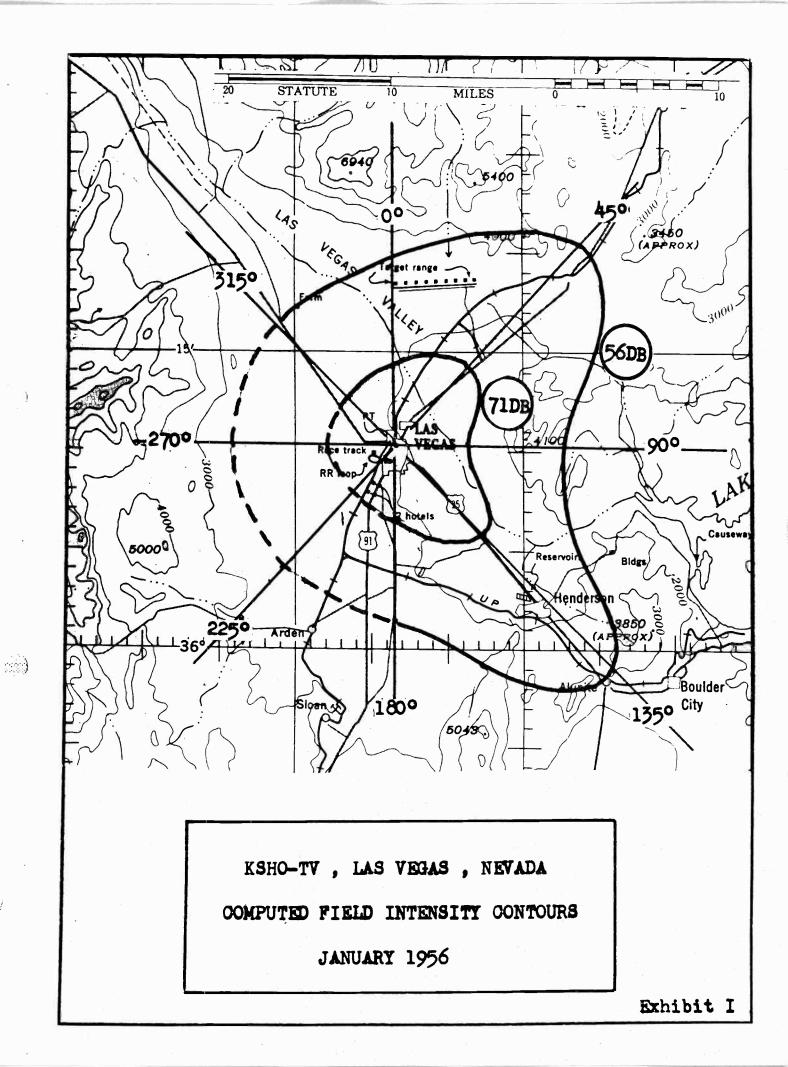
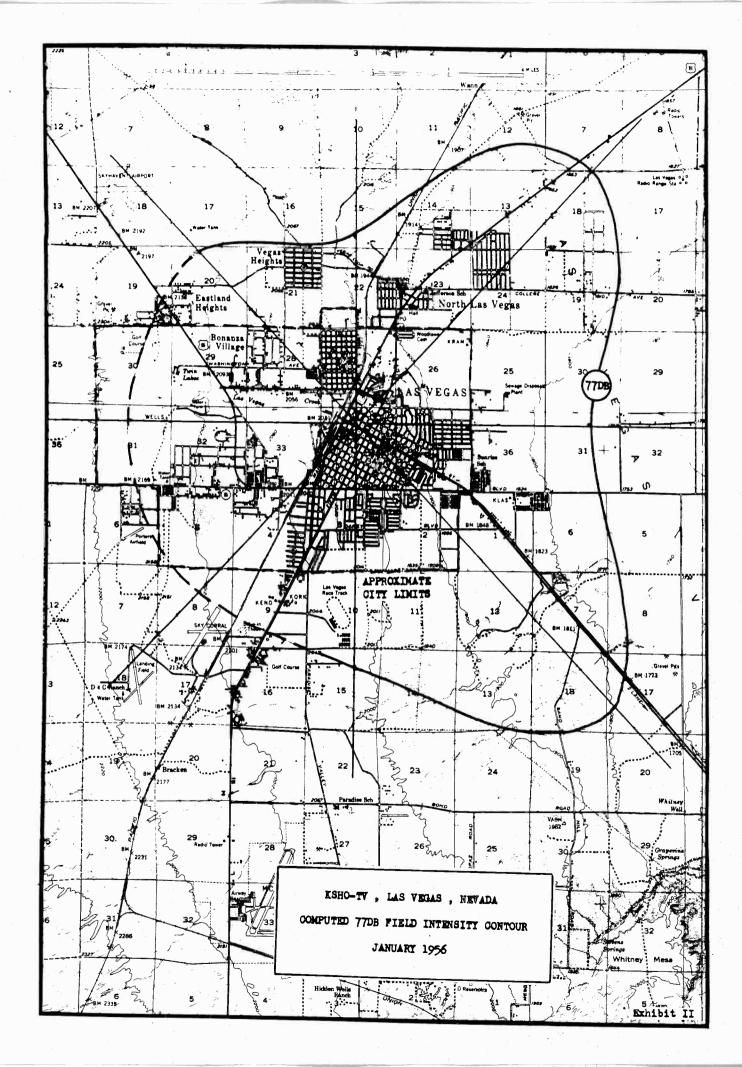
1403 RJ 050	3 2/3/51	5 Engr	COMPLESSION	PCT-37	47. Trip			
Broadcast Application	1		TIONS COMMISSION		Section V-C			
TELEVISION BROADCA ENGINEERING DATA	ISI M	e of applicant ritz Zenoff		81930	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			
1. Purpose of authorization	applied for: (Inc	licate by check mark)		-	FR 1956			
(If application is for a change E is of a charact answer all paragraphs, o complete only paragraph	er which will char	nge coverage or incre	ase the overall height	of the antenna stru	cture more than 20 feet,			
A. Construct a new station	. 0	MISION (TV)	F. Construct or ch	ange auxuliary ante	1			
B. Change effective radiate antenna height above as	ted power or FE	B 3 1956	G. Change transmit H. Install auxilia	ry or alternate				
C. Change transmitter loca			main transmitte		monitor			
D. Change frequency E. Change antenna system	ERDAD	Cast Burea	Change studio 1		L MONTE GOT			
2. Facilities requested			7. (a) Antenna struct	ure				
Frequency			Is the proposed construct		Yes No			
010 - 016	Channel No.	13	vicinity of any other radio proposed transmitting and					
210 216	_Mc.		any other radio station?		1			
1	fective Radiated	Antenna height	engineering data showing	details and effect upor	other station.			
(visual)	ower (aural)	above average terrain	Will proposed structure be		O15 Yes X No			
0.579	n dbk: -5.4 n kw: 0.288	139.6 feet	top of a building? If "Ye of building (distance from	_ ,				
In kw: U.) [5] In kw: 3. Station location (principal)		139.0 Teet	Overall height in feet abo	9	eight in feet above mean			
State State	City or town		(Do not include the heigh obstruction lighting which	- 1	. (Do not include the any obstruction lighting			
Nevada	Las V	Гедав	required.)	1 -	y be required.)			
4. Transmitter location			240.5	5	2256.5			
State	County				22,0.7			
Nevada	Clark		Height of antenna radi	(2)	246.5 feet			
City or town	Street Address	s (or other identifi-	in feet above mean sea Geographical coordinat	. Teveri				
Las Vegas	Fre	mont Hotel	North latitude West longitude					
5. Main studio location	200	l and Fremont	J.O 10 1	2.5	115 8 34			
State Nevada	County	Lark	How were coordinates determined? From 1/62,500 topo map					
City or town	Street address	5	Indicate by check mark zone in which structum	1	2 🗶 3			
Las Vegas	Fremont I 2nd and I		located. (b) Antenna data		100110 to F2 ×			
6. Transmitters			Visual Make	-	Type No.			
Visual Make	Type No. Ra	ted power	Prodeli	•	ELA=7			
Adler	WST-200 In	dbk: -6.98	1100011					
Aural	In	kw: 0.2	Number of sections	Rated imput power in dbk	Power gain in db			
Make		ted Power	1 4		6.00			
Adler	MOT	dbk: -10.0 kw: 0.10	Aural (if separate) S	8.9	isual			
If the above transmitters are co	mposite or of types	for which data have not	Make	2010 G 0 1 VI	Type No.			
been filed with the F.C.C., atta showing of transmitter details i								
The showing should include sch								
operating constants of the last	radio stages, full de	tails of frequency con-	Number of sections	Rated imput power in dbk	Power gain in db			
trol, vestigial sideband filter (inetworks. If changes are to be				111 000				
networks. If changes are to be schematic diagram and give full					1			
	.,,,,,	*	If directional antenn	a is proposed, give	full details including			
(a) Deposibe in Euclibit No.	ALTER NO	he used for deter-	horizontal and vertical plane radiation patterns, as					
(a) Describe in Exhibit No. mining and maintaining power of specified in this application.		The used for deter- ters to the values	horizontal and vertic	al plane radiation	Exhibit No.			
mining and maintaining power of specified in this application.		•	Is electrical or mech proposed? If so, des	anical beam tilting	Yes No x			
mining and maintaining power of specified in this application.	utput of the transmit	ters to the values	Is electrical or mech proposed? If so, des	anical beam tilting cribe fully in Exhi and pertinent verti	Exhibit No.  Yes No.  bit No.  cal radiation patterns.			

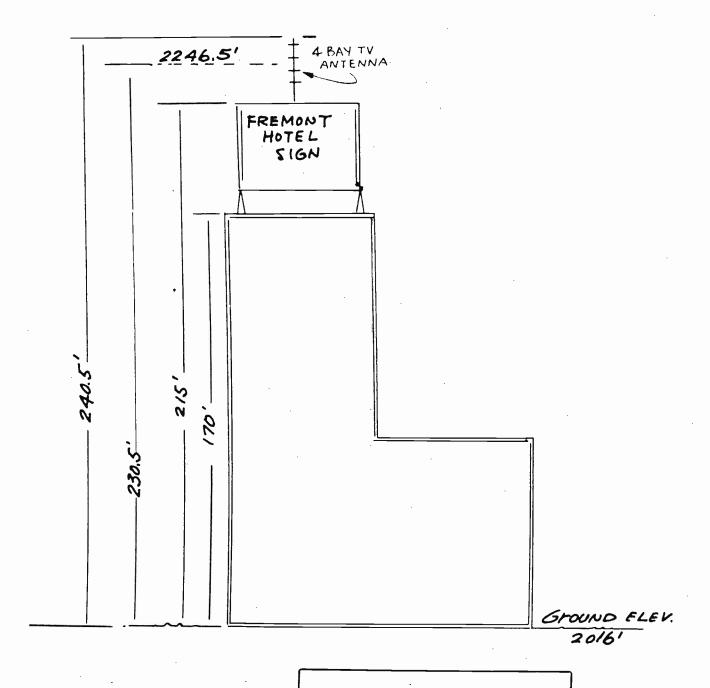
Styroflex (or equivalent)  Size (nominal inside transverse dimensions) in inches  1.472  Length in feet Power loss in db for this length  1.472  400  1.44  Size (nominal inside transverse dimension) in inches  Size (nominal inside transverse dimension) in inches  Length in feet Power loss in db for this length  1.472  9. Proposed operation  (a) Visual  Transmitter power output (after vestigial side-band filter, if used)  In dbk:  1.48  In dbk  In dbk: -10.0  O  In dbk: -10.0  O	loss in do for						
Styroflex (or equivalent)  Size (nominal inside transverse dimensions) in inches  1.472  Length in feet power loss in db for this length  1.472  Power loss in db transverse dimension) in inches  1.472  Power loss in db transverse dimension) in inches  1.472  Power loss in db transverse dimension) in inches  (a) Visual  Transmitter power output (after vestigial sideband filter, if used) In dbk:  In dbk:  1.48  Power loss in db transverse dimension) in inches  (b) Aural  Transmitter power output (after vestigial sideband filter, if used) In dbk:  In dbk:  1.48  In dbk:  Type No.  Rated in mix in dbk  Size (nominal inside transverse dimension) in inches  Imput to transmission line in dbk:  In dbk:  In dbk:  In dbk:  In dbk:  1.40  In dbk:  In	loss in do for						
Styrofler (or equivalent)  Size (nominal inside transverse dimensions) in inches  1.472  Length in feet Power loss in db for this length  1.472  Length in feet Power loss in db for this length  1.472  Power loss in db transverse dimension) in inches  1.472  Length in feet Power loss in db transverse dimension) in inches  1.472  Proposed operation  (a) Visual  Transmitter power output (after vestigial sideband filter, if used)  In dbk:  1.48  Length in feet Power loss in db transverse dimension) in inches  (b) Aural  Transmitter power output (after vestigial sideband filter, if used)  In dbk:  1.48  Length in feet transverse dimension) in inches  Transmitter power output output (after vestigial sideband filter, if used)  In dbk:  1.49  Length in feet Power loss in db transverse dimension) in inches  Imput to transmission line in output (after vestigial sideband filter, if used)  In dbk:  1.49  Length in feet Power loss in db transverse dimension) in inches	loss in do for						
transverse dimensions) in inches  1.472  400  1.44  1.44  1.472  400  1.44  transverse dimension) in inches  this legth in inches  400  1.47  400  1.44  400  1.44  400  1.44  400  1.44  400  400							
9. Proposed operation  (a) Visual  Transmitter power output (after vestigial side-band filter, if used) In dbk: -6.98  O  1.47  (b) Aural  Transmitter power output (after vestigial side-band filter, if used) In dbk: -6.98  O  -6.98  In dbk: -10.0  O							
(a) Visual  Transmitter power output (after vestigial side-band filter, if used) In dbk: -6.98  (b) Aural  Transmitter power output in db: mission line in dbk:  In dbk: -10.0  (b) Aural  Transmitter power output in db: mission line in dbk: In dbk: -10.0	1						
Transmitter power output (after vestigial side-band filter, if used) In dbk: -6.98  In dbk: -6.98  In dbk: -10.0  In dbk: -10.0							
11 mk. 0000   0   -6.98	mput to trans- mission line in dbk:						
In kw: 0.2	-10.0						
line power in dbk: gain in db: ated power loss in db: gain in db: ated power loss in db:	Effective radi- ated power						
-1.4	In dbk: -5.4 In kw: 0.288						
10. Modulation monitors 14. (a) Attach as Exhibit No. B and C map (S)	N(ELLE).						
(a) Visual monitor or monitoring equipment for the area within 15 miles of the proposed tree	rey quadrangles)						
Make Kay Lab Type No13A cation and show drawn thereon the following date 1. Proposed transmitter location—accurately plo	ta:						
(b) Aural monitor 2. Transmitter location and call letters of all	2. Transmitter location and call letters of all known radio stations (except amateur) and the location of known commercial and government receiving stations within 2 miles of the proposed transmitter location;  3. Character of the area within 2 miles of proposed transmitter location, suitably designated as to residential, business, industrial, and rural nature;						
Hewlitt Packard 335 ER known commercial and government receiving st							
11. Frequency monitors  3. Character of the area within 2 miles of prop							
business, industrial, and rural nature;							
Rewlitt Packard 335 ER -500 cps 4. At least eight radials each extending to a department of which must extend the proposed transmit	tter location,						
(b) Aural monitor  Make  Hewlitt Packard  Type No. 335 KR  Accuracy  1000 cps  ON FILE*							
12. If the above monitors or monitoring equipment have not been approved by the F.C.C., include as Exhibit No. a brief technical description of each. FCC approved  (b) Attach as Exhibit (D) ON FILE; reasonably large scales for the radials in (a) Each graph shall show the elevation of the ante-	(5) above. cenna radi-						
13. Will the studios, cameras, microphones, and other equipment proposed for transmission of programs be designed for compliance with the Commission's Rules?  Ation center. Identify each graph by its bearing proposed transmitter location. Direction of transmitter location, Direction of the shall be zero azimuth, with angles measured closed transmitter location. Show source of topographical data on each.	crue north lockwise.						
15. From the profile graphs in 14(b), for the eight mile distance between two and ten miles from the proposed transm and in accordance with the procedure prescribed in the Commission's Rules, supply the following tabulation of data:	mitter location,						
	istance in miles to the Grade B contour 56 db						
0 0 2064 feet 182.5 feet -2.38 dbk3.2 4.5 mi.	16.0						
90 2070 176.5 -2.38 3.1 4.4 135 1755 491.5 -2.38 5.0 7.5	19.0						
180 2076 170.5 -2.38 3.05 4.4 2006 -49.5 -2.38 3.0 4.0	10.4						
0160 -015 5 -0.28 3.0 1.0	10.0						
2/0	10.0						
NOTE: 225° 315° radials assumed to produce coverage	ge_equal to						
- Communication	r irom snreh						
Average 2107 minimum in other directions or line of sight *Radial over principal community if not included above. Do not include in average.	struct						

