

TOMLINSON-LEIS COMMUNICATIONS, L.P.
Amendment to BPH-20161114ADJ
KYYK (FM) Palestine, Texas
Channel 252 C2
Form 301 FM
Facility ID 72838
Palestine, TX

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TOMLINSON-LEIS COMMUNICATIONS, L.P.
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KYYK (FM) Palestine, Texas
Channel 252 C2
Form 301 FM
Facility ID 72838
Palestine, TX

Purpose of Application

Tomlinson-Leis Communications, L.P., submits this amendment to the pending application in response to email from Mr. Tung Bui at the Commission.

KYYK Reference Coordinates

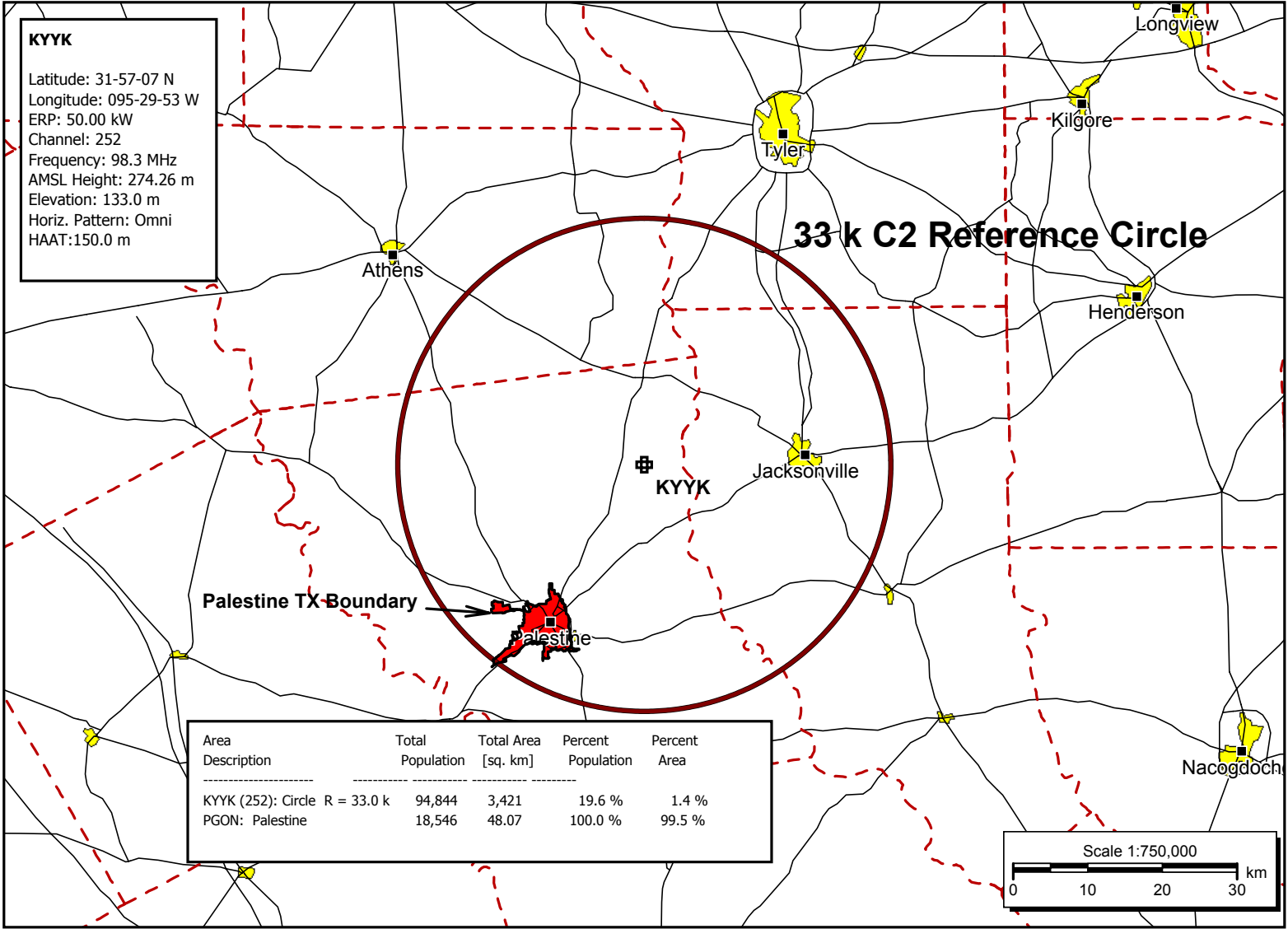
City of License Coverage

From the new KYYK reference coordinates a 33 kilometer reference circle will encompass 100% of the population of the city of Palestine and 99.5% of the area. An FAA study was done showing no hazard to air navigation on the proposed reference coordinates. The study is 2016-ASW-12001-OE. From this location, an antenna with center of radiation of 141.26 meters, 246.26 m COR will equal 150 m HAAT. This study approves a tower of 284.98 meters amsl. See the following pages for demonstration of the coverage of city of license.

