

MARANATHA BROADCASTING COMPANY, INC.
KJWP, FACILITY ID 1283
WILMINGTON, DE

REQUEST FOR WAIVER OF POWER LIMIT FOR LOW BAND VHF STATION

INTRODUCTION

This exhibit is offered to support the request of KJWP, in cooperation with three other television stations that have entered into a mutual upgrade agreement, to increase power on its VHF station to overcome the interference that persists in the urban environments in which these stations operate. As set forth in more detail below, only by significantly increasing power to the levels proposed herein can these stations compete in the television markets which they are serving.

These four stations authorized to operate on low-band VHF channels in the mid- Atlantic area have determined that each of them would benefit significantly from increases in each of their ERP. Thus all four will seek an increase in their own ERP, and each has agreed to accept interference from any of the others for power increases of up to 9 dB. A copy of the Mutual Upgrade Agreement where each party agrees to accept interference is separately attached to this application.

The four stations are:

- Channel 2, WVIR-TV, FID 70309, Charlottesville, VA
- Channel 2, KJWP, FID 1283, Wilmington, DE (this application)
- Channel 3, WJLP, FID 86357, Middletown Township, NJ
- Channel 4, WACP, FID 189358, Atlantic City, NJ

Although a power increase for KJWP will cause some normally prohibited interference, in this case all four stations affected by this interference have mutually agreed that all will be better off if each increases ERP by 9 dB. In other words, the improvement in their ability to reach viewers in the core of their service area will more than offset the creation of any interference at the fringe of their coverage areas. The viewers at the fringes of their service area are likely not receiving these signals at the present time. Moreover, in the well-populated mid-Atlantic area, viewers who do receive interference are likely to receive service from many other stations. The latest TVStudy run on November 6th showed that no other stations on channels 2

through 5 will receive impermissible interference from the Joint Applicants as a result of this proposal.

KJWP is a “Stay” station under the FCC TV Repacking currently in process. As such, KJWP along with WJLP and WACP, were not able to file an application and be processed during the last special filing window. Each of these stations plans to file an application in the window scheduled to open on November 28th, 2017. WVIR-TV, the fourth applicant, agreed to move to a VHF channel in the recent incentive auction, and filed its application to implement its power increase on November 2, 2017 in the window for displaced applicants seeking to upgrade their facilities. It noted the existence of the Mutual Upgrade Agreement and requested processing with the applications of the other parties to the agreement.

In the instant application, Maranatha Broadcasting Company, Inc. (“MBC”), Licensee of KJWP, seeks approval of its own 9 dB power increase, understanding that the Commission may not approve the proposal until it has received and had an opportunity to review and act on the applications of the other three stations. For KWJP, the 9 dB increase results in a proposal to raise ERP from 9.36 kilowatts to 74.3 kilowatts with circular polarization. MBC hereby requests a waiver of Section 73.622(f) (6) to operate with an ERP exceeding 10 kilowatts and a waiver of any other relevant rule that the Commission deems necessary for the processing of this application. The following justification is submitted in support of the requested waiver.

1: SECTION 73.622(f)(5) RECOGNIZES THAT POWER IN EXCESS OF ZONE 1
MAXIMUMS CAN BE PERMITTED

KJWP is located in the Philadelphia, PA ADI. KJWP was assigned a digital channel (Channel 2) in the initial Table of Allotments. It thus is qualified under the provisions of 73.622(f)(5) to seek an increase in power sufficient to give it coverage equal to that of the station in its market with the greatest coverage, provided that the power increase does not create any prohibited interference¹. KJWP is currently licensed for 9.36 kW at 310.8 meters HAAT, exceeding the 305 meter limit for HAAT in Zone 1 and hence is licensed at 9.36 kW rather than the 10 kW Zone 1 maximum. A TVStudy 2.2.3 engineering study performed by this office showing that the proposed modified operation of KJWP from 9.36 to 74.3 kW at 310.8 meters HAAT will not cause impermissible interference as required by 73.623(c) to any other facility

except to those stations which are parties to the mutual upgrade agreement between the four stations noted above.

A review of existing DTV licensees and granted Construction Permits has shown that WPVI-DT, FCC ID# 8606, is the largest station in the Philadelphia television market. WPVI, Channel 6 DTV, upon returning to its analog channel on June 16, 2009, was, after a modification, authorized an ERP of 7.56 kW at 332 meters HAAT (File No. BPCDT-20080208ADW). The WPVI-TV HAAT is 330 meters. However, upon commencing operations with these facilities, WPVI faced numerous complaints that its signal could not be received by over-the-air receivers, and it applied for and received a construction permit to increase to the facilities with which it operates today, 34 kW at 330 meters HAAT, far in excess of the Zone 1 maximum power limitations. See FCC file Number BLCDDT-20111019ACJ. The current WPVI-DT licensed facility has a 28 dBu F(50,90) interference free service area of 44,651.0 square kilometers and serves 13,599,735 people.¹ The Commission's willingness to grant this application demonstrates that, in the appropriate circumstance, power levels in excess of the Zone 1 maximums should be permitted.

