

(1) File= BMXPED20190325AAP (2) Call= KAER (3) Channel= 207 (4) Class= C  
 (5) Service= FS (6) City= MESQUITE (7) State= NV  
 (8) Country= US (9) N Lat 36-00-34 (10) W Long 115-00-20  
 (11) herp= 9.00 (12) Max herp= (13) hhaat= 314.0 (18) h\_rcamsl= 1013.  
 (14) verp= 9.00 (15) Max verp= (16) vhaat= 314.0 (19) v\_rcamsl= 1013.  
 (17) Beam Tilt= N (26) h\_rcagl= 22.0 (27) v\_rcagl= 22.0  
 (20) Section 73.215=N (21) Internat. Class= (22) Dir Ant= Y  
 (23) Make= ODD (24) Model= FORM 340 (25) Rotate=

\*\*\*\*\*  
 \* Distance to the 60 dBu contour = 50 km. \*  
 \* Class C contour must exceed 83 km. \*  
 \*\*\*\*\*

KAER BMXPED20190325AAP 207 C FS Polarization erp (kw) haat rcamsl rcagl  
 MESQUITE NV US hor pln bm tilt (meter) (meter) (meter)  
 36.0034 115.0020 (D.MMSS) NAD 27 Horizontal 9.00 314.0 1013. 22.0  
 36.0034 115.0023 (D.MMSS) NAD 83 Vertical 9.00 314.0 1013. 22.0  
 Application ID: 1802941  
 Facility ID: 93355

CDBS Site Elevation 991.00 m  
 CDBS Overall Structure Height 055.00 m

Not registered with ASR. Using CDBS values for TOWAIR

TOWAIR Coordinates (NAD 83) 36:00:34N 115:00:23W  
 TOWAIR Coordinates (NAD 27) 36:00:34N 115:00:20W  
 TOWAIR Site Elevation 991.00 m  
 TOWAIR Overall Structure Height 055.00 m  
 TOWAIR results: Structure does not require ASR registration.

The following contours are calculated using: erp= 9.000 (kW) 9.5 (dbk) haat= 314.0 (meters)  
 Calculated haat from TOPO Data Base

Interfering	Domestic dbu km	Azimuth Degrees	haat (meters)		ERP(kw) Actual	Actual contours (km)	
			Horiz	Vert		70 dbu	60 dbu
co-channel ( 40.0)	120.3	0.0	479.8	479.8	9.00	38.5	59.8
1st adjacent ( 54.0)	73.8	45.0	447.7	447.7	2.46	27.2	45.7
2nd adjacent (100.0)	4.9	90.0	236.2	236.2	0.07	8.3	14.7
3rd adjacent (100.0)	4.9	135.0	315.6	315.6	0.01	5.7	11.3
		180.0	217.5	217.5	0.01	4.3	8.4
Protected ( 60.0)	50.0	225.0	114.3	114.3	0.03	4.4	7.9
		270.0	326.9	326.9	0.15	11.7	20.9
		315.0	424.5	424.5	2.46	26.5	44.5
City Grade ( 70.0)	31.2	Average	320.3	320.3	9.0	31.5	50.5
Service ( 60.0)	50.0						

Note: Contours on the above radials were calculated using the max horiz or vert haat and the erp along the actual radial. Directional antenna patterns are used if available.

\*\*\*\*\*  
 \* Distance to the 60 dBu contour = 50 km. \*  
 \* Class C contour must exceed 83 km. \*  
 \*\*\*\*\*  
 \* Class minimums DO NOT apply to Auxiliary Facilities. \*  
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\*\*\*\*\*  
 \* Directional Antenna Pattern \*  
 \*-----+-----+-----+-----+-----\*  
 \* Make: ODD | Model: FORM 340 | Rotation: Degrees \*  
 \*\*\*\*\*

