

**Non-Interference Compliance for
Calvary Chapel Church, Inc.
Regarding Facility ID 138531 Channel 242**

Description of Exhibit 12 Contents

This exhibit demonstrates that the proposed facility complies with contour overlap and interference protection provisions in all of the applicable rule sections and that this application for a construction permit is in full compliance with 47 C.F.R. § 74.1204. The applicant acknowledges that it will comply with 47 C.F.R. § 74.1203 in regards to resolving any interference that may occur.

Page 2 of this exhibit is an explanation of the method used to demonstrate compliance with contour overlap and interference provisions based on 47 C.F.R. § 74.1204(d), which states:
[A]n application otherwise precluded by this section will be accepted if it can be demonstrated that no actual interference will occur due to intervening terrain, lack of population or such other factors as may be applicable.

Page 3 contains a tabulation of the vertical radiation pattern of the proposed antenna and the minimum ground clearance of the interfering contour based on this pattern.

Page 4 includes tabulations of the vertical radiation pattern for the proposed antenna provided by the antenna manufacturer.

Page 5 of this exhibit contains the tabulated data from the interference analysis, which shows all stations whose protected contours come within 50 km of the 34 dB μ F(50,10) contour of the proposed translator. These tabulated values were calculated using data from the FCC's CDBS files and 30 arc second terrain data. The column labeled "Adj" shows the number of channels difference between the entry and the proposed translator. The column labeled "Dist" shows the distance in km.

Page 6 of this exhibit is a portion of a USGS 1:24,000 scale 7.5 minute quadrangle at full scale with the calculated area of interference overlaid. The sheet includes the quadrangle name and measurement scale at the bottom. The area of interference was calculated using the free space equation and 120 radials.

Page 7 of this exhibit is a high resolution aerial photo of the vicinity surrounding the proposed translator's tower site provided by the U.S. Geological Survey's National Aerial Photography Program. It has been included to provide clarification of the vicinity.

Compliance with 47 C.F.R. § 74.1204(d)

All authorized second and third adjacent stations with which the proposed translator has contour overlap are tabulated below. Column four show the station's signal level at the proposed translator's tower site, and column five gives the minimum value within the entire standard interfering contour of the proposed translator (100 dBμ for most classes, 94 for class B, 97 for class B1). The minimum second or third adjacent F(50,50) contour within the proposed translator's standard interfering contour was used to calculate the proposed translator's actual "worst-case" interfering contour.

Application ID	File Number	Callsign	Contour at Tower	Min. Contour
1625940	BLFT-20140417ABP	W240CI	83.47	79.52

Minimum F(50,50) Contour of Adjacent Station within Proposed Translator's Standard Interfering Contour:
79.52 dBμ.

FCC 02-244 at Section II.A.5 states that "when demonstrating that 'no actual interference will occur due to . . . other factors,' pursuant to Section 74.1204(d), an applicant may use the undesired-to-desired signal ratio method." The undesired-to-desired ratio for second and third adjacent stations required by §74.1204(a) is 40 dB. Since the minimum protected contour strength within the proposed translator's standard interference contour is **79.52 dBμ**, this makes the proposed translator's worst-case interfering contour **119.52 dBμ**. By the free-space equation, this contour is calculated to extend a maximum of **117.17m** from the transmit antenna.

The maximum horizontal plane of the interfering contour was calculated for 120 radials and plotted on the pertinent portion of a USGS quadrangle (page 8 of this exhibit). However, the field strength of the proposed translator's antenna varies with angle of depression from horizontal. The antenna relative fields are tabulated on the following page at 5 degree increments, starting at 5 degrees below horizontal. Antenna relative field strength data was provided and certified by the manufacturer of the proposed antenna. Using a free-space calculation that neglects any loss due to reflection, the vertical ground clearance of the proposed translator's interference contour has been tabulated. As shown on the following page, the area of interference clears the ground level by **66.86 m** from the tower. The applicant has taken into account USGS quadrangles and relevant aerial photography instating that no structures, except possibly tower support structures, puncture the area of interference. Hence, in accordance with 47 C.F.R. § 74.1204(d) and the clarification provided by the FCC in the decision *Re: Living Way Ministries* (FCC 02-244), a lack of population has been demonstrated within the area of interference and this application is therefore in full compliance with 47 C.F.R. § 74.1204.

