

TECHNICAL EXHIBIT  
APPLICATION FOR MODIFICATION OF  
DTV CONSTRUCTION PERMIT  
DTV STATION KWHE-DT  
HONOLULU, HAWAII  
CH 31 20.1 KW (DA) 5 M

Technical Narrative

The technical exhibit of which this narrative is part was prepared on behalf of LeSEA Broadcasting Corporation in support of an application for modification of construction permit for DTV station KWHE-DT on channel 31 at Honolulu, Hawaii. Station KWHE-DT is currently authorized (BPCDT-19991020ABP) to operate on channel 31 with a maximum directional effective radiated power (ERP) of 50 kilowatts and an antenna radiation center height above average terrain (HAAT) of 33 meters. It is proposed to modify the authorized facility by changing the directional antenna system, increasing the antenna radiation center height above ground level, and decreasing the maximum directional ERP. No other changes are proposed.

Compliance with the current DTV Freeze

The proposed 41 dBu noise-limited contour extends slightly beyond the currently authorized 41 dBu contour toward the west (bearings 262° thru 295° true). However, based on a conversation with an FCC processing person, since the extension occurs entirely over the Pacific Ocean, such an extension is not prohibited by the FCC's *Freeze on the Filing of Certain TV and DTV Requests for Allotment or Service Area Changes*.

Proposed Operation

It is proposed to operate on DTV channel 31 from the following site coordinates, N 21°18'49" W 157°51'43" (NAD27). It is also proposed to operate with an RFS RD8H-1736L1L horizontally polarized directional antenna, a maximum ERP of 20.1 kW and an HAAT of 5 meters.

Notification to the FAA is not necessary, as there is no proposed change in the overall height of the Century Square Building. The antenna structure registration number (ASRN) for the pole on which

the KWHE-DT antenna is mounted is 1007317. Figure 1 provides a sketch of the proposed antenna and supporting structure.

#### Response to Paragraph 10 - Antenna Data

Figure 2 provides horizontal and vertical plane radiation pattern data for the RFS RD8H-1736L1L directional antenna.

#### Response to Paragraph 12 - City Coverage

Figure 3 is a map showing the FCC predicted DTV coverage contours. The map provides the FCC predicted 41 dBu f(50,90) noise-limited contour and 48 dBu f(50,90) city grade contour. The extent of the contours has been calculated using the normal FCC prediction method and a 3-second digitized terrain database. The antenna HAAT was calculated in accordance with Section 73.625(b)(4) of the FCC rules. The Honolulu city limits were derived from information contained in the 2000 U.S. Census for Hawaii. As shown, the 48 dBu contour encompasses the entire city limits of Honolulu.

#### NTSC/DTV/Class A Allocation Considerations

Figure 4 is a DTV channel 31 separation study toward other NTSC and DTV allotments based on a 50 kilometer "buffer". Although the separation requirements are only applicable to new DTV allotments, they can be used as an indication of which stations have the potential of receiving interference from the proposed channel 31 DTV operation.

An interference analysis has been conducted using the procedures outlined in the FCC's OET-69 bulletin, which demonstrates that the proposal complies with the interference protection provisions of Section 73.623(c)(2).<sup>1</sup> Interference calculations for the proposed operation are summarized below with respect to all authorized NTSC, DTV, and Class A facilities.

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<sup>1</sup> The du Treil, Lundin & Rackley, Inc. DTV interference analysis program is based on the program and procedures outlined by the FCC in the Sixth Report and Order; subsequent Memorandum Opinion and Order; and FCC OET Bulletin No. 69. A nominal grid size resolution of 2 km was employed. A Sun based processor computer system was employed.

Station	Facility	Ch.	City	State	FCC Service Population	Proposed Interference Population	% of Baseline
KMEB-DT	CP	30	WAILUKU	HI	--	--	None
KMEB-DT	PLN	30	WAILUKU	HI	--	--	None
KBFD	LIC	32	HONOLULU	HI	--	--	None
KALU	LIC	38	HONOLULU	HI	--	--	None

As shown above, the proposal on channel 31 complies with the FCC's interference standards towards all authorized NTSC, DTV and Class A stations.

#### Objectionable Interference

There are several known authorized full service AM stations within 5 kilometers (3 miles) of the proposed transmitter site. Figure 5 provides a tabulation of those AM stations within 5 kilometers, and all full service FM and TV stations within 16 kilometers of the proposed site. Although no adverse electromagnetic impact is expected, the applicant recognizes its responsibility to correct problems, which are a result of its proposed DTV operation.

The proposed transmitter site is 4118 kilometers from the Canadian border and is 4181 kilometers from the US/Mexican border area. The closest FCC monitoring is at Waipahu, Hawaii, approximately 16 kilometers to the west. The proposed DTV site is outside the National Radio Quiet Zone (VA/WVA), the closest point being 7,469 kilometers to the northeast. The closest point of the Table Mountain Radio Quiet Zone (CO) is more than 5,356 kilometers to the northeast. The closest radio astronomy site operating on TV channel 37 is at Mauna Kea, Hawaii located approximately 301 kilometers to the southeast. These separations are sufficient to not be a concern for coordination purposes, except with respect to the FCC monitoring station at Waipahu. However, the proposed facility will not increase the field strength produced over the monitoring station in excess of the currently authorized KWHE-DT facility. Therefore, it is believed the proposal complies with Section 73.1030(c) of the FCC rules and coordination is not required.<sup>2</sup>

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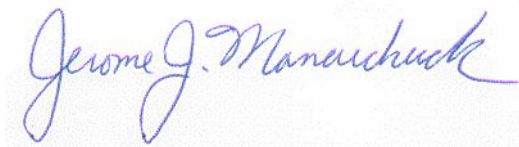
<sup>2</sup> Based on the Longley-Rice calculations, the authorized KWHE-DT provides a field strength of 95.8 dBu over the monitoring station, and the proposal provides a field strength of 95.23 dBu.

