

WRBJ-FM

APPLICATION FOR NEW ON-CHANNEL BOOSTER

This technical statement and attached exhibits have been prepared on behalf of Roberts Radio Broadcasting, LLC (“Roberts”), Licensee of station WRBJ-FM, Channel 249A, Brandon, MS, Facility identifier 73959 for an on-channel FM booster to cover the community of Jackson, MS. Roberts is requesting this booster following successful experimentation of synchronized and geotargeted boosters for WRBJ-FM.

FACILITIES REQUESTED

The requested facility will operate within the 60dBu contour of WRBJ-FM. A map showing the coverage of this booster in relationship to the WRBJ-FM signal is shown in Exhibit A. The antenna proposed is a Jampro single element, single level log-periodic antenna rotated 45 degrees from vertical to achieve slant H+V polarization. The Azimuth Pattern is attached as Exhibit C.

TECHNICAL SPECIFICATIONS

Booster Location:	Jackson, MS (“Derrick site”)
ASR	NONE (TOWAIR Exhibit D)
Geographic Coordinates (NAD83):	32°16’35.8” N, 90° 09’ 54.4” W
Channel:	249 (97.7 MHz)
Effective Radiated Power:	250 W (H+V)
Antenna Type, Pattern:	Jampro JAVA 1 (Exhibit C)
Antenna Orientation:	295° True
Site Height AMSL	80m
Tower OAGL	28m
Antenna Height :	
Above ground:	24m
Above mean sea level:	104m

As shown in Exhibit A the 60dBu contour of the booster will fall inside the 60dBu contour of WRBJ-FM (249A) and is thus compliant with 74.1232(f). As shown in Exhibit B, the proposed booster will provide interference protection to all first adjacent channel stations because the first adjacent interfering contours are within the WRBJ-FM interfering contours. WRBJ-FM not short-spaced to any first adjacent stations. There is no IF spacing issue from this location.

ENVIRONMENTAL CONSIDERATIONS

The Booster will be attached at the 24m height on an existing 28m derrick structure. Because there will be no modifications to this tower it is exempt from environmental processing under CFR Section 1.1306.

The proposed WRBJ-FM booster antenna was evaluated for RF energy at ground level. The closest antenna type for analysis is a EPA Type 2 antenna. As such, the estimated RF at 2m AGL is expected to be $9.5\mu\text{W}/\text{cm}^2$, or less than 4.8% of the maximum allowable $200\mu\text{W}/\text{cm}^2$ NIER. Since this is under 5% of the maximum allowable NIER, it is believed that this facility is exempt from further environmental assessment under 47CFR 1.1306 and 1.1307.

The applicant agrees to reduce power or cease operations when it becomes necessary if workers are near the antenna in order to ensure that they will not be exposed to levels of radio frequency electromagnetic radiation that exceed FCC guidelines.

