

ENGINEERING STATEMENT

The engineering data contained herein have been prepared on behalf of AINA'E COMPANY LTD., permittee of KLEI-DT, Channel 25 in Kailua-Kona, Hawaii, in support of its application for modification of Construction Permit BPCDT-19991101AKS, to specify a change in transmitter site and decrease in effective radiated power.

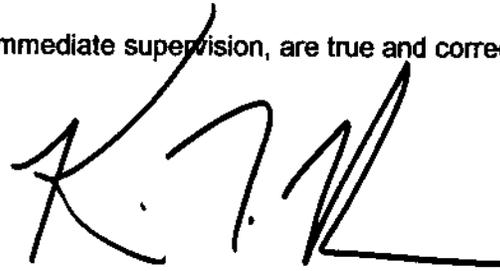
Exhibit B provides directional antenna pattern data, and proposed operating parameters are tabulated in Exhibit C. Exhibit D is a map upon which the predicted service contours are plotted. As shown, the city of license is completely contained within the proposed 48 dBu service contour. Since the 41 dBu contour of the proposed facility is completely contained within that allotted to KLEI-DT, no interference study is included herein. A power density calculation is provided in Exhibit E.

It is not expected that the proposed facility would cause objectionable interference to any other broadcast or non-broadcast station authorized to operate at or near the new KLEI-DT site. However, if such should occur, the owner of KLEI-DT recognizes its obligation to take whatever corrective actions are necessary.

Since no change in the overall height or location of the existing tower is proposed herein, the FAA has not been notified of this application. In addition, the FCC issued Antenna Structure Registration Number 1211321 to this tower.

EXHIBIT A

I declare under penalty of perjury that the foregoing statements and the attached exhibits, which were prepared by me or under my immediate supervision, are true and correct to the best of my knowledge and belief.

A handwritten signature in black ink, appearing to read 'K. T. Fisher', with a stylized flourish at the end.

