

Larry H. Will, P.E.

Broadcast Engineering

1055 Powderhorn Drive
Glen Mills, PA 19342-9504

PH (610) 399-1826
E-Mail lhwill@verizon.net

MBC GRAND CORPORATION

APPLICANT FOR A

**MINOR MODIFICATION OF CONSTRUCTION PERMIT BXPH-
20100830ABP FOR**

KSTR-FM, CHANNEL 241

Montrose, Colorado

FCC FAC ID 21629

MINOR MODIFICATION TO A CONSTRUCCION PERMIT

FCC FORM 301 EXHIBIT 34

September 26, 2011

MBC GRAND BROADCASTING COMPANY, INCORPORATED

MINOR MODIFICATION TO A CONSTRUCTION PERMIT

FOR AN AUXILIARY FACILITY FOR KSTR-FM

Montrose, Colorado

FCC FAC ID 21629

FCC FORM 301 - ENGINEERING EXHIBIT 34

ENVIRONMENTAL STATEMENT

The instant application is excluded under 1.1306. The proposed modification of C.P. for BXPB-20100830ABP, Channel 241 FM is one of three low power FM broadcast antennas at the station location required to be considered by 47 CFR 1.1307(b). Per the FCC CDBS, as of this date, there are no TV facilities within 1 km and no AM facilities within 3.2 km.

There are two other facilities operating from a tower that is approximately 50 meters from the proposed operation of BXPB-20100830ABP. They are KJOL-FM, CH 220, 91.9 MHz, 0.475 kW H&V at 24m AG and KDVW-LP, CH 265, 100.9 MHz, 0.1 kW H&V at 17 meters AG.

Using the guidelines in Appendix B of FCC OET 65, the multi user transmitter site is in a very remote and rugged area and meets the OET-65 requirements of "a remote area not likely to be visited by the general public". Therefore the requirements for compliance with the uncontrolled/general public limits may be accomplished by posting RFR warning signs at the perimeter of each of the small areas where measured exposure levels could exceed the guidelines.

The KSTR-FM auxiliary antenna is to be mounted on an adjacent tower within 50 meters of the existing tower on the site and using the procedures outlined in OET Bulletin 65, Edition 97-01 with Supplement A and specifically Equation 10, Page 22 and Appendix B of OET 65 and Figure 11 of Supplement A, I have evaluated the RFR energy from the antenna system of proposed KSTR-FM auxiliary transmitter as follows:

KSTR-FM AUXILIARY: With this application, KSTR-FM auxiliary transmitter on Channel 241 is proposing a revised ERP of 0.575 kilowatts using a directional antenna and with both horizontal and vertical polarization. The proposed KSTR-FM auxiliary transmitting antenna is a single Scala CA-5-FM/CP/RM medium gain unit with a power gain of 4X side mounted with the C/R at 12 meters up the tower (lowest element is at least 9.5 meters above head height). Utilizing Equation 10, Page 22, and taking into account from standard single bay "yagi" type

design and based on published Scala datasheets, the maximum expected downward radiation (at greater than -60 degrees) from the single bay antenna on the tower is approximately 0.2x field or 46 watts (0.046 kW), the required occupational/controlled physical separation is approximately 1.2 meters. Again using Equation 10, for the general population/uncontrolled environment, the required "safe" physical separation from the antenna is 2.7 meters. For general population/uncontrolled environment, since the lowest part of the antenna is at least 9.5 meters above ground, the height of the structure limits the possible excessive radiation values from proposed KSTR-FM auxiliary to at least 7.5 meters above head height at the ground. At 2 meters above ground, the maximum calculated RFR energy from proposed KSTR-FM Auxiliary is 28 uW/cm² or 14% of the allowable under OET65.

Therefore the addition of KSTR-FM Auxiliary on Channel 241 with an ERP of 0.575 kW H&V and with the antenna element at least 7.5 meters above head height at ground level, total levels of the KSTR-FM Auxiliary transmitter RFR energy at all points will be less than 14% of that allowed under OET-65.

