

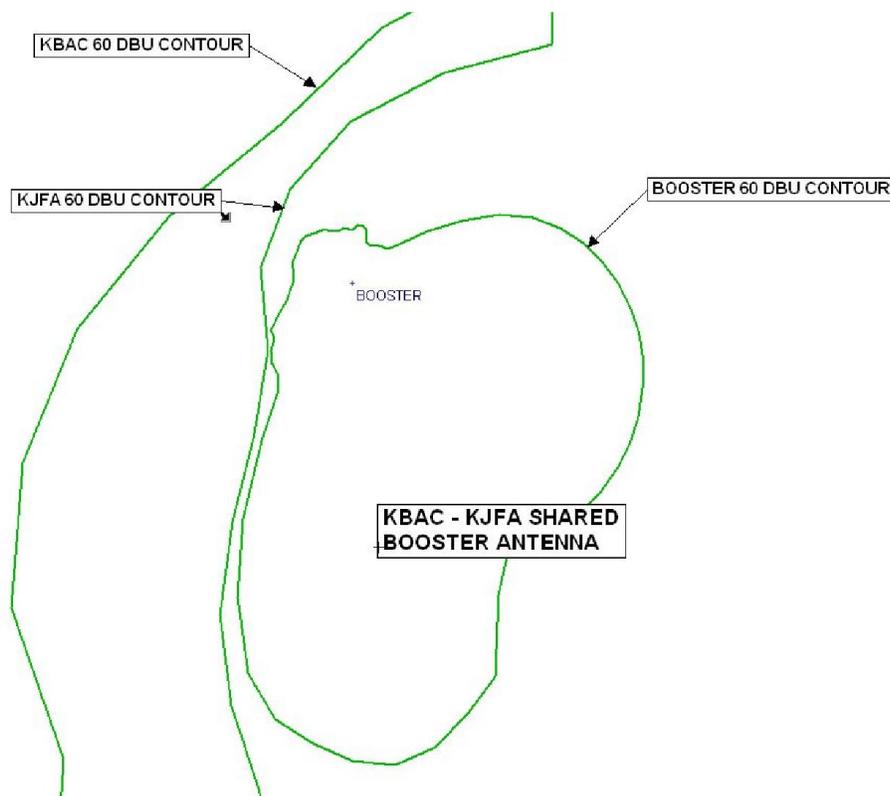
## Technical Exhibit and Narrative

This application for an FM Booster Minor Change is being filed simultaneously with three other similar applications. All four booster stations are being relocated to a new tower location. The booster stations are as follows:

1. KJFA-FM3      FIN 136434
2. KBAC-FM1      FIN 40638
3. KLBU-FM2      FIN 123368
4. KQBA-FM1      FIN 123369

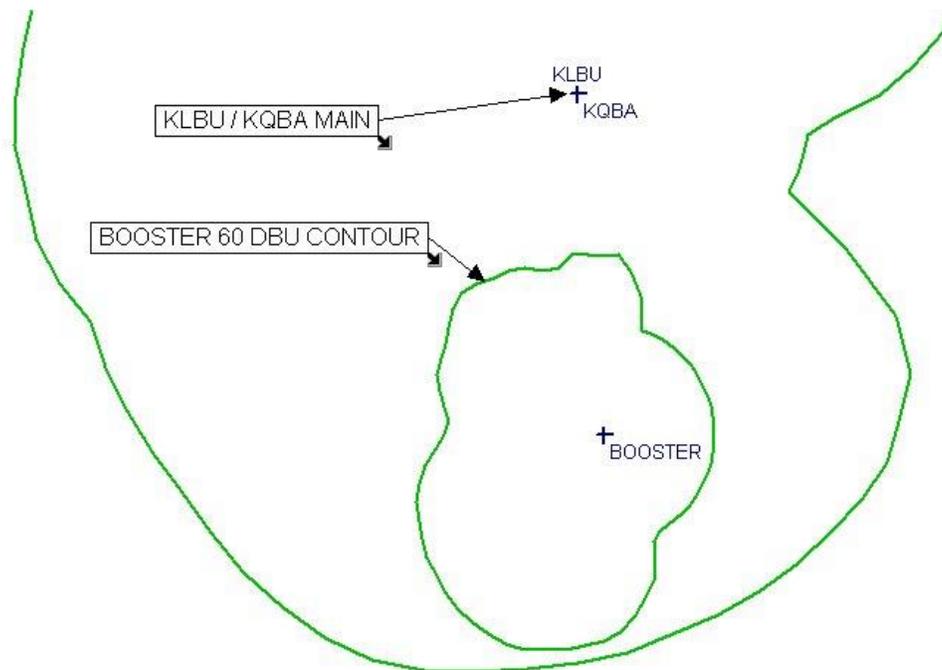
KJFA-FM3 and KBAC-FM1 will share a common directional antenna, while KLBU-FM2 and KQBA-FM1 will share a common non-directional antenna which will also be shared with FM translator stations K279CX FIN 156867 and K288HI FIN 156827. Each antenna will be fed through transmitter filtering and combining equipment which will isolate each transmitter from the others while suppressing intermodulation and spurious products resulting from the combined operation.

The directional antenna to be employed by KJFA-FM3 and KBAC-FM1 is a two-antenna composite array designed by Scala to reduce the signal radiated on the "back side" of the antenna. As shown in the following map, it is demonstrated that the 60 dbu contour of the proposed KJFA-FM3 and KBAC-FM1 boosters is fully contained within the 60 dbu contour of the main facility for each station.



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The non-directional antenna to be employed by KLBU-FM2 and KQBA-FM1 is a standard Nicom BKG77-6, which is presently installed on the tower and is in use by FM Translator stations K279CX and K288HI. As mounted, the antenna becomes slightly directional, which pattern is reflected in the application and taken into account for the map below, which demonstrates that the 60 dbu contour of the proposed KLBU-FM2 and KQBA-FM1 boosters is fully contained within the 60 dbu contour of the main facility for each station.



The directional antenna system for KJFA-FM3 and KBAC-FM1 is mounted with its center of radiation at 45 meters above ground level, while the center of radiation for the four-station non-directional antenna is mounted at 41 meters above ground level. FM translator station K240EC also operates from the tower using a separate antenna at 70 watts erp. The total effective radiated power from all seven stations is 30.42 kilowatts. Using the FCC "FMMODEL" program, the cumulative worst-case field intensity at ground level would be above the public exposure limits, although it is extremely unlikely that such a worst-case situation will occur with the proposed antennas. Therefore, the applicants propose that field intensity measurements will be conducted in the vicinity of the tower when all the booster and translator stations are operating to confirm that the radiation on the ground is within public exposure limits. In the event there are areas of exposure that are above the public exposure limits, the applicants will cooperate to install fencing of those areas to ensure the safety of the public.