



ENGINEERING STUDY

WSCL(FM)

Application for a Minor License Modification

Channel 208B (89.5MHz)

Salisbury, MD

Facility ID 58660

May 2020

WSCL (FM)

Application for a Minor License Modification

TECHNICAL STATEMENT

This technical statement and attached exhibits were prepared on behalf of Salisbury University, licensee of radio station WSCL (FM), Channel 208B, Salisbury, MD. WSCL seeks to increase power from 36kW to 45kW at their current tower location.

ALLOCATION

The proposed operation will utilize a non-directional antenna and will meet all contour protection requirements toward other stations. The allocation study attached as Exhibit A indicates that four facilities are close enough to warrant close examination, WNJB (207A), WYPA (208A), WPFW, (207B) and WXMD (209A). The map demonstrating compliance is attached as Exhibit B. It is noted that all contours to and from each facility noted have been computed using FCC 30 second terrain data. Exhibit B1 demonstrates that the closest interfering contour, WSCL (208B) to WNJB (207A) does not overlap with the protected WNJB 60dBu contour.

The proposed facility is not within 320km of any common border between the US and Mexico or Canada.

Exhibit C demonstrates that the proposed 60dBu noncommercial station's contour will completely encompass the Salisbury, MD Community of License.

The ASR Registration for the facility is attached as Exhibit D.

Proposed Facility Specifications

Coordinates (NAD83)	38°-40'-00" N Latitude, 75°-34'-59" W Longitude
Tower ASR	1049463
Tower Overall AGL	158.5m
Site AMSL	8.8m
Antenna COR AGL	136m
Antenna COR AMSL	144.8m
Antenna HAAT	135.7m
Antenna Pattern	NON-Directional
Proposed Antenna	ERI SHPX-6AE
ERP	45kW

TV CHANNEL 6 PROTECTION

The proposed facility will have no impact on any full power TV channel 6 facility.

ENVIRONMENTAL CONSIDERATIONS

The proposed WSCL antenna will operate at a maximum power level of 45kW H+V and will operate at 136m AGL. WSCL proposes to operate with a 6-bay, full-wave spaced non-directional antenna. Based upon the FCC online calculator "FM Model"¹ Power Density vs. Distance calculator using an EPA Type 3 Opposed U Dipole antenna, the maximum power density at 2m AGL is expected to be 11.4 μ W/cm² at 43 meters from the tower base, or 6% of the permitted 200 μ W/cm² limit for uncontrolled exposure. There are no tall buildings within 500m of the proposed tower and there are no other non-excluded facilities operating on the tower. Based upon the preceding, it is believed that the modified WSCL-FM facility will be in compliance with environmental requirements.

¹ <https://www.fcc.gov/general/fm-model>

Radio station WSCL (FM) along with other users at the site will maintain an occupational safety policy and agrees to reduce power or cease operation during periods of maintenance to avoid potentially harmful exposure of personnel to non-ionizing RF radiation.

Respectfully Submitted

A handwritten signature in cursive script that reads "Bert Goldman". The signature is written in black ink and is positioned above the printed name.

Bert Goldman
Technical Consultant

EXHIBIT A- Allocation Study

ComStudy 2.2 search of channel 208 (89.5 MHz Class B) at 38-40-00 N, 75-34-59 W.

