

MULLANEY ENGINEERING, INC.

9049 SHADY GROVE COURT
GAITHERSBURG, MD 20877

EXHIBIT 1

TECHNICAL CHANGES - ENGINEERING AMENDMENT

**HOUSTON CHRISTIAN BROADCASTER, INC.
NEW - FM TRANSLATOR
LONGVIEW, TX
BNPFT-20030317CIN
FACILITY ID 140154**

Applicant makes the following minor technical changes to its pending “short-form” application to resolve Mutually Exclusive (MX) relationships within:

MX GROUP 454

Section III-A Engineering (Tech Box), is amended in its entirety to specify a new output channel (from 247D to 246D), antenna height above ground (antenna AGL) and details concerning the antenna supporting structure (tower).

Collectively, the resulting changes are permissible and classified as a “minor” amendment under the Commission’s application processing rules.

Applicant provides herein as Table I an interference study that demonstrates that the facilities proposed herein are no longer part of the MX group specified above and are not in conflict with any other application subject to auction and may be reclassified as a singleton application, and proceed to grant upon submission of a “full-form” application (when authorized to do so by the Commission).

Applicant demonstrates as provided in the interference study that the changes proposed are MX with the original application with overlap of the primary 60 dBu contours and is therefore a “minor change” amendment.

LPFM PRECLUSION STUDY

The proposal will not preclude any LPFM channels within a spectrum limited or spectrum available market as described in Appendix A and B of the Fourth Report and Order (FCC 12-29) released March 19, 2012.

The proposed transmitter site has been slightly modified from the original Short Form location and output channel. As such, pursuant to Public Notice DA 13-383, Attachment B, an LPFM Preclusion study is included herein.

LPFM GRID TEST

As Table II shows, the proposed transmitter site is outside the Tyler - Longview TX Arbitron market, but within the 39km buffer zone around the 20x20 Market Grid (See Table II Map).

The average 60 dBu contour distance from this proposal is 10.6 kilometers - the minimum spacing between this facility and an LPFM co-channel station is 32 kilometers. As the map in Table II show, this proposal would not preclude any LPFM stations within the Tyler-Longview market grid.

Additionally, Table III is provided which is a grid study using the FCC LPFM6 grid tool.

The proposed site is also outside all other Appendix-A markets, grids, and buffers. Therefore, no other LPFM Grid Test showings are required. This application cannot preclude any LPFM filing, within any market grid of concern.

TOP-50 TRANSMITTER SITE TEST

The proposed transmitter site is outside any Top-50 Arbitron market. Therefore, a Top-50 Market Transmitter site test is not required.

July 20, 2013

Timothy Z. Sawyer
Consulting Engineering
Mullaney Engineering, Inc.

A handwritten signature in blue ink, reading "Timothy Z. Sawyer". The signature is fluid and cursive, with the first name "Timothy" and last name "Sawyer" clearly legible.

MX GROUP 454 CLEARED

TABLE I

Houston Christian Broadcasters, Inc.

REFERENCE CH# 246D - 97.1 MHz, Pwr= 0.25 kW, HAAT= 65.8 M, COR= 166.7 M
 32 29 48.7 N. Average Protected F(50-50)= 10.6 km
 94 44 31.6 W. Omni-directional