Under the terms of BLCDDT-20131129AIH, KJWP, Channel 2, 28 dBu F(50,90) approved service area is 34,532.5 square km. Even operating with an HAAT of 310.8 meters, its signal is inferior to the coverage of WPVI-DT. Under the proposal set forth herein, KJWP's facilities would cover 13,037,421 persons and 49,322.3 square kilometers.² While the area (but not the population on the current TVStudy run) is slightly greater than the area served by WPVI, as set forth below, Maranatha believes that the increased power is justified by the factors cited below.³

2: WAIVER OF 73.622(f)(6) REQUESTED

The KJWP initial digital allotment of CH 2, the same as its former analog channel, was initially and is currently licensed for 9.36 kW at 310.8 meters HAAT. An FCC TVStudy 2.2.3 engineering study performed by this office showed that the proposed modified operation of

¹ TVStudy run on 10/29/2017. These values include large bodies of water reducing actual coverage significantly.

² TVStudy run on 11/28/2017 reflecting the worst case KJWP received interference.

³ In fact, WPVI itself seemed to recognize that greater power is necessary to overcome all interference. In 2012, WPVI-TV filed for an additional increase in its facilities to a proposed power level of 62.9 kW, stating that it was still receiving reception complaints even when operating at 34 kW. See, FCC File No. BPCT-20120604AEC. While that application was voluntarily dismissed by the licensee by letter from counsel dated September 23, 2013, the dismissal letter merely stated that the applicant had decided not to pursue its application "at this time." The applicant did not disclaim the allegations of continuing reception issues made in the engineering statement filed with the application.

KJWP from 9.36 to 74.3 kW at 310.8 meters HAAT will not cause impermissible interference to any other facility as required by 73.623(c) that isn't covered by the Mutual Upgrade Agreement. Since the requested operation with 74.3 kW exceeds the limit allowed by 73.622(f)(6) of the Commission's Rules, a waiver of Section 73.622(f)(6) (as well as of Sections 73.622(f)(5) and 73.623(c) if necessary) are requested. These requests are supported by the showings in this Exhibit.

KJWP is not affiliated with a major television network. Instead, it carries programming from a network (MeTV), and also broadcasts several separate video subchannels providing an important source of diverse programming to its viewers. These subchannels include channels carried as the result of agreements with other stations to carry digital subchannels that have become or will become orphans because they have been operated on channels surrendered in the incentive auction. An increase in power would be of substantial benefit to the viewers of these channels who receive the station over the air.

The Commission has previously recognized the need for flexibility in setting power levels to allow low-band VHF stations to serve the public adequately. In a Notice of Proposed Rulemaking in 2010, the Commission considered the potential for raising the power of VHF stations to compensate for interference issues that arise when these stations converted to digital operations. While that proceeding ended without any blanket increase in power being adopted, the Commission retained the flexibility to review the power that was appropriate in individual cases as more experience was developed in digital operations. Indeed, WVIR-TV, one of the 4 stations in this group, operates with an authorized power level of 10 kW which exceeds the limit in Rule 73.622(f)(6), because WVIR-TV is located in Zone 1, and its HAAT exceeds 305 meters.⁴

The current US standard 8VSB signal is susceptible to random RF noise like that produced by man-made objects, cosmic radiation, recently deployed inadequately filtered electronics, lights and devices of all types not only in the business environment, but also in

⁴ This office is aware of at least five other precedents for an operation greater than the maximum Zone I Power Limits for VHF stations, and there may be others. They are WRGB, Schenectady, NY, and CH 6 at 30.2 kW, ND; and WPVI-TV, CH 6, Philadelphia, PA at 34 kW, ND, as well as a grant of application of WTPC-TV, FID 82574, CH 7, ERP 85 kW and HAAT 310 meters, Zone 1, BLCDDT-20090515ADP, granted 08/05/2010. Also see WVEC, Hampton, VA, CH 13, FID 74167, ERP 35 kW. HAAT 363 meters, Zone 1, BPCDDT-20080305AFC, BLCDDT-20090612ZAJJ granted 06/22/2010, and for WGAL, Facility ID# 53930, Lancaster, PA, Zone 1, BLCDDT-20110323ABF, 32.2 kW, granted 06/01/2011, and BMPCDDT-20090720AKB, for 59 kW ERP, pending and cut-off.

ordinary consumer households⁵. This is particularly true for Low VHF stations. RF Loss due to building penetration is very high, upwards of 10-20 dB in some Reports, because of the long wavelengths in the 54-88 MHz band coupled with building construction materials.

In addition, most consumer antennas do an inadequate job of picking up these stations. VHF indoor antennas not only do not have any gain but may actually have a loss of up to 10 dB at low-band VHF - a greater loss than might be offset by the increase that KJWP is seeking in the instant application⁶. The large rotatable VHF-UHF receiving antennas in common use through the 1970s are virtually all gone in 2017. Also, modern consumers who rent urban apartments, such as those in the Philadelphia area, have no option for installing 12 foot long Low-Band VHF antennas necessary for reception of these stations operating at their current power levels. A statement by Barry Fisher, President of Maranatha Broadcasting, is appended to this report. It reflects real life testing that confirms the difficulties of Low Band VHF reception in the home.

The “Rabbit ear” antennas that generally are utilized indoors operate in areas where man-made noise is prevalent. As these antennas provide no signal to noise improvement, the reception of Low Band VHF stations suffer. Therefore the only practical option is to increase the transmission power to overcome these modern realities.

3: ADDITIONAL PUBLIC INTEREST SHOWING

This request by the parties to the Mutual Upgrade Agreement seeks to increase the facilities of their stations by an equal amount of 9 dB. This mutual increase in power better serves all parties and the public, particularly with respect to signal penetration within each station’s DMA. Repeated Longley-Rice studies by this office in conjunction with several high

⁵ In the late 1950’s when the TASO studies were completed, high levels of consumer equipment that produced radio noise was not an actual factor in successful reception of TV at the edges of the service contour (Grade B). Outside antennas were the norm not only in the fringe, but also, in urban areas. Ignition systems impulse noise and thunderstorms were the only significant noise sources and also signal amplitude variations (fading) with time (Tropospheric Fading) which could cause relatively long (20-30 minutes) reception outages.

