

Aug 2005
KFMY(FM) Channel 249C Oakville, WA
Allocation Study

One-Step Upgrade

This application is being filed consistent with the Report and Order in MM Docket No. 00-41, which approved the reallocation of KFMY on Channel 249C1 from Raymond to Oakville. In addition, a one-step upgrade is requested to Channel 249C.

Channel 249C Allotment Site

The attached spacing study shows that the proposed Channel 249C allotment site meets the co-channel and adjacent channel spacing requirements for Class C stations as prescribed in §73.207 of the Commission's Rules, with the exception of a short-spacing to a Canadian station as detailed below.

CBUF-FM Channel 249C at Vancouver, British Columbia

The proposed allotment site is short-spaced to Canadian station CBUF-FM, which operates on Channel 249C at Vancouver, 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 C spacing is 306 kilometers, whereas the distance between the proposed allotment site and the CBUF-FM transmitter site is 233 kilometers.

It is respectfully requested that the Commission coordinate Channel 249C at Oakville with Canadian authorities as a limited allotment with a power restriction of 6.5 kW at 11.4 degrees True (the azimuth towards CBUF-FM), in order to prevent overlap of the Oakville 249C 38 dBu F(50,10) contour to the CBUF-FM 97 km protected service radius. (See calculation details below.)

Hatfield & Dawson Consulting Engineers

Oakville Channel 249C Allotment Power Limitation Calculation Details

Proposed Channel 249C Allotment Site: N47-17-50 x W123-35-25

8-radial HAT for this site is 282 meters.

Therefore full Class C antenna height is (282m HAT + 600m HAAT) = 882 meters AMSL

Azimuth to CBUF-FM is 11.4 degrees True.

This lies between 0 deg True (HAT = 439 meters) and 45 deg True (HAT = 544 meters).

Interpolated HAT for 11.4 deg True is 466 meters, so HAAT = 416 meters.

Distance to CBUF-FM is 233.4 km. CBUF-FM has a protected service radius of 97 km, so the Oakville 249C allotment 38 dBu F(50,10) contour must be limited to $(233.4 - 97) = 136.4$ km in order to prevent overlap.

The corresponding power limit is 6.5 kW at 416 meters HAAT.

Channel 249C Transmitter Site

The attached spacing study shows that the proposed transmitter site meets the co-channel and adjacent channel spacing requirements for Class C stations as prescribed in §73.207 of the Commission's Rules, with the exception of one Canadian and two domestic short-spacings as detailed below.

KACI-FM Channel 249C2 The Dalles

Processing pursuant to §73.215 of the Commissions Rules is requested with respect to the licensed KACI-FM facility, and the attached Allocation Study Map 1 is included to demonstrate the lack of prohibited contour overlap with that station.

KYSN Channel 249C3 East Wenatchee

Processing pursuant to §73.215 of the Commissions Rules is requested with respect to the licensed KYSN facility, and the attached Allocation Study Map 2 is included to demonstrate the lack of prohibited contour overlap with that station.

CBUF-FM Channel 249C at Vancouver, British Columbia

The proposed transmitter site is short-spaced to Canadian station CBUF-FM, which operates on Channel 249C at Vancouver, British Columbia. Under the terms of the Working Arrangement the required co-channel Class C to Class C spacing is 306 kilometers, whereas the distance between the proposed KFMY transmitter site and the CBUF-FM transmitter site is 229 kilometers. The attached Allocation Study Maps 3 and 4 demonstrate that the 38 dBu F(50,10) contour from the proposed directional KFMY facility will not overlap the CBUF-FM 97 km protected service radius at any location over Canadian land areas.

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SEARCH PARAMETERS FM Database Date: 050404

