

Part 1 - Channel Study

| REFERENCE | | CH# 201C2- 88.1 MHz, Pwr= 8.6 kW, HAAT= 358.9 M, COR= 1849 M | | | | | | | | DISPLAY DATES | |
|-------------------------|---------|--|--------------|----------------|---------------------------|---------------------------|--------------------|-------------------|------------------------------------|-------------------------|---------|
| 41 53 43.2 N. | | Average Protected F(50-50)= 52.5 km | | | | | | | | DATA 03-05-18 | |
| 112 04 43.1 W. | | Omni-directional | | | | | | | | SEARCH 03-05-18 | |
| CH CITY | CALL | TYPE STATE | ANT STATE | AZI. <-- | DIST FILE # | LAT. LNG. | Pwr(kW) HAAT(M) | INT(km) COR(M) | PRO(km) LICENSEE | *IN* (Overlap in km) | *OUT* |
| 201A Ogden | KUAO! | LIC | CX UT | 190.5 10.4 | 72.30 BLED20171027AAA | 41 15 18.4 112 14 08.8 | 1.550 200 | 81.8 1482 | 28.6 Educational Media Foundati | -69.6 | -97.9 |
| 202D Wellsville | K202EJ! | LIC | C UT | 161.5 341.6 | 33.26 BLFT20140603AAJ | 41 36 41.0 111 57 05.0 | 0.019 139 | 14.4 1734 | 10.3 Calvary Chapel Of Twin Fal | -31.2*< | -51.0*< |
| 204C1 North Ogden | KNKL | LIC | VX UT | 202.7 22.6 | 36.54 BLED20170824AAD | 41 35 30.5 112 14 54.0 | 73.000 297 | 9.2 1623 | 68.4 Educational Media Foundati | -34.0*< | -37.3*< |
| 202D Randolph, Etc. | K202AF! | LIC | DHN UT | 110.4 291.1 | 84.94 BLFT19821102II | 41 37 31.0 111 07 23.0 | 0.020 339 | 13.1 2363 | 9.0 University Of Utah | 14.2 | -10.4*< |
| 201D Coalville, Etc. | K201AE! | LIC | DC UT | 156.4 336.8 | 125.96 BLFT20141105ADD | 40 51 18.0 111 28 44.0 | 0.115 | 53.8 2839 | 14.3 Community Wireless Of Park | 24.0 | -5.2< |
| 201C1 Buhl | KTFY | LIC | VX ID | 296.5 115.0 | 214.02 BLED20050811AAA | 42 43 48.0 114 25 06.0 | 60.000 199 | 144.2 1370 | 55.9 Idaho Conference Of Sevent | 19.5 | 37.1 |
| 202C3 Salt Lake City | KCPW-FM | LIC | DCX UT | 181.8 1.8 | 140.43 BMLD20170209ABB | 40 37 53.0 112 07 50.0 | 0.450 416 | 34.5 2088 | 22.6 Wasatch Public Media | 49.3 | 33.3 |
| 201A Pleasant Grove | KPGR | LIC | CN UT | 170.0 350.3 | 172.70 BLED19810914AE | 40 21 48.0 111 43 30.0 | 0.115 -344 | 19.3 1457 | 5.8 Alpine School District | 101.5 | 42.0 |

Terrain database is FCC 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= - Zone 2, 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 restricted contour.
< = Station meets FCC minimum distance spacing for its class.
< = Contour Overlap

Part 2 - Request for Waiver of 47 C.F.R. Section 73.509

Educational Media Foundation (EMF) desires to increase the power and service area of station KUAO to serve Tremonton, UT. The proposed modification of a licensed facility meets all contour protection requirements except towards one.

As seen in Part 1 of Exhibit 18, this proposed modification of KUAO will overlap the protected and interfering KNKL licensed contours.

KNKL previously agreed to accept interference from KUAO. According to the KNKL license, as seen in BLED-20170824AAD, Special Operating Condition Number Five:

Further modification of KUAO(FM), Facility ID No. 71394, Ogden, UT, will not be construed as a per se modification of KNKL(FM's facility). (See Educational Information Corporation, 6 FCC Rcd. 2207 (1991).

