

Engineering Statement
Exhibit 5 - RADIO MULTIPLE OWNERSHIP STUDY
WCRO(AM) Johnstown, PA - Facility ID 18050 - 1230 kHz ND1 U 1.0 kW

prepared for
Lightner Communications, LLC

Introduction

Lightner Communications LLC (“*Lightner*”) is owner and licensee of, or has attributable ownership interest in, a number of AM, FM, and translator stations in Pennsylvania. *Lightner* is proposing to acquire radio station WCRO(AM) in proximity of those presently owned:

Call Sign	Facility ID	City, State
WKFO(AM)	69975	Kittanning, PA
WKMC(AM)	72315	Roaring Spring, PA
WRTA(AM)	67505	Altoona, PA
WTRN(AM)	1056	Tyrone, PA
WYUP(AM)	63425	Loretto, PA
WBRX(FM)	60909	Cresson, PA
WBXQ(FM)	33971	Patton, PA
WRSC-FM	64572	Bellefonte, PA

The instant exhibit is provided to demonstrate *Lightner’s* continuing compliance with Section 73.3555 of the Commission’s rules with regard to ownership of multiple radio stations.

None of the stations currently lie within a rated FCC geographic radio market pursuant to information provided by BIA. While Altoona, PA, in the vicinity of many of these stations, was once a market, it is not currently considered to be a rated, defined geographic market.

The Commission issued a Report and Order and Notice of Proposed Rulemaking (“R&O”)¹ for various multiple ownership issues. The R&O establishes a means of evaluating radio station multiple ownership issues utilizing existing Nielsen Audio^{®2} and BIA[®] MEDIA Access Pro^{TM3} market data for analysis of markets with established geographic boundaries.⁴ There is a separate

¹ Report and Order in MB Docket No. 02-277 and MM Docket Nos. 01-235, 01-317, and 00-244, and Notice of Proposed Rulemaking for MB Docket 03-130 FCC-03-127, (adopted June 2, 2003)(released July 2, 2003).

² Nielsen Audio is a registered mark of Nielsen Holdings, N.V.

³ MEDIA Access Pro is a trademark of BIA[®] Financial Network Inc.

⁴ As an initial matter, the geographical boundaries of a market are established by reference to the boundaries of the markets established by Nielsen Audio. Within that market, the FCC requires that the BIA count of stations operating in the market be employed.

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“interim” means for evaluating radio station multiple ownership issues beyond established Nielsen Audio radio markets. As all stations *Lightner* is proposing to own are no longer in a rated market, the “interim contour method” is provided to demonstrate compliance with FCC ownership limits.

Pursuant to §73.3555 of the Commission’s Rules, the number of stations that a licensee may own is based on the total number of stations in that particular market, regardless of the study methodology employed. There is also a limit on how many stations each licensee may own in any one service (AM or FM).

- Markets with 45 or more stations are limited to 8 total stations and 5 in any one service.
- Markets with 30-44 stations are limited to 7 total stations and 4 in any one service.
- Markets with 15-29 stations are limited to 6 total stations and 4 in any one service.
- Markets with 14 or fewer stations are limited to 5 total stations and 3 in any one service, but not more than 50% of the market stations.

Interim Method - Introduction

Under the current Rules, any station with a principal community beyond the geographic boundary of a defined geographic radio market shall be studied under the Commission’s “interim,” contour overlap methodology. A “market” is defined as the area encompassed by the principal community contours of radio stations for which common ownership is proposed⁵ and which have a mutual area of principal community contour overlap.

Interim Method – The Markets

As shown with **Exhibit 5 - Figure 1**, the 5.0 mV/m daytime principal community contour of the proposed addition, (WCRO(AM)) does not overlap the principal community contour of any other station in which *Lightner* has any attributable ownership interest. The principal community

⁵ Order in Implementation of Sections 202(a) and 202(b)(1) of the Telecommunications Act of 1996 (Broadcast Radio Ownership) FCC 96-90, released March 8, 1996 and Memorandum Opinion and Order in Revision of Radio Rules and Policies 7 FCC Rcd 6387, 6395 para. 39 (1992).

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contours of the other existing eight stations listed herein have instances of unique principal community contour overlap which were addressed with an ownership filing in 2019.

Summary

In preparing the attached maps and tables, pertinent station data were extracted from the Commission's engineering databases. For AM stations, these included the operating power, radiation efficiency, directional antenna data (where appropriate), and geographic coordinates. The distances to the 5 mV/m contours were then determined using the digitized version of the *Atlas of Ground Conductivity* published in 1981 by the International Telecommunication Union along with a computer program which simulates the FCC's AM groundwave propagation curves. For the FM stations, pertinent data for determining the distances to the contour included the antenna elevation above mean sea level, geographic coordinates, effective radiated power, and, where appropriate, directional antenna patterns. The requisite 3.16 mV/m (70 dB μ) contours were determined using digitized 3 arc-second U.S.G.S. terrain data along radials spaced every degree from the transmitter site and an implementation of the Commission's TVFMFS computer program which simulates the FM propagation curves. The detailed distances to the principal community contours were then used with a GIS mapping program to generate the attached maps.

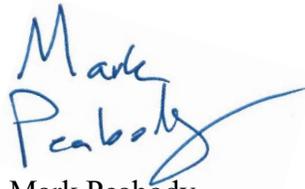
Conclusion

As shown herein, applying the interim contour overlap method, *Lightner's* proposed common ownership of WCRO(AM) with WKFO(AM), WKMC(AM), WRTA(AM), WTRN(AM), WYUP(AM), WBRX(FM), WBXQ(FM), and WRSCX-FM complies with §73.3555 of the Commission's Rules regarding the multiple ownership of radio stations. The 5.0 mV/m daytime principal community contour of WCRO(AM) does not overlap the AM or FM principal community contour of any other *Lightner* station.

