

Interference Study

The proposed minor modification complies with all requirements of Section 74.1204 of the Commission's rules. This application specifies the following changes to K224AQ:

	<u>From</u>	<u>To</u>
Geographical coordinates:	43-57-46 / 124-04-15	43-57-23 / 124-04-26 (.75 km)
Channel:	Channel 224	Channel 223
ERP:	0.036 kW	0.050 kW
COR AMSL:	230.0 meters	238.0 meters
HAAT:	139.0 meters	161.0 meters
Antenna:	Directional (H & V)	Non-directional (V)

K224AQ as modified will result in it being located inside the 60 dBu contour of KGNU (LIC), CH 226C, Springfield-Eugene, OR. The separation distance between KGNU and K224AQ's new site is 77.3 km. At 77.3 km, KGNU has a signal strength of 61.3 dBu. The third adjacent channel FM interference contour corresponding to KGNU's 61.3 dBu is 101.3 dBu, which extends out .4 km or 1,320 feet. There are no building structures or population within this area, therefore, no interference to KGNU is anticipated.

Page 2 of this Exhibit contains a Allocation Study showing the relationship of K224AQ as modified to other authorized facilities, Page 3 contains a tabulation of the 12 radials with the corresponding HAAT's and distance to the 60 dBu contour and 101.3 dBu interference contour, and Page 4 contains a map showing the 101.3 dBu interference contour.

Interference Study

Allocation Study, relationship of K224AQ as modified to other stations

CH 223D - 92.5 MHz, ERP = 0.050 kW, HAAT = 161.0M, COR AMSL = 238.0 M  
43 57 23 N  
124 04 26 W

CH CITY	CALL	TYPE STATE	AZI. <--	DIST FILE #	LAT. LNG.	Pwr(kw) HAAT(M)	COR(M) INT(km)	PRO(km) LICENSEE	*IN* (Overlap)	*OUT* (in km)
220D Newport	K220CX	LIC C OR	3.5 183.5	76.60 BLFT20000602AIK	44 38 40 124 00 52	0.090 163	213 0.5	12.8 Oregon St. Bd. Of Higher E	65.23	63.27
220A Eugene	KRVMFM	LIC CN OR	85.9 265.9	77.20 BLED19930329KA	44 00 08 123 06 50	1.100 249	426 0.5	29.2 School Dist. 4j, Lane Coun	69.89	47.52
221A Reedsport	KSVD	LIC NC OR	195.2 15.2	34.44 BLH20001018ABG	43 39 26 124 11 10	0.300 154	179 0.5	17.0 School District 4j, Lane C	20.61	16.92
222L1 Harrisburg	CP222	CP OR	63.7 243.7	80.37 BNPL20010614AEZ	44 16 21 123 10 15	0.100 9	122 13.8	5.6 Rock Solid Ministries	62.50	60.91
223D Albany	AP223	APP C OR	48.1 228.1	101.10 BNPFT20030313BJU	44 33 32 123 07 31	0.160 25	102 34.0	6.3 Albany Seventh-day Adventi	69.84	60.72
223D Cottage Grove	K223AC	LIC CN OR	103.2 283.2	85.27 BLFT19941209TF	43 46 38 123 02 33	0.250 155	471 15.0	16.2 Mckenzie River Broadcastin	28.06	54.03
224D Florence	K224AQ	LIC DHN OR	19.0 199.0	0.75 BLFT19821015IH	43 57 46 124 04 15	0.024 190	230 14.5	10.0 Family Stations, Inc	-23.62*	-23.81*
224D Springfield	AP224	APP C OR	76.2 256.2	73.11 BNPFT20030314ACB	44 06 34 123 11 13	0.250 28	145 11.5	7.1 Educational Media Foundati	54.81	54.51
224C3 Newport	KNCU	LIC C OR	1.3 181.3	88.89 BLH20000417ABR	44 45 22 124 02 57	3.800 303	338 14.1	41.8 Pacific West Broadcasting,	16.56	32.99
225A Coos Bay	RADD	ADD OR	191.5 11.5	68.28	43 21 15 124 14 34	6.000 -25	0 0.5	15.8	53.94	52.03
226C Springfield-eugene	KKNU	LIC EN OR	86.0 266.0	77.30 BLH19970925KF	44 00 04 123 06 45	100.000 409	588 0.5	80.4 Mckenzie River Broadcastin	60.50	-3.63*
226C Springfield-eugene	RDEL	DEL OR	86.0 266.0	77.30	44 00 04 123 06 45	100.000 -179	0 0.5	31.0	69.02	45.84

\*\*\*\*\*Affixed to 'IN' or 'Out' values = site inside protected contour.  
ERP and HAAT are on direct line to and from reference station.

Interference Study

Tabulation of HAAT & 60 dBu/101.3 dBu distance

CH 223D – 92.5 MHz, ERP = 0.050 kW, HAAT = 161.0 m, COR AMSL = 238.0 m  
43-57-23 / 124-04-26

<b>Azimuth</b>	<b>HAAT (meters)</b>	<b>60 dBu (km)</b>	<b>101.3 dBu (km)</b>
0	123.7	9.6	0.4
30	139.8	10.2	0.4
60	144.8	10.4	0.4
90	- 4.8	4.7	0.4
120	98.4	8.6	0.4
150	100.0	8.7	0.4
180	179.0	11.7	0.4
210	221.5	12.9	0.4
240	231.6	13.2	0.4
270	233.9	13.2	0.4
300	234.9	13.3	0.4
330	228.0	13.1	0.4

Per Section 74.1235(b)(2), maximum ERP allowed for the maximum HAAT of 234.9 meters is 50 watts.

Interference Study

Map of K224AQ as modified 101.3 dBu Interference Contour