Channel: 249C 97.7 MHz Page 1

Latitude: 47 17 50

Longitude: 123 35 25

Safety Zone: 32 km

Job Title: OAKVILLE 249C ALLOTMENT SITE

Call Status	City St	FCC File No.	Channel Freq.	ERP(kW) HAAT(m)	Latitude Longitude	Bearing deg-True	Dist (km)	Req (km)
	METCHOSIN/SOOKE BC RM-		246A 97.1	0.000 0.0	48-24-09 123-34-20	0.6	122.90 21.90	101 CLEAR
KBSG-FM LIC	TACOMA WA BLH-891018KC		247C 97.3	55.000 729.0	47-30-14 121-58-29	78.7	124.10 19.10	105 CLEAR
KBSGaux LIC	TACOMA WA BXLH-990714KF		247C 97.3	54.000 226.0	DA 47-18-14 122-23-43	89.1	90.38 0.00	0 AUX
KBSGaux LIC	TACOMA WA BXLH-001018ACH		247C 97.3	50.000 388.0	DA 47-32-35 122-06-25	75.7	115.22 0.00	0 AUX
KBSGaux LIC	TACOMA WA BXLH-940302KB		247C 97.3	20.000 691.0	47-30-14 121-58-29	78.7	124.10 0.00	0 AUX
NEW-T APP	PORTLAND OR BNPFT-030310BFC		248D 97.5	0.010 220.0	45-36-31 122-51-20	163.0	196.01 0.00	0 TRANS
NEW-T APP	ARIEL WA BNPFT-030317KLO		248D 97.5	0.010 805.0	45-59-37 122-35-42	152.0	163.73 0.00	0 TRANS
CBUFFM	VANCOUVER BC -		249C 97.7	100.000 567.0	DA 49-21-12 122-57-18	11.4	233.44 -72.56	306 SHORT
K249DK LIC	NEWBERG OR BLFT-980617TH		249D 97.7	0.013 431.0	45-21-17 122-59-23	167.7	220.82 0.00	0 TRANS
KACI-FM LIC	THE DALLES OR BMLH-040610AAJ		249C2 97.7	5.100 272.0	45-38-56 121-16-20	135.1	255.48 6.48	249 CLOSE
K249DZ CP	ARLINGTON HEIGHTS WA BNPFT-030828BAF		249D 97.7	0.025 63.0	48-16-26 121-56-12	48.1	164.76 0.00	0 TRANS
KYSN LIC	EAST WENATCHEE WA BLH-020423AAQ		249C3 97.7	9.300 -30.0	47-22-51 120-17-15	86.6	249.78 12.78	237 CLEAR
K249DX CP	MEDINA WA BNPFT-030829AYK		249D 97.7	0.090 158.0	47-36-57 122-18-26	69.4	103.03 0.00	0 TRANS

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SEARCH PARAMETERS FM Database Date: 050404