73.207 Compliance of Reference Coordinates

This amendment proposes to modify the reference coordinates of the vacant first adjacent channel 251A at Trinity to be fully spaced to the proposed KYYK C2 reference coordinates. These coordinates are N 31 02 08.2 / W 95 11 50, NAD 27. See the following pages for a demonstration of compliance with 73.207 spacing city of license coverage for these proposed new coordinates. An FAA study was done on the site of the proposed new Trinity reference coordinates showing no hazard for a tower of 244 feet or 74.37 meters or a height above mean sea level of 179.84 meters. This study is 2017-ASW-3151-OE. See the following pages for demonstration of compliance of the replacement reference coordinates for the vacant allotment.

All calculations of coverage and HAAT, etc., were done with a computer program V-Soft Probe 4 using NED 03 second database terrain data.



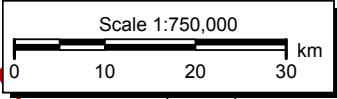
KYYK

Latitude: 31-57-07 N
Longitude: 095-29-53 W
ERP: 50.00 kW
Channel: 252
Frequency: 98.3 MHz
AMSL Height: 274.26 m
Elevation: 133.0 m
Horiz. Pattern: Omni
HAAT:150.0 m

33 k C2 Reference Circle

Palestine TX-Boundary

Area Description	Total Population	Total Area [sq. km]	Percent Population	Percent Area
KYYK (252): Circle R = 33.0 k	94,844	3,421	19.6 %	1.4 %
PGON: Palestine	18,546	48.07	100.0 %	99.5 %



KYYK C2 Reference
Tomlinson-leis Communications, L.p.

REFERENCE		DISPLAY DATES
31 57 07.0 N.	CLASS = C2 Int = B	DATA 04-12-17
95 29 53.0 W.	Current Spacings to 3rd Adj.	SEARCH 04-13-17
----- Channel 252 - 98.3 MHz -----		

Call	Channel	Location	Azi	Dist	FCC	Margin
KYYK	RSV-A 252C2	Palestine	TX 0.0	0.00	189.5	-189.5
KYYK	APP-N 252C2	Palestine	TX 258.6	14.47	189.5	-175.0
KYYK	LIC 252C3	Palestine	TX 258.3	14.34	176.5	-162.2
KORA-FM	LIC 252A	Bryan	TX 209.4	165.51	165.5	0.01
TRINIT	VAC 251A	Trinity	TX 164.3	105.54	105.5	0.04
KTAL-FM	LIC 251C0	Texarkana	TX 52.5	175.58	175.5	0.08
KBOC	LIC-N 252C	Bridgeport	TX 312.1	248.65	248.5	0.15
KYAR	LIC 252A	Lorena	TX 250.1	173.09	165.5	7.6
AU9868103	VAC 254A	Wells	TX 134.7	72.33	54.5	17.8
KAGZ	LIC 249A	Burke	TX 133.1	95.11	54.5	40.6
KTJM	LIC 253C	Port Arthur	TX 156.9	232.99	187.5	45.5
KAGZ	CP -N 249C2	Burke	TX 128.6	103.45	57.5	46.0

RSV-R = reserved - needs protection, RSV-A = allocation
All separation margins include rounding

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VACANT ALLOTMENT REFERENCE COORDINATES, TRINITY TX

This amendment proposes replacement of the reference coordinates of the first adjacent Class A allotment with new coordinates:

N31 02 08.2 W 95 11 50 NAD 27
N31 02 08.89 W 95 11 50.77 NAD 83

These coordinates are fully spaced to the proposed KYYK C2 reference coordinates and to all other existing licenses and applications. See the following page for a study demonstrating spacing.

This is an un-built auction facility from the 2005 auction. As the facility was never constructed, the permit was cancelled. The original permit and allocation were for Groveton TX. For some undeterminable reason the permit and reference were modified to specify Trinity TX as the city of license, even though there were not any suitable fully spaced towers that provided service to Trinity. Plans were made for the facility to be a minimal facility on an existing tower in Trinity with a directional antenna in order to save the permit.