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Certification

Under the penalty of perjury, the undersigned hereby certifies that the foregoing statement was prepared by him or under his direction on behalf of *Lightner Communications, LLC* and that it is true and correct to the best of his knowledge and belief. Mark Peabody is a senior consultant in the firm of *Cavell, Mertz & Associates, Inc.* and has submitted numerous engineering exhibits to the Federal Communications Commission. His qualifications are a matter of record with the Commission.



Mark Peabody
August 30, 2023

Cavell, Mertz & Associates, Inc.
7724 Donegan Dr.
Manassas, Virginia 20109
(703) 392-9090

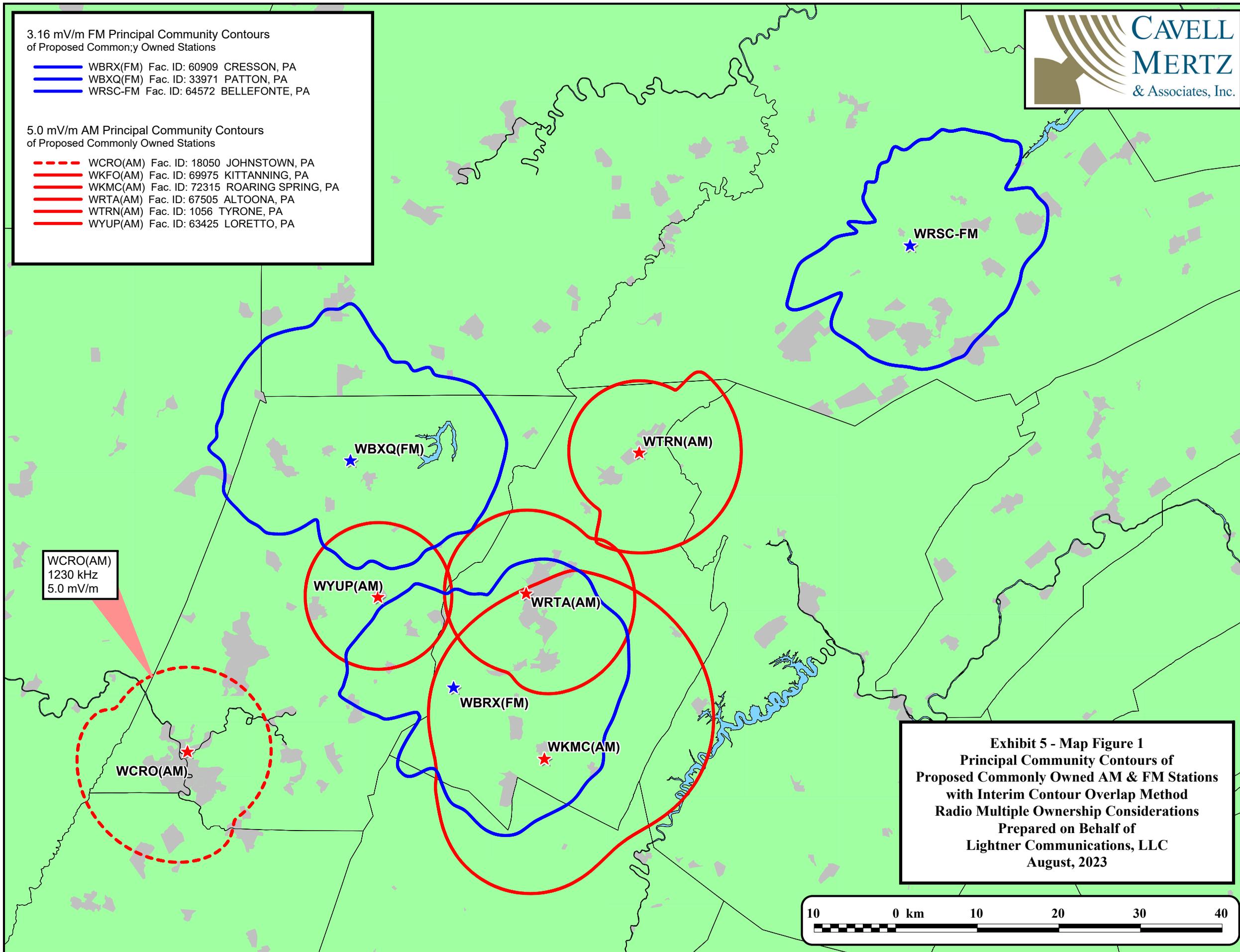


3.16 mV/m FM Principal Community Contours
of Proposed Commonly Owned Stations

- WBRX(FM) Fac. ID: 60909 CRESSON, PA
- WBXQ(FM) Fac. ID: 33971 PATTON, PA
- WRSC-FM Fac. ID: 64572 BELLEFONTE, PA

5.0 mV/m AM Principal Community Contours
of Proposed Commonly Owned Stations

- - - WCRO(AM) Fac. ID: 18050 JOHNSTOWN, PA
- WKFO(AM) Fac. ID: 69975 KITTANNING, PA
- WKMC(AM) Fac. ID: 72315 ROARING SPRING, PA
- WRTA(AM) Fac. ID: 67505 ALTOONA, PA
- WTRN(AM) Fac. ID: 1056 TYRONE, PA
- WYUP(AM) Fac. ID: 63425 LORETTO, PA



WCRO(AM)
1230 kHz
5.0 mV/m

Exhibit 5 - Map Figure 1
Principal Community Contours of
Proposed Commonly Owned AM & FM Stations
with Interim Contour Overlap Method
Radio Multiple Ownership Considerations
Prepared on Behalf of
Lightner Communications, LLC
August, 2023

