

## **ENGINEERING EXHIBIT**

### **Amendment to Short-Form Application for FM Translator Construction Permit BNPFT-20030317ECQ**

prepared for

**Sinclair Telecable, Inc.**  
**D/B/A Sinclair Communications**  
New (FM) Norfolk, VA  
Facility ID 141072

*Sinclair Telecable, Inc. D/B/A Sinclair Communications* (“*Sinclair*”) is an applicant for a new FM translator to operate on Channel 243 (96.5 MHz), Facility ID 141072, Norfolk, VA (BNPFT-20030317ECQ). Pursuant to the FCC’s Public Notice<sup>1</sup> of March 14, 2013, *Sinclair* is amending its short-form (tech box) application BNPFT-20030317ECQ to supply a Preclusion Showing and a minor technical amendment.

#### **Minor Change**

*Sinclair* herein amends its short-form application to specify a different transmitting location, changes in effective radiated power and antenna height, and a change to an adjacent channel. The attached Figure 1 supplies a contour comparison map which demonstrates that the 60 dB $\mu$  contour of the amended application overlaps that of the original application. As amended, the application specifies Channel 242 which is first adjacent to Channel 243 as originally specified. The changes conform to the “minor change” criteria as described in §74.1233(a). Further, Figure 1 shows that the resulting 54 dB $\mu$  contour will be encompassed by that of the proposed commonly-owned primary station to be rebroadcast, WROX-FM (Ch. 241B, Facility ID 60479, Exmore, VA).

---

<sup>1</sup>Media Bureau Announces April 1 – April 19 Filing Window for FM Translator Auction 83 Preclusion Showings, DA 13-427, March 14, 2013.

## Preclusion Showing

As amended, the proposed site is within the Norfolk-Virginia Beach-Newport News, VA market which is designated as Spectrum Limited in FCC 12-29<sup>2</sup>. Further, the proposed site is within the 30x30 second LPFM grid for Norfolk, VA. Therefore, a Preclusion Showing is required.

Pertinent portions of the FCC's LPFM "Grid Tool" computer program output (version lpfm6.20121206.zip) for the Norfolk-Virginia Beach-Newport News, VA market are attached in Table 1. The center-city reference coordinates (36° 50' 48" N-Lat, 76° 17' 08" W-Lon) were taken from the computer file accompanying the Grid Tool program. As shown on the Grid Tool channel summary (Table 1 page 1 of 2), there are no protected LPFM grid points on Channels 242 and 241, co-channel and first-adjacent channel to the proposed Channel 242, respectively

Protected LPFM grid points do exist for Channel 243 which is first-adjacent to the proposed Channel 242. The detailed channel availability grid for Channel 243 is supplied on Table 1, page 2.

The proposed translator will operate with 0.12 kW effective radiated power ("ERP") at an antenna height above average terrain ("HAAT") of 45 meters (based on USGS 3-arc second terrain data and 8 radials). This ERP/HAAT combination results in a distance to the 60 dB $\mu$  contour of 7.2 km. Therefore, the §73.807(c) minimum distance separation between the translator site and any first-adjacent LPFM grid point is 15 km.

Figure 2 supplies a map depicting the proposed Channel 242 translator site and the nearest Channel 243 LPFM protected grid points as extracted from the LPFM Grid Tool output. The coordinates of the nearest protected grid points, identified on the map as "A" through "H", are listed on Table 2. The distances between the proposed translator site and each of these grid points are also supplied on Table 2, computed per §73.808 and §73.208(c).

---

<sup>2</sup>Creation of a Low Power Radio Service, MM Docket 99-25, Amendment of Service and Eligibility Rules for FM Broadcast Translator Stations, MB Docket 07-172, Fourth Report and Order and Third Order on Reconsideration, released March 19, 2012.

When rounded to the nearest kilometer as specified in §73.208(c)(8), the proposed translator site location satisfies the 15 km minimum distance separation requirement of §73.807(c) with respect to the Channel 243 protected grid points. Thus, the translator proposal, as amended, does not preclude any protected LPFM grid points.

### **Other Allocation Factors**

As amended, the Channel 242 translator proposal is no longer mutually exclusive with translator application file number BNPFT-20030317MBP for Channel 243 at Suffolk, VA. Compliance with §73.1204 to full service FM stations will be discussed in the subsequent long-form application.

### **Certification**

The undersigned hereby certifies that the foregoing statement and associated attachments were prepared by him or under his direction, and that they are true and correct to the best of his knowledge and belief.



