	2.22	3.46	320°	0.100	0.03	-16.01	0.105	0.03	-15.58
145°	0.955	2.28	3.58	0.931	2.17	3.36	325°	0.102	0.03	-15.85	0.097	0.02	-16.25
150°	0.927	2.15	3.32	0.921	2.12	3.26	330°	0.109	0.03	-15.27	0.100	0.03	-15.99
155°	0.896	2.01	3.03	0.913	2.08	3.19	335°	0.121	0.04	-14.36	0.112	0.03	-15.02
160°	0.871	1.90	2.78	0.907	2.06	3.13	340°	0.138	0.05	-13.22	0.132	0.04	-13.59
165°	0.852	1.82	2.59	0.903	2.04	3.10	345°	0.160	0.06	-11.94	0.161	0.06	-11.89
170°	0.841	1.77	2.47	0.901	2.03	3.08	350°	0.187	0.09	-10.58	0.196	0.10	-10.18
175°	0.835	1.74	2.42	0.897	2.01	3.04	355°	0.222	0.12	-9.09	0.230	0.13	-8.77

Polarization:	Horizontal	Vertical
Maximum Field:	1.000 @ 122° True	1.000 @ 94° True
Minimum Field:	0.058 @ 269° True	0.084 @ 293° True
RMS:	0.636	0.633
Maximum ERP:	2.500 kW	2.500 kW
Maximum Power Gain:	1.636 (2.137 dB)	1.636 (2.137 dB)

Total Input Power: 1.528 kW

United States of America
FEDERAL COMMUNICATIONS COMMISSION
FM BROADCAST STATION LICENSE
AUXILIARY ANTENNA

Authorizing Official:

Official Mailing Address:

RBG LAS VEGAS LICENSES, LLC
3333 SIERRA OAKS DRIVE
SACRAMENTO CA 95864

Penelope A. Dade
Supervisory Analyst
Audio Division
Media Bureau

Facility Id: 25692

Call Sign: KOAS

License File Number: BXLH-20011018AFZ

Grant Date: January 31, 2002

This license expires 3:00 a.m.
local time, October 01, 2005.

This License Covers Permit No.: BXPB-20000927ACH

Subject to the provisions of the Communications Act of 1934, subsequent acts and treaties, and all regulations heretofore or hereafter made by this Commission, and further subject to the conditions set forth in this license, the licensee is hereby authorized to use and operate the radio transmitting apparatus herein described.

This license is issued on the licensee's representation that the statements contained in licensee's application are true and that the undertakings therein contained so far as they are consistent herewith, will be carried out in good faith. The licensee shall, during the term of this license, render such broadcasting service as will serve the public interest, convenience, or necessity to the full extent of the privileges herein conferred.

This license shall not vest in the licensee any right to operate the station nor any right in the use of the frequency designated in the license beyond the term hereof, nor in any other manner than authorized herein. Neither the license nor the right granted hereunder shall be assigned or otherwise transferred in violation of the Communications Act of 1934. This license is subject to the right of use or control by the Government of the United States conferred by Section 606 of the Communications Act of 1934.

Callsign: KOAS

License No.: BXLH-20011018AFZ

Name of Licensee: RBG LAS VEGAS LICENSES, LLC

Station Location: AZ-DOLAN SPRINGS

Frequency (MHz): 105.7

Channel: 289

Class: C

Hours of Operation: Unlimited -- For auxiliary purposes only

Transmitter: Type Accepted. See Sections 73.1660, 73.1665 and 73.1670 of the Commission's Rules.

Transmitter output power: .265 kW

Antenna type: Non-Directional

Description: SCA FMV

Antenna Coordinates: North Latitude: 35 deg 56 min 45 sec

West Longitude: 115 deg 02 min 34 sec

	Horizontally Polarized Antenna	Vertically Polarized Antenna
Effective radiated power in the Horizontal Plane (kW):	.078	.078
Height of radiation center above ground (Meters):	56	56
Height of radiation center above mean sea level (Meters):	1373	1373
Height of radiation center above average terrain (Meters):	582	582

Antenna structure registration number: Not Required

Overall height of antenna structure above ground: 59 Meters

Obstruction marking and lighting specifications for antenna structure:

It is to be expressly understood that the issuance of these specifications is in no way to be considered as precluding additional or modified marking or lighting as may hereafter be required under the provisions of Section 303(q) of the Communications Act of 1934, as amended.