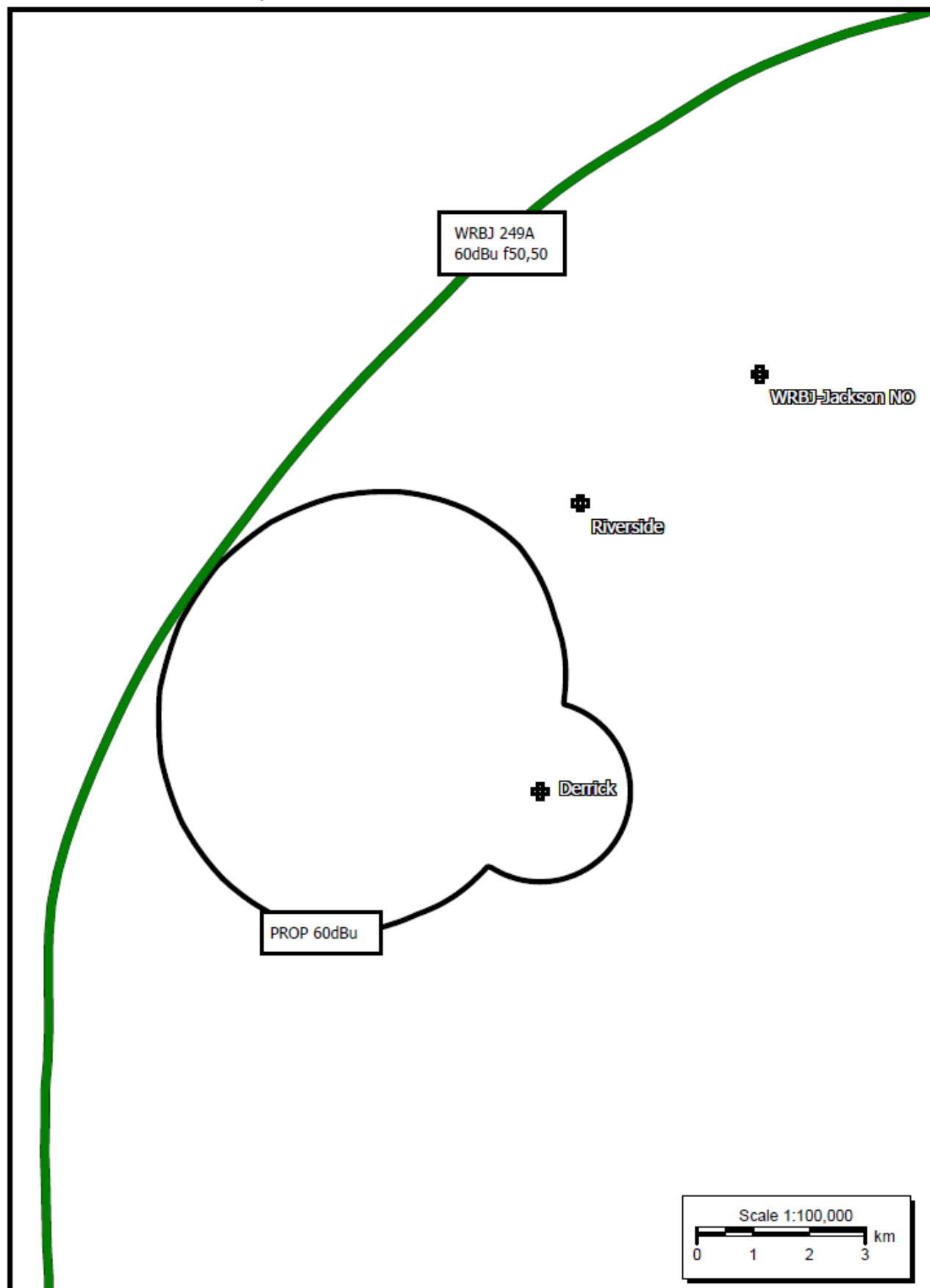
CERTIFICATION

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



Bertram S. Goldman
Goldman Engineering Management

