

TECHNICAL STATEMENT OF RYAN WILHOUR OF THE FIRM OF
KESSLER AND GEHMAN ASSOCIATES, INC., CONSULTING ENGINEERS
IN CONNECTION WITH A PETITION FOR RECONSIDERATION AND
SUPPLEMENTAL TECHNICAL AMENDMENT TO FACILITY ID 173309
(FCC FILE NUMBER BNPED-20071019ADN)
FOR A NEW NONCOMMERCIAL EDUCATIONAL FM BROADCAST STATION
ON CHANNEL 203B, BLUEFIELD, WEST VIRGINIA
WEST VIRGINIA EDUCATIONAL BROADCASTING AUTHORITY
BLUEFIELD, WEST VIRGINIA

DISCUSSION AND ANALYSIS

With regard to the above referenced facility, the Commission issued a dismissal letter Dated August 22, 2008 which indicated the following reason for dismissal:

An engineering study of the application reveals that it is in violation of 47 C.F.R. §73.509 with respect to the first-adjacent channel Class C1 license (BLED-19951023KA) for WMMT(FM), Whitesburg, KY. Specifically, the proposed protected contour (60 dBu) would receive prohibited overlap from the interfering contour (54 dBu) of WMMT by over 1 kilometer between the azimuths from 274°T to 277°T. This constitutes an acceptance defect.

Exhibit S1 independently confirms that the Commission's dismissal decision was based upon contour analysis using 30 arc second terrain data. Exhibit S1 demonstrates four sets of contours with particular emphasis on radials 274 through 277 from the proposed facility. The red shaded area illustrates contour overlap when 30 arc second terrain data is used for contour analysis, whereas the bold contours demonstrate contour compliance

when more accurate 3 arc second terrain data is used as originally filed in the above reference application. Exhibit S2 tabulates the 3-arc second USGS terrain from radial 274 through 277 in 1 degree increments for the proposed facility. Exhibit S3 tabulates the 3-arc second USGS terrain from radial 74 through 76 in 1 degree increments for WMMT(FM) FCC File No.: BPED-19951023KA. For each radial the terrain is extracted 0.1 km increments along the radial starting at 3 km and ending at 16 km from the transmitter site. It is respectfully requested that the Commission reinstate FCC file number BNPED-20071019ADN and reanalyze the radial arcs in question using the supplemental 3 arc second terrain attached herein for contour compliance with respect to WMMT(FM) FCC File number BLED-19951023KA.

It should be noted that the FCC rules do not specify a default elevation datum for contour generation. In fact, the FCC's website¹ indicates that "three arc second terrain" is commonly used for contour derivations. It should be further noted that the Commission historically reinstates and grants² dismissed applications when a petition for reconsideration is filed for Nunc Pro Tunc processing which adds supplemental 3 arc second terrain for contour radials which the Commission found in prior instances to not be compliant using 30 arc second terrain.

DECLARATION OF ENGINEER

I, Ryan Wilhour, declare and state that I am a graduate electrical engineer with a Bachelor of Science in Electrical Engineering and my qualifications are a matter of record with the Federal Communication Commission, and that I am an engineer in the firm of Kessler and Gehman Associates, Inc., and that firm has been retained by

¹ <http://www.fcc.gov/oet/info/maps/mmb/>

² FCC File Number BPED-20040608ABF Exhibit E6F located in Attachment 22

West Virginia Educational Broadcasting Authority to prepare the application and supplemental amendment referenced herein.