⁶ The Commission acknowledged all these factors in Innovations in the Broadcast Bands, 27 FCC Rcd 4616 (2012).

band VHF stations⁷ show that it is possible for mutual power increases to actually improve service to a greater extent than to that lost by any areas of new interference⁸.

One of the reasons for this phenomenon is the fact that interference is counted as a percentage of current population, while population is counted as a total number, and in some cases, areas and population that did not receive acceptable reception of a particular station at the lower power now are able to receive a viewable signal. This is especially true with indoor reception.

In short, MBC believes that the instant request, which proposes a +9 dB power increase serves the Public Interest in improving the reliability of reception of all stations participating in the Mutual Upgrade Agreement including KJWP. Maranatha Broadcasting is committed to constructing facilities requested herein promptly upon receipt of Commission authority.

MBC requests that the Commission look favorably on the cooperative effort of these aforementioned four Low-band VHF stations which face serious handicaps in the digital environment. All have agreed on an approach that will enable each of them to do a better job of serving the public. It should be noted that the stations have agreed to coordinate timing of implementation of their power increases; but in the case of WVIR- TV, it will not transmit on Channel 2 at all, at any power level, until Transition Period 5, which is expected to come after the other stations have implemented their increases. Implementation by other stations before WVIR-TV implements will have no adverse impact on WVIR-TV, because WVIR-TV will still be operating on its existing Channel 32.

In light of the foregoing, Maranatha Broadcasting Company, Inc. respectfully submits that a grant of this application is justified and would significantly advance the public interest, and asks that it be granted.

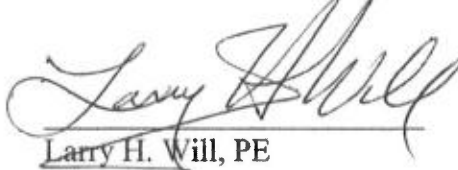
⁷ Studies and field measurements conducted for WBPH-TV, FID 60850 in conjunction with WUSA, FID 65593 with respect to mutual power increases in conjunction with a 4 station Multistation Mutual Interference Agreement, signed in January 2010.

⁸ With TVStudy, the results sometimes show a modest reduction in mutual interference and every valid receive location studied always receives 9 dB more signal..

CERTIFICATION

The foregoing is true and correct to the best of my knowledge and belief. My qualifications are attached.

Respectfully submitted,



Larry H. Will, PE

Dated: November 28, 2018

CERIFICATION STATEMENT BY LARRY H. WILL, P.E.

I, Larry H. Will, PE residing at 1055 Powderhorn Drive, Glen Mills, PA 19342 hereby certifies that the statements and findings prepared by him or under his direction and as shown in the instant Exhibit for MBC, Inc. are correct and true to the best of my knowledge and ability. My qualifications are a matter of record with the Federal Communications Cmission.

I have been involved in radio, television, and communications engineering for over 50 years, and have extensive civilian and military experience in radio communications systems including AM, FM, and TV broadcasting, shortwave transmission, troposcatter systems, terrestrial microwave and satellite systems , and fiber optic systems.

He is currently a Professional Broadcasting and Telecommunications Engineering Consultant and had retired in 1997 as Director of Engineering for New Jersey Network (NJN) after a 26+ year career. Previously he was an AM station part owner and served as Chief Engineer and Assistant Chief Engineer at several TV and Radio stations.

Respectfully submitted,

A handwritten signature in cursive script, appearing to read "Larry H. Will", written in dark ink.

Larry H. Will, P.E.

November 28, 2017

**STATEMENT OF BARRY FISHER, PRESIDENT
OF MARANATHA BROADCASTING COMPANY INC.**

Statement of Barry Fisher, President and General Manager of Maranatha Broadcasting Company Inc. (MBC), owner WFMZ-TV since November 1976 and KJWP-TV since September 2017.

He started his career as the Director of Engineering for WFMZ-TV in 1978 and is an SBE Certified Professional Engineer. In 1997, he was promoted to President and GM of MBC. 40 years of working with viewers on receiving issues has given him a good insight on how different channels can be received in the region.

MBC purchased KJWP-TV on September 1st, 2017 and the station is operated from our control point in Allentown, PA. The majority of television stations in the Philadelphia market, including KJWP-TV, a MeTV station, have transmitter sites located in the Roxborough antenna farm located in Philadelphia.

WPVI-TV Channel 6 and KJWP-TV Channel 2 are in the Low VHF band, and the majority of other stations in the market are in the High VHF or UHF bands. WACP-TV Channel 4's tower is located south of Philadelphia. When the digital transition occurred, it is well-documented how stations in the Low VHF band lost service to areas previously served while broadcasting in analog. WPVI-TV was eventually granted an increase in power from 7.6KW to 34KW on October 19, 2012, which helped resolve some issues, but not all, as our test will show.

As a lifelong resident in the Philadelphia market, I can attest that even with WPVI-TV's increase to 35KW, it still does not share the same penetration to homes as the UHF affiliates in the market. Even with an all-band antenna, both WPVI-TV and KJWP-TV still are more difficult if not impossible to receive for multiple reasons, including well-documented impulse noise.