	<u> </u>
Broadcast Application TELEVISION BROADCAST  16. Attach as Exhibit No. and III (s) (Sectional Aeronautical	Section V-C, Page 3  (F THRU P - ON FILE)*  17. Attach as Exhibit No. a sufficient number of aerial
charts where obtainable, preferably without aeronautical over- lay) of the area proposed to be served and shown drawn thereon:	photographs taken in clear weather at appropriate altitudes and angles to show the nature of the surrounding terrain in
<ul> <li>(a) Proposed transmitter location and the radials along which the profile graphs have been prepared;</li> </ul>	the vicinity of the proposed transmitter site. The photo- graphs must be marked so as to show compass directions. Photo- graphs taken in eight different directions from an elevated
(b) The studio location and boundaries of the principal community; <b>Studio in lower part of hotel</b>	position on the ground will be acceptable in lieu of the
(c) The predicted Grade A and Grade B contours from 12 above;	Give date photographs were taken.  ON FILE*
(d) The required minimum field strength contour;  (e) Scale of miles.	
be provided over the entire principal community proposed to be se	n accordance with the method prescribed in the Commission's Rules, erved?
Areas will have signal of 77 db or more,  19. Will the main studio be located within the limits of the principle.	
community proposed to be served.	Yes X No
20. (a) Does the proposed transmitter location comply with the min the Commission's Rules?	nimum separation requirements of Yes X No
or if other channel separations are proposed that are less such separations below. (Include existing stations, proposed the location and geographical coordinates of each antenna.	than the applicable minimum separation requirement plus 20 miles, is than the applicable minimum separations plus 10 miles, list osed stations and cities which appear in the table of assignments; proposed antenna or reference point as appropriate; the distance ethod used in each instance to measure the distance.) If none, so
Non	
	·
21. If this is an application for modification of construction pe	ermit state briefly as Exhibit No. the present status of
construction and indicate when it is expected that construction	will be completed.
	iers being entered into. To be filed later
Applicant expects to begin broadcasting	by February 15, 1956.
STATE OF CALIFORNIA ) S. C.	<del></del>
COUNTY OF SANTA ORUZ )	
Subscribed and sworn to before me this 10t	h day of January, 1956.
NotaryM	y Commission Expires
Dat January 10, 1956	Many . Machael

	cation				
1		FEDERAL CO	DMMUNICATIONS COMMISSION		
ANTENNA	AND SITE INFORM (see instruction B	MATION	Moritz Z	noff	Section V-G (Anten
	Section I)	Address w	here applicant can be reach	ed in nerom	-1.
Since this Section navigation, it is n	is submitted to the Regi				125 <b>1</b> 956
Legal Counsel D	evid Zenoss	to called for be supplied. Pr	the Air Coordinating Committee for evicusly and separately filed data  Purpose of application	clearance in connection	n with obstructions to air
Address F	reidmen Budl	3.4	Purpose of application	(Check appropriate	box) (Increase he
		vada	M. New antenna const-	seatt.	
consulting mgm	eer		b. Alteration of exist.		es 🖂 structure
Address	rant R. Wrat	hall	2. Features of surroun		
	tos, Califor	mie	trees, water tanks, to	cons or excisting men mers, etc.) which in	made structures (hills, the opinion of the appli-
Class of station		ies requested	mize the seronautical h	eld the antenna from	the opinion of the appli- aircraft and thereby mini-
TV	(	Channel 13	I	be highest	•
<ol> <li>Location of an State</li> </ol>	ntenna		within 2.0	miles of na	oposed site.
Nevada	County	City or Town		and of pr	oposed site.
Pract enterne 1	Clark	Las Vegas			
give distance and	tion (street address direction from and	s) (If outside city limit name of nearest town)	s, Submit as Exhibit No.	R a chow	ch is plotted the exact
Fremont Ho	tel. 2nd and	Fremon+	1 10Cattion of the	a site, and also the	ch is plotted the exact he relative location of
in downtown	Las Vegas.		The chart wood above		-6 man made structures
			The chart used shall b landing chart on rever cal Chart, choice dense		
or directional ant	ites (to be determin	ed to nearest second.	should be used	general, the Secti	onal Assessment and the to
or single vertical orth latitude	radiator give towe	r location.	should be used only who from a landing area or obtainable These Coast and Conduction	n the antenna site when an Instrument	is more than 10 miles
36 ° 10 '12	West	longitude	obtainable. 1/ These Coast and Geodetic Surv 1/ Exception - Where th	charts may be purel ey, Washington 25	hased from the U.S.
		<i>5</i> ° 8′ 34″	DOIDGOTHE OF - 7	- P-OPODOU AITHANA	Cito !
nearest establic	stance, and bearing shed airway within 5	to center line of	site, namey(s) and exist	self-made, large so	
	arrugh MICHIN S	miles 1.5			
List all landing			mires of 10 503.	VE) IAD.	
List all landing area from the an	areas within 10 mi	les of anterna site. Giv	miles SE to 203°-	the results	
List all landing area from the an	areas within 10 mi tenna site. Landing Area	les of anterma site. Giv	re distance and direction to	the nearest bounds	
List all landing area from the an (a) Sky Hayer (b) Yegas Sky	g areas within 10 mi tenna site. Landing Area 1 - 4	les of anterma site. Giv	re distance and direction to	the nearest bounds	
List all landing area from the an (a) Sky Haver (b) Yegas Sky (c) DC4 Ranch	g areas within 10 mi itema site. Landing Area 1 - 4 7 Corral - 36	Mi NW  Mi SW	e distance and direction to  MCCarran - 5  (e) Nellis - 8	the nearest bounds	
List all landing area from the an (a) Sky Haver (b) Yegas Sky Cc DC4 Ranch	g areas within 10 mi itema site.  Landing Area  1 - 4  7 Corral - 35	Mi NW  Mi SW  Mi SW	e distance and direction to  MCCarran - 5  (e) Nellis - 8	the nearest bounds  5 M1 - SSM  5 M1 - NE	
List all landing area from the an (a) Sky Haver (b) Yegas Sky Cc DC4 Ranch Description of a Antenna 1s	g areas within 10 mi itema site. Landing Area 1 - 4 7 Corral - 3 antenna system (If d	Mi NW  Mi SW  Mi SW  Mi SW  irectional, give spacing	e distance and direction to  Minimum  (d) McCarran - 5  (e) Nellis - 8	the nearest bounds  5 M1 - SSW  5 M1 - NE	
List all landing area from the an (a) Sky Haver (b) Yegas Sky (c) DC4 Ranch Description of a Antenna 1s this will	gareas within 10 mi itema site.  Landing Area  1 - 4  7 Corral - 35  antenna system (If description of the counted co	Mi NW  Mi SW  Mi SW  Mi SW  irectional, give spacing	e distance and direction to  Minimum  (d) McCarran - 5  (e) Nellis - 8	the nearest bounds  5 M1 - SSW  5 M1 - NE	
List all landing area from the an (a) Sky Haver (b) Yegas Sky (c) DC4 Rench Description of a Antenna 1s this will pe Prode	gareas within 10 mi sterma site.  Landing Area  Corral - 3  antenna system (If d steel latti be mounted c  lin, Inc.	Mi NW Mi SW Mi SW Mi SW Mi SW Mirectional, give spacing Ce structure and top 45-foot second	e distance and direction to  MCCarran - 5  (e) Nellis - 8	the nearest bounds  5 M1 - SSW  5 M1 - NE	
List all landing area from the an (a) Sky Haver (b) Yegas Sky (c) DC4 Rench Description of a Antenna 1s this will pe Prode scription of tower	g areas within 10 mi  tterma site.  Landing Area  7 Corral - 35  antenna system (If d  steel latti be mounted c  lin, Inc.  (s) Lattice	Mi NW Mi SW Mi SW Mi SW Mi SW Mirectional, give spacing Ce structure and top 45-foot second	e distance and direction to  Minimum  (d) McCarran - 5  (e) Nellis - 8	the nearest bounds  5 M1 - SSW  5 M1 - NE	
List all landing area from the an (a) Sky Haver (b) Yegas Sky (c) DC4 Ranch Description of a Antenna 1s this will pe Prode scription of tower (height figures (height figures area from the surporting are (height figures area from the surporting area from the an area from the area	gareas within 10 mi sterma site.  Landing Area  1 - 4 7 Corral - 35 antenna system (If d steel latti be mounted c  lin, Inc. (a) Lattice  Yes	Mi NW  Mi SW  Mi SW  Mi SW  Sectional, give spacing ce structure and top 45-foot sections.	e distance and direction to  MCCarran - 5  (d) McCarran - 5  (e) Nellis - 8  and orientation of towers).  d has overall her ign atop new Frem	the nearest bounds  5 M1 SS  5 M1 NE  ght of 25'  cont Hotel b	6 1/2", uilding.
List all landing area from the an (a) Sky Haver (b) Yegas Sky (c) DC4 Ranch Description of a Antenna 1s this will pe Prode scription of tower (height figures obstruction 1)	gareas within 10 mi itema site.  Landing Area  1 - 4 7 Corral - 35 interna system (If d steel latti be mounted c  lin, Inc. (e) Lattice  Yes 3 should not include	Mi NW  Mi SW  Mi SW  Mi SW  Sectional, give spacing ce structure and top 45-foot sections.	e distance and direction to  MILLIAN  (d) McCarran - 5  (e) Nellis - 8  and orientation of towers).  d has overall her ign atop new Fren  Tub	the nearest bounds  5 M1 SSW  5 M1 NE  ght of 25'  cont Hotel b	6 1/2", uilding.
List all landing area from the an area from the area from th	gareas within 10 mi itema site.  Landing Area  1 - 4 7 Corral - 35 interna system (If d steel latti be mounted of lin, Inc. (e) Lattice Yes 3 should not include ighting	Mi NW  Mi SW  Mi SW  Mi SW  Sirectional, give spacing ce structure and top 45-foot service	e distance and direction to  MCCarran - 5  (e) Nellis - 8  and orientation of towers). d has overall hei ign atop new Fren	the nearest bounds  5 M1 SS  5 M1 NE  ght of 25'  cont Hotel b	6 1/2", uilding.
List all landing area from the an area from the area from th	gareas within 10 mi itema site.  Landing Area  1 - 4 7 Corral - 35 interna system (If d steel latti be mounted c  lin, Inc. (s) Lattice  Yes 3 should not include ighting) slements ground	Mi NW  Mi NW  Mi SW  5 Mi SW  irectional, give spacing  ce structure and top 45-foot s  Steel  Guyed  #1  20' 6 1/2"  240.5'	e distance and direction to  MILLIANTE  (d) McCarran - 5  (e) Nellis - 8  and orientation of towers). d has overall heilign atop new Fren  Tub  #2 #3	the nearest bounds  5 M1 SSW  5 M1 NE  School 25'  cont Hotel b	6 1/2", uilding.  part #6
List all landing area from the an area from the an (a) Sky Haver (b) Yegas Sky (c) DC4 Rench Description of a Antenna 1s this will pe Prodescription of tower (height figures obstruction 1) ght of radiating earall height above as combination of S	gareas within 10 mi sterma site.  Landing Area  Corral - 35  Antenna system (If d steel latti be mounted co  Lin, Inc. (s) Lattice  Yes  should not include tenting) blements ground meen sea level tandard, FM, or TV	Mi NW  Mi NW  Mi SW  Mi SW  Sirectional, give spacing on top 45-foot s  Steel  Guyed  #1  20' 6 1/2"  240.5'  Perenting in many contractions in the second sec	e distance and direction to  MCCarran - 5  (d) McCarran - 5  (e) Nellis - 8  and orientation of towers). d has overall hei ign atop new Frem  Tub  #2 #3	the nearest bounds  5 M1 SSW  5 M1 NE  Sht of 25'  cont Hotel b  clar (Pole) In  #4 #5	6 1/2", uilding.
List all landing area from the an area from the area from th	gareas within 10 mi terma site.  Landing Area  7 Corral - 35  Antenna system (If d steel latti be mounted co  lin, Inc.  (s) Lattice  Yes  3 should not include tenting blements ground  mean sea level tandard, FM, or TV o a horizontal plan	Mi NW  Mi NW  Mi SW  Mi SW  Steel  Guyed  #1  20' 6 1/2"  240.5'  2256.5'  Departion is proposed on for the proposed	e distance and direction to  AMERICA  (d) McCarran - 5  (e) Nellis - 8  and orientation of towers).  d has overall heilign atop new French  #2 #3  the same multi-element array	the nearest bounds  5 M1 SSW  5 M1 NE  ght of 25'  cont Hotel b  ular (Pole) In  #4 #5	6 1/2", uilding.
List all landing area from the an area from the area from th	gareas within 10 mi sterma site.  Landing Area  1 - 4 7 Corral - 3 2 3 3 3 3 3 3 3 3 4 7 Corral - 3 3 3 3 3 3 3 3 3 4 7 Corral - 3 3 3 3 3 3 3 4 7 Corral - 3 3 3 3 3 3 3 4 5 5 3 3 3 4 5 6 6 7 6 8 7 8 8 8 8 8 8 8 8 8 8 8 8 8 8	Mi NW  Mi NW  Mi SW  Mi SW  Mi SW  Irrectional, give spacing  Ce structure and  On top 45-foot s  Steel  Guyed  #1  20' 6 1/2"  240.5'  2256.5'  Operation is proposed on for the proposed antenna Clearly indicate if any on sketch for the proposed on the proposed on sketch for the proposed on the proposed on sketch for the proposed on the propos	e distance and direction to  ALLEANTE  (d) McCarran - 5  (e) Nellis - 8  and orientation of towers).  d has overall her ign atop new Frem  #2 #3  the same multi-element array system, giving heights of towers are existing. TV	the nearest bounds  5 M1 SSM  5 M1 NE  Spht of 25'  cont Hotel b  ular (Pole) In  #4 #5	6 1/2", uilding.  part  #6  or proposed) sub-
List all landing area from the an area from the area from th	gareas within 10 mi sterma site.  Landing Area  Corral - 35  Antenna system (If d steel latti be mounted co  lin, Inc. (s) Lattice  Yes  should not include ighting) slements ground meen sea level tendard, FM, or TV a horizontal plan i spacing in feet.  II a vertical pla in feet for all sign	Mi NW  Mi NW  Mi SW  Mi SW  Mi SW  Irrectional, give spacing  Ce structure and  n top 45-foot s  Steel  Guyed  #1  20' 6 1/2"  240.5'  2256.5'  peration is proposed on for the proposed antenna (Clearly indicate if any m sketch for the proposed ifficant features. Clear	e distance and direction to  ALLEANTE  (d) McCarran - 5  (e) Nellis - 8  and orientation of towers).  d has overall her ign atop new Frem  #2 #3  the same multi-element array system, giving heights of towers are existing. TV	the nearest bounds  5 M1 SSM  5 M1 NE  Spht of 25'  cont Hotel b  ular (Pole) In  #4 #5	6 1/2", uilding.  part  #6  or proposed) sub-
List all landing area from the an area from the area from th	gareas within 10 mi sterma site.  Landing Area  7 Corral - 35  anterma system (If d steel latti be mounted of  Lin, Inc. (a) Lattice  Yes  should not include lighting) slements ground meen sea level tandard, FM, or TV a horizontal plan is spacing in feet.  II a vertical pla in feet for all sign as system designed s and at the uppermost	Mi NW  Mi NW  Mi SW  Mi SW  Mi SW  Mirectional, give spacing  Ce structure and  n top 45-foot s  Steel  Guyed  #1  20' 6 1/2"  240.5'  2256.5'  peration is proposed on for the proposed antenna Clearly indicate if any me sketch for the proposed if icant features. Clear to that obstruction lights point(s)?	e distance and direction to  ALLEANTE  (d) McCarran - 5  (e) Nellis - 8  and orientation of towers).  d has overall her ign atop new Frem  #2 #3  the same multi-element array system, giving heights of towers are existing. TV	the nearest bounds  5 M1 SSM  5 M1 NE  Spht of 25'  cont Hotel b  ular (Pole) In  #4 #5	6 1/2", uilding.  part  #6  or proposed) sub-
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VERTICAL PLAN SKETCH

