

tvstudy v2.2.5 (4uoc83)

Database: localhost, Study: Geron21d15kwTUA110IncT, Model: Longley-Rice

Start: 2021.06.24 06:35:40

Study created: 2021.06.24 06:35:40

Study build station data: LMS TV 2021-06-23

Proposal: K42LM-D D21 LD APP GERONIMO, OK

Facility ID: 186479

Station data: User record

Record ID: 326

Country: U.S.

Build options:

Protect pre-transition records not on baseline channel

Stations potentially affected by proposal:

| IX | Call | Chan | Svc | Status | City, State | File Number | Distance |
|-----|---------|------|-----|--------|-------------------|-------------------|----------|
| No | KKTM-LP | N17+ | TX | LIC | ALTUS, OK | BLTTTL20041001AFP | 87.4 km |
| No | K24IW-D | D20 | LD | CP | ARDMORE, OK | BLANK0000072055 | 154.9 |
| No | K47KI-D | D20 | LD | LIC | DUNCAN, OK | BLANK0000072559 | 66.4 |
| No | K25LQ-D | D20 | LD | LIC | ELK CITY, OK | BLANK0000063621 | 127.8 |
| No | K20JB-D | D20 | LD | LIC | HOLLIS, OK | BLDTT20100802AZJ | 132.2 |
| No | KQCW-DT | D20 | DT | LIC | MUSKOGEE, OK | BMLCDT20130823ACR | 277.6 |
| No | KBZC-LD | D20 | LD | LIC | Oklahoma city, OK | BLANK0000112197 | 152.7 |
| No | K39GH-D | D20 | LD | CP | QUANAH, TX | BLANK0000053926 | 124.5 |
| No | KTXS-TV | D20 | DT | CP | SWEETWATER, TX | BLANK0000035779 | 275.7 |
| No | KTXS-TV | D20 | DT | LIC | SWEETWATER, TX | BLCDDT20080815ABJ | 275.7 |
| No | K20DN-D | D20 | DC | LIC | WICHITA FALLS, TX | BLANK0000001589 | 63.6 |
| No | K20LC-D | D20 | LD | CP | WICHITA FALLS, TX | BNPDTL20090825BQN | 63.6 |
| No | KHBS | D21 | DT | LIC | FORT SMITH, AR | BLCDDT20031121AMR | 347.5 |
| No | KDCK | D21 | DT | LIC | DODGE CITY, KS | BLEDT20030423ABG | 407.6 |
| No | KAKE | D21 | LD | LIC | WICHITA, KS | BLCDDT20100308ABF | 378.9 |
| No | KKTM-LP | D21+ | LD | CP | ALTUS, OK | BLANK0000054101 | 87.4 |
| No | K21JN-D | D21 | LD | LIC | ERICK, OK | BLDTT20100802AZU | 142.5 |
| Yes | K21MP-D | D21 | LD | LIC | LAWTON, OK | BLANK0000055044 | 21.5 |

| | | | | | | | |
|-----|---------|------|----|-----|-------------------|-------------------|-------|
| No | KUOT-CD | D21 | DC | LIC | OKLAHOMA CITY, OK | BLANK0000069721 | 133.9 |
| No | K21MT-D | D21 | LD | LIC | SEILING, OK | BLANK0000058911 | 189.4 |
| No | K21IT-D | D21 | LD | LIC | WEATHERFORD, OK | BLDTT20100225ABG | 119.6 |
| No | KXAN-TV | D21 | DT | LIC | AUSTIN, TX | BLANK0000121393 | 461.8 |
| No | KXAN-TV | D21 | DT | CP | AUSTIN, TX | BLANK0000127602 | 461.8 |
| No | K21IR-D | D21 | LD | LIC | CHILDRESS, TX | BLDTT20100907ACP | 167.7 |
| No | KDTX-TV | D21 | DT | LIC | DALLAS, TX | BLANK0000075181 | 245.9 |
| No | KWDA-LD | D21 | LD | LIC | DALLAS, TX | BLDTL20110711AGT | 237.6 |
| No | K42CF-D | D21 | LD | CP | GRUVER, TX | BLANK0000053124 | 335.5 |
| No | KDKW-LD | D21 | LD | CP | LUBBOCK, TX | BLANK0000058681 | 330.2 |
| No | K21LA-D | D21 | LD | CP | MCCLEAN, TX | BNPDTL20100406ACP | 221.4 |
| No | K21KJ-D | D21 | LD | LIC | MINERAL WELLS, TX | BLDTL20140612AAS | 198.2 |
| No | K21LV-D | D21 | LD | LIC | PERRYTON, TX | BLDTT20120622ADI | 285.6 |
| No | K21NW-D | D21 | LD | LIC | TULIA, TX | BLANK0000076189 | 305.4 |
| No | K22JQ-D | D22 | LD | CP | ARDMORE, OK | BLANK0000072056 | 154.9 |
| No | K22JQ-D | D22 | LD | LIC | ARDMORE, OK | BLDTL20140224ACC | 118.5 |
| No | K22MA-D | D22 | LD | LIC | ELK CITY, OK | BLANK0000058430 | 127.8 |
| No | K47LS-D | D22 | LD | LIC | HOLLIS, OK | BLANK0000058437 | 132.2 |
| No | KTOU-LD | D22 | LD | LIC | OKLAHOMA CITY, OK | BLANK0000150102 | 133.3 |
| Yes | KAUZ-TV | D22 | DT | LIC | WICHITA FALLS, TX | BLCDT20090724ACR | 62.0 |
| No | K25IC | N25+ | TX | LIC | LAWTON, OK | BLTTL20070212ACG | 13.1 |