DISPLAY DATES
 DATA 07-21-13

CH CITY	CALL	TYPE ANT STATE	AZI <--	DIST FILE #	LAT LNG	PWR (kW) HAAT (M)	INT (km) COR (M)	PRO (km) LICENSEE	*IN* (Overlap in km)	*OUT*
247D Longview	631428	APP_C_ TX	206.4 26.4	0.02 BNPFT20030317CIN	32 29 48.0 94 44 32.0	0.250 108	18.7 209	12.6 Houston Christian Broadcas	-30.0*	-29.0*
245C3 Pittsburg	KSCN	LIC NC_ TX	331.7 151.6	64.56 BLH20010730ABF	33 00 31.0 95 04 14.0	14.000 113	58.0 230	38.5 East Texas Broadcasting, I	-2.8<	13.0
247C2 Waskom	AL7143	RSV-A TX	90.0 270.5	91.80 RM11232	32 29 36.0 93 45 55.0	50.000 150	77.7 203	51.9	4.0	25.9
247D Henderson	640799	APP_C_ TX	190.0 9.9	35.11 BNPFT20030317KTH	32 11 06.0 94 48 25.0	0.250 88	19.6 216	13.1 East Texas Community Repea	4.3	6.0
247C2 Waskom	KQHN	LIC_CX TX	90.0 270.5	91.80 BLH20060109AAQ	32 29 36.0 93 45 55.0	42.000 163	77.2 216	51.9 Cumulus Licensing Llc	4.6	25.9
246C Fort Worth	KEGL	LIC_C_ TX	273.4 92.2	209.34 BMLH20081020AOC	32 35 19.0 96 58 05.0	100.000 508	190.2 697	86.3 Citicasters Licenses, Inc.	8.1	85.5
300C2 Longview	AL7146«	VAC TX	14.5 194.5	23.30 RM11232	32 42 01.0 94 40 47.0	50.000 150	0.0 246	0.0 Xyz	15.0R	8.3M
245D Marshall	1562700	APP_C_ TX	78.4 258.6	37.39 BNPFT20030317JLF	32 33 49.0 94 21 07.0	0.205	17.1 218	11.7 E-string Wireless, Ltd	10.8	12.4
246C Cleveland	KTHT	LIC_C_ TX	186.9 6.8	219.09 BLH20001031AAA	30 32 06.0 95 01 04.0	100.000 563	196.5 609	91.1 Cox Radio, Inc.	11.3	89.3
243C1 Shreveport	KVKI-FM	LIC_CY LA	82.3 262.8	83.47 BLH19850305KS	32 35 38.0 93 51 39.0	100.000 243	8.9 305	66.9 Townsquare Media Shrevepor	64.9	15.5
244C2 Frankston	KOYE	LIC NC_ TX	231.2 50.9	80.88 BLH20010510AAK	32 02 22.0 95 24 39.0	50.000 150	5.8 276	51.4 Access.1 Texas License Com	63.2	28.4
249C3 Rusk	KWRW	LIC NCN TX	208.4 28.1	85.30 BLH19940124KB	31 49 12.0 95 10 19.0	14.500 124	4.2 258	41.1 E. H. Whitehead	69.9	43.1
249C3 Winfield	KALK	LIC NCN TX	330.4 150.1	87.80 BLH19920813KC	33 11 01.0 95 12 32.0	22.500 100	3.9 226	37.7 East Texas Broadcasting, I	74.8	49.0
248D Lindale	650278	APP_C_ TX	271.9 91.5	63.78 BNPFT20030317JKI	32 30 49.0 95 25 14.0	0.170 95	0.9 229	11.2 E-string Wireless, Ltd	51.7	51.5
247D Nacogdoches	K247BG	LIC_C_ TX	175.9 355.9	89.57 BLFT20070614AEQ	31 41 28.0 94 40 26.0	0.115 140	17.7 259	12.0 E-string Wireless, Ltd	60.3	60.7
245D Shreveport	K245BA	LIC_C_ LA	88.9 269.5	93.89 BLFT20080306AAC	32 30 32.0 93 44 35.0	0.205 107	19.2 160	12.8 Houston Christian Broadcas	64.7	67.2
246C2 Camden	KAMD-FM	LIC_CX AR	57.6 238.7	212.26 BLH20020806AAD	33 30 14.0 92 48 38.0	50.000 139	133.6 188	47.9 Radio Works, Inc.	68.6	130.2
300D Mount Pleasant	K300AU«	LIC_C_ TX	348.3 168.2	79.93 BLFT20070405ABY	33 12 09.0 94 54 59.0	0.250 61	0.0 172	0.0 Life Media Ministries, Inc	10.0R	69.9M

Terrain database is NGDC 30 SEC , R= 73.215 qualifying spacings or FCC minimum Spacings in KM, M= Margin in KM
 Contour distances are on direct line to and from reference station. Reference zone= West Zone, Co to 3rd adjacent.
 Ant Column: (D= DA Standard, Z= DA 73.215, N= Not DA 73.215, _= Omni), Polarization (C,H,V,E), Beamtilt(Y,N,X)
 "*"affixed to 'IN' or 'OUT' values = site inside protected contour.
 « = Station meets FCC minimum distance spacing for its class.

