

Figure 1

Minor Modification of FM Translator for KBUP AM											
REFERENCE		CH#	284D	-	104.7 MHz,	Pwr= 0.25 kW	DA,	HAAT= 53.9 M,	COR= 120 M	DISPLAY DATES	
47 03 53.6 N.					Average Protected F(50-50)= 9.65 km					DATA	12-28-15
122 56 51.8 W.					Standard Directional					SEARCH	01-28-16
CH	CALL	TYPE	ANT	AZI	DI ST	LAT	PWR(kW)	INT(km)	PRO(km)	*IN*	*OUT*
CITY	STATE			<--	FILE #	LNG	HAAT(M)	COR(M)	LICENSEE	(Overlap in km)	
284C2	KDUX-FM	LIC _CX		256.5	61.10	46 56 01.0	31.000	123.8	43.9	-65.3*	10.0
Hoquiam	WA			75.9	BLH20140506ACW	123 43 49.0	110	191	Alpha Media Licensee Lic		
285C3	AL5614	RSV-A _N		113.6	62.20	46 50 19.0	25.000	94.6	64.6	-43.0*	-17.1*
Eatonville	WA			294.1	RM9269	122 11 53.0	100	622			
285C3	KKBW	LIC ZCX		115.3	58.04	46 50 24.0	17.000	61.0	40.4	-13.7*	2.5
Eatonville	WA			295.8	BLH20020117AAM	122 15 27.0	124	571	Citicasters Licenses, Inc.		
283C2	KLSW	CP _CX		49.7	82.72	47 32 35.0	6.700	81.8	54.6	-6.0	19.4
Covington	WA			230.3	BPED20150402AAS	122 06 25.0	400	525	Educational Media Foundati		
283C2	KLSW	LIC DCX		49.7	82.72	47 32 35.0	7.100	81.6	54.6	-5.8	19.5
Covington	WA			230.3	BMLED20150303AAL	122 06 25.0	388	514	Educational Media Foundati		
281D	K281AD	LIC _CN		99.9	7.83	47 03 10.0	0.050	0.5	6.6	-2.1*	0.5
Olympia	WA			279.9	BLFT19931228TD	122 50 45.0	59	105	Entercom License, Lic		
287C1	KCMS	LIC _CY		49.6	82.81	47 32 40.0	54.000	10.0	75.1	65.9	7.5
Edmonds	WA			230.2	BLH20010212AAE	122 06 26.0	385	511	Crista Ministries		
282C3	KMNT	LIC _CX		188.4	57.30	46 33 18.0	2.350	3.0	40.7	46.2	15.5
Chehalis	WA			8.3	BLH20050720AEZ	123 03 27.0	322	477	Bicoastal Media Licenses I		
281D	DK281AS	LIC _C_		63.8	50.59	47 15 50.0	0.092	0.7	10.0	42.1	40.1
Tacoma	WA			244.3	BLFT20070618ABD	122 20 45.0	96	167	Horizon Christian Fellowsh		
281D	K280GE	CP _V_		256.5	61.27	46 56 00.0	0.250	1.1	14.8	57.3	45.8
Aberdeen	WA			75.9	BPFT20151005ABT	123 43 57.0		203	Jodesha Broadcasting, Inc.		
284D	K284BM	LIC _C_		180.1	98.16	46 10 55.0	0.041	40.9	12.1	48.2	59.3
Longview	WA			0.1	BLFT20080228ABE	122 57 01.0	171	309	Pacific Lutheran Universi t		
284C2	KKRV	LIC _CX		76.4	211.31	47 28 44.0	6.500	146.6	64.6	56.2	119.8
Wenatchee	WA			258.4	BLH20020205AAA	120 12 49.0	403	1065	Alpha Media Licensee Lic		
283C1	1696632	APP NCX		148.7	183.40	45 38 56.0	5.300	115.3	78.1	57.2	89.8
White Salmon	WA			329.6	BNPH20151013ADJ	121 43 17.0	951	1537	Jackman Holding Company, L		
285L1	1627267	APP _		35.8	72.16	47 35 24.0	0.008			57.6	59.6
Seattle	WA			216.2	BNPL20131112ALX	122 23 05.0	102	128	Seattle Community Radio		
231C	KMPS-FM	LIC _C_		56.1	88.81	47 30 17.0	73.000	66.6	21.5	28.5R	60.3M
Seattle	WA			236.9	BMLH20130522ACI	121 58 04.0	698	932	Cbs Radio Stations Inc.		
283C1	1696898	RSV-A _		147.4	197.36	45 33 38.0	100.000	119.1	80.2	67.3	94.9
White Salmon	WA			328.4		121 34 59.0	299	1032	Jackman Holding Company, L		
283L1	KWJZ-LP	LIC _		54.7	100.48	47 34 54.0	0.100			85.2	80.1
Fall City	WA			235.5	BLL20060119ADP	121 51 14.0		274	Snoqualmie Educational Rad		
285L1	NEW	CP _		36.1	95.92	47 45 33.0	0.080			82.1	82.8
Bothell	WA			216.7	BNPL20131114BFU	122 11 27.0	-5	62	University Of Washngton B		
285A	KZQM	CP DCX		353.6	111.83	48 03 52.0	3.000	19.5	13.2	88.1	92.8
Sequim	WA			173.5	BNPH20130715ACS	123 06 52.0	-73	153	Radio Pacific, Inc.		
281C	KAFE	LIC DCX		2.5	179.79	48 40 49.6	60.000	12.3	90.2	163.4	89.5
Bellingham	WA			182.6	BLH20091204ADR	122 50 26.3	701	739	Saga Broadcasting, Lic		
285A	KZQM	APP DCX		354.0	118.65	48 07 34.0	6.000	23.5	15.8	91.0	96.1
Sequim	WA			173.8	BMPH20150922ACS	123 06 57.0	22	87	Radio Pacific, Inc.		
283D	K283BT	LIC _C_		215.3	119.49	46 11 05.0	0.070	15.8	10.7	97.3	104.0
Astoria	OR			34.7	BLFT20130403AAL	123 50 45.0	107	140	Oregon Public Broadcasting		
286C1	KRSK	LIC NC_		174.8	172.18	45 31 21.0	22.500	7.7	70.2	154.8	101.2
Molalla	OR			354.9	BLH20040303ACH	122 44 45.0	470	561	Entercom License, Lic		
285C	AL1072	_		359.9	254.40	49 21 12.0	100.000	148.1	97.0	102.3	149.3
Vancouver	BC			179.9	RM	122 57 18.0	600	906			
285C	AL4527	_		359.9	254.93	49 21 29.0	100.000	148.6	97.0	102.3	149.9
Vancouver	BC			179.9		122 57 09.0	600	921			