No non-directional AM stations found within 0.8 km

No directional AM stations found within 3.2 km

Record parameters as studied:

Channel: D21
 Mask: Stringent
 Latitude: 34 26 55.00 N (NAD83)
 Longitude: 98 24 32.00 W
 Height AMSL: 337.9 m (Adjusted based on actual ground elevation calculation)
 HAAT: 0.0 m
 Peak ERP: 15.0 kW
 Antenna: DIE-TUA (ID 120649) 110.0 deg
 Elev Pattn: Generic

49.5 dBu contour:

| Azimuth | ERP | HAAT | Distance |
|---------|----------|-------|----------|
| 0.0 deg | 0.078 kW | 4.2 m | 9.7 km |
| 45.0 | 0.333 | 10.9 | 13.9 |
| 90.0 | 10.9 | 17.1 | 29.4 |
| 135.0 | 9.01 | 30.6 | 28.6 |
| 180.0 | 0.138 | 24.9 | 11.2 |
| 225.0 | 0.078 | 18.1 | 9.7 |
| 270.0 | 0.037 | 8.4 | 8.1 |
| 315.0 | 0.037 | -5.0 | 8.1 |

Database HAAT does not agree with computed HAAT

Database HAAT: 0 m Computed HAAT: 14 m

Distance to Canadian border: 1570.2 km

Distance to Mexican border: 591.2 km

Conditions at FCC monitoring station: Grand Island NE

Bearing: 359.9 degrees Distance: 719.6 km

Proposal is not within the West Virginia quiet zone area

Conditions at Table Mountain receiving zone:

Bearing: 318.3 degrees Distance: 871.5 km

No land mobile station failures found

Study cell size: 1.00 km

Profile point spacing: 0.10 km

Maximum new IX to full-service and Class A: 0.50%

Maximum new IX to LPTV: 2.00%

Interference to BLANK0000055044 LIC scenario 1

| | | | | | | | |
|-------------|---------|------|-----|--------|-------------------|-------------------|----------|
| | Call | Chan | Svc | Status | City, State | File Number | Distance |
| Desired: | K21MP-D | D21 | LD | LIC | LAWTON, OK | BLANK0000055044 | |
| Undesireds: | K42LM-D | D21 | LD | APP | GERONIMO, OK | | 21.5 km |
| | K47KI-D | D20 | LD | LIC | DUNCAN, OK | BLANK0000072559 | 57.3 |
| | KKTM-LP | D21+ | LD | CP | ALTUS, OK | BLANK0000054101 | 97.0 |
| | K21JN-D | D21 | LD | LIC | ERICK, OK | BLD TT20100802AZU | 144.5 |
| | KUOT-CD | D21 | DC | LIC | OKLAHOMA CITY, OK | BLANK0000069721 | 112.5 |
| | K21IT-D | D21 | LD | LIC | WEATHERFORD, OK | BLD TT20100225ABG | 106.7 |
| | KDTX-TV | D21 | DT | LIC | DALLAS, TX | BLANK0000075181 | 254.7 |
| | KAUZ-TV | D22 | DT | LIC | WICHITA FALLS, TX | BLCDT20090724ACR | 82.2 |

