

KATZ-FM Engineering Exhibit
Antenna Location
Facility ID No. 48958

This engineering exhibit is part of a minor change application for KATZ-FM to change community, class, and antenna location. This exhibit concerns the proposed new antenna location for KATZ-FM.

The proposed location for KATZ-FM is a new 80 foot tower upon a building described in antenna structure registration number 1200490. From this location KATZ-FM will operate with a directional antenna, at a height above average terrain of 125 meters. The web page provided by the FCC was utilized to determine the maximum effective radiated power for a Class C3 facility at this height of 16 kilowatts. As demonstrated in the attached spacing study in Figure 1 this proposed location is fully spaced in accordance with section 73.207 to all other existing, authorized, and proposed stations and allotments with the exception of KDJR Desoto, Missouri, and WYMG Jacksonville, Illinois, which are discussed below.

This proposal is short spaced to first adjacent WYMG 263B Jacksonville by 26.9 kM while the existing KATZ-FM authorization is shot spaced to WYMG by 83.8 kM and is “grandfathered” pursuant to Section 73.213(a). This proposal will result in a 56.9 kM decrease in this short spacing. Figure 2 is a map depicting the protected and interfering contours of KATZ-FM as licensed and proposed, as well as those of WYMG. This exhibit demonstrates that there is existing overlap between WYMG and the Licensed KATZ-FM, as well as the extent of reduction in overlap, and that no new area of interference will be created by this proposal. It is thought that this proposal is compliant with Section 73.213(a), and is in the public interest.

This proposal is short spaced to first adjacent KDJR 261A Desoto by 16.8 kM. It is proposed to utilize the provisions of Section 73.215. Figure 3 is a map depicting the protected and interfering contours of KATZ-FM as proposed, as well as those of KDJR. Please note that KDRJ is presently licensed pursuant to Section 73.215 thus protection is only given to the existing facility by this proposal. In Figure 3 it can be determined that utilizing the proposed directional antenna, operation at 16 kW will not create prohibited interference to KDJR from the proposed KATZ-FM facility.

Environmental Considerations

The proposed transmitting facility is to be located on the roof of the “Stevens Building” in Clayton, Missouri. This location is not within 3.2 kM of a directional or 0.8 km of a non-directional standard broadcast station. No FM or TV broadcast facilities are located within 1.0 kM. There does exist, however, numerous geographically licensed communications facilities located upon this roof. Due to the complexity of the surrounding RF environment, KATZ-FM will take power density measurements prior to filing of an application for license to demonstrate compliance with 74CRR 1.1306.

Figure 1

ComStudy 2.2 search of channel 262 (100.3 MHz Class C3) at 38-38-51.0 N, 90-20-08.0 W.

Callsign	State	City	Freq	Chal	ERP_w	Class	Status	Dist_km	Sep	Clr
KATZ-FM	IL	ALTON	100.3	262	50000	B	LIC	32.88	211	-178.1
KATZ-FM	IL	ALTON	100.3	262	0	B	USE	32.88	211	-178.1
WYMG	IL	JACKSONVILLE	100.5	263	0	B	USE	118.08	145	-26.9
WYMG	IL	JACKSONVILLE	100.5	263	50000	B	LIC	118.08	145	-26.9
KDJR	MO	DE SOTO	100.1	261	0	A	USE	72.15	89	-16.8
KDJR	MO	DE SOTO	100.1	261	2000	A	LIC	72.15	89	-16.8
WCBW-FM	IL	EAST ST. LOUIS	89.7	209	250	A	LIC	11.72	12	-0.3
KCFV	MO	FERGUSON	89.5	208	100	A	LIC	14.07	12	2.1
KYMC	MO	BALLWIN	89.7	209	120	A	LIC	17.46	12	5.5
WZJM-LP	IL	FREEBURG	99.9	260	100	LP100	LIC	47.54	40	7.5
NEW	MO	SAINT LOUIS	99.7	259	250	D	APP	8.82	0	8.8
KFAV	MO	WARRENTON	99.9	260	10500	C3	LIC	65.19	43	22.2
KNLH	MO	CEDAR HILL	89.5	208	68	A	LIC	36.81	12	24.8
WJBD-FM	IL	SALEM	100.1	261	1150	A	LIC	116.79	89	27.8
WJBD-FM	IL	SALEM	100.1	261	0	A	USE	116.79	89	27.8
891002MP	MO	TROY	100.7	264	0	A	USE	70.37	42	28.4
WXAJ	IL	HILLSBORO	99.7	259	0	B	USE	100.34	71	29.3
KFNS-FM	MO	TROY	100.7	264	6000	A	LIC	72.96	42	31
880107MP	MO	WARRENTON	99.9	260	0	C3	USE	74.78	43	31.8
WXAJ	IL	HILLSBORO	99.7	259	50000	B	LIC	104.85	71	33.8
WARW	IL	DORSEY	89.5	208	30	A	LIC	48.02	12	36
NEW	IL	WATERLOO	99.9	260	55	D	APP	37.52	0	37.5
NEW	IL	WATERLOO	99.9	260	55	D	APP	37.52	0	37.5

Figure 2.