CALL	CITY	ST CHN CL	DIST	SEP	BRNG	CLEARANCE	
WNJB-FM	BRIDGETON	NJ 207 A	95.47	113.00	22.5	0.06 dB	Exhibit B
WYPA	CHERRY HILL	NJ 208 A	147.48	178.00	20.1	0.67 dB	Exhibit B
WPFW LIC	WASHINGTON	DC 207 B	134.44	169.00	283.4	1.80 dB	Exhibit B
WXMD	CALIFORNIA	MD 209 B1	97.55	145.00	249.1	1.51 dB	Exhibit B
WPFW CP	WASHINGTON	DC 207 B	134.45	169.00	283.4	1.30 dB	Exhibit B
WTMD	TOWSON	MD 209 B1	120.32	145.00	313.2	3.20 dB	
WLJV CP	SPOTSYLVANIA	VA 208 B1	173.91	211.00	255.2	4.32 dB	
WLJV LIC	SPOTSYLVANIA	VA 208 A	180.49	178.00	253.8	5.38 dB	
WITF-FM	HARRISBURG	PA 208 B	216.72	241.00	329.8	6.11 dB	
WHRV	NORFOLK	VA 208 B	221.54	241.00	201.7	6.41 dB	
WITF-FM	HARRISBURG	PA 208 B	216.72	241.00	329.8	6.41 dB	
WGLS-FM	GLASSBORO	NJ 209 A	116.78	113.00	12.0	7.44 dB	
WNJN-FM	ATLANTIC CITY	NJ 209 A	117.62	113.00	41.0	9.64 dB	
WWCJ	CAPE MAY	NJ 206 B1	87.30	71.00	54.0	15.96 dB	
WRTJ	COATESVILLE	PA 207 A	152.00	113.00	352.6	15.37 dB	
W262BF	GEORGETOWN	DE 262 D	16.17	0.00	73.6	16.2	
WJPH CP	WOODBINE	NJ 210 A	90.02	69.00	42.6	18.07 dB	
WSOU	SOUTH ORANGE	NJ 208 A	257.37	178.00	26.0	18.42 dB	
WWPJ	PEN ARGYL	PA 208 A	244.68	178.00	5.6	18.82 dB	
WJPH LIC	WOODBINE	NJ 210 A	93.07	69.00	42.5	19.48 dB	
WRDV	WARMINSTER	PA 207 A	175.69	113.00	13.3	20.17 dB	
WRIQ	CHARLES CITY	VA 209 B	202.00	169.00	231.7	22.42 dB	

LMS DATA AS OF 5/11/2020

EXHIBIT B Allocation Contours

WSCL, 208B Salisbury, MD Allocation Contours (45kW @ 136m AGL)

