

**TECHNICAL REPORT
MINOR MODIFICATION TO
W250BC**

This technical report has been developed in support of a minor modification to licensed translator W250BC (facility ID # 158597). The facility will be moved to an existing tower (ASR#1223132) as a fill in translator for FM station WNNX (facility ID#6809) with an ERP of 250 watts. E1A demonstrates 60 dBu overlap with the licensed facility.

The data for all terrain utilized in this report and application exhibits were obtained from the V-Soft FMCommander and Probe 3 computer program utilizing the V-Soft 30 second terrain database. The following exhibits are provided to support the modification of the facility:

- E1 Channel Overlap Study**
- E1A 60 dBu overlap of proposed and licensed W250BC facilities.**
- E1B WSB-FM interference contour plot**
- E2 W250BC and WNNX 60 dBu plot**
- E3 HAAT Calculation**
- E4 Aerial photo of tower site**
- E5 Tower ASR**

Allocation analysis and WSB-FM Interference Calculation:

Exhibit E1 and E1B demonstrate that the proposed facility does not cause interference to any protected facilities. The WAY-FM translator applications on 251D at Floyd, GA are dismissed in a separate action. The proposed W250BC facility is located well inside the WSB-FM 60 dBu contour. Therefore, the interference ratio is utilized to determine the actual W250BC interference contour, in accordance with FCC-02-244, paragraph 12. Exhibit E1B shows that WSB-FM places a 109.35 dBu (50,50) contour at the W250BC tower site. Adding the 40 dBu 3rd adjacent channel interference ratio yields an interfering contour of 149.35 dBu (50,10) at 3.8 meters. Therefore, it is obvious that the interference contour will not encompass any buildings or roads where radio reception is possible. In fact, the proposed antenna is at an elevation of 324 meters AGL on an existing tower and will not reach the ground. Exhibit E4 shows that there are no tall

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buildings or highways within 3.8 meters. **A waiver of section 74.1204 is requested in accordance with well-established Commission precedent.**

W250BC Antenna and RF exposure calculation:

W250BC will be located at a COR AGL of 324meters on an existing tower, ASR no. 1223132, using a one bay Dielectric DCBR-03-1FM panel antenna at coordinates:

33-48-26 N 84-20-22 W (NAD 27).

The RF contribution from the 0.250 kW facility was evaluated using the formula:

$$S \text{ (RF in microwatts/cm}^2\text{)} = \frac{33.4 \text{ (F2 - Vert Factor)} \times \text{(H ERP + V ERP in watts)}}{R^2 \text{ (distance to radiation center in meters).}}$$

Based on a worst case F factor of 1.0, the RF contribution was calculated to be 0.15 μ Watts/cm² or 0.075% of the general public exposure limit, and well below the 5% level that is excluded from consideration.

Conclusion:

It is concluded that the minor modification of W250BC will comply with all Commission rules and policies.



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E1 W250BC CHANNEL STUDY

REFERENCE
33 48 26.0 N.
84 20 22.0 W.

CH# 250D - 97.9 MHz, Pwr= 0.25 kW, HAAT= 323.5 M, COR= 588 M
Average Protected F(50-50)= 23.4 km
Omni-directional