Response to Paragraph 13 - Environmental Protection Act

Based on information provided by an agent of the applicant, public access to the building rooftop is restricted as access is locked and secured. In addition, LeSEA Broadcasting Corporation controls access to the rooftop and will maintain its policy of reducing or ceasing operation when maintenance personnel are on the roof-top or near the antenna. This certification was previously provided to the Commission in the applicants application for DTV construction permit (BPCDT-19991020ABP). Figure 6 is a copy of the environmental assessment and RF radiation statement from the KWHE-DT application for construction permit.

Finally, it is noted that this technical exhibit only addresses the potential for radio frequency electromagnetic field exposure. All other aspects of the environmental processing analysis will be or already has been provided to the FCC by the building owner as part of the tower registration process.

If there are questions concerning the technical portion of this application, please contact the office of the undersigned.

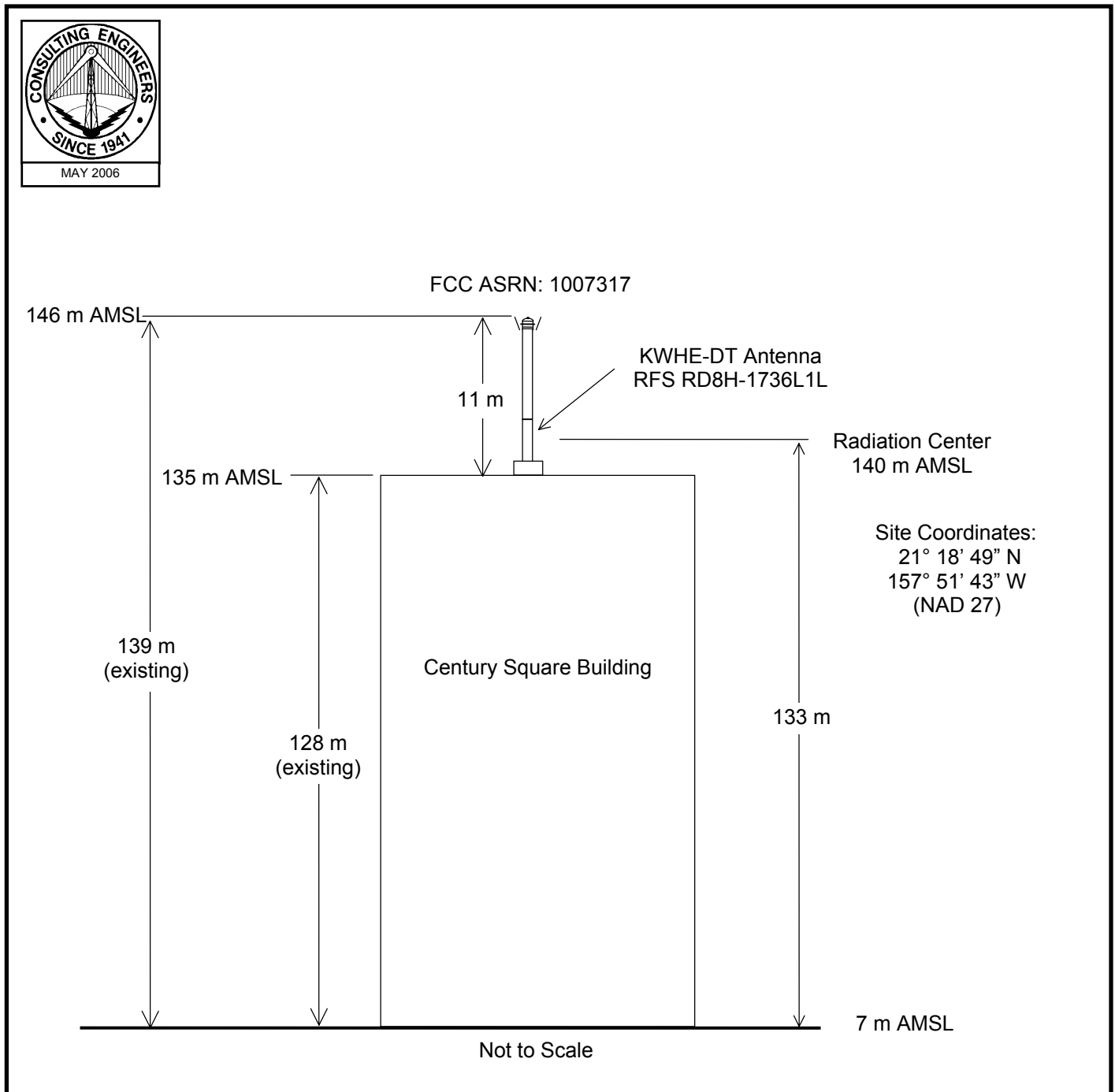


Jerome J. Manarchuck

du Treil, Lundin & Rackley, Inc.  
201 Fletcher Ave.  
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(941) 329-6000  
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May 9, 2006

