

ENGINEERING EXHIBIT

Application for Low Power Television Station Digital Flash-Cut Construction Permit

prepared for

Midessa Broadcasting Limited Partnership

KSCM-LP Bryan, TX

Facility ID 54417

Ch. 18 (digital) 15 kW

Midessa Broadcasting Limited Partnership (“Midessa”) is the licensee of Low Power Television station KSCM-LP, analog Channel 18, Bryan, TX, Facility ID 54417 (BLTTL-20070608AAU). *Midessa* herein proposes herein to flash-cut KSCM-LP to digital operation.

The proposed facility will operate on the current KSCM-LP Channel 18 as digital using a “stringent” out of channel emission mask. **Figure 1** depicts the coverage contour of the proposed facility, as well as that of the KSCM-LP licensed analog Channel 40 facility. The use of the same transmitter site and the service area overlap shown demonstrates compliance with §73.3572 for a minor change.

The proposed antenna is the existing Andrew omnidirectional model ALP24L3-HSO-18 employed by the licensed KSCM-LP facility. The antenna is side-mounted on an existing antenna supporting structure, having FCC Antenna Structure Registration (“ASR”) number 1044896.¹ No change to the overall structure height is proposed.

A detailed interference study per OET Bulletin 69² shows that the proposal complies with the Commission’s interference protection requirements toward all DTV, television translator, LPTV,

¹The geographic coordinates specified herein differ from the KSCM-LP license by 9 seconds latitude and 4 seconds longitude. The coordinate change is necessary to correspond to current Antenna Structure Registration data, which was modified by the structure owner in February 2008. No change in actual site location is proposed.

²FCC Office of Engineering and Technology Bulletin number 69, *Longley-Rice Methodology for Evaluating TV Coverage and Interference*, February 6, 2004 (“OET-69”). The implementation of OET-69 for this study followed the guidelines of OET-69 as specified therein. A cell size of 1 km was employed. Comparisons of various results of this computer program (run on a Sun Sparc processor) to the Commission’s implementation of OET-69 show excellent correlation.

and Class A stations. The results, summarized in **Table 1**, show that any new interference does not exceed the Commission's interference limits (0.5 percent to full power and Class A stations, and 2.0 percent to secondary stations).

The KSCM-LP site is located 153.8 km from the reference coordinates for the Houston, TX region use of land mobile facilities within television Channel 17's spectrum, first adjacent channel to KSCM-LP. The instant proposal complies with §74.709(d)(3), as demonstrated in **Figure 2**, in that the proposed translator's 76 dBμ F(50,10) contour does not overlap any part of the land mobile protected area (a 130 km radius from the land mobile reference coordinates).

The nearest FCC monitoring station is 392 km distant at Kingsville, TX. This exceeds by a large margin the threshold minimum distance specified in §73.1030(c)(3) that would suggest consideration of the monitoring station. The site is not located within the areas requiring coordination with "quiet" zones specified in §73.1030(a) and (b). There are no AM stations within 3.2 kilometers of the site, based on information contained within the Commission's database. The site is beyond the border areas requiring international coordination.

Human Exposure to Radiofrequency Electromagnetic Field (Environmental)

The proposal will involve use of an existing side-mounted transmitting antenna, with no change to overall structure height. The use of existing transmitting locations has been characterized as being environmentally preferable by the Commission, according to Note 1 of §1.1306 of the FCC Rules. Therefore, it is believed that this application may be categorically excluded from environmental processing pursuant to §1.1306 of the Commission's rules.

The proposed operation was evaluated for human exposure to RF energy using the procedures outlined in the Commission's OET Bulletin Number 65. Based on OET-65 equation (10), and considering 30 percent antenna relative field in downward elevations, the calculated signal density near the tower at two meters above ground level attributable to the proposed facility is 3.9 μW/cm², which is 1.2 percent of the general population/uncontrolled maximum permitted exposure limit. This is below the five percent threshold limit described in §1.1307(b) regarding sites

with multiple emitters, categorically excluding the applicant from responsibility for taking any corrective action in the areas where the proposal's contribution is less than five percent.