In abiding by the above information, this proposed increased service area would RECEIVE interference from the following third adjacent facility (see Exhibit 18-A for a contour map of the interference area):

| Facility ID | Status | Call Sign | City of License |
|-------------|---------|-----------|-----------------|
| 122023 | License | KNKL | North Ogden, UT |

The area of "overlap received" from the above referenced facility (the area falling over water was discounted as seen in Exhibit 18-A) will be approximately:

| Call Sign (or File #) | Square km | Total area of proposed 60 dBu |
|-----------------------|-----------|-------------------------------|
| KNKL | 214.2 | 2.7% |

The grant of this waiver request will allow KUAO to increase its overall coverage area by 6,795.0 sq km which is a gain of 713%. The population in the proposed 60dbu service contour will decrease from 333,804 to 172,076 (total 60dbu contour population of 172,719 persons minus the 643 persons in the KNKL 100dbu interfering contour) which is a decrease of 48.44%. The population in the interference received area is 643 persons which is 0.37% of the 172,719 persons in the entire proposed 60dbu(F50-50) contour. The population and coverage areas are seen in Exhibit 18-B. Note the coverage areas are taking into account the area over water. This waiver request is nearly identical to the requests made by the licensees of WCPE(FM) and WCCE(FM) in Educational Information Corporation, 6 FCC Rcd 2207 (1991). WCPE(FM) requested a waiver in its application to permit *de minimus* overlap "received," and WCCE(FM) requested a waiver in its application to permit *de minimus* overlap "caused." In recognition of the importance of affording noncommercial educational stations the flexibility to expand and meet the growing demand for service, the Commission granted both waiver requests. The instant request fully satisfies the criteria established by the Commission for waiver of Section 73.509 of the Commission's rules as it pertains to overlap received*.

Significant service will be maintained and enhanced by the proposed expansion of KUAO, and the overlap area is very small and well within the scope of the Commission's waiver policy. Clearly, this benefit heavily outweighs the potential for interference in an area that constitutes less than 4% (total) of the station's proposed service area. Accordingly EMF respectfully submits that a waiver of Section 73.509(a) of the Commission's rules is in the public interest and is justified in this instance.

* EMF wishes to emphasize that its request is not at all similar to the second waiver request made by WCPE in Educational Information Corporation, 1997 FCC LEXIS 2636 (May 20, 1997). Unlike here, WCPE was seeking a waiver of overlap "caused" in that second case.

Overlap Population Report
KUAO.P (201) / KNKL (204)

Overlap Area Type: Intersection
Areas Included:
KUAO.P (201): FCC F(50-50) 60.00 dBu (FCC HAAT)
KNKL (204): FCC F(50-10) 100.00 dBu (FCC HAAT)

