

December 2005
KPLU-FM Channel 203C Tacoma, WA
Allocation Study

The attached spacing study shows the co-channel and adjacent channel spacing between stations and demonstrates that the proposed operation meets the IF channel spacing requirements as prescribed in §73.207 of the Commission's Rules.

The attached allocation study map exhibit demonstrates the requisite contour protection to all licensed and proposed domestic stations close enough to require detailed study.

Vacant Channel 203A at Harrison Hot Spring, British Columbia, Canada

The proposed operation is short-spaced to a vacant Canadian allotment on Channel 203A at Harrison Hot Spring, British Columbia. Under the terms of the Working Arrangement for the Allotment and Assignment of FM Broadcasting Channels Under the Agreement Between the Government of Canada and the Government of the United States of America Relating to the FM Broadcasting Service, as amended in 1997 ("Working Arrangement"), the required co-channel Class C to Class A spacing is 247 kilometers, whereas the distance between the KPLU-FM site and the Harrison Hot Spring Channel 203A allotment site is 200 kilometers.

Harrison Hot Spring Channel 203A is listed in the Canadian FM database (downloaded from the Industry Canada website) as a limited allotment, limited to 3 kW ERP at 100 meters HAAT, or the equivalent.

Channel 203C at Tacoma (the underlying allotment for KPLU-FM) is included in the 1991 Working Arrangement as an unlimited (albeit short-spaced) allotment, as is Channel 203A at Harrison Hot Spring. Since KPLU-FM was at that time of the 1991 Working Arrangement licensed at the same transmitter site proposed in the instant application, and since no reference has been found in either the Working Arrangement or the US or Canadian FM databases of any international power

limitation applied to Channel 203C at Tacoma, it is therefore believed that KPLU-FM is entitled to operate with maximum Class C facilities in the direction of Harrison Hot Spring.

Vacant Channel 203A at Chilliwack, British Columbia, Canada

The spacing study indicates an apparent short-spacing to a vacant Canadian allotment on Channel 203A at Chilliwack, British Columbia. The Canadian FM database does not currently include an entry for Channel 203A at Chilliwack. Nor does that channel appear in the 1991 Working Arrangement. Chilliwack 203A did appear in the 1984 Working Arrangement, but was reallocated to Harrison Hot Spring in 1986. (See discussion of Harrison Hot Spring, above.)

TV6 Protection

The KPLU-FM facility is located within the §73.525 “threshold” distance to KOIN-TV Channel 6 at Portland, Oregon. While there is some interference predicted to be caused to reception of KOIN-TV (slightly in excess of the 3000 persons permitted by the FCC Rules), the licensee of that station has provided KPLU-FM with a letter concurring with the grant of the instant application. A copy of that letter is attached to this study.

Conclusions

Based on the foregoing analysis, the proposed KPLU-FM operation is believed to be in full compliance with domestic and international allotment requirements.

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SEARCH PARAMETERS FM Database Date: 051216

