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JUN 16 2008

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WRITER'S DIRECT DIAL

June 16, 2008

Via Hand-Delivery

Ms. Marlene H. Dortch  
Secretary  
Federal Communications Commission  
445 12<sup>th</sup> Street, S.W.  
Washington, DC 20554

Re: **Petition for Rule Making  
Amendment of Section 73.622(i)  
Post-Transition Table of DTV Allotments  
(Kansas City, Missouri)**

Dear Ms. Dortch:

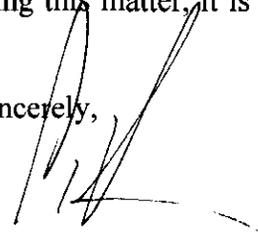
On behalf of KMBC Hearst-Argyle Television, Inc., the licensee of KMBC-TV and KMBC-DT, Kansas City, Missouri, transmitted herewith for filing are an original and four (4) copies of a Petition for Rule Making, seeking the substitution of DTV Channel 29 as the post-transition DTV allocation for Station KMBC-DT at Kansas City, Missouri, in lieu of the current DTV Channel 9 allotment.

No. of Copies rec'd 014  
DATE 08-27 MB

Ms. Marlene H. Dortch  
June 16, 2008  
Page 2

Should any questions arise in considering this matter, it is respectfully requested that you communicate with this office.

Sincerely,

A handwritten signature in black ink, appearing to read 'Coe W. Ramsey', written over the word 'Sincerely,'.

Coe W. Ramsey  
*Counsel to*  
*KMBC Hearst-Argyle Television, Inc.*

Enclosure

cc: Barbara Kreisman, FCC  
Clay Pendarvis, FCC

FILED/ACCEPTED

JUN 16 2008

Federal Communications Commission  
Office of the Secretary

**Before the  
Federal Communications Commission  
Washington, D.C. 20554**

In the Matter of	)	
	)	
Amendment of Section 73.622(i)	)	MB Docket No. _____
Post-Transition Table of DTV Allotments	)	RM- _____
(Kansas City, Missouri)	)	

To: Chief, Video Division  
Media Bureau

**PETITION FOR RULE MAKING**

KMBC Hearst-Argyle Television, Inc. (“Hearst”), the licensee of KMBC-TV and KMBC-DT, Kansas City, Missouri, by and through its undersigned attorneys and pursuant to Sections 1.401, 1.420, 73.622(a), and 73.623 of the Commission’s Rules, hereby respectfully requests that the Commission institute a rule making proceeding to amend Section 73.622(i) of the Commission Rules, the Post-Transition Table of DTV Allotments (“DTV TOA”), to substitute DTV Channel 29 as the post-transition DTV allocation for Station KMBC-DT at Kansas City, Missouri, in lieu of the current DTV Channel 9 allotment. In addition, Hearst respectfully requests that the Commission amend Appendix B of the DTV TOA to specify the technical parameters for KMBC-DT’s proposed Channel 29 operation as specified herein.

KMBC-DT currently operates its pre-transition digital facility on DTV Channel 7. Pursuant to the Commission’s decision in *Advanced Television Systems and Their Impact Upon the Existing Television Broadcast Service*, Memorandum Opinion and Order on Reconsideration of the Seventh Report and Order, FCC 08-72 (2008) (“*Seventh MO&O*”), the Commission’s final DTV TOA specifies KMBC-DT’s current NTSC

Channel 9 for KMBC-DT's post-transition DTV operation. In connection with the *Seventh MO&O*, Hearst had requested the substitution of Channel 29 for its assigned Channel 9. While that request was not granted, the Commission recommended that Hearst file the instant Petition for Rule Making after the television filing freeze is lifted. *See id.*, at ¶ 85. Pursuant to DA 08-1213, the television filing freeze was lifted for petitions for digital channel substitutions effective May 30, 2008.<sup>1</sup> In advance of the lifting of the filing freeze, Hearst filed a request for special temporary authorization ("STA") to commence operation on Channel 29 upon the expiration of the DTV transition deadline on February 17, 2009, and pending the Commission's consideration of the instant request. Hearst's STA request remains pending in FCC File No. BDSTA-20080415ABD.

Hearst's parent company is also the parent company of KCWE(TV), Kansas City, Missouri. KCWE(TV)'s NTSC operation is on Channel 29, which KCWE(TV) will discontinue using at the end of the DTV transition. In the *Seventh MO&O*, the FCC allotted KCWE(TV) Channel 31, which KCWE(TV) has already constructed and is operating pursuant to its license in FCC File No. BLCDDT-20051014ABT. As such, Channel 29 will become available upon the termination of KCWE(TV)'s NTSC operation. Upon authorization, Hearst intends to operate KMBC-DT on Channel 29 using KCWE(TV)'s current NTSC antenna configuration at KCWE(TV)'s current NTSC transmission site.

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<sup>1</sup> On June 12, 2008, Hearst filed an application for maximization of KMBC-DT's currently allotted Channel 9 facility (FCC File No. BPCDDT-20080612AAJ). If the proposal set forth herein is adopted, Hearst will amend its pending Channel 9 maximization application (or file a modification application, as appropriate) to specify the operation of KMBC-DT on Channel 29 pursuant to the technical parameters set forth herein.

