

**AMEND BXPB-20040224ABF**  
**NEW AUXILIARY FM ANTENNA SYSTEM**  
**KJUL LICENSE, LLC**  
**KSTJ RADIO STATION**  
**CH 274C - 102.7 MHZ - 1.5 KW**  
**BOULDER CITY, NEVADA**  
**April 2004**

**TECHNICAL STATEMENT**

This Technical Statement and attached exhibits were prepared on behalf of KJUL License, LLC (“KLL”), licensee of FM radio station KSTJ, Channel 274C, Boulder City, Nevada. In BXPB-20040224ABF, KLL proposed to install an auxiliary FM antenna system for KSTJ for use when the main system is out of service for repairs or maintenance. The auxiliary antenna system was to be installed on the same tower as the authorized main antenna system for KSTJ. It has been determined that the tower on which the main KSTJ antenna is located will not support the proposed auxiliary antenna system. Therefore, this amendment proposes to locate the auxiliary antenna system on another existing tower, located approximately 30 feet south of the existing KSTJ main antenna tower. The two towers, being located so close together, share the same geographic coordinates. The proposed tower for the auxiliary antenna is only 100 feet above the ground. The proposed auxiliary system will operate with an effective radiated power of 1.5 kilowatts.<sup>1</sup>

Since KLL is proposing to install the KSTJ auxiliary antenna on an existing tower, the Federal Aviation Administration has not been apprised of this proposal. The existing tower is

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1) This level of power is to minimize the potential contribution of the auxiliary antenna system’s radio frequency radiation emissions in the vicinity of the tower site.

less than 200 feet above ground and has been found to not require tower registration<sup>2</sup>. Since the proposed facility is an auxiliary, no allocations, community coverage, main studio location or interference issues are considered in this instant application. Further, since the proposed auxiliary is effectively co-located at the same site as the KSTJ main antenna, there are no frequency implications. Attached, as Technical Exhibit #1, is a map showing the proposed auxiliary facility's 60 dBu contour will not extend beyond that of the licensed KSTJ 60 dBu contour.

Since the proposed KSTJ antenna will be located on a tower near the main KSTJ antenna system, which has co-located TV stations, the worksheets associated with Form 301 could not be used to demonstrate compliance with the Commission's radio frequency radiation limits. Therefore, a study was undertaken to show the proposed KSTJ auxiliary facilities are in compliance with the Commission's RFR rules (Exhibit A). All other data used to certify the information contained in the application has been forwarded to KLL and is available for submission to the Commission upon request.

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2) Based on the TOWAIR program.

**Graham Brock, Inc. - Broadcast Technical Consultants**

**KSTJ Proposed**

Latitude: 35-56-46 N  
Longitude: 115-02-34 W  
ERP: 1.50 kW  
Channel: 274C  
Frequency: 102.7 MHz  
AMSL Height: 1344.2 m  
Horiz. Pattern: Omni  
Vert. Pattern: No  
Prop Model: FCC  
60 dBu pop.: 1,342,841  
60 dBu area: 6,797.6 sq. km.

**KSTJ Main**

BLH-20010709ABU  
Latitude: 35-56-46 N  
Longitude: 115-02-34 W  
ERP: 99.00 kW  
Channel: 274C  
Frequency: 102.7 MHz  
AMSL Height: 1390.0 m  
Horiz. Pattern: Omni  
Vert. Pattern: No  
Prop Model: FCC

**KSTJ MAIN 60 dBu**

**PROPOSED KSTJ AUX. 60 dBu**

**TECHNICAL EXHIBIT #1**  
**AMEND BXPH-20040224ABF**  
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Scale 1:1,500,000  
0 20 40 60 km