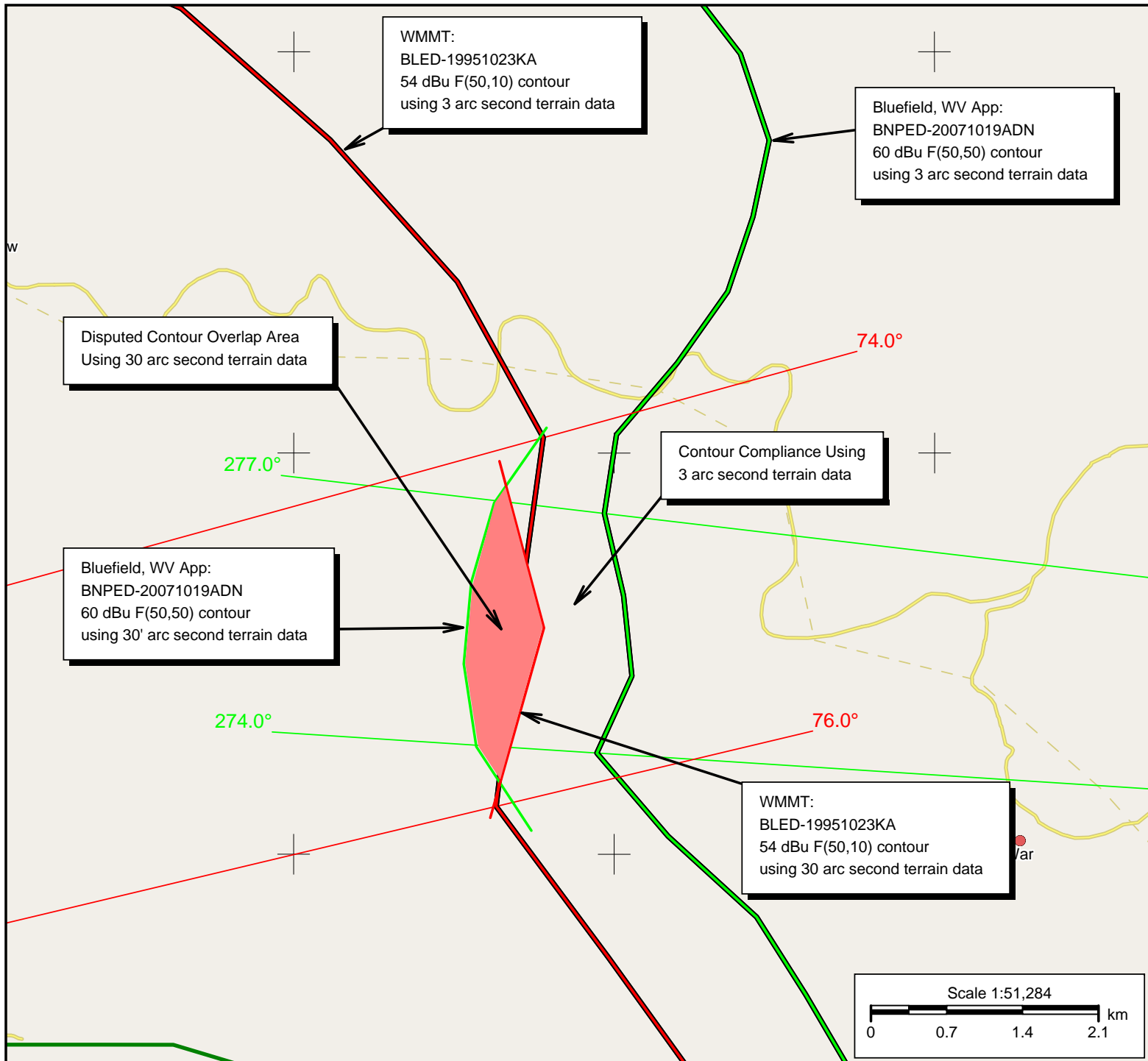
The foregoing statement and the report regarding the aforementioned engineering work are true and correct to the best of my knowledge. Executed on October 2, 2008.

KESSLER AND GEHMAN ASSOCIATES, INC.

A handwritten signature in blue ink, appearing to read "Ryan Wilhour", with a stylized flourish at the end.

Ryan Wilhour

Consulting Engineer



1224548.A
BNPED20071019ADN
Latitude: 37-16-58.50 N
Longitude: 081-15-42.40 W
ERP: 31.00 kW
Channel: 203
Frequency: 88.5 MHz
AMSL Height: 875.3 m
Elevation: 823.5 m
Horiz. Pattern: Directional
Vert. Pattern: No
Prop Model: None

WMMT
BLED19951023KA
Latitude: 37-06-38 N
Longitude: 082-44-15 W
ERP: 15.00 kW
Channel: 204
Frequency: 88.7 MHz
AMSL Height: 1018.0 m
Elevation: 998.0 m
Horiz. Pattern: Directional
Vert. Pattern: No
Prop Model: None