The site therefore, with proper posting of RFR signs, will remain in compliance with 1.1307(b) with the addition of KSTR-FM Auxiliary transmitter.

KJOL-FM: As shown in the KJOL-FM Construction Permit modification application, the installed 2 bay Shively one wavelength spaced antenna results in less than 5% of the allowable exposure to the general public at ground level and that station can be excluded in the multiple station calculation requirements of FCC OET-65.

KDVW-LP: KDVW-LP on Channel 265 is operating with an ERP of 0.1 kilowatts with both horizontal and vertical polarization. As shown in the KDVW-LP modification application BMPL-20061113AAU, KDVW-LP's RFR contribution at ground level is less than 5% of the allowable of OET-65 and also need not be considered further.

Therefore the addition of KSTR-FM Auxiliary on Channel 241 with an ERP of 0.575 kW H&V and with the antenna element at least 10.5 meters above head height at ground level, total levels of the KSTR-FM Auxiliary transmitter RFR energy at all points will be less than 14% of that allowed in the general public/uncontrolled environment requirements under OET-65.

The site therefore, with proper posting of RFR signs, will remain in compliance with 1.1307(b) with the addition of KSTR-FM Auxiliary transmitter.

In addition, as a precaution to employees, a suitable sign will be posted at the base of the KSTR-FM Auxiliary tower alerting maintenance personnel to the presence of radiofrequency energy so that appropriate action can be taken when access on the tower above 7.5 meters above ground is required.

Also, even though the applicant owns the tower, not all broadcast transmitters, that are co-located on the site, are owned by the applicant. The applicant further states that during periods of maintenance where workers on the tower could be exposed to excessive levels of RFR energy, any transmitting system that could pose a hazard will be either turned off or reduced in

power to insure that workers are not subject to excessive values of RFR energy and that periodic RFR measurements will be conducted to insure both worker safety and that the actual perimeter of high RFR energy areas will be posted with suitable warning signs.

With these procedures in place, we believe the proposed addition of KSTR-FM auxiliary transmitter will be in compliance with the RFR energy protection requirements of 47 CFR 1.1307(b).

BLANKETING INTERFERENCE

The area surrounding the proposed site is in a generally uninhabited mountaintop, therefore, no blanketing interference is anticipated. However, the applicant will investigate and cure any complaints reported within the blanketing area. There are no AM facilities within 3.2 KM.

CA5-FM/CP/RM
FM YAGI ANTENNA
6 dBd gain
88 to 108 MHz
Circularly polarized

The Scala CA5-FM/CP/RM is a ruggedly built yagi antenna, designed for professional FM transmit and receive applications. Like all Scala antennas, the CA5-FM/CP/RM is made of the finest materials resulting in superior performance and long service life.

The CA5-FM/CP/RM may be used stand-alone or in stacked arrays for higher gain, increased side-lobe suppression, or custom azimuth patterns.



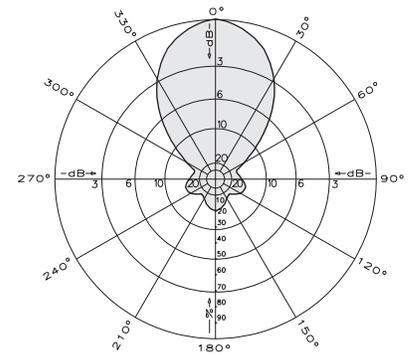
Specifications:

Frequency range	Any specified FM channel 88 to 108 MHz
Gain	6 dBd
Impedance	50 ohms
VSWR	< 1.5:1
Polarization	Circular
Front-to-back ratio	>14 dB
Maximum input power	250 watts
Azimuth pattern	61 degrees (half-power)
Elevation pattern	61 degrees (half-power)
Connector	N female
Weight	35 lb (15.9 kg)
Dimensions	79 x 56 x 50.8 inches maximum (2007 x 1422 x 1290 mm)
Equivalent flat plate area	2.84 ft ² (0.264 m ²) maximum
Wind survival rating*	120 mph (194 kph)
Shipping dimensions	84 x 13 x 8 inches maximum (2134 x 330 x 203 mm)
Shipping weight	38 lb (8.2 kg) maximum
Mounting	For masts of 2.375 inches (60 mm) OD.