TV ANTENNA AND SUPPORTING

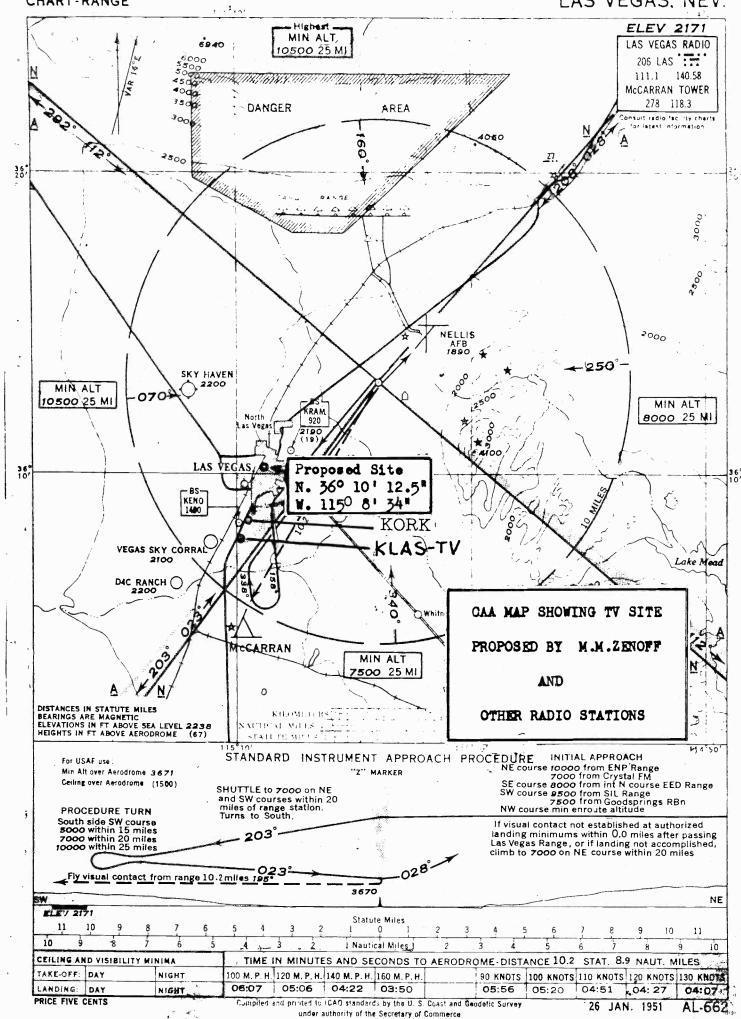
HOTEL AND SIGN

#### Minimum Field Over City

For Charmels 7-13, FCC Rules provide a median field intensity of 77 db shall be provided over the entire principal city to be served.

Because of rough mountains approximately 18 miles distant from the site and the resulting general rise in ground elevation, "negative" antenna heights are computed for 225, 270 and 315 degree radial directions. Actually the proposed KEHO-TV entenna is visible from any point in the 225°-315° sector to, and in most locations, beyond approximately 12 miles. Based upon freespace radiation conditions the 77 db contour for proposed KSHO-TV operation will be radiated to approximately 12 miles. In order not to show greater coverage for "negative" antenna heights than for "positive" height computations, coverage in the 225°-315° sector was assumed to equal the minimum computed in the "positive" height directions. With this assumption approximately one square mile of city area west of the site is outside the computed 77 db signal contour (See Exhibit II). Most distant part of the city is 3.7 miles west of the proposed site. Since the proposed site is visible from any ground point in the western part of the city minimum fields should be computed in a realistic manner. Assuming free-space radiation the minimum field over the western sections of the city will be approximately 89 db. In my opinion, such a field is to be expected and signal service exceeding 77 db level will be radiated over all parts of Las Vegas with the proposed modified KSHO-TV operation.

### MCCARRAN FIELD LAS VEGAS, NEV.



FRANK ROBERSON: FRANK U. FLETCHER RUSSELL ROWELL

OUNSEL

#### SPEARMAN AND ROBERSON

METROPOLITAN 8-0023

Attorneys at Law Munsey Building Washington 4, D. C

August 1h, 1956



Miss Mary Jane Morris, Secretary Federal Communications Commission Washington 25, D. C.

Ret KSHO-TV, Les Veges, Nevada

Dear Miss Morrist

There is filed berewith an application in triplicate on FCC Form 301, in behalf of Moritz Zenoff, operator of Station KSHO-TV at Las Vegas, Nevada in which construction permit is requested for the installation of a deplicate main transmitter.

In the event that any additional information is desired in connection with the enclosed application, it will be furnished promptly upon request.

Very truly yours,

SPEARMAN AND ROBERSON

By

Russell Rowell Attorneys for KSHO-TV

Enc. RR:bjv

with mair Transmittee

## For Duplicate Main Transmitter

FCC Form 301 February 1956

Form Approved Budget Bureau No. 52-R014.13

Section I

MAKKE

FEDERAL COMMUNICATIONS COMMISSION

APPLICATION FOR AUTHORITY TO CONSTRUCT A NEW BROADCAST STATION OR MAKE CHANGES IN AN EXISTING BROADCAST STATION

#### INSTRUCTIONS

A. This form is to be used in applying for authority to construct a new AM (standard), commercial FM (frequency modulation), or television broadcast station, or to make changes in existing broadcast stations. This form consists of this part, Section I, and the following sections:

Section II, Legal Qualifications of Broadcast Applicant

Section III, Financial Qualifications

Section IV, Statement of Program Secvi-

Section V-A, Standard Broadcast Diginal

Section V-B, FM Broadcast Engineering Deta

Section V-C, Television Broadcast Engineering Ant

Section V.G. Antenna and Site Information

B. Prepare three copies of this form and all exhibits. Sweet of Section I. Prepare two additional copies (a total of 100) of Section V-G and associated exhibits. File all the above with Federal Communications Commission, Washington 25, D. C.

- C. Number exhibits serially in the space provided in the body of the form and list each exhibit in the space provided on page 2 of this Section. Show date of preparation of each exhibit, antenna pattern, and map, and show date when each photograph was taken.
- D. The name of the applicant stated in Section I hereof shall be the exact corporate name, if a corporation; if a partnership, the names of all partners and the name under which the partnership does business; if an unincorporated association, the name of an executive officer, his office; and the name of the association. In other Sections of the form the name need be only sufficient for identification of the applicant.
- E. Information called for by this application which is already on file with the Commission (except that called for in Section V-G) need not be refiled in this application provided (1) the information is now on file in another application or FCC Form filed by or on behalf of this applicant; (2) the information is identified fully by reference to the file number (if any, the FCC form number, and the filing date of the application or other form containing the information and the page of paragraph referred to, . and (3) after making the reference, the applicant states: "No change since date of filing." Any such reference will be considered to incorporate into this application all information, confidential or otherwise, contained in the application or other form referred to. The incorporated application or other form will thereafter, in its entirety, be open to the public.
- F. This application must be executed by applicant, if an individual; by a partner of applicant, if a partnership; by an officer of applicant, if a corporation or association; or by attorney of applicant only under conditions shown in Section 1.303, Rules Relating to Practice and Prooedure, in which event satisfactory evidence of disability of applicant or his absence from the Continental United States and authority of attorney to act must be submitted with application.
- G. Before filling out this application, the applicant should familiarize himself with the Communications Act of 1934, as amended, Parts 1, 2, 3 and 17 of the Commission's Rules and Regulations and the Standards of Good Engineering Practice.
- H. BE SURE ALL NECESSARY INFORMATION IS FURNISHED AND ALL PARAGRAPHS ARE FULLY ANSWERED. IF ANY PORTIONS OF THE APPLICATION ARE NOT AP-PLICABLE, SPECIFICALLY SO STATE. DEFECTIVE OR INCOMPLETE APPLI-CATIONS MAY BE RETURNED WITHOUT CONSIDERATION.

File No.

Name and post office address of applicant (See Instruction D)

MORITZ ZENOFF FREMONT HOTEL LAS VEGAS, NEVADA

Send notices and communications to the following-named person at the post office address indicated if different than above Moritz Zenoii - above; cy to Spearman & Roberson, Munsey Bldg, Wash 4 D.C.

<ol> <li>Requested</li> </ol>				~ #	_		
1. nequested	facilitie	s					
Frequency	Channel	Powe	er in	kilowa	itts		nimum bours
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MC	13	p.43	0	0.	430	1	8 plus
Hours of	operation						
Unlimited X		Sharing	g with	1	Othe	er -	
Daytime only		(Speci:	fy Sta	itions)	(Spe	ecify	')
Limited		}					
Type of static	on (as Sta	ndard,	FM, Te	elevisi	ion)		
Station 1	ocation			-			
Las Ve	gas		St	Neva	ada		
2. If author: requested	ity to mak	_		_	_	tati	on is
(a) Present	facilities	8.80	110	18 8	DOAB		
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Hours of	operation						
Unlimited		Sharing	g with	1	Other	•	
Daytime only		(Speci	fy Sta	ations)	(Spec	ify)	
Limited		•					
Limited  Station 1	location		-				

changes in information filed with the Commission in prior applications or reports. In the spaces below check Sections submitted herewith and as to Sections not submitted herewith refer to the prior application or report containing the requested information in accordance with Instruction E. (If contemplated expenditures are less than \$5,000, complete paragraph 1 of Section III only. Section IV is not required for applications for minor changes not involving change in power, change in frequency, change in hours of operation, or moving from city to city.)

	Section No. Para. No. Reference (File o	r Form No. and Date)
	Section II - on file -	מפסד מסממ
	Section III - on file - See	BPC1=1907
1	Section IV - on file -	
	Section V -C - Herewith	
	Have there been any substantial changes	Yes No X
	in the information incorporated in this	
ı	errollogation by moformous in this	

If this application is contingent on the grant of another pending application, state name of other applicant and file number of other application.