The general public will not be exposed to RF levels attributable to the proposal in excess of the FCC's guidelines. RF exposure warning signs will continue to be posted. With respect to worker safety, the applicant will coordinate exposure procedures with all pertinent stations and will reduce power or cease operation as necessary to protect persons having access to the site, tower or antenna from RF electromagnetic field exposure in excess of FCC guidelines.

Certification

The undersigned hereby certifies that the foregoing statement and associated attachments were prepared by him or under his direction, and that they are true and correct to the best of his knowledge and belief.



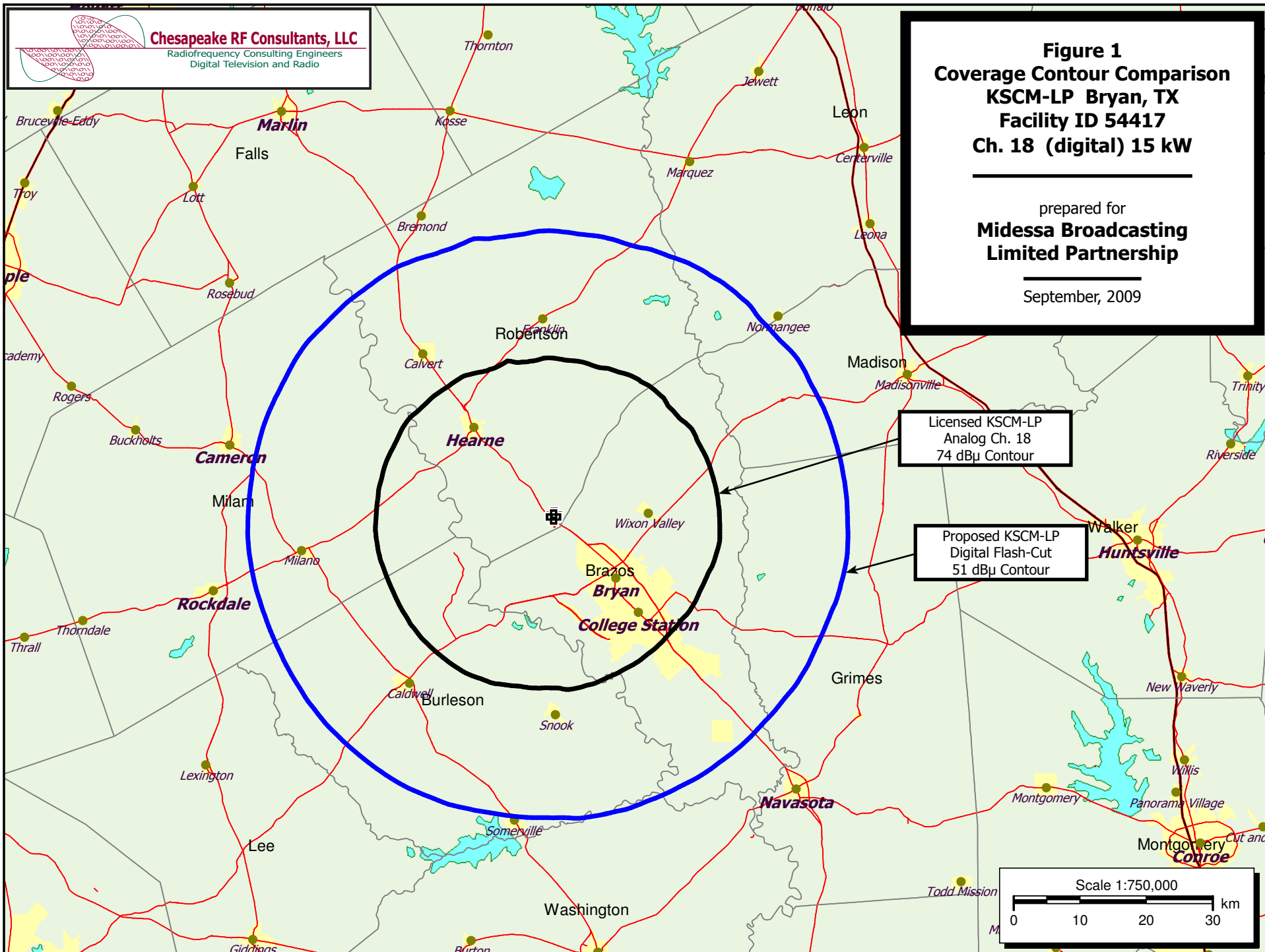
Joseph M. Davis, P.E.
September 22, 2009