Proposed 60dBu Contour within 60dBu of Main



Proposed 54dBu f50,10 Interfering Contour Comparison

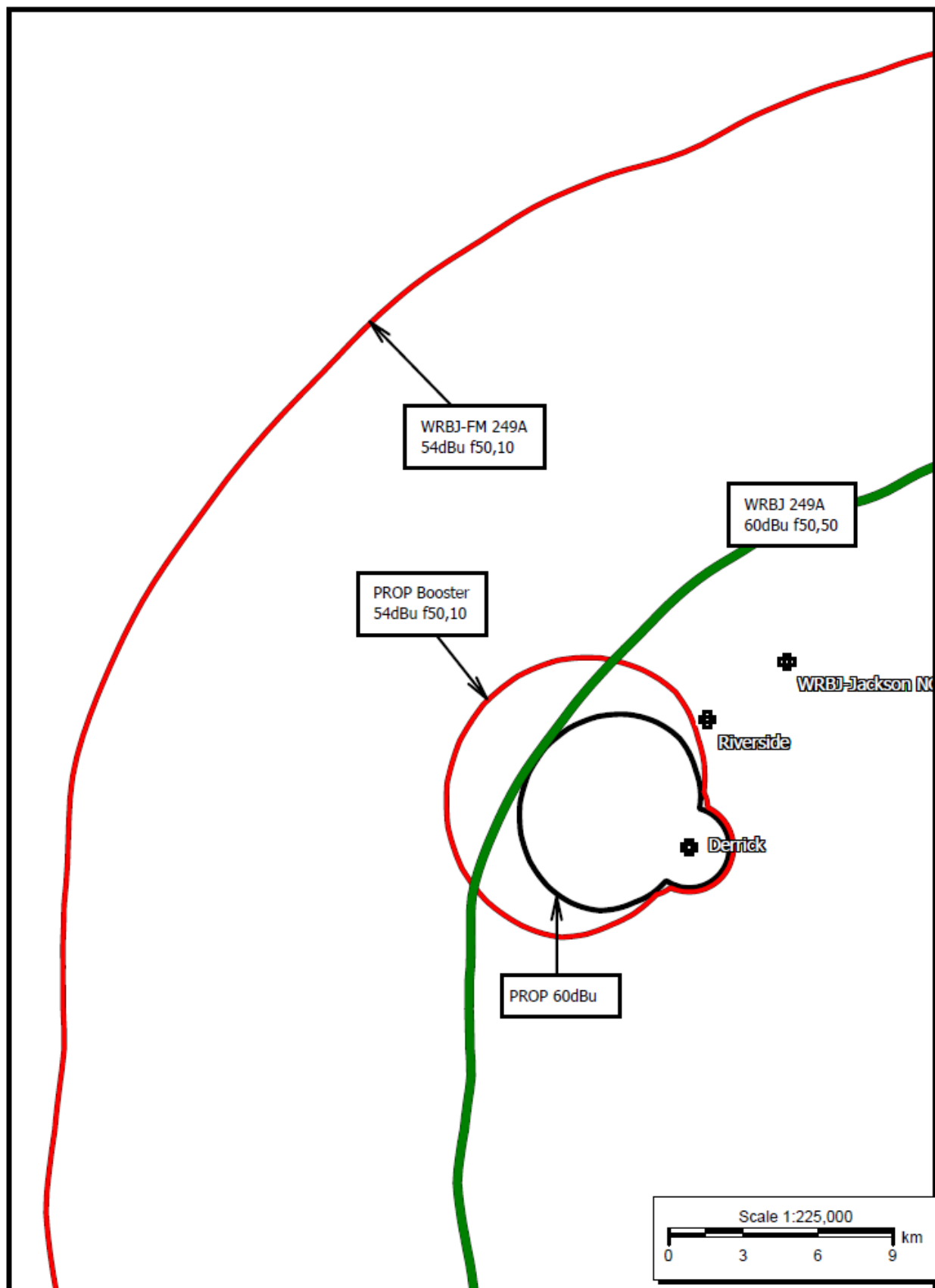
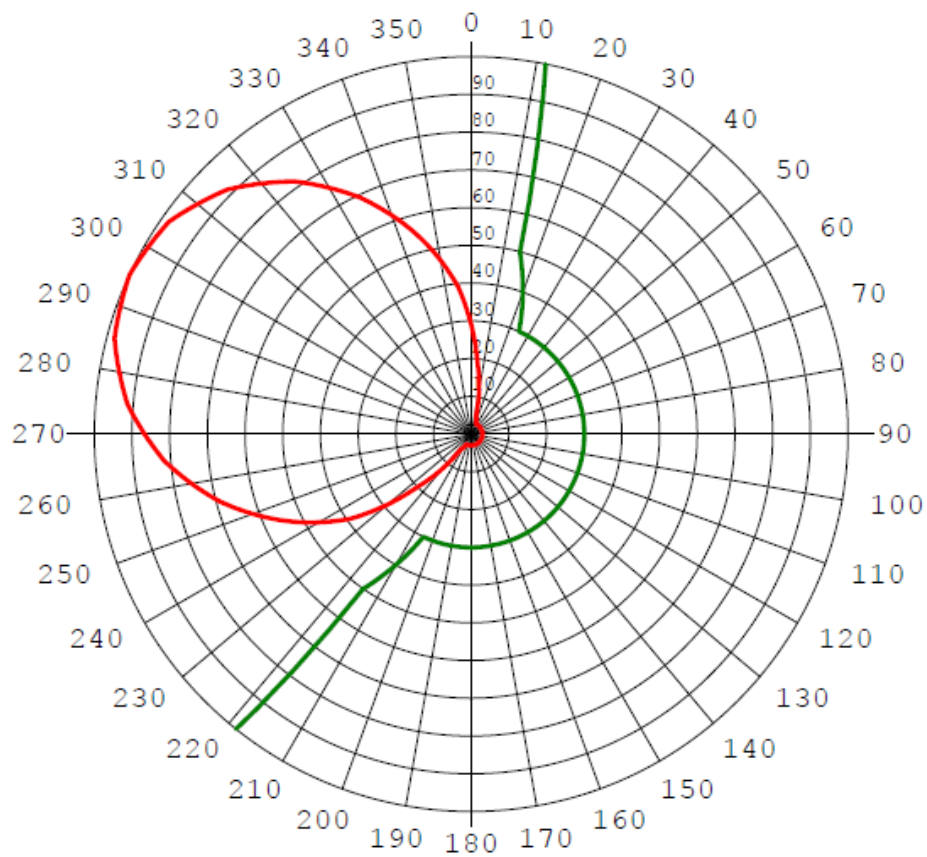