KEVIN T. FISHER

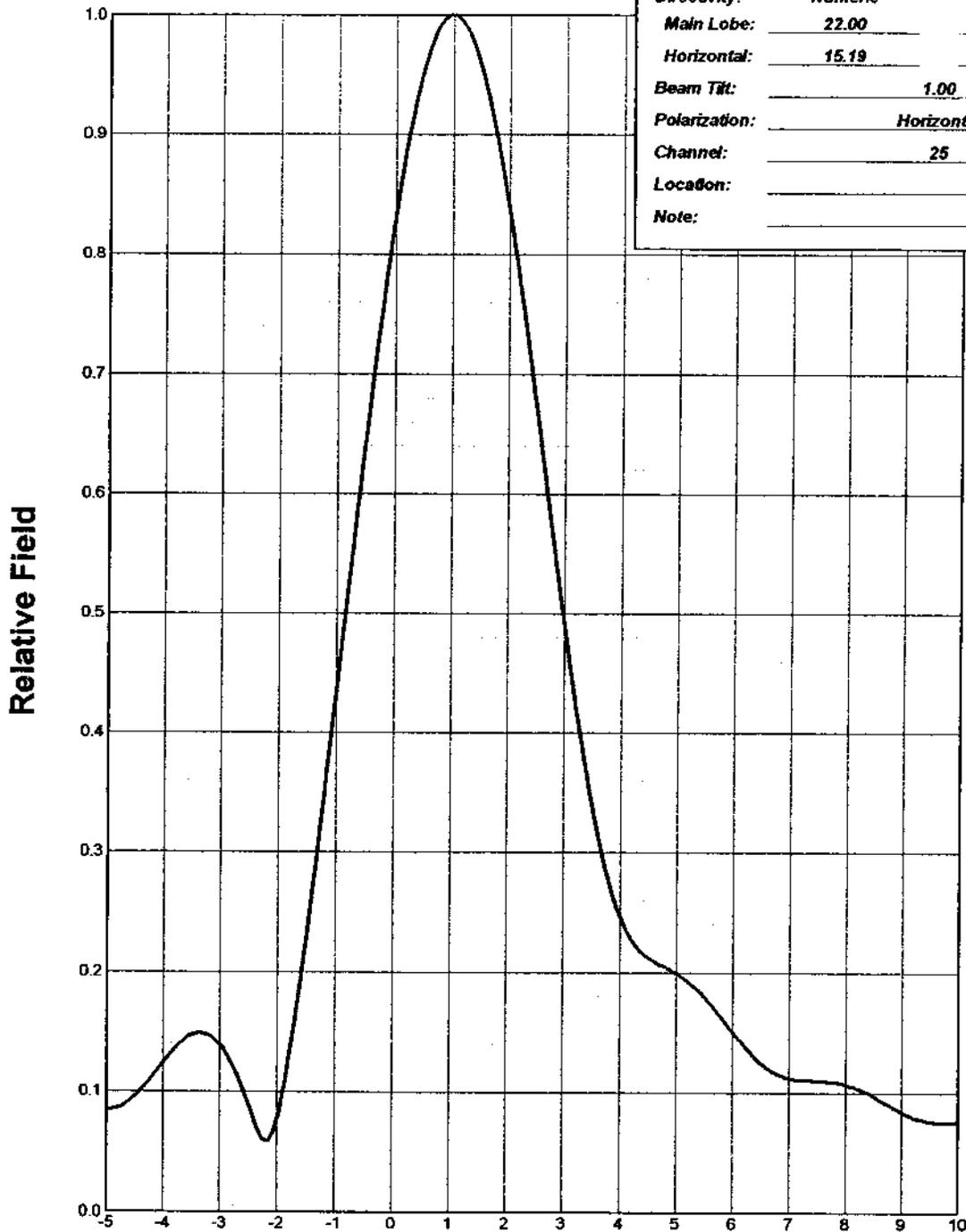
June 8, 2004



ANDREW.

ELEVATION PATTERN

Type:	ATW22HS4H	
Directivity:	Numeric	dBd
Main Lobe:	22.00	13.42
Horizontal:	15.19	11.82
Beam Tilt:	1.00	
Polarization:	Horizontal	
Channel:	25	
Location:		
Note:		