Channel: 249C 97.7 MHz Page 2

Latitude: 47 17 50

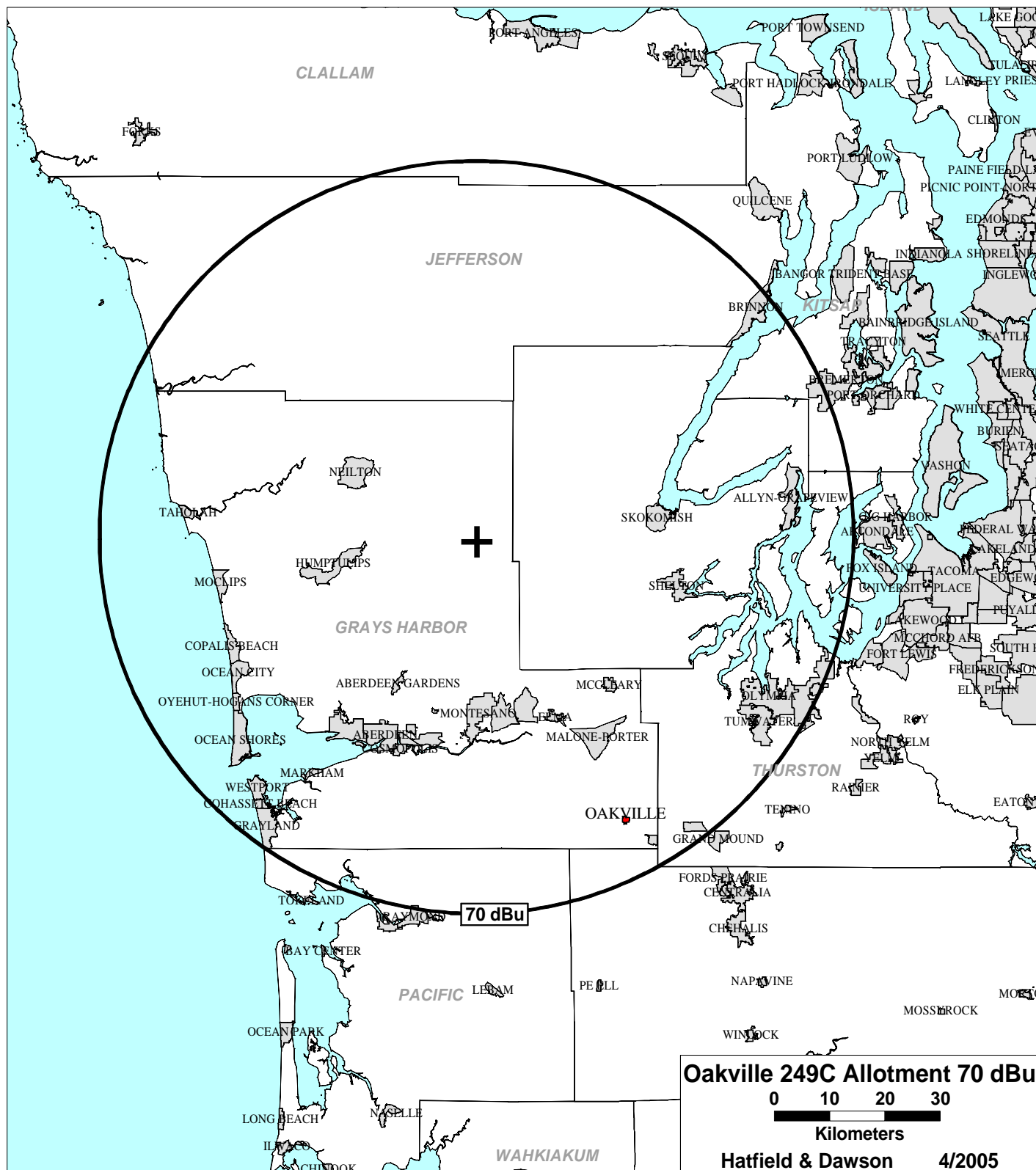
Longitude: 123 35 25

Safety Zone: 32 km

Job Title: OAKVILLE 249C ALLOTMENT SITE

Call Status	City St	FCC File No.	Channel Freq.	ERP(kW) HAAT(m)	Latitude Longitude	Bearing deg-True	Dist (km)	Req (km)
KFMY	RAYMOND		249C1	44.000	46-54-05	163.5	45.89	270
LIC	WA BLH-011101ACQ		97.7	403.0	123-25-07	SS	-224.11	SHORT
RSV	OAKVILLE		249C1	0.000	46-57-14	168.6	38.93	270
NOTE:	WA RM-9369		97.7	0.0	123-29-21		-231.07	SHORT
	RESERVED FOR KFMY							
KFMY-FM1	OLYMPIA		249D	3.700	47-00-58	121.3	59.94	0
LIC	WA BLFTB-011109AAG		97.7	0.0	122-54-57		0.00	BOOST
K249CQ	PACKWOOD		249D	0.050	46-36-08	116.8	167.64	0
LIC	WA BLFT-871124TA		97.7	529.0	121-38-10		0.00	TRANS
KFMYaux	RAYMOND		249C1	0.500	46-58-31	136.1	49.59	0
CP	WA BXPB-020123AAJ		97.7	673.0	123-08-16		0.00	AUX
K250AE	LONGVIEW		250D	0.250	46-08-57	159.6	136.02	0
APP	WA BPFT-030424ABJ		97.9	25.0	122-58-29		0.00	TRANS
K250AE	LONGVIEW		250D	0.050	46-08-06	158.6	138.57	0
LIC	WA BLFT-981005TF		97.9	-38.0	122-56-06		0.00	TRANS
NEW-T	PORT ANGELES		250D	0.003	48-04-42	2.7	86.95	0
APP	WA BNPFT-030820AEJ		97.9	608.0	123-32-05		0.00	TRANS
NEW-T	PORT ANGELES		250D	0.005	48-04-42	2.7	86.95	0
APP	WA BNPFT-030317BVD		97.9	608.0	123-32-05		0.00	TRANS
NEW-T	ST HELENS		250D	0.250	45-51-22	159.6	170.70	0
APP	WA BNPFT-030317EAK		97.9	45.0	122-49-16		0.00	TRANS
NEW-T	WOODLAND		250D	0.250	45-54-22	157.4	167.25	0
APP	WA BNPFT-030317LRI		97.9	8.0	122-45-32		0.00	TRANS
KING-FM	SEATTLE		251C	58.000	47-30-14	78.7	124.10	105
LIC	WA BLH-921130KC		98.1	714.0	121-58-29	SS	19.10	CLEAR