DISPLAY DATES
DATA 12-12-08
SEARCH 12-12-08

CH CITY	CALL	TYPE STATE	ANT	AZI <--	DI ST FILE #	LAT LNG	PWR(kW) HAAT(M)	INT(km) COR(M)	PRO(km) LICENSEE	*IN* (Overlap in km)	*OUT*
250D Rivdale	W250BC	LIC GA	_C_	180.3 0.3	27.1 BLFT20080229ACD	33 33 45.4 84 20 27.9	0.006	17.5 382	5.4 Extreme Media Group, Lic	-13.0	-46.6
253C0 Atlanta	AL1313	RSV GA	---	175.3 355.3	5.3 RM10660	33 45 33.0 84 20 05.0	100.000 450	12.2 731	83.6	-29.7*	-79.4*(1)
253C0 Atlanta	WSB-FM	LIC GA	_CN	175.3 355.3	5.3 BLH19980903KB	33 45 33.0 84 20 05.0	100.000 313	10.4 594	73.5 Cox Radio, Inc.	-29.9*	-69.3*(2)
251D Floyd	633357	APP GA	_C_	275.1 95.0	19.8 BNPFT20030311AOP	33 49 22.0 84 33 09.0	0.010	9.5 386	6.7 Way-fm Media Group, Inc.	-13.6*	-27.8 (3)
251D Floyd	633361	APP GA	_C_	275.1 95.0	19.8 BNPFT20030311AOS	33 49 22.0 84 33 09.0	0.010	9.5 386	6.7 Way-fm Media Group, Inc.	-13.6*	-27.8 (3)
248C3 Fayetteville	WPZE	LIC GA	_C_	212.8 32.7	41.7 BMLH20021031ABB	33 29 29.0 84 35 00.0	7.900 175	3.7 448	38.3 Roa Licenses, Lic	15.8	2.3
249C3 Rome	WGPN	LIC GA	ZC_	300.3 119.8	94.9 BMLED20080118AAD	34 14 05.0 85 13 48.0	4.300 241	56.8 459	38.2 Georgia Public Telecommuni	15.0	22.2
249C3 Rome	WGPN	CP GA	ZCX	300.3 119.8	94.9 BPED20080409ACJ	34 14 05.0 85 13 48.0	4.300 241	56.8 459	38.2 Georgia Public Telecommuni	15.0	22.2
249C3 Rome	WGPN	LIC GA	ZCX	300.3 119.8	94.9 BMLED20080407ABR	34 14 05.0 85 13 48.0	4.200 241	56.5 459	38.0 Georgia Public Telecommuni	15.3	22.4
250D Athens	W250AC	LIC GA	_CN	80.0 260.5	90.3 BLFT19950505TH	33 56 41.0 83 22 39.0	0.027 56	18.3 277	5.6 Georgia Public Telecommuni	49.9	17.8
251C3 Hogansville	WMGP	LIC GA	ZC_	214.9 34.6	100.3 BLH19990927AAJ	33 03 54.0 84 57 23.0	25.000 100	59.4 326	38.4 Citicasters Licenses, L.p.	18.8	28.6
250C3 Fort Valley	WIBB-FM	LIC GA	_CN	158.3 338.7	147.6 BMLH19990112KB	32 34 12.0 83 45 26.0	10.500 152	101.0 271	36.5 Amfm Radio Licenses, L.I.c	23.6	41.3
248D Cumming	639042	APP GA	_C_	19.4 199.5	50.8 BNPFT20030314AIA	34 14 18.0 84 09 19.0	0.010	0.2 549	8.4 Community Public Radio, In	28.0	41.2
251C0 Seneca	WHZT	LIC SC	_CN	51.4 232.2	158.3 BLH19980629KB	34 41 15.0 82 59 13.0	100.000 304	107.0 554	73.8 Cox Radio, Inc.	28.7	51.3
250A Oxford	WVOK-FM	LIC AL	_C_	262.2 81.3	143.5 BLH20010406AAJ	33 37 20.0 85 52 19.0	0.510 338	81.0 564	28.5 Woodard Broadcasting Co.,	38.9	43.8

(1) WSB-FM historic allocation point does not require protection.

(2) WSB-FM protected based on interference ratio (see E1B and technical report narrative).

(3) WAY-FM applications dismissed in separate action.

