

ENGINEERING STATEMENT  
RE APPLICATION FOR LICENSE TO COVER  
OUTSTANDING CONSTRUCTION PERMIT  
(FCC FILE NO. BMPCDT-20070125ABY)  
ON BEHALF OF  
MISSION BROADCASTING, INC.  
KRBC-DT, ABILENE, TEXAS  
CHANNEL 29 1000 KW DA ERP 258 METERS HAAT

AUGUST 2007

COHEN, DIPPELL AND EVERIST, P.C.  
CONSULTING ENGINEERS  
RADIO AND TELEVISION  
WASHINGTON, D.C.

COHEN, DIPPELL AND EVERIST, P. C.

City of Washington )  
 ) ss  
District of Columbia )

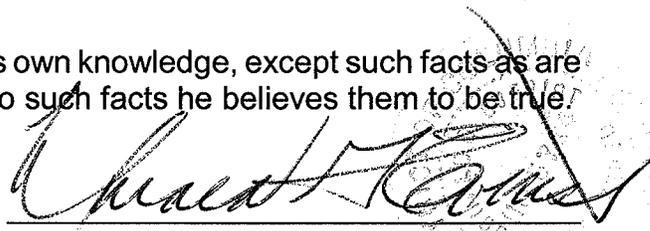
Donald G. Everist, being duly sworn upon his oath, deposes and states that:

He is a graduate electrical engineer, a Registered Professional Engineer in the District of Columbia, and is President, Secretary and Treasurer of Cohen, Dippell and Everist, P.C., Consulting Engineers, Radio - Television, with offices at 1300 L Street, N.W., Suite 1100, Washington, D.C. 20005;

That his qualifications are a matter of record in the Federal Communications Commission;

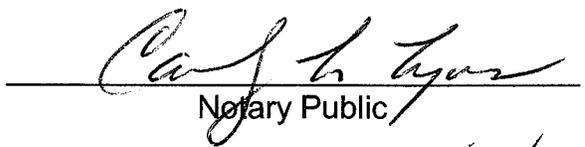
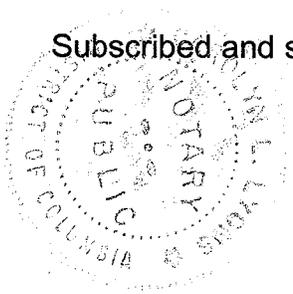
That the attached engineering report was prepared by him or under his supervision and direction and

That the facts stated herein are true of his own knowledge, except such facts as are stated to be on information and belief, and as to such facts he believes them to be true.



Donald G. Everist  
District of Columbia  
Professional Engineer  
Registration No. 5714

Subscribed and sworn to before me this 23<sup>rd</sup> day of August, 2007.

  
Notary Public

My Commission Expires: 2/28/2008

COHEN, DIPPELL AND EVERIST, P. C.

City of Washington            )  
  ) ss  
District of Columbia         )

Martin R. Doczkat being duly sworn upon his oath, deposes and states that:

He is a graduate electrical engineer of the Pennsylvania State University, and is a staff engineer at Cohen, Dippell and Everist, P.C., Consulting Engineers, Radio - Television, with offices at 1300 L Street, N.W., Suite 1100, Washington, D.C. 20005;

That the attached engineering report was prepared by him or under his supervision and direction and

That the facts stated herein are true of his own knowledge, except such facts as are stated to be on information and belief, and as to such facts he believes them to be true.

  
\_\_\_\_\_  
Martin R. Doczkat

Subscribed and sworn to before me this 23<sup>rd</sup> day of August, 2007.



  
\_\_\_\_\_  
Notary Public

My Commission Expires: 2/28/2008

This engineering statement has been prepared on behalf of Mission Broadcasting, Inc. ("Mission"), licensee of KRBC-TV, Abilene, Texas. The purpose of this engineering statement is to accompany its request for license to cover its outstanding construction permit (FCC File No. BMPCDT-20070125ABY) for the digital television ("DTV") facilities for KRBC-DT.