Bear	Field	ERP(kw)	(dbk)	Bear	Field	ERP(kw)	(dbk)	Bear	Field	ERP(kw)	(dbk)	Bear	Field	ERP(kw)	(dbk)
350.0	0.980	8.644	9.37	0.0	1.000	9.000	9.54	10.0	0.980	8.644	9.37	20.0	0.897	7.241	8.60
30.0	0.756	5.144	7.11	40.0	0.600	3.240	5.11	50.0	0.432	1.680	2.25	60.0	0.300	0.810	-0.92
70.0	0.204	0.375	-4.26	80.0	0.134	0.162	-7.92	90.0	0.091	0.075	-11.28	100.0	0.066	0.039	-14.07
110.0	0.054	0.026	-15.81	120.0	0.050	0.023	-16.48	130.0	0.042	0.016	-17.99	140.0	0.037	0.012	-19.09

150.0	0.032	0.009	-20.35	160.0	0.032	0.009	-20.35	170.0	0.034	0.010	-19.83	180.0	0.032	0.009	-20.35
190.0	0.034	0.010	-19.83	200.0	0.042	0.016	-17.99	210.0	0.047	0.020	-17.02	220.0	0.052	0.024	-16.14
230.0	0.055	0.027	-15.65	240.0	0.055	0.027	-15.65	250.0	0.022	0.004	-23.61	260.0	0.043	0.017	-17.79
270.0	0.130	0.152	-8.18	280.0	0.166	0.248	-6.06	290.0	0.226	0.460	-3.38	300.0	0.320	0.922	-0.35
310.0	0.432	1.680	2.25	320.0	0.600	3.240	5.11	330.0	0.756	5.144	7.11	340.0	0.897	7.241	8.60
350.0	0.980	8.644	9.37												

Maximum to minimum ratio = 33.152 db

- Maximum rate of change = 9.609 db between 260.0 degrees and 270.0 degrees.
- Rates exceeding 2.0db = 2.007 db between 30.0 degrees and 40.0 degrees.
- Rates exceeding 2.0db = 2.853 db between 40.0 degrees and 50.0 degrees.
- Rates exceeding 2.0db = 3.167 db between 50.0 degrees and 60.0 degrees.
- Rates exceeding 2.0db = 3.350 db between 60.0 degrees and 70.0 degrees.
- Rates exceeding 2.0db = 3.651 db between 70.0 degrees and 80.0 degrees.
- Rates exceeding 2.0db = 3.361 db between 80.0 degrees and 90.0 degrees.
- Rates exceeding 2.0db = 2.790 db between 90.0 degrees and 100.0 degrees.
- Rates exceeding 2.0db = 7.959 db between 240.0 degrees and 250.0 degrees.
- Rates exceeding 2.0db = 5.821 db between 250.0 degrees and 260.0 degrees.
- Rates exceeding 2.0db = 9.609 db between 260.0 degrees and 270.0 degrees.
- Rates exceeding 2.0db = 2.123 db between 270.0 degrees and 280.0 degrees.
- Rates exceeding 2.0db = 2.680 db between 280.0 degrees and 290.0 degrees.
- Rates exceeding 2.0db = 3.021 db between 290.0 degrees and 300.0 degrees.
- Rates exceeding 2.0db = 2.607 db between 300.0 degrees and 310.0 degrees.
- Rates exceeding 2.0db = 2.853 db between 310.0 degrees and 320.0 degrees.
- Rates exceeding 2.0db = 2.007 db between 320.0 degrees and 330.0 degrees.

NOTE: Any indicated rotation angle has already been applied to the above pattern.

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\*  
\* Class A Separation Distances \*  
\*

Separation distances for Class A facilities are from the NEW Rules effective 10/02/89.

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\*  
\* TV Channel 6 Study \*  
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azimuth (degrees)	call	file number	serv stat	city	st c	DD.MMSS	longitude DDD.MMSS	erp	tv haat	tv meter	tv gradeb	fmtotv dist	fmtotv rqdist	fmerp (kw)	tvatfm (dbu)
164.2	344.4	K53DG	BLDTV-20110217ACA	LD LIC	LAUGHLIN	NV US 35.1458	114.4434	0.30	0.00	15.7	87.6	196.0	196.0		13.1
16.4	196.8	K06DM	BLDTV-20130123ADQ	LD LIC	PANACA	NV US 37.2734	114.2757	0.06	0.00	10.6	168.0	196.0			-9.4

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\*  
\* PRIMARY STATION \*  
\* OF ABOVE AUXILIARY \*  
\*\*\*\*\*