PROPOSAL IS MX WITH ORIGINAL APPLICATION AS NOTED ABOVE - MINOR CHANGE AMENDMENT

TABLE II

LPFM MARKET TEST
LONGVIEW TX, CHANNEL 246

Reference Lat : 32-29-48.7
 Lon : 94-44-31.6

Search Radius: 100.00 Miles (160.9 KM)
Freeze Radius: 47.80 Miles (76.9 KM)

MARKET NO *****	DISTANCE MILES/KM *****	BEARING DEGREES *****	CITY *****	STATE *****
136	58.1/93.5	88.6	&\ Shreveport 32-30-51.0 / 93-44-51.0	LA
144	* 34.2/55.0	253.0	&\ Tyler-Longview 32-21- 4.0 / 95-18- 3.0	TX

indicates Spectrum Limited LPFM Market
& indicates Spectrum Available LPFM Market
\ indicates 20 Min Grid

* In order for a grid test showing to be triggered the distance from the transmitter site (reference coordinates shown above) to the market center must fall below a minimum spacing of 47.8 mile/76.9 kilometers.

LPFM PRECLUSION STUDY
LONGVIEW, TX CHANNEL 246

TABLE II MAP

39 KM BUFFER

LONGVIEW CH 246

32 KM FROM PROPOSAL

MARKET CENTER

Tyler

Kilgore

Marshall

Athens

Henderson

Jacksonville

MARKET CENTER
TYLER-LONGVIEW TX 20 X 20 GRID
Latitude: 32-21-04 N
Longitude: 095-18-03 W

THIS PROPOSAL DOES NOT PRECLUDE ANY LPFM WITHIN THE TYLER-LONGVIEW MARKET GRID

Scale 1:750,000

0 10 20 30 km

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TYLER_LOGVIEW TX
Latitude 32-21-04
Longitude 095-18-03
Grid Size 21 x 21
Micro FM 100 Watts at 30m HAAT
Co-Channel and 1st Adjacent Protected
2nd Adjacent Channel Protected
3rd Adjacent Channel Not Protected
I.F. Not Protected
TV Channel 6 Protected
CP Records Protected
APP Records Protected
FM Translators Protected
TV Channel 6 Translators/LP Protected
Auc83 FX App Records Protected

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Total	723
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Total allotments, least preclusive spacing:      20
Total allotments, most preclusive spacing:       14
TYLER_LOGVIEW TX                                TYLER_LOGVIEW TX
Latitude    32-21-04                             Latitude    32-21-04
Longitude   095-18-03                            Longitude   095-18-03
Least preclusive siting                          Most preclusive siting
Availability of Channel 229 (X)                   Availability of Channel 229 (X)
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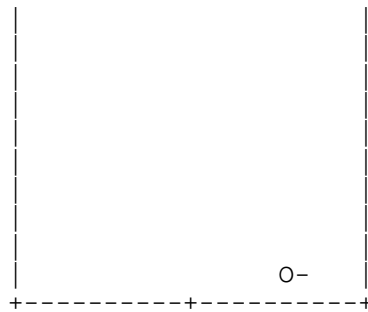
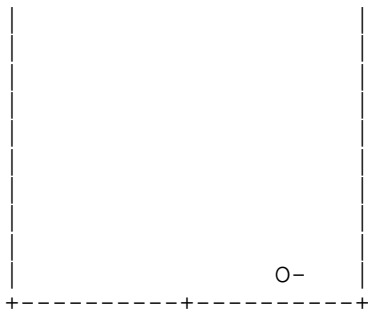
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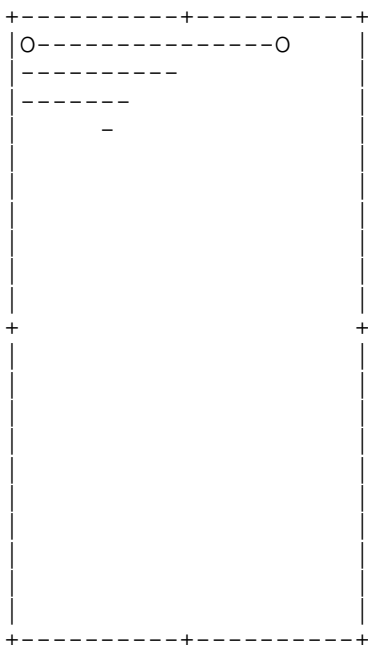
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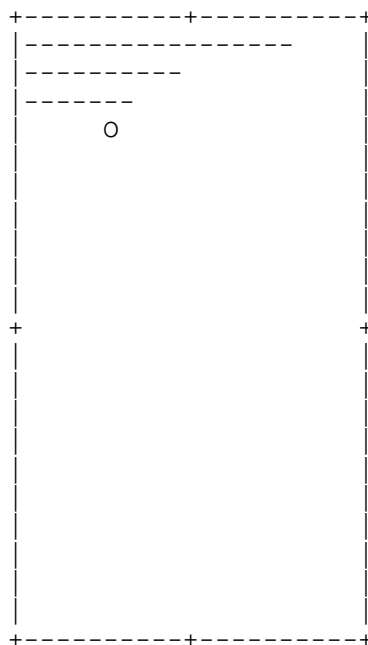
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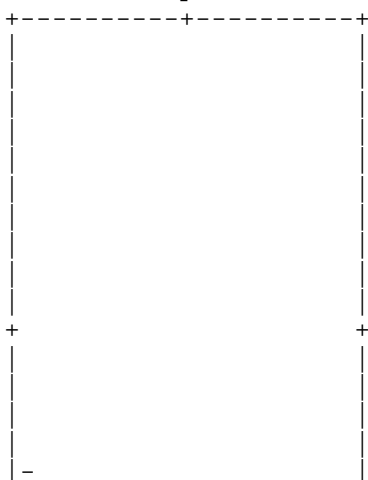
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Longitude 095-18-03
Least preclusive siting
Availability of Channel 230 (X)