EXHIBIT C- Antenna Pattern



Azi	Rel	dBk	kW	dB	Azi	Rel	dBk	kW	dB
0	0.290	-16.77	0.021	-10.75	180	0.030	-36.48	0.000	-30.46
10	0.120	-24.44	0.004	-18.42	190	0.030	-36.48	0.000	-30.46
20	0.040	-33.98	0.000	-27.96	200	0.030	-36.48	0.000	-30.46
30	0.030	-36.48	0.000	-30.46	210	0.040	-33.98	0.000	-27.96
40	0.030	-36.48	0.000	-30.46	220	0.120	-24.44	0.004	-18.42
50	0.030	-36.48	0.000	-30.46	230	0.290	-16.77	0.021	-10.75
60	0.030	-36.48	0.000	-30.46	240	0.467	-12.63	0.055	-6.61
70	0.030	-36.48	0.000	-30.46	250	0.617	-10.21	0.095	-4.19
80	0.030	-36.48	0.000	-30.46	260	0.754	-8.48	0.142	-2.46
90	0.030	-36.48	0.000	-30.46	270	0.867	-7.27	0.188	-1.24
100	0.030	-36.48	0.000	-30.46	280	0.948	-6.48	0.225	-0.46
110	0.030	-36.48	0.000	-30.46	290	0.990	-6.11	0.245	-0.09
120	0.030	-36.48	0.000	-30.46	300	0.990	-6.11	0.245	-0.09
130	0.030	-36.48	0.000	-30.46	310	0.948	-6.48	0.225	-0.46
140	0.030	-36.48	0.000	-30.46	320	0.867	-7.27	0.188	-1.24
150	0.030	-36.48	0.000	-30.46	330	0.754	-8.48	0.142	-2.46
160	0.030	-36.48	0.000	-30.46	340	0.617	-10.21	0.095	-4.19
170	0.030	-36.48	0.000	-30.46	350	0.467	-12.63	0.055	-6.61

Rotation Angle = 0

TOWAIR Determination Results

A routine check of the coordinates, heights, and structure type you provided indicates that this structure does not require registration.

*** NOTICE ***

TOWAIR's findings are not definitive or binding, and we cannot guarantee that the data in TOWAIR are full current and accurate. In some instances, TOWAIR may yield results that differ from application of the criteria set out in 47 C.F.R. Section 17.7 and 14 C.F.R. Section 77.13. A positive finding by TOWAIR recommending notification should be given considerable weight. On the other hand, a finding by TOWAIR recommending either for or against notification is not conclusive. It is the responsibility of each ASR participant to exercise due diligence to determine if it must coordinate its structure with the FAA. TOWAIR only one tool designed to assist ASR participants in exercising this due diligence, and further investigation may be necessary to determine if FAA coordination is appropriate.

DETERMINATION Results							
PASS SLOPE(100:1): NO FAA REQ-RWY MORE THAN 10499 MTRS & 7675.77 MTRS (7.67579 KM) AWAY							
Type	C/R	Latitude	Longitude	Name	Address	Lowest Elevation (m)	Runway Length (m)
AIRP	R	32-19-51.00N	090-12-57.00W	HAWKINS FLD	HINDS JACKSON, MS	93.2	1642.0
PASS SLOPE(100:1): NO FAA REQ-RWY MORE THAN 10499 MTRS & 7781.84 MTRS (7.78179 KM) AWAY							
Type	C/R	Latitude	Longitude	Name	Address	Lowest Elevation (m)	Runway Length (m)
AIRP	R	32-19-44.00N	090-13-13.00W	HAWKINS FLD	HINDS JACKSON, MS	93.2	1642.0
Your Specifications							
NAD83 Coordinates							
Latitude						32-16-35.9 north	
Longitude						090-09-54.4 west	
Measurements (Meters)							
Overall Structure Height (AGL)						28	
Support Structure Height (AGL)						0	
Site Elevation (AMSL)						80	
Structure Type							
RIG - Oil or other type of Rig							