Channel: 203C 88.5 MHz Page 1

Latitude: 47 30 14

Longitude: 121 58 29

Safety Zone: 32 km

Job Title: KPLU-FM 203C TACOMA

Call Status	City St	FCC File No.	Channel Freq.	ERP(kW) HAAT(m)	Latitude Longitude	Bearing deg-True	Dist (km)	Req (km)
	SATURNA ISLAND BC -		201C 88.1	0.000 0.0	48-46-28 123-10-10	328.3	166.93 13.93	153 CLEAR
K201GB LIC	CENTRALIA WA BLFT-030130AHO		201D 88.1	0.120 DA 79.0	46-43-52 123-01-28	223.1	117.16 0.00	0 TRANS
KFIO CP	EAST WENATCHEE WA BPED-970327MC		201A 88.1	0.600 -40.0	47-22-52 120-17-16	95.5	127.97 32.97	95 CLEAR
KCWU LIC	ELLENSBURG WA BLED-990510KE		201A 88.1	0.500 -59.0	47-00-21 120-30-55	116.2	123.57 28.57	95 CLEAR
K201EN LIC	EVERETT WA BLFT-050314AAR		201D 88.1	0.005 DA 639.0	48-03-06 121-51-37	7.9	61.51 0.00	0 TRANS
K201EX LIC	GREENWATER WA BLFT-050916ABF		201D 88.1	0.005 DA 906.0	47-13-04 121-50-54	163.3	33.21 0.00	0 TRANS
K201EB LIC	MOUNT VERNON WA BLFT-010601AGD		201D 88.1	0.006 546.0	48-21-54 122-16-01	347.3	98.20 0.00	0 TRANS
K201EB CP	MOUNT VERNON WA BPFT-050909ACH		201D 88.1	0.008 DA 505.0	48-22-03 122-16-55	346.7	98.73 0.00	0 TRANS
KSBC LIC	NILE WA BLED-990322KC		201A 88.1	0.200 -349.0	46-50-02 120-56-13	133.1	108.35 13.35	95 CLEAR
K201EM LIC	OLYMPIA WA BLFT-990903AAU		201D 88.1	0.140 DA 142.0	47-00-20 122-56-35	233.2	91.88 0.00	0 TRANS
K201ET LIC	PORT TOWNSEND WA BLFT-990310TD		201D 88.1	0.002 DA 687.0	48-00-58 122-55-32	309.1	91.24 0.00	0 TRANS
K201ET CP	PORT TOWNSEND WA BPFT-031020ABR		201D 88.1	0.005 DA 687.0	48-00-58 122-55-32	309.1	91.24 0.00	0 TRANS
K201AB LIC	WEST SEATTLE, ETC. WA BLFT-040109ABZ		201D 88.1	0.120 233.0	47-28-50 122-31-58	266.7	42.13 0.00	0 TRANS
K201FH CP	BELLINGHAM WA BPFT-040120ABJ		202D 88.3	0.005 DA 477.0	48-46-55 122-22-11	348.5	145.12 0.00	0 TRANS

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SEARCH PARAMETERS FM Database Date: 051216
 Channel: 203C 88.5 MHz Page 2
 Latitude: 47 30 14
 Longitude: 121 58 29
 Safety Zone: 32 km
 Job Title: KPLU-FM 203C TACOMA