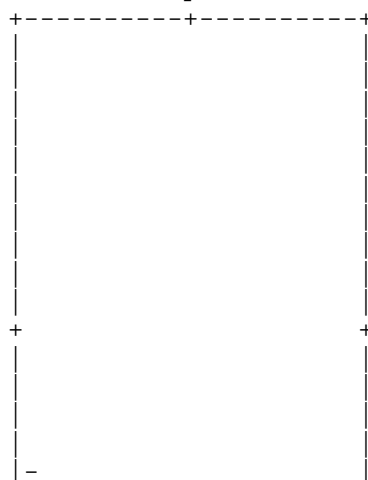
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Latitude 32-21-04
Longitude 095-18-03
Most preclusive siting
Availability of Channel 230 (X)

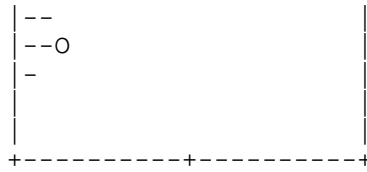
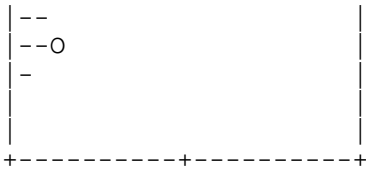


Point #105 at 32-31-04 095-12-03
Point #441 at 32-31-04 095-28-03
TYLER_LOGVIEW TX
Latitude 32-21-04
Longitude 095-18-03
Least preclusive siting
Availability of Channel 238 (X)



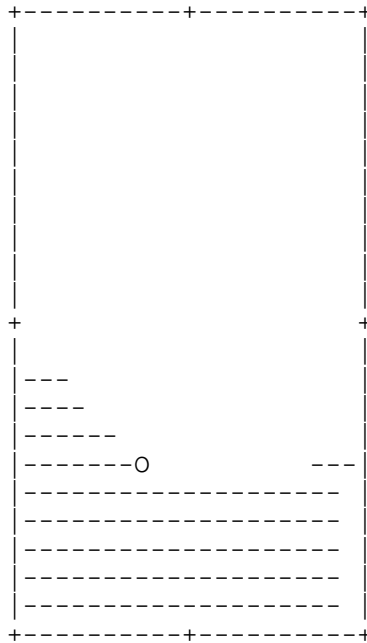
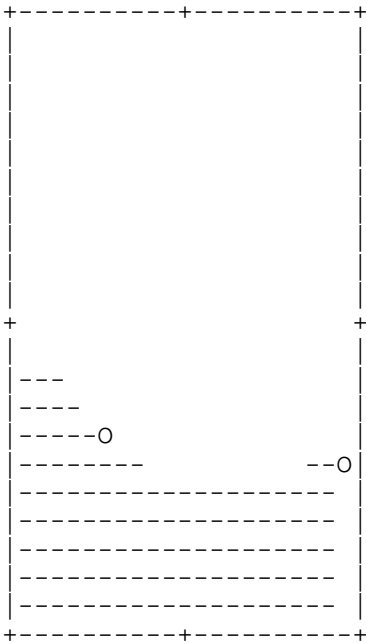
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Latitude 32-21-04
Longitude 095-18-03
Most preclusive siting
Availability of Channel 238 (X)