Joseph M. Davis, P.E.  
April 17, 2013

**Chesapeake RF Consultants, LLC**  
207 Old Dominion Road  
Yorktown, VA 23692  
703-650-9600

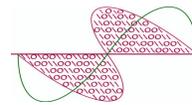
### List of Attachments

Table 1	LPFM Grid Tool Report
Table 2	Distance to LPFM Grid Points
Figure 1	Coverage Contour Comparison – Minor Change Compliance
Figure 2	Preclusion Showing – Protection of LPFM Grid Points



**Table 1**  
**LPFM Grid Tool Report**

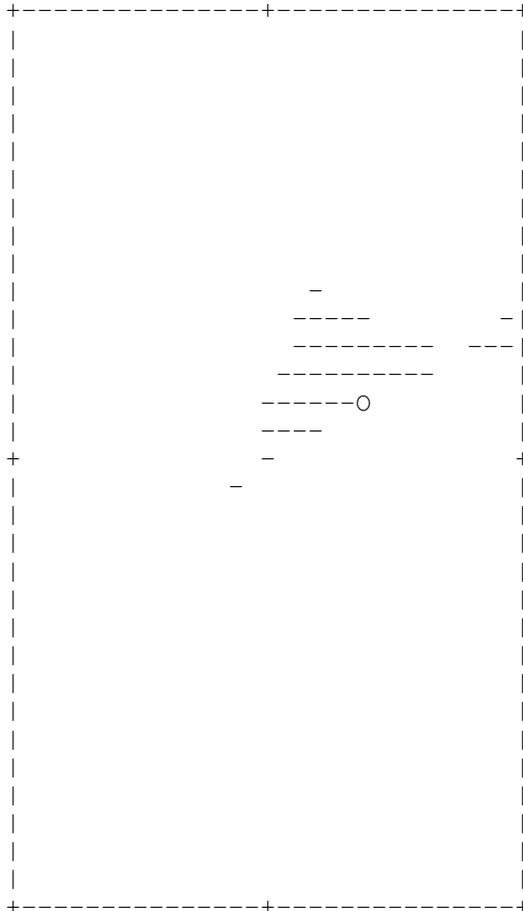
Sinclair Telecable, Inc. D/B/A Sinclair Communications  
 (page 2 of 2)



**Chesapeake RF Consultants, LLC**  
 Radiofrequency Consulting Engineers  
 Digital Television and Radio

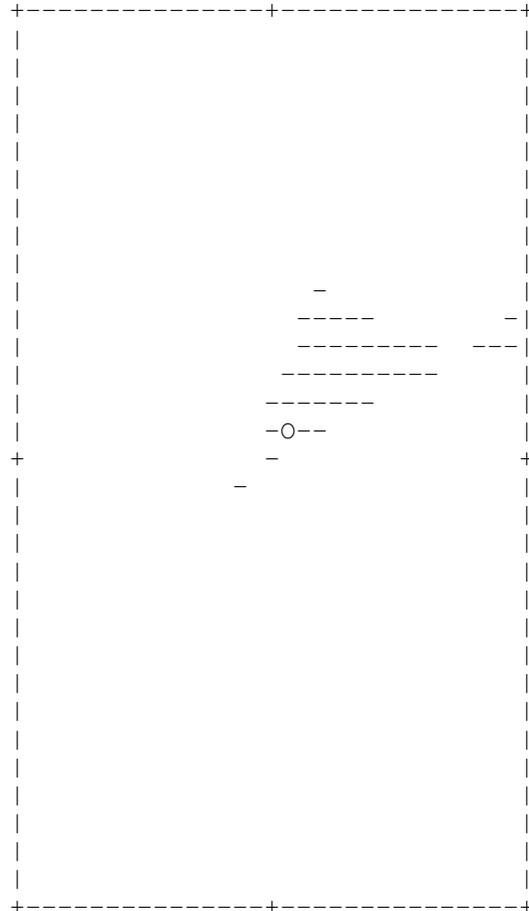
**Channel 243**  
**First-Adjacent to Proposed Channel 242**

Norfolk, VA  
 Latitude 36-50-48  
 Longitude 076-17-08  
 Least preclusive siting  
 Availability of Channel 243 (X)



Point #297 at 36-52-48 076-11-08

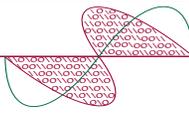
Norfolk, VA  
 Latitude 36-50-48  
 Longitude 076-17-08  
 Most preclusive siting  
 Availability of Channel 243 (X)



Point #451 at 36-51-48 076-16-08

**Table 2**  
**Distance to LPFM Grid Points**  
 Sinclair Telecable, Inc. D/B/A Sinclair Communications

Translator site coords:	--latitude--			--longitude--			Distance from translator		
	36	58	14	76	24	28	(km)	(km - rounded)	
LPFM Grid Point	--latitude--			--longitude--					
A	36	56	48	76	14	08	15.57	16	
B	36	55	48	76	15	08	14.57	15	
C	36	54	48	76	15	08	15.24	15	
D	36	53	48	76	16	08	14.84	15	
E	36	52	48	76	17	08	14.82	15	
F	36	51	48	76	17	08	16.13	16	
G	36	50	48	76	17	08	17.54	18	Center of Grid
H	36	49	48	76	19	08	17.49	17	