As shown in the accompanying Engineering Statement prepared by Bernard R. Segal, P.E., Channel 29 may be allotted for post-transition DTV use by KMBC-DT. Mr. Segal's engineering statement and figures are attached hereto as Exhibit A (the "Engineering Statement"). Specifically, Hearst proposes operation of KMBC-DT on Channel 29 at coordinates 39-05-01 N and 94-30-57 W, with 1000 kW ERP at a HAAT of 358 meters. *See id.* at 1-2.

Hearst's proposed channel substitution and operating parameters comply with the Commission's rules because (1) the proposed substitution satisfies the minimum co-channel and first adjacent channel separation requirements in Section 73.623; (2) the proposed substitution satisfies the 0.5 percent new interference standard specified in Section 73.616; and (3) the proposed channel substitution would provide the requisite field strength coverage of the community of Kansas City, as required by Section 73.625. *See id.* at 1-3.

In addition to being in full compliance with the Commission's technical rules, the substitution of Channel 29 for KMBC-DT's post-transition DTV allocation would serve the public interest for several reasons:

As set forth in the Engineering Statement, Hearst's proposed operation on Channel 29 would substantially match the coverage of its current Channel 9 allocation. *See id.* at 3. The Commission has recognized the public interest is served by construction of post-transition DTV facilities that match at least 95 percent of the predicted population coverage of a station's currently allotted post-transition facility. *See Seventh MO&O*, at ¶ 140. In the instant case, Hearst's proposed operation on Channel 29 would match

nearly 98 percent of its current allocation. *See* Engineering Statement at 3. As such, the proposed channel substitution would serve the public interest.

In addition, absent the ability to operate on Channel 29, KMBC-DT faces a unique technical challenge because KMBC-DT is the only station in the Kansas City market with a DTV allotment in the VHF band. *See Seventh MO&O*, Appendix B. This circumstance results in a viewer reception problem since over-the-air viewers in the Kansas City market typically have UHF-only antennas. To receive the best over-the-air reception of KMBC-DT's programming on the Channel 9 allotment, viewers would need to purchase and install separate VHF antennas solely for KMBC-DT reception. Given the fact that VHF antennas are significantly larger than UHF antennas, the public generally is inclined only to purchase and install UHF antennas. Indeed, when satellite carriers have provided Kansas City viewers with antennas for over-the-air reception of local television stations, those antennas are typically UHF-only antennas.

The VHF reception problem is not merely theoretical. As indicated in the article attached as Exhibit B, the VHF reception problem is well-recognized. In addition, as demonstrated by viewer correspondence in Exhibit C, KMBC-DT already has real-world experience with viewer reception problems that result from being the only VHF DTV channel in the Kansas City market. KMBC-DT's current DTV pre-transition channel is VHF Channel 7, and as with KMBC-DT's post-transition Channel 9 allotment, the station's current Channel 7 DTV operation is the only current VHF DTV station in the Kansas City market. Nearly every day, Hearst receives viewer complaints and comments concerning problems with receiving the station's VHF DTV channel.

For example, in a May 27, 2008, e-mail exchange with a viewer complaining that he could not receive KMBC-DT, the frustrated viewer wrote “[Y]ou and KMBC have a serious problem. You are losing audience as we speak, and will especially after Feb. Why are you the only digital station using VHF and thus making it difficult (or impossible) to tune in? I am getting a spectacular picture on every other digital station using my excellent rabbit ears and signal amplifier, and nothing on 9. . . . I am sure other people have the same issue. . . . I highly recommend that you solve this as soon as possible. We will miss Channel 9 until you fix it.” See Exhibit C.

Another viewer recently wrote “I have 2 TVs and they both have the analog tuners. I bought 2 converter boxes. . . . They both work great and I have just the rabbit ears and I pickup 18 channels. All have excellent reception. One big problem . . . I cannot pickup channel 9 at all. No signal. What I do is watch channel 9 on my tiny 13 inch that I have not hooked up to the convertor [sic] box. . . . Will I be able to get channel 9 when FEB.2009 comes around? I cannot buy a new TV or get cable. . . .” See Exhibit C.

In another recent e-mail exchange, one frustrated viewer indicated her TV manufacturer even told her that her tuner would not even receive the VHF band: “When I told them that KMBC broadcasts in the VHF band, they said that the receiver will not pick up anything in the VHF band, and also that VHF will be going away in Feb ‘09.”<sup>2</sup> See Exhibit C.

Attached as Exhibit C are additional sample e-mails recently received by KMBC-DT that demonstrate the frustration occurring among viewers who are trying to

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<sup>2</sup> While this statement is erroneous, correct or not, public perception is critically important.

receive KMBC-DT as the only VHF DTV station in the Kansas City market. The station finds it quite difficult sometimes to explain to a viewer that, despite the fact that the viewer can receive all of the other stations in the market, to receive KMBC-DT he or she must incur the additional expense and inconvenience of installing a different and larger antenna. Because many over-the-air viewers cannot or will not make such a purchase, the effective result of KMBC-DT's post-transition operation on Channel 9 will be a loss of service to those viewers, which would be contrary to the public interest. Because grant of the instant request will resolve KMBC-DT's unique technical challenge caused by the VHF reception problem, the proposed post-transition channel substitution would serve the public interest.