None Required

Special operating conditions or restrictions:

- 1 The permittee/licensee in coordination with other users of the site must reduce power or cease operation as necessary to protect persons having access to the site, tower or antenna from radiofrequency electromagnetic fields in excess of FCC guidelines.

*** END OF AUTHORIZATION ***

United States of America
FEDERAL COMMUNICATIONS COMMISSION
FM BROADCAST TRANSLATOR/BOOSTER
STATION LICENSE

Authorizing Official:

Official Mailing Address:

RBG LAS VEGAS LICENSES, LLC
3333 SIERRA OAKS DRIVE
SACRAMENTO CA 95864

Penelope A. Dade
Supervisory Analyst
Audio Division
Media Bureau

Facility Id: 132721

Call Sign: KOAS-FM1

License File Number: BLFTB-20050331AWQ

Grant Date: May 26, 2005

This license expires 3:00 a.m.
local time, October 01, 2005.

This license covers permit no.: BMPFTB-20050121ACH

Subject to the provisions of the Communications Act of 1934, subsequent acts and treaties, and all regulations heretofore or hereafter made by this Commission, and further subject to the conditions set forth in this license, the licensee is hereby authorized to use and operate the radio transmitting apparatus herein described.

This license is issued on the licensee's representation that the statements contained in licensee's application are true and that the undertakings therein contained so far as they are consistent herewith, will be carried out in good faith. The licensee shall, during the term of this license, render such broadcasting service as will serve the public interest, convenience, or necessity to the full extent of the privileges herein conferred.

This license shall not vest in the licensee any right to operate the station nor any right in the use of the frequency designated in the license beyond the term hereof, nor in any other manner than authorized herein. Neither the license nor the right granted hereunder shall be assigned or otherwise transferred in violation of the Communications Act of 1934. This license is subject to the right of use or control by the Government of the United States conferred by Section 606 of the Communications Act of 1934.

Callsign: KOAS-FM1

License No.: BLFTB-20050331AWQ

Name of Licensee: RBG LAS VEGAS LICENSES, LLC

Principal community to be served: NV-HENDERSON

Primary Station: KOAS (FM) , Channel 289, DOLAN SPRINGS, AZ

Via: Microwave

Frequency (MHz): 105.7

Channel: 289

Hours of Operation: Unlimited

Antenna Coordinates: North Latitude: 36 deg 08 min 55 sec

West Longitude: 115 deg 09 min 15 sec

Transmitter: Type Accepted. See Sections 73.1660, 74.1250 of the Commission's Rules.

Transmitter output power: 1.98 kW

Antenna type: (directional or non-directional): Directional

Description: ERI MP-4AC-DA-HW-SP

Major lobe directions 90 130
(degrees true):

	Horizontally Polarized Antenna:	Vertically Polarized Antenna:
Effective radiated power in the Horizontal Plane (kw):	2.5	2.5
Height of radiation center above ground (Meters):	346	346
Height of radiation center above mean sea level (Meters):	966	966

Antenna structure registration number: Not Required

Overall height of antenna structure above ground: 350 Meters

Obstruction marking and lighting specifications for antenna structure:

It is to be expressly understood that the issuance of these specifications is in no way to be considered as precluding additional or modified marking or lighting as may hereafter be required under the provisions of Section 303(q) of the Communications Act of 1934, as amended.

None Required

Callsign: KOAS-FM1

License No.: BLFTB-20050331AWQ

Special operating conditions or restrictions:

- 1 The permittee/licensee must reduce power or cease operation as necessary to protect persons having access to the site, tower or antenna from radiofrequency electromagnetic fields in excess of FCC guidelines.

*** END OF AUTHORIZATION ***

KLEIN BROADCAST ENGINEERING, L.L.C.

dedicated to improving the science of radio and television communications

JULY 2008

EXHIBIT E-10RHS
FCC FORM 301 APPLICATION
FOR FM BROADCAST STATION CONSTRUCTION PERMIT
TO MODIFY
(a Minor Change Application)
KOAS(FM) AUXILIARY SYSTEM
(FCC FACILITY ID# 25692)
FM CHANNEL 289 C / 105.7 mHz.
DOLAN SPRINGS, ARIZONA

