



**STATEMENT OF JAMES D. SADLER  
SPECIAL OPERATING CONDITIONS  
AFFECTING STATIONS WHBG(AM) AND WSVA(AM)  
IN SUPPORT OF AN APPLICATION FOR LICENSE  
FM TRANSLATOR STATION W295CP - HARRISONBURG, VIRGINIA  
FACILITY ID: 200014**

Applicant: Tidewater Communications, LLC

I am a Technical Consultant, an employee in the firm of Carl T. Jones Corporation with offices located in Springfield, VA. My education and experience are a matter of record with the Federal Communications Commission.

**Discussion**

The FM Translator W295CP Construction Permit, FCC File No. BPFT-20190826AAL, authorizes the installation of a new FM transmitting antenna on an existing tower located adjacent to the shared towers employed by AM Stations WHBG and WSVA. Special operating conditions, 4 and 5, were included in the W295CP Construction Permit requiring the permittee to provide notification of the construction to the AM Stations and, using method of moments analysis, examine the potential impact of the construction on the patterns of Station WHBG and WSVA. Because both of the AM Stations and the FM translator W295CP are co-owned by the permittee notification was not necessary in this case. This office has been retained to determine the impact



of the installation of the FM translator antenna and prepare this engineering statement and the attached figures to satisfy the two conditions.

Radio Station WSVA operates on 550 kHz utilizing the center tower of its three tower array for daytime non-directional operation. The station uses all three towers for the directional operation during nighttime hours. Station WHBG operates non-directionally during daytime and nighttime hours on 1360 kHz using the center tower of the array. The authorized FM translator antenna is mounted on an existing tower located approximately 220 feet north-northeast of tower number 3 (NW) and 573 feet north-northwest of tower number 2 (C). The existing tower is base insulated and the guy wires are broken up with insulators. The tower is detuned at 550 kHz but has never been detuned at 1360 kHz.

The new Nicom BKG/1P, 4 Bay, FM antenna was installed on the existing tower without increasing the physical height of the tower and replaces the existing antenna already in place. Appropriate ground kits remain in place on the existing transmission line at 50 foot intervals to minimize the effect of the installation on both AM operations. The FM translator transmission line crosses the base of the insulated tower via a Kintronic Labs, FM isocoil, Model No. ISO-170-FM-DIN-RU. This unit has not been changed out and remains in place.

Station WSVA (condition 5) is licensed pursuant to method of moment's rules. The existing tower is detuned at the WSVA operating frequency, 550 kHz. Following the installation of the new FM antenna, the tower was once again detuned at 550 kHz

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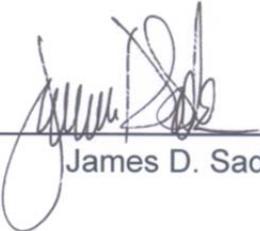
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and as a result the installation of the new W295CP FM antenna has had a negligible impact on the operation of Station WSVA.

Special operating condition 4 on the construction permit applies to the non-directional operation of Station WHBG. The existing tower located adjacent to the WHBG non-directional tower has never been detuned at the WHBG operating frequency of 1360 kHz. A showing was made relative to the special operating condition in the original W295CP Construction Permit, FCC File No. BNPFT-20171201AEY, using a method of moment's computer model to model the effect of the existing tower on the WHBG non-directional pattern using Expert MiniNEC Broadcast Professional (Version 23.0). The model showed that the pattern distortion resulting from the existing tower did not exceed  $\pm 2$  dB in any direction. Following the antenna replacement, the tower was detuned at 550 kHz in an identical fashion as it was during the initial installation and there have been no changes to the base of the tower that would affect the model. Therefore, additional detuning of the tower at 1360 kHz is not required.

In conclusion, the replacement of the W295CP antenna has had a negligible impact on the operations of Station WSVA and Station WHBG and, therefore, special conditions 4 and 5 contained in the construction permit are fully satisfied. This engineering statement was prepared by me or under my direct supervision and the information therein is believed to be true and correct.

Dated: April 9, 2020

  
James D. Sadler