Indeed, grant of the instant proposal would serve the overriding public interest of maintaining KMBC's service to the Kansas City community. Ultimately, KMBC-DT's operation needs to be located on a frequency on which it can be viewed along with the other stations in the market. Given the fact that all of the other stations in the market will be located on UHF channels, as explained above, KMBC-DT's operation as the sole orphaned VHF station would have the practical effect of disenfranchising many of KMBC's viewers. As the implementation of the proposed channel substitution would help protect the public's ability to receive KMBC's programming, the public interest supports substitution of UHF Channel 29 for KMBC's post-transition DTV operation in lieu of its currently allotted VHF Channel 9.

If the Commission adopts the requested amendment to the post-transition DTV TOA, Hearst will promptly file the appropriate minor change application for a construction permit specifying DTV Channel 29 in lieu of DTV Channel 9 for station

KMBC-DT. Hearst intends to request authority for Channel 29 operation at coordinates 39-05-01 N and 94-30-57 W, with 1000 kW ERP at a HAAT of 358 meters. Upon timely authorization, Hearst intends to commence operation of the proposed facility as its post-transition facility upon expiration of the DTV transition deadline on February 17, 2009.

For the foregoing reasons, Hearst respectfully requests that the Commission amend the Post-Transition DTV TOA as set forth in Section 73.622(i) of its Rules as follows:

Present

Kansas City, MO 9, \*18, 24, 31, 34, 42, 47, 51

Proposed

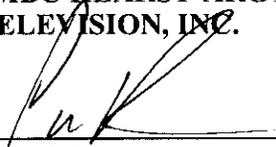
Kansas City, MO \*18, 24, 29, 31, 34, 42, 47, 51

Hearst also respectfully requests that the Commission amend Appendix B of the Post-Transition DTV TOA to specify the following technical parameters for KMBC-DT's post-transition operation:

Facility ID	State	City	NTSC Chan	DTV Chan	DTV ERP (kW)	DTV HAAT (m)	DTV Antenna ID	DTV Latitude	DTV Longitude
65686	MO	Kansas City	9	29	1000	358	--	390501	943057

Respectfully submitted,

**KMBC HEARST-ARGYLE  
TELEVISION, INC.**



---

Mark J. Prak  
Coe W. Ramsey

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*Counsel to  
KMBC Hearst-Argyle Television, Inc.*

June 16, 2008



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BERNARD R. SEGAL, P. E.  
CONSULTING ENGINEER  
KENSINGTON, MARYLAND

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ENGINEERING STATEMENT  
IN SUPPORT OF PETITION TO MODIFY  
THE POST-TRANSITION TABLE OF DTV ALLOTMENTS  
PREPARED FOR  
KMBC HEARST-ARGYLE TELEVISION, INC.  
STATION KMBC-DT, KANSAS CITY, MISSOURI

The instant Engineering Statement has been prepared on behalf of KMBC Hearst-Argyle Television, Inc., the licensee of Station KMBC-DT, Kansas City, Missouri. The purpose is to seek a modification of the Post-Transition Table of DTV Allotments of Section 73.622(i) of the FCC Rules by substituting Channel 29 for Channel 9 at Kansas City, Missouri. The Channel 9 allotment is paired for KMBC-DT use.

As demonstrated herein, the requested post-transition use of Channel 29 would be in compliance with all FCC Rules. The first requirement is that the proposed allotment satisfy the minimum co-channel and first adjacent channel separations that are set forth in Section 73.623(d) with respect to other allotments that were set forth in Appendix B of the Memorandum Opinion and Order on Reconsideration of the Seventh Report and Order in MB Docket No.87-268, released March 6, 2008, and earlier submitted site changes for existing stations. The NAD '27 reference site coordinates for the proposed KMBC-DT, Channel 29, allotment are: 39° 05' 01" north latitude; 94° 30' 57" west longitude. These coordinates correspond to the site for Channel 29 analog Station KCWE, Kansas City. Station KCWE's analog operation will cease after February 17, 2009. Station KCWE-DT is already operating pursuant to its Channel 31, Appendix B, post-transition allotment facilities.

For co-channel UHF DTV stations in Zone II, the minimum separation requirement is 223.7 kilometers. The closest Channel 29 post-transition allotment is more than 350 kilometers from the KMBC-DT reference site. The first adjacent channel spacing requirement is that no allotment be located within the 24-110 kilometer separation bracket from the site reference. The closest post-transition allotment on either Channel 28, or Channel 30, is more than 200 kilometers from the KMBC-DT site



BERNARD R. SEGAL, P. E.  
CONSULTING ENGINEER  
KENSINGTON, MARYLAND

Engineering Statement In Support of Petition To Modify  
The Post-Transition Table of DTV Allotments  
Prepared For KMBC Hearst-Argyle Television, Inc.  
Station KMBC-DT, Kansas City, Missouri

Page 2

reference. The proposed Channel 29 allotment satisfies the separation requirements of Section 73.623(d).