Not Contingent

FCC Form 301			
The applicant hereby waives any claim	n to the use of any particula	r frequency or of the ether as	Section I, Page 2 against the regulatory power of the
United States because of the previous with this application. (See Section	304 of the Communications Ac	t of 1934).	
The applicant represents that this applicant of any other application with-which it may	may be in conflict.		
All the statements made in the applic a material part hereof and are incorp	porated herein as if set out	in full in the application.	
The applicant, or the undersigned on as to all matters which are relevant	the applicant's behalf, stat to this application and that	es that he has endeavored to su he has done so as to all matte	upply full and correct information ers within his own knowledge.
Dated thisday ofA	1 19 56.		T 88
		/s/ Moritz	of applicant)
		By Moritz Zenoff	- Self
Subscribed and sworn to			Title
before me this	nyat, 19		
(SEAL) (Notary public's seal must be affixed	•	/ b/ Devoy Desupota	ry Public
law of jurisdiction requires, otherw that law does not require seal.)	rise state		
If applicant is represented by legal	<del></del>	ssion expires6966	
or engineering counsel, state name	Eng. Grant R. Wi Legal: Spearman a	rathall, Aptos, Cal: nd Roberson, Washin	if. gton, D. C. Munsey Bldg
EXHIBITS furnished as required by this Exhibit No.   Section and Para.	As form: Name of officer or employe	e (1) by whom or (2) under	Official title
No. of Form	whose direction exhibit w	as prepared (show which)	
This app	lication is for d	uplicate main	
transmit	ter. It is the s	ame as the	
leased f:	ently in use. It rom Kay Labs, San	ls to be Diego.	
Californ equipment	iia, as is other to	echnical	
adarbuen			
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Rated loss: Visual \_

Aural

If yes, describe fully in Exhibit No.

Styre (nominal inside transverse dissensions)  1.1/2  1.1/			TELEVIS	STON BROADCAS	ST ENGINEERING DAT	A			Sec	tion V-C, Pag
Streen (nominal inside transverse dimensions) in inches  1.1/72  1.00  1.1/12  1.00  1.1/12  1.00  1.1/12  1.00  1.1/12  1.00  1.1/12  1.00  1.1/12  1.00  1.1/12  1.00  1.1/12  1.00  1.1/12  1.00  1.1/12  1.00  1.1/12  1.00  1.1/12  1.00  1.1/12  1.00  1.1/12  1.00  1.1/12  1.00  1.1/12  1.00  1.1/12  1.00  1.00  1.1/12  1.00  1		ed to supply po	wer to the	antenna from		11000				V. 3. 81
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in db: dbk: -8.26 In dbk: -8.26 In dbk: -8.26 In dbk: -8.26 In dbk: -11.25 In dbk: -12.26 In dbk	(a) Visual		- 21 - 2-2		(b) Aural			·		
Line power in disk: gain in db: disk power loss in db: line power loss in db: line power loss in db: line lo	(after vestigial side- band filter, if used) In dbk: -8.26	in db:	missi	ion line in dbk:	output In dbk: -11	25	i	in db:	ss	
D. Modulation monitors  (a) Visual menitor or monitoring equiment  Make KAY LAB  (b) Aural monitor  Make Hewlett Packard  (c) Aural monitor  Make Hewlett Packard  (d) Visual monitor  Make Hewlett Packard  (e) Aural monitor  Make Hewlett Packard  (f) Aural monitor  Make Hewlett Packard  (h) Aural monitor  Make Leving Hewlett Packard  (h) Aural monitor  (h) Aural monitor  (h) Aural monitor  (h) Aural mon	line power power in dbl	k: gain in d	fb: a	ted power	line power loss in db:	power in	db <b>k</b> :	gain in d	b:	Effective ra ated power In dbk: -6.
Note   Name	-1.4 -9.6	× +6.0	<b>X</b> 0	n kw:					V (C)	In kw:
make KAY LAB  Type 35 ER  Type 36 ER  Type	U. Nodulation monitors						C NO.			
cation and show drawn thereon the following data:  1. Proposed transmitter location—accurately plotted; 2. Transmitter location and call letters of all known radio stations (except amateur) and the location of known commercial and government receiving stations within 2 miles of the proposed transmitter location; 3. Character of the area within 2 miles of proposed transmitter location; 3. Character of the area within 2 miles of proposed transmitter location; 3. Character of the area within 2 miles of proposed transmitter location; 3. Character of the area within 2 miles of proposed transmitter location; 3. Character of the area within 2 miles of proposed transmitter location; 3. Character of the area within 2 miles of proposed transmitter location; 3. Character of the area within 2 miles of proposed transmitter location; 3. Character of the area within 2 miles of proposed transmitter location; 3. Character of the area within 2 miles of proposed transmitter location; 3. Character of the area within 2 miles of proposed transmitter location; 3. Character of the area within 2 miles of the noncosed transmitter location; 3. Character of the area within 2 miles of the noncosed transmitter location; 4. At least eight radial seach extending to a distance of ten or more miles from the proposed transmitter location; 4. At least eight radial seach extending to a distance of ten or more miles from the proposed transmitter location; 4. At least eight radial seach extending to a distance of ten or more will sea the radial seach extend through the principal city to be served.  4. At least eight radial seach extend through the principal city to be served.  5. The moles moles from the proposed transmitter location. Direction of transmission of programs be designed for compliance with the programs be designed for compliance with the programs be designed for compliance with the proposed transmitter location.  6. Attach as Exhibit No.  6. Accuracy  7. Accuracy  8. Accuracy  9. Accuracy  12. The beaver miles from the proposed transmi		oring equipment								
Make Hewlett Packard  1. Frequency monitors  2. Transmitter location and call letters of all known radio stations (except a mateur) and the location of known commercial and government receiving stations within 2 miles of the nermoned transmitter location, suitably designated as to residentia business, industrial, and rural nature;  4. At least eight radials each extending to a distance of ten or more miles from the promosed transmitter location one or more of which must extend through the principal city to be served;  1. Frequency monitors  1. Frequency monitors  1. Frequency monitors  1. Frequency monitors  2. Transmitter location of known commercial and government receiving stations within 2 miles of the area within 2 miles of the memorable tables in the conscious, industrial, and rural nature;  4. At least eight radials each extending to a distance of ten or more miles from the promosed transmitter location one or more of which must extend through the principal city to be served;  1. Frequency mithing 2 miles of the area within 2 miles of the mitter location. In the promosed transmitter location one or more of which must extend through the principal city to be served;  1. At least eight radials each extending to be an interesting of the normal part of the area within 2 miles of the area within 2 miles of the area within 2 miles of the	VVI TWP	-	TYPART	9-13A	cation and show	drawn th	nereon	the follow	wing d	lata:
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(a) Visual monitor  (b) Aural monitor  Make Hewlett Packard  Type No. 335ER  Type No. 34E Least eight radials each extend through the principa city to be Served. 4. At least eight radials each extend through the principa city to be Served. 4. At least eight radials seath extend through the principa city to be Served. 4. At least eight radials seath extend through the principa city to be Served. 4. At least eight radials seath extend through the principa city to be Served. 4. At least eight radials seath extend through th	Make Hewlett Packar	rd	Type N	35 ER	known commer	cial and	govern	ment rece	iving	stations
Make Herlett Packard  (b) Aural monitor  Make Hewlett Packard  Type No. 335ER  LOOCops  12. If the above monitors or monitoring equipment have not been amproved by the F.C.C., include as Exhibit No. a brief technical description of each.  FCC approved  13. Will the studios, cameras, microphones, and other equipment proposed for transmission of programs be designed for commission of programs be designed for commission's Rules?  15. From the profile graphs in 14 (b), for the eight mile distance between two and ten miles from the proposed transmitter location. Direction of true north shall be zero azimuth, with angles measured clockwise. Show source of tonographical data on each.  16. Attach as Exhibit No. profile graphs we reasonably large scales for the radials in (a) (5) above Each graph shall show the elevation of the antenna radiation center. Identify each graph by its bearing from the proposed transmitter location. Direction of true north shall be zero azimuth, with angles measured clockwise. Show source of tonographical data on each.  16. From the profile graphs in 14 (b), for the eight mile distance between two and ten miles from the proposed transmitter location. Direction of true north shall be zero azimuth, with angles measured clockwise. Show source of tonographical data on each.  17. From the profile graphs in 14 (b), for the eight mile distance between two and ten miles from the proposed transmitter location. Direction of true north shall be zero azimuth, with angles measured clockwise. Show source of tonographical data on each.  18. Attent eight radials each extending to a distance on ten or more of which must extend through the principa city to be served at the city to be served at the city to be served city to be s					3. Character of	f the area	a within	n 2 miles	of pr	oposed trans-
(b) Aural monitor  Make  Hewlett Packard  Type No. 335FR  LOOOOps  12. If the above monitors or monitoring equipment have not been amproved by the F.C.C., include as Exhibit No. a brief technical description of each.  FCC approved  13. Will the studios, cameras, microphores, and other equipment proposed for transmission of programs be designed for compliance with the Commission's Rules?  15. From the profile graphs in 14(b), for the eight mile distance between two and ten miles from the proposed transmitter location. Direction of true north shall be zero azimuth, with angles measured clockwise. Show source of trongraphical data on each.  15. From the profile graphs in 14(b), for the eight mile distance between two and ten miles from the proposed transmitter location. Show source of trongraphical data on each.  Average elevation of radial (2-10 mi.) in feet above mean realized (degrees true) of radials (1-10 mi.) in feet above mean realized (degrees true) of tradials (1-10 mi.) in feet above mean realized (degrees true) of tradials (1-10 mi.) in feet above mean realized (degrees true) of tradials (1-10 mi.) in feet above mean realized (degrees true) of tradials (1-10 mi.) in feet above mean realized (degrees true) of tradials (1-10 mi.) in feet above mean realized (degrees true) of tradials (1-10 mi.) in feet above mean realized (degrees true) of tradials (1-10 mi.) in feet above mean realized (degrees true) of tradials (1-10 mi.) in feet above mean realized (degrees true) of tradials (1-10 mi.) in feet above mean realized (degrees true) of tradials (1-10 mi.) in feet above mean realized (degrees true) of tradials (1-10 mi.) in feet above mean realized (degrees true) of tradials (1-10 mi.) in feet above mean realized (degrees true) of tradials (1-10 mi.) in feet above mean realized (degrees true) of tradials (1-10 mi.) in feet above mean realized (degrees true) of tradials (1-10 mi.) in feet above mean realized (degrees true) of tradials (1-10 mi.) in feet above mean realized (degrees true) of tradials (1-10 mi.		Trans No.	Amouno	037	<b>-1</b> .	•	-	~		residential,
Make Hewlett Packard  Type No.  335FR  **Louracy** - 1000cps  12. If the above monitors or monitoring equipment have not been amproved by the F.C.C., include as Exhibit No.  a brief technical description of each.  FCC approved  13. Will the studios, cameras, microphones, and other equipment promosed for transmission of programs be designed for compliance with the Commission's Rules?  15. From the profile graphs in 14(b), for the eight mile distance between the and in accordance with the procedure prescribed in the Commission's Rules, supply the following tabulation of data:    Average elevation of radial (2-10 mi.) in feet above mean reduction camer above average elevation of transmitter lock can be average elevation of transmitter lock can be average elevation of transmitter lock can be average elevation of tradial (2-10 mi.) and in accordance with the procedure prescribed in the Commission's Rules, supply the following tabulation of data:    Average elevation of radial (2-10 mi.) and in accordance with the procedure prescribed in the Commission's Rules, supply the following tabulation of data:    Average elevation of radial (2-10 mi.) and in feet above mean radiation center above average elevation of tradial (2-10 mi.) and in feet above mean radiation center above average elevation of tradial (2-10 mi.) and all (2-10 mi	Herlett Packard	1335ER	= 50	Ocps	4. At least eig ten or more	tht radial	ls each om the	extendin proposed	g to a transm	nitter location
Hewlett Packard 335PR - 10000ps  12. If the above monitors or monitoring equipment have not been amproved by the F.C.C., include as Exhibit No. a brief technical description of each. FCC approved  13. Will the studios, cameras, microphones, and other equipment proposed for transmission of programs be designed for compliance with the Commission's Rules?  15. From the profile graphs in 14(b), for the eight mile distance between two and ten miles from the proposed transmitter location and in accordance with the procedure prescribed in lett shore mean in feet above mean in feet ab	, ,				i			xtend thr	ough t	the principal
amproved by the F.C.C., include as Exhibit No. a brief technical description of each. FCC approved  13. Will the studios, cameras, microphones, and other equipment proposed for transmission of programs be designed for compliance with the Commission's Rules?  15. From the profile graphs in 14(b), for the eight mile distance between two and ten miles from the proposed transmitter location. Direction of true north shall be zero azimuth, with angles measured clockwise. Show source of tonogramhical data on each.  16. From the profile graphs in 14(b), for the eight mile distance between two and ten miles from the proposed transmitter location of radial (2-10 mi.) are level to mile bearing (degrees true) are level to many sea level are level and in accordance with the procedure of radial (2-10 mi.) are level to many sea level are level and in feet above many sea level are level and in accordance with the procedure of radial (2-10 mi.) are level to mile the procedure of radial (2	Hewlett Packar	d 335ER	Accura	00 <b>0</b> cps		on F11	.e			
15. From the profile graphs in 14(b), for the eight mile distance between two and ten miles from the proposed transmitter location and in accordance with the procedure prescribed in the Commission's Rules, supply the following tabulation of data:    Radial	approved by the F.C.C., inc technical description of ea U. Will the studios, camera and other equipment propose mission of programs be desi	clude as Exhibitach. FCC as, microphonesed for trans- igned for com-	appro	a brief	Each graph sha ation center. proposed transs shall be zero	ge scales 11 show th Identify mitter loo azimuth, 1	he elev each g cation. with an	D e radials ration of raph by i Directi gles meas	profi in (a the ar ts bea on of ured o	lle graphs wit a) (5) above. ntenna radi- aring from the true north
Radial	15. From the profile graphs and in accordance with the	in 14(b), for procedure pres	cribed in	the Commission	on's Rules, supply t	en miles f the follow	wing tal	bulation o	d tran	a:
0       2064       feet       182.5       feet       -3.66       dbk       3.0 Mi 4.3 mi       10.0         45       1885       361.5       -3.66       dbk       4.2 6.2 mi       15.2         90       2070       176.5       /3.66       2.95 4.1       9.9         135       1755       491.5       -3.66       4.7 7.0       17.5         180       2076       170.5       -3.66       2.85 3.8       9.5         25       2296       -49.5       -3.66       2.85 3.8       9.5         270       2162       -215.5       -3.66       2.85 3.8       9.5         315       2217       -0.5       -3.66       2.85 3.8       9.5         (9)       Note: 225 - 315 radials assumed to produce coverage equal	Radial of ra- bearing in fe-	disl (2-10 mi.) et above mean	radiation	center above elevation of	power in radial		Istance in o the Grad	miles		distance in miles to the Grade 560 contour
45 1885 361.5 -3.66 4.2 6.2 1.56  90 2070 176.5 \$3.66 2.95 4.1 9.9  135 1755 491.5 -3.66 4.7 7.0 17.5  180 2076 170.5 -3.66 2.9 4.0 9.9  225 2296 -49.5 -3.66 2.85 3.8 9.5  270 2462 -215.5 -3.66 2.85 3.8 9.5  315 2247 -0.5 -3.66 2.85 3.8 9.5  (9) Note: 225 - 315 radials assumed to produce coverage equal	200	6),	182.	ና	-3.66 dbk	3.0 M		- m1.		
135 1755 491.5 -3.66 4.7 7.0 17.5  180 2076 170.5 -3.66 2.9 4.0 9.9  225 2296 -49.5 -3.66 2.85 3.8 9.5  270 2162 -215.5 -3.66 2.85 3.8 9.5  315 2217 -0.5 -3.66 2.85 3.8 9.5  (9) Note: 225 - 315 radials assumed to produce coverage equal	45 180	85	361.	5	<b>-3.6</b> 6	4.2	6.	2		
2076 170.5 -3.66 2.9 4.0 9.5  225 2296 -49.5 -3.66 2.85 3.8 9.5  270 21.62 -215.5 -3.66 2.85 3.8 9.5  315 221.7 -0.5 -3.66 2.85 3.8 9.5  (9) Note: 225 - 315 radials assumed to produce coverage equal	90 20	70	176.	5	<b>43.66</b>	2.95	4.	1	· · · · ·	フ・ブ
25 2296 -49.5 -3.66 2.85 3.8 9.5 270 21,62 -215.5 -3.66 2.85 3.8 9.5 315 221,7 -0.5 -3.66 2.85 3.8 9.5 (9) Note: 225 - 315 radials assumed to produce coverage equal		55	491.	5	-3.66	4.7	(•	.0		41 • Z
270 2\(\text{li62} = -215.5 = 3.66   \) 2.85 3.8	100		170.	ל	<b>-3.6</b> 6	2.9	4.	Ü		フ•フ
315 2217 -0.5 -3.66 2.85 3.8 9.5  (a) Note: 225 - 315 radials assumed to produce coverage equal			-49	<u>.</u> 5	-3.66	2.05	. د	O		<b>ア</b> •フ
Note: 225 - 315 radials assumed to produce coverage equal			-21	5.5	-3.66	2.05	₹.	Ö		7.0
	0.00	~ ~ ~ ~	-0.	5	<b>-3.6</b> 6		3.	0		
							COAG	rage (	adma	ſΤ
to min in other directions of to limits of	1./				Tauri	TO AT				
*Radial over principal community if not included above. Do not include in average.	22.02. 19	min in o	ther d	irection	S OF 10 TIME	US OI				
Antenna height above average terrain 139.6 feet (yust be identical with Paragraph 2)	2207 11	nity if not_ind	ilud <b>ə</b> d abo	irection antenna ve. Do not i	structure nclude in average.	US OI				