Antenna Manufacturer: NICOM
Antenna Model: BKG77
CORAGL: 118.9 m
Maximum ERP: 0.201 kW
Interfering Contour: 119.52 dBμ
Max Int. Contour Distance: 117.17 m
Ground Clearance: 66.86 m

NICOM BKG77 Depression Propagation Elevations - single bay

Depress Angle Below Horizontal	Antenna Relative Field	ERP (watts)	Distance to Interfering Contour (m)	Horizontal Distance to Contour from Antenna (m)	Vertical Clearance of Interfering Contour (m)
0	1	250.00	117.17	117.17	118.90
5	0.999	249.50	117.05	116.61	108.70
10	0.982	241.08	115.06	113.31	98.92
15	0.954	227.53	111.78	107.97	89.97
20	0.918	210.68	107.56	101.08	82.11
25	0.871	189.66	102.06	92.49	75.77
30	0.818	167.28	95.85	83.01	70.98
35	0.758	143.64	88.82	72.75	67.96
40	0.691	119.37	80.97	62.02	66.86
45	0.616	94.86	72.18	51.04	67.86
50	0.538	72.36	63.04	40.52	70.61
55	0.465	54.06	54.48	31.25	74.27
60	0.391	38.22	45.81	22.91	79.22
65	0.313	24.49	36.67	15.50	85.66
70	0.239	14.28	28.00	9.58	92.58
75	0.176	7.74	20.62	5.34	98.98
80	0.128	4.10	15.00	2.60	104.13
85	0.103	2.65	12.07	1.05	106.88
90	0.105	2.76	12.30	0.00	106.60



BKO 77

Vertical	-66	0.297	54	0.479	174	0.468
Values	-63	0.345	57	0.436	177	0.479
-180	0.487	-60	0.391	60	0.391	
-177	0.478	-57	0.436	63	0.345	
-174	0.467	-54	0.479	66	0.297	
-171	0.460	-51	0.523	69	0.253	
-168	0.454	-48	0.568	72	0.211	
-165	0.447	-45	0.616	75	0.176	
-162	0.439	-42	0.661	78	0.145	
-159	0.429	-39	0.706	81	0.120	
-156	0.419	-36	0.745	84	0.105	
-153	0.402	-33	0.783	87	0.100	
-150	0.385	-30	0.818	90	0.105	
-147	0.369	-27	0.852	93	0.118	
-144	0.359	-24	0.881	96	0.134	
-141	0.350	-21	0.910	99	0.151	
-138	0.338	-18	0.934	102	0.168	
-135	0.326	-15	0.954	105	0.185	
-132	0.314	-12	0.972	108	0.202	
-129	0.303	-9	0.987	111	0.219	
-126	0.290	-6	0.999	114	0.236	
-123	0.278	-3	0.999	117	0.252	
-120	0.265	0	1.000	120	0.265	
-117	0.251	3	0.999	123	0.278	
-114	0.236	6	0.999	126	0.290	
-111	0.218	9	0.987	129	0.304	
-108	0.202	12	0.972	132	0.314	
-105	0.185	15	0.954	135	0.327	
-102	0.168	18	0.934	138	0.338	
-99	0.151	21	0.910	141	0.350	
-96	0.134	24	0.881	144	0.360	
-93	0.118	27	0.852	147	0.370	
-90	0.105	30	0.818	150	0.386	
-87	0.100	33	0.783	153	0.403	
-84	0.105	36	0.745	156	0.420	
-81	0.120	39	0.706	159	0.430	
-78	0.145	42	0.661	162	0.440	
-75	0.176	45	0.616	165	0.448	
-72	0.211	48	0.568	168	0.455	
-69	0.253	51	0.523	171	0.461	