44444 END OF FM SPACING STUDY FOR CHANNEL 249 44444



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SEARCH PARAMETERS FM Database Date: 060814

Channel: 249C 97.7 MHz Page 1

Latitude: 47 18 46

Longitude: 123 22 15

Safety Zone: 32 km

Job Title: KFMV 249C TRANSMITTER SITE AT SOUTH MTN

Call Status	City St	FCC File No.	Channel Freq.	ERP(kW) HAAT(m)	Latitude Longitude	Bearing deg-True	Dist (km)	Req (km)
	METCHOSIN/SOOKE BC RM-		246A 97.1	0.000 0.0	48-24-09 123-34-20	353.0	122.10 21.10	101 CLEAR
KBSG-FM LIC	TACOMA WA BLH-891018KC		247C 97.3	55.000 729.0	47-30-14 121-58-29	78.1	107.49 2.49	105 CLOSE
KBSGaux LIC	TACOMA WA BXLH-940302KB		247C 97.3	20.000 691.0	47-30-14 121-58-29	78.1	107.49 0.00	0 AUX
KBSGaux LIC	TACOMA WA BXLH-001018ACH		247C 97.3	50.000 388.0	47-32-35 122-06-25	74.5	98.74 0.00	0 AUX
NEW-T APP	PORTLAND OR BNPFT-030310BFC		248D 97.5	0.010 220.0	45-36-31 122-51-20	168.0	193.53 0.00	0 TRANS
NEW-T APP	ARIEL WA BNPFT-030317KLO		248D 97.5	0.010 805.0	45-59-37 122-35-42	157.7	158.21 0.00	0 TRANS
NEW-T APP	BRUSH PRAIRIE WA BNPFT-030317KHD		248D 97.5	0.250 88.0	45-39-06 122-36-01	162.0	193.90 0.00	0 TRANS
NEW-T APP	VANCOUVER WA BNPFT-030317IJS		248D 97.5	0.250 52.0	45-38-20 122-36-19	162.2	195.14 0.00	0 TRANS
CBUFFM	VANCOUVER BC -		249C 97.7	100.000 567.0	49-21-12 122-57-18	7.6	228.99 -77.01	306 SHORT
K249DK LIC	NEWBERG OR BLFT-980617TH		249D 97.7	0.013 431.0	45-21-17 122-59-23	172.2	219.62 0.00	0 TRANS
DEL	THE DALLES OR RM-11279		249C2 97.7	0.000 0.0	45-38-56 121-16-20	138.3	245.32 -3.68	249 SHORT
ABSOLUTE MINIMUM 73.215 SPACING = 237 KM								
KACI-FM LIC	THE DALLES OR BMLH-040610AAJ		249C2 97.7	5.100 272.0	45-38-56 121-16-20	138.3	245.32 -3.68	249 SHORT
ABSOLUTE MINIMUM 73.215 SPACING = 237 KM								
K249DZ CP	ARLINGTON HEIGHTS WA BNPFT-030828BAF		249D 97.7	0.025 63.0	48-16-26 121-56-12	44.5	151.55 0.00	0 TRANS
KYSN LIC	EAST WENATCHEE WA BLH-020423AAQ		249C3 97.7	9.300 -30.0	47-22-51 120-17-15	87.0	233.11 -3.89	237 SHORT
ABSOLUTE MINIMUM 73.215 SPACING = 226 KM								

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SEARCH PARAMETERS FM Database Date: 060814