RF RADIATION HAZARD COMPLIANCE STATEMENT

The facilities proposed herein by the applicant, permittee or licensee, in this Engineering Exhibit comply with FCC O.S.T. Bulletin #65 and #65A as revised (1997) and the ANSI C-95.1-1982 RF and ANSI C95.1992 and the NCRP exposure guidelines. The interpolation of the figures from the above referenced document, page 18, supplement "A", shows a WORST case requirement of 15.3 meters height above ground level requirement for the radiation center of the proposed two (2) bay half wave length spaced FM broadcast antenna. A combined vertical and horizontal effective radiated power of 5.0 kilowatts was used for this study and determination (2.5 kW Horiz. & 2.5 kW Vert.) The radiation center of the FM broadcast antenna system is proposed at 346 meters above ground level (AGL), well within the requirement for the antenna as determined from the above referenced documents. The antenna specified and installed is an Electronics Research, Inc., model MP-2E-DA-HW, EPA Type 3, two (2) section, half wave length spaced, circularly polarized antenna. The antenna manufacturer, Electronics Research, Inc., states its antenna meets the BEST case requirements for downward radiation pattern according to the FCC O.S.T. Bulletin #65 Guidelines. The antenna proposed uses no beam tilt and no null fill.

The proposed FM antenna is to be mounted on a tower located on the top of the Stratosphere Hotel. The tower is an existing structure and is approximately 41 meters tall above the roof level of the hotel. It has existed there for many years and we believe exempt from structure registration. The general public access can not be any closer than 20 meters to the center of radiation of the proposed antenna. At 20 meters distance, this proposal still meets the distance requirements found in FCC O.E.T. Bulletin #65 Supplement "A", page, 18 for Uncontrolled Areas.

Occupational compliance is certified by the reduction of operating power or the complete cessation of operation during such time maintenance personnel are on the antenna support structure. A transmitter "LOCK OUT" circuit will be installed to prevent accidental turn on of the transmission equipment during the time maintenance personnel are on the antenna support structure. The applicant, will cooperate with other site users in order to comply with The FCC Guidelines on Human Exposure to Non-Ionizing RF Radiation.

In addition to the preceding the applicant, has by computer program, performed additional calculations to predict RF power density at the base of the antenna support structure. This program predicts a maximum power density of 45.8499 microwatts/cm² at a distance of 36.75 meters from the base of the antenna support structure at a height of 2.0 meters above ground level. This is less than 23% of the allowable RF power density for Uncontrolled areas under the FCC and ANSI/EPA Guidelines, being limited to: 200.0 microwatts/cm² for Uncontrolled areas and 1.00mW/cm² or (1,000 microwatts/cm²) for Controlled areas (areas within fencing). All other power density was calculated to be below this maximum predicted level for a distance of 0 to 1000 meters distance from the base of the antenna support structure at 2.0 meters above ground level. This calculation was made assuming a radiation center height of 20 meters because of the uncontrolled public access to the roof of the Stratosphere Hotel. So this is a worst case analysis. The actual radiation center of the proposed antenna is 346 meters above ground level. Using a radiation center of 346 meters above ground level, the proposed system produces an RFR power density of 0.1255uW/cm² at a distance of 702 meters distance from the base of the antenna support structure at 2 meters above ground level or just over one tenth of one percent of the allowable RFR level for uncontrolled public access areas.

The computer program employed for the RFR analysis in this engineering exhibit uses either the Near Field or Far Field method for the calculation of power density and was written by the Commission's O.E.T. staff. In this particular case the Far Field Method was used. The formula used by the computer program was derived from the FCC O.S.T. Bulletin #65, as revised to date.

The formula may be stated in the following manner:

$$E(V/m) = 1.6*221.72*\text{SQRT}(\text{ERP}) * (\text{element pattern factor}) * (\text{array factor}) / \text{DIST}$$

$$H(A/m) = 1.6*0.588*\text{SQRT}(\text{ERP}) * (\text{element pattern factor}) * (\text{array factor}) / \text{DIST}$$

Where:

ERP = effective radiated power in kilowatts, relative to a half wave dipole.

DIST = distance in meters from the antenna radiation center to the observation point in meters.

The 1.6 factor found in the ANSI/EPA formula and used above at the beginning of each equation takes into account possible contributions from ground reflections. The element pattern factor in a linearly interpolated relative field value at the appropriate depression angle below the horizon as taken directly from the EPA data. The array factor is computed at the appropriate depression angle using the number of antenna elements, when normalized to 1.0 in the main lobe. This array factor only applies to antenna arrays of point sources where each source has equal power distribution and phase, and are uniformly spaced. The element patterns themselves can be associated with particular antenna designs. As of May 1986 there were six (6) element types identified for FM antennas as listed in the ANSI/EPA data and FCC Bulletin #65.