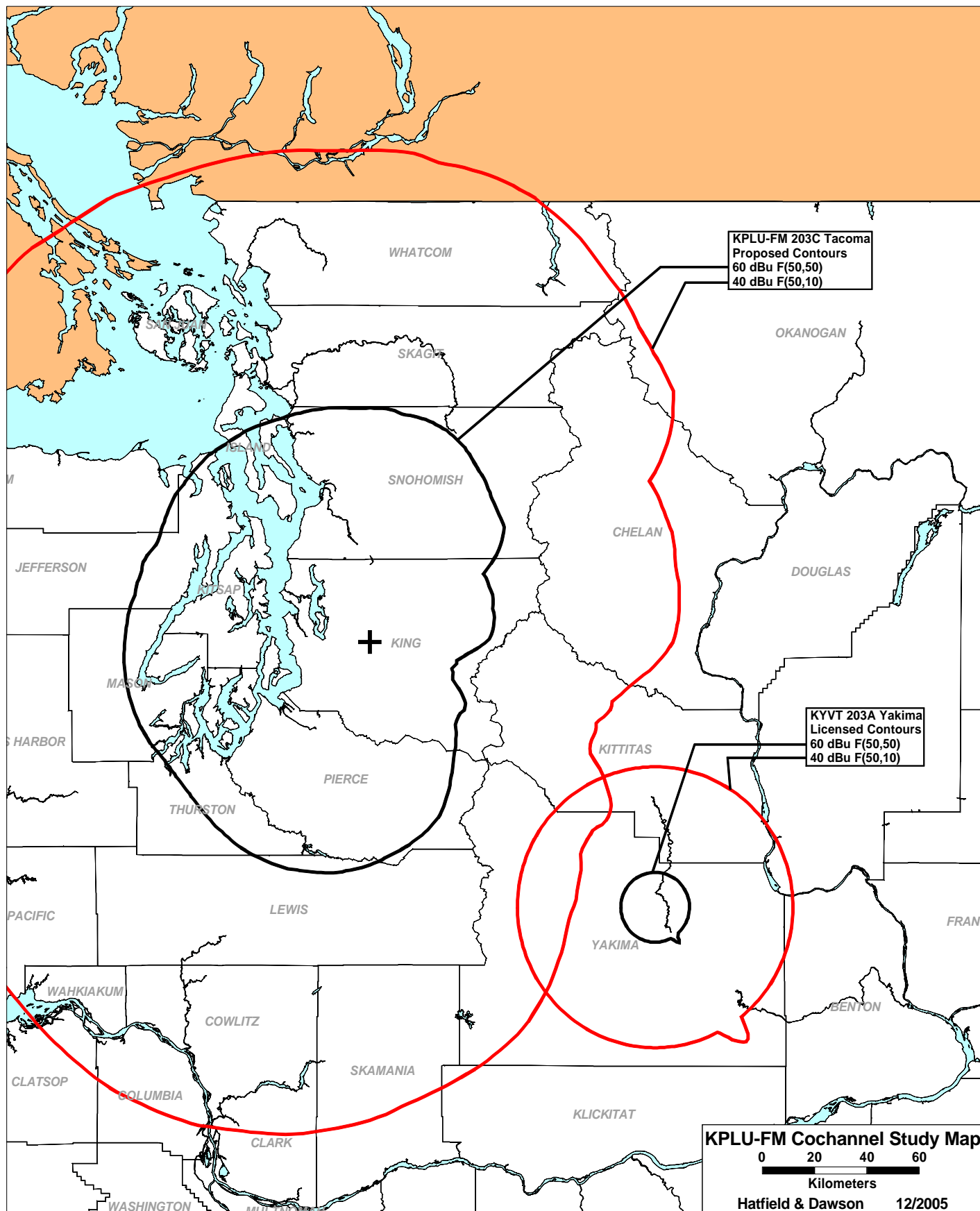
Call Status	City St	FCC File No.	Channel Freq.	ERP(kW) HAAT(m)	Latitude Longitude	Bearing deg-True	Dist (km)	Req (km)
KMLW LIC	MOSES LAKE WA	BLED-970512KC	202C3 88.3	4.000 207.0	46-56-31 119-25-41	107.1	202.75 26.75	176 CLEAR
K202DS LIC	PORT ANGELES WA	BLFT-041210AAY	202D 88.3	0.045 116.0	48-06-45 123-31-50	300.8	134.76 0.00	0 TRANS
	CHILLIWACK BC	RM-	203A 88.5	0.000 0.0	49-06-36 121-50-47	3.0	178.85 -68.15	247 SHORT
	CHILLIWACK BC	-	203A 88.5	0.000 0.0	49-06-36 121-50-47	3.0	178.85 -68.15	247 SHORT
	HARRISON HOT SPRING BC	-	203A 88.5	0.000 0.0	49-17-38 121-46-35	4.1	199.59 -47.41	247 SHORT
	PARKSVILLE BC	-	203A 88.5	0.000 0.0	49-17-40 124-19-25	319.8	264.38 17.38	247 CLEAR
KPLUaux LIC	TACOMA WA	BXLED-010126AAO	203C 88.5	50.000 388.0	47-32-35 122-06-25	293.7	10.87 0.00	0 AUX
KPLU-FM LIC	TACOMA WA	BLED-890925KA	203C 88.5	58.000 714.0	47-30-14 121-58-29	0.0	0.00 -290.00	290 SHORT
KPLUaux LIC	TACOMA WA	BMLD-900402KD	203C 88.5	30.000 189.0	47-28-50 122-31-58	266.7	42.13 0.00	0 AUX
KYVT LIC	YAKIMA WA	BLED-800908AE	203A 88.5	3.000 -78.0	46-35-06 120-31-41	132.5	150.07 -75.93	226 SHORT
	NEW WESTMINSTER BC	-	204D 88.7	0.000 0.0	49-12-43 122-55-32	340.1	202.58 0.00	0 TRANS
NEW	NEW WESTMINSTER BC	-	204D 88.7	0.004 18.0	49-12-43 122-55-32	340.1	202.58 0.00	0 CLS=D
K204BI LIC	BELLINGHAM WA	BLFT-891127TA	204D 88.7	0.019 188.0	48-48-04 122-27-40	346.1	148.71 0.00	0 TRANS
K204BI APP	BELLINGHAM WA	BPFT-041213ABN	204D 88.7	0.029 203.0	48-48-04 122-27-40	346.1	148.71 0.00	0 TRANS

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 Channel: 203C 88.5 MHz Page 3
 Latitude: 47 30 14
 Longitude: 121 58 29
 Safety Zone: 32 km
 Job Title: KPLU-FM 203C TACOMA

