MARSAND, INC.
Matthew A. Sanderford, Jr., P.E.

RADIO FREQUENCY RADIATION COMPLIANCE STATEMENT

The proposed facility complies in full with the requirements of 47 C.F.R. Section 1.1306 and will have no significant environmental impact. The proposed site does not involve any of the conditions specified in Section 1.1307(a)(1)-(6) of the Rules.

The licensed facility has been studied in accordance with the procedures set forth in the FCC OET Bulletin No. 65 "Evaluating Compliance With FCC Guidelines for Human Exposure to Radiofrequency Electromagnetic Fields", Edition 97-01, and has been found to comply with the limits set forth in Section 1.1310 of the Rules. This determination has been based upon calculations with the total radiated power from all TV & FM, full and low power, co-located broadcast emitters. The total exposure as defined by the ANSI standard computations for occupational/controlled area is **0.10** % of the maximum. The total exposure as defined by the ANSI standard computations for general population/uncontrolled area is **0.51** % of the maximum. The proposed facility is in compliance with the Commission's guidelines.

	Multiple Use FM/TV Tower			ASRN:	1049789
Location:	**K44GS CH44 DTV Wichita Falls, TX**				7/14/2015
Channel Frequency Type	**Service**	**ERP (W)**	**Ant Center of Radiation AG (m)**	**% of ANSI/FCC Limit (6min)**	**% of ANSI/FCC Limit (30 min)**
44	TV UHF#1	15,000	156.00	0.01	0.05
22	TV UHF#2	433,000	303.00	0.09	0.46
32	TV UHF#3	15	100.00	0.00	0.00
225C1	FM #1	200	237.40	0.00	0.00
260C1	FM #2	200	237.40	0.00	0.00
280C2	FM #3	38	237.00	0.00	0.00
Total %				**0.10**	**0.51**
	IN COMPLIANCE				

The Licensee agrees to maintain full compliance with the safety precautions to workers on the tower (controlled) and the general public (uncontrolled) by reducing or removing radiated power during the time of construction or maintenance on or near the antenna. The Licensee 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

The Licensee is believed to be in full compliance with the Environmental Impact and Commission Rules.

Matthew A. Sanderford, Jr., P.E.
MARSAND, INC. – President

RF RADIATION TO HUMAN EXPOSURE CALCULATIONS UHF#1

Call letters:	K44GS	Date:	**7/14/2015**
Lic City:	Wichita Falls, TX	**(UHF 300-1500 MHz)**	
Channel:	44		

ANSI/IEEE C95.1-1992 & FCC OST/OET Bulletin Number 65

Peak Visual ERP:	H+V	**0**	**W**
Aural ERP:	H+V	**0**	**W**
DTV Average Pwr	H+V	**15,000**	**W**
Worst Case downward radiation:		**0.20**	
Typical relative field factor in the downward direction:		**0.10**	
(from -60 to -90 degrees elevation)			
Distance from ground to antenna center of radiation:		**156.0**	**m**

A. Occupational/Controlled Exposure

	Actual		Worst Case	
Highest power density:	**0.21**	**µW/cm²**	0.82	µW/cm²
Power Density at ground level:	**0.0002**	**mW/cm²**	0.0008	mW/cm²

ANSI Maximum Radiation Limit for this Channel -

Frequency of Visual Carrier:	**653**	**MHz**	
Required minimum ANSI standard:	**2.1767**	**mW/cm²**	6 minutes Avg.
Percentage of ANSI requirement:	**0.01**	**%**	0.04 %

B. General Population/Uncontrolled Exposure

			Head Height	
Dist. of Person from ant/twr vert Plumb:	**20**	**m**	**2**	m
Dist. of Person from ant/twr Direct:	**155.3**	**m**		

	Actual		Worst Case	
Highest power density:	**0.21**	**µW/cm²**	0.83	µW/cm²
Power Density at ground level:	**0.0002**	**mW/cm²**	0.0008	mW/cm²

ANSI Maximum Radiation Limit for this Channel -

Frequency of Visual Carrier:	**653**	**MHz**	
Required minimum ANSI standard:	**0.4353**	**mW/cm²**	30 minutes Avg.
Percentage of ANSI requirement:	**0.05**	**%**	0.19 %

RF RADIATION TO HUMAN EXPOSURE CALCULATIONS UHF#2

Call letters:	KAUZ-TV	Date:	**7/14/2015**
Lic City:	Wichita Falls, TX	**(UHF 300-1500 MHz)**	
Channel:	22		