Facility ID 173309 FCC File No.: BNPED-20071019ADN

3 Arc Second Terrain Extraction in meters

	274 deg.	275 deg.	276 deg.	277 deg.
3 km	792	792	792	792
3.1 km	792	792	792	792
3.2 km	786	788	789	791
3.3 km	775	782	788	792
3.4 km	772	784	790	793
3.5 km	784	792	795	795
3.6 km	796	802	802	801
3.7 km	811	818	816	810
3.8 km	820	822	821	813
3.9 km	822	821	820	806
4 km	818	816	806	786
4.1 km	800	794	784	769
4.2 km	784	778	771	761
4.3 km	766	764	758	749
4.4 km	744	745	741	733
4.5 km	729	729	727	724
4.6 km	722	720	720	717
4.7 km	718	716	716	717
4.8 km	719	718	717	720
4.9 km	722	720	720	726
5 km	726	725	727	734
5.1 km	726	729	738	752
5.2 km	729	740	758	777
5.3 km	732	755	777	795
5.4 km	751	773	792	810
5.5 km	764	786	805	821
5.6 km	781	802	818	819
5.7 km	802	820	821	812
5.8 km	820	822	819	806
5.9 km	823	822	812	799
6 km	822	820	807	793
6.1 km	823	815	801	772
6.2 km	826	808	789	762
6.3 km	817	799	775	749
6.4 km	809	792	759	732
6.5 km	801	779	750	731
6.6 km	794	763	737	729
6.7 km	781	750	732	728
6.8 km	772	744	731	729
6.9 km	756	732	732	732
7 km	741	732	733	736
7.1 km	733	732	734	741
7.2 km	732	732	736	746
7.3 km	732	733	740	750
7.4 km	732	735	745	757
7.5 km	733	740	752	760
7.6 km	736	747	757	762
7.7 km	741	752	762	763
7.8 km	746	760	763	764
7.9 km	751	762	765	764
8 km	757	766	768	766

Facility ID 173309 FCC File No.: BNPED-20071019ADN

3 Arc Second Terrain Extraction in meters

	274 deg.	275 deg.	276 deg.	277 deg.
8.1 km	760	771	775	767
8.2 km	767	780	785	767
8.3 km	774	788	791	762
8.4 km	783	792	788	764
8.5 km	794	797	789	765
8.6 km	811	810	788	759
8.7 km	821	819	776	751
8.8 km	820	813	764	745
8.9 km	808	788	754	737
9 km	797	780	748	734
9.1 km	791	780	744	732
9.2 km	791	770	740	732
9.3 km	787	767	740	732
9.4 km	775	766	741	732
9.5 km	763	762	747	732
9.6 km	762	762	748	732
9.7 km	762	761	752	739
9.8 km	763	763	756	749
9.9 km	763	763	760	757
10 km	763	765	762	762
10.1 km	763	767	772	762
10.2 km	763	776	788	763
10.3 km	764	780	792	773
10.4 km	765	781	793	789
10.5 km	766	782	794	798
10.6 km	776	787	796	807
10.7 km	789	791	796	820
10.8 km	791	793	799	822
10.9 km	788	794	806	823
11 km	781	795	806	823
11.1 km	770	795	808	825
11.2 km	763	787	806	825
11.3 km	762	778	800	817
11.4 km	762	767	792	810
11.5 km	762	763	783	800
11.6 km	765	762	773	791
11.7 km	785	764	769	790
11.8 km	803	781	781	791
11.9 km	823	809	792	792
12 km	822	823	811	795
12.1 km	813	822	822	811
12.2 km	797	816	823	822
12.3 km	792	807	821	823
12.4 km	795	811	822	823
12.5 km	810	818	823	823
12.6 km	822	823	823	823
12.7 km	826	823	823	823
12.8 km	826	823	823	823
12.9 km	824	823	823	822
13 km	803	813	816	822

Facility ID 173309 FCC File No.: BNPED-20071019ADN

3 Arc Second Terrain Extraction in meters

	274 deg.	275 deg.	276 deg.	277 deg.
13.1 km	779	794	803	818
13.2 km	763	781	797	810
13.3 km	753	767	793	797
13.4 km	737	759	790	783
13.5 km	714	747	783	765
13.6 km	694	732	761	742
13.7 km	668	714	735	718
13.8 km	649	685	707	692
13.9 km	630	656	682	665
14 km	609	634	656	644
14.1 km	583	613	636	640
14.2 km	567	593	618	644
14.3 km	553	578	606	649
14.4 km	549	559	596	649
14.5 km	550	550	585	636
14.6 km	553	549	573	625
14.7 km	557	549	562	617
14.8 km	560	549	554	604
14.9 km	569	549	549	587
15 km	573	549	549	568
15.1 km	578	549	549	552
15.2 km	585	552	549	549
15.3 km	595	561	549	549
15.4 km	604	576	549	549
15.5 km	622	602	553	549
15.6 km	654	644	581	550
15.7 km	702	713	618	569
15.8 km	742	751	675	597
15.9 km	767	767	719	621
16 km	784	779	731	640
Average for each Radial	747	749	748	745
Antenna HAAT in Meters	129	126	128	130
Distance to Contour in KM	42.1	41.8	41.9	42.2