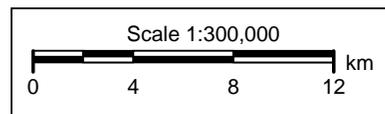
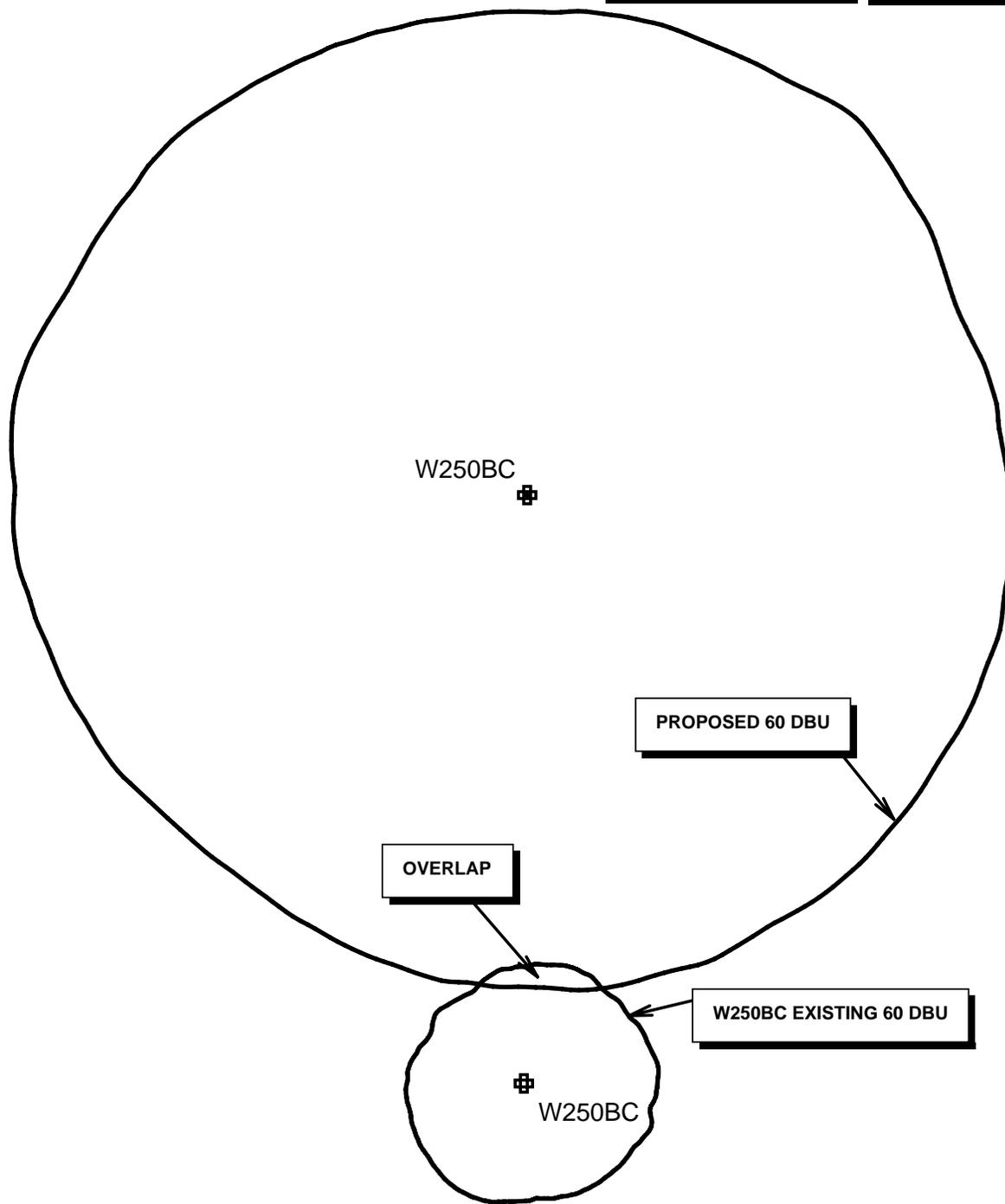
**E1A W250BC PROPOSED
60 DBU OVERLAP TO
LICENSED FACILITY**

W250BC PROPOSED

Latitude: 33-48-26 N
Longitude: 084-20-22 W
ERP: 0.25 kW
HAAT: 302 m
Channel: 250
Frequency: 97.9 MHz
RCAMSL Height: 588.0 m
Site Elevation: 264.0 m
Horiz. Pattern: Omni

W250BC

BLFT20080229ACD
Latitude: 33-33-45.40 N
Longitude: 084-20-27.90 W
ERP: 0.006 kW
HAAT: 0.0 m
Channel: 250
Frequency: 97.9 MHz
RCAMSL Height: 382.0 m
Site Elevation: 280.0 m
Horiz. Pattern: Omni