Figure 1



## **PROPOSED ANTENNA AND SUPPORTING STRUCTURE**

DTV STATION KWHE-DT

HONOLULU, HAWAII

CH 31 20.1 KW (MAX-DA) 5 M

du Treil, Lundin & Rackley, Inc. Sarasota, Florida

**RADIO FREQUENCY SYSTEMS**  
The Clear Choice™

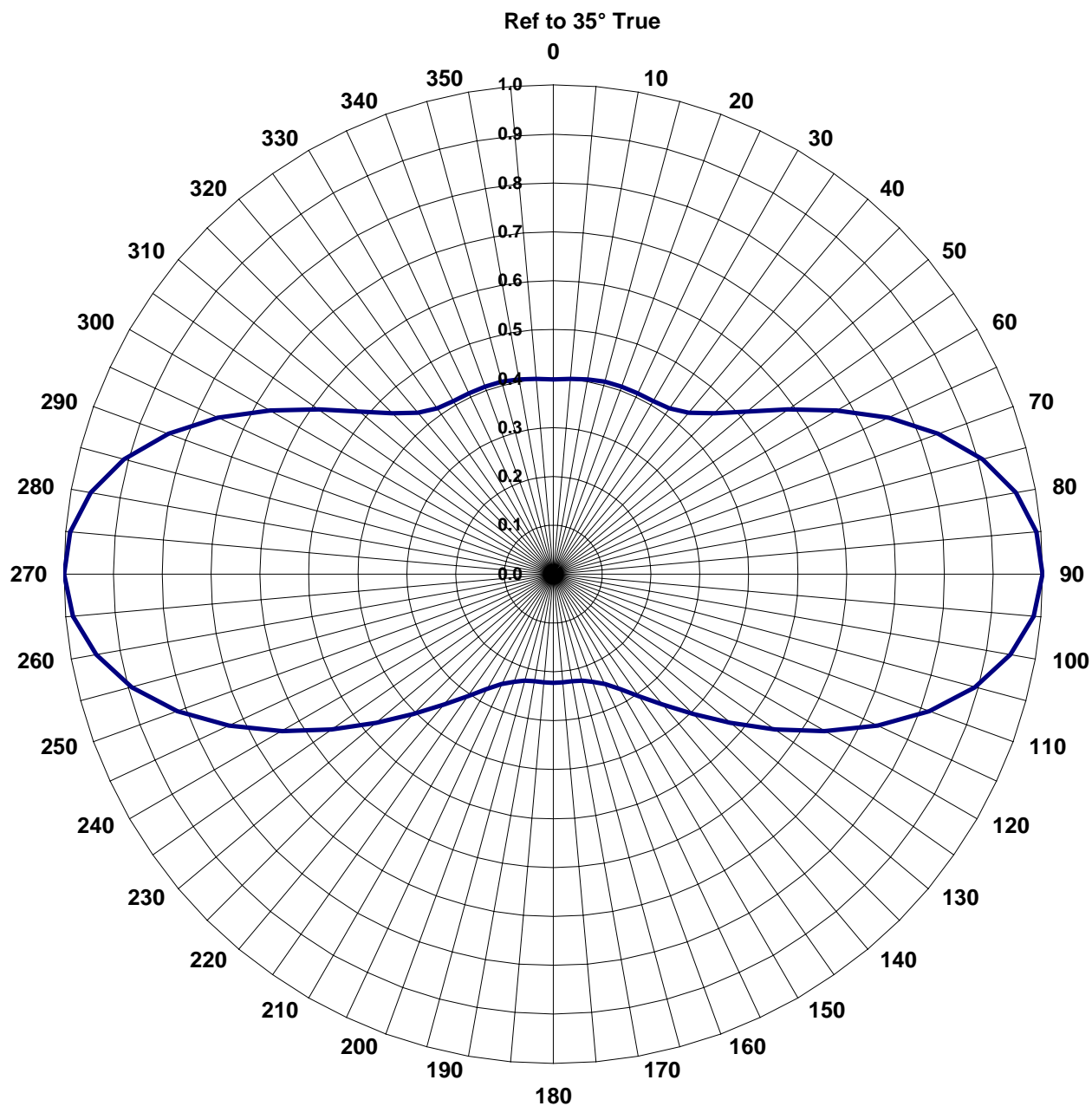


## AZIMUTH PATTERN

TYPE:	RFS - H	
	Numeric	dB
Directivity:	<u>3.00</u>	<u>4.8</u>
Polarization:	Horizontal	
Channel:	31R	
Location:	Honolulu, HI	

Model:	RD8H-1736L1L00
INQUIRY #:	I2088
QUOTE #:	AG121905-I2088
ATS Job#:	2448

*Note: Pattern shape and directivity may vary with channel and mounting configuration.*

