

THOMAS M. ECKELS, PE
STEPHEN S. LOCKWOOD, PE
DAVID J. PINION, PE
ERIK C. SWANSON, PE

THOMAS S. GORTON, PE

JAMES B. HATFIELD, PE (1925-2011) BENJAMIN F. DAWSON III, PE
CONSULTANTS

HATFIELD & DAWSON
CONSULTING ELECTRICAL ENGINEERS
9500 GREENWOOD AVE. N.
SEATTLE, WASHINGTON 98103

TELEPHONE (206) 783-9151
FACSIMILE (206) 789-9834
E-MAIL hatdaw@hatdaw.com

MAURY L. HATFIELD, PE
(1942-2009)
PAUL W. LEONARD, PE

Request to Extend Special Temporary Authority

KBZZ-AM
Facility ID 48684

Sparks, Nevada

June 2020

KBZZ(AM), Sparks, Nevada has been operating under STA for several years due to the theft of much of the station's ground system and damage to the transmission lines, sample lines and control cables caused by a wildfire. Over the course of the summer of 2018, the damage has been repaired and a new ground system installed. Measurements and a moment method model have been completed on the nighttime directional antenna pattern. Tower #1 has been adjusted to the parameters determined by the moment method proof, however tower #3 could not be brought within tolerances with the phasing equipment now in place. Tower #3 is within 10% of the desired ratio and 5° of the desired phase. Initial reference point field strength readings taken on the 6° and 47° null radials indicate that the pattern as currently adjusted meets the suppression requirements on these radials, and symmetry of the in-line pattern would indicate that the other two null radials are also within limits.

During the summer of 2019 another (unsuccessful) attempt was made to adjust the pattern to the parameters determined by the MOM proof. According to the model, tower #3 has a drive resistance of approximately -5 ohms. If the resistance of the feed system are included, this becomes essentially zero, explaining the difficulty adjusting this tower.

We now propose to adjust the array to a variation of the inverse/alternate pattern, which does not have a negative tower.

The KBZZ site is located on BLM controlled land in the hills east of Reno/Sparks. Access is via very primitive jeep trails, which are challenging in the best of conditions. Work on this facility is impossible before early summer.

The current Covid-19 pandemic has further delayed this project due to travel restrictions and local shelter in place orders. Should such restrictions remain as they are today, we anticipate recommencing work on KBZZ in July or August of this year.

Americom Limited Partnership, licensee of KBZZ therefore requests extension of the current STA (BESTA-20190612AAQ) for a period of 180 days to operate KBZZ with the substantially adjusted nighttime directional pattern. Daytime operation will be with the licensed nondirectional daytime antenna.

Thomas S. Gorton PE
Consulting Engineer