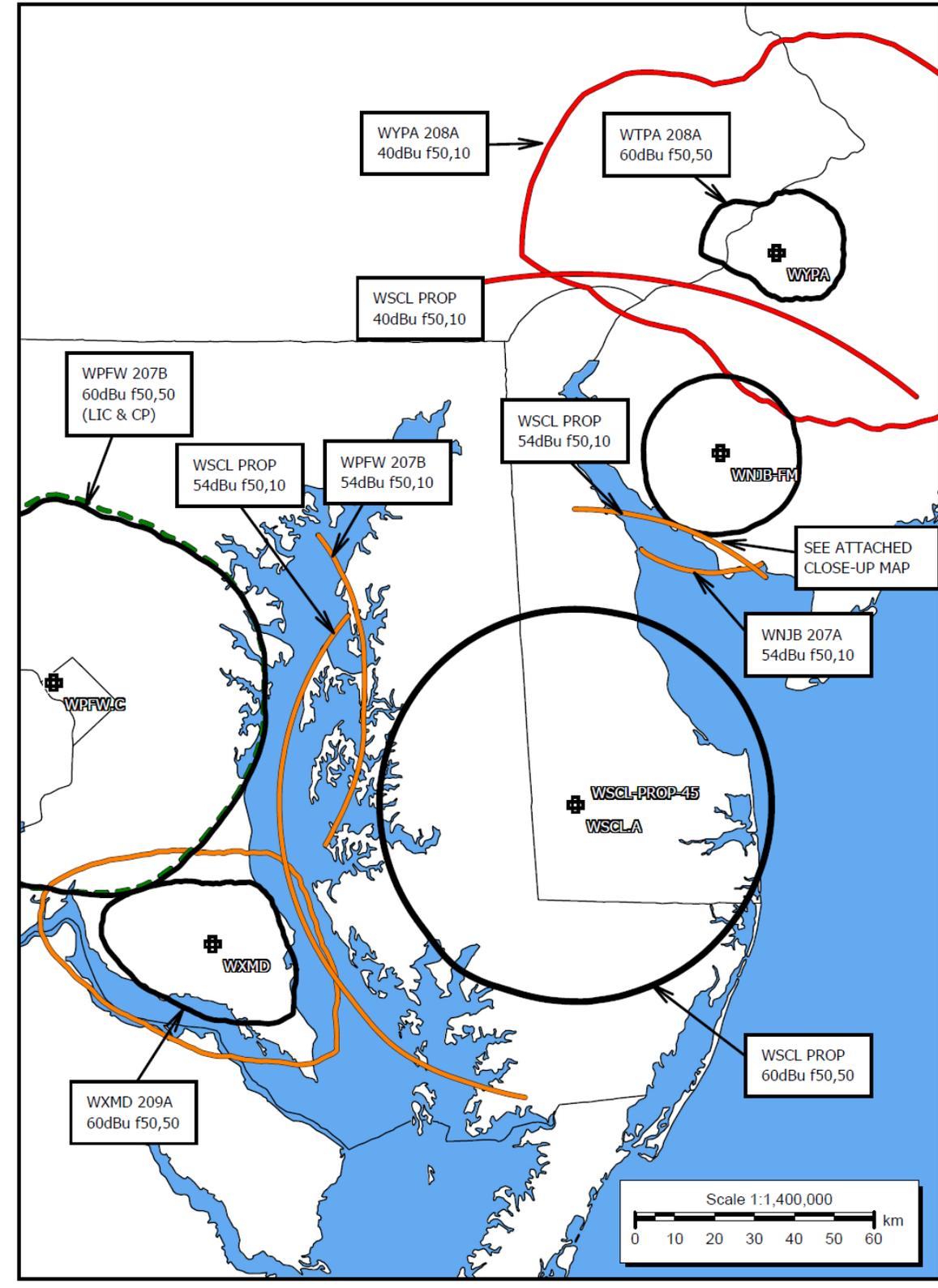


EXHIBIT B1 Allocation Contours to WNJB (207A)

Licensed Vs Proposed WSCL (45kW @ 136m AGL)