WMMT(FM) FCC File No.: BLED-19951023KA

3 Arc Second Terrain Extraction in meters

	74 deg.	75 deg.	76 deg.
3 km	785	774	766
3.1 km	785	772	760
3.2 km	779	767	754
3.3 km	774	763	753
3.4 km	769	761	751
3.5 km	766	756	745
3.6 km	762	752	742
3.7 km	760	752	743
3.8 km	761	754	748
3.9 km	762	758	754
4 km	760	757	755
4.1 km	754	749	749
4.2 km	746	740	738
4.3 km	737	729	725
4.4 km	727	716	705
4.5 km	721	707	694
4.6 km	720	702	686
4.7 km	722	698	680
4.8 km	715	696	678
4.9 km	710	692	678
5 km	705	693	683
5.1 km	715	707	697
5.2 km	728	727	721
5.3 km	745	748	741
5.4 km	757	758	742
5.5 km	759	755	734
5.6 km	744	741	723
5.7 km	722	722	708
5.8 km	700	704	696
5.9 km	677	687	682
6 km	670	668	667
6.1 km	668	663	656
6.2 km	665	657	648
6.3 km	663	653	642
6.4 km	661	650	637
6.5 km	662	648	634
6.6 km	662	647	631
6.7 km	659	645	626
6.8 km	651	639	621
6.9 km	634	622	610
7 km	609	599	590
7.1 km	606	593	580
7.2 km	616	601	584
7.3 km	626	604	580
7.4 km	618	594	569
7.5 km	607	583	558
7.6 km	596	572	551
7.7 km	583	564	545
7.8 km	575	557	537
7.9 km	580	559	531
8 km	589	568	541

WMMT(FM) FCC File No.: BLED-19951023KA

3 Arc Second Terrain Extraction in meters

	74 deg.	75 deg.	76 deg.
8.1 km	591	580	562
8.2 km	591	583	578
8.3 km	588	582	579
8.4 km	582	573	564
8.5 km	574	557	542
8.6 km	567	548	522
8.7 km	567	550	529
8.8 km	574	565	549
8.9 km	569	574	570
9 km	558	565	578
9.1 km	541	541	563
9.2 km	525	520	536
9.3 km	527	520	519
9.4 km	544	540	526
9.5 km	549	549	538
9.6 km	549	548	540
9.7 km	549	547	539
9.8 km	558	547	543
9.9 km	564	551	548
10 km	557	552	549
10.1 km	550	549	548
10.2 km	533	535	534
10.3 km	510	505	504
10.4 km	491	488	489
10.5 km	488	488	488
10.6 km	488	488	488
10.7 km	488	488	490
10.8 km	488	494	512
10.9 km	488	512	536
11 km	509	526	550
11.1 km	537	546	561
11.2 km	553	562	572
11.3 km	554	575	575
11.4 km	547	577	578
11.5 km	528	559	573
11.6 km	525	555	565
11.7 km	542	549	553
11.8 km	532	530	529
11.9 km	500	504	502
12 km	488	487	481
12.1 km	488	485	474
12.2 km	488	485	470
12.3 km	504	493	475
12.4 km	516	509	486
12.5 km	494	490	477
12.6 km	478	469	475
12.7 km	474	478	485
12.8 km	473	487	520
12.9 km	471	488	545
13 km	471	489	570

WMMT(FM) FCC File No.: BLED-19951023KA

3 Arc Second Terrain Extraction in meters

	74 deg.	75 deg.	76 deg.
13.1 km	465	497	587
13.2 km	460	508	598
13.3 km	458	522	600
13.4 km	458	528	590
13.5 km	459	534	588
13.6 km	457	532	582
13.7 km	459	519	578
13.8 km	459	510	559
13.9 km	458	506	550
14 km	458	507	552
14.1 km	464	512	556
14.2 km	477	522	556
14.3 km	495	537	562
14.4 km	515	556	571
14.5 km	527	560	574
14.6 km	527	550	570
14.7 km	509	532	558
14.8 km	495	525	555
14.9 km	483	529	562
15 km	480	534	575
15.1 km	484	535	578
15.2 km	489	541	579
15.3 km	500	552	583
15.4 km	506	564	593
15.5 km	506	581	604
15.6 km	519	602	614
15.7 km	548	608	635
15.8 km	574	613	646
15.9 km	600	613	648
16 km	609	611	643
Average for each Radial	586	593	598
Antenna HAAT in Meters	432	425	420
Distance to Contour in KM	91.9	91.2	90.6