North Atlanta

E1B W250BC AND WSB-FM INTERFERENCE PLOT

W250BC
Latitude: 33-48-26 N
Longitude: 084-20-22 W
ERP: 0.25 kW
HAAT: 302 m
Channel: 250
Frequency: 97.9 MHz
RCAMSL Height: 588.0 m
Site Elevation: 264.0 m
Horiz. Pattern: Omni

WSB-FM
BLH19980903KB
Latitude: 33-45-33 N
Longitude: 084-20-05 W
ERP: 100.00 kW
HAAT: 313.0 m
Channel: 253
Frequency: 98.5 MHz
RCAMSL Height: 594.0 m
Site Elevation: 302.0 m
Horiz. Pattern: Omni
Vert. Pattern: No
Prop Model: None

W250BC INTERFERING CONTOUR = 149.35 dBu = 3.8 METERS

WSB-FM 109.35 (50,10) DBU

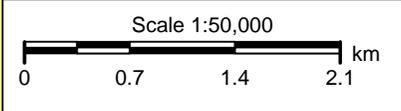
W250BC

North Decatur

Druid Hills

Decatur

WSB-FM



**E2 W250BC PROPOSED
60 DBU CONTAINED WITHIN
WNNX LICENSED 60 DBU**

W250BC PROPOSED

Latitude: 33-48-26 N
Longitude: 084-20-22 W
ERP: 0.25 kW
HAAT: 302 m
Channel: 250
Frequency: 97.9 MHz
RCAMSL Height: 588.0 m
Site Elevation: 264.0 m
Horiz. Pattern: Omni

WNNX 60 DBU

W250BC PROPOSED 60 DBU

W250BC
WNNX

34-00-00 N

33-40-00 N

33-20-00 N

084-2

Scale 1:500,000



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E3 HAAT AND 60 DBU TABULATION

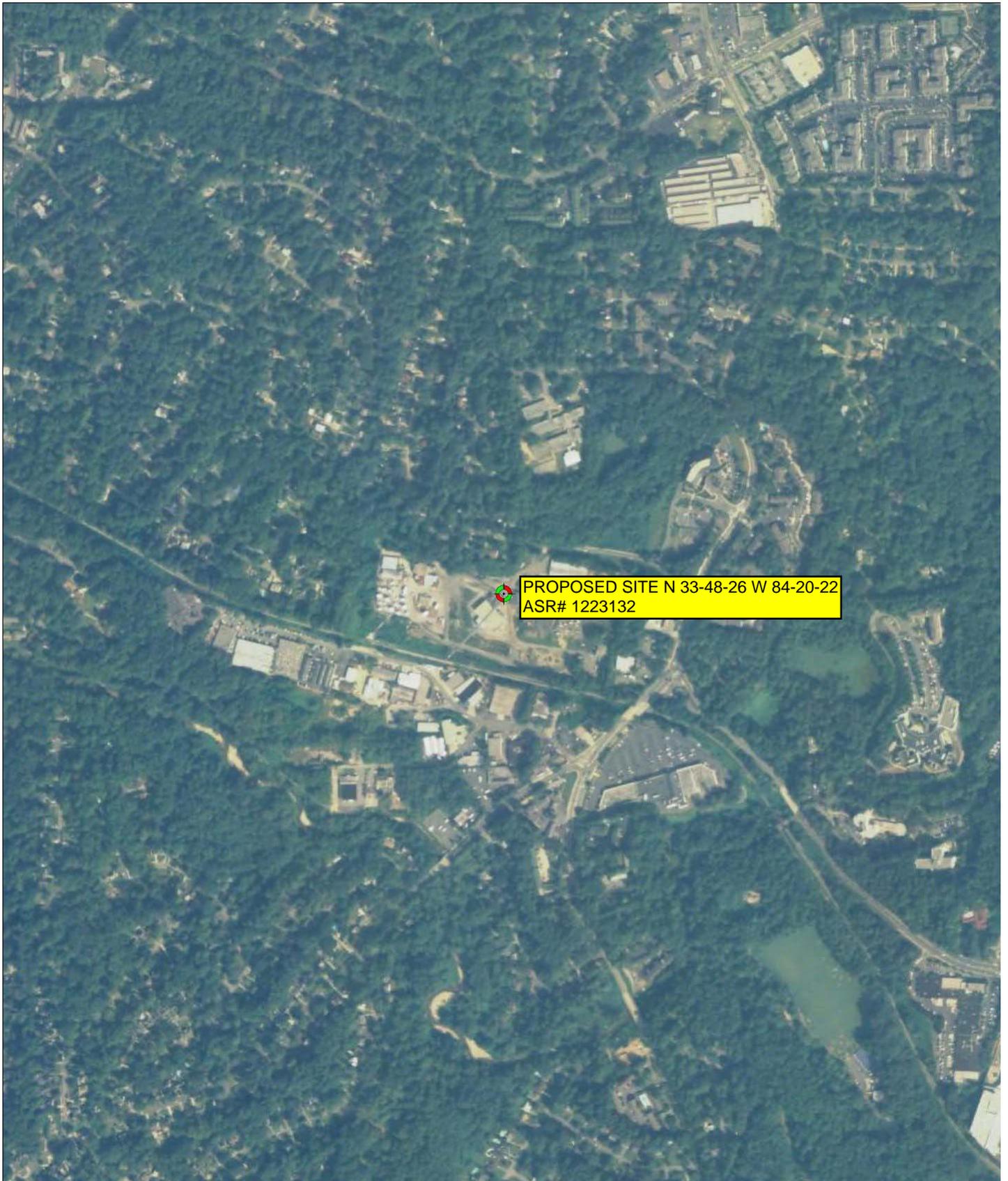
N. Lat. = 334826.0 W. Lng. = 842022.0
HAAT and Distance to Contour
FCC, FM 2-10 Mi, 51 pts Method - NGDC 30 SEC