The "crossed ring" EPA Type 3 element is used on the Electronics Research, Inc., model MP-2E-DA-HW, EPA Type 3 is listed in the EPA data and was used for the calculations contained herein. There were two types listed for television, one for VHF and one for UHF.

The General Public will not have access to the antenna support structure base because the antenna support structure base above the 21 meter level has secured locks and security personnel at the structure base when the public has access to the roof of the hotel. Only authorized personnel have access to the tower base. This will prevent General Public access to the actual antenna support structure.

The applicant, will install and post RF Radiation Hazard Warning Signs in and around the site at approximately eye level for additional warning and safety.

A vertical pattern plot of the Electronics Research, Inc., model MP-2E-DA-HW (EPA Type 3) antenna to be employed at KOAS(FM) Auxiliary System is included with this exhibit and is marked Figure 1. This plot clearly shows this antenna has greatly reduced downward radiation and meets the BEST case requirements of FCC Bulletin #65, as amended to date.

The plot Exhibit marked Figure 2. is a plot of the actual calculated power density in microwatts/cm² vs. distance. This plot shows the calculated maximum predicted power density of 45.8499 microwatts/cm² occurring at 36.75 meters distant from the base of the antenna support structure. It also shows, graphically, that all other calculated power density RFR levels are below this maximum between 0 meters and 1000 meters distant from the base of the antenna support structure.

No new antenna support structure construction is necessary or proposed. The proposed antenna mounts on an existing structure.

This assures the Commission the proposed facility for KOAS(FM) Auxiliary System, FM Broadcast Station, at Dolan Springs, Arizona, is in compliance with the FCC O.S.T. Bulletin #65 and the ANSI C-95.1-1992 and the NCRP RF Exposure Guidelines as amended to date. The applicant, certifies compliance with the ANSI, NCRP and FCC Human Exposure Guidelines to Non-Ionizing RF Radiation.