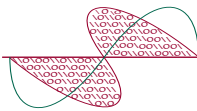
Chesapeake RF Consultants, LLC
11993 Kahns Road
Manassas, VA 20112
703-650-9600

List of Attachments

Figure 1	Coverage Contour Comparison
Figure 2	Land Mobile Allocation Map
Table 1	Interference Analysis Results Summary
Form 346	Saved Version of Engineering Sections from FCC Form at Time of Upload

This material was entered September 22, 2009 for filing electronically. Since the FCC's electronic filing system may be accessed by anyone with the applicant's name and password, and electronic data may otherwise be altered in an unauthorized fashion, we cannot be responsible for changes made subsequent to our entry of this data and related attachments.





Chesapeake RF Consultants, LLC
Radiofrequency Consulting Engineers
Digital Television and Radio

Figure 2
Land Mobile Allocation Map
KSCM-LP Bryan, TX
Facility ID 54417
Ch. 18 (digital) 15 kW

prepared for
Midessa Broadcasting
Limited Partnership

September, 2009

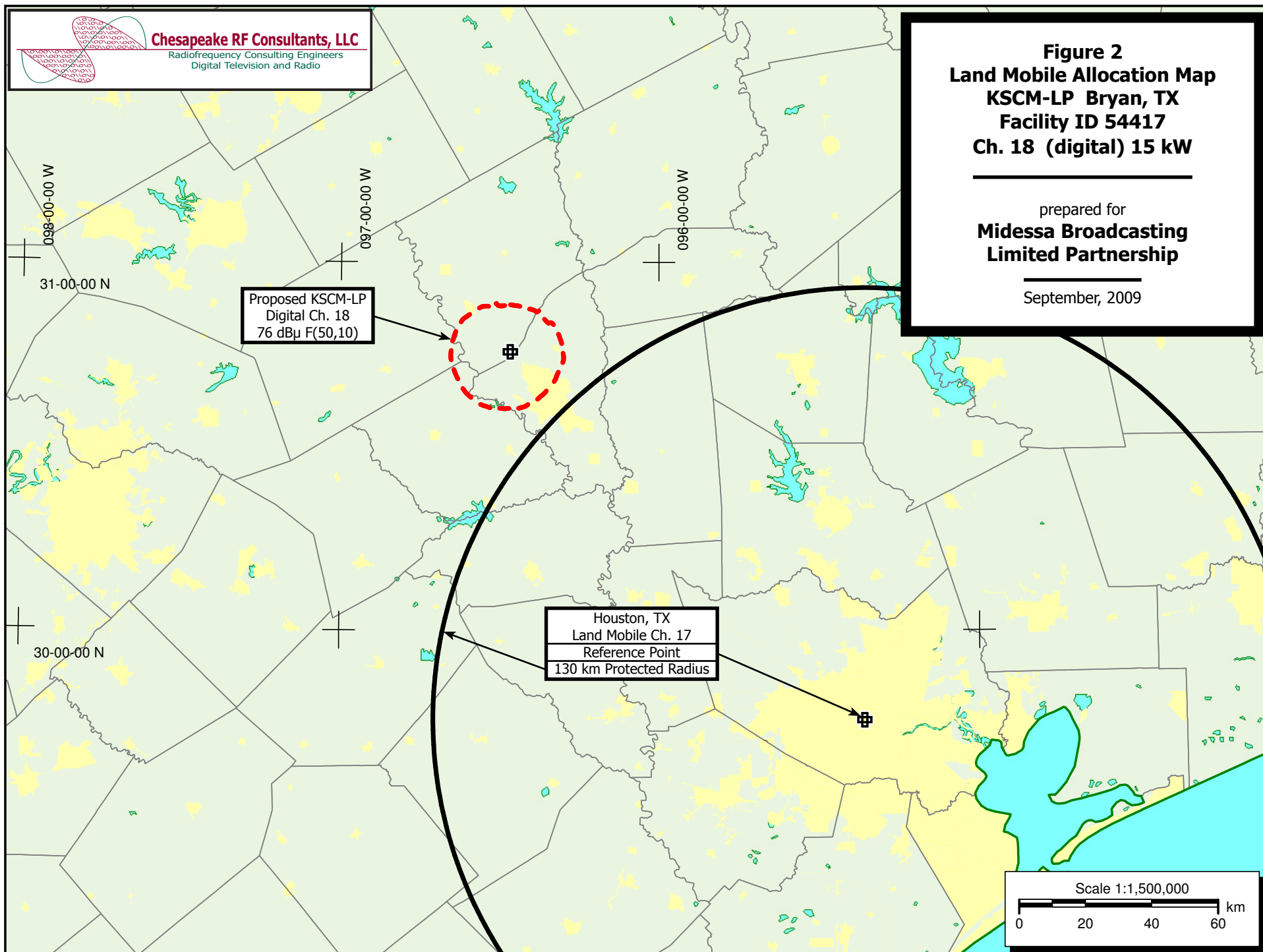


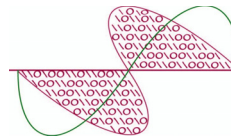
Table 1

Interference Analysis Results Summary

prepared for

Midessa Broadcasting Limited Partnership

KSCM-LP Bryan, TX



Chesapeake RF Consultants, LLC

Radiofrequency Consulting Engineers
Digital Television and Radio

KSCM-LP USERRECORD-01 BRYAN TX US
 Channel 18 ERP 15. kW HAAT 126. m RCAMSL 00223 m STRINGENT MASK
 Latitude 030-45-26 Longitude 0096-28-04
 Antenna Nondirectional

Ch.	Call	City/State	Dist (km)	Status	Application Ref. No.	---Population (2000 Census)---	
						Baseline	New Interference