Broadcast Application TELEVISION BROADCAST	ENGINEERING DATA Section V-C, Page 3
16. Attach as Exhibit No. INITmap(s) (Sectional Aeronautical charts where obtainable, preferably without aeronautical overlay) of the area proposed to be served and shown drawn thereon:  (a) Proposed transmitter location and the radials along which the profile graphs have been prepared;  (b) The studio location and boundaries of the principal community; Studio in lower part of Hote (c) The predicted Grade A and Grade B contours from 12 above;  (d) The required minimum field strength contour;  (e) Scale of miles.	Give date photographs were taken.  On file  n accordance with the method prescribed in the Commission's Rules,
be provided over the entire principal community proposed to be s  Areas will have signal of 77 db or	more - See Exhibit IV on Mile No
19. Will the main studio be located within the limits of the prin community proposed to be served.	Yes 🖈 No 🗌
20. (a) Does the proposed transmitter location comply with the mi the Commission's Rules?	nimum separation requirements of Yes 🔭 No 🦳
or if other channel separations are proposed that are les such separations below. (Include existing stations, prop the location and geographical coordinates of each antenna	than the applicable minimum separation requirement plus 20 miles, is than the applicable minimum separations plus 10 miles, list wosed stations and cities which appear in the table of assignments; a, proposed antenna or reference point as appropriate; the distance method used in each instance to measure the distance.) If none, so
none	
21. If this is an application for modification of construction and indicate when it is expected that construction	permit state briefly as Exhibit No. the present status of a will be completed.
Within 30 days	
cetton is submitted and that I have examined the foregoing S	or Consulting Engineer of the radio station for which this appli- tatement of technical information and that it is true to the best provided the engineer's original signed report of the data from attached hereto.)

Technical Director, Chief Engineer or Consulting Engineer

Product Application			THE COLUMN		-701			
Broadcast Application		Non	FEDERAL COMMUN	NICATIONS COMMIS	SSION			Section V-C
TELEVISION BROA ENGINEERING D		1	* *	Company	of	America	. Inc.	· BMPCT-
1. Purpose of authorizati (If application is for change E is of a char answer all paragraphs complete only paragra	a new sta acter which , otherwis	ed for: (Indication or for ich will charise complete	dicate by check m r any of the chang nge coverage or in only paragraphs:	nark):#243 /Luges numbered B the norease the overse 2 and 7 and the second	afer hrough all he	D, complete a right of the ar	SB_ 9- all paragra ntenna stru aragraphs:	aphs of this form; if ucture more than 20 feet, for changes F through I.
A. Construct a new state.  B. Change effective rac	diated pow					or change auxi unsmitter	lliary ante	⊇nna system
antenna height above	•	terrain				xiliary or alt mitter	:ernate	
D. Change frequency E. Change antenna system	em					nges (specify) ndio location		
2. Facilities requested				7. (a) Ante	nna st	tructure		
	Мс.		13	vicinity of any proposed trans any other radio	y other smitting o static	on? If "Yes",	r will the pported by t attach as E	
Effective Radiated Power (visual)	Power (a	ve Radiated aural)	Antenna height above average terrain			owing details and		
In dbk: 10.6 In kw: 11.5	In dbk: In kw:	7.6 5.75	130 fee	total structure ground in feet Overall height (Without obstructure)	t in fee	et above ground.	Overall h	an sketch for the proposed any) giving heights above meight in feet above mean . (Without obstruction
3. Station location (prin	<del></del>	munity) ity or town Las V	<b>028</b> 8		242	1	lighting)	22961
4. Transmitter location State	Cot	unty		(With obstructi	ion ligi	•		neight in feet above mean  1. (With obstruction lighting)
Nevada		Clark			tenna	radiation cen	tor	22991
City or town		reet Address	(or other identif	Geographical	e mear	n sea level.	22	78 feet mearest second)
Las Vegas  5. Main studio location			Hotel	North latitus	<sup>ide</sup> 。 5 08	1 32	West long	15 09 37
State Same s		nty ansmit	ter	How were coodetermined?		tes		egas Quad-
City or town	Stre	eet address		zone in which located.  (b) Antenna	h stru	mark the	1	2 3 3
6. Transmitters				Visual				
Visual				Make				Type No.
Make RCA	TT-2	2AH In c	dbk: 3.01		RCA	<del>,</del>		TF-6AH
Aural		[In l	kw: 2.0	Number of se	ctions	1	put power dbk	Power gain in db
Make RCA	Type TT-2	DAW In c	ed Power dbk: 0 kw:1.0	6 Aural (if se	marate	15.4		8.39
(If the above transmitter har F.C.C., attach as Exhibit I transmitter details. Showin full details of frequency co	No. ng should i	a companion accepted for	r licensing by the plete showing of natic diagram and	Make  Not s  Number of see	epa	rate	put power	Type No.  Power gain in db
licensed transmitter include of change.)							đbk	
(a) Describe in Exhibit No. mining and maintaining power specified in this application.	output of t	the transmitter	<del>-</del>	as Exhibit	No.	Not a	cal plane	ive full details in- radiation patterns,
(b) Multiplexer: Make R			[- <del>1</del> 9390	proposed? If	f so,	mechanical bear describe full	m tilting y in Exhib:	Yes No
Rated imput power 10				Will antenna	be al	tered to prov	ide null f	
Rated loss: Visua Q	UL dh	Aura D - O	10 / as	i i yes, descr	ribe f	Wly in Exhibi	it No.	

O managed at				Ti	LEVISION BROAD	CAST ENGINEERI	NG D	ATA					
8. Transmissio (a) Visual	n line propo	sed (	o supply po	wer	to the antenna f	rom the transmi	ter	1121			S	ection V-(	), Pag
Make		Γ		т				separate)	N	ot s	BDal	ate	
D 3 -			No.	Rate	ed imput power Tok	Make			Тур	e No.	Rated imput p		
Prode		- 1	600		8.75							dbk	-Tawor
Size (nomina transverse d	l inside	Leng	th in feet	Powe	r loss in db	Size (n	omine	ul inside	<del> </del>				
in inches	•			for	this length	transve	rse d	d niside dimension)	Teaf	gth in fe	•	ver loss in Is length	db f
1-5/8	11	2	2501		0.78	in inch	es					o ragar	
9. Proposed oper	ation					<del></del>			<u> </u>				
(a) Visual						(b) Aural							
Transmitter p (after vestig	ower output	Mul	tiplexer lo		Imput to trans-	Transmi	tter	power	Ma I	tiplexer :		1	
band filter,	if used)		in db:	ľ	mission line in dbk:	output			,,,,,,	in db:	ioss	Input to mission	trans line i
In dbk: 3.	01		0.004	-	3.01	In dbk:	Λ	^				db	
In kw: 2.			·			In kw:	1.	-	,	0.004	•	0.	.0
Transmission line power	Antenna impo power in db		Antenna po		Effective radi	Transmis	sion	Antenna i	70010	T		<u> </u>	
loss in db:	bower III (II)	κ:	gain in db	:	ated power	line pow loss in	er	power in		Antenna gain in		Effectiv ated pow	
0.78	2.23		8.3	9	In dbk: 10.	52 0.78		-0.7	ø	8.	20		~ .
				•	In kw: 11.5			, .,	•	0.	) <del>7</del>	In dbk:	7.6
). Modulation mo		lo	change		<u> </u>	<del> </del>		- D-1-11-11		<u> </u>		In kw:	5.7
(a) Visual monit	or or monito	ring	equipment									s) (topogr	
Make				Тур	e No.			~ · · · · · · · · · · · · · · · · · · ·	ies o	I The hro	സഹേദ	*	ngles r lo-
(b) Aural monito				<u></u>		and	3410#	cirawii tine	reon	the follo	wing d	ata:	
Make				1		1. Proposed 2. Transmit	ter]	nsmitter 1 location a	ocati	on-accur	ately	plotted;	
	,			Туре	No.	1 and St	arton	us (except	ama t	eur) and	the le		
. Frequency mon	itors N	0	hange	Ь		2010111 00	unsel.(	eram and &	overn	ment rece	ivina .	stations location;	
(a) Visual monit	or					or or acce	ı Oı	use area i	vitnii	n 9 miles	of nm		18
Make		Ту	pe No.	Accu	racy	business	, ind	bistrial.	and w	esignated	as to	residentia	ı,
(b) Aural monitor	•					, ост. от щи	) T C II	TIES ILOU	TOO T	hasaman'i	- mana	distance of mitter location,	
Make		Typ	e No.	Accu	racy	one or mo	,,,,	T MITTELL UNIT	ıst ex	ctend thro	ough th	itter locat ne principa	1
					•		, ,	· veu.					
If the above m	onitors or m	onito	oring equipm	ent :	have not been								
approved by the F technical descrip	· C. C. , Inclu	ce as	Exhibit No	•	a brief	(b) Atta	ch a	s Exhibit	No.	Eng.	profil	e graphs w	ith
Will the studi		N	ot app	11	cable	reasonably l Each graph s							
una otner equipme	nt proposed	for t	ranc_	Ye	es Fy No	-oroni carcer	. 10	rentriy ea	ch ør	anh hu it	e haam	4 A 1	ne.
mission of progra pliance with the	ns be design	ed fo	r com-			proposed tra shall be zer	+OILLY I	ree locat	ıon.	Direction	n of t		
						Show source	of to	pographic	ul da	ta on eacl	rea ci	ockwise.	
From the profit nd in accordance	with the pro	14 (b ocedu	), for the re prescrib	eight edir	mile distance to the Commission	between two and	ten :	miles from	the	proposed	transm	itter loca	tion,
Radial bearing	Average of radial	elevar (2-10 a	ion He	ight in	feet of antenna n center above	Effective radiated		TOTTONTIE	tabu dicted	uation of	data:	Predicted	
(degrees true)	in feet al	level	***	verage	elevation of (2-10 mi.)	power in radial direction		distant		lles A	dia	rregicted tance in miles the Grade B	_
0	***************************************	1	Paat		feet	-		Con	tour			contons	
45	***************************************					db	ĸ			. mi •	***************************************	m	1.
90 13 <b>5</b>	************		******					************					
180						***************************************		***************************************			**********		
225	***************************************										************	***************************************	
270	***************************************		3.	<b>a.a</b>	Figure 6	of Engi	ne	ering		h1b14			
315												***********	
(*)	*************							*	•••••				
Average			*******						•				
ial over principa	d community	if n	ot included	ahm	e. Do not 4-12								
enna height above	average ter	rain			feet Nuset 1	nde in average.							