KRBC-TV operates on NTSC Television Channel 9 with a maximum visual horizontal effective radiated power ("ERP") of 316 kW non-directional and a height above average terrain ("HAAT") of 259 meters. KRBC-TV has been allocated DTV Channel 29 with facilities of 1000 kW maximum directional ERP and HAAT of 259 meters in the revised DTV Table of Allotments.<sup>1</sup> KRBC-DT has constructed DTV facilities of 1000 kW directional ERP (horizontal polarization) at a HAAT of 258 meters from a common antenna with KTAB-DT at the existing KTAB-TV site pursuant to its outstanding construction permit (FCC File No. BMPCDT-20070125ABY) and requests a license to cover these authorized facilities herein.

The DTV antenna is side-mounted on the existing tower having a total overall structure height above ground of 228.3 meters (749 feet). The existing KTAB-TV transmitter site is located at the intersection of 23 km southeast of Abilene, Texas, 0.9 km southeast of the intersection of State Routes 36 and FM 1178.

The tower registration number of the existing tower is 1215589. The geographic coordinates of the existing tower are:

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<sup>1</sup>"In the Matter of Advanced Television Systems and Their Impact Upon the Existing Television Broadcast Service", MM Docket No. 87-286, Memorandum Opinion and Order on Reconsideration of the Sixth Report and Order (FCC 98-24), 2/12/98, DTV Table of Allotments, Appendix B.

North Latitude: 32° 16' 38"

West Longitude: 99° 35' 51"

NAD-27

Equipment Data

Antenna: MCI, Model No. 9551316 side-mounted, horizontally polarized antenna with 0.75° electrical beam tilt.

Power Data

Transmitter power output	23.55 kW	13.72 dBk
Combiner efficiency/loss MCI, Model #206004D-29	97.9%	0.09 dB
Dielectric, Type DC-877, 8-3/16", rigid 75 ohm or equivalent-length 201 meters (660 ft) efficiency/loss	87.7%	0.57 dB
Input power to the antenna	20.23 kW	13.06 dBk
Antenna power gain, Main Lobe	49.43	16.94 dBd
Effective Radiated Power, Maximum	1000 kW	30.0 dBk

Elevation Data

Vertical dimension of Channel 29 top-mounted antenna	20.7 meters 68 feet
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Elevation of site above mean sea level	673 meters 2208 feet
Center of radiation of Channel 29 antenna above mean sea level	862 meters 2828 feet
Overall height above mean sea level of proposed tower (including beacon and lightning protection)	901.3 meters 2957 feet
Antenna height above average terrain	258 meters

NOTE: Slight height differences result due to conversion to metric.

#### Special Operation Condition

Mission acknowledges that the grant of this DTV license is subject to the special operating condition specified in the outstanding construction permit. Therefore, Mission certifies that it has made a good faith effort to identify and notify potentially affected health care facilities within the KRBC-DT service area authorized by the outstanding construction permit (FCC File No. BMPCDT-20070125ABY).

**Section III - Engineering**

**TECHNICAL SPECIFICATIONS**

Ensure that the specifications below are accurate. Contradicting data found elsewhere in this application will be disregarded. All items must be completed. The response "on file" is not acceptable.

**TECH BOX**

1. Channel _____			
2. Operating Constants			
Transmitter power output (average power at input to transmission line, after any filter attached to the transmitter, if used)			Transmission line power loss
kW		dBk	
dB		dB	
Antenna Input power	Maximum antenna power gain	Effective radiated power (average power)	
dBk	dB	kW	dBk
3. Antenna Data			
Manufacturer		Model	

**NOTE: In addition to the information called for in the Certification Checklist, an explanatory exhibit providing full particulars must be submitted for each question for which a "No" response is provided.**

**CERTIFICATION**

4. **Main Studio Location.** The main studio location complies with 47 C.F.R. Section 73.1125.  Yes  No See Explanation in Exhibit No.
5. **Constructed Facility.** The facility was constructed as authorized in the underlying construction permit or complies with 47 C.F.R. Section 73.1690.  Yes  No See Explanation in Exhibit No.
6. **Special Operating Conditions.** The facility was constructed in compliance with all special operating conditions, terms, and obligations described in the construction permit.  Yes  No See Explanation in Exhibit No.
- Exhibit No.
- An exhibit may be required.** Review the underlying construction permit.
7. **Transmitter.** The transmitter complies with 47 C.F.R. Section 73.1660.  Yes  No See Explanation in Exhibit No.