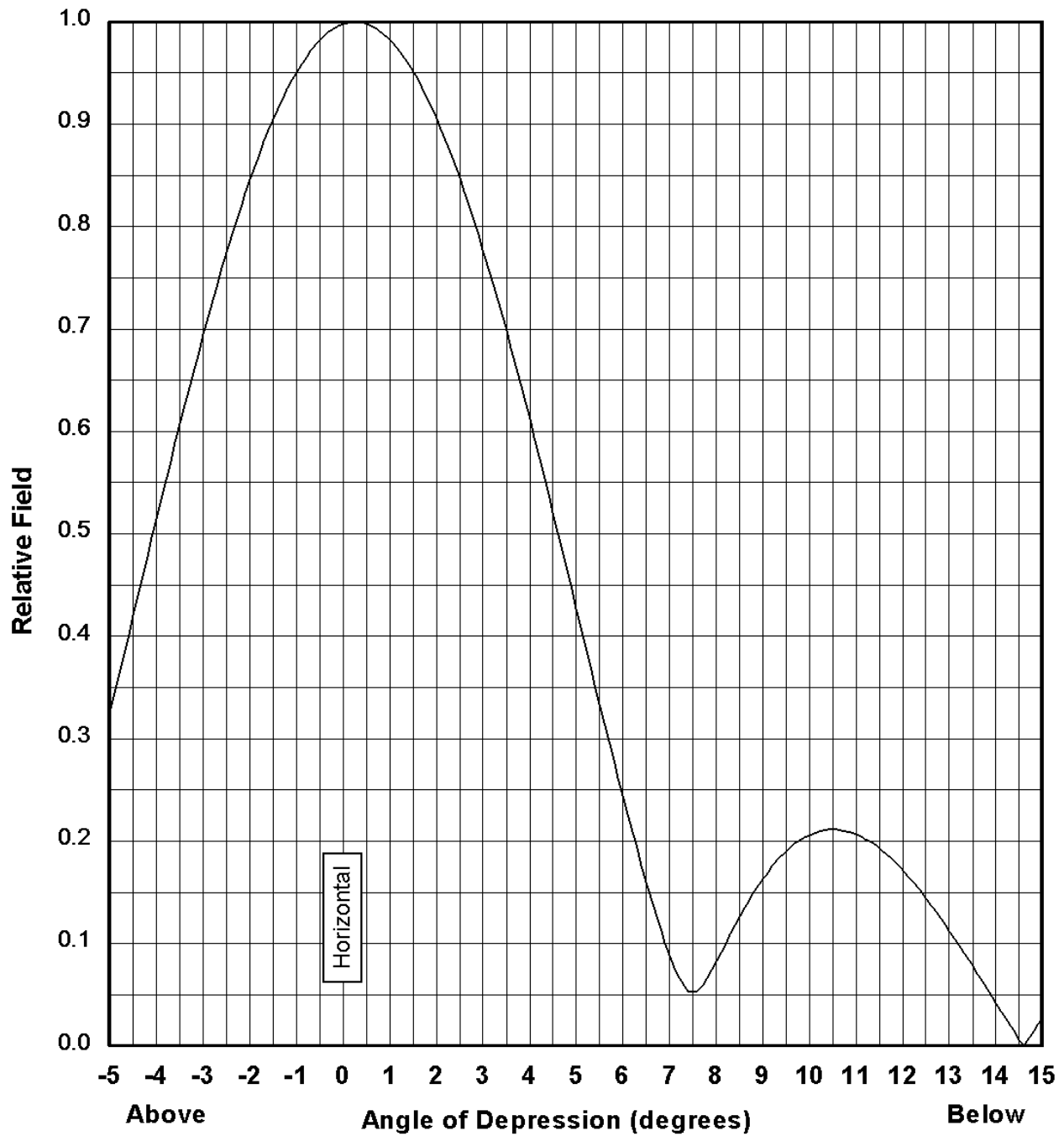


Radio Frequency Systems, Inc.  
200 Pondview Drive Meriden, CT 06450  
Tel: +1 203-630-3311 Fax: +1 203-821-3852  
[www.rfsworld.com](http://www.rfsworld.com)

ENGINEERING EXHIBIT  
 APPLICATION FOR MODIFICATION OF  
 DTV CONSTRUCTION PERMIT  
 STATION KWHE-DT  
 HONOLULU, HAWAII  
 CH 31      20.1 KW (MAX-DA)      5 M

Tabulation of Directional Antenna Pattern

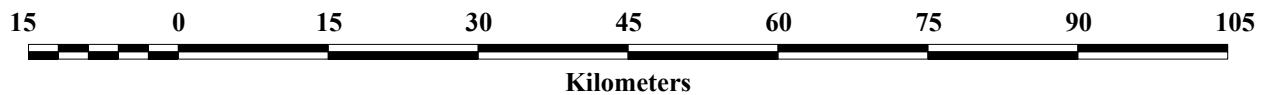
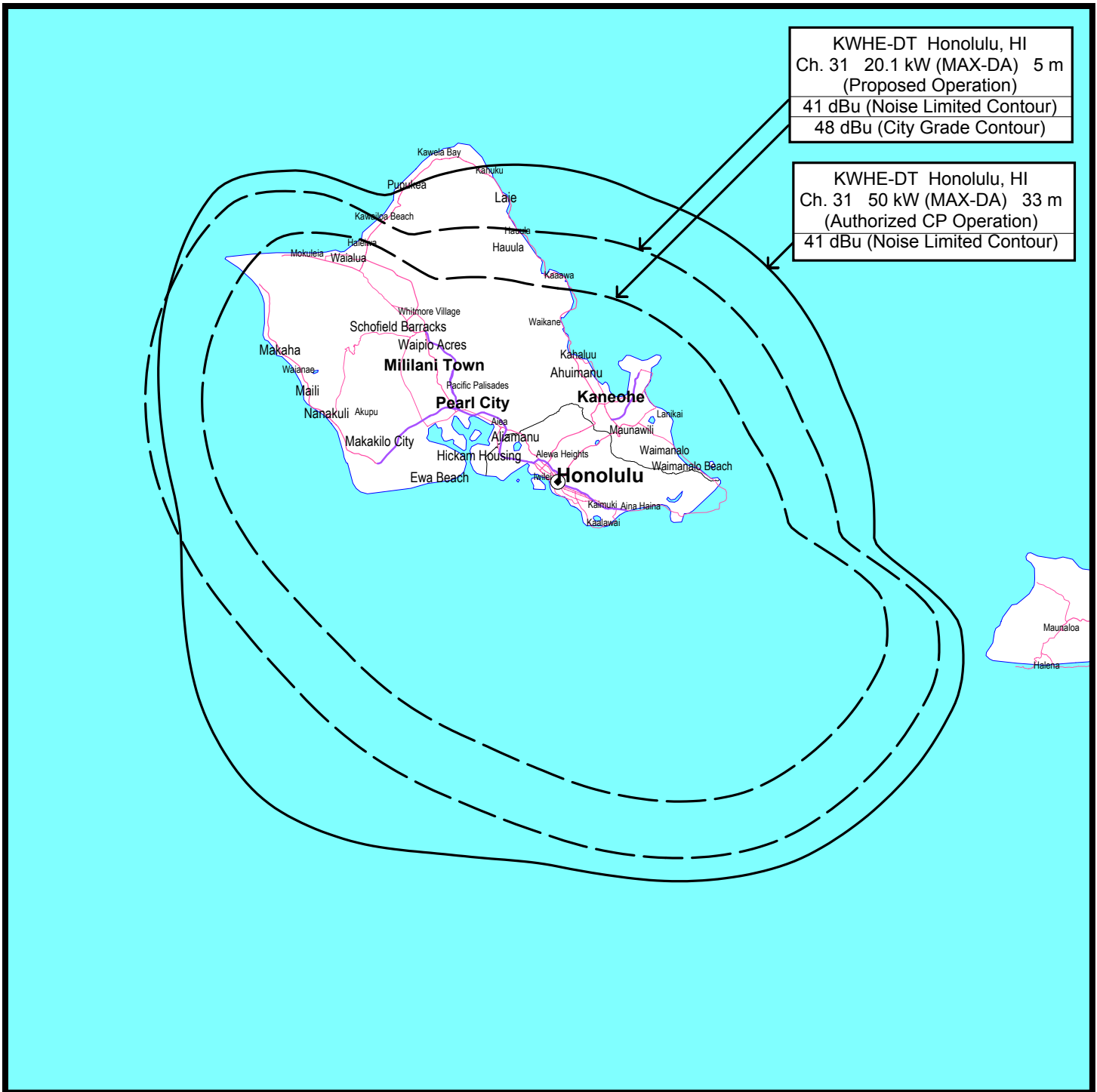
Azimuth (Ref. To 35 deg. true)	Relative Field	Effective Radiated Power (kW)	Azimuth Ref. To 35 (deg true)	Relative Field	Effective Radiated Power (kW)
0	0.398	3.18	180	0.222	0.99
10	0.404	3.28	190	0.222	0.99
20	0.408	3.35	200	0.233	1.09
30	0.408	3.35	210	0.271	1.48
40	0.431	3.73	220	0.348	2.43
50	0.517	5.37	230	0.473	4.50
60	0.669	9.00	240	0.641	8.26
70	0.838	14.12	250	0.817	13.42
80	0.960	18.52	260	0.949	18.10
90	1.000	20.10	270	1.000	20.10
100	0.949	18.10	280	0.960	18.52
110	0.817	13.42	290	0.838	14.12
120	0.641	8.26	300	0.669	9.00
130	0.473	4.50	310	0.517	5.37
140	0.348	2.43	320	0.431	3.73
150	0.271	1.48	330	0.408	3.35
160	0.233	1.09	340	0.408	3.35
170	0.222	0.99	350	0.404	3.28