CH CITY	CALL	TYPE STATE	ANT	AZI <--	DI ST FI LE #	LAT LNG	PWR(kW) HAAT (M)	I NT(km) COR (M)	PRO(km) LI CENSEE	Page # 2 *IN* (Overl ap i n km)		*OUT*
284C Florence	KDUK-FM	LIC _C_ OR		188.7 8.3	311.77 BLH20070727AI U	44 17 28.0 123 32 18.0	68.000 707	190.4 1038	88.9 Bi coastal	113.1 Media		197.2 Li censes V
285C Vancouver	CKVX	OPE ?EY BC		359.9 179.9	254.93	49 21 29.0 122 57 09.0	50.000 552	135.6 871	97.6	115.3		149.9
286A Metchosin Etc.	R29889	ADD ____ BC		342.8 162.3	155.89	48 24 09.0 123 34 20.0	6.000 100	3.7 228	38.0	148.1		116.4
283L1 Vernonia	KVPB-LP	CP ____ OR		187.4 7.3	135.30 BMPL20150623ABB	45 51 28.6 123 10 25.8	0.100 -77	202		119.0 Vernoni a Public		119.6 Broadcasti
281C2 Scappoose	KFIS	LIC NCY OR		173.6 353.8	176.29 BLH20020306AAK	45 29 20.0 122 41 40.0	7.000 386	4.8 480	53.7 Caron Broadcasting, Inc.	161.7		121.9

Terrain database is NGDC 30 SEC , R= 73.215 qualifying spacings or FCC minimum Spacings in KM, M= Margin in KM
In & Out distances between contours are shown at closest points. Reference zone= West Zone, Co to 3rd adjacent.
All separation margins (if shown) include rounding.
Ant Column: (D= DA Standard, Z= DA 73.215, N= Not DA 73.215, _= Omni), Polarization (C,H,V,E), Beamtilt(Y,N,X)
"*"affixed to 'IN' or 'OUT' values = site inside restricted contour.