The 16.2 kilometer allocation circle from the new specified reference coordinates do not encompass all of the city of Trinity. The FAA study 2017-ASW-3151-OE serves as proof a tower with a radiation center of 175.9 meters AMSL can be constructed. The resulting facility would be 6 kW with a HAAT of 99 meters. The resulting 60 dBu contour encompasses all of the boundary of Trinity and beyond. The FM PTP V2 from this build-able facility encompasses 100% of the existing facility. The 70 dBu F 50-50 contour on the 239 degree bearing toward Trinity is 16.75 kilometers. The FM PTP V2 contour on the same bearing is 23.75 kilometers, 34% more than the F 50-50 contour. This alone justifies the use of the alternative method of coverage to demonstrate coverage to the city of license¹. See the following for further demonstration of justification.

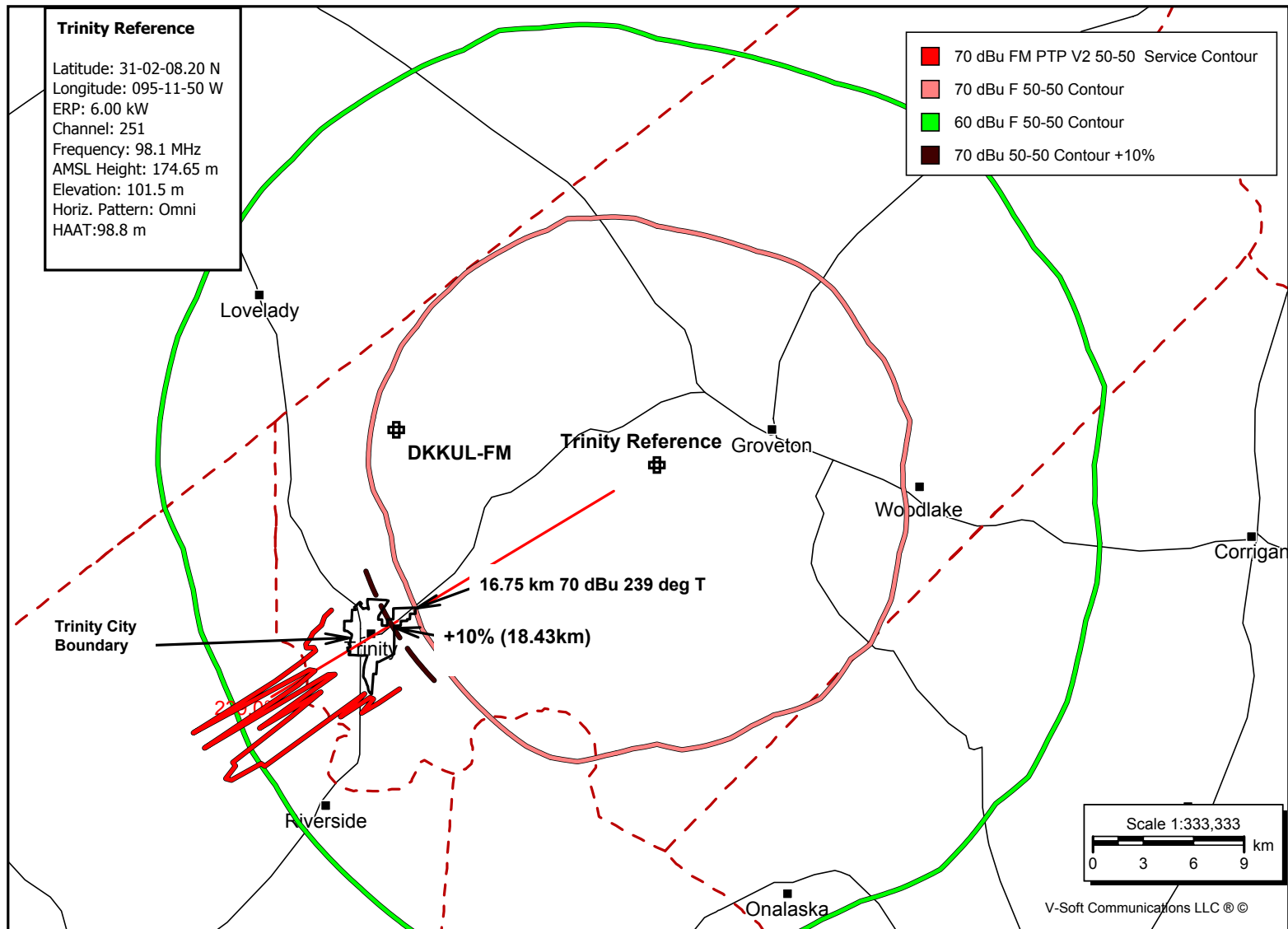
Bearing	70 dBu F 50-50	70 dBu FM PTP V2	Increase
Deg	k	k	%
230	17.13	22.95	33.975
239	16.75	23.75	41.79
250	16.59	21.2	27.78