 $\{\lambda, \beta, \beta\}$ 

Broadcast Application	TELEVISION BROADCAS	T ENGINEERING DATA	Section V-C, Page 3
16. Attach as Exhibit No. Eng. map(s) charts where obtainable, preferably wilay) of the area proposed to be served  (a) Proposed transmitter location and which the profile graphs have be (b) The studio location and boundary community;  (c) The predicted Grade A and Grade above;  (d) The required minimum field strenges.	and shown drawn thereon; and the radials along een prepared; ies of the principal  B contours from 12	17. Attach as Exhibit No. <b>Eng</b> a photographs taken in clear weather and angles to show the nature of the vicinity of the proposed trangraphs must be marked so as to ship graphs taken in eight different diposition on the ground will be acaerial photographs if the area caerial photographs were taken.	r at appropriate altitudes the surrounding terrain in smitter site. The photo- ow compass directions. Photo- irections from an elevated ceptable in lieu of the
18. Will the minimum required value of a be provided over the entire principal of		in accordance with the method prescribserved?	bed in the Commission's Rules
<ol> <li>Will the main studio be located with community proposed to be served.</li> </ol>	•	ncipal 613 requested	Yes No 🕎
2). (a) Does the proposed transmitter lo the Commission's Rules?			Yes y No
or if other channel separations such separations below. (Inclu- the location and geographical co	are proposed that are les de existing stations, prop cordinates of each antenna	than the applicable minimum separations than the applicable minimum separations and cities which appears, proposed antenna or reference poinmethod used in each instance to measure	tions plus 10 miles, list r in the table of assignments t as appropriate: the distanc
		existing station on Alberso Equal Are	a map
21. If this is an application for modiconstruction and indicate when it is			the present status o
Not a	pplicable		
cation is submitted and that I have	examined the foregoing s signature may be omitted:	or Consulting Engineer of the radio s tatement of technical information and provided the engineer's original sign attached hereto.)	that it is true to the best
Date September 3, 19	57	B/ Jules C	onen or Consulting Engineer

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Types

Broadcast Applica	ation		FEDE	RAT COMMITM	TOAMTO	NO GOLDIN				
ANTENNA	AND SITE IN	I DODLA . ma	l Na	me of applic	ant	NS COMMISS			- 5	Section V-G (Antenne
(s	ee instructio	рηΒ		elevis:	Lon	Company	of	Americ	ca, I	nc.
	Section I)		17	remont	Hot	ent can be re	ached in	person		
Since this Section is navigation, it is nec Legal Counsel	submitted to t	he Regiona.		TO ARKS	15.	NOVACA				
navigation, it is nec	essary that all	the data o	called for be suppl	ied. Previous	Ly and se	parately filed	for clear data must	ance in connect not be incorpo	ction with o	obstructions to air
A. Harry	Becker	<u> </u>			rurp	ose of applica	ttion (Che	ck appropria	te box)	
Wyatt Bl	dg., Wa	shin	gton 5.	D.C.	a, i	New antenna co	nstructio	n	X	]
consulting ingine	er					Alteration of Thange in loca	tion		ctures .	]
Vandiver Address	e, Cohe	n an	d Wearn		rist	entures of sur	mmetions	07 001		structures (hills,
	York A		77		trees	water tanks	, towers,	etc.) which,	in the o	structures (hills, pinion of the appli-
1420 New	TOIR A	Beilitio	wash. 5	D.C.	mize	the aeronaution	cal hazar	of the ente	rron arron	aft and thereby mini-
Televisi	on C	h 13	, 11.5 k	w.1361	1	KENO to	wers	0.3 m	ile a	outh,
1. Location of and State	tenna			-,100	<b> </b> 1	22651 a	DOAG	MSL		
Nevada	County		City or Town		1	Celevis	ion a	statio	n KT.A	S-TV tower
	Clark		Las Veg	8.8	•	7.7 EL	sout!	h, 231	81 ab	OVA MST
Eract antenna locat give distance and d	ion (street direction from	address)	(If outside cit	ty limits,	locat	t as Exhibit	MPUS	a chart on	which is	plotted the exect
				iown)	the na	atural format	ions and	te, and als	so the rel sting man	plotted the exact lative location of rmade structures
El Ranch	10 Vega	s Ho	tel		The ch	1974 HOOD Who	.77 L.			
Generalia accessi					cal (2)	art, choice	dance die		/, OI & 2	octional Aeronauti-
Geographic coordination of the coordination of	tes (to be de enna give coo	termined	of center of a	ond.	8DOU1d	he need on		,,	OCCITATION.	AUIONBULICAL Chart
For single vertical North latitude	radiator giv	e tower	location.	rray.)	obtain	able. 1/m	heee aha		merre Whbt.	oach Chart is un-
9	**	West la	ngitude		1 / Exc	ention - Who		"COLLEGE COLL	ري ملا ولتم	•
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CONSULTING ELECTRONIC ENGINEERS
WASHINGTON, D. C.

SEP 1957

ENGINEERING EXHIBIT
APPLICATION FOR CONSTRUCTION PERMIT
TELEVISION COMPANY OF AMERICA, INC.
KSHO-TV
LAS VEGAS, NEVADA

CH 13

11.5 KW

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September 3, 1957

CONSULTING ELECTRONIC ENGINEERS
WASHINGTON, D. C.

ENGINEERING EXHIBIT
APPLICATION FOR CONSTRUCTION PERMIT
TELEVISION COMPANY OF AMERICA, INC.
KSHO-TV
LAS VEGAS, NEVADA
CH 13 11.5 KW 130 FT

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ENGINEERING EXHIBIT
APPLICATION FOR CONSTRUCTION PERMIT
TELEVISION COMPANY OF AMERICA, INC.
KSHO-TV

CEP 1357

LAS VEGAS, NEVADA
CH 13 11.5 KW

130 FT

#### Engineering Statement

This engineering exhibit was prepared in accordance with the Rules of the Federal Communications Commission and pursuant to the provisions of Sections V-C and V-G of FCC Form 301 in support of an application by Television Company of America, Inc., licensee of Television Station KSHO-TV, for a construction permit. The applicant proposes to move both transmitter and studio and install a new transmitter and antenna. KSHO-TV presently operates on Channel 13 at Las Vegas, Nevada, with effective radiated power of 0.436 kw visual and antenna height above average terrain of 100 feet. Operating as proposed, effective radiated power will be 11.5 kw and antenna height above average terrain will be 130 feet.

#### Proposed Equipment

It is proposed to employ an RCA Type TF-6AH, six-section, superturnstile antenna having a power gain at visual carrier of 6.9 (8.39 db). This antenna, when used with the RCA Type TT-2AH transmitter and approximately 250 feet of 1-5/8 inch Teflon-insulated transmission line, would be expected to develop effective radiated power of 11.5 kilowatts peak visual. The

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Engineering Statement Las Vegas, Nevada

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estimated over-all efficiency of the transmission line is 83.5 percent. All of the equipment to be employed will comply with FCC Rules.

## Proposed Transmitter and Studio Location

KSHO-TV proposes to locate its transmitter and studio at El Rancho Vegas Hotel on U.S. Highway 91-466, one-quarter mile south of the Las Vegas city boundary. Waiver of Section 3.613(a) is requested by the applicant. The antenna is to be mounted on a 205-foot guyed tower. Over-all height above ground will be 242 feet (2296 feet above mean sea level - 2299 feet, including beacon).

Geographic coordinates of the proposed site, as determined from the Las Vegas quadrangle of the U. S. Department of the Interior Geological Survey, are:

North Latitude 36° 08' 32" West Longitude 115° 09' 37"

The location proposed is in an area called "The Strip" running south from Las Vegas and comprised almost exclusively of resort hotels. Figure 2 herein shows commercial and industrial areas within two miles of the proposed location and the sites of nearby radio and television stations. The location is approximately 0.3 miles from the three-tower antenna system of KENO, which operates on 1460 kc with 1000 watts and directional antenna during nighttime hours. The new KSHO-TV tower will be

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Engineering Statement Las Vegas, Nevada

page 3

insulated and the transmission lines will be isolated so that the system may be detuned at the 1460 kc frequency in order to eliminate any adverse effect on the KENO antenna system. No other radio or television system in the area is expected to be affected by the proposed structure.

The over-all height of the KSHO-TV antenna proposed is somewhat less than the height of the existing KENO towers so the proposed construction would not be expected to constitute a hazard to air navigation.

#### Coverage Contours

10.330

The positions of the coverage contours were determined in accordance with the Rules Governing Television. The average elevation from two to ten miles from the transmitter was determined from data obtained from USGS topographic maps reproduced herein as Figure 4. On five bearings (0°, 45°, 90°, 135° and 180°) the distances to coverage contours were determined by employment of Figure 10 of Section 3.699 of the Rules. On the remaining three bearings, negative antenna heights are encountered and the distances to contours were therefore estimated by consideration of the topography involved.

Jules Cohen

VANDIVERE, COHEN and WEARN

September 3, 1957

# ENGINEERING EXHIBIT APPLICATION FOR CONSTRUCTION PERMIT TELEVISION COMPANY OF AMERICA, INC.

KSHO-TV

LAS VEGAS, NEVADA
CH 13 11.5 KW 130 FT

#### Engineering Specifications

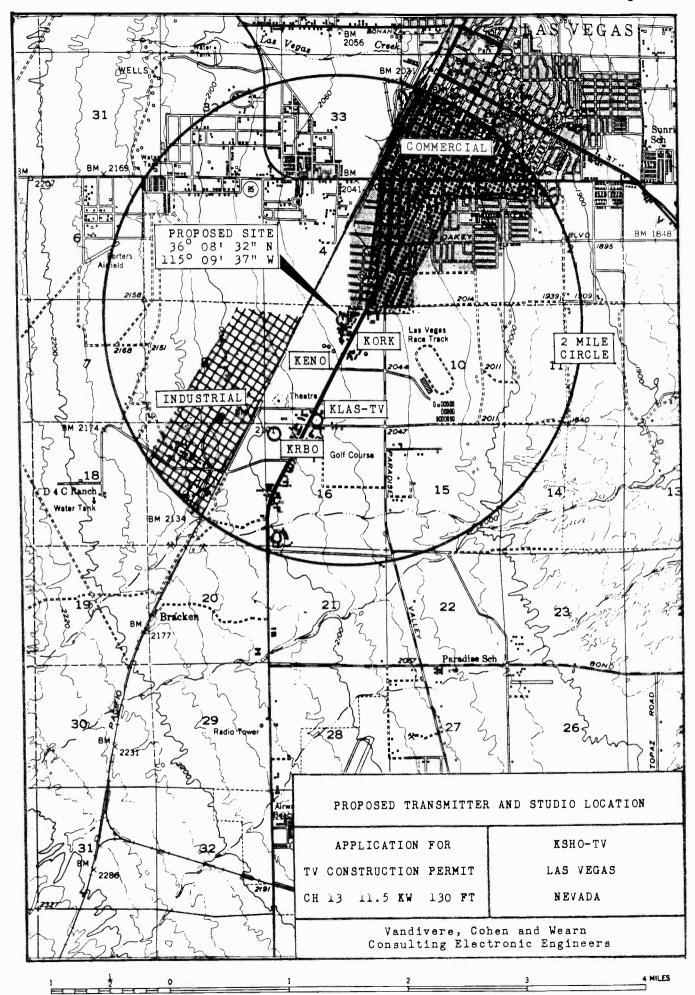
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Channel	13
Frequency	210 - 216 mc
Antenna	RCA Type TF-6AH (6-section)
Elevation of Site above MSL	20541
Height of Supporting Tower above Ground	2051
Over-all Height of Supporting Tower and Antenna above Ground	2421
(with beacon)	2451
Over-all Height of Supporting Tower and Antenna above MSL	22961
(with beacon)	22991
Average Elevation of Radials	21511
Height of Antenna Radiation Center above Ground	2241
Height of Antenna Radiation Center above MSL	22781
Height of Antenna Radiation Center above Average Terrain	127' Rounded to 130'
Transmission Line Type Pro	delin Series 600
Nominal Size	1-5/8"
Rated Power Input per	line 7.5 kw
Length	2501
Efficiency (0.78 db Lo	ss) 83.5%

Engineering Exhibit Las Vegas, Nevada

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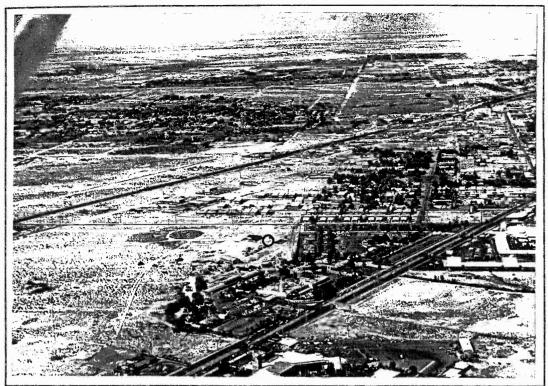
## Engineering Specifications (cont.)

Diplexer					RCA	MI-193	390
Transmitter Outpu	ıt Visual		2.0	kw		3.01	dbk
	Aural		1.0	kw		0.0	dbk
Diplexer Loss	Visual		0.1	%		0.004	dъ
	Aural		0.1	%		0.004	đЪ
Transmission Lin	e Input Visual		2.0	kw		3.01	d b <b>k</b>
	Aural		1.0	kw	•	0.0	dbk
Transmission Lin	e Loss	. 1	.6.5	%		0.78	dъ
Antenna Input	Visual	. •	1.67	kw		2.23	dbk
	Aural		0.835	kw		-0.78	dbk
Antenna Power Ga	in		6.9		•	8.39	dъ
Effective Radiat	ed Power Visual	:	L1.5	kw		10.62	dbk
	Aural		5.75	kw		7.61	dbk

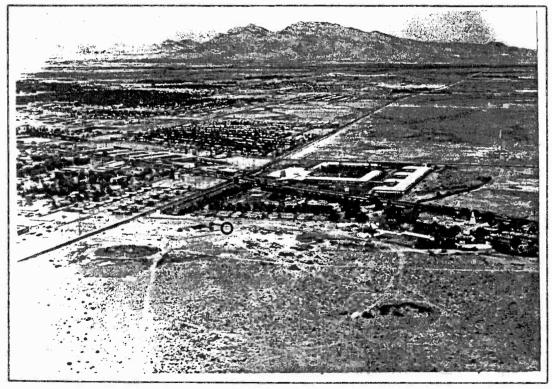


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CONTOUR INTERVAL 20 FEET DATUM IS MEAN SEA LEVEL



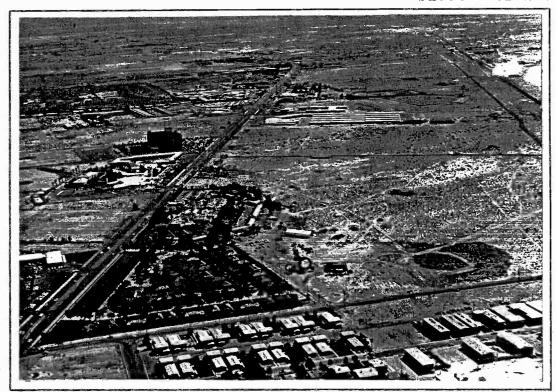
LOOKING NORTH



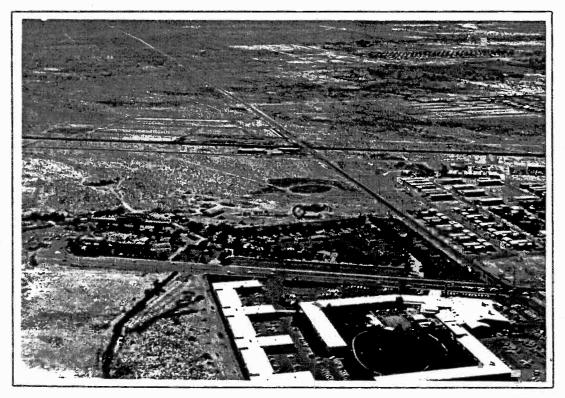
LOOKING EAST

AERIAL PHOTOGRAPHS OF PROPOSED SITE AND VICINITY (CIRCLE INDICATES TOWER LOCATION)