Azi. AV EL HAAT ERP kW 60-F5

000	295.5	292.5	0.2500	22.28
030	288.7	299.3	0.2500	22.53
060	304.2	283.8	0.2500	21.96
090	297.0	291.0	0.2500	22.23
120	286.2	301.8	0.2500	22.62
150	281.7	306.3	0.2500	22.79
180	284.4	303.6	0.2500	22.69
210	297.8	290.2	0.2500	22.20
240	280.0	308.0	0.2500	22.85
270	258.3	329.7	0.2500	23.61
300	272.8	315.2	0.2500	23.11
330	285.7	302.3	0.2500	22.64

Ave El= 286.03 M HAAT= 301.97 M AMSL= 588 M

E4 AERIAL PHOTOGRAPH OF PROPOSED SITE



0 ————— 0.2 Mi
0 ————— 1000 Ft

E5 Registration 1223132

 [Map Registration](#)

Registration Detail

Reg Number	1223132	Status	Constructed
File Number	A0425886	Constructed	03/27/2002
FAA Study	00-ASO-8684-OE	EMI	Yes
FAA Issue Date	01/18/2001	NEPA	No

Antenna Structure

Structure Type TOWER - Free standing or Guyed Structure used for Communications Purposes

Location (in NAD83 Coordinates)

Lat/Long 33-48-26.4 N 084-20-21.5 W 1800 Briarcliff Road NE
City, State Atlanta , GA
Center of AM Array

Heights (meters)

Elevation of Site Above Mean Sea Level	Overall Height Above Ground (AGL)
264.3	360.3
Overall Height Above Mean Sea Level	Overall Height Above Ground w/o Appurtenances
624.6	321.9

Painting and Lighting Specifications

FAA Chapters 4, 9, 12
Paint and Light in Accordance with FAA Circular Number 70/7460-1K

Owner & Contact Information

FRN	0006154249	Licensee ID	L00167959
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Owner

Richland Towers, Inc.
4890 West Kennedy Blvd., Suite 920
Tampa , FL 33609

P: (813)286-4140
E:

Contact

4890 West Kennedy Blvd., Suite #920
Tampa , FL 33609

P: (813)286-4140
E:

Last Action Status

Status	Constructed	Received	01/24/2005
Purpose	Notification	Entered	01/24/2005
Mode	Interactive		

Related Applications

01/24/2005 A0425886 - Notification (NT)
01/15/2004 A0360461 - Admin Update (AU)
03/08/2001 A0173831 - Admin Update (AU)
Related applications (4)