15	KHPZ-CA	ROUND ROCK TX	115.2	LIC	BLTTA-20020408AAC	---	none
16	KIVY-LP	CROCKETT TX	114.4	LIC	BLTTL-19930201JK	---	none
16	KADT-LP	GEORGETOWN TX	120.7	CP	BPTTL-20061002AUC	---	none
16	KADT-LP	KILLEEN TX	128.3	LIC	BLTTL-19990915AVI	---	none
17	KVAT-LP	AUSTIN TX	136.3	CP	BDFCDTL-20090217AAZ	---	none
17	NEW	COLLEGE STATION TX	22.4	APP	BNPDTL-20090825AWF	175,029	3,099 (1.77%)
17	KVAT-LP	GARFIELD TX	136.3	LIC	BLTTL-20041214AEC	---	none
17	K17BP	PALESTINE TX	132.1	LIC	BLTT-19930301IC	---	none
18	K55GT	ALEXANDRIA LA	391.9	CP	BDISTTL-20071207ACB	---	none
18	KDNT-LP	ALLEN OK	333.4	APP	BSTA-20071203ADV	---	none
18	KDNT-LP	ALLEN OK	389.8	LIC	BLTTL-20060109ADC	---	none
18	KJTN-LP	ABILENE TX	361.6	LIC	BLTTL-20051215ABA	---	none
18	KNIC-DT	BLANCO TX	229.0	CP	BPCDT-20080402ADA	1,876,816	1,436 (0.08%)
18	KDNT-LP	DENISON TX	333.4	CP	BPTTL-20071203ADR	---	none
18	KGSW-LP	KEENE TX	200.6	APP	BDISDTL-20090630AFO	---	none
18	KYTX	NACOGDOCHES TX	183.1	LIC	BLCDDTL-20070810AAO	803,396	170 (0.02%)
18	NEW	PORT ARTHUR TX	263.9	APP	BNPDTL-20090825AXV	---	none
18	KTDF-LP	SAN ANTONIO TX	244.4	LIC	BLTTL-20030303AAN	---	none
18	K38IG	VICTORIA TX	225.2	CP	BDISTTL-20070402KPN	---	none
19	KGBS-LD	AUSTIN TX	136.7	CP	BDCCDTL-20080918AHK	---	none
19	KQUX-LD	AUSTIN TX	136.7	CP	BDCCDTL-20070514AAT	---	none
19	KTXH	HOUSTON TX	161.6	CP	BPCDT-20080619AAW	4,855,077	526 (0.01%)
19	KTXH	HOUSTON TX	161.6	LIC	BLCDDTL-20020514AAE	4,828,131	121 (0.00%)
19	NEW	LUFKIN TX	186.3	APP	BNPDTL-20090825AUI	---	none
20	KADF-LP	AUSTIN TX	136.5	LIC	BLTTL-20071029AAN	---	none