TEST TO DEFINITELY ILLUSTRATE THE IMPACT OF IMPULSE NOISE TO LOW VHF RECEPTION

To illustrate this fact, we conducted a test at a residence approximately 40 miles north of the antenna farm from which most of the Philadelphia stations transmit. The house is located at approximately 700 feet AMSL with a clear line of site to the Roxborough antenna farm. It is in a neighborhood where the homes are on 1-acre lots, which allowed us to isolate potential impulse noise for the test.

A typical antenna that the average consumer would have access to was bought at the local Walmart. It was a GE Pro Outdoor Antenna, one of the few sold at Walmart that lists VHF as one of its capabilities. The antenna has no technical specifications listed other than the claim that it "works within 70 miles". It is a Yagi antenna approximately two feet long. We do not know if the VHF claim on the antenna box includes Low VHF in its design or not.

The test proved to be quite revealing. At first, the antenna was located inside the home on a tripod near the television, approximately 6 feet in elevation. It was oriented toward the antenna farm with only a window as its obstacle. After peaking the receive signals to antenna farm, virtually all of the UHF stations were receivable but no Low VHF stations were received (see table #1).

The antenna was then located on the same tripod approximately 90 feet outside of the house, away from any other homes by several hundred feet. Using the same antenna, television, and coax, Channel 2 could be viewed with an 18.6 SNR and Channel 6 with a 19.5 SNR. The UHF stations were virtually unchanged (see table #2). This test was the first step in illustrating how impulse noise definitively impacts Low VHF stations and has no effect on UHF or High VHF Stations.

The same antenna system was relocated to 5 feet from the house with a clear view to the antenna farm but in close proximity to the house. The same tests were repeated. Again, Channel 2 and Channel 6 could not be received, and the UHF stations remained unchanged (see table #3).

With the antenna still located 5 feet from the house, the main circuit breaker to the house was turned off, assuring all sources of impulse noise were removed with the exception of the UPS powering the television. Channel 2 was now receivable with a 16.5 SNR and Channel 6 with a 22 SNR. The UHF stations remained unchanged (see table #4).

This test was conducted in a location with the most favorable circumstances where there was a large separation in homes. In locations where residences are townhomes or apartments that are packed together, the impulse noise to an antenna will logically increase dramatically due to the number of appliances, HVAC, and other sources of noise in the more densely compacted environment. In fact, I have personally spoken to viewers who receive Channel 2, and complain of pixilation and lost signal around dinner time. One might assume that microwave ovens and other appliances could be the source of increased impulse noise causing the loss of signal.

CONCLUSIONS FROM THIS TEST

This test conclusively and unequivocally confirms what the Low VHF broadcasters in this filing are facing. Impulse noise is a major factor that can only be overcome by increasing the transmission power side of the equation. Antenna gain itself will not change the ratio of received signal to noise in the home.

ANTENNA DESIGN AND AVAILABILITY IMPACTS TO LOW VHF BROADCASTERS

A visit to the local Walmart illustrates a second problem that Low VHF broadcasters face. There are many antenna selections, but few state exactly for which band the antenna is designed to receive. Most simply say "HDTV antenna" followed by a radius of coverage. IE: "HDTV antenna, 30 mile range"; or "HDTV antenna, 50 mile range"; etc. Even if the manufacturer listed the operating frequencies or bands the antenna was designed for, only an experienced broadcaster or ham radio operator would understand the antenna was only built for UHF reception. There were a few antenna options for VHF, and most of those antennas were for High VHF, not Low VHF.

Modern consumers, especially those living in apartments, will generally pick an antenna that fits conveniently beside their TV on a shelf or desktop. The author of this report has personally encountered hundreds of conversations with viewers and friends completely oblivious to the need for an antenna specifically built to receive Low VHF stations that is required to receive the most watched station in the market, Channel 6, as well as petitioner's Channel 2.

In fact, the broadcasters' virtual channel scheme reinforces consumer confusion. In the Philadelphia market, there is a station branded as "Channel 3" that actually operates on UHF channel 26, and a "Channel 10" which is on UHF channel 34. So logically the average consumer believes they are picking up Channels 3 and 10, therefore they should receive Channel 6, since it is between 3 and 10. The modern consumer lacks the knowledge to understand that Channel 6 and Channel 2 are in fact Low VHF channels and that they need a different kind of antenna to receive these signals. The way antennas are packaged and sold to the consumers does nothing to help them appreciate the difference and, even if they did, most consumers would be lost on the need for one over the other.

Given this obvious reality, a Low VHF broadcaster has no option to reach these consumers other than to increase their transmitter power to overcome the lack of antenna gain in most consumer antennas (and in some antennas that are on the market, a negative gain to Low VHF broadcaster).

ANTENNA DESIGN REALITIES

On their website, Channel Master lists the full specifications for antennas they sell and further illustrates the reason the petitioners are asking for this power increase.

A Channel Master CM40001HDBW Flat antenna listed on their website has the following specifications: 174- 216 MHZ and 470-700MHZ with a gain of 3-6db on VHF (that is High VHF) and 6db gain on UHF. There is no listing of gain for Low VHF, so one can assume it is zero or negative gain. The differential between UHF and Low VHF would be in excess of 6db and being located inside the house, the added loss of impulse noise makes this differential even worse.

The Channel Master ULTRAntenna 60 is a high gain antenna, small enough to conceivably be installed behind a TV or closet in an apartment. It has the following specifications: 174- 216 MHZ and 470- 700MHZ with a gain of 3.5db on VHF (that is High VHF) and 10db gain on UHF. There is no listing of gain for Low VHF, so one can assume it is zero or negative gain. The gain differential between UHF and Low VHF can be assumed to reach 10db, and adding impulse noise makes the differential even worse.