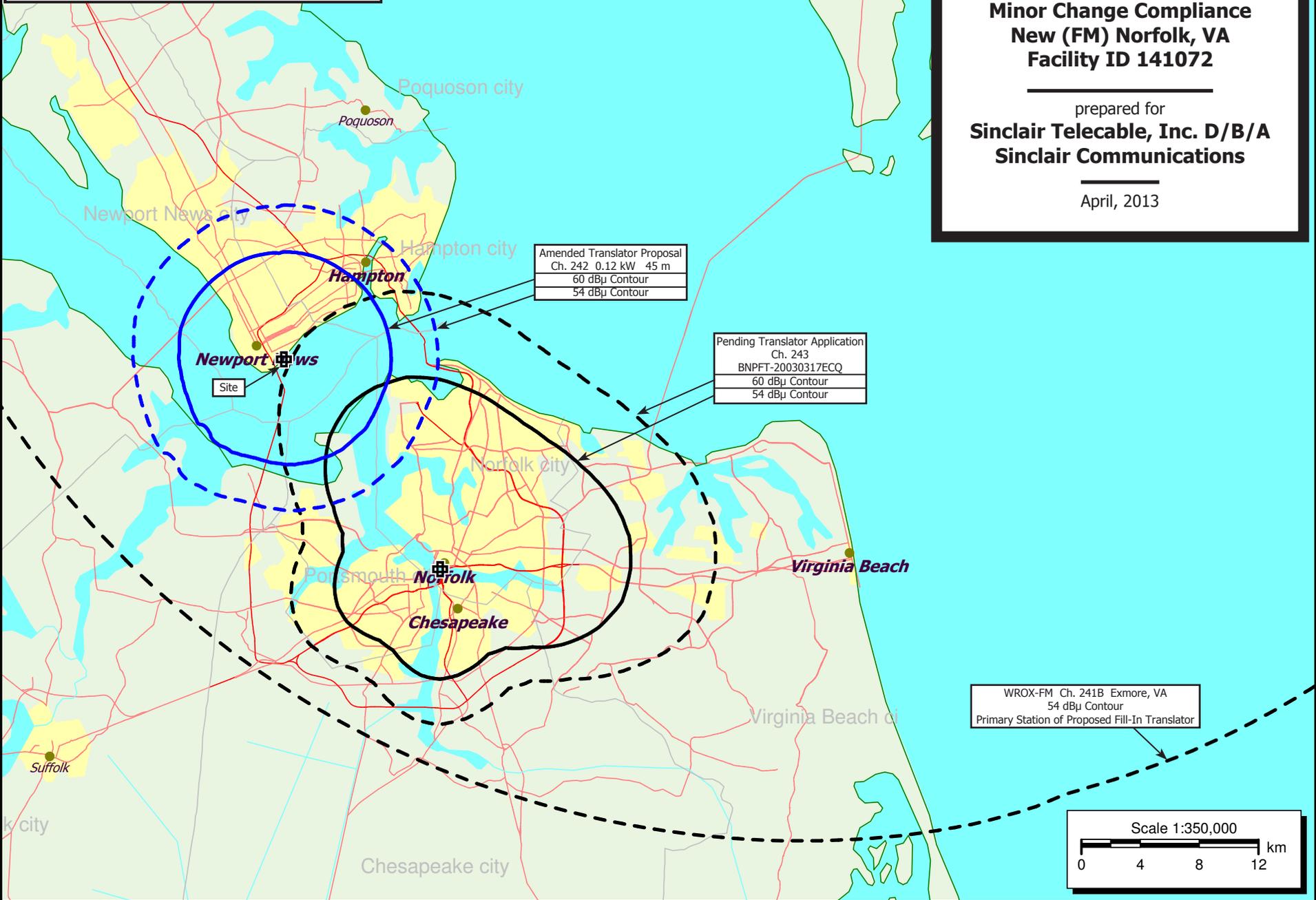


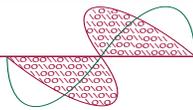
**Chesapeake RF Consultants, LLC**  
Radiofrequency Consulting Engineers  
Digital Television and Radio

**Figure 1**  
**Coverage Contour Comparison**  
**Minor Change Compliance**  
**New (FM) Norfolk, VA**  
**Facility ID 141072**

prepared for  
**Sinclair Telecable, Inc. D/B/A**  
**Sinclair Communications**

April, 2013





**Chesapeake RF Consultants, LLC**  
Radiofrequency Consulting Engineers  
Digital Television and Radio

**Figure 2**  
**Preclusion Showing**  
**Protection of LPFM Grid Points**  
**New (FM) Norfolk, VA**  
**Facility ID 141072**

prepared for  
**Sinclair Telecable, Inc. D/B/A**  
**Sinclair Communications**

April, 2013