**Elevation Pattern**Model: RD8**RADIO FREQUENCY SYSTEMS**Beam Tilt: 0.25 degreesNull Fill: 5%Directivity: 9.73 (9.88 dBd)Polarization: Horizontal

**Elevation Pattern Tabulated Data****Model: RD8****RADIO FREQUENCY SYSTEMS****Beam Tilt: 0.25 degrees****Directivity: 9.73 (9.88 dBd)****Null Fill: 5%****Polarization: Horizontal**

Angle	Relative Field	dB	Angle	Relative Field	dB	Angle	Relative Field	dB	Angle	Relative Field	dB
-5.0	0.33	-9.75	7.2	0.07	-23.50	33.5	0.09	-20.60	64.0	0.02	-34.70
-4.8	0.36	-8.80	7.4	0.05	-25.35	34.0	0.09	-20.73	64.5	0.02	-33.23
-4.6	0.40	-7.94	7.6	0.05	-25.32	34.5	0.09	-21.11	65.0	0.03	-32.04
-4.4	0.44	-7.15	7.8	0.07	-23.68	35.0	0.08	-21.73	65.5	0.03	-31.12
-4.2	0.48	-6.43	8.0	0.08	-21.74	35.5	0.07	-22.64	66.0	0.03	-30.43
-4.0	0.51	-5.77	8.2	0.10	-20.03	36.0	0.06	-23.84	66.5	0.03	-29.95
-3.8	0.55	-5.16	8.4	0.12	-18.62	36.5	0.05	-25.38	67.0	0.03	-29.66
-3.6	0.59	-4.60	8.6	0.13	-17.46	37.0	0.04	-27.39	67.5	0.03	-29.55
-3.4	0.63	-4.08	8.8	0.15	-16.52	37.5	0.03	-29.98	68.0	0.03	-29.63
-3.2	0.66	-3.60	9.0	0.16	-15.76	38.0	0.02	-33.43	68.5	0.03	-29.92
-3.0	0.69	-3.16	9.2	0.17	-15.14	38.5	0.01	-37.99	69.0	0.03	-30.43
-2.8	0.73	-2.76	9.4	0.19	-14.64	39.0	0.01	-41.51	69.5	0.03	-31.18
-2.6	0.76	-2.39	9.6	0.19	-14.24	39.5	0.01	-39.17	70.0	0.02	-32.25
-2.4	0.79	-2.05	9.8	0.20	-13.94	40.0	0.02	-36.19	70.5	0.02	-33.68
-2.2	0.82	-1.74	10.0	0.21	-13.72	40.5	0.02	-34.47	71.0	0.02	-35.76
-2.0	0.85	-1.46	10.5	0.21	-13.50	41.0	0.02	-33.72	71.5	0.01	-38.79
-1.8	0.87	-1.20	11.0	0.21	-13.69	41.5	0.02	-33.85	72.0	0.01	-44.01
-1.6	0.89	-0.97	11.5	0.19	-14.28	42.0	0.02	-34.80	72.5	0.00	-61.94
-1.4	0.92	-0.77	12.0	0.17	-15.29	42.5	0.01	-37.02	73.0	0.00	-46.38
-1.2	0.93	-0.59	12.5	0.14	-16.79	43.0	0.01	-41.41	73.5	0.01	-39.49
-1.0	0.95	-0.44	13.0	0.11	-18.95	43.5	0.00	-57.72	74.0	0.02	-35.70
-0.8	0.96	-0.31	13.5	0.08	-22.15	44.0	0.01	-43.10	74.5	0.02	-33.11
-0.6	0.98	-0.20	14.0	0.04	-27.51	44.5	0.02	-35.86	75.0	0.03	-31.18
-0.4	0.99	-0.12	14.5	0.01	-43.61	45.0	0.03	-31.73	75.5	0.03	-29.68
-0.2	0.99	-0.06	15.0	0.03	-31.34	45.5	0.04	-28.92	76.0	0.04	-28.50
0.0	1.00	0.00	15.5	0.06	-24.78	46.0	0.05	-26.80	76.5	0.04	-27.51
0.2	1.00	0.00	16.0	0.08	-21.50	46.5	0.06	-25.18	77.0	0.05	-26.76
0.4	1.00	0.00	16.5	0.11	-19.54	47.0	0.06	-23.90	77.5	0.05	-26.14
0.6	1.00	0.00	17.0	0.12	-18.33	47.5	0.07	-22.91	78.0	0.05	-25.68
0.8	0.99	-0.08	17.5	0.13	-17.65	48.0	0.08	-22.15	78.5	0.05	-25.34
1.0	0.98	-0.15	18.0	0.13	-17.40	48.5	0.08	-21.59	79.0	0.06	-25.11
1.2	0.97	-0.25	18.5	0.13	-17.52	49.0	0.09	-21.21	79.5	0.06	-25.01
1.4	0.96	-0.36	19.0	0.13	-17.99	49.5	0.09	-20.99	80.0	0.06	-25.01
1.6	0.94	-0.50	19.5	0.11	-18.85	50.0	0.09	-20.92	80.5	0.06	-25.11
1.8	0.93	-0.67	20.0	0.10	-20.12	50.5	0.09	-21.00	81.0	0.05	-25.32
2.0	0.91	-0.86	20.5	0.08	-21.93	51.0	0.09	-21.24	81.5	0.05	-25.66
2.2	0.88	-1.07	21.0	0.06	-24.45	51.5	0.08	-21.61	82.0	0.05	-26.11
2.4	0.86	-1.31	21.5	0.04	-28.09	52.0	0.08	-22.12	82.5	0.05	-26.69
2.6	0.83	-1.57	22.0	0.02	-33.15	52.5	0.07	-22.81	83.0	0.04	-27.41
2.8	0.81	-1.86	22.5	0.02	-34.47	53.0	0.07	-23.64	83.5	0.04	-28.31
3.0	0.78	-2.18	23.0	0.03	-29.95	53.5	0.06	-24.64	84.0	0.03	-29.42
3.2	0.75	-2.53	23.5	0.05	-26.61	54.0	0.05	-25.85	84.5	0.03	-30.81
3.4	0.71	-2.91	24.0	0.06	-24.52	54.5	0.04	-27.29	85.0	0.02	-32.58
3.6	0.68	-3.33	24.5	0.07	-23.22	55.0	0.04	-29.00	85.5	0.02	-34.89
3.8	0.65	-3.78	25.0	0.07	-22.52	55.5	0.03	-31.03	86.0	0.01	-38.20
4.0	0.61	-4.26	25.5	0.08	-22.29	56.0	0.02	-33.51	86.5	0.01	-43.61
4.2	0.58	-4.79	26.0	0.07	-22.50	56.5	0.01	-36.59	87.0	0.00	-61.94
4.4	0.54	-5.36	26.5	0.07	-23.17	57.0	0.01	-40.82	87.5	0.00	-46.20
4.6	0.50	-5.98	27.0	0.06	-24.35	57.5	0.00	-47.13	88.0	0.01	-39.58
4.8	0.46	-6.65	27.5	0.05	-26.20	58.0	0.00	-66.02	88.5	0.02	-35.97
5.0	0.43	-7.38	28.0	0.04	-29.09	58.5	0.00	-52.40	89.0	0.02	-33.51
5.2	0.39	-8.18	28.5	0.02	-34.20	59.0	0.00	-47.33	89.5	0.03	-31.73
5.4	0.35	-9.05	29.0	0.00	-50.46	59.5	0.01	-45.51	90.0	0.03	-30.34
5.6	0.32	-10.01	29.5	0.01	-37.20	60.0	0.01	-45.19			
5.8	0.28	-11.07	30.0	0.03	-30.40	60.5	0.01	-45.85			
6.0	0.24	-12.24	30.5	0.05	-26.82	61.0	0.00	-47.13			
6.2	0.21	-13.56	31.0	0.06	-24.51	61.5	0.00	-47.33			
6.4	0.18	-15.07	31.5	0.07	-22.93	62.0	0.01	-45.04			
6.6	0.14	-16.78	32.0	0.08	-21.83	62.5	0.01	-41.72			
6.8	0.12	-18.78	32.5	0.09	-21.13	63.0	0.01	-38.86			
7.0	0.09	-21.06	33.0	0.09	-20.72	63.5	0.01	-36.54			

Figure 3



## FCC PREDICTED COVERAGE CONTOURS

DTV STATION KWHE-DT  
HONOLULU, HAWAII  
CH 31 20.1 KW (MAX-DA) 5 M

du Treil, Lundin & Rackley, Inc. Sarasota, Florida

Figure 4

## CDBS TV/DTV SEPARATION STUDY

Job Title:  
 Channel: 31  
 Class:  
 Type: DT

Separation Buffer: 50 km  
 Coordinates: 21-18-49 157-51-43  
 Zone: II

Call Id	City St	Status	File Num	Channel Zone	ERP HAAT	DA Id	Latitude Longitude	Bear	Dist. (km)	Req. min	max
DKWHE	HONOLULU			31 ( )	50.000	D	21-18-49	90.1	0.0		
	HI DTV			II	33		157-51-43				
KWHE	HONOLULU		BPCDT	31 ( )	50.000	D	21-18-49	90.0	0.0		
36846	HI CP C	19991020AB	II		33 28782		157-51-43				
KBFD	HONOLULU		BLCT	32 (Z)	145.000	D	21-18-49	90.0	0.0	12.0	106.0
65395	HI LIC C	19860903KF	II		-5 18233		157-51-43		12.00	Close	
KALO	HONOLULU		BLET	38 (Z)	206.000	D	21-23-33	290.0	25.7	24.1	96.6
51241	HI LIC C	20020520AB	II		579 39195		158-05-43		1.63	Short	