ANSI/IEEE C95.1-1992 & FCC OST/OET Bulletin Number 65

Peak Visual ERP:	H+V	**0**	**W**
Aural ERP:	H+V	**0**	**W**
DTV Average Pwr	H+V	**433,000**	**W**
Worst Case downward radiation:		**0.20**	
Typical relative field factor in the downward direction:		**0.10**	
(from -60 to -90 degrees elevation)			
Distance from ground to antenna center of radiation:		**303.0**	**m**

A. Occupational/Controlled Exposure

	Actual		Worst Case	
Highest power density:	**1.58**	**µW/cm²**	6.30	µW/cm²
Power Density at ground level:	**0.0016**	**mW/cm²**	0.0063	mW/cm²

ANSI Maximum Radiation Limit for this Channel -

Frequency of Visual Carrier:	**521**	**MHz**	
Required minimum ANSI standard:	**1.7367**	**mW/cm²**	6 minutes Avg.
Percentage of ANSI requirement:	**0.09**	**%**	0.36 %

B. General Population/Uncontrolled Exposure

			Head Height	
Dist. of Person from ant/twr vert Plumb:	**20**	**m**	**2**	m
Dist. of Person from ant/twr Direct:	**301.7**	**m**		

	Actual		Worst Case	
Highest power density:	**1.59**	**µW/cm²**	6.36	µW/cm²
Power Density at ground level:	**0.0016**	**mW/cm²**	0.0064	mW/cm²

ANSI Maximum Radiation Limit for this Channel -

Frequency of Visual Carrier:	**521**	**MHz**	
Required minimum ANSI standard:	**0.3473**	**mW/cm²**	30 minutes Avg.
Percentage of ANSI requirement:	**0.46**	**%**	1.83 %

RF RADIATION TO HUMAN EXPOSURE CALCULATIONS UHF#3

Call letters:	K32KT-D	Date:	**7/14/2015**
Lic City:	Wichita Falls, TX	**(UHF 300-1500 MHz)**	
Channel:	32		

ANSI/IEEE C95.1-1992 & FCC OST/OET Bulletin Number 65

Peak Visual ERP:	H+V	**0**	**W**
Aural ERP:	H+V	**0**	**W**
DTV Average Pwr	H+V	**15**	**W**

Worst Case downward radiation: **0.20**
Typical relative field factor in the downward direction: **0.10**
(from -60 to -90 degrees elevation)
Distance from ground to antenna center of radiation: **100.0** **m**

A. Occupational/Controlled Exposure

	Actual		Worst Case	
Highest power density:	**0.00**	**µW/cm²**	0.00	µW/cm²
Power Density at ground level:	**0.0000**	**mW/cm²**	0.0000	mW/cm²

ANSI Maximum Radiation Limit for this Channel -

Frequency of Visual Carrier:	**581**	**MHz**	
Required minimum ANSI standard:	**1.9367**	**mW/cm²**	6 minutes Avg.
Percentage of ANSI requirement:	**0.00**	**%**	0.00 %

B. General Population/Uncontrolled Exposure

			Head Height	
Dist. of Person from ant/twr vert Plumb:	**20**	**m**	**2**	m
Dist. of Person from ant/twr Direct:	**100.0**	**m**		

	Actual		Worst Case	
Highest power density:	**0.00**	**µW/cm²**	0.00	µW/cm²
Power Density at ground level:	**0.0000**	**mW/cm²**	0.0000	mW/cm²

ANSI Maximum Radiation Limit for this Channel -

Frequency of Visual Carrier:	**581**	**MHz**	
Required minimum ANSI standard:	**0.3873**	**mW/cm²**	30 minutes Avg.
Percentage of ANSI requirement:	**0.00**	**%**	0.00 %

RF RADIATION TO HUMAN EXPOSURE CALCULATIONS FM #1

Call letters:	KNIN-FM	Date:	**7/14/2015**
Lic City:	Wichita Falls, TX	**(FM 30-300 MHz)**	
Channel:	225C1		
Frequency:	92.9 MHz		

ANSI/IEEE C95.1-1992 & FCC OST/OET Bulletin Number 65

Aural ERP:	Horizontal	**100 W**
Aural ERP:	Vertical	**100 W**
Worst Case downward radiation:		**0.30**
Typical relative field factor in the downward direction:		**0.20**
(from -60 to -90 degrees elevation)		
Distance from ground to antenna center of radiation:		**237.4 m**

A. Occupational/Controlled Exposure

	Actual	Worst Case
Highest power density:	**0.00 µW/cm²**	**0.01 µW/cm²**
Power Density at ground level:	**0.0000 mW/cm²**	**0.0000 mW/cm²**

ANSI Maximum Radiation Limit for this Channel -

Frequency of Visual Carrier:	**92.9 MHz**	
Required minimum ANSI standard:	**1.0 mW/cm²**	**6 minutes Avg.**
Percentage of ANSI requirement:	**0.00 %**	**0.00 %**