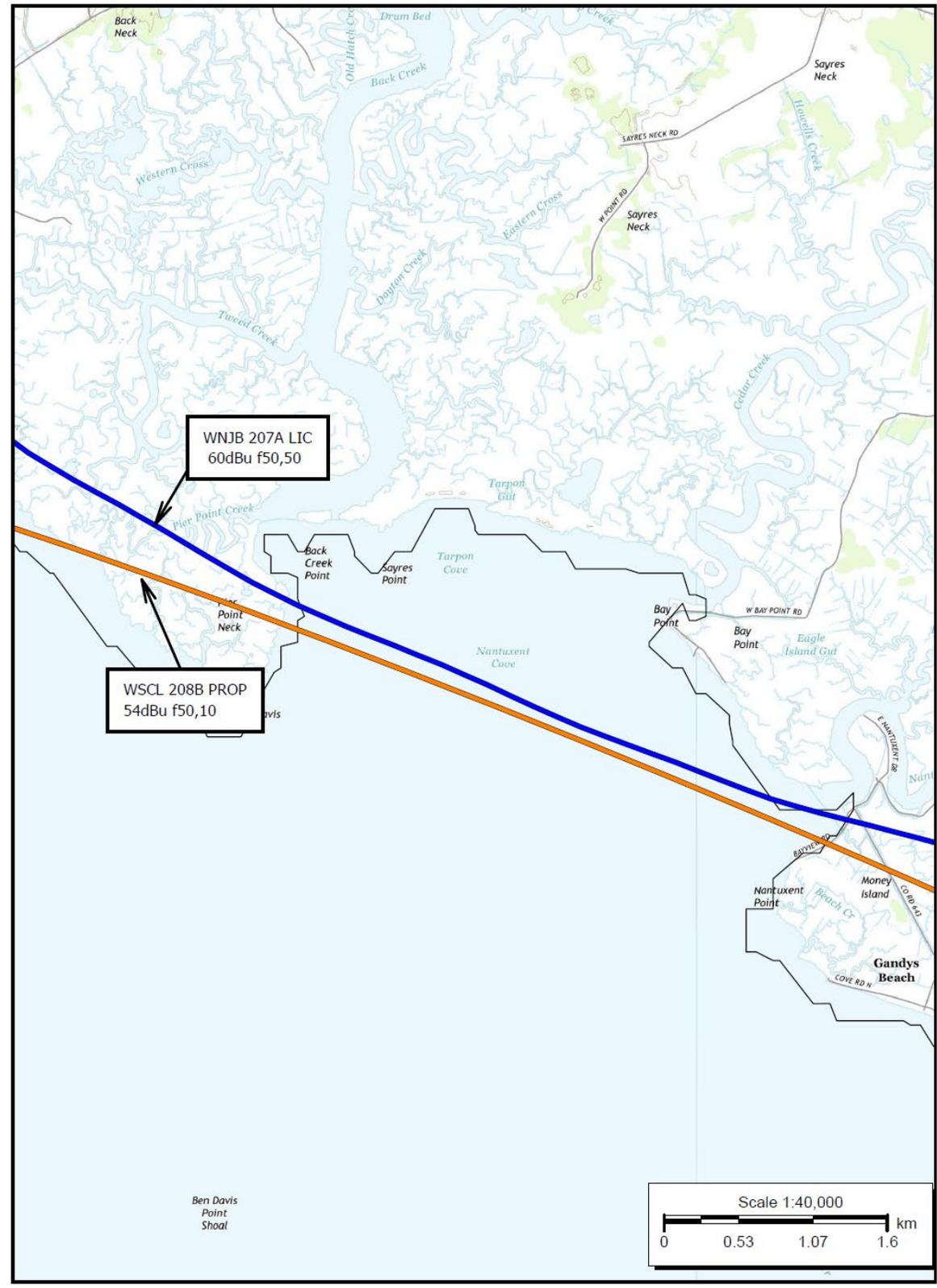


EXHIBIT C Community Coverage, Salisbury, MD

WSCL (36kW @ 136m HAAT) VS 45kW, Community Coverage

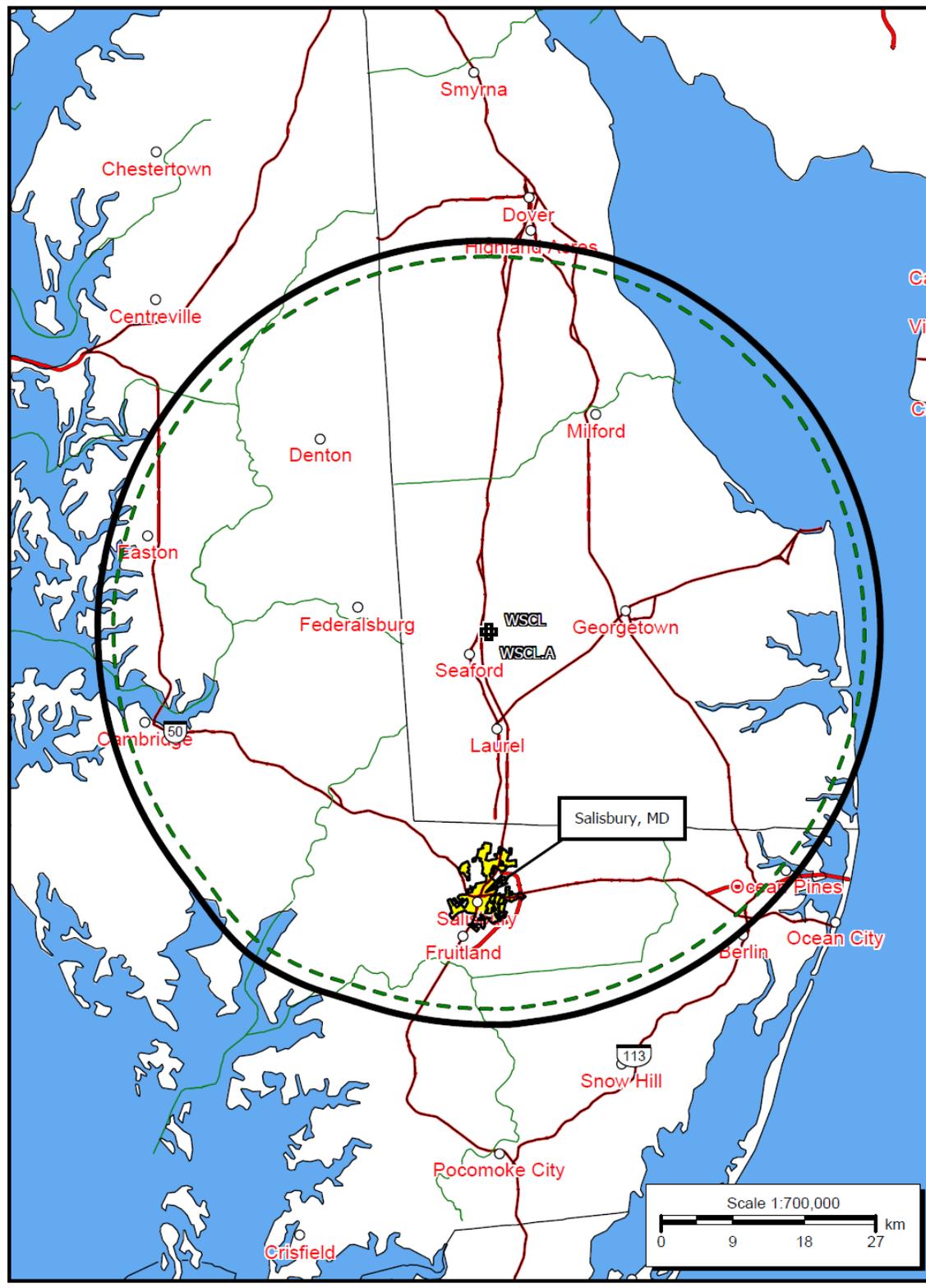


EXHIBIT D- ASR Registration

Registration 1049463

[Map Registration](#)

Registration Detail			
Reg Number	1049463	Status	Constructed
File Number	A0530679	Constructed	09/02/2003
EMI	No	Dismantled	
NEPA	No		
Antenna Structure			
Structure Type	TOWER - Free standing or Guyed Structure used for Commu		
Location (in NAD83 Coordinates)			
Lat/Long	38-40-00.0 N 075-34-59.0 W	Address	22625 Sussex Highway Seaford, DE 19973
City, State	SEAFORD , DE		
Zip	19973	County	SUSSEX
Center of AM Array		Position of Tower in Array	
Heights (meters)			
Elevation of Site Above Mean Sea Level		Overall Height Above Ground (AGL)	
8.8		158.5	
Overall Height Above Mean Sea Level		Overall Height Above Ground w/o Appurtenances	
167.3		152.4	
Painting and Lighting Specifications			
FAA Chapters 4, 6, 13 Paint and Light in Accordance with FAA Circular Number 70/7460-1J			
FAA Notification			
FAA Study	97-AEA-3513-OE	FAA Issue Date	03/05/1998
Owner & Contact Information			
FRN	0006163521	Owner Entity Type	
Owner			
MEEKINS ANTENNA RENTALS, INC. Attention To: TINSLEY MEEKINS, JR. 29669 PORPOISE CREEK RD TRAPPE , MD 21673		P: (410)476-4545 F: E: tinsley@towerleasing.biz	
Contact			
		P: F: E:	
Last Action Status			
Status	Constructed	Received	12/07/2006
Purpose	Admin Update	Entered	12/08/2006
Mode	Mail In (Manual)		
Related Applications			
12/07/2006	A0530679 - Admin Update (AU)		
11/24/2006	A0526285 - Notification (NT)		
09/02/2003	A0340684 - Modification (MD)		
Related applications (4)			