A new allotment must not cause more than 0.5 % new interference to any post-transition DTV station, allotment, or Class A station. The facilities for the proposed allotment are for the use of a non-directional antenna with an effective radiated power of 1000 kW. The antenna radiation center height above average terrain that is proposed is 358 meters. The antenna radiation center height above mean sea level will be 614 meters. An allocation study, using the FCC's Longley-Rice prediction methodology, and the referenced Appendix B, post-transition, database has been conducted for the proposed Channel 29 operation for Station KMBC-DT. No changes were made to the FCC's default cell size and terrain sampling interval, or to any other FCC default value.

The study was conducted using a Sunblade processor that has been found to closely replicate FCC results many times in the past. The 2000 Census was selected for the population enumerations. The allocation study showed that no co-channel, or first adjacent channel, allotment was close enough to the proposed KMBC-DT, Channel 29, allotment to warrant consideration. The study confirmed that no Class A station was close enough to merit consideration, as well. The proposed allotment satisfies the interference protection requirements of the FCC Rules.

Finally, the new allotment must provide 48 dBu encompassment of the entire principal community. Attached herewith as Figure 1 is a map that shows that the 48 dBu contour for the proposed KMBC-DT, Channel 29, allotment encompasses all of Kansas City. The map shows, also, the noise-limited, 41 dBu, contour. Supporting data for the contour distance determination for each signal strength level at each 10° interval, as required by the Rules, are presented in Figure 2.

BERNARD R. SEGAL, P. E.  
CONSULTING ENGINEER  
KENSINGTON, MARYLAND

Engineering Statement In Support of Petition To Modify  
The Post-Transition Table of DTV Allotments  
Prepared For KMBC Hearst-Argyle Television, Inc.  
Station KMBC-DT, Kansas City, Missouri

Page 3

The antenna that will be employed is the one currently employed for Station KCWE's Channel 29 analog operation. The antenna is a Dielectric, Type TFU-33E/V-R. The antenna is elliptically polarized and has a 0.6° electrical beam tilt. Figure 3 is the elevation relative field pattern for the antenna. As indicated in the tabulation of Figure 2, the elevation pattern relative field in each direction exceeds 90 % of the maximum that occurs at the 0.6° depression angle. Accordingly, the maximum radiation was used to determine the distance to the contour in each direction.

Based on the study results, the proposed Channel 29, Station KMBC-DT, operation will provide service to 2,283,000 persons in 33,461 square kilometers within the noise-limited 41 dBu contour. The Appendix B allotment information table shows that the Channel 9 allotment for KMBC-DT would provide net service to 2,334,000 persons in 34,707 square kilometers. For Channel 9, the noise-limited signal strength level is 36 dBu. Figure 4 compares the noise-limited Channel 9 and Channel 29 contours for KMBC-DT.

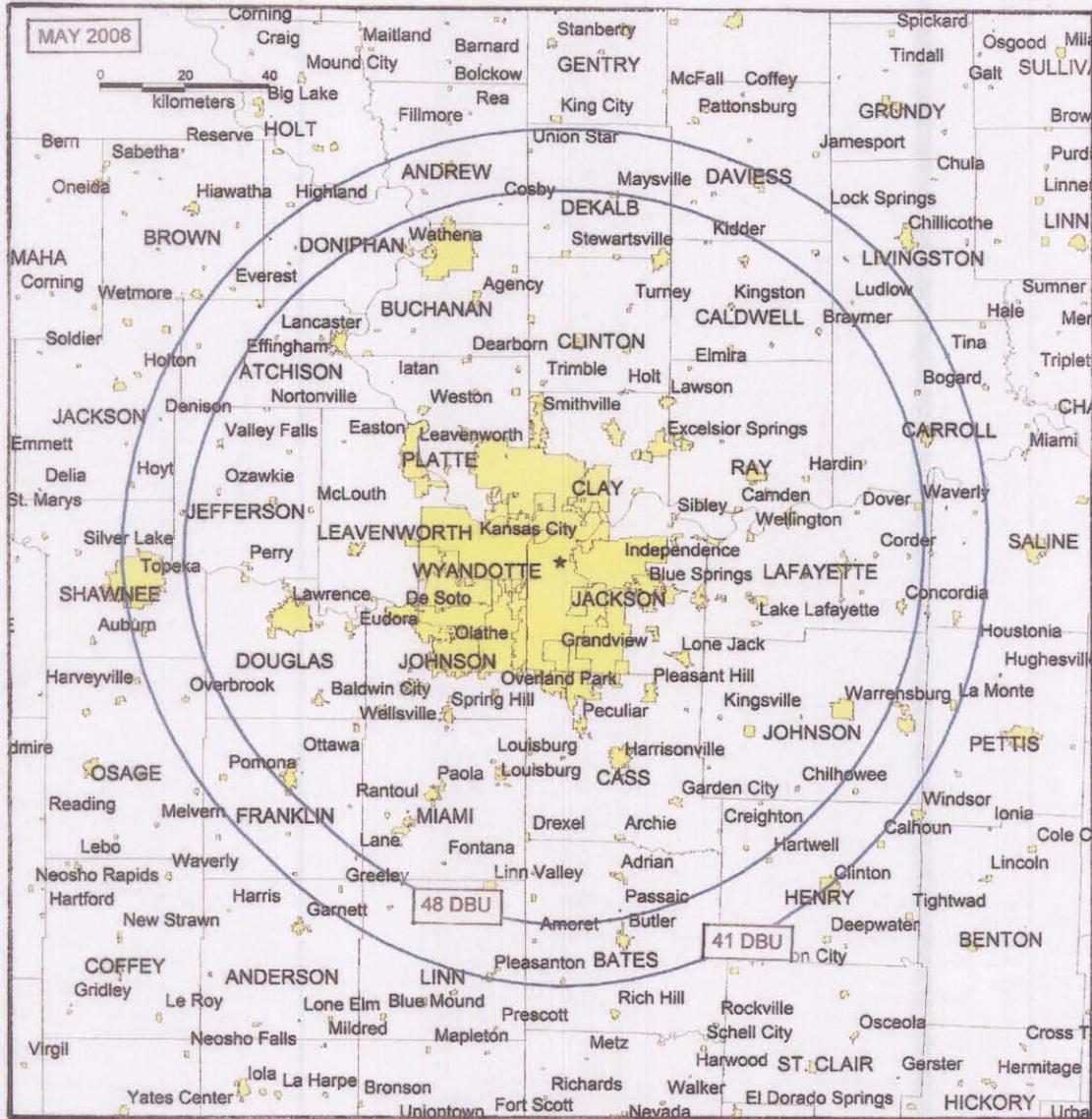
The 2,283,000 persons that would be served on Channel 29 represent 97.8 % of the 2,334,000 persons that would be served under the present Channel 9 allotment for KMBC-DT. Thus, the FCC's touchstone of 95 % population replication relative to the Appendix B allotment population that was set forth in paragraph 140 in the Report and Order, Third Periodic Review in MB Docket No. 07-91, as one of the qualifying requirements for expedited application processing consideration, would be satisfied.