Azimuth from	to	call	sts	file number	city	st c	Lat (D.MMSS)	Long	erp (kw)	haat	D	Service	con	F5050	dist
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(km) (km)

29.7 209.9 KAER LIC BLED20140616AAG MESQUITE NV US 36.3604 114.3506 CO 207C 97.0H V 586.0 91.0 75.7

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\*
\* BOOSTER STATIONS \*
\*
\*\*\*\*\*

Azimuth from to call sts file number city st c lat long rel chn erp (kw) haat d service-con
(D.MMSS) horz vert (m) a F5050 dist
(km) (km)
0.0 0.0 KAERFM2 LIC BLFTB20170913ABD LAS VEGAS NV US 36.0034 115.0020 co 207D 11.0H 11.0V D 18.6 0.0

\*\*\* WARNING \*\*\*

If the Primary station is changing its service contour, you must check to see that these BOOSTER stations do not extend the Primary station service contour. The service contour for class B is 54 dBu; class B1, 57 dBu; all others, 60 dBu.

\*\*\* WARNING \*\*\*

\*\*\*\*\*

Azimuth from to call sts file number city st c lat long rel chn erp (kw) haat d I-con P-con inte prot int
(D.MMSS) horz vert (m) a F5010 F5050 dist rsep rsep r c
(km) (km) (km) (km)
263.8 83.6 KNPR LIC BLED20070424AAW LAS VEGAS NV US 35.5755 115.2959 2nd 205C 22.0H 22V 1190. 9.5 95.1 44.8 26.1 95.7 S
263.8 83.6 KNPR LIC BXLED20070423ABV LAS VEGAS NV US 35.5755 115.2959 2nd 205C 2.00H 2.V 1188. 3.1 69.0 44.8 19.7 69.6 S
\*\* Auxiliary Transmitter of Full-Service FM Station \*\*
29.7 209.9 KAER LIC BLED20140616AAG MESQUITE NV US 36.3604 114.3506 co 207C 97.0H V 586.0 187.5 84.3 75.7 243.2 218.3 S S
305.7 125.5 KAER CP BXPED20160823AAO MESQUITE NV US 36.0922 115.1532 co 207C .875H .87V 61.00 75.2 25.6 28.0 113.8 126.5 S S
\*\* Auxiliary Transmitter of Full-Service FM Station \*\*
0.0 0.0 KAER CP BXPED20171115AAF MESQUITE NV US 36.0034 115.0020 co 207C 11.0H 11V 314.0D 144.8 61.8 0.0 204.6 203.0 S S
\*\* Auxiliary Transmitter of Full-Service FM Station \*\*
0.0 0.0 KAER APP BMXPED20190325AAP MESQUITE NV US 36.0034 115.0020 co 207C 9.00H 9.V 314.0D 141.2 59.8 0.0 201.0 201.0 S S
\*\* Auxiliary Transmitter of Full-Service FM Station \*\*
0.0 0.0 KAERFM2 LIC BLFTB20170913ABD LAS VEGAS NV US 36.0034 115.0020 co 207D 11.0H 11V D 144.8 61.8 0.0 204.6 203.0 S S
263.9 83.6 KCVN LIC BLED20031205AFP LAS VEGAS NV US 35.5757 115.3003 2nd 209C2 .550H .55V 1122.D 1.6 53.9 44.9 18.3 54.5 S
324.2 144.1 KHSJLP LIC BLL20150122AAA LAS VEGAS NV US 36.0623 115.0532 if 261L1 .030H .030V 53.86 13.3 28. S

\*\*\* Warning \*\*\*

The free-space equation was used to find one or more of the above contour distances.

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\*\*\*\* Normal termination FM Channel Study no. 1 \*\*\*\* 103 FM records were considered, of which 9 were printed above \*\*\*\*

\*\*\*\*\* FM Channel Study NO. 1 - Mass Media Bureau - Federal Communications Commission - 9-APR-19 05:45:05 \*\*\*\*\*

AA M M AA M M AA M M AA M M
A A MM MM A A MM MM A A MM MM A A MM MM
A A M MM M A A M MM M A A M MM M A A M MM M
AAAAA M M AAAAA M M AAAAA M M AAAAA M M
A A M M A A M M A A M M A A M M

FM Reference Data:

KAER        BMXPED20190325AAP 207 C    FS   MESQUITE                    NV US 36.0034 115.0020

There were 0 AM stations within 3.22 km of the FM reference coordinates.

