**Educational Media Foundation**
5700 West Oaks Boulevard
Rocklin, CA 95765

*Exhibit 13*
*Millard, NE*

# Channel Study

REFERENCE — CH# 285D - 104.9 MHz, Pwr= 0.099 kW, HAAT= 188.1 M, COR= 516 M — DISPLAY DATES
41 15 26.0 N. — Average Protected F(50-50)= 14.1 km — DATA 08-19-13
95 57 49.0 W. — Omni-directional — SEARCH 08-19-13

| 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* |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 283C0 Omaha | KSRZ | LIC | C NE | 314.3 134.3 | 7.52 BMLH20050610AIL | 41 18 16.0 96 01 41.0 | 100.000 332 | 10.7 673 | 75.2 Journal Broadcast Corporat | -16.3* | -68.4* |
| 285D Millard | 1564759 | APP | C NE | 0.0 0.0 | 0.00 BNPFT20030317DVI | 41 15 26.0 95 57 49.0 | 0.250 | 49.2 466 | 14.7 Educational Media Foundati | -63.0* | -60.2* |
| 285C2 York | KTMX | LIC | NCX NE | 246.3 65.3 | 136.86 BLH20030324AAY | 40 45 07.0 97 27 04.0 | 13.000 297 | 128.7 776 | 53.9 Mwb Broadcasting Llc | -5.6 | 37.4 |
| 288D Glenwood | 1564621 | APP | C IA | 114.3 294.4 | 10.57 BNPFT20030311ADM | 41 13 05.0 95 50 54.0 | 0.010 | 0.2 348 | 3.2 Csn International | -4.8* | 6.6 |
| 285C3 Emerson | KCTY | LIC | NC NE | 320.5 139.8 | 141.45 BLH20130307AAJ | 42 14 04.0 97 03 20.0 | 25.000 87 | 112.3 559 | 37.7 Wayne Radio Works Llc | 16.1 | 60.7 |
| 288A Fremont | KFMT-FM | LIC | CN NE | 290.0 109.7 | 50.39 BLH19800416AB | 41 24 40.0 96 31 53.0 | 1.200 137 | 1.9 516 | 24.3 Community First Media Of N | 34.9 | 25.5 |
| 287C3 Harlan | KNOD | LIC | CN IA | 55.1 235.6 | 70.31 BLH19920828KD | 41 37 00.0 95 16 10.0 | 25.000 86 | 4.2 495 | 40.1 Wireless Broadcasting, L.l | 52.0 | 29.6 |
| 285D Auburn | K285GH | CP | C NE | 169.0 349.1 | 89.62 BNPFT20130327AHU | 40 27 57.0 95 45 38.0 | 0.170 | 43.7 400 | 11.8 Community Broadcasting, In | 32.3 | 30.7 |
| 286D Shenandoah | 632829 | APP | C IA | 137.5 317.9 | 73.63 BNPFT20030314BRT | 40 46 02.0 95 22 23.0 | 0.250 29 | 10.1 353 | 7.1 Kma Broadcasting, L.p. | 48.5 | 43.3 |
| 285D Kiron | K285ET | LIC | C IA | 27.6 208.1 | 110.51 BLFT20061012AAV | 42 08 10.0 95 20 30.0 | 0.250 50 | 34.0 469 | 9.8 West Iowa Fellowship Of Ev | 61.9 | 49.8 |

Terrain database is NGDC 30 SEC, R= 73.215 qualifying spacings or FCC minimum spacings in KM, M= Margin in KM
In & Out distances between contours are shown at closest points. Reference Zone= West Zone, Co to 3rd adjacent.
All separation margins (if shown) include rounding
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.

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## Compliance with C.F.R. 74.1204

The proposed FM Translator is located within the protected 60 dBu contour of second adjacent channel station KSRZ, channel 283C0, Omaha, Nebraska. According to 74.1204(a)(3), in order to protect second and third adjacent facilities, the difference in dBu between the two facilities must not exceed 40dBu.

| | |
|---|---|
| The proposed ERP for NEW: | 99 watts |
| The proposed COR for NEW: | 150 meters |
| KSRZ F(50/50) contour at proposed site: | 105.2 dBu |
| The F(50/10) contour of proposed NEW | 145.2 dBu |

By taking into account the vertical elevation pattern for an RFS CPF-500 two bay antenna, it has been determined that the predicted interfering contour will not actually reach the ground (see Exhibit 13 A-1). The maximum distance to the interference contour is 3.8 meters. Please see Exhibit 13 A-2 for an aerial photo of the area that shows there are no buildings tall enough to enter the predicted interference area.

Therefore, EMF respectfully requests a waiver of C.F.R. 74.1204 based on no population within the area of predicted interference.

EXHIBIT 13 - A1
74.1204(d) Showing
NEW
MILLARD, NE

**ERP (kw):** 0.099
**Height of Antenna above Ground (m):** 150
**Translator's IX Contour:** 145.2
**Antenna Type:** RFS CPF-500 2BAY FULL WAVE

| Depression Angle from Horizon | Antenna Relative Field | ERP (kw) from the Antenna RF | Dist. To IX Contour (m) | Height IX Contour Above Ground (m) |
|---|---|---|---|---|
| 0 | 1.000 | 0.0990 | 3.8355 | 150.000 |
| 5 | 0.970 | 0.0931 | 3.7192 | 149.676 |
| 10 | 0.886 | 0.0777 | 3.3971 | 149.410 |
| 15 | 0.757 | 0.0567 | 2.9023 | 149.249 |
| 20 | 0.596 | 0.0351 | 2.2848 | 149.219 |
| 25 | 0.418 | 0.0173 | 1.6025 | 149.323 |
| 30 | 0.238 | 0.0056 | 0.9136 | 149.543 |
| 35 | 0.071 | 0.0005 | 0.2708 | 149.845 |
| 40 | 0.075 | 0.0006 | 0.2869 | 149.816 |
| 45 | 0.191 | 0.0036 | 0.7341 | 149.481 |
| 50 | 0.276 | 0.0076 | 1.0594 | 149.188 |
| 55 | 0.330 | 0.0108 | 1.2669 | 148.962 |
| 60 | 0.357 | 0.0126 | 1.3681 | 148.815 |
| 65 | 0.361 | 0.0129 | 1.3842 | 148.745 |
| 70 | 0.349 | 0.0121 | 1.3401 | 148.741 |
| 75 | 0.329 | 0.0107 | 1.2634 | 148.780 |
| 80 | 0.309 | 0.0094 | 1.1832 | 148.835 |
| 85 | 0.294 | 0.0086 | 1.1276 | 148.877 |
| 90 | 0.292 | 0.0084 | 1.1180 | 148.882 |

Exhibit 13 A-2


Google earth

feet 300
meters 100

NAD27 COORDINATES

41 15 26 N

095 57 49 W

The red line measures 3.8m from the base of the tower.