ANDREW CORPORATION
 10500 W. 153rd Street
 Orland Park, Illinois U.S.A 60462

EXHIBIT B-1

ANTENNA ELEVATION PATTERN

**PROPOSED KLEI-DT
 CHANNEL 25 - KAILUA-KONA, HAWAII
 [MODIFICATION OF BPCDT-19991101AKS]**

SMITH AND FISHER

EXHIBIT B-2

ANTENNA AZMUTH PATTERN

**PROPOSED KLEI-DT
CHANNEL 25 - KAILUA-KONA, HAWAII
[MODIFICATION OF BPCDT-19991101AKS]**

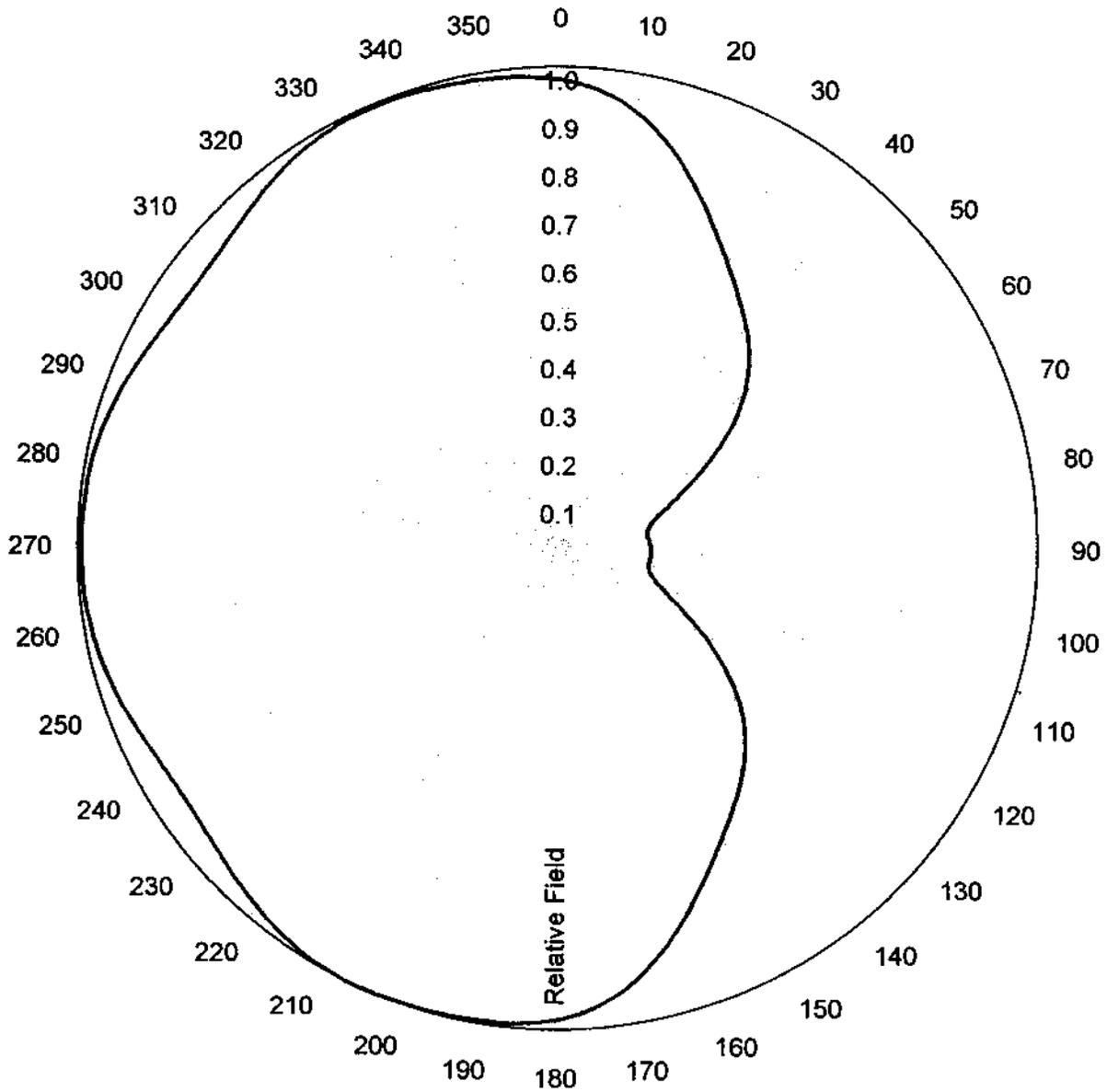
SMITH AND FISHER



ANDREW.

AZIMUTH PATTERN

Type:	ATW-C1	
	Numeric	dBd
Directivity:	1.52	1.82
Peak(s) at:		
Polarization:	Horizontal	
Channel:	25	
Location:		
Note:		



ANDREW CORPORATION
10500 W. 153rd Street
Orland Park, Illinois U.S.A 60462



ANDREW.

