

**Larry H. Will, P.E.**

**Broadcast Engineering**

---

1055 Powderhorn Drive  
Glen Mills, PA 19342-9504

PH (610) 399-1826  
FAX (610) 399-0995  
E-Mail lwill@voicenet.com

**WSKG PUBLIC TELECOMMUNICATIONS COUNCIL  
BINGHAMTON, NEW YORK**

**PERMITTEE OF**

**WSKA-TV, CHANNEL 30**

**CORNING, NEW YORK**

**FACILITY ID # 78908**

**FCC FILE Nos. BPET-19960126KE**

**BMPEdT-20040413AAJ**

**AS MODIFIED ON JULY 28, 2004, JULY 27, 2005**

**MINOR CHANGE**

**3rd AMENDMENT TO A PENDING APPLICATION TO MODIFY EXISTING**

**C. P. APPLICATION TO SPECIFY DIGITAL OPERATION**

**SUPPLEMENTAL ENGINEERING EXHIBIT**

**WSKG PUBLIC TELECOMMUNICATIONS COUNCIL  
BINGHAMTON, NEW YORK**

**PERMITTEE OF**

**WSKA-DT, CHANNEL 30**

**CORNING, NEW YORK**

**FCC Nos. BPET-19960126KE**

**BMPEDT-20040413AAJ**

**AS AMENDED JULY 28, 2004, JULY 27, 2005**

**MINOR CHANGE**

**AMENDMENT TO A PENDING APPLICATION TO MODIFY EXISTING**

**C. P. TO SPECIFY DIGITAL OPERATION**

**TABLE OF CONTENTS**

	<u>PAGE</u>
ENGINEERING STUDY	3
BACKGROUND	4
CONTOUR PROTECTION SHOWING	4
CONCLUSIONS	5
FIGURE 3A - DTV COVERAGE CONTOURS	
FIGURE 3B - CANADA CONTOUR PROTECTION SHOWING PLOT	

(Figures 3A and 3B or provided as separate pdf files)

**WSKG PUBLIC TELECOMMUNICATIONS COUNCIL**

**BINGHAMTON, NEW YORK**

**PERMITTEE OF WSKG-TV CHANNEL 42**

**BINGHAMTON, NEW YORK**

**FCC FILE Nos. BPET-19960126KE**

**BMPEDT-20040413AAJ**

**AS AMENDED JULY 28, 2004, JULY 27, 2005**

**SUPPLEMENTAL ENGINEERING EXHIBIT**

**1: FURTHER ADDITIONAL SHOWING WITH RESPECT TO PROTECTION OF CH 30 PARIS, ON, CA AND PETERBOROUGH, ON, CA.**

WSKG PUBLIC TELECOMMUNICATIONS COUNCIL has an outstanding Construction Permit for WSKA-TV operating NTSC on Channel 30 in Corning, NY (File No. BPET-19960126KE and a pending application for modification to specify digital operation as BMPEDT-20040413AAJ) as modified on July 28, 2004. This instant minor amendment to the pending application is to provide an additional and revised study with respect to two DTV Canadian allotments on Channel 30 in Paris (Class VL) and in Peterborough, ON, CA (Class C) a result of a letter (1800E3-TN) received from the Commission staff and dated April 15, 2005 as well as suggestions received from the International Bureau within the last 30 days. This modification application was brought about by an initial rejection by Canada on the minor amendment facilities proposed for WSKA-DT, Corning, NY as proposed in BMPEDT-20040413AAJ due to mileage short spacing to these Canadian facilities.

The proposed allotment for Paris as stated in the US-Canada Letter of Understanding (LOU) is for station CIII-TV with 1000 kW ERP at 325 meters HAAT at coordinates 43-15 -39N, 080-26-39W with protected coverage to 89 km (Canadian Class VL). The Paris DTV allotment is 302.58 km at an azimuth of 295.48 degrees from WSKA-DT as proposed herein and is 329.76 km at an azimuth of 295.77 degrees from the WSKA-TV NTSC original site. The LOU requires an NTSC-DTV Class C-VL spacing of 306 km and a DTV-DTV F(90,90) Class C-VL spacing of 359 km at UHF.

The proposed allotment for Peterborough as stated in the US-Canada Letter of Understanding (LOU) is for station CIII-TV-27 with 1000 kW ERP at 325 meters HAAT at coordinates 44-04 -14N, 078-08-36W with protected coverage to 70 km (Canadian Class C). The Peterborough DTV allotment is 231.19 km at an azimuth of 338.39 degrees from WSKA-DT as proposed herein and is 252.11 km at an azimuth of 334.48 degrees from the WSKA-TV NTSC original site. The LOU requires an NTSC-DTV Class C-C spacing of 240 km and a DTV-DTV F(90,90) Class C-C spacing of 287 km at UHF.

## **2. BACKGROUND**

The WSKA-TV CP facilities (Canadian LOU reference Class C), as stated in the original FCC Construction Permit BPET-19960126KE and in the US-Canada LOU provide for WSKA-TV to operate NTSC at 813 kilowatts ERP at 242 meters HAAT and at coordinates 42-01-55N, 076-47-02W. If operating DTV, the original WSKA-TV site is 29.24 km short spaced to the LOU 359 km requirement between WSKA-DT and a Canadian Class VL facility. The proposed facilities originally filed for WSKA-DT in BPEDT-20040413AAJ were located at the same site as for the analog facility. WSKA-DT had originally requested a digital ERP of 50 kilowatts non-directional at 242 meters HAAT.

On July 28, 2004, WSKA filed an application to modify the pending application of WSKA-DT to specify a new location and HAAT. This modification application retained the designation File No. BMPEDT-20040413AAJ.

## **3: CONTOUR PROTECTION SHOWING**

For short spaced facilities, the LOU requires first that the US station demonstrate contour protection to the Canadian facilities. If contour protection can be shown, then the proposed facilities would be expected to be approved per the L.O.U. Figure 3B shows the results. The L.O.U. requires that for post transition, the F(10,10) curves shall

be utilized for interference and the complete Canadian service protected area(s) of 89 and 70 km radius shall be used for protection. Figure 3 was plotted showing the respective service areas and by using F(50,10) curves so a -7.1 dB correction was added to the 19.5 and 35.5 dBu F(10,10) contours for purposes of plotting. The 35.5 dBu contour value takes into account the additional 16 dB of receive antenna directivity isolation as spelled out in the Canadian DTV Planning Factors in the L.O.U.

Thus Figure 3B shows that the 28.4 dBu F(50,10) [35.5 dBu F10,10] contour is completely outside both the Paris and Peterborough service areas<sup>1</sup> and the 12.4 dBu F(50,10) [19.5 dBu F(10,10)] contour does not extend beyond the further limit of either stations protected service area.

#### **4. CONCLUSIONS**

This Engineering Exhibit and plot show that the proposed (as amended herein) WSKA-DT facilities at the new location and HAAT, and utilizing a directional antenna, will not result in prohibited interference to the allotted Paris and Peterborough DTV facilities as defined in Appendix 2 of the US-CS L.O.U. Thus we believe that we have demonstrated compliance with the intent of the US-Canada LOU as it relates to the minor change in the proposed facilities of WSKA-DT over those previously approved for WSKA(TV) (analog) in the US-Canada DTV LOU and that the requested facilities should be approved and GRANTED.

---

<sup>1</sup> A small 35.5 dBu F(10,10) overlap to Peterborough occurs in the middle of Lake Ontario not affecting populated areas.