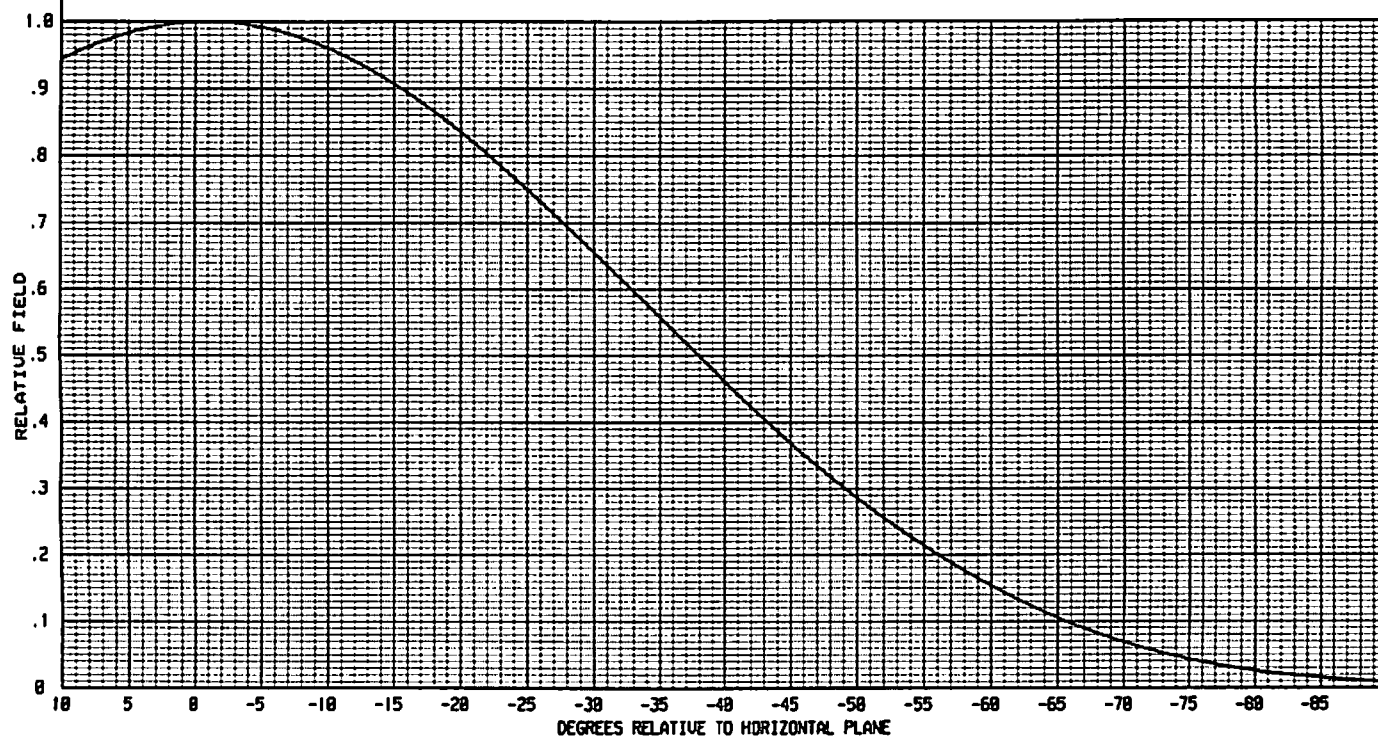
ELECTRONICS RESEARCH, INC.
7777 GARDNER ROAD
CHANDLER, IN. 47610

---THEORETICAL---
VERTICAL PLANE RELATIVE FIELD

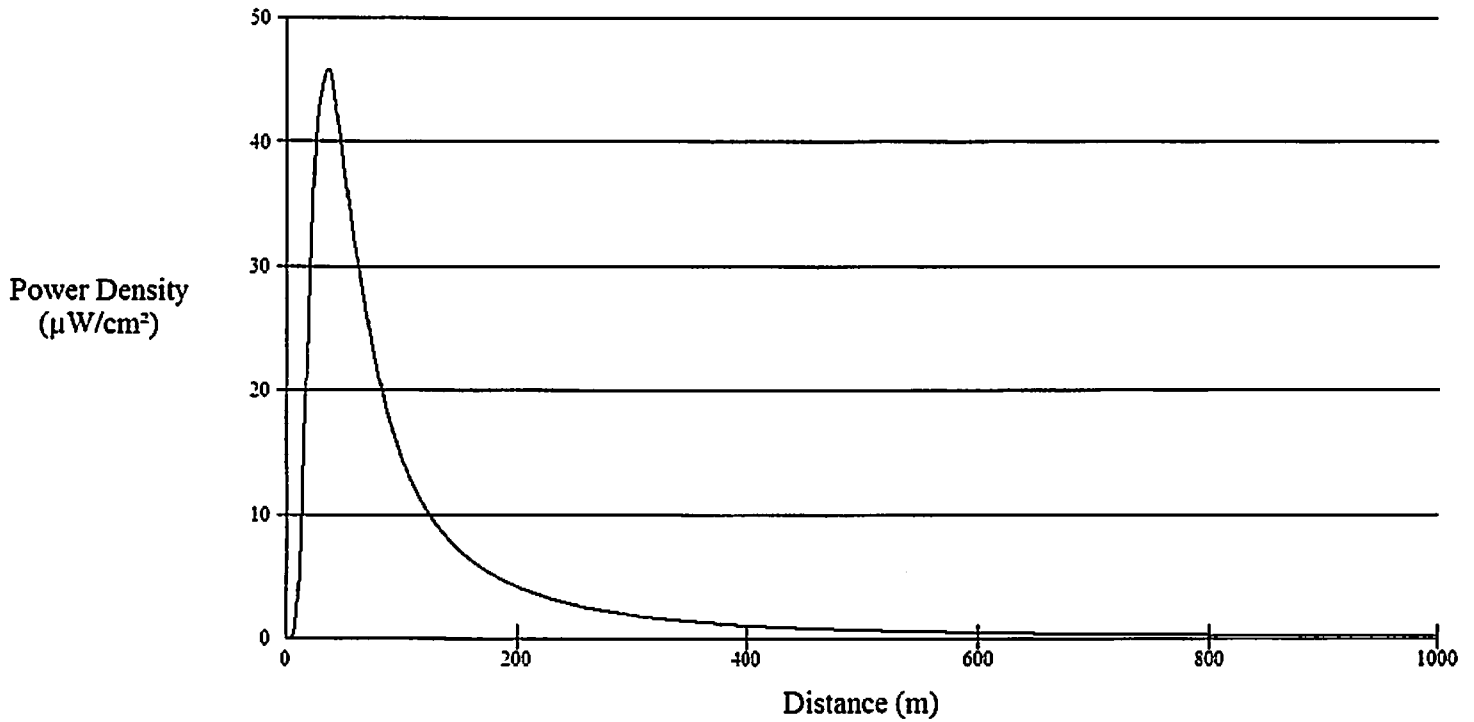
105.7 MHz.