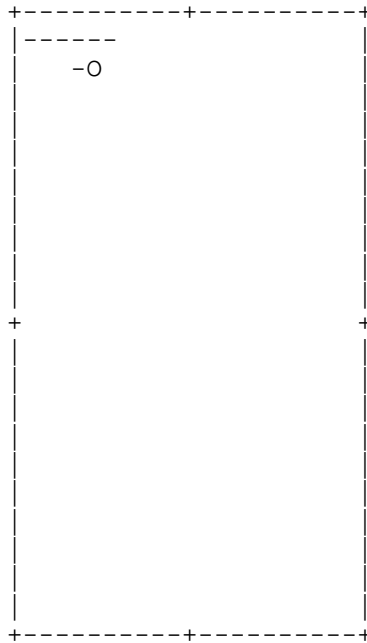
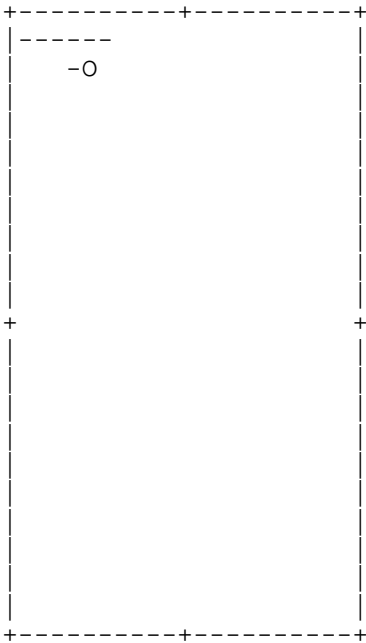
Point #382 at 32-14-04 095-26-03
TYLER_LOGVIEW TX
Latitude 32-21-04
Longitude 095-18-03
Least preclusive siting
Availability of Channel 247 (X)

Point #382 at 32-14-04 095-26-03
TYLER_LOGVIEW TX
Latitude 32-21-04
Longitude 095-18-03
Most preclusive siting
Availability of Channel 247 (X)

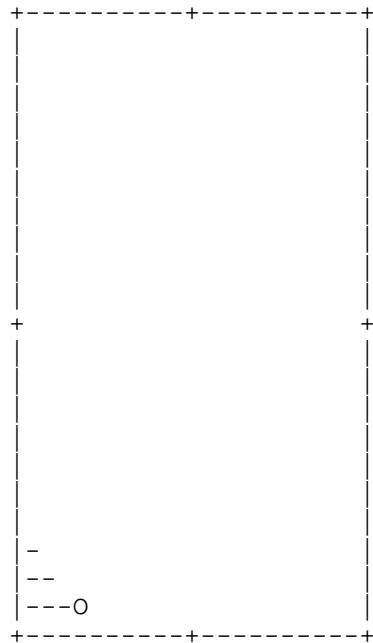


Point #006 at 32-16-04 095-08-03
Point #322 at 32-17-04 095-23-03
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Longitude 095-18-03
Least preclusive siting
Availability of Channel 251 (X)

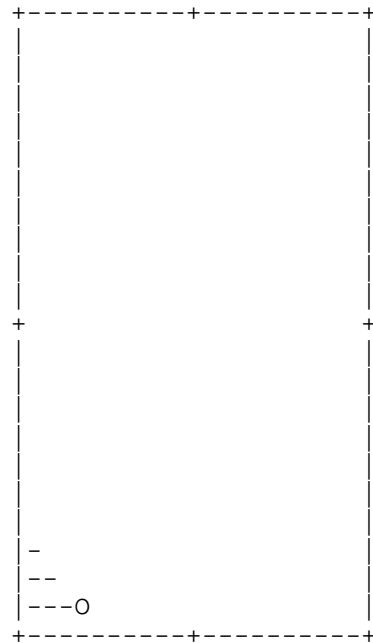
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Longitude 095-18-03
Most preclusive siting
Availability of Channel 251 (X)



