ENGINEERING REPORT
RF Radiation Study

KLFT(FM) – Tucson, AZ
Channel 203A – 88.5 MHz
Supplimental Showing for Form 302 Filing

September, 2005

MUNN–REESE, INC.
Broadcast Engineering Consultants
Coldwater, MI 49036

CERTIFICATION OF ENGINEERS

The firm of Munn-Reese, Inc., Broadcast Engineering Consultants, with offices at 385 Airport Drive, Coldwater, Michigan, has been retained for the purpose of preparing the technical data forming this report.

The data utilized in this report was taken from the FCC Secondary Database and data on file. While this information is believed accurate, errors or omissions in the database and file data are possible. This firm may not be held liable for damages as a result of such data errors or omissions.

The report has been prepared by properly trained electronics specialists under the direction of the undersigned whose qualifications are a matter of record before the Federal Communications Commission.

I declare under penalty of the laws perjury that the contents of this report are true and accurate to the best of my knowledge and belief.

September 1, 2005

MUNN-REESE, INC.

By _____
Wayne S. Reese, President

By _____
Justin W. Asher, Project Engineer

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COMPLIANCE WITH RADIOFREQUENCY RADIATION GUIDELINES

New station KFLT(FM), Tucson, AZ, has been re-evaluated for human exposure to non-ionizing radiofrequency radiation at the transmitter site due a a change in installed antenna height other than that specified in Construction Permit File No. BPED-19960517MF. The site houses multiple transmitters. The potential for human exposure to non-ionizing radiofrequency radiation at the multiple source site has been evaluated with regards to §1.1307(b)(3) concerning the five percent (5%) contribution rule for multiple transmitter sites.

The KFLT(FM) facility will operate on 88.5 MHz with a maximum effective radiated power (ERP) of 1.5 kW vertical only polarization. The station will employ a 2-bay Shively 6513-2-DA antenna, however ever a worst case one bay EPA Type 1 antenna has been assumed to ensure maximum protection. The antenna has been mounted 147 meters above ground level (AGL) which is 10 meters less than the 157 meter AGL height specified in the Construction Permit. This change was required to ensure proper spacing with other elements on the tower not known at the time of the original filing.

This site has been evaluated for compliance with the FCC guidelines concerning human exposure to radiofrequency radiation. The standards employed are detailed in OET Bulletin No. 65 (Edition 97-01).

Software packages were used to determine the individual contribution of the station. FM radiofrequency radiation levels were predicted using both the array pattern, the calculations of which are based on the number of bays in the antenna and wavelength spacing between the bays, and the element pattern. The element pattern is determined by using measured element data prepared by the EPA and published in "An Engineering Assessment of the Potential Impact of Federal Radiation Protection Guidance on the AM, FM and TV Services," by Paul C. Gailey and Richard Tell - April 1985, U.S. Environmental Protection Agency, Las Vegas, NV. The programs use formulas originally published in OST Bulletin No. 65, 1985.

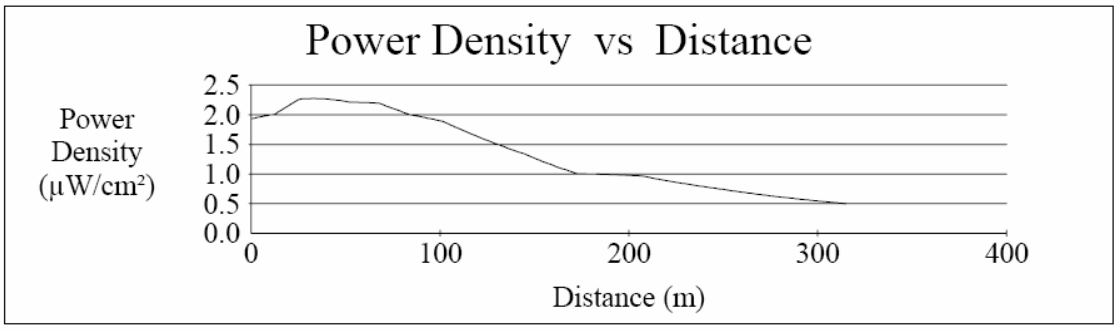
The result of the evaluations for the station is shown in both graphical and tabular forms at the end of this report. The tabulation lists the portion of the tabular output for the station showing the region of maximum radiofrequency radiation. The locations of maximum predicted power density have been highlighted. The FM graphical display has been scaled to show the best definition of the data curve.

To evaluate the total exposure to non-ionizing radio-frequency radiation with regards to the five percent contribution exclusion rule, it is necessary to express the individual contribution as a decimal fraction of the maximum permissible limit. If the resulting contribution is less than or equal to 0.05 (5.0%), the exposure is concluded to be within the guidelines of OET Bulletin No. 65 (Edition 97-01) and §1.1307(b)(3). The maximum predicted exposure of 2.2718 $\mu W/cm^2$ will occur at 33 meters from the base of the tower. This level represents 1.14% of the 200 $\mu W/cm^2$ limit for the more restrictive uncontrolled environment where members of the general public may be exposed to radiofrequency radiation. Protection of the more restrictive uncontrolled limit implies protection of the controlled limit.