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|--|--------------|---------|-----------------|---------|-----------------|---------|----------------|---------|----------------|
| | Service area | | Terrain-limited | | IX-free, before | | IX-free, after | | Percent New IX |
| | 7052.9 | 182,345 | 6870.6 | 181,941 | 6629.7 | 181,247 | 6098.7 | 178,380 | 8.01 1.58 |

| | | | | | | |
|--------------------|-------|--|--|----------|-------------------|------------------|
| Undesired | | | | Total IX | Unique IX, before | Unique IX, after |
| K42LM-D D21 LD APP | 597.4 | | | 2,997 | | 531.1 2,867 |
| K47KI-D D20 LD LIC | 120.7 | | | 452 | 116.7 444 | 70.4 338 |
| KKTM-LP D21+ LD CP | 26.1 | | | 27 | 22.1 24 | 16.1 22 |
| K21JN-D D21 LD LIC | 1.0 | | | 2 | 1.0 2 | 1.0 2 |
| KUOT-CD D21 DC LIC | 69.1 | | | 174 | 59.1 164 | 57.1 153 |
| K21IT-D D21 LD LIC | 19.0 | | | 44 | 16.0 37 | 16.0 37 |
| KDTX-TV D21 DT LIC | 14.0 | | | 13 | 7.0 5 | 5.0 5 |
| KAUZ-TV D22 DT LIC | 6.1 | | | 0 | 6.1 0 | 2.0 0 |

Interference to BLCDT20090724ACR LIC scenario 1

| | | | | | | | |
|-------------|---------|------|-----|--------|-------------------|-------------------|----------|
| | Call | Chan | Svc | Status | City, State | File Number | Distance |
| Desired: | KAUZ-TV | D22 | DT | LIC | WICHITA FALLS, TX | BLCDT20090724ACR | |
| Undesireds: | K42LM-D | D21 | LD | APP | GERONIMO, OK | | 62.0 km |
| | KOKI-TV | D22 | DT | LIC | TULSA, OK | BLCDT20021127AGL | 351.7 |
| | KETK-TV | D22 | DT | LIC | JACKSONVILLE, TX | BMLCDT20120516ABW | 363.6 |

| | | | | | | | | | |
|--|--------------|---------|-----------------|---------|-----------------|---------|----------------|---------|----------------|
| | Service area | | Terrain-limited | | IX-free, before | | IX-free, after | | Percent New IX |
| | 27443.8 | 381,428 | 27263.5 | 379,448 | 27241.6 | 379,378 | 27227.5 | 379,314 | 0.05 0.02 |

| | | | | | | | |
|--------------------|------|--|----------|------|-------------------|--|------------------|
| Undesired | | | Total IX | | Unique IX, before | | Unique IX, after |
| K42LM-D D21 LD APP | 14.1 | | 64 | | | | 14.1 64 |
| KOKI-TV D22 DT LIC | 16.9 | | 10 | 16.9 | 10 | | 16.9 10 |
| KETK-TV D22 DT LIC | 5.0 | | 60 | 5.0 | 60 | | 5.0 60 |

Interference to proposal scenario 1
94.63% interference received

| | | | | | | | |
|-------------|---------|------|-----|--------|-------------------|------------------|----------|
| | Call | Chan | Svc | Status | City, State | File Number | Distance |
| Desired: | K42LM-D | D21 | LD | APP | GERONIMO, OK | | |
| Undesireds: | K21MP-D | D21 | LD | LIC | LAWTON, OK | BLANK0000055044 | 21.5 km |
| | KAUZ-TV | D22 | DT | LIC | WICHITA FALLS, TX | BLCDT20090724ACR | 62.0 |

| | | | | | | | |
|--|--------------|-------|-----------------|-------|---------|-----|-------------|
| | Service area | | Terrain-limited | | IX-free | | Percent IX |
| | 925.2 | 7,147 | 923.2 | 7,147 | 157.0 | 384 | 82.99 94.63 |

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|--------------------|-------|--|----------|-------|-----------|--|-----------------|
| Undesired | | | Total IX | | Unique IX | | Prcnt Unique IX |
| K21MP-D D21 LD LIC | 766.2 | | 6,763 | 759.1 | 6,753 | | 82.23 94.49 |
| KAUZ-TV D22 DT LIC | 7.1 | | 10 | 0.0 | 0 | | 0.00 0.00 |