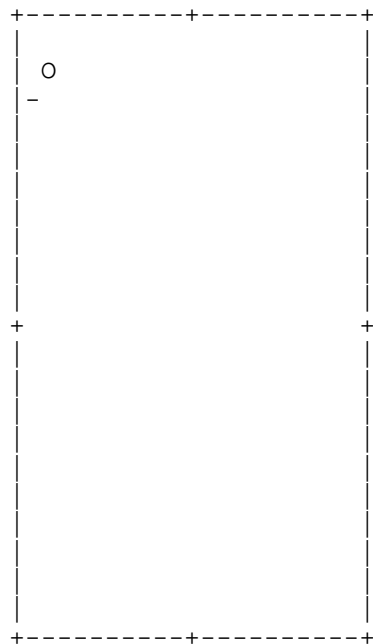
Point #356 at 32-30-04 095-24-03
TYLER_LOGVIEW TX
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Least preclusive siting
Availability of Channel 255 (X)



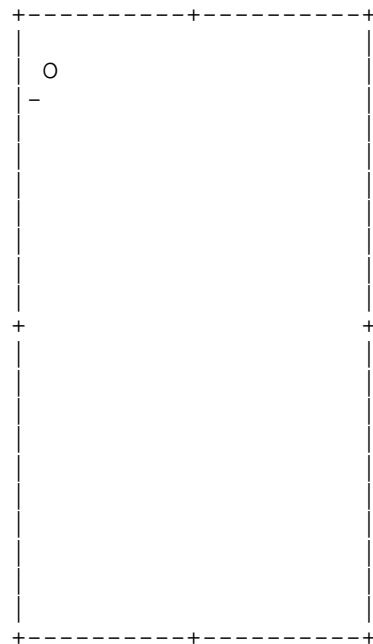
Point #356 at 32-30-04 095-24-03
TYLER_LOGVIEW TX
Latitude 32-21-04
Longitude 095-18-03
Most preclusive siting
Availability of Channel 255 (X)



Point #358 at 32-11-04 095-25-03
TYLER_LOGVIEW TX
Latitude 32-21-04
Longitude 095-18-03
Least preclusive siting
Availability of Channel 262 (X)



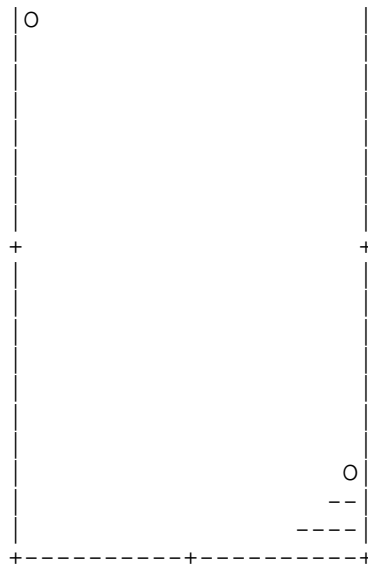
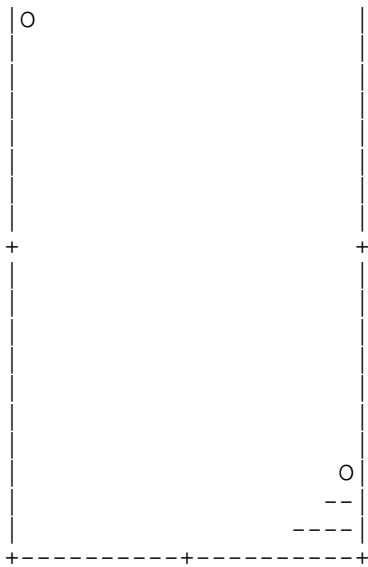
Point #358 at 32-11-04 095-25-03
TYLER_LOGVIEW TX
Latitude 32-21-04
Longitude 095-18-03
Most preclusive siting
Availability of Channel 262 (X)



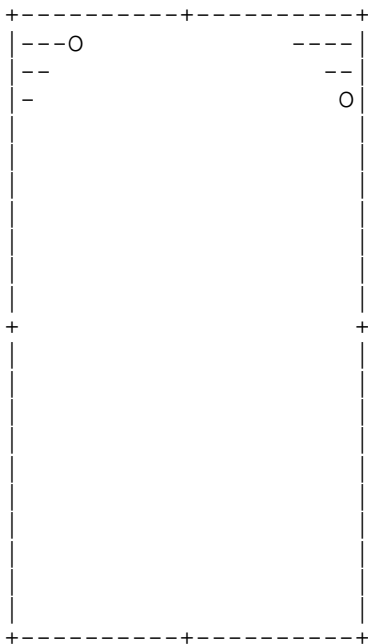
Point #419 at 32-30-04 095-27-03
TYLER_LOGVIEW TX
Latitude 32-21-04
Longitude 095-18-03
Least preclusive siting

