

**ENGINEERING REPORT
MINOR CHANGE AMENDMENT
APPLICATION to BPH-20070119ACD**

For FM Station

**WPAY-FM - CH281C – 104.1 MHz
Portsmouth, OH
File No. BLH-20060921ADI**

Minor Amendment Change to Class CØ and
implementation of new DA Pattern

February, 2007

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DISCUSSION OF REPORT

This firm was retained to prepare the required engineering report in support of a minor change amendment to application BPH-20070119ACD for FM Station WPAY-FM, Portsmouth, OH, License BLH-20060921ADI. WPAY-FM is currently licensed to operate with 100.0 kW ERP (H)&(V) at 453 m HAAT as a Class C facility on CH281, 104.1 MHz. A downgrade to Class CØ instead of Class C1, as originally proposed, is requested in addition to a drop in antenna height and new DA pattern. The proposed facility will operate with 100.0 kW (H)&(V) at 450 meters HAAT. The facility will continue to serve the community of Portsmouth, OH.

This application is to be processed, pursuant to Section 73.3517(e) of the Rules, with two other contingent applications: (1) WJZK(FM), facility ID #30563, Richwood, OH, which is proposing to relocate and change communities to West Jefferson, OH. It should be noted WJZK(FM) application BPH-20070119ACO is also being simultaneously amended to reflect the community of West Jefferson, OH. WJZK(FM) was originally slated to reflect the community of Grandview Heights, OH, however the amended community of West Jefferson, OH, is now requested; and, (2) WQEL(FM), facility ID #7112, Bucyrus, OH, which is filing an application to change its community of license to Richwood, OH, to replace service that would be lost by the relocation of WJZK(FM), facility ID #30563, Richwood, OH, to West Jefferson, OH. This WPAY-FM amended application is filed as part of a related group of applications to make changes in facilities, and cross-references each of the related applications. This application includes a copy of the agreement to undertake the coordinated facility modifications between the licensee of WJZK(FM) and WQEL(FM) and the licensee of WPAY-FM.

As the existing WPAY-FM facility is licensed solely as a short-spaced §73.213 facility toward WLBC-FM, Muncie, IN, and this amended application proposes to processing under §73.215 as a short-spaced facility toward WJZK(FM) while at the same time maintaining the §73.213 status towards WLBC-FM, a special fully spaced reference point will be employed to meet criteria for §73.215 processing towards WJZK(FM). USGS 7.5 minute topographic mapping of the special reference point has been included in **Exhibit 23.1a**. The special reference point was noted to not be near a state or national park, nor located near an airport or other presumed hazard to air navigation. The reference point meets all the spacing requirements of 47 C.F.R. §73.207 toward other stations in the allocation as noted in **Exhibit 23.1b** assuming the contingent grant of the WJZK(FM) community change application. In addition the special reference point encompasses the community of Portsmouth, OH, with the 59.0 km Principal Community Coverage Contour arc as noted in **Exhibit 23.1c**.

As this WPAY-FM application proposes a change in Class from Class C to Class CØ and is contingent on the physical change to the WJZK(FM) site location and operating parameters, the updated allocation study has been included in **Exhibit 26.1**. WPAY-FM requests concurrent §73.215 filing against and to the contingently filed WJZK(FM) application. Contour protection towards WJZK(FM) has been demonstrated in **Exhibit 30.1**. WPAY-FM requests continued §73.213 processing against WLBC-FM,

DISCUSSION OF REPORT (continued)

Muncie, IN. As the WPAY-FM facility will not be changing locations dropping in Class from Class C to Class CØ, an existing §73.213 short-spacing will be reduced. No interference exists or will exist as a result of this proposal. Full contour protection will be afforded the WLBC-FM facility as noted in **Exhibit 27.1**. WPAY-FM remains fully spaced to the remainder of the allocation.

The WPAY-FM service contours have been calculated in accordance with the Rules, and the data obtained has been tabulated and plotted in this report. The plotted contours are found as **Exhibit 23.4** of this report. The tabulation of the distances to the respective contours shown in this discussion is based on the use of the standard eight cardinal bearings, which were also used for the computation of the HAAT. However, the plotted contours shown in **Exhibit 23.4**, are based on the use of a full 360 terrain radials. The USGS 03 second terrain database has been used in calculation of both HAAT and contour distance computations. This exhibit shows the overall service provided by the 1.0 mV/m and the 3.16 mV/m contour which serves 100.0% of the community of license of Portsmouth, OH.

The proposed twelve bay ERI MP-12AC-DA-HW antenna will be mounted on the present tower bearing Antenna Structure 1250086.

The remainder of the information in this report and exhibit numbering is responsive to the Rules of the Commission, and provides the data for FCC Online Form 301, Section III-B.

The FM Broadcast facility proposed in this application is within the controlled and uncontrolled limits as set forth in the RF Exposure Compliance Worksheets, Worksheet #3, issue May 1999. A copy of Worksheet #3 will be supplied upon request. The RF radiation will not result in human exposure to radiofrequency radiation in excess of the applicable safety standards specified in §1.1307(b) of the Commission's rules. The facility will be properly marked with signs, and entry will be restricted by means of fencing with locked doors and/or gates. Any other means as may be required to protect employees and the general public will be employed.

In the event work would be required in proximity to the antenna such that the person or persons working in the area would be potentially exposed to fields in excess of the guidelines set forth in OET Bulletin No. 65 (Edition 97-01), the transmitter power will be reduced or the station will cease operation during the critical period.

This instant application does not propose a change in communities of license, therefore Section 307(b) showings are not required.

DISCUSSION OF REPORT (continued)

DISTANCES TO CONTOURS: The table below shows the distances to the 3.16 mV/m and 1.0 mV/m contours from the proposed facility using an ERP of 100.0 kW at an HAAT of 450 meters. These distances have been calculated based on the FCC F(50 50) curves.

N. Lat. = 384100.0 W. Lng. = 830046.0							
HAAT and Distance to Contour - FCC Method - USGS 03 SEC							
Azi.	AV EL	HAAT	ERP kW	dBk	Field	60-F5	70-F5

000	173.5	502.5	23.0400	13.62	0.480	71.35	47.96
045	195.7	480.3	73.7022	18.67	0.859	82.49	57.90
090	197.4	478.6	100.0000	20.00	1.000	85.40	60.81
135	239.4	436.6	100.0000	20.00	1.000	82.45	58.31
180	262.9	413.1	100.0000	20.00	1.000	80.73	56.99
225	262.4	413.6	100.0000	20.00	1.000	80.77	57.02
270	230.6	445.4	100.0000	20.00	1.000	83.10	58.81
315	244.4	431.6	47.0596	16.73	0.686	74.15	50.86
Ave El= 225.80 M HAAT= 450.20 M AMSL= 676							