**du Treil, Lundin, and Rackley****Coordinates: 21-18-49 157-51-43 Range: 5**

Date: 5/8/2006

**AM Stations Within 5 kilometers**

Page: 1

<b>Rec Type</b>	<b>Call</b>	<b>Latitude</b>	<b>Longitude</b>	<b>City</b>	<b>State</b>	<b>Power</b>	<b>Freq</b>	<b>Status</b>	<b>Hours</b>	<b>Ant. Mode</b>	<b>Class</b>	<b>Bearing</b>	<b>Dist. (km)</b>
C	KHVH	21-19-26	157-52-32	HONOLULU	HI	10.00	830	L	U	ND1	B	309.02	1.81
C	KHRA	21-19-26	157-52-32	HONOLULU	HI	5.00	1460	L	U	ND1	B	309.02	1.81
C	KHBZ	21-19-26	157-52-32	HONOLULU	HI	5.00	990	L	U	ND1	B	309.02	1.81
C	KSSK	21-19-26	157-52-32	HONOLULU	HI	7.50	590	L	U	ND1	B	309.02	1.81
C	KGU	21-17-41	157-51-49	HONOLULU	HI	10.00	760	L	U	ND1	B	184.67	2.10
C	KZOO	21-17-41	157-51-49	HONOLULU	HI	1.00	1210	L	U	ND1	B	184.67	2.10
C	KHNR	21-17-41	157-51-49	HONOLULU	HI	10.00	880	A	D	ND2	B	184.67	2.10
C	KHNR	21-17-41	157-51-49	HONOLULU	HI	10.00	880	A	N	ND2	B	184.67	2.10
C	KORL	21-17-41	157-51-49	HONOLULU	HI	10.00	690	L	U	ND1	B	184.67	2.10
C	KWAI	21-17-41	157-51-49	HONOLULU	HI	5.00	1080	L	U	ND1	B	184.67	2.10
C	KRUD	21-17-41	157-51-49	HONOLULU	HI	0.50	1130	C	D	ND2	B	184.67	2.10
C	KRUD	21-17-41	157-51-49	HONOLULU	HI	0.50	1130	C	N	ND2	B	184.67	2.10
C	KKEA	21-19-26	157-52-47	HONOLULU	HI	5.00	1420	L	U	ND1	B	301.82	2.17
C	KNDI	21-19-26	157-52-47	HONOLULU	HI	5.00	1270	L	U	ND1	B	301.82	2.17
C	KREA	21-19-27	157-52-47	HONOLULU	HI	5.00	1540	L	U	ND1	B	302.51	2.18
C	KUMU	21-20-10	157-53-33	HONOLULU	HI	10.00	1500	L	U	ND1	B	308.33	4.03
C	KLHT	21-20-10	157-53-33	HONOLULU	HI	10.00	1040	L	D	ND2	B	308.33	4.03
C	KLHT	21-20-10	157-53-33	HONOLULU	HI	10.00	1040	L	N	ND2	B	308.33	4.03
C	KRUD	21-20-10	157-53-33	HONOLULU	HI	10.00	1130	C	D	ND2	B	308.33	4.03
C	KRUD	21-20-10	157-53-33	HONOLULU	HI	5.00	1130	C	N	ND2	B	308.33	4.03

**du Treil, Lundin, and Rackley****Coordinates: 21-18-49 157-51-43 Frequency Range: 200-300****Range: 16**

Date: 5/8/2006

**FM Stations Within 16 kilometers**

Page: 1

<b>Rec Type</b>	<b>Fac Id</b>	<b>Call</b>	<b>Status</b>	<b>Chan</b>	<b>Svc Class</b>	<b>Class</b>	<b>City</b>	<b>St</b>	<b>DA</b>	<b>Latitude</b>	<b>Longitude</b>	<b>ERP (kW)</b>	<b>HAAT (m)</b>	<b>RCAMSL (m)</b>	<b>Bear</b>	<b>Dist. (km)</b>
C	40144	KDNN	LIC	253	FM	C1	HONOLULU	HI	N	21-18-49	157-51-43	51.000	18.0	141.0	0.0	0.0
C	34592	KIKI-FM	LIC	230	FM	C1	HONOLULU	HI	N	21-19-26	157-52-32	100.000	44.0	125.0	309.0	1.8
C	34620	KHNR-F	LIC	248	FM	C1	HONOLULU	HI	N	21-17-37	157-50-32	80.000	14.0	141.0	137.4	3.0
C	31601	KUMU-F	LIC	234	FM	C1	HONOLULU	HI	N	21-17-09	157-50-19	100.000	24.0	141.0	142.0	3.9
C	66592	KTUH	LIC	212	FM	A	HONOLULU	HI	N	21-18-14	157-49-22	3.000	-25.0	77.0	104.9	4.2
C	26440	KIPO	CP	207	FM	C0	HONOLULU	HI	D	21-20-12	157-49-03	26.000	529.0	637.0	60.9	5.3
C	26446	KHPR	LIC	201	FM	C	HONOLULU	HI	N	21-19-49	157-45-24	35.000	645.0	771.0	80.3	11.1
C	81548	960418M	APP	218	FM	C	KANEOHE	HI		21-19-49	157-45-24	50.000	659.0	756.0	80.3	11.1
C	50118	KRTR-FM	LIC	242	FM	C	KAILUA	HI	N	21-19-49	157-45-24	75.000	645.0	771.0	80.3	11.1
C	27424	KPHW	LIC	282	FM	C	KANEOHE	HI	N	21-19-49	157-45-24	75.000	645.0	771.0	80.3	11.1