**PREPARER'S CERTIFICATION ON PAGE 6 MUST BE COMPLETED AND SIGNED.**

**APPLICATION FILED PURSUANT TO 47 C.F.R. SECTIONS 73.1675(c) or 73.1690(c).**

Only applicants filing this application pursuant to 47 C.F.R. Sections 73.1675(c) or 73.1690(c) must complete the following

8. **Changing transmitter power output.** Is this application being filed to authorize a change in transmitter power output caused by the replacement of an omnidirectional antenna with another omnidirectional antenna or an alteration of the transmission line system? See 47 C.F.R. Sections 73.1690(c)(1) and (c)(10).  Yes  No

9. **Replacing a directional antenna.** Is this application being filed pursuant to 47 C.F.R. Section 73.1690(c)(3) to replace a directional antenna with another directional antenna?  Yes  No

If "Yes" to the above, the applicant certifies the following:

a. **Pattern of Directional Antenna.** The proposed theoretical antenna pattern complies with 47 C.F.R. Section 73.1690(c)(3). **Exhibit is required.**  Yes  No See Explanation in Exhibit No.  
Exhibit No.

10. **Use a formerly licensed main facility as an auxiliary facility.** Is this application being filed pursuant to 47 C.F.R. Section 73.1675(c)(1) to request authorization to use a formerly licensed main facility as an auxiliary facility and/or change the ERP of the proposed auxiliary facility?  Yes  No

If "Yes" to the above, the applicant certifies the following:

a. **Auxiliary antenna service area.** The proposed auxiliary facility complies with 47 C.F.R. Section 73.1675(a). **Exhibit is required.**  Yes  No See Explanation in Exhibit No.

b. **Environmental Protection Act.** The proposed facility is excluded from environmental processing under 47 C.F.R. Section 1.1306 (*i.e.*, the facility will not have a significant environmental impact and complies with the maximum permissible radiofrequency electromagnetic exposure limits for controlled and uncontrolled environments).  Yes  No See Explanation in Exhibit No.

By checking "Yes" above, the applicant also certifies that it, in coordination with other users of the site, will reduce power or cease operation as necessary to protect persons having access to the site, tower or antenna from radiofrequency electromagnetic exposure in excess of FCC guidelines.

11. **Change the license status.** Is this application being filed pursuant to 47 C.F.R. Section 73.1690(c)(9) to change the license status from commercial to noncommercial or from noncommercial to commercial?  Yes  No

Exhibit No.

If "Yes" to the above, submit an exhibit providing full particulars. For applications changing license status from commercial to noncommercial, include Section II of FCC Form 340 as an exhibit to this application.

**PREPARER'S CERTIFICATION ON PAGE 6 MUST BE COMPLETED AND SIGNED.**

**SECTION III PREPARER'S CERTIFICATION**

I certify that I have prepared Section III (Engineering Data) on behalf of the applicant, and that after such preparation, I have examined and found it to be accurate and true to the best of my knowledge and belief.

Name Martin R. Doczkat		Relationship to Applicant (e.g., Consulting Engineer) Consulting Engineer	
Signature 		Date August 23, 2007	
Mailing Address Cohen, Dippell and Everist, P.C., 1300 L Street, NW, Suite 1100			
City Washington		State or Country (if foreign address) DC	ZIP Code 20005
Telephone Number (include area code) (202) 898-0111		E-Mail Address (if available) cde@attglobal.net	

WILLFUL FALSE STATEMENTS ON THIS FORM ARE PUNISHABLE BY FINE AND/OR IMPRISONMENT (U.S. CODE, TITLE 18, SECTION 1001),  
AND/OR REVOCATION OF ANY STATION LICENSE OR CONSTRUCTION PERMIT (U.S. CODE, TITLE 47, SECTION 312(a)(1)),  
AND/OR FORFEITURE (U.S. CODE, TITLE 47, SECTION 503).