**AZIMUTH PATTERN
FCC FILING FORMAT**

Type: ATW-C1

Polarization: Horizontal

Angle	Field	ERP (kW)	ERP (dBk)
0	0.974	664.065	28.222
10	0.921	593.761	27.736
20	0.811	460.399	26.631
30	0.695	338.113	25.291
40	0.604	255.368	24.072
50	0.504	177.809	22.500
60	0.363	92.237	19.649
70	0.235	38.657	15.872
80	0.190	25.270	14.026
90	0.195	26.617	14.252
100	0.193	26.074	14.162
110	0.228	36.388	15.610
120	0.348	84.772	19.283
130	0.495	171.515	22.343
140	0.602	253.680	24.043
150	0.691	334.233	25.240
160	0.803	451.361	26.545
170	0.917	588.615	27.698
180	0.979	670.900	28.267
190	0.993	690.226	28.390
200	0.999	698.592	28.442
210	0.996	694.403	28.416
220	0.972	661.341	28.204
230	0.941	619.829	27.923
240	0.937	614.571	27.886
250	0.963	649.150	28.123
260	0.985	679.149	28.320
270	0.992	688.836	28.381
280	0.987	681.910	28.337
290	0.966	653.201	28.150
300	0.938	615.883	27.895
310	0.935	611.950	27.867
320	0.963	649.150	28.123
330	0.989	684.676	28.355
340	0.994	691.617	28.399
350	0.987	681.910	28.337



ANDREW CORPORATION
10500 W. 153rd Street
Orland Park, Illinois U.S.A 60462

EXHIBIT B-3

ANTENNA RELATIVE FIELD VALUES

**PROPOSED KLEI-DT
CHANNEL 25 – KAILUA-KONA, HAWAII
[MODIFICATION OF BPCDT-19991101AKS]**

SMITH AND FISHER

PROPOSED OPERATING PARAMETERS

PROPOSED KLEI-DT
CHANNEL 25 – KAILUA-KONA, HAWAII
[MODIFICATION OF BPCDT-19991101AKS]

Transmitter Power Output:	24.3 kw
Transmission Line Efficiency:	86.0%
Antenna Power Gain – Main Lobe:	33.44
Effective Radiated Power – Main Lobe:	700 kw
Transmitter Make and Model:	Type-accepted
Rated Output	25 kw
Transmission Line Make and Model:	Andrew HJ11-50
Size and Type:	4" air heliax
Length:	220 feet
Antenna Make and Model:	Andrew ATW22HS4-HSC1-25H
Orientation	270°T
Beam Tilt	1.0 degrees
Radiation Center	59.4 meters
Radiation Center	1,681 meters