**du Treil, Lundin, and Rackley****Coordinates: 21-18-49 157-51-43 Channel Range: 2-100 Range: 16**

Date: 5/8/2006

**TV Stations Within 16 kilometers**

Page: 1

<b>Rec Type</b>	<b>Facility Id</b>	<b>Call</b>	<b>Status</b>	<b>Chan</b>	<b>Svc Class</b>	<b>Class</b>	<b>City</b>	<b>St</b>	<b>DA</b>	<b>Latitude</b>	<b>Longitude</b>	<b>ERP (kW)</b>	<b>HAAT (m)</b>	<b>RCAMSL (m)</b>	<b>Bearing</b>	<b>Dist. (km)</b>
C	36846	KWHE	CP	31	DT		HONOLULU	HI	D	21-18-49	157-51-43	50.000	33	134	0	0
C	36846	KWHE	LIC	14	TV		HONOLULU	HI	D	21-18-49	157-51-43	75.900	8	131	0	0
C	36846	KWHE	STA	31	DS		HONOLULU	HI	D	21-18-49	157-51-43	5.000	31	128	0	0
C	65395	KBFD	CP	33	DT		HONOLULU	HI	D	21-18-49	157-51-43	108.000	-5	119	0	0
C	65395	KBFD	LIC	32	TV		HONOLULU	HI	D	21-18-49	157-51-43	145.000	-5	119	0	0
C	65395	KBFD	STA	33	DS		HONOLULU	HI	D	21-18-49	157-51-43	14.400	-5	242	0	0
C	4144	KHON-T	STA	22	DS		HONOLULU	HI	N	21-17-46	157-50-36	4.560	-33.3	109	135.2	2.74
C	4144	KHON-T	LIC	8	DT		HONOLULU	HI	N	21-17-46	157-50-36	7.200	-12	128	135.2	2.74
C	26431	KHET	LIC	11	TV		HONOLULU	HI	N	21-17-46	157-50-36	148.000	-25.2	117	135.2	2.74
C	36917	KGMB	LIC	8	DT		HONOLULU	HI	N	21-17-46	157-50-36	7.200	-12	128	135.2	2.74
C	36917	KGMB	APP	22	DT		HONOLULU	HI	D	21-17-46	157-50-36	15.000	-33.3	109	135.2	2.74
C	36917	KGMB	LIC	9	TV		HONOLULU	HI	N	21-17-46	157-50-36	105.000	-12	128	135.2	2.74
C	64548	KITV	CP	40	DT		HONOLULU	HI	D	21-17-37	157-50-34	85.000	1	128	138.2	2.98
C	64548	KITV	LIC	40	DT		HONOLULU	HI	D	21-17-37	157-50-34	8.500	1	128	138.2	2.98
C	64548	KITV	LIC	4	TV		HONOLULU	HI	N	21-17-37	157-50-34	100.000	14	141	138.2	2.98
C	4144	KHON-T	LIC	2	TV		HONOLULU	HI	N	21-17-39	157-50-18	50.000	18	143	131.4	3.26
C	36917	KGMB	CP	22	DT		HONOLULU	HI	N	21-17-39	157-50-18	1000.00	9.2	134	131.4	3.26
C	34867	KHNL	CP	35	DT		HONOLULU	HI	N	21-17-09	157-50-19	25.000	39	118	141.9	3.91
C	34867	KHNL	LIC	13	TV		HONOLULU	HI		21-17-09	157-50-19	316.000	48	127	141.9	3.91
C	77483	KPXO	APP	41	DT		KANEOHE	HI	N	21-19-49	157-45-24	34.000	632	757	80.33	11.08
C	77483	KPXO	LIC	66	TV		KANEOHE	HI	N	21-19-49	157-45-24	95.500	632	757	80.33	11.08
C	77483	KPXO	STA	41	DS		KANEOHE	HI	N	21-19-49	157-45-24	1.660	632	757	80.33	11.08
C	77483	KPXO	CP	41	DT		KANEOHE	HI	N	21-19-49	157-45-24	297.000	632	757	80.33	11.08
C	83180	KKAI	LIC	50	TV		KAILUA	HI	N	21-19-49	157-45-24	83.200	632	757	80.33	11.08
C	89714	KMGT	LIC	56	TV		WAIMANALO	HI	N	21-19-49	157-45-24	83.200	632	757	80.33	11.08

**EXHIBIT E-5**

**Environmental Assessment & RF Radiation Statement**

This application involves the addition of an antenna and transmission line to an existing broadcast location on the roof-top of the Century Square Building in downtown Honolulu. This application has no significant additional impact upon items 1 through 7 of paragraph A. of the General Environmental Worksheet.

With respect to item 8, the additional RF radiation emitted by the KWHE antenna will be located in a narrow beam centered 127.0 meters above ground. There is no possibility of public access to areas exceeding the ANSI standard. The access to the roof-top is locked and secure. The only possibility of exposure to RF Radiation levels in excess of the ANSI standard is on the roof-top itself, near the antenna.

It is the policy of LeSEA Broadcasting Corporation to cease transmission from the antenna when maintenance personnel or window-washers must perform work on the roof top or near the antenna.

The LeSEA transmitter site will pose no significant effect upon the human environment with regard to exposure of the general public to levels of non-ionizing radiation in excess of ANSI standards.

Douglas W. Garlinger  
October 13, 1999