B. General Population/Uncontrolled Exposure

		Head Height
Dist. of Person from ant/twr vert Plumb:	**20 m**	**2 m**
Dist. of Person from ant/twr Direct:	**236.2 m**	

	Actual	Worst Case
Highest power density:	**0.00 µW/cm²**	**0.01 µW/cm²**
Power Density at ground level:	**0.0000 mW/cm²**	**0.0000 mW/cm²**

ANSI Maximum Radiation Limit for this Channel -

Frequency of Visual Carrier:	**92.9 MHz**	
Required minimum ANSI standard:	**0.2 mW/cm²**	**30 minutes Avg.**
Percentage of ANSI requirement:	**0.00 %**	**0.01 %**

RF RADIATION TO HUMAN EXPOSURE CALCULATIONS FM #2

Call letters:	KLUR(FM)	Date:	**7/14/2015**
Lic City:	Wichit Falls, TX	**(FM 30-300 MHz)**	
Channel:	260C1		
Frequency:	99.9 MHz		

ANSI/IEEE C95.1-1992 & FCC OST/OET Bulletin Number 65

Aural ERP:	Horizontal	**100 W**
Aural ERP:	Vertical	**100 W**
Worst Case downward radiation:		**0.30**
Typical relative field factor in the downward direction:		**0.20**
(from -60 to -90 degrees elevation)		
Distance from ground to antenna center of radiation:		**237.4 m**

A. Occupational/Controlled Exposure

	Actual	Worst Case
Highest power density:	**0.00 µW/cm²**	**0.01 µW/cm²**
Power Density at ground level:	**0.0000 mW/cm²**	**0.0000 mW/cm²**

ANSI Maximum Radiation Limit for this Channel -

Frequency of Visual Carrier:	**99.9 MHz**	
Required minimum ANSI standard:	**1.0 mW/cm²**	**6 minutes Avg.**
Percentage of ANSI requirement:	**0.00 %**	**0.00 %**

B. General Population/Uncontrolled Exposure

		Head Height
Dist. of Person from ant/twr vert Plumb:	**20 m**	**2 m**
Dist. of Person from ant/twr Direct:	**236.2 m**	

	Actual	Worst Case
Highest power density:	**0.00 µW/cm²**	**0.01 µW/cm²**
Power Density at ground level:	**0.0000 mW/cm²**	**0.0000 mW/cm²**

ANSI Maximum Radiation Limit for this Channel -

Frequency of Visual Carrier:	**99.9 MHz**	
Required minimum ANSI standard:	**0.2 mW/cm²**	**30 minutes Avg.**
Percentage of ANSI requirement:	**0.00 %**	**0.01 %**

RF RADIATION TO HUMAN EXPOSURE CALCULATIONS FM #3

Call letters:	KQXC-FM	Date:	**7/14/2015**
Lic City:	Wichita Falls, TX	**(FM 30-300 MHz)**	
Channel:	280C2		
Frequency:	103.9 MHz		

ANSI/IEEE C95.1-1992 & FCC OST/OET Bulletin Number 65

Aural ERP:	Horizontal	**19 W**
Aural ERP:	Vertical	**19 W**
Worst Case downward radiation:		**0.30**
Typical relative field factor in the downward direction:		**0.20**
(from -60 to -90 degrees elevation)		
Distance from ground to antenna center of radiation:		**237.0 m**

A. Occupational/Controlled Exposure

	Actual	Worst Case
Highest power density:	**0.00 µW/cm²**	**0.00 µW/cm²**
Power Density at ground level:	**0.0000 mW/cm²**	**0.0000 mW/cm²**

ANSI Maximum Radiation Limit for this Channel -

Frequency of Visual Carrier:	**103.9 MHz**	
Required minimum ANSI standard:	**1.0 mW/cm²**	**6 minutes Avg.**
Percentage of ANSI requirement:	**0.00 %**	**0.00 %**

B. General Population/Uncontrolled Exposure

		Head Height
Dist. of Person from ant/twr vert Plumb:	**20 m**	**2 m**
Dist. of Person from ant/twr Direct:	**235.8 m**	

	Actual	Worst Case
Highest power density:	**0.00 µW/cm²**	**0.00 µW/cm²**
Power Density at ground level:	**0.0000 mW/cm²**	**0.0000 mW/cm²**

ANSI Maximum Radiation Limit for this Channel -

Frequency of Visual Carrier:	**103.9 MHz**	
Required minimum ANSI standard:	**0.2 mW/cm²**	**30 minutes Avg.**
Percentage of ANSI requirement:	**0.00 %**	**0.00 %**