The Channel Master STEALT 50 is a 23.5 inch long antenna with the following specifications: 54-216MHZ and 470-700MHZ with a gain of 3db on VHF and 9 DB gain on UHF. The gain differential between UHF and VHF is 6db, and this does not consider the extra noise generated to Low VHF due to impulse noise.

We outline these antenna options so the FCC can understand the reason the four stations entering into this Mutual Upgrade Agreement arrived at 9db. It was not an arbitrary number, rather one gained from years of practical experience. Only when you assume the customer is willing to install a 10 foot long roof top antenna is the antenna gain of UHF and Low VHF closer to equal.

SUMMARY

WVIR-TV, KJWP-TV, WACP-TV, and WJLP-TV have invested a lot of time and money to engineer and reach this agreement for increasing our power levels by 9db. The cost to upgrade each facility and operate them on an ongoing basis is significant. But uniquely, these four stations are in the lowest section of the Low VHF band, channels 2-4, in the most congested area of the country. Low VHF stations

are clearly the most impacted by impulse noise and receiving antenna performance. With WVIR-TV moving from a 1 Megawatt UHF to channel 2, without the proposed 9db increase, a significant number of viewers will experience loss of service that will generate many complaints to the station, FCC and Congressmen from viewers.

As a viewer of KJWP-TV, I have personally experimented with various antennas and found that the difference in gain is in fact a real factor in receivability. My interaction with hundreds of viewers since the digital transition reinforces the fact that the modern consumers are lost to the differences in broadcast bands. Broadcasters cannot mandate what antennas a consumer will use, and it is obvious by what type of antennas are being advertised and sold in mass. The marketplace favors smaller antennas and that fact places our four stations at a severe disadvantage to other broadcasters.

Clearly in the Philadelphia market, Channel 6 is already almost 6db stronger than Channel 2, and it still is not strong enough to overcome the impulse noise at our test location.

Therefore, the four Low VHF broadcasters party to this agreement respectfully request the FCC grant this power increase, so we can serve the public in similar fashion to our High VHF and UHF competitors. We have done the heavy lifting to engineer this pathway to resolve our issues. We strongly believe it is in the public interest and the FCC's long term interest to grant this four-party waiver. The public should not be denied the ability to view our stations by holding us to an outdated limitation on the power we are permitted to transmit.

The foregoing is true and correct to the best of my knowledge and belief.

A handwritten signature in dark ink, appearing to read 'Barry Fisher', is written over a horizontal line.

Barry Fisher, President

Maranatha Broadcasting Company Inc.

Dated: November 28, 2017

TABLE #1

**Antenna located inside home near window 6ft
elevation.**

<u>Ch #</u>	<u>RF Ch #</u>	<u>SNR</u>	<u>Relative Signal Strength</u>	
2	2	0	0	
3	26	28.3	81	
6	6	0	0	
10	34	20.2	39	
17	17	26.8	68	
29	42	17	16	
35	35	17.8	21	
* 39	39	26.3	68	located in Allentown
51	25	21.1	38	
60	9	28.1	78	located in Allentown
61	31	23	49	
62	34	19.6	31	
65	29	26.5	67	
69	46	31.5	95	located in Allentown

TABLE #2

**Antenna located 90ft away from the house 6ft
elevation.**

<u>Ch #</u>	<u>RF Ch #</u>	<u>SNR</u>	<u>Relative Signal Strength</u>	
2	2	18.6	25	
3	26	19.5	36	
6	6	21.8	45	
10	34	23.3	51	
17	17	27.7	74	
29	42	27.95	77	
35	35	0	0	
* 39	39	24.9	58	located in Allentown
51	25	23.2	49	
60	9	19.3	30	located in Allentown
61	31	24.9	60	
62	49	22.2	44	
65	29	26.9	68	
69	46	30.4	95	located in Allentown

TABLE #3

Antenna located 5ft away from the house 6ft elevation, House Power ON

<u>Ch #</u>	<u>RF Ch #</u>	<u>SNR</u>	<u>Relative Signal Strength</u>
2	2	0	0
3	26	19.5	36
6	6	0	0

TABLE #4

Antenna located 5ft away from the house 6ft elevation, House Power OFF

<u>Ch #</u>	<u>RF Ch #</u>	<u>SNR</u>	<u>Relative Signal Strength</u>
2	2	16.5	14
3	26	19.5	36
6	6	22	45

MUTUAL UPGRADE AGREEMENT

MUTUAL UPGRADE AGREEMENT

This MUTUAL UPGRADE AGREEMENT ("Agreement") is dated as of the 2nd day of November, 2017 (the "Effective Date"), by and among Western Pacific WACP, LLC ("WACP Licensee"), Virginia Broadcasting, LLC ("WVIR Licensee"), Maranatha Broadcasting Company, Inc. ("KJWP Licensee"), and PMCM TV, LLC (referred to herein as "PMCM" or "WJLP Licensee") (collectively, the four parties are referred to herein as "the Parties" and each may be referred to herein as a "Party").