Point #419 at 32-30-04 095-27-03
TYLER_LOGVIEW TX
Latitude 32-21-04
Longitude 095-18-03
Most preclusive siting

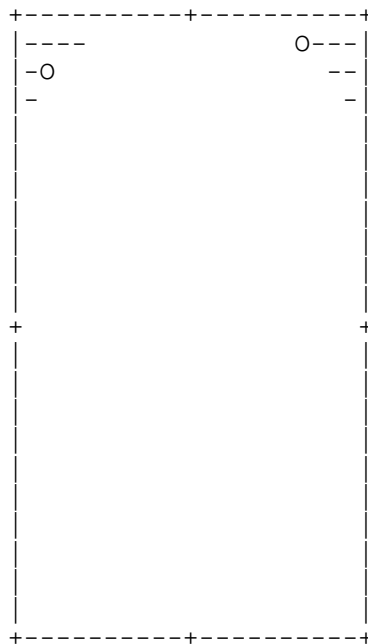
Handwriting practice paper with two sets of lines. Each set consists of a solid top line, a dashed middle line, and a solid bottom line. The first set has a small 'o' written on the middle dashed line. The second set is empty.



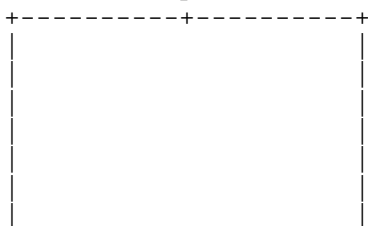
Point #439 at 32-29-04 095-28-03
Point #003 at 32-13-04 095-08-03
TYLER_LOGVIEW TX
Latitude 32-21-04
Longitude 095-18-03
Least preclusive siting
Availability of Channel 286 (X)



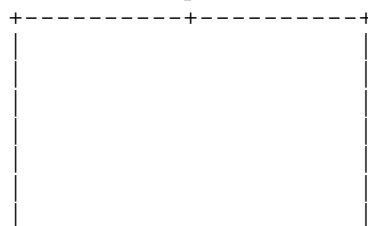
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TYLER_LOGVIEW TX
Latitude 32-21-04
Longitude 095-18-03
Most preclusive siting
Availability of Channel 286 (X)

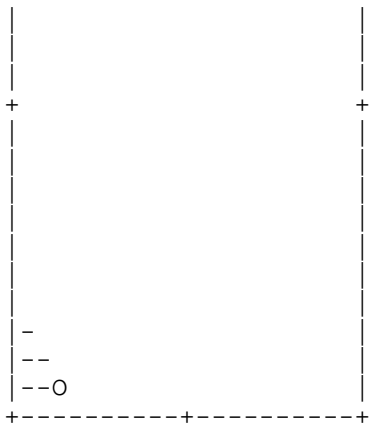


Point #019 at 32-29-04 095-08-03
Point #378 at 32-31-04 095-25-03
TYLER_LOGVIEW TX
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Longitude 095-18-03
Least preclusive siting
Availability of Channel 300 (X)

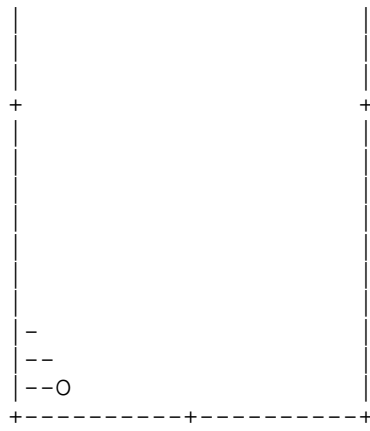


Point #084 at 32-31-04 095-11-03
Point #419 at 32-30-04 095-27-03
TYLER_LOGVIEW TX
Latitude 32-21-04
Longitude 095-18-03
Most preclusive siting
Availability of Channel 300 (X)





Point #379 at 32-11-04 095-26-03



Point #379 at 32-11-04 095-26-03