Since the maximum contribution of 1.14% for the uncontrolled environments is less than the 5.0% as set for by §1.1307(b)(3), the KFLT(FM) facility is in compliance with FCC guidelines. §1.1307(b)(3) states facilities contributing less than five percent of the exposure limit at locations with multiple transmitters are categorically excluded from responsibility for taking any corrective action in the areas where its contribution is less than five percent. Since this study meets the five percent exclusion test at all ground level areas, the impact of the facility may be considered independently from other facilities operating at or nearby this site. It is believed the impact of this facility should not be considered to be a factor at ground level as defined under §1.1307(b)(3).

In addition to the protection afforded by the antenna height above ground, the facility is properly marked with signs, and entry to the facility is restricted by means of fencing with locked doors and/or gates. Any other means that may be required to protect employees and the general public will be employed. In the event work is required in proximity to the antenna(s) such that the person or persons working in the area will be potentially exposed to fields in excess of the current guidelines, an agreement signed by all broadcast parties at the site is in effect for the offending transmitter(s) to reduce power, or cease operation during the critical period.

PLOT & TAB OF TOTAL POWER DENSITY
KFLT(FM) – Tucson, AZ
Using a worst cast 1-Bay EPA Type 1 Antenna Mounted 147 meters AGL



Distance (meters) = 315
Horizontal ERP (W) = 0
Antenna Height (m) = 147
Number of Elements = 1
Y-axis (Linear) = -1
Vertical ERP (W) = 1500
Antenna EPA Type = 1
Element Spacing = 1
X-axis Setup = -1, 315

X(m)	Y(μW/cm²)	X(m)	Y(μW/cm²)	X(m)	Y(μW/cm²)	X(m)	Y(μW/cm²)	X(m)	Y(μW/cm²)
0	1.9306	45	2.2469	90	1.9646	133	1.4689	178	1.0018
1	1.9380	46	2.2427	91	1.9582	134	1.4572	179	1.0011
2	1.9452	47	2.2383	92	1.9519	135	1.4456	180	1.0004
3	1.9523	48	2.2338	93	1.9454	136	1.4341	181	.99964
4	1.9591	49	2.2291	94	1.9388	137	1.4227	182	.99880
5	1.9658	50	2.2243	95	1.9322	138	1.4113	183	.99791
6	1.9723	51	2.2193	96	1.9255	139	1.4001	184	.99697
7	1.9786	52	2.2141	97	1.9188	140	1.3890	185	.99599
8	1.9847	53	2.2100	98	1.9119	141	1.3779	186	.99496
9	1.9906	54	2.2102	99	1.9050	142	1.3670	187	.99389
10	1.9963	55	2.2101	100	1.8981	143	1.3562	188	.99278
11	2.0019	56	2.2099	101	1.8911	144	1.3454	189	.99163
12	2.0072	57	2.2095	102	1.8804	145	1.3348	190	.99043
13	2.0173	58	2.2088	103	1.8657	146	1.3208	191	.98920
14	2.0380	59	2.2079	104	1.8511	147	1.3071	192	.98792
15	2.0586	60	2.2069	105	1.8365	148	1.2935	193	.98661
16	2.0790	61	2.2057	106	1.8221	149	1.2800	194	.98526
17	2.0993	62	2.2042	107	1.8078	150	1.2668	195	.98388
18	2.1194	63	2.2026	108	1.7935	151	1.2537	196	.98246
19	2.1393	64	2.2008	109	1.7794	152	1.2407	197	.98101
20	2.1590	65	2.1988	110	1.7653	153	1.2279	198	.97952
21	2.1785	66	2.1966	111	1.7514	154	1.2153	199	.97800
22	2.1979	67	2.1943	112	1.7375	155	1.2028	200	.97645
23	2.2170	68	2.1883	113	1.7238	156	1.1905	201	.97486
24	2.2360	69	2.1767	114	1.7101	157	1.1783	202	.97325
25	2.2547	70	2.1650	115	1.6965	158	1.1663	203	.97161
26	2.2659	71	2.1533	116	1.6831	159	1.1544	204	.96993
27	2.2674	72	2.1415	117	1.6697	160	1.1427	205	.96823
28	2.2687	73	2.1297	118	1.6564	161	1.1311	206	.96651
29	2.2697	74	2.1179	119	1.6432	162	1.1197	207	.96475
30	2.2706	75	2.1061	120	1.6302	163	1.1084	208	.95889
31	2.2712	76	2.0942	121	1.6172	164	1.0972	209	.95271
32	2.2716	77	2.0823	122	1.6043	165	1.0862	210	.94658
33	2.2718	78	2.0704	123	1.5915	166	1.0753	211	.94050
34	2.2717	79	2.0585	124	1.5788	167	1.0645	212	.93447
35	2.2715	80	2.0466	125	1.5662	168	1.0539	213	.92849
36	2.2710	81	2.0346	126	1.5537	169	1.0434	214	.92255
37	2.2704	82	2.0227			170	1.0330	215	.91667
38	2.2695	83	2.0107			171	1.0228	216	.91083
39	2.2681	84	2.0005	127	1.5413	172	1.0126	217	.90504
40	2.2650	85	1.9948	128	1.5290	173	1.0045	218	.89930
41	2.2618	86	1.9889	129	1.5168	174	1.0041	219	.89360
42	2.2583	87	1.9830	130	1.5047	175	1.0036	220	.88795
43	2.2547	88	1.9769	131	1.4927	176	1.0031		
44	2.2509	89	1.9708	132	1.4807	177	1.0025		

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