Call Status	City St	FCC File No.	Channel Freq.	ERP(kW) HAAT(m)	Latitude Longitude	Bearing deg-True	Dist (km)	Req (km)
K204DD LIC	WENATCHEE WA	BLFT-011022AAF	204D 88.7	0.012 441.0	47-22-44 120-17-14	95.6	128.04 0.00	0 TRANS
	SATURNA ISLAND BC	-	205C 88.9	0.000 0.0	48-46-28 123-10-10	328.3	166.93 13.93	153 CLEAR
NEW	VICTORIA BC	-	205C1 88.9	5.900 454.0	48-35-41 123-32-37	316.7	168.50 24.50	144 CLEAR
K205DD LIC	BREMERTON WA	BLFT-980610TC	205D 88.9	0.010 486.0	47-32-57 122-47-02	275.0	61.14 0.00	0 TRANS
K205DO LIC	CAPE GEORGE WA	BLFT-000713ABL	205D 88.9	0.002 687.0	48-00-58 122-55-32	309.1	91.24 0.00	0 TRANS
KCSH LIC	ELLENSBURG WA	BLED-011026AAA	205A 88.9	0.380 167.0	47-10-02 120-45-50	111.9	98.87 3.87	95 CLOSE
K205DF LIC	ENUMCLAW WA	BLFT-020906AAE	205D 88.9	0.002 918.0	47-13-04 121-50-54	163.3	33.21 0.00	0 TRANS
K205DH LIC	SHELTON WA	BLFT-990902AAP	205D 88.9	0.003 864.0	47-19-13 123-20-39	259.3	105.35 0.00	0 TRANS
K205DD CP	BREMERTON WA	BPFT-050304AAW	206D 89.1	0.011 477.0	47-32-58 122-46-56	275.1	61.02 0.00	0 TRANS
K206DL LIC	GRANITE FALLS/EVERET WA	BLFT-050314AAS	206D 89.1	0.005 639.0	48-03-06 121-51-37	7.9	61.51 0.00	0 TRANS
K206CJ LIC	ISSAQUAH WA	BLFT-030320ACJ	206D 89.1	0.003 772.0	47-30-32 121-59-09	303.7	1.00 0.00	0 TRANS
K206CU CP	MOUNT VERNON WA	BPFT-050909ACG	206D 89.1	0.008 505.0	48-22-03 122-16-55	346.7	98.73 0.00	0 TRANS
K206CU LIC	MOUNT VERNON WA	BLFT-010601AGE	206D 89.1	0.006 546.0	48-21-54 122-16-01	347.3	98.20 0.00	0 TRANS

44444 END OF FM SPACING STUDY FOR CHANNEL 203 44444





KOIN

KOIN-TV, Inc.
222 SW Columbia Street
Portland, OR 97201
Telephone: (503) 464-0600
Fax: (503) 464-0717

Mr. Martin Neeb, General Manager
KPLU-FM
Pacific Lutheran University
12180 Park Ave S.
Tacoma, WA 98447-0885

December 7, 2005

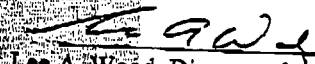
Dear Mr. Neeb

Having reviewed the information you supplied it appears that any potential interference to KOIN-TV from the changes to the FM station proposed by the KPLU-FM located at Tacoma, WA operating on channel 203 (88.5 MHz) with an Effective Radiated Power of 72 kW should be minimal. However, since a possibility does exist KOIN will ask that you agree to comply with the following conditions:

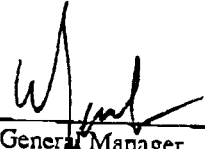
- 1) KPLU-FM agrees to remedy interference to KOIN-TV Channel 6 users by providing a suitable notch filter, such as that produced by Microwave Filter Company or the equivalent, to remove the interfering signal;
- 2) KPLU-FM will notify KOIN-TV of the person who may be contacted should it receive any complaints from viewers of interference to KOIN-TV channel 6;
- 3) KPLU-FM will provide KOIN-TV with copies of any reception complaints it receives along with a description of the corrective action taken;
- 4) This agreement applies only to the particular application with which it is first submitted and any future changes in the operating parameters of the station will require a new letter of agreement between KOIN-TV and KPLU-FM.

KOIN-TV has a long and successful history of cooperation with users of the non-commercial FM community and looks forward to a similar level of cooperation with KPLU-FM. Please return a signed copy of this letter as your understanding and acceptance of these conditions.

Sincerely,


Lee A. Wood, Director of Engineering
On behalf of: KOIN-TV
222 SW Columbia St.
Portland, OR 97201

Agreed to:


Signed: Martin Neeb, General Manager
On behalf of: KPLU-FM
12180 Park Ave S.
Tacoma, WA 98447