I declare under penalty of perjury that the foregoing is true and correct. Executed on May 23, 2008.

*Bernard R. Segal, P.E.*

Bernard R. Segal, P. E.  
Maryland License 25811

FIGURE 1



**CALCULATED F(50,90) CONTOURS**  
KMBH HEARST-ARGYLE TELEVISION, INC.  
STATION KMBH-DT, KANSAS CITY, MISSOURI  
CH 29 1000KW (H), 220KW (V) 358 METERS  
Bernard R. Segal, P. E. Consulting Engineer

BERNARD R. SEGAL, P. E.  
CONSULTING ENGINEER  
KENSINGTON, MARYLAND

FIGURE 2

ELEVATION DATA AND  
DISTANCES TO SERVICE CONTOURS  
PROPOSED KMBC-DT, KANSAS CITY, MISSOURI  
CH. 29 1000 KW (H), 220 KW (V) 358 METERS

NAD '27 Site Coordinates: 39° 05' 01" N; 94° 30' 57" W  
Antenna Radiation Center: 614 meters AMSL

Azimuth (Deg. True)	HAAT (meters)	Depression Angle To Radio Horizon (degrees)	Distance To	
			48 dBu Contour (km)	41 dBu Contour (km)
0	370	0.5	90.2	103.6
10	375	0.5	90.6	104.0
20	383	0.5	91.1	104.7
30	390	0.5	91.5	105.3
40	394	0.5	91.8	105.6
50	390	0.5	91.5	105.3
60	348	0.5	88.4	101.7
70	332	0.5	86.7	100.2
80	334	0.5	86.9	100.4
90	341	0.5	87.7	101.1
100	343	0.5	87.9	101.2
110	357	0.5	87.3	100.7
120	334	0.5	86.9	100.4
130	332	0.5	86.7	100.2
140	338	0.5	87.4	100.8
150	339	0.5	87.5	100.9
160	335	0.5	87.0	100.5
170	337	0.5	87.3	100.7
180	350	0.5	88.6	101.9
190	365	0.5	89.9	103.1
200	352	0.5	88.7	102.0
210	336	0.5	87.1	100.6
220	327	0.5	86.2	99.7
230	329	0.5	86.4	99.9
240	320	0.5	85.4	99.0
250	330	0.5	86.5	100.0
260	334	0.5	86.9	100.4
270	372	0.5	90.4	103.7
280	360	0.5	89.5	102.7
290	353	0.5	88.8	102.1
300	362	0.5	89.6	102.9
310	379	0.5	90.9	104.3
320	374	0.5	90.5	103.9
330	361	0.5	89.5	102.8
340	352	0.5	88.7	102.0
350	358	0.5	89.3	102.6

Note: In each direction, the relative field at the depression angle to the radio horizon exceeded 90% of the maximum in the vertical plane. Therefore, the maximum ERP was used to determine the contour distance.