ELEMENT SPACING:
54.5 INCHES

ERI TYPE HP-2E-DA-HW-SP END FED ANTENNA
-.95 DEGREE(S) ELECTRICAL BEAM TILT
8 PERCENT FIRST NULL FILL
8 PERCENT SECOND NULL FILL



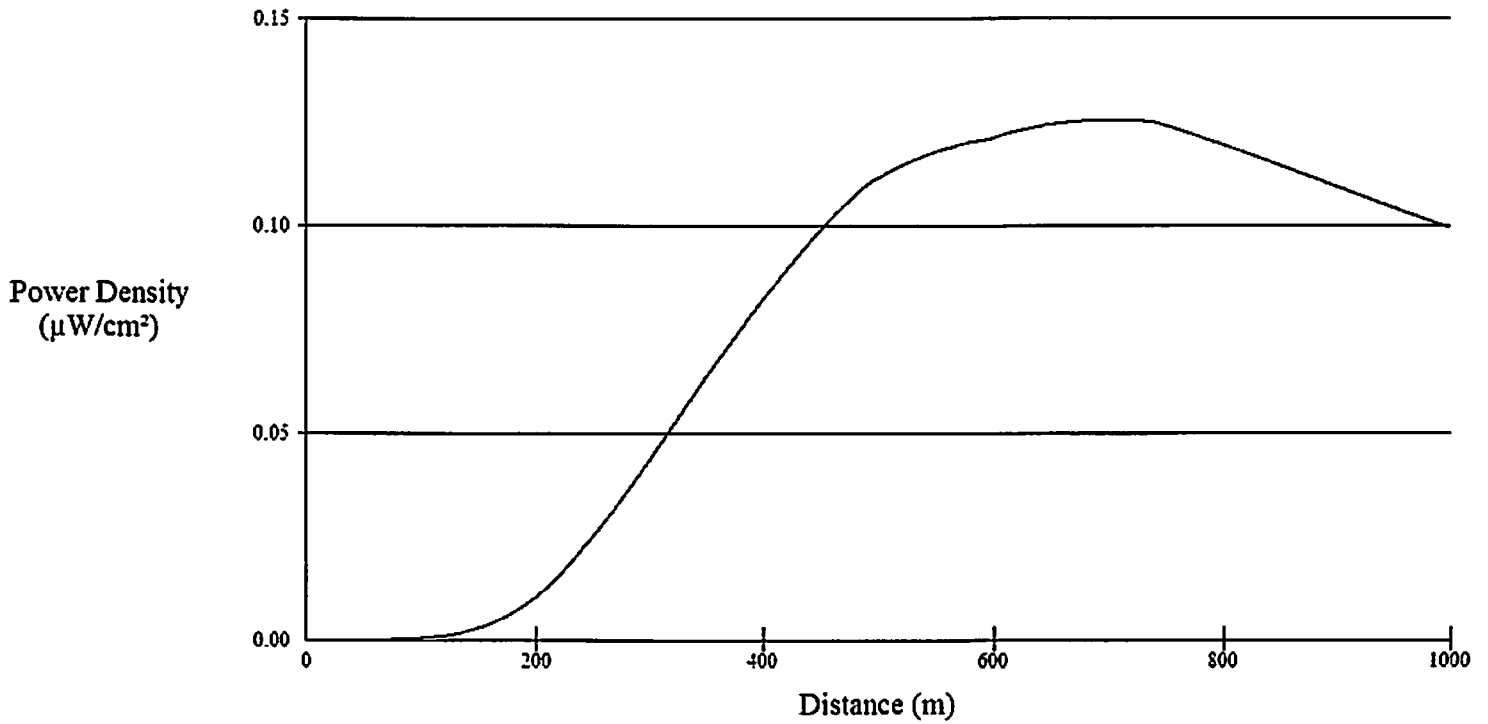
Power Density vs Distance



Office of Engineering and Technology

Distance (m):	<input type="text" value="1000"/>	Antenna Type:	<input type="text" value="ERI of JAMPRO JBCB 'Rotator' (EPA)"/>
Horizontal ERP (W):	<input type="text" value="2500"/>	Number of Elements:	<input type="text" value="2"/>
Vertical ERP (W):	<input type="text" value="2500"/>	Element Spacing:	<input type="text" value="5"/>
Antenna Height (m):	<input type="text" value="100"/>		

Power Density vs Distance



Office of Engineering and Technology

Distance (m): Antenna Type:

Horizontal ERP (W): Number of Elements:

Vertical ERP (W): Element Spacing:

Antenna Height (m):