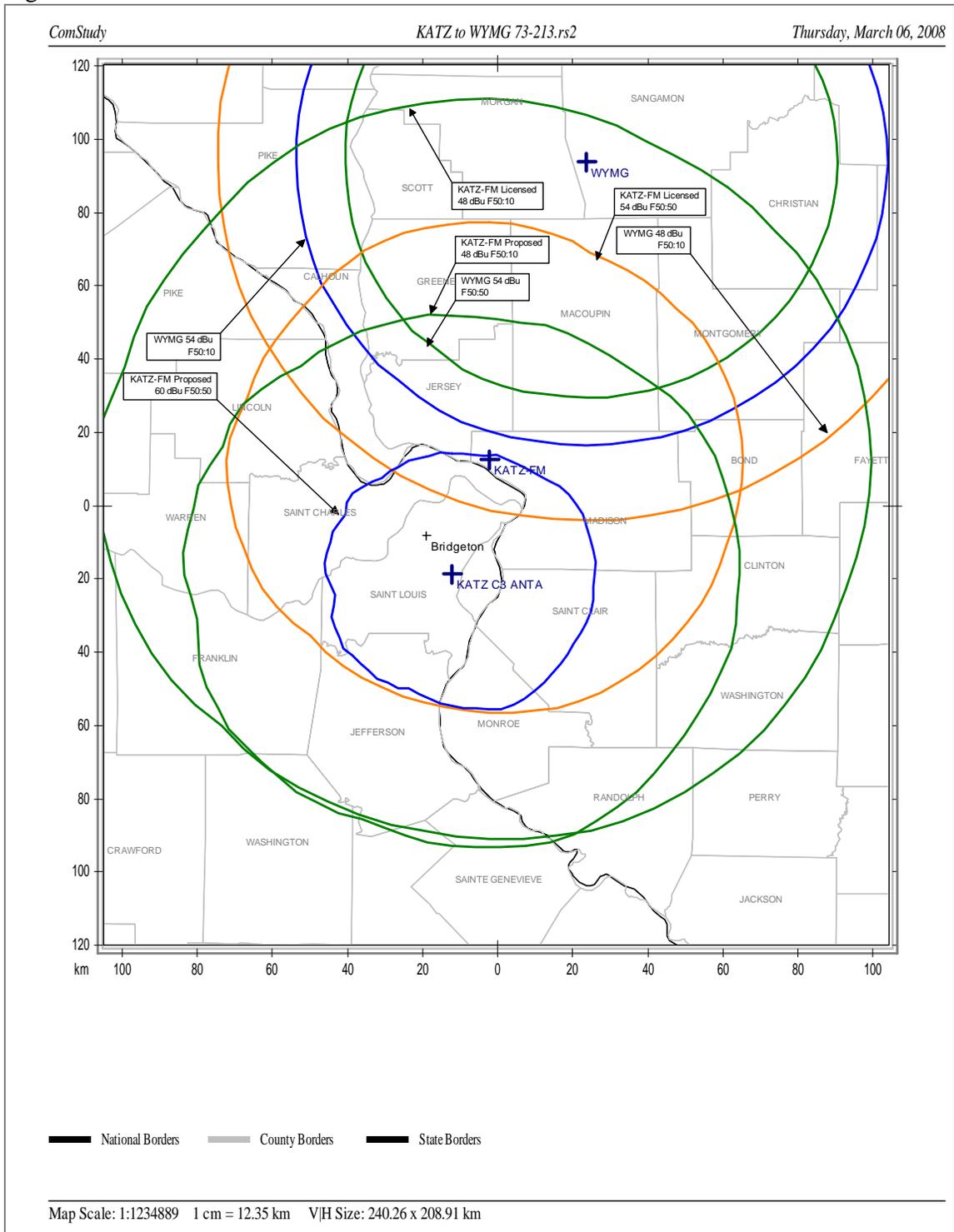


Figure 3.