Proposal Number DCA-7302  
Date 2-Mar-96  
Call Letters KCWE Channel 29  
Location Kansas City, MO  
Customer  
Antenna Type TFU-33E/V-R

FIGURE 3

### ELEVATION PATTERN

RMS Gain at Main Lobe	30.00 (14.77 dB)	Beam Tilt	0.60 deg
RMS Gain at Horizontal	21.60 (13.34 dB)	Frequency	563.00 MHz
Calculated / Measured	Calculated	Drawing #	33E300060

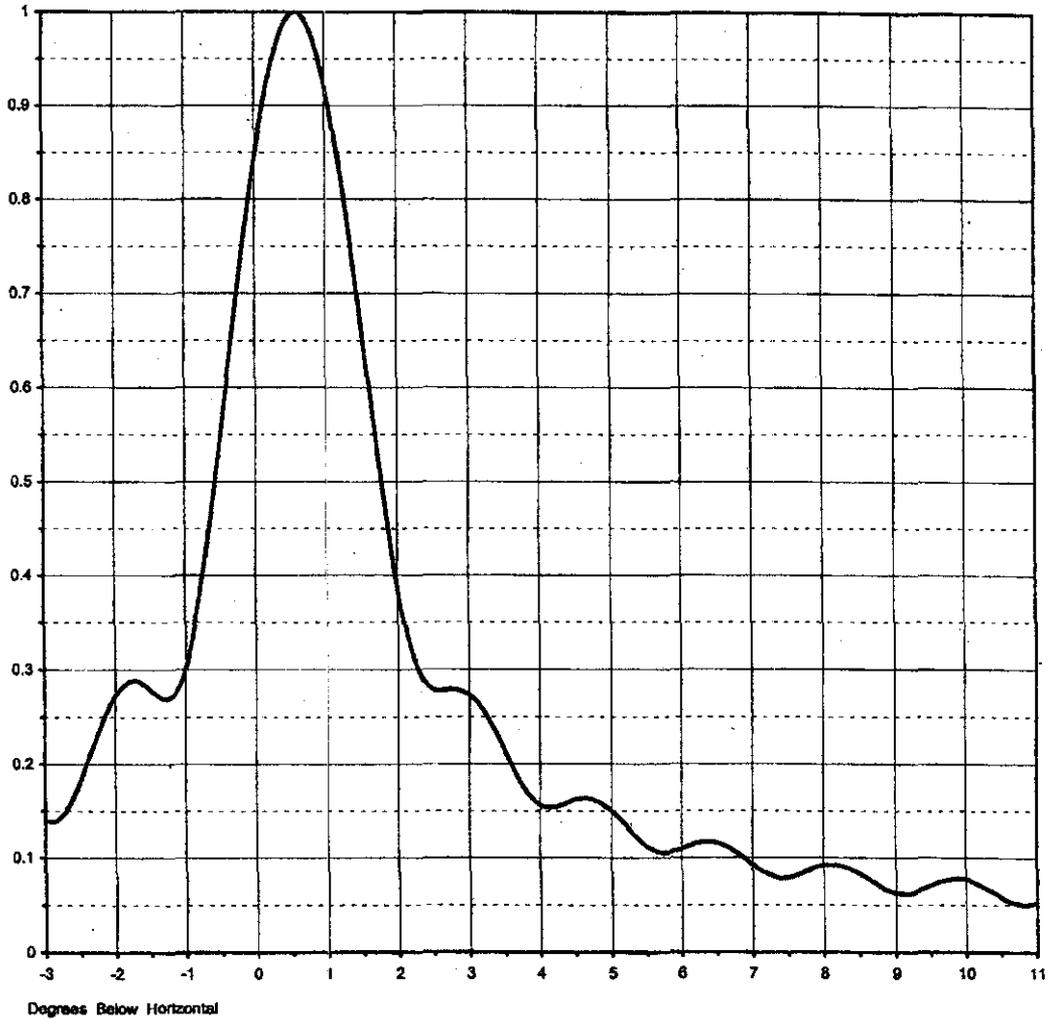
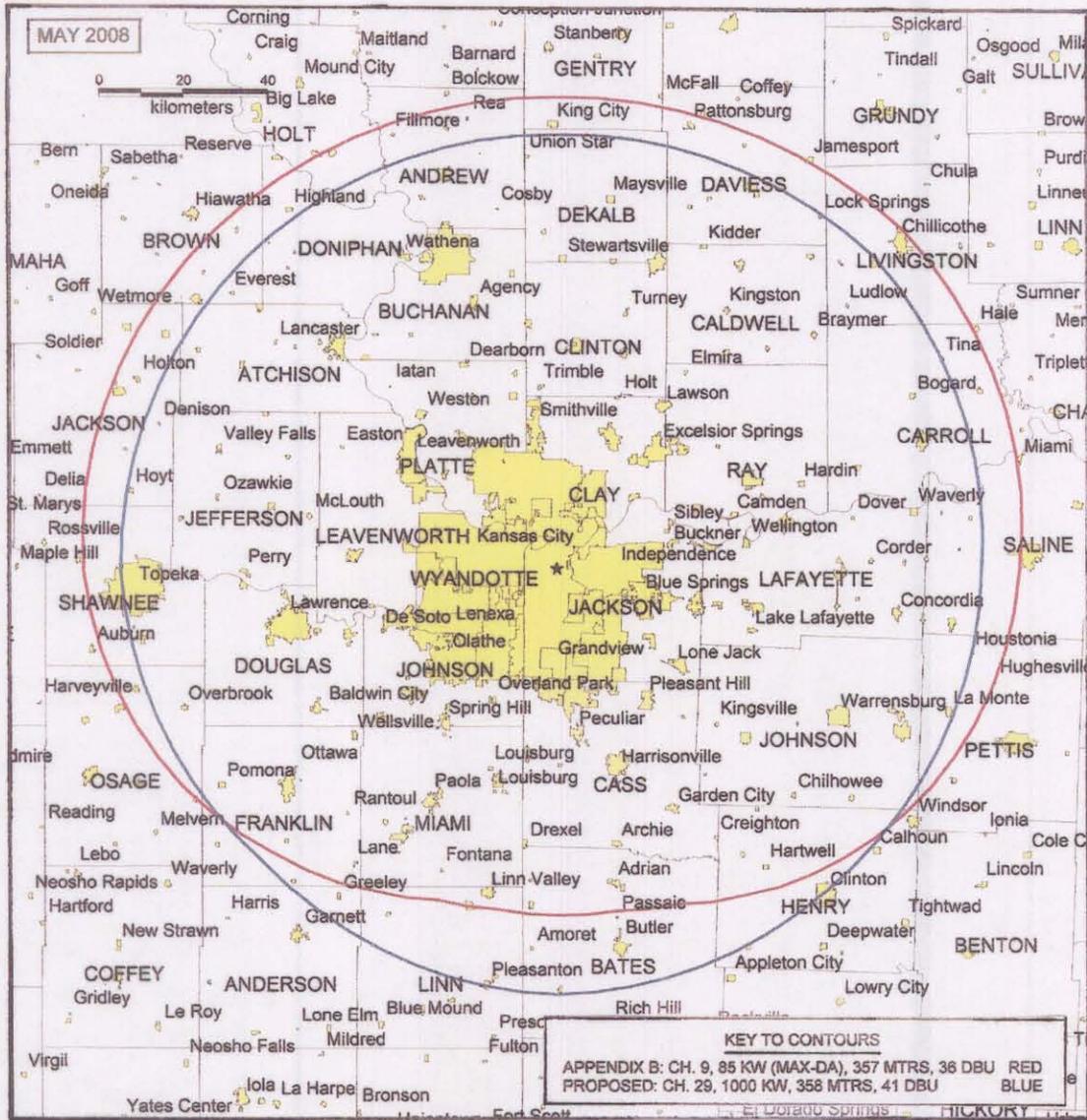