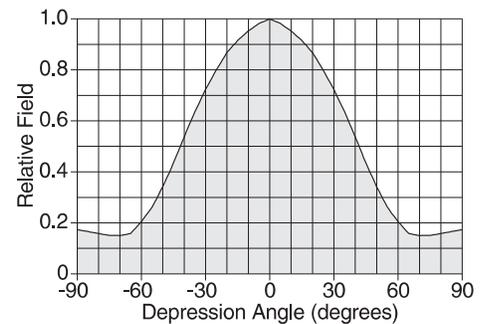
* Mechanical design is based on environmental conditions as stipulated in EIA-222-F (June 1996) and/or ETS 300 019-1-4 which include the static mechanical load imposed on an antenna by wind at maximum velocity. See the Engineering Section of the catalog for further details.

Order Information:

Contact Scala Customer Service for detailed order information.



Azimuth pattern (E-plane)

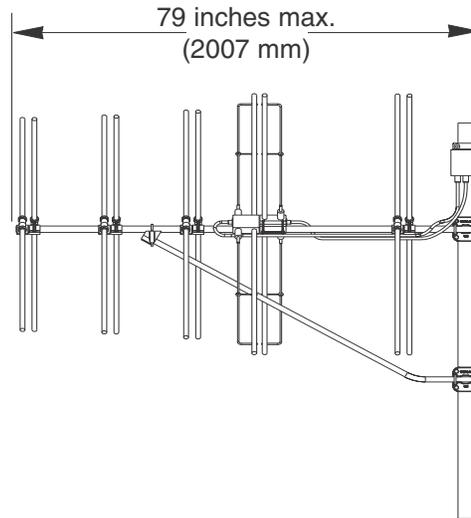
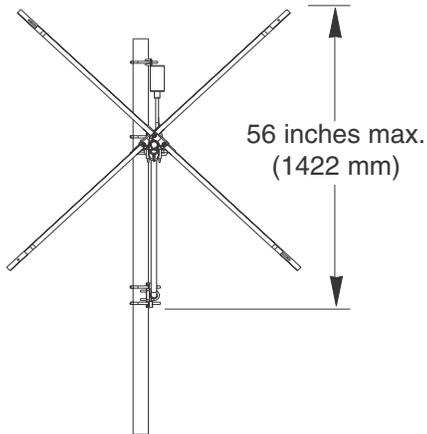
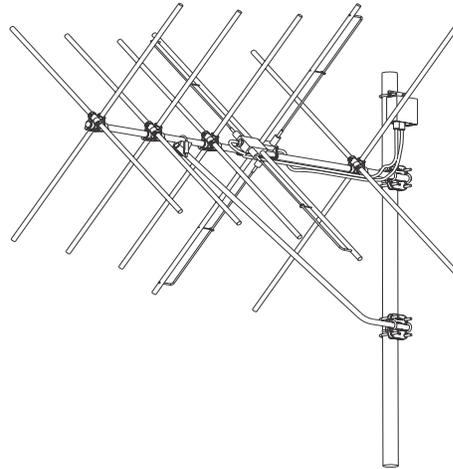
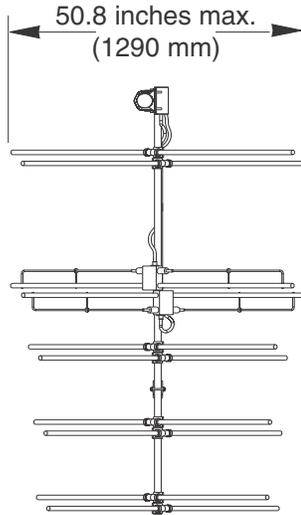


Elevation pattern (H-plane)



10748-B

CA5-FM/CP/RM
FM YAGI ANTENNA
6 dBd gain
88 to 108 MHz
Circularly polarized



Order Information:

Contact Scala Customer Service for detailed order information.

All specifications are subject to change without notice