SECTION III - ENGINEERING DATA (Digital)																																																																																																											
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 Number: 18																																																																																																										
2.	Translator Input Channel No. :																																																																																																										
3.	Primary station proposed to be rebroadcast: <table border="1"><tr><td>Facility Identifier</td><td>Call Sign</td><td>City</td><td>State</td><td>Channel</td></tr></table>											Facility Identifier	Call Sign	City	State	Channel																																																																																											
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4.	Antenna Location Coordinates: (NAD 27) Latitude: Degrees 30 Minutes 45 Seconds 26 <input checked="" type="radio"/> North <input type="radio"/> South Longitude: Degrees 96 Minutes 28 Seconds 04 <input checked="" type="radio"/> West <input type="radio"/> East																																																																																																										
5.	Antenna Structure Registration Number: 1044896 <input type="checkbox"/> Not Applicable [Exhibit 10] <input type="checkbox"/> Notification filed with FAA																																																																																																										
6.	Antenna Location Site Elevation Above Mean Sea Level: 112.5 meters																																																																																																										
7.	Overall Tower Height Above Ground Level: 152.0 meters																																																																																																										
8.	Height of Radiation Center Above Ground Level: 110 meters																																																																																																										
9.	Maximum Effective Radiated Power (ERP): 15.0 kW																																																																																																										
10.	Transmitter Output Power: 0.775 kW																																																																																																										
11.	a. Transmitting Antenna: Before selecting Directional "Off-the-Shelf", refer to "Search for Antenna Information" under CDBS Public Access (http://fjallfoss.fcc.gov/prod/cdbs/pubacc/prod/cdbs_pa.htm). Make sure that the Standard Pattern is marked Yes and that the relative field values shown match your values. Enter the Manufacturer (Make) and Model exactly as displayed in the Antenna Search. <input checked="" type="radio"/> Nondirectional <input type="radio"/> Directional "Off-the-shelf" <input type="radio"/> Directional composite Manufacturer ERI Model ALP24L3-HSO-18 b. Electrical Beam Tilt: 0.75 degrees <input type="checkbox"/> Not Applicable																																																																																																										
c. Directional Antenna Relative Field Values: <input checked="" type="checkbox"/> N/A (Nondirectional or Directional "Off-the-shelf") Rotation (Degrees): <input type="checkbox"/> No Rotation																																																																																																											
<table border="1"><thead><tr><th>Degrees</th><th>Value</th><th>Degrees</th><th>Value</th><th>Degrees</th><th>Value</th><th>Degrees</th><th>Value</th><th>Degrees</th><th>Value</th><th>Degrees</th><th>Value</th></tr></thead><tbody><tr><td>0</td><td></td><td>10</td><td></td><td>20</td><td></td><td>30</td><td></td><td>40</td><td></td><td>50</td><td></td></tr><tr><td>60</td><td></td><td>70</td><td></td><td>80</td><td></td><td>90</td><td></td><td>100</td><td></td><td>110</td><td></td></tr><tr><td>120</td><td></td><td>130</td><td></td><td>140</td><td></td><td>150</td><td></td><td>160</td><td></td><td>170</td><td></td></tr><tr><td>180</td><td></td><td>190</td><td></td><td>200</td><td></td><td>210</td><td></td><td>220</td><td></td><td>230</td><td></td></tr><tr><td>240</td><td></td><td>250</td><td></td><td>260</td><td></td><td>270</td><td></td><td>280</td><td></td><td>290</td><td></td></tr><tr><td>300</td><td></td><td>310</td><td></td><td>320</td><td></td><td>330</td><td></td><td>340</td><td></td><td>350</td><td></td></tr><tr><td colspan="2">Additional Azimuths</td><td colspan="10"></td></tr></tbody></table>												Degrees	Value	Degrees	Value	Degrees	Value	Degrees	Value	Degrees	Value	Degrees	Value	0		10		20		30		40		50		60		70		80		90		100		110		120		130		140		150		160		170		180		190		200		210		220		230		240		250		260		270		280		290		300		310		320		330		340		350		Additional Azimuths											
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[Relative Field Polar Plot](#)