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* 05:45:07 FM ANSI Radiation Study for: 20190325AAP 9-APR-19
*
* Site Location: N Lat 36-00-34 W Lon 115-00-20
*
* RCAMSL:1013.00 RCAGL: 22.00
*
* NOTE: 2 meters was subtracted from the RCAGL value to do the calculations.
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Call	Serv	Stat	Channel	ARN	City	St	HERP (kw)	VERP (kw)	Dist (m)	Height (m)	RF%	
											Occup	Public
KYMT	FS	LIC	226C	BLH19970707KF	LAS VEGAS	NV	5.570	5.570	185.30	40.0	1.04	5.18
KLUC-FM	FM	LIC	253C	BLH19870211KA	LAS VEGAS	NV	100.000	100.000	154.42	57.0	24.66	123.31
KISF	FM	LIC	278C	BLH19890310KD	LAS VEGAS	NV	100.000	100.000	154.42	49.0	25.46	127.29
KRGT-FM1	FB	LIC	257D	BLFTB20050815AED	LAS VEGAS	NV	6.000	6.000	154.42	34.0	1.60	8.02
KKLZ	FM	LIC	242C	BMLH20111201LCE	LAS VEGAS	NV	100.000	100.000	154.42	63.0	24.02	120.12
K265EZ	FX	LIC	265D	BLFT20141020ACH	HENDERSON	NV	0.035	0.035	154.42	32.0	0.01	0.05
KSOS	FM	LIC	213C	BMLEDT20171002AAE	LAS VEGAS	NV	100.000	100.000	154.42	81.0	21.97	109.87
KSNE-FM	FM	LIC	293C0	BMLH20110126ABC	LAS VEGAS	NV	100.000	100.000	123.53	55.0	36.54	182.70
KMXB	FM	LIC	231C	BMLH20130801AKK	HENDERSON	NV	100.000	100.000	123.53	51.0	37.41	187.04
KXQQ-FM	FM	LIC	263C	BMLH20140122ABE	HENDERSON	NV	100.000	100.000	123.53	54.0	36.76	183.80
KWNR	FM	LIC	238C	BLH19890629KB	HENDERSON	NV	100.000	100.000	105.26	51.0	48.84	244.18
KCEP	FM	LIC	201C1	BLED19930617KA	LAS VEGAS	NV	10.000	10.000	105.26	66.0	4.33	21.64
KAER	FS	CP	207C	BXPED20171115AAF	MESQUITE	NV	11.000	11.000	0.00	20.0	183.57	917.84
KAER	FS	Study	207C	BMXPED20190325AAP	MESQUITE	NV	9.000	9.000	0.00	20.0	150.19	750.96
KAER-FM2	FB	LIC	207D	BLFTB20170913ABD	LAS VEGAS	NV	11.000	11.000	0.00	20.0	183.56	917.82
KRGT	FM	CP	257C2	BPB20180905ABJ	SUNRISE MANOR	NV	8.800	8.800	30.88	47.0	18.59	92.93
KVEG-FM1	FB	LIC	248D	BLFTB20031216AAA	HENDERSON	NV	20.000	20.000	66.63	27.0	25.86	129.28
KKLZ	FS	LIC	242C	BXLH20090825BIR	LAS VEGAS	NV	12.000	12.000	61.77	21.0	18.84	94.19
KCYE	FS	LIC	274C	BXLH20090903ACI	BOULDER CITY	NV	12.500	12.500	61.77	21.0	19.62	98.11
KVVU-TV	DT	CP	9	0000004367	HENDERSON	NV	86.000		279.07	82.8	0.00	0.00
KVVU-DT	DT	LIC	9	BLCDT20021120ABN	HENDERSON	NV	86.000		252.07	82.8	0.00	0.00
KVVU-TV	DT	APP	9	BPCDT20120427AAB	HENDERSON	NV	160.000		252.07	82.8	0.00	0.00
KLTV	DT	LIC	11	BMLEDT20120124ACO	LAS VEGAS	NV	105.000		238.16	68.3	0.00	0.00
	DT	CP	45	0000019136	Las Vegas	NV	1000.000		228.81	85.9	0.00	0.00
KVCW-DT	DT	LIC	29	BLCDT20070109AAW	LAS VEGAS	NV	1000.000		210.53	85.9	0.00	0.00
KVMY-DT	DT	LIC	22	BLCDT20090220ABX	LAS VEGAS	NV	1000.000		210.53	85.6	0.00	0.00
KBFY-LP	TX	CP	53	BDISTT20060802ANR	HENDERSON	NV	9.300		290.00	51.5	0.09	0.47
KVBC-DT	DT	LIC	2	BLCDT20050824ABJ	LAS VEGAS	NV	27.700		66.63	87.0	0.00	0.00
KBLR	DT	LIC	40	BXMLCD20120314ABE	PARADISE	NV	230.000		24.98	23.6	0.00	0.00
KBLR	DT	LIC	40	BLCDT20111014ABM	PARADISE	NV	1000.000		61.77	57.8	0.00	0.00

