

ENGINEERING EXHIBIT
Application for Modification of License
prepared for

WJCL Hearst Television LLC
WJCL(DT) Savannah, GA
Facility ID 37174
Ch. 22 350 kW 436 m

WJCL Hearst Television LLC (“*Hearst*”) is the licensee of WJCL(DT), Channel 22, Facility ID 37174, Savannah, GA (BLCDT-20091013AFS). *Hearst* herein seeks a modification of the WJCL license to cover a change in transmitter power output caused by alteration of the transmission line system. Additionally, a correction of mechanical beamtilt data is provided for incorporation in the modified license.

Changing Transmitter Power Output

Hearst has recently replaced the 3-1/8 inch rigid transmission line with 4 inch flexible line. The replacement line has more loss than the prior line, therefore the transmitter power output (“TPO”) is increased commensurately to maintain the authorized effective radiated power. Updated operating constants are provided on the accompanying Form 2100 and the new TPO is 21.44 kW.

Mechanical Beamtilt Correction

Review of the WJCL license shows that the mechanical beamtilt is represented incorrectly, therefore a response of “NO” is provided to the “Constructed Facility” certification question. WJCL operates as digital on its former analog Channel 22, using the same antenna previously employed for its analog operation (BLCT-19880725KH, BLCT-19980514KF, and BMPCT-7072). Although no changes in the antenna have been made for operation as digital, WJCL’s present license shows different values for mechanical beamtilt than for analog operation.

	<u>Mechanical Beamtilt</u>
Legacy Analog Licenses	0.25 degree at 90 degrees T
Current Digital License	0.15 degree at 225.3 degrees T

The antenna (RCA TFU 45J) is nominally nondirectional. With mechanical beamtilt, a mild directional pattern is created at the radio horizon such that the pattern's minimum occurs in the same direction as the antenna's mechanical tilt. The resulting directional pattern is incorporated into the facility's technical parameters. The directional antenna pattern corresponding to WJCL's former analog license has minimum relative field at 90 degrees T which corresponds to the same azimuth of the mechanical tilt (90 degrees T) that was specified on the analog license.

The exact same directional antenna pattern was carried forward to the WJCL digital authorization (minimum relative field at 90 degrees T). However, the underlying Construction Permit ("CP") application BMPCDT-20090918AAU showed different mechanical beamtilt specifications, of 0.15 degree at 225.3 degrees T. The exhibits attached to BMPCDT-20090918AAU indicate "mechanical tilt at a bearing of N225.315°E". It would appear that some confusion occurred which inadvertently placed two of the cardinal radials (225° and 315°) in this specification. Nevertheless, a mechanical tilt of 0.15 degree at 225.3 degrees T was indeed specified on the CP and ultimately on WJCL's current license.

Hearst hereby requests that the modified WJCL license also include the actual mechanical beamtilt configuration, of 0.25 degrees at 90 degrees T. Like a geographic coordinate correction, this change cannot be directly entered by the applicant on Form 2100 because those data fields are "grayed" out. These specifications are in agreement with the authorized directional pattern at the radio horizon and also match those of the prior analog license which specified the same, existing antenna. No change in coverage contour locations will result from correcting the mechanical beamtilt specification.

Chesapeake RF Consultants, LLC

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