Figure 1-1
Minor Modification of FM Translator for KBUP AM

FMCommander Single Allocation Study - 01-28-2016 - NGDC 30 SEC
Proposed's Overlaps (In= -13.75 km, Out= 2.5 km)

Proposed CH 284 D DA
Lat= 47 03 53.6, Lng= 122 56 51.8
0.25 kW 53.9 m HAAT, 120 m COR
Prot.= 60 dBu, Intef.= 54 dBu

KKBW CH 285 C3 73.215 Z BLH20020117AAM
Lat= 46 50 24.0, Lng= 122 15 27.0
17.0 kW 124 m HAAT, 571 m COR
Prot.= 60 dBu, Intef.= 54 dBu

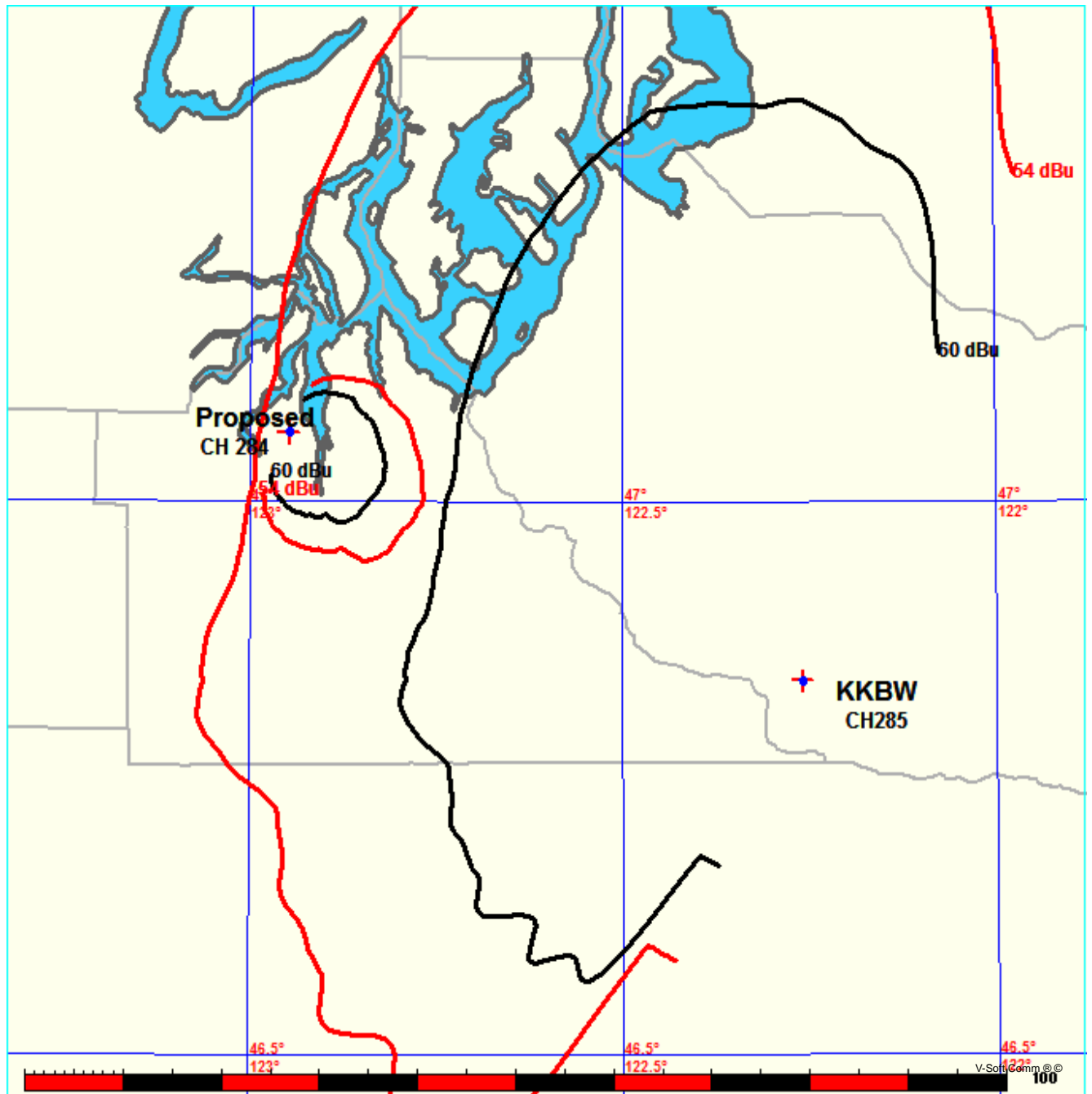


Figure 1-2
Minor Modification of FM Translator for KBUP AM

FMCommander Single Allocation Study - 01-28-2016 - NGDC 30 SEC
Proposed's Overlaps (In= -2.13 km, Out= 0.47 km)

Proposed CH 284 D DA
Lat= 47 03 53.6, Lng= 122 56 51.8
0.25 kW 53.9 m HAAT, 120 m COR
Prot.= 60 dBu, Intef.= 100 dBu

K281AD CH 281 D BLFT19931228TD
Lat= 47 03 10.0, Lng= 122 50 45.0
0.05 kW 59 m HAAT, 105 m COR
Prot.= 60 dBu, Intef.= 100 dBu