FIGURE 4



**CALCULATED F(50,90) CONTOURS**  
**KMBC HEARST-ARGYLE TELEVISION, INC.**  
**STATION KMBC-DT, KANSAS CITY, MISSOURI**  
Bernard R. Segal, P. E. Consulting Engineer

**EXHIBIT B**

*Hey Kids, Time For A Game of Musical Chairs!*

**By Peter Putman, CTS**

**October 30, 2007**

**(Attached)**



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**DTV TUTORIAL: OCTOBER 30, 2007**

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## Hey Kids, Time For A Game Of Musical Chairs!

P E T E R   P U T M A N ,   C T S

All DTV stations broadcast on UHF channels, right? Wrong! What's more, on February 17, 2009, many of them will move back to VHF channels.

There seems to be a common misperception among consumers and DTV manufacturers that all terrestrial digital TV stations have been assigned and will stay on UHF TV channels. While that's certainly the case in major markets like New York and Los Angeles, it's definitely not the case in smaller markets like Binghamton, NY or Scranton, PA, or even in a large market like Atlanta or Dallas.

In fact, all existing VHF and UHF TV channels from 2 up to 51 are available for ATSC (digital terrestrial) broadcasting. It just so happens that most of the major TV markets have a full complement of VHF analog stations on the air, so the FCC assigned mostly UHF channels to be used during the transition years (1997 through 2008). The final choice of channel is largely up to each station, provided that another broadcaster hasn't grabbed its desired resting place.

One thing that seems constant is that broadcasters are abandoning low-band VHF channels like rats leaving a sinking ship. In most markets, high-band VHF (7-13) or UHF (14-51) channels are preferred for post-DTV transition operation. Notable exceptions that I am aware of include WPVI-6 (Philadelphia, PA) and WRGB-6 (Albany, NY).

The FCC has given broadcasters several chances to pick their final

digital channel once the analog transmitters go dark on 2/17/09. In more than one case, a station with an analog high-band VHF assignment (like WABC-7 in New York) has opted to give up its UHF assignment (in this case, channel 45) and move back to that old, familiar VHF channel.

In other cases, stations didn't move quickly enough to keep their old analog VHF channel, like WCAU-10 in Philadelphia. Since VHF 10 has been allocated to a station in nearby Harrisburg, WCAU will shut down their digital station on UHF 67 (a channel they would have lost anyway, as it's out of the DTV "core") and park their semi on UHF 34, currently occupied by WYBE-DT, who will move back to their original UHF channel 35.

In yet other markets, a new digital station can't even begin broadcasting until its FCC-assigned channel is vacated by another temporary DTV station. (Remember playing musical chairs as a kid?) WNYA-DT in Albany, NY has been assigned VHF 13. Unfortunately, it's currently in use by WNYT-TV, who also operates an ATSC station on neighboring VHF 12. Once WNYT-TV (analog) goes dark, WNYA-DT can light up.