SEPTEMBER, 1957



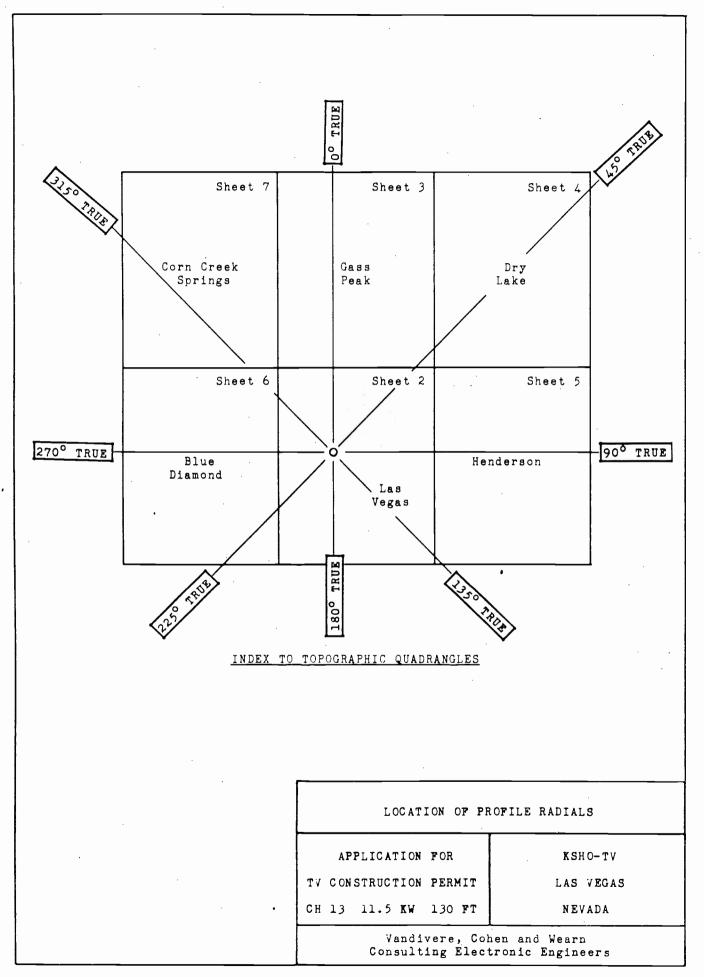
LOOKING SOUTH

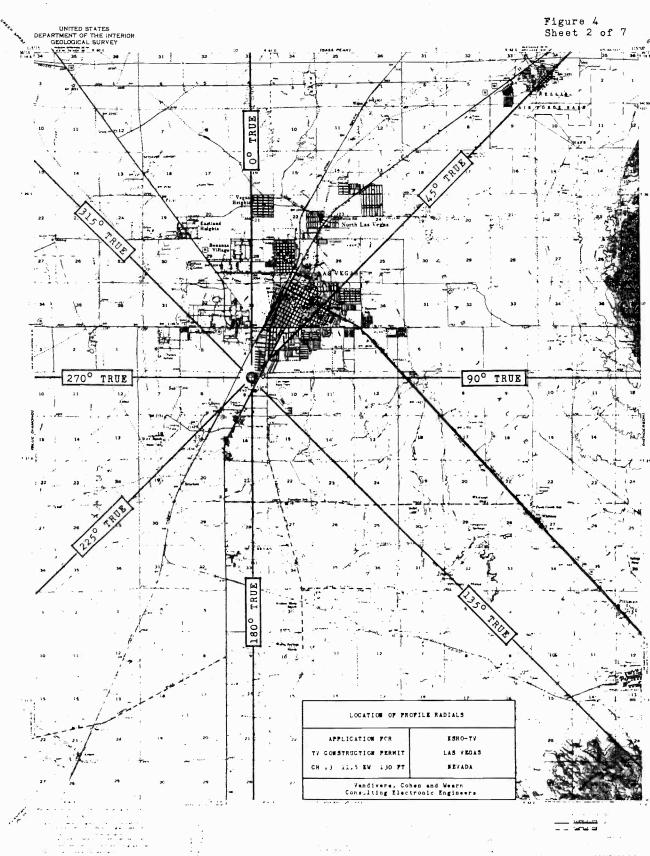


LOOKING WEST

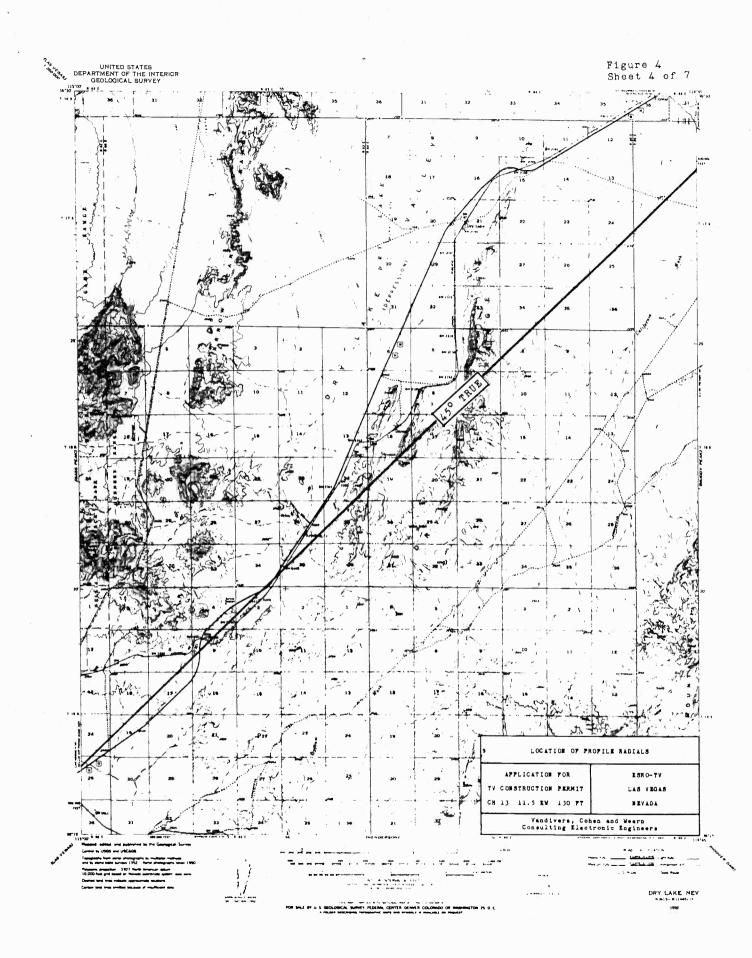
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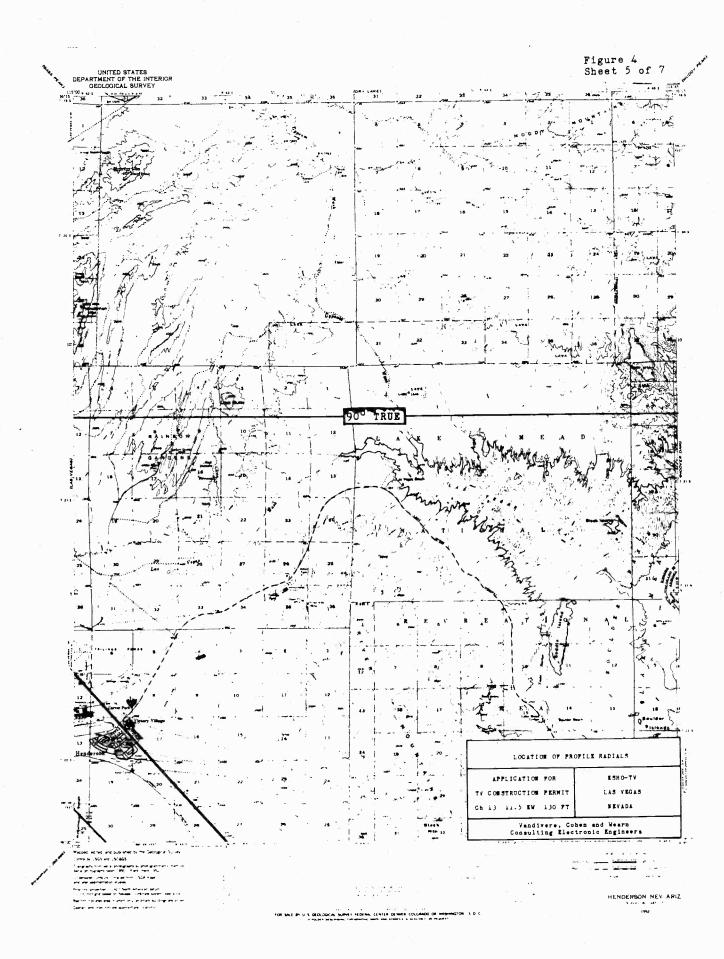
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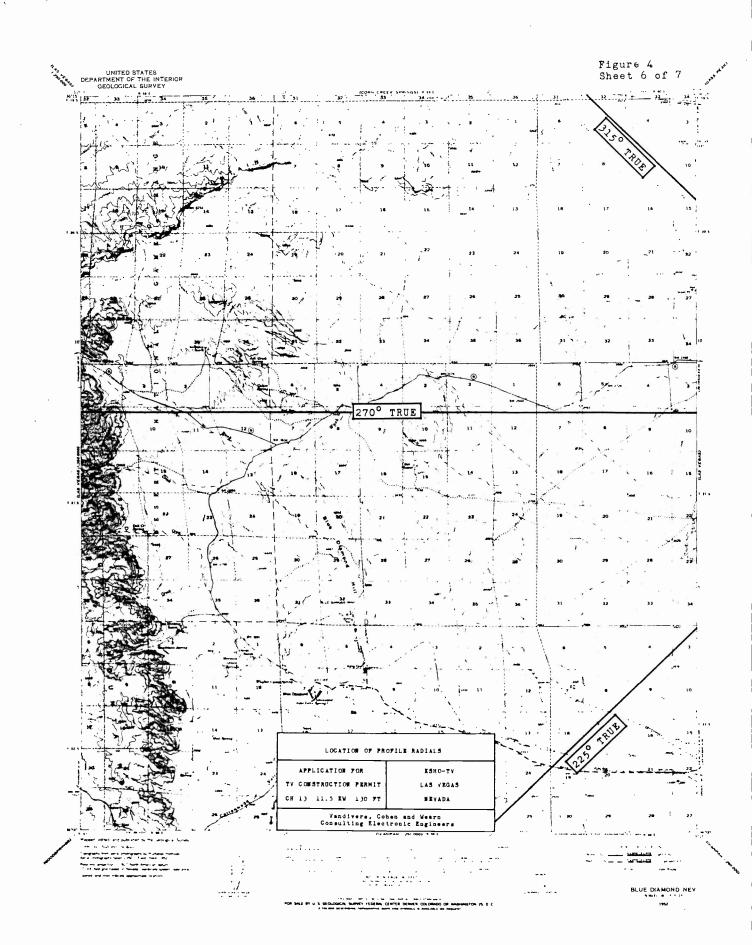


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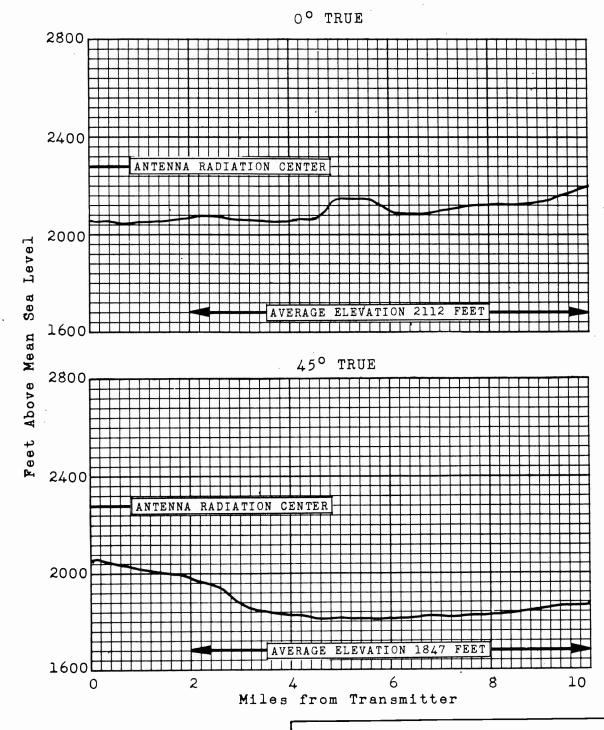


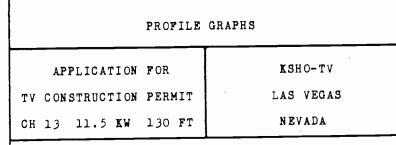
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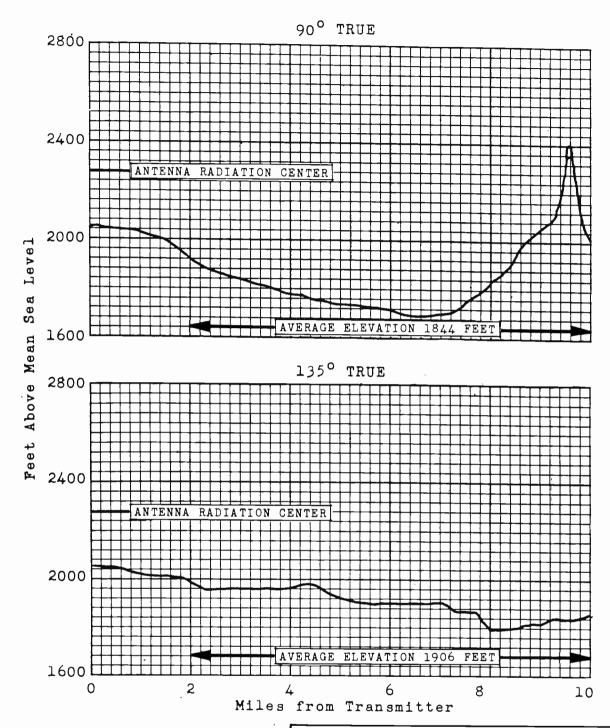
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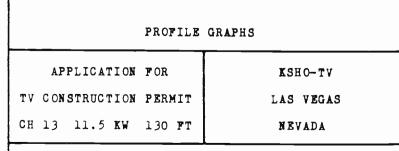
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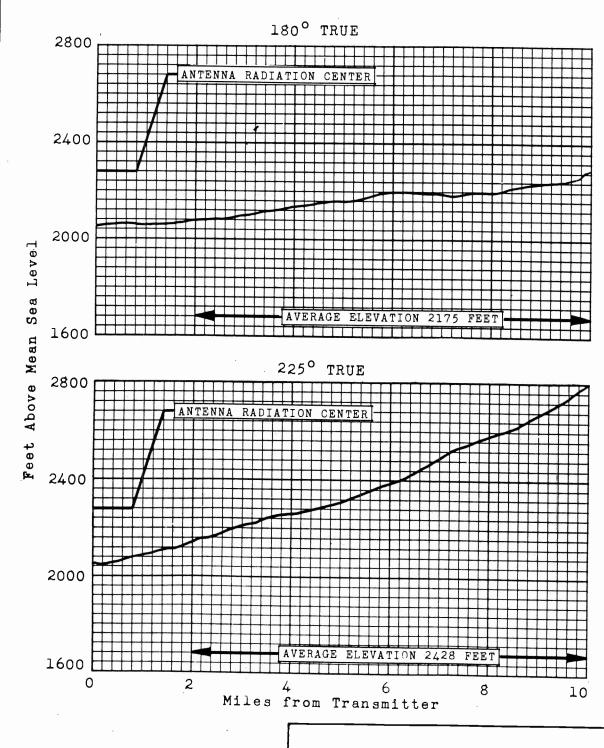