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862.96 4314.78

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S E E E N G I N E E R - RF LEVEL 862.96% OF THE RECOMMENDED ANSI RF RADIATION LIMIT FOR OCCUPATIONAL EXPOSURE ! ! !

S E E E N G I N E E R - RF LEVEL 4314.78% OF THE RECOMMENDED ANSI RF RADIATION LIMIT FOR GENERAL PUBLIC EXPOSURE ! ! !

CHECK FMSTUDY - IF AM WITHIN 0.3 KILOMETERS, S E E E N G I N E E R !  
 ### Designates record with insufficient engineering data to calculate RF contributions.  
 FM ANSI Study Completed.

\*\*\*\*\* FM Channel Study NO. 1 - Mass Media Bureau - Federal Communications Commission - 9-APR-19 05:45:07 \*\*\*\*\*

FFFFFF	M	M	FFFFFF	M	M	FFFFFF	M	M	FFFFFF	M	M	FFFFFF	M	M	
F	MM	MM	F	MM	MM	F	MM	MM	F	MM	MM	F	MM	MM	
FFFFF	M	MM	M	FFFFF	M	MM	M	FFFFF	M	MM	M	FFFFF	M	MM	M
F	M	M	F	M	M	F	M	M	F	M	M	F	M	M	
F	M	M	F	M	M	F	M	M	F	M	M	F	M	M	

FM Reference Data:

KAER	BMXPED20190325AAP	207C	FS	MESQUITE	NV	US	36.0034	115.0020					
Dist (km)	Azimuth From To	Call	Chan	Status	Location	St Ct	Latitude	Longitude	Da	File Number			
0.00	0.0 0.0	KAERFM2	207D	FB LIC	LAS VEGAS	NV US	36-00-34N	115-00-20W	Yes	BLFTB20170913ABD			
0.00	0.0 0.0	KAER	207C	FS CP	MESQUITE	NV US	36-00-34N	115-00-20W	Yes	BXPED20171115AAF			
0.00	0.0 0.0	KAER	207C	FS APP	MESQUITE	NV US	36-00-34N	115-00-20W	Yes	BMXPED20190325AAP			
0.06	0.0 180.0	KKLZ	242C	FS LIC	LAS VEGAS	NV US	36-00-36N	115-00-20W	No	BXLH20090825BIR			
0.07	22.0 202.0	KVEGFM1	248D	FB LIC	HENDERSON	NV US	36-00-36N	115-00-19W	Yes	BLFTB20031216AAA			
0.03	0.0 180.0	KRGT	257C2	FM CP	SUNRISE MANOR	NV US	36-00-35N	115-00-20W	No	BPH20180905ABJ			
** General Comments: One Step Application													
0.06	0.0 180.0	KCYE	274C	FS LIC	BOULDER CITY	NV US	36-00-36N	115-00-20W	No	BXLH20090903ACI			

There were 7 FM locations within 0.1 km of the FM reference coordinates.

\*\*\* FM Study normal termination on 9-APR-19 AT 05:45:13