¹FCC 08-139, May 28, 2008 and DA 10-1760, September 16, 2010

Trinity Reference

Latitude: 31-02-08.20 N
Longitude: 095-11-50 W
ERP: 6.00 kW
Channel: 251
Frequency: 98.1 MHz
AMSL Height: 174.65 m
Elevation: 101.5 m
Horiz. Pattern: Omni
HAAT: 98.8 m

- 70 dBu FM PTP V2 50-50 Service Contour
- 70 dBu F 50-50 Contour
- 60 dBu F 50-50 Contour
- 70 dBu 50-50 Contour +10%



Proposed Trinity Allotment Reference Contour City Grade Coverage

Distance to Contour Report

Type of contour: FCC
Location Variability: 50.0 %
Time Variability: 50.0 %
of Radials Calculated: 72
FCC Matching HAAT Calculation Used
Field Strength: 70.00 dBuV/m

Primary Terrain: NED 3 Second US Terrain

----- Transmitter Information:

Call Letters: Trinity Reference
Latitude: 31-02-08.20 N
Longitude: 095-11-50 W
ERP: 6.00 kW
Channel: 251
Frequency: 98.1 MHz
AMSL Height: 174.65 m
Elevation: 101.5 m
Horiz. Antenna Pattern: Omni
Vert. Elevation Pattern: No

Azimuth (deg)	Distance (km)	HAAT (m)
-----	-----	-----
0.0	14.22	79.3
5.0	14.03	77.2
10.0	13.98	76.6
15.0	13.94	76.1
20.0	13.96	76.4
25.0	14.05	77.3
30.0	14.33	80.6
35.0	14.59	83.4
40.0	14.74	85.0
45.0	14.81	85.9
50.0	14.68	84.5
55.0	14.55	82.9
60.0	14.54	82.8
65.0	14.88	86.6
70.0	14.95	87.4
75.0	14.96	87.5
80.0	15.28	90.8
85.0	14.89	86.7
90.0	14.61	83.6
95.0	14.69	84.5
100.0	15.08	88.8
105.0	15.31	91.2
110.0	15.33	91.4
115.0	15.65	94.7
120.0	16.07	99.0
125.0	16.24	100.8
130.0	16.56	104.2

135.0	16.30	101.4
140.0	16.65	105.1
145.0	16.94	108.3
150.0	16.73	106.0
155.0	16.41	102.6
160.0	16.50	103.5
165.0	16.82	107.0
170.0	16.94	108.3
175.0	17.00	108.9
180.0	16.60	104.6
185.0	16.94	108.3
190.0	17.53	115.2
195.0	18.26	124.8
200.0	18.50	128.1
205.0	18.43	127.2
210.0	18.17	123.6
215.0	17.91	120.1
220.0	17.70	117.3
225.0	17.49	114.7
230.0	17.13	110.5
235.0	17.05	109.5
239.0	16.75	106.3
240.0	16.67	105.4
245.0	16.52	103.8
250.0	16.59	104.5
255.0	16.37	102.1
260.0	16.41	102.6
265.0	16.96	108.5
270.0	17.18	111.1
275.0	17.17	110.9
280.0	17.11	110.3
285.0	17.05	109.6
290.0	16.79	106.7
295.0	16.79	106.6
300.0	16.50	103.5
305.0	16.43	102.7
310.0	16.18	100.2
315.0	16.14	99.7
320.0	15.91	97.4
325.0	15.72	95.4
330.0	15.61	94.3
335.0	15.42	92.4
340.0	15.60	94.2
345.0	15.20	90.0
350.0	14.99	87.8
355.0	14.73	85.0

Average HAAT for radials shown: 98.8 m

Proposed Trinity Allotment Reference Contour FM PTP V2 Coverage

Distance to Contour Report

Type of contour: FMPTP v2
Type of FMPTP Curve: Service
of Radials Calculated: 72
Field Strength: 70.00 dBuV/m

Primary Terrain: NED 3 Second US Terrain

Transmitter Information:

Call Letters: Trinity Reference
Latitude: 31-02-08.20 N
Longitude: 095-11-50 W
ERP: 6.00 kW
Channel: 251
Frequency: 98.1 MHz
AMSL Height: 174.65 m
Elevation: 101.5 m
Horiz. Antenna Pattern: Omni
Vert. Elevation Pattern: No