Channel: 249C 97.7 MHz Page 2

Latitude: 47 18 46

Longitude: 123 22 15

Safety Zone: 32 km

Job Title: KFMY 249C TRANSMITTER SITE AT SOUTH MTN

Call Status	City St	FCC File No.	Channel Freq.	ERP(kW) HAAT(m)	Latitude Longitude	Bearing deg-True	Dist (km)	Req (km)
NEW-T APP	MANSFIELD WA	BNPFT-030317AAP	249D 97.7	0.007 521.0	DA 47-51-15 120-10-10	74.7	248.24 0.00	0 TRANS
K249DX LIC	MEDINA WA	BLFT-060303AAB	249D 97.7	0.080 33.0	DA 47-37-21 122-07-51	69.3	99.63 0.00	0 TRANS
RSV	OAKVILLE WA	RM-9369	249C1 97.7	0.000 0.0	46-57-14 123-29-21	192.7	40.90 -229.10	270 SHORT
KFMY APP	OAKVILLE WA	BPH-050511ADR	249C 97.7	60.000 756.0	DA 47-18-46 123-22-15	0.0 SS	0.00 -290.00	290 SHORT
KFMYaux APP	OAKVILLE WA	BXPH-050815AAS	249C 97.7	3.700 82.0	47-00-58 122-54-57	133.6	47.73 0.00	0 AUX
KFMY APP	OAKVILLE WA	BPH-050511ADR	249C 97.7	60.000 756.0	DA 47-18-46 123-22-15	0.0 SS	0.00 -290.00	290 SHORT
KFMY RSV	OAKVILLE WA	-	249C 97.7	0.000 0.0	47-17-50 123-35-25	264.1	16.69 -273.31	290 SHORT
KFMY-FM1 LIC	OLYMPIA WA	BLFTB-011109AAG	249D 97.7	3.700 0.0	47-00-58 122-54-57	133.6	47.73 0.00	0 BOOST
K249CQ LIC	PACKWOOD WA	BLFT-871124TA	249D 97.7	0.050 529.0	DA 46-36-08 121-38-10	120.3	153.87 0.00	0 TRANS
KFMY LIC	RAYMOND WA	BLH-011101ACQ	249C1 97.7	44.000 403.0	DA 46-54-05 123-25-07	184.5 SS	45.88 -224.12	270 SHORT
KFMYaux LIC	RAYMOND WA	BXLH-050406ACE	249C1 97.7	0.500 673.0	46-58-31 123-08-16	154.8	41.48 0.00	0 AUX
ADD	TUALATIN OR	RM-11279	250C2 97.9	0.000 0.0	45-29-20 122-41-40	165.4	209.31 21.31	188 CLEAR
NEW-T APP	CAMAS WA	BPFT-971027TH	250D 97.9	0.011 488.0	45-40-35 122-22-39	157.0	197.24 0.00	0 TRANS

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SEARCH PARAMETERS FM Database Date: 060814

Channel: 249C 97.7 MHz Page 3

Latitude: 47 18 46

Longitude: 123 22 15

Safety Zone: 32 km

Job Title: KFMY 249C TRANSMITTER SITE AT SOUTH MTN

Call Status	City St	FCC File No.	Channel Freq.	ERP(kW) HAAT(m)	Latitude Longitude	Bearing deg-True	Dist (km)	Req (km)
K250AE CP	LONGVIEW WA	BPFT-030424ABJ	250D 97.9	0.250 25.0	46-08-57 122-58-29	166.7	132.85 0.00	0 TRANS
K250AE LIC	LONGVIEW WA	BLFT-981005TF	250D 97.9	0.050 -38.0	46-08-06 122-56-06	165.6	135.10 0.00	0 TRANS
NEW-T APP	PORT ANGELES WA	BNPFT-030317BVD	250D 97.9	0.005 DA 608.0	48-04-42 123-32-05	351.9	86.00 0.00	0 TRANS
NEW-T APP	ST HELENS WA	BNPFT-030317EAK	250D 97.9	0.250 45.0	45-51-22 122-49-16	165.3	167.32 0.00	0 TRANS
NEW-T APP	WOODLAND WA	BNPFT-030317LRI	250D 97.9	0.250 8.0	45-54-22 122-45-32	163.1	163.25 0.00	0 TRANS
KING-FM LIC	SEATTLE WA	BLH-921130KC	251C 98.1	58.000 DA 714.0	47-30-14 121-58-29	78.1 SS	107.49 2.49	105 CLOSE
KINGaux LIC	SEATTLE WA	BXLH-020829ABH	251C 98.1	50.000 DA 388.0	47-32-35 122-06-25	74.5	98.74 0.00	0 AUX
KING-FM CP	SEATTLE WA	BPH-051207ADW	251C 98.1	68.000 DA 707.0	47-30-14 121-58-29	78.1	107.49 2.49	105 CLOSE

44444 END OF FM SPACING STUDY FOR CHANNEL 249 44444