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Facility ID	File Number	Callsign	Licensee	Sts	City	St	Cls	ERP	AMSL	Ch	Adj	Dist
85933	BLFT- 20140417ABP	W240CI	JVC MEDIA OF SOUTH FLA, LLC	LIC	NORTH PALM BEACH	FL	D	250	124	240	-2	5.69
139096	20081009AGM	W244BK	PALM BEACH RADIO GROUP LLC	LIC	TWENTYMILE BEND	FL	D	80	55	244	2	5.91
22646	BLFT-19940216TD	W242AC	FRIENDS BROADCASTING, INC.	LIC	PORT ST. LUCIE	FL	D	10	143	242	0	60.92
73893	BLH-20050301ACH BXPB-	WPOW	CBS RADIO STATIONS INC.	LIC	MIAMI	FL	C	98000	308	243	1	94.29
73893	20140603ACJ BMPFT-	WPOW	CBS RADIO STATIONS INC.	CP CP	MIAMI	FL	C	98500	302	243	1	94.31
82621	20140306AHP	W296AW	BLACK MEDIA WORKS, INC.	MOD	MANGONIA PARK	FL	D	250	159	296	54	5.69
82621	BLFT-19970507TJ BLFT-	W296AW	BLACK MEDIA WORKS, INC.	LIC	MANGONIA PARK	FL	D	10	161	296	54	5.69
138734	20130826ABN BPFT-	W241AX	PALM BEACH RADIO GROUP LLC	LIC	BOCA RATON	FL	D	250	139	241	-1	41.89
138734	20140204AAA BXLH-	W241AX	PALM BEACH RADIO GROUP LLC	CP	BOCA RATON	FL	D	230	139	241	-1	41.89
73893	20050114AED BNPFT-	WPOW	CBS RADIO STATIONS INC.	LIC	MIAMI	FL	C	65730	215	243	1	94.29
138681	20130826ABS BLFT-	W242CG	CALVARY CHAPEL CHURCH, INC.	CP	CORAL SPRINGS	FL	D	3	45	242	0	62.02
153406	20070918AAO	W245AY	NATIONAL CHRISTIAN NETWORK INC	LIC	PALM SPRINGS	FL	D	45	50	245	3	21.01
153406	BPFT-20130131AIC	W245AY	NATIONAL CHRISTIAN NETWORK INC	CP	PALM SPRINGS	FL	D	250	50	245	3	21.01
85974	BLFT-19981211TA BMLH-	W244BD	WAY MEDIA INC	LIC	STUART	FL	D	800	44	244	2	47.58
73976	20000928ABL	WRXK-FM	BEASLEY MEDIA GROUP, LLC	LIC	BONITA SPRINGS NORTH MIAMI BEACH	FL	C	100000	343	241	-1	159.21
48368	BLH-20100420AIC BLFT-	WRMA	WXDJ LICENSING, INC.	LIC	BEACH		C2	40000	170	239	-3	115.44
85968	20101115FKT	W295BJ	JVC MEDIA OF SOUTH FLA, LLC FORT MYERS BROADCASTING COMPANY	LIC	JUPITER	FL	D	190	169	295	53	25.21
22094	BLH-20060727AAL	WINK-FM WDBO-	COX RADIO, INC.	LIC	FORT MYERS	FL	C	98000	465	245	3	166.25
23443	BLH-20011219AAC BXLH-	FM WDBO-	COX RADIO, INC.	LIC	ORLANDO	FL	C	99000	463	243	1	216.63
23443	20130621AAE	FM	COX RADIO, INC.	LIC	ORLANDO	FL	C	96000	400	243	1	216.63
59536	BLH-20010405AAB	WSJZ-FM	CUMULUS LICENSING LLC	LIC	SEBASTIAN	FL	C3	25000	94	240	-2	123.25
59536	BPH-20150128AUC BPFT-	WSJZ-FM	CUMULUS LICENSING LLC	CP	SEBASTIAN LAUDERDALE LAKES	FL	C3	21500	112.4	240	-2	127.99
138625	20141231BWQ BNPL-	W245BC	WCHZ LICENSE, LLC	CP	LAKES	FL	D	250	122	245	3	71.22
194819	20131107AAE BLFT-	WSKT-LP	AGAPE FORCE MIAMI	CP	MIAMI	FL	LP100	81	33.5	241	-1	107.83
76167	20110506ABD BLFT-	W242AK	RADIO TRAINING NETWORK, INC.	LIC	LAKELAND LAUDERDALE LAKES	FL	D	250	91	242	0	233.86
138625	20061101AAQ	W245BC	WCHZ LICENSE, LLC	LIC	LAKES	FL	D	67	40	245	3	68.88