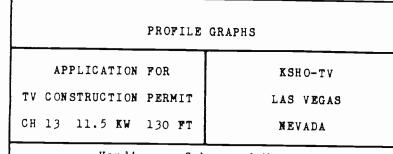
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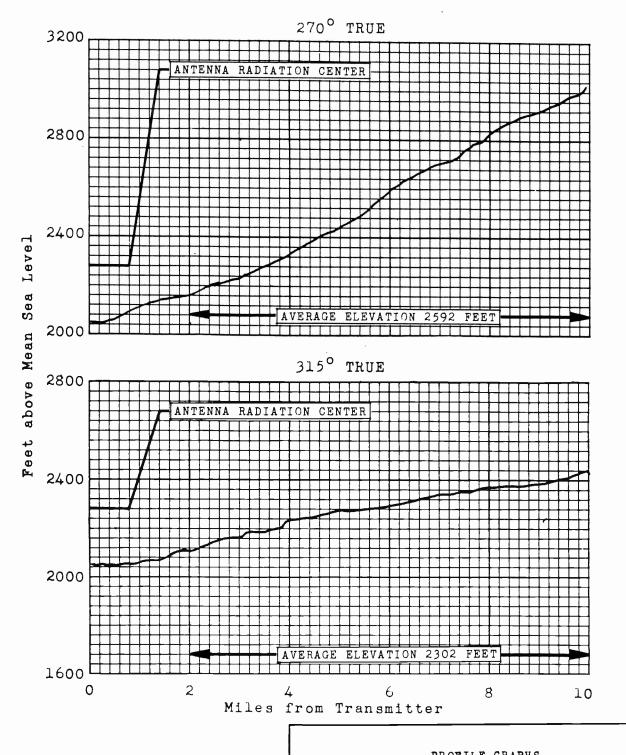
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		PROFILE	GRAPHS
	APPLICATION	FOR	KSHO-TV
	TV CONSTRUCTION	PERMIT	LAS VEGAS
	CH 13 11.5 KW	130 FT	NEVADA
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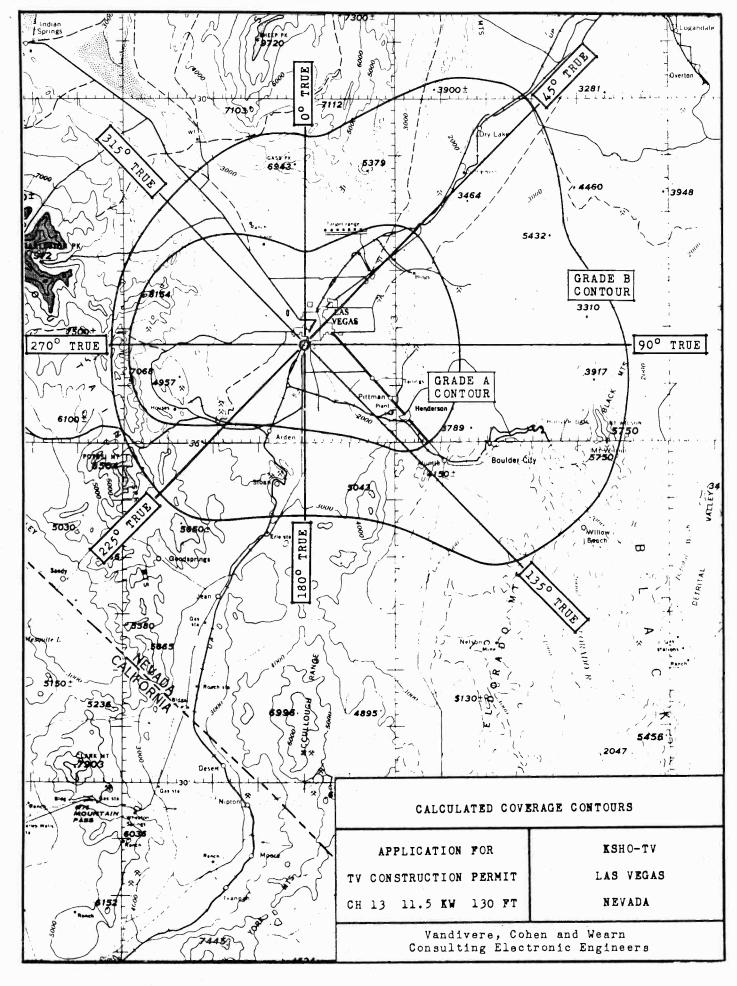
ENGINEERING EXHIBIT APPLICATION FOR CONSTRUCTION PERMIT TELEVISION COMPANY OF AMERICA, INC. KSHO-TV

LAS VEGAS, NEVADA 11.5 KW 130 FT - CH 13

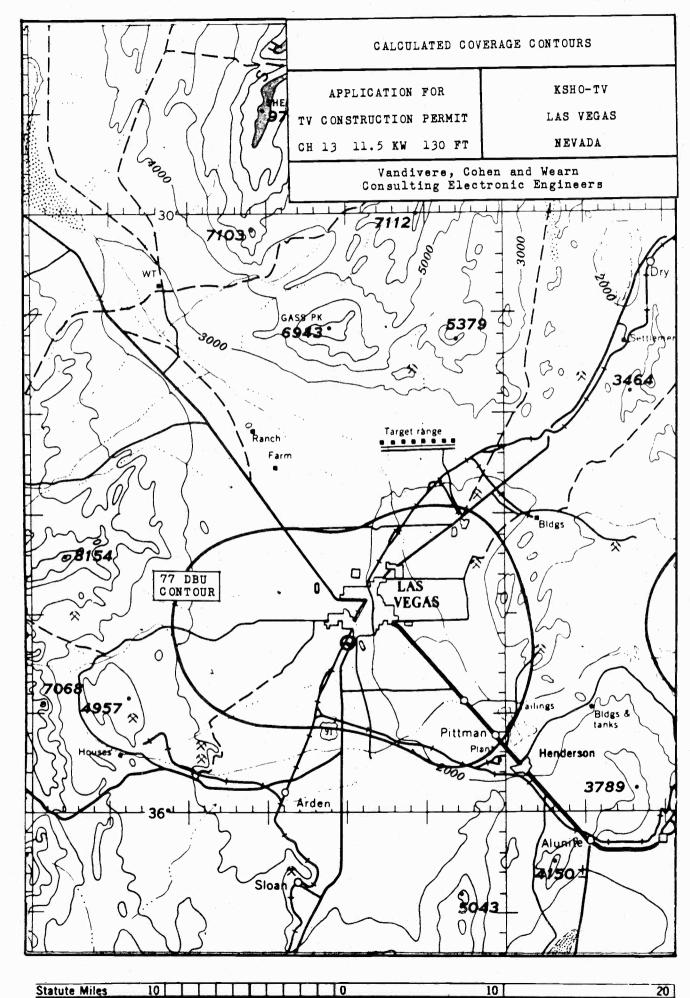
## Average Elevations and Distances to Coverage Contours

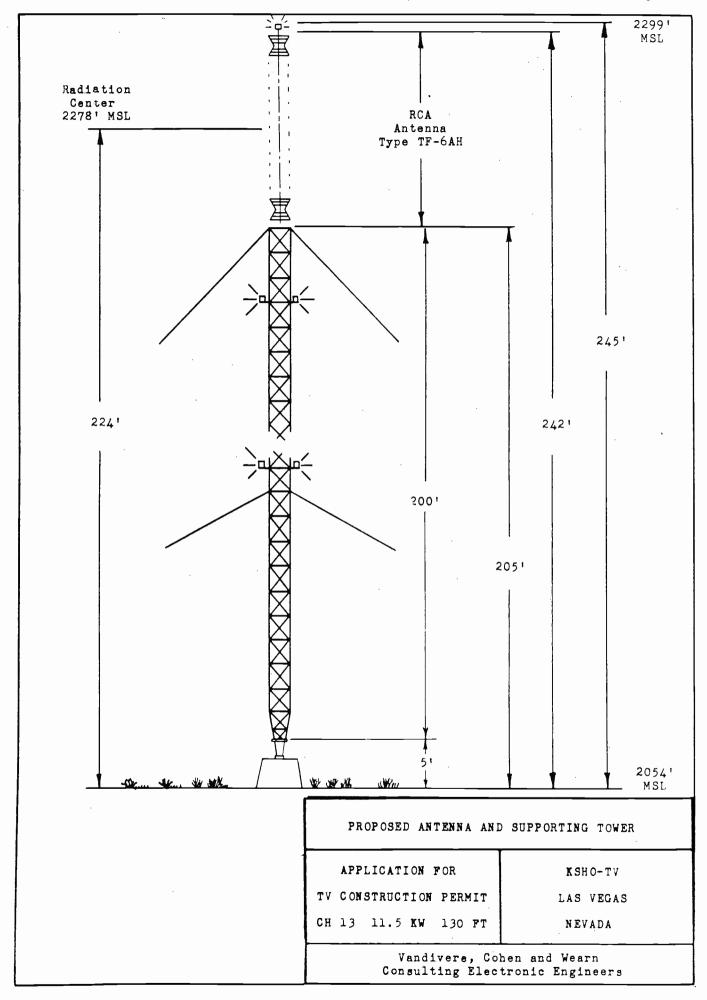
	Average	Height of Radiation	<u> </u>	Distance	
Radial	Elevation	Center Above	77 dbu	Grade A	Grade B
Bearing	of Radial	Avg. Terrain	Contour		Contour
(degrees)	(feet)	(feet)	(miles)	(miles)	(miles)
0 .	2112	166	6.5	9.0	21
45	1847	431	11.0	15.8	33.5
0.0	7011	121	11.0	3.5.0	22 5
90	1844	434	11.0	15.8	33.5
135	1906	372	10:0	14.5	31
1))	1,00	<i>&gt; (~</i>	20.0		7-
180	2175	. 103	5.0	8.4	17.5
_		_ <b>~</b>			
225	2428	-150	6.8*	11.3*	21.1*
270	2592	-314	10.1*	18.1*	19.8*
210	2792	- )14	10.1	10.1.	19.0
315	2302	- 24	8.7*	14.8*	20.0*
	<del></del>	<del></del>			
		127.35			
Average	2151	127			
	<b>ま</b> ) エ・,フ				
	(	(Round to 130)			

<sup>\*</sup> Estimated from topography



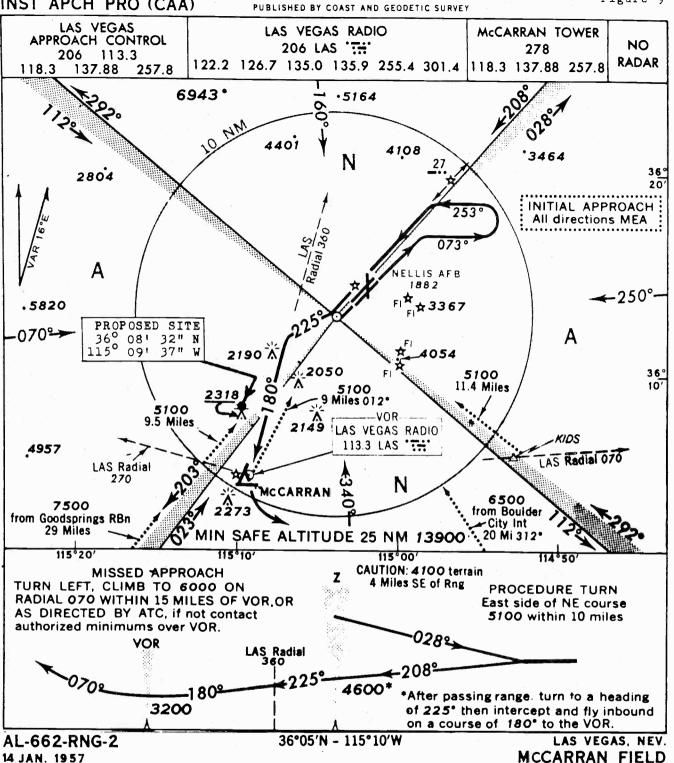
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rv	COM	STRUCT	CION	PERMIT	LAS VEGAS
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CONSULTING ELECTRONIC ENGINEERS
WASHINGTON, D. C.

ENGINEERING EXHIBIT
APPLICATION FOR CONSTRUCTION PERMIT
TELEVISION COMPANY OF AMERICA, INC.
KSHO-TV
LAS VEGAS, NEVADA
CH 13 11.5 KW 130 FT

Affidavit

WASHINGTON

88:

DISTRICT OF COLUMBIA

SEP 1957

FICE OF RECHETARY

Jules Cohen, being first duly sworn, says that he is a member of the firm of Vandivere, Cohen and Wearn, consulting electronic engineers; that his qualifications as an expert in radio engineering are a matter of record with the Federal Communications Commission; that he is a registered professional engineer in the District of Columbia and the Commonwealth of Virginia; that the foregoing exhibit was prepared by him and under his direction, and that the statements contained therein are true of his own personal knowledge except those stated to be on information and belief, and as to those statements he verily believes them to be true and correct.

s/ Jules Cohen

Subscribed and sworn to before me this 3rd day of September, 1957.

My commission expires January 31, 1961 s/ Inez M. Brooks
Notary Public, D. C.

(SEAL)