RECITALS

- A. WACP Licensee is the licensee of TV broadcast station WACP(TV), channel 4, Atlantic City, New Jersey (FCC Id. 189358) ("WACP") pursuant to authorizations issued by the Federal Communications Commission ("FCC").
- B. WVIR Licensee is the licensee of TV broadcast station WVIR(TV), channel 2, Charlottesville, Virginia (FCC Id. 70309) ("WVIR") pursuant to authorizations issued by the FCC.
- C. KJWP Licensee is the licensee of TV broadcast station KJWP(TV), channel 2, Wilmington, Delaware (FCC Id. 1283) ("KJWP") pursuant to authorizations issued by the FCC.
- D. WJLP Licensee is the licensee of TV broadcast station WJLP(TV), channel 3, Middletown Township, New Jersey (FCC Id. 86537) ("WJLP") pursuant to authorizations issued by the FCC.
- E. The Parties each wish to upgrade the facilities of their television stations but cannot do so without the consent of the other Parties and the permission of the FCC.

NOW, THEREFORE, in consideration of the above recitals and the mutual covenants and agreements set forth in this Agreement, and for valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Parties, intending to be legally bound, agree as follows:

SECTION 1. DEFINITIONS

WACP, WVIR, KJWP, and WJLP are referred to herein as the "Stations" or each as a "Station." Capitalized terms used in this Agreement shall have the meanings ascribed to them in the preamble or elsewhere in the Agreement.

SECTION 2. REPRESENTATIONS AND WARRANTIES

Each of the Parties represents and warrants to each of the other Parties as follows:

2.1 **Standing.** It is a business entity duly organized, validly existing, and in good standing under the laws of the state of its organization. Each of the Parties has all requisite authority to execute and deliver this Agreement and the documents contemplated hereby, and to

perform and comply with all of the terms, covenants, and conditions to be performed and complied with by the Parties under the terms of this Agreement.

2.2 Authorization and Binding Obligation. Each of the Parties is legally qualified, empowered and authorized to enter into this Agreement. The execution, delivery, and performance hereof shall not constitute a breach or violation of any agreement, contract or other obligation to which it is subject or by which the Party is bound. This Agreement has been duly executed and delivered by each Party and constitutes the legal, valid, and binding obligation of each Party, enforceable in accordance with its terms. Each person executing this Agreement represents and warrants that he/she is authorized to legally bind the Party on whose behalf he/she has signed.

SECTION 3 COVENANTS AND AGREEMENTS

3.1 Filings.

(a) FCC Applications. Subject to PMCM's compliance with Section 3.1(b) of this Agreement, the Parties each agree that each Party shall file an application for a construction permit to modify its facilities to specify the facilities substantially as set forth on Exhibit 1 hereto (each an "Application" and collectively, "the Applications") according to the following timetable: (i) WVIR Licensee shall file its Application with the FCC no later than November 2, 2017; and (ii) WACP Licensee, KJWP Licensee, and WJLP Licensee shall each file its Application with the FCC on the first day of the limited filing period during which the FCC will temporarily lift the freeze on the filing and processing of modification applications, as announced by FCC staff on October 19, 2017 in DA 17-1033 (the "Freeze Window"). Each Party shall request waivers of Sections 73.622(f) and 73.623(c) of the FCC's Rules, relying on this Agreement and appropriate public interest considerations, and shall agree to processing of its Application contingent on the grant of all of the Applications, with such waiver of Section 73.3517 (the contingent application rule) as may be needed to accomplish this goal and any other waivers that may be necessary for grant of the Applications. If the FCC dismisses, denies or otherwise rejects the Application filed on or before November 2, 2017 or any Application filed on the first day of the Freeze Window, but leaves open the possibility of re-filing any such Application when the FCC resumes its normal process for accepting applications for the improvement of television stations, the Parties agree to remain bound by this Agreement until any such Applications can be refiled in the normal course of FCC processing. The Parties shall cooperate to file on the first day for such applications in the normal course if the FCC provides prior notice of that resumption of normal processing. Each Party agrees to diligently prosecute its Application and not challenge any other Application. If the FCC determines that it cannot grant the Applications as proposed, but the FCC would grant the Applications with the facilities specified in the Applications but at a lower power that would not subject any Station to more interference than it would receive were all of the Applications granted as initially filed, then the Parties agree to so amend their Applications in order for all of the Applications to be granted. Following the conclusion of the Construction Period described in Section 3.4 of this Agreement, each Party agrees to accept any interference that may result from the grant of the Applications, on the condition that its own Application is granted by the FCC. Each Party authorizes the inclusion of this Agreement in the Applications, noting the acceptance of interference to be submitted to the FCC to support the Applications. If all of the Applications contemplated by

this Agreement have not been granted by December 31, 2018, any Party not then subject to a suit claiming specific performance under Section 3.2 of this Agreement may terminate this Agreement by written notification to the other Parties, except that the provisions of Section 3.1(b) of this Agreement shall survive any termination of this Agreement.

(b) Withdrawal of Petitions for Reconsideration and Related Pleadings. Within two (2) business days of the date WACP Licensee files its Application, PMCM shall submit notifications ("Notifications") to the FCC withdrawing with prejudice PMCM's pending Petitions for Reconsideration (the "Petitions") in MB Docket Nos. 09-230 and 13-40 and all related pleadings in those proceedings. PMCM hereby covenants that, after it files the Notifications, it shall not seek to challenge, revive any challenge or otherwise object in any forum or venue to the FCC's channel 5 allotment at Seaford, Delaware, the results of FCC Auction 90, the WMDE(TV) community of license change from Seaford, Delaware to Dover, Delaware, the issuance of the WMDE(TV) construction permit or the issuance of the WMDE(TV) license. WACP Licensee's obligation to submit its Application pursuant to Section 3.1(a) of this Agreement is specifically contingent on PMCM's timely compliance with its obligations under this Section 3.1(b) of this Agreement, and if PMCM has not so complied, WACP Licensee may, in addition to and without limiting any other rights and remedies available under this Agreement, (i) request that the FCC hold the Applications in abeyance pending resolution of PMCM's breach of this Agreement; (ii) withdraw its Application; and/or (iii) terminate its own participation in this Agreement without further obligation or liability.