CONTOUR POPULATION
48 DBU : 83,479
41 DBU : 166,482

SMITH AND FISHER

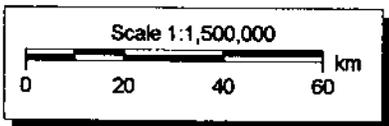
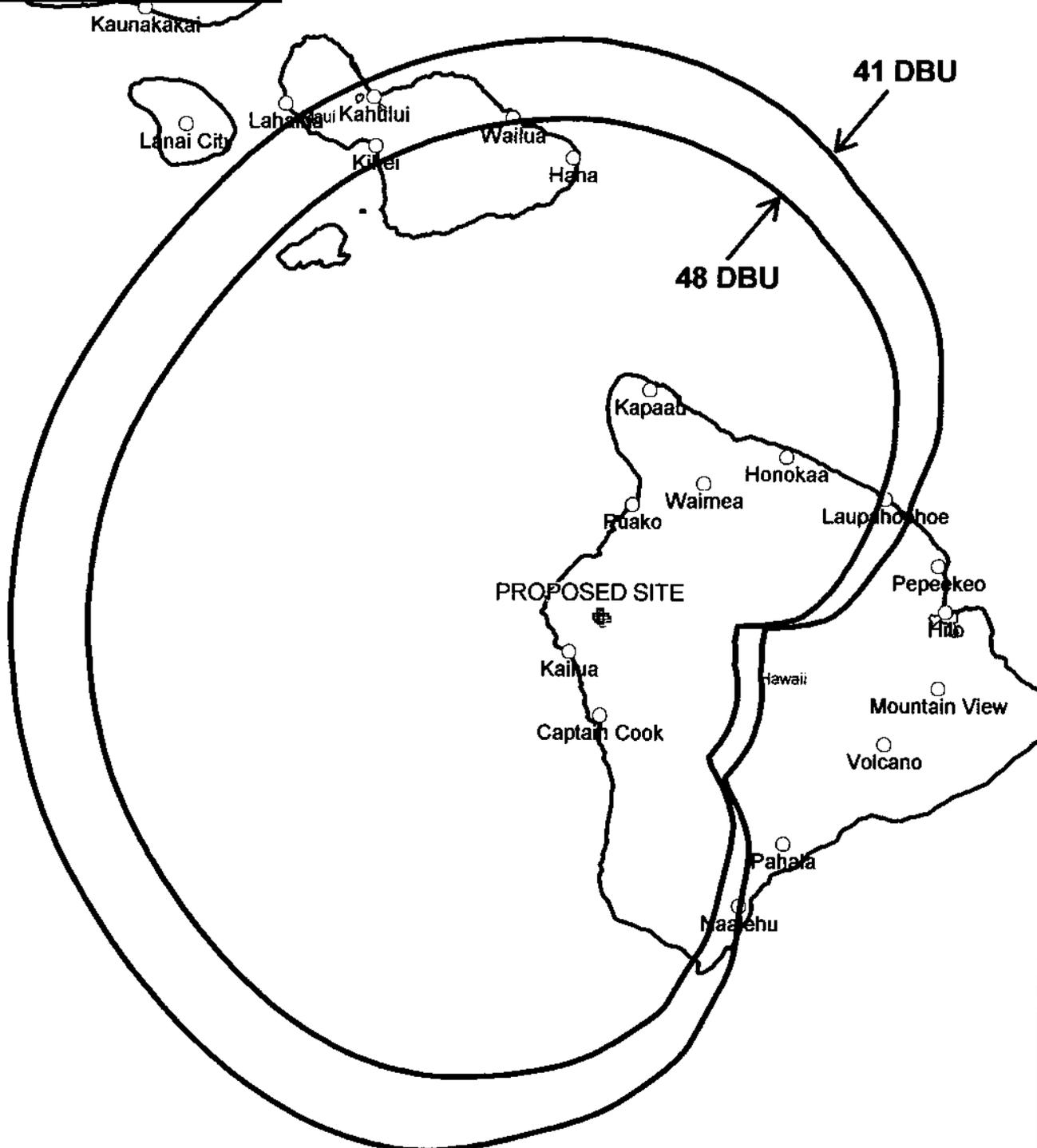


EXHIBIT D
PREDICTED SERVICE CONTOURS
PROPOSED KLEI-DT
CHANNEL 25 - KAILUA-KONA, HAWAII
[MODIFICATION OF BPCDT-19991101AKS]
SMITH AND FISHER

POWER DENSITY CALCULATION

PROPOSED KLEI-DT
CHANNEL 25 - KAILUA-KONA, HAWAII

[MODIFICATION OF BPCDT-19991101AKS]

Since the FCC considers the possible biological effects of RF transmissions in its environmental determinations, we have studied the matter with respect to this Kailua-Kona facility. Employing the methods set forth in *OET Bulletin No. 65* and considering a main-lobe effective radiated power of 700 kw, an effective antenna height of 59.4 meters above ground, and the elevation pattern of the Andrew antenna, maximum power density two meters above ground of 0.0080 mw/cm^2 is calculated to occur 16 meters from the base of the tower. Since this is only 2.2 percent of the 0.36 mw/cm^2 reference for uncontrolled environments (areas with public access) surrounding a facility operating on Channel 25 (536-542 MHz), a grant of this proposal may be considered a minor environmental action with respect to public and occupational ground-level exposure to nonionizing electromagnetic radiation.

Further, the station owner will take whatever precautionary steps are necessary, such as reducing power or leaving the air temporarily, to ensure that workers operating in the vicinity of the antenna are not exposed to excessive nonionizing radiation.