

Purpose and Description of Requested STA

This STA is requested in conjunction with the ongoing work by the Advanced Television Systems Committee (ATSC) to develop the next-generation TV standard (ATSC 3.0). The facility requested in this STA will be used to test the various components being proposed for the new standard, in particular those related to use of VHF frequencies, as well as allowing for a comparison to the existing standard. In order to conduct a meaningful field test it is necessary to deploy a full scale system.

The proposed facility will operate on channel 9 (186-192 MHz) with a non-directional antenna and an effective radiated power (ERP) of 10 kW. The antenna to be utilized is a Harris Model TAB-3H and is currently the authorized auxiliary antenna for WJW channel 8 Cleveland, OH who has agreed to allow the use of their auxiliary antenna for this project. The antenna is side mounted (179 m AGL) on an existing registered tower (ASR: 1054608) with an overall height of 266 m AGL.

An OET-69 study was performed (results attached) to ascertain if any new interference will be caused by the proposed facility. The results of that study indicate that new interference is predicted to be caused to only one station, WTOV-TV channel 9 Steubenville, OH. The licensee of WTOV-TV has agreed to accept the predicted interference for the duration of the test subject to certain limitation that NAB agrees to abide by. A copy of the signed agreement between the licensee of WTOV-TV and NAB is attached.

In addition, a study was conducted to determine if any interference is predicted to be caused to any Canadian stations. The results of that study indicate that the only potential for interference to a Canadian station would be to CBET-DT channel 9 Windsor, ON operated by the Canadian Broadcasting Corporation (CBC). The CBC has been contacted and has agreed to accept the interference subject to certain stipulations that NAB has agreed to honor. A copy of the signed letter of agreement between NAB and CBC is attached.

The proposed facility will comply with all regulations related to RF exposure as well as out-of-band emissions by use of a mask filter that complies with current emission limits.

NAB will also coordinate all operation with the Society of Broadcast Engineers (SBE) local frequency coordinator to avoid conflicts with other uses of channel 9 in the Cleveland area.