3.2 No Inconsistent Action; Enforcement. No Party shall take any action that is inconsistent with its obligations under this Agreement. In consideration of the mutual promises contained herein, and of the time and expense each Party has spent in furtherance of this Agreement and the facilities changes contemplated hereunder, and recognizing that damages in the event of breach of this Agreement by a Party hereto may be difficult, if not impossible, to ascertain, it is therefore agreed that each such Party, in addition to and without limiting any other remedy it may have under law or equity, will have the right to an injunction or other equitable relief in any court of competent jurisdiction, enjoining any such breach, and enforcing specifically the terms and provisions hereof, and each Party hereby waives any and all defenses it may have on the ground of lack of jurisdiction or competence of the court to grant such an injunction or other equitable relief. Each Party shall waive and shall be deemed to have waived any requirement for the posting of bond or other security or for any showing of the inadequacy of money damages. In any successful action to enforce their rights under this Agreement, any and all successful Parties shall be entitled to reimbursement, upon presentment, of reasonable attorney fees and other out-of-pocket expenses in connection with the enforcement of its rights hereunder. With the exception of the rights retained by WACP Licensee pursuant to Section 3.1(b) of this Agreement, no Party shall have the right to claim any monetary damages beyond out-of-pocket expenses. No Party shall have the right to claim punitive or exemplary damages, or damages for lost business opportunities or diminution of the market value of or revenue potential of its Station.

3.3 Cooperation. The Parties hereto shall cooperate fully with each other in connection with any and all actions required to be taken as part of their respective obligations under this Agreement and take all commercially reasonable actions necessary to secure grants of

the Applications. If additional information is requested by the FCC about any of the Applications, each Party agrees to provide such information as the FCC reasonably requests.

3.4 FCC Actions. If the FCC grants the Applications, each Party shall expeditiously take action to construct the facilities authorized pursuant to its Application and to file with the FCC an application for license to cover the facilities so constructed. The Parties acknowledge that the construction of each Party's new facilities may not be completed at the same time, but all Parties shall be provided with a period of up to 18 months from the grant of the construction permits for upgraded facilities in which to complete construction (the "Construction Period"). Following the expiration of the Construction Period, no Party will object to the commencement of operations with the facilities specified in any of the Applications because its own construction has not been completed, so long as the commencement of operations does not violate any terms or conditions of the grant of any of the Applications. A Party may choose to apply for and construct facilities at a reduced power level from what is outlined in Exhibit 1, provided that such reduced power facilities do not adversely affect the ability of any other Party to obtain or fully effectuate its authorization for, or to operate, the facilities at the power levels set forth in such Party's Application. In that event, the Party that opted for reduced power retains the right to construct facilities at the power levels outlined in Exhibit 1 at any future date and each of the other Parties agrees to not interpose any objection to any subsequent filing to increase power to the full facilities set out in Exhibit 1.

SECTION 4. TERM AND TERMINATION

The term of this Agreement shall begin as of the Effective Date and shall continue in effect until such time as

- (a) this Agreement is terminated by mutual consent in writing;
- (b) any of the Applications is denied by the FCC without the potential for re-filing as described in Section 3.1(a) above; or
- (c) as otherwise provided in Section 3.1 above.

SECTION 5 MISCELLANEOUS

5.1 Notices. All notices, demands, and requests required or permitted to be given under the provisions of this Agreement shall be (a) in writing, (b) delivered by personal delivery, or sent by commercial delivery service, facsimile transmission or registered or certified mail, return receipt requested, (c) deemed to have been given on the date of personal delivery, the date set forth in the records of the delivery service or on the return receipt or on the date sent by facsimile with receipt confirmed by telephone, and (d) addressed as follows:

If to WACP Licensee: 400 N. Ashley Drive, Suite 2500
Tampa, FL 33602
Tel: (813) 286-4140
Fax: _____

With a copy (which shall not constitute notice) to:

David A. O'Connor
Wilkinson Barker Knauer, LLP
1800 M Street, NW, Suite 800N
Washington, DC 20036

If to WVIR Licensee: 503 East Market Street
Charlottesville, VA 22902-5301
Tel: (434) 220-2900
Fax: (434) 229-2916

With a copy (which shall not constitute notice) to:

Anne Goodwin Crump
Fletcher Heald & Hildreth, PLLC
1300 N. 17th Street, Suite 1100
Arlington, VA 22209-3801
Fax: (703) 812-0486

If to KJWP Licensee: 300 East Rock Road
Allentown, PA 18103
Tel: (610) 798-4000
Fax: (610) 791-3000

With a copy (which shall not constitute notice) to:

David D. Oxenford
Wilkinson Barker Knauer, LLP
1800 M Street, NW, Suite 800N
Washington, DC 20036

If to WJLP Licensee: 63 West Parish Road
Concord, NH 03303
Tel: (732) 403-3880
Fax: _____

With a copy (which shall not constitute notice) to:

Dennis P. Corbett
Telecommunications Law Professionals PLLC
1025 Connecticut Avenue, NW, Suite 1011
Washington, DC 20036

or to any other or additional persons and addresses as the parties may from time to time designate in a writing delivered in accordance with this Section 6.1.