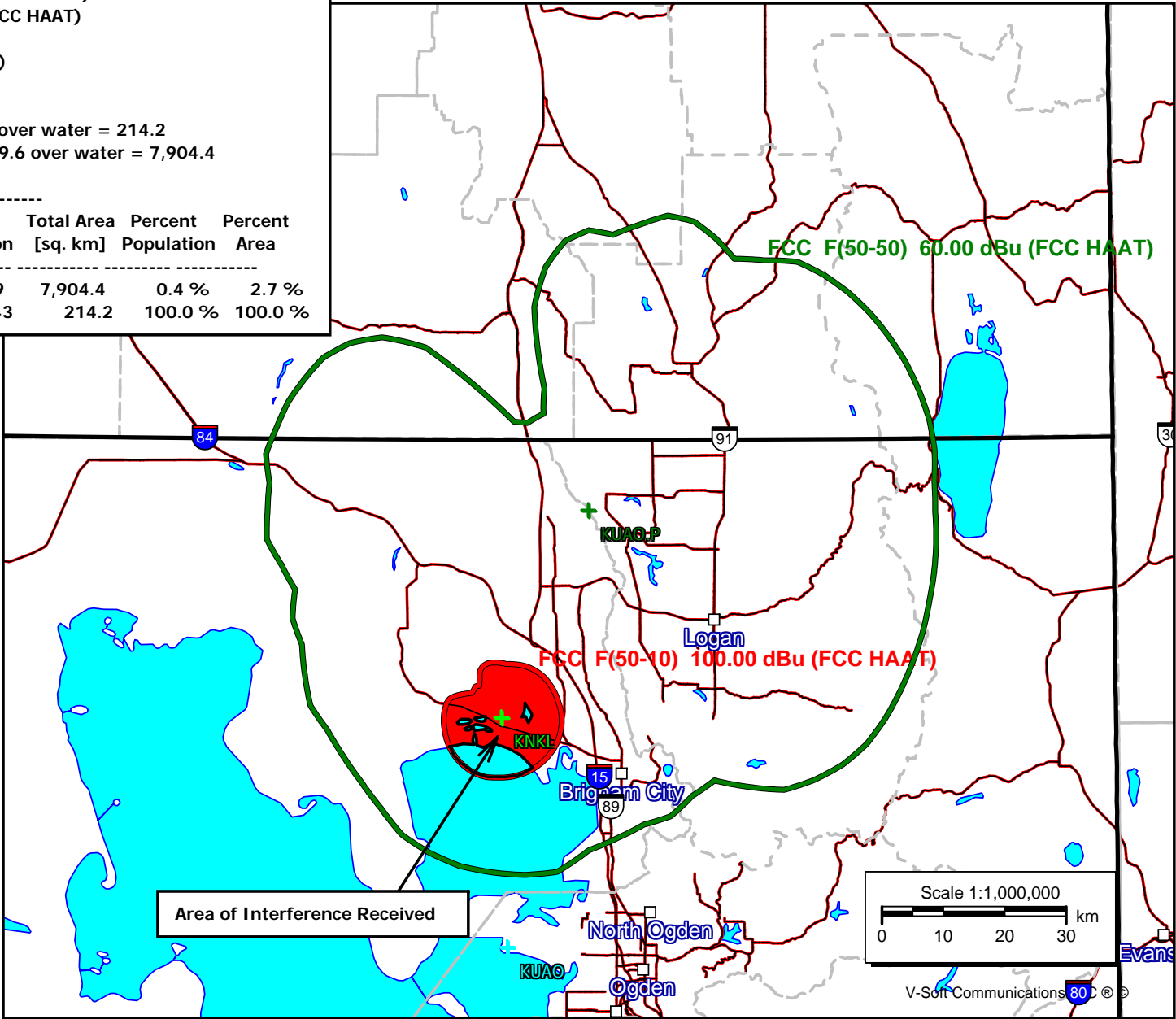
Population Database: 2010 US Census (PL)

Total Population: 643
Overlap Area: 272.38 sq. km - 58.2 sq km over water = 214.2
KUAO Proposed 60dbu Contour 8,424 - 519.6 over water = 7,904.4

| Area Description | Total Population | Total Area [sq. km] | Percent Population | Percent Area |
|------------------------------|------------------|---------------------|--------------------|--------------|
| KUAO.P (201): FCC F(50-50)60 | 172,719 | 7,904.4 | 0.4 % | 2.7 % |
| KNKL (204): FCC F(50-10)100 | 643 | 214.2 | 100.0 % | 100.0 % |

Exhibit 18-A

Overlap Contours of KUAO.P and KNKL



KUAO.P

Latitude: 41-53-43.20 N
Longitude: 112-04-43.10 W
ERP: 8.60 kW
Channel: 201
Frequency: 88.1 MHz
AMSL Height: 1849.0 m
Elevation: 1829.0 m
Horiz. Pattern: Omni
Vert. Pattern: No
Prop Model: None

KNKL
BLED20170824AAD

Latitude: 41-35-30.50 N
Longitude: 112-14-54 W
ERP: 73.00 kW
Channel: 204
Frequency: 88.7 MHz
AMSL Height: 1623.0 m
Elevation: 1573.0 m
Horiz. Pattern: Omni
Vert. Pattern: No
Prop Model: None

Population Report for All Contours

Population Database: 2010 US Census (PL)

Coverage Areas are discounted for water

| | Population | Housing Units | Area (sq. km) |
|--------------------------------|------------|---------------|---------------|
| KUAO (201) [Ogden, UT] | | | |
| FCC F(50-50) 60.00 dBu | 333,804 | 115,424 | 1109.0 |
| KUAO.P (201) [Tremonton, UT] | | | |
| FCC F(50-50) 60.00 dBu | 172,719 | 58,908 | 7904.0 |