Market	Station	Current NTSC Channel	Current DTV Channel	Final Election	Already Occupied?	By Whom?
Los Angeles CA	KCBS	2	60	43	Yes	KCAL-DT
Los Angeles CA	KCAL	9	43	9	Yes	KCAL-TV
New York NY	WCBS	2	52	33	Yes	WPIX-DT
New York NY	WPIX	11	33	11	Yes	WPIX-TV
Philadelphia PA	WCAU	10	67	34	Yes	WYBE-DT
Philadelphia PA	WYBE	35	34	35	Yes	WYBE-TV
Chicago IL	WBBM	2	3	12	No	-
Albany NY	WNYA	None	None	13	Yes	WNYT-DT
Albany NY	WNYT	13	12	12	Yes	Same

**Figure 1. As you can see, some TV stations will have to play a game of "musical chairs" before February 17, 2009.**

None of this should be a mystery to anyone. The FCC has all of this information and more in its Final Channel Election Tables,

available for your perusal at <http://www.fcc.gov/dtv/>. These tables can be downloaded in Excel format, which allows you to quickly sort stations by city, state, and even channel assignments.

For the most part, the tables have been turned from the good old days of the 1940s and 1950s when everyone wanted to broadcast near the low end of the VHF band. Channels 2 through 6 were highly coveted, while getting a UHF channel assignment was the equivalent of being exiled to Siberia.

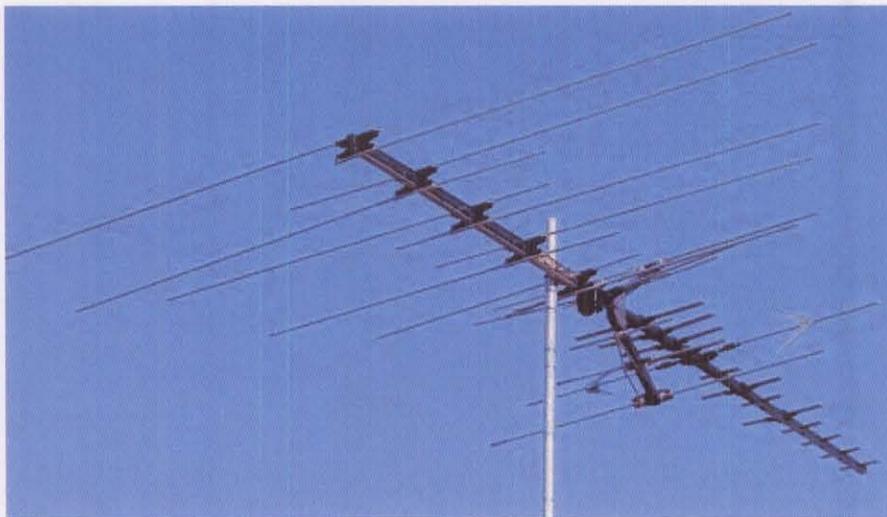
Nowadays, those low-band VHF slots aren't as popular due to impulse noise interference and sporadic enhancement of VHF signals (DX) from other parts of the country during summer months. The FCC data shows only 43 stations electing to use channels 2, 3, 4, 5, or 6 at the end of the transition.

The conventional engineering wisdom is that it takes 2x as much transmitter power to achieve the same coverage area on UHF as with a VHF transmitter. But VHF antennas use circular polarization, whereas UHF antennas use horizontal polarization and have much smaller wavelengths. An argument could be made that less power is needed on UHF to achieve similar coverage, as long as the viewer has a directional antenna in place.

Everyone has their own technical and/or financial reasons for moving or staying put. So while we can say goodbye to KCBS-2 in Los Angeles and WNBC-4 in New York, we'll still have WPIX-11, KCAL-9, WGN-9 in Chicago, WUSA-9 in Washington DC, and KGO-7 in San Francisco — they'll just be digital, not analog.



**Figure 2a. After 2/17/09, you may have to replace this antenna...**



**Figure 2b. ...with one of these for DTV reception, although something smaller will probably do the trick.**

What does this game of musical chairs mean to you? Simply that

you'll probably need to change the type of antenna you're currently using to receive terrestrial DTV and HDTV programs, and you definitely shouldn't wait until the night before 2/17/09 to do it.

Fortunately, the current crop of DTV receivers work umpteen million times better than their 1<sup>st</sup>-generation ancestors, so conventional multi-band antennas should be able to do the trick without you having to breaking the bank.

That's not to say you can't receive VHF high-band signals on a UHF antenna, but you'd have to be pretty close to the transmitter, as your UHF-only stick won't have very much gain at those frequencies. As for low-band VHF, a UHF antenna might as well be disconnected for all the good it will do.

You've probably also seen how all of the PC-based DTV tuner "sticks" and modules all come with tiny, collapsible whip antennas that won't be of much use unless you're within a couple miles of a TV transmitter. If you travel a lot and want to watch DTV on the road, you may want to look into a combination VHF/UHF antenna; one that combines collapsible whips with a tunable UHF loop of some kind.

I tested a couple of these at Chicago's O'Hare Airport earlier this year and was pleasantly surprised with the results as I was able to pull in all of the local UHF digitals plus WBBM-DT on VHF-3 (one of the dumbest frequency assignments the FCC has ever made).

In a nutshell, forewarned is forearmed, as one sage remarked years ago. Download and check the tables to see who'll be switching seats in your market. You may even want to call the station's engineering department to confirm the final DTV channel assignment. If everyone is planning to stay on UHF channels (like Syracuse, NY), then you're probably home free.

But if one or more of your favorite local stations is moving back to VHF, you've got some antenna work ahead of you...

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