5.2 Benefit and Binding Effect. This Agreement shall be binding upon and inure to the benefit of the Parties and their respective heirs, successors and permitted assigns. Any Party may assign its rights and obligations under this Agreement to any successor licensee, and each Party agrees that it shall cause any authorized assignee, transferee or successor in interest to assume all of that Party's respective rights and obligations under this Agreement, and that any purported assignment, transfer or other disposition of any license in violation of this section shall be deemed void and of no force or effect.

5.3 Further Assurances. The parties shall execute any other applications, agreements or documents that may be necessary and desirable to the implementation and consummation of this Agreement.

5.4 Governing Law. This Agreement shall be governed, construed, and enforced in accordance with the laws of the State of Delaware (without regard to the choice of law provisions thereof).

5.5 Headings. The headings herein are included for ease of reference only and shall not control or affect the meaning or construction of the provisions of this Agreement.

5.6 Amendments. This Agreement cannot be amended, supplemented, or changed except by an agreement in writing that makes specific reference to this Agreement and which is signed by the party against which enforcement of any such amendment, supplement, or modification is sought.

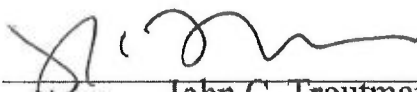
5.7 Counterparts. This Agreement may be signed in counterparts with the same effect as if the signature on each counterpart were upon the same instrument.

[THE REMAINDER OF THIS PAGE IS INTENTIONALLY LEFT BLANK]

[SIGNATURE PAGE TO MUTUAL UPGRADE AGREEMENT]

IN WITNESS WHEREOF, the parties hereto have duly executed this Mutual Upgrade Agreement as of the Effective Date.

WESTERN PACIFIC WACP, LLC

By: 
Name: John C. Troutman
Title: Vice President

VIRGINIA BROADCASTING, LLC

By: _____
Name: Harold B. Wright
Title: Vice-President

MARANATHA BROADCASTING, INC.

By: _____
Name: _____
Title: _____

PMCM TV, LLC

By: _____
Name: _____
Title: _____

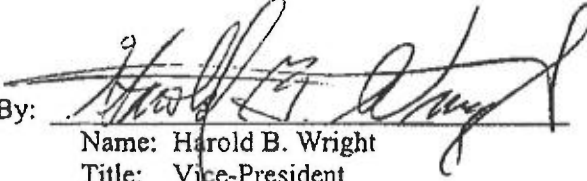
[SIGNATURE PAGE TO MUTUAL UPGRADE AGREEMENT]

IN WITNESS WHEREOF, the parties hereto have duly executed this Mutual Upgrade Agreement as of the Effective Date.

WESTERN PACIFIC WACP, LLC

By: _____
Name:
Title:

VIRGINIA BROADCASTING, LLC

By:  _____
Name: Harold B. Wright
Title: Vice-President

MARANATHA BROADCASTING, INC.

By: _____
Name:
Title:

PMCM TV, LLC

By: _____
Name:
Title:

[SIGNATURE PAGE TO MUTUAL UPGRADE AGREEMENT]

IN WITNESS WHEREOF, the parties hereto have duly executed this Mutual Upgrade Agreement as of the Effective Date.


WESTERN PACIFIC WACP, LLC

By: _____
Name:
Title:

VIRGINIA BROADCASTING, LLC

By: _____
Name:
Title:

MARANATHA BROADCASTING, INC.

By:  _____
Name: **Barry Fisher**
Title: **PRESIDENT & GM**

PMCM TV, LLC

By: _____
Name:
Title:

[SIGNATURE PAGE TO MUTUAL UPGRADE AGREEMENT]

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WESTERN PACIFIC WACP, LLC

By: _____
Name:
Title:

VIRGINIA BROADCASTING, LLC

By: _____
Name:
Title:

MARANATHA BROADCASTING, INC.

By: _____
Name:
Title:

PMCM TV, LLC

By: Robert E. McAllan
Name: Robert E. McAllan
Title: CEO

Exhibit 1

Facilities to be proposed

November 2, 2017

WACP:

North Latitude: 39° 44' 4.00"

West Longitude: 74° 50' 27.00"

NAD-83

ASR # 1042989

Height of antenna radiation center above mean sea level (AMSL): 287.7meters (943.9 feet)

Height of antenna radiation center above average terrain (HAAT): 258.4 meters (847.8 feet)

ERP: 79.4 kW

WVIR-TV:

North Latitude: 37° 59' 01"

West Longitude: 78° 28' 53"

NAD-83

ASR # 1018769

Height of DTV antenna radiation center 534.8 meters above mean sea level (1754.6 feet)

Height of DTV antenna radiation center 362 meters above average terrain (1187.7 feet)

ERP: 79.4 kW

KJWP-TV:

North Latitude: 40° 02' 30.14"

West Longitude: 75° 14' 10.08"

NAD-83

ASR # 1231524

Height of DTV antenna radiation center 378.9 meters above mean sea level (1243.1 feet)

Height of DTV antenna radiation center 310.8 meters above average terrain (1019.69 feet)

ERP: 74.3 kW

WJLP (WTC SITE) - One World Trade Center, The Freedom Tower

North Latitude: 40° 42' 46.8"

West Longitude: 74° 00' 47.3"

NAD-83

ASR # 1263701

Height of DTV antenna radiation center 484.6 meters above mean sea level (~ 1590 feet)

Height of DTV antenna radiation center 476 meters above average terrain (~ 1563 feet)

ERP: 18.11 kW