Azimuth (deg)	Distance (km)	HAAT (m)
-----	-----	-----
0.0	20.90	79.3
10.0	20.88	76.6
20.0	20.85	76.4
30.0	20.83	80.6
40.0	20.80	85.0
50.0	20.77	84.5
60.0	20.75	82.8
70.0	20.72	87.4
80.0	20.69	90.8
90.0	20.67	83.6
100.0	20.64	88.8
110.0	20.61	91.4
120.0	20.59	99.0
130.0	20.56	104.2
140.0	20.53	105.1
150.0	20.51	106.0
160.0	20.48	103.5
170.0	20.46	108.3
180.0	20.43	104.6
190.0	20.40	115.2
200.0	20.38	128.1
210.0	20.35	123.6
220.0	20.32	117.3
230.0	22.95	110.5
239.0	23.75	106.3
240.0	31.86	105.4
250.0	21.20	104.5
260.0	21.17	102.6

270.0	21.14	111.1
280.0	21.12	110.3
290.0	21.09	106.7
300.0	21.06	103.5
310.0	21.04	100.2
320.0	21.01	97.4
330.0	20.98	94.3
340.0	20.96	94.2
350.0	20.93	87.8

Average HAAT for radials shown: 98.8 m

Trinity Vacant Replacement

REFERENCE		DISPLAY DATES
31 02 08.2 N.	CLASS = A Int = AA	DATA 04-12-17
95 11 50.0 W.	Current Spacings to 3rd Adj.	SEARCH 04-12-17
----- Channel 251 - 98.1 MHz -----		

Call	Channel	Location		Azi	Dist	FCC	Margin
DKKUL-FM	VAC 251A	Trinity	TX	277.7	15.65	114.5	-98.9
KYYK	RSV-A 252C2	Palestine	TX	344.4	105.54	105.5	0.04
KBXX	LIC 250C	Houston	TX	190.6	164.56	164.5	0.06
KYYK	APP-N 252C2	Palestine	TX	336.8	107.62	105.5	2.1
KAGZ	CP -N 249C2	Burke	TX	54.6	64.21	54.5	9.7
KYYK	LIC 252C3	Palestine	TX	336.8	107.54	88.5	19.0
KTAL-FM	LIC 251C0	Texarkana	TX	28.1	235.72	214.5	21.2
KAGZ	LIC 249A	Burke	TX	48.1	54.97	30.5	24.5
AU9868103	VAC 254A	Wells	TX	24.2	55.69	30.5	25.2
KTJM	LIC 253C	Port Arthur	TX	151.0	129.05	94.5	34.6
KORA-FM	LIC 252A	Bryan	TX	249.0	118.19	71.5	46.7

RSV-R = reserved - needs protection, RSV-A = allocation
All separation margins include rounding



Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2017-ASW-3151-OE

Issued Date: 03/28/2017

Rick Estes
Estes Communications
6920 Kirk Lane
Burleson, TX 76028

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Antenna Tower Groveton
Location:	Groveton, TX
Latitude:	31-02-08.86N NAD 83
Longitude:	95-11-50.77W
Heights:	333 feet site elevation (SE) 244 feet above ground level (AGL) 577 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 L Change 1, Obstruction Marking and Lighting, paint/red lights - Chapters 3(Marked),4,5(Red),&12.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

- ☐ At least 10 days prior to start of construction (7460-2, Part 1)
☒ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

This determination expires on 09/28/2018 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.

- (c) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is based, in part, on the foregoing description which includes specific coordinates , heights, frequency(ies) and power . Any changes in coordinates , heights, and frequencies or use of greater power will void this determination. Any future construction or alteration , including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

A copy of this determination will be forwarded to the Federal Communications Commission (FCC) because the structure is subject to their licensing authority.

If we can be of further assistance, please contact our office at (817) 222-5933. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2017-ASW-3151-OE.

Signature Control No: 325323201-326906508

(DNE)

Andrew Hollie
Specialist

Attachment(s)
Frequency Data
Map(s)

cc: FCC

Frequency Data for ASN 2017-ASW-3151-OE

LOW FREQUENCY	HIGH FREQUENCY	FREQUENCY UNIT	ERP	ERP UNIT
698	806	MHz	1000	W
806	824	MHz	500	W
824	849	MHz	500	W
851	866	MHz	500	W
869	894	MHz	500	W
896	901	MHz	500	W
901	902	MHz	7	W
930	931	MHz	3500	W
931	932	MHz	3500	W
932	932.5	MHz	17	dBW
935	940	MHz	1000	W
940	941	MHz	3500	W
1850	1910	MHz	1640	W
1930	1990	MHz	1640	W
2305	2310	MHz	2000	W
2345	2360	MHz	2000	W

TOPO Map for ASN 2017-ASW-3151-OE