NOTE: In addition to the information called for in this section, an explanatory exhibit providing full particulars must be submitted for each question for which a "No" response is provided.	
12.	Out-of-channel Emission Mask: <input type="radio"/> Simple <input checked="" type="radio"/> Stringent
CERTIFICATION	
13.	Interference : The proposed facility complies with all of the following applicable rule sections. 47.C.F.R Sections 74.709, 74.793(e), 74.793(f), 74.793(g), 74.793(h), 74.794(b) and 73.1030. <input checked="" type="radio"/> Yes <input type="radio"/> No See Explanation in [Exhibit 11]
14.	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). Unless the applicant can determine RF compliance, an Exhibit is required . <input checked="" type="radio"/> Yes <input type="radio"/> No See Explanation in [Exhibit 12] 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.

15. Channels 52-59. If the proposed channel is within channels 52-59, the applicant certifies compliance with the following requirements, as applicable:
<input type="checkbox"/> The applicant is applying for a digital companion channel for which no suitable channel from channel 2-51 is available.
<input type="checkbox"/> Pursuant to Section 74.786(d), the applicant has notified, within 30 days of filing this application, all commercial wireless licenses of the spectrum comprising the proposed TV channel and the first adjacent channels thereto, for which the proposed digital LPTV or TV translator antenna site lies inside the licensed geographic boundaries of the wireless licensees or within 75 miles and 50 miles, respectively, of the geographic boundaries of co-channel and adjacent-channel wireless licensees.
16. Channels 60-69. If the proposed channel is within channels 60-69, the applicant certifies compliance with the following requirements, as applicable:
<input type="checkbox"/> Pursuant to Section 74.786(e), the applicant has notified, within 30 days of filing this application, all commercial wireless licenses of the spectrum comprising the proposed TV channel and the first adjacent channels thereto, for which the proposed digital LPTV or TV translator antenna site lies inside the licensed geographic boundaries of the wireless licensees or within 75 miles and 50 miles, respectively, of the geographic boundaries of co-channel and adjacent-channel wireless licensees.
<input type="checkbox"/> Pursuant to Section 74.786(e), the applicant proposing operation on channel 63, 64, 68 and 69 ("public safety channels") has secured a coordinated spectrum use agreements(s) with 700 MHz public safety regional planning committee(s) and state administrator(s) of the region(s) and state(s) within which the antenna site of the digital LPTV or TV translator station is proposed to locate, and those adjoining regions and states with boundaries within 75 miles of the proposed station location.
<input type="checkbox"/> Pursuant to Section 74.786(e), the applicant for a channel adjacent to channel 63, 64, 68 or 69 has notified, within 30 days of filing this application, the 700 MHz public safety regional planning committee(s) and state administrator(s) of the region and state containing the proposed digital LPTV or TV translator antenna site and regions and states whose geographic boundaries lie within 50 miles of the proposed LPTV or TV translator antenna site.
PREPARERS CERTIFICATION ON PAGE 3 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 JOSEPH M. DAVIS, P.E.	Relationship to Applicant (e.g., Consulting Engineer) CONSULTING ENGINEER	
Signature	Date 9/22/2009	
Mailing Address CHESAPEAKE RF CONSULTANTS, LLC 11993 KAHNS ROAD		
City MANASSAS	State or Country (if foreign address) VA	Zip Code 20112 -
Telephone Number (include area code) 7036509600	E-Mail Address (if available) JOSEPH.DAVIS@RF-CONSULTANTS.COM	