KUAO.P

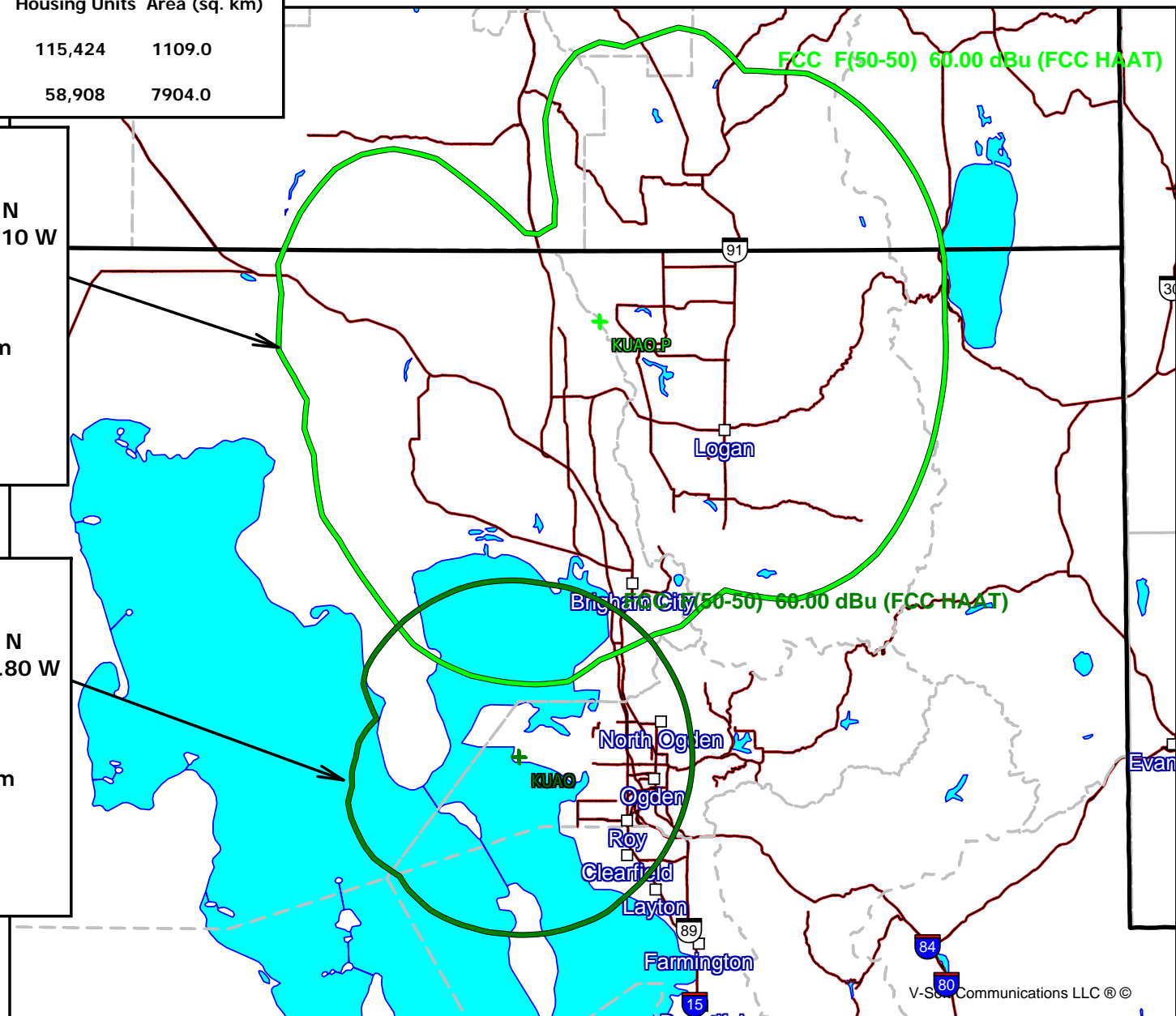
Latitude: 41-53-43.20 N
Longitude: 112-04-43.10 W
ERP: 8.60 kW
Channel: 201
Frequency: 88.1 MHz
AMSL Height: 1849.0 m
Elevation: 1734.52 m
Horiz. Pattern: Omni
Vert. Pattern: No
Prop Model: None

KUAO

BLED20171027AAA
Latitude: 41-15-18.40 N
Longitude: 112-14-08.80 W
ERP: 1.55 kW
Channel: 201
Frequency: 88.1 MHz
AMSL Height: 1482.0 m
Elevation: 1427.0 m
Horiz. Pattern: Omni
Vert. Pattern: No
Prop Model: None

Exhibit 18-B
Licensed and Proposed Contours

KUAO (201)
KUAO.P (201)



Scale 1:1,000,000

