

TECHNICAL EXHIBIT
AMENDMENT TO PENDING
DIGITAL DISPLACEMENT APPLICATION
TV TRANSLATOR W34CI (FACILITY ID 71730)
MAYAGUEZ, PR
CH 21 1.81 KW (DA)

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Technical Narrative

This Technical Exhibit supports an amendment of pending digital displacement application for TV translator station W34CI (File No. BDISDTT-20090605AAV). W34CI is licensed to operate on analog channel 34 with a directional antenna (visual) effective radiated power (ERP) of 6 kW and an antenna height above mean sea level (RCAMSL) of 407 (BLTT-19971031JA). Station W34CI is predicted to receive interference to 84% of its analog service population from DTV station WELU-DT, Aguadilla, PR. Station W34CI is also predicted to cause new interference to 9% of the DTV service population of WELU-DT. WELU-DT operates on channel 34 from a transmitter site 27.9 kilometers southeast of the W34CI site. Thus, W34CIO is being displaced by WELU-DT.

W34CI was granted a CP to displace its analog operation to channel 46 (BDISTT-20070828AAO). Subsequently, the channel 46 was assigned by the Commission to WCCV-DT, in Arecibo, PR. Studies based on the FCC's OET-69 Longley-Rice analysis procedure showed that the W34CI CP facility would cause predicted interference of about 5% to the WCCV-DT facility and that the predicted interference to the W34CI facility on Channel 46 would be about 36% due to the addition of the WCCV-DT facility. Therefore, a W34CI facility on Channel 46 would be displaced by interference caused to and received from WCCV-DT.

A channel search and interference study was undertaken and digital channel 21 appeared as a viable solution for W34CI to displace to. Thus, W34CI filed an application (File No. BDISDTT-20090605AAV) requesting displacement to digital channel 21. W34CI now seek to amend this pending application to specify a different antenna pattern and change in ERP. This will result in significantly better coverage while affording the necessary protection to all pertinent stations.

Proposed Facilities

W34CI proposes to operate on digital channel 21 and employ a directional antenna. There is no proposed change in transmitter site coordinates (18-18-51 N, 67-11-30 W) and the existing supporting structure (ASRN #1010409) will be used. It is proposed to operate with a directional antenna maximum ERP of 1.81 kW and antenna RCAMSL of 407 meters. A notification letter has been sent to the Arecibo Observatory, included herein as Appendix 2.

Figure 1 is a coverage map showing the present 74 dBu and proposed 51 dBu coverage contours. As the proposal will operate from the currently licensed operation, there will be a significant common area where both contours overlap.

Allocation Considerations

A study has been conducted to assure that the proposal will not create prohibited interference with other licensed, authorized or pending analog or digital TV, LPTV/translator and Class A TV stations.

Using the procedures outlined in the FCC's OET-69 Bulletin, a cell size of 1 kilometer, a distance increment of 0.5 kilometer and a stringent out-of-channel emission mask filter, no prohibitive interference is predicted to any other station.

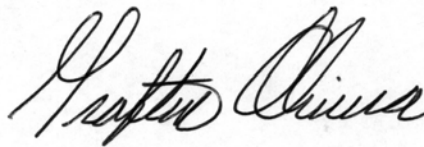
The applicant recognizes the proposal is secondary to authorized full-service analog and DTV operations. The applicant understands that it must correct and/or eliminate prohibited interference that may result from its proposed operation.

Radiofrequency Electromagnetic Field Exposure

The proposed W34CI facilities were evaluated in terms of potential radio frequency (RF) energy exposure at ground level to workers and the general public. The radiation center for the antenna is located 45 meters above ground level. The proposed maximum ERP is 1.81 kW average. An analysis using the vertical plane pattern data shown in Appendix 1 shows that for the highest RF exposure that can be expected at any depression angle greater than 15 degrees below horizon, based on a worst-case field factor of 0.35, the calculated power density at a point 2 meters above ground level is predicted to be less than 4.03 uW/cm^2 . This is 1.2% of the FCC's recommended limit of 343.3 uW/cm^2 for channel 21 for an "uncontrolled" environment, and thus in compliance with FCC rules.

Access to the transmitting site will be restricted and appropriately marked with warning signs. In the event that workers or other authorized personnel enter restricted areas or climb the tower, appropriate measures will be taken to assure worker safety with respect to radio frequency radiation exposure. Such measures include reducing the average exposure by spreading out the work over a longer period of time, wearing "accepted" RFR protective clothing and/or RFR exposure monitors or scheduling work when the stations are at reduced power or shut down.

It is noted that this statement only addresses the potential for radiofrequency electromagnetic field exposure. All other aspects of the environmental processing analysis will be or already have been provided to the FCC by the tower owner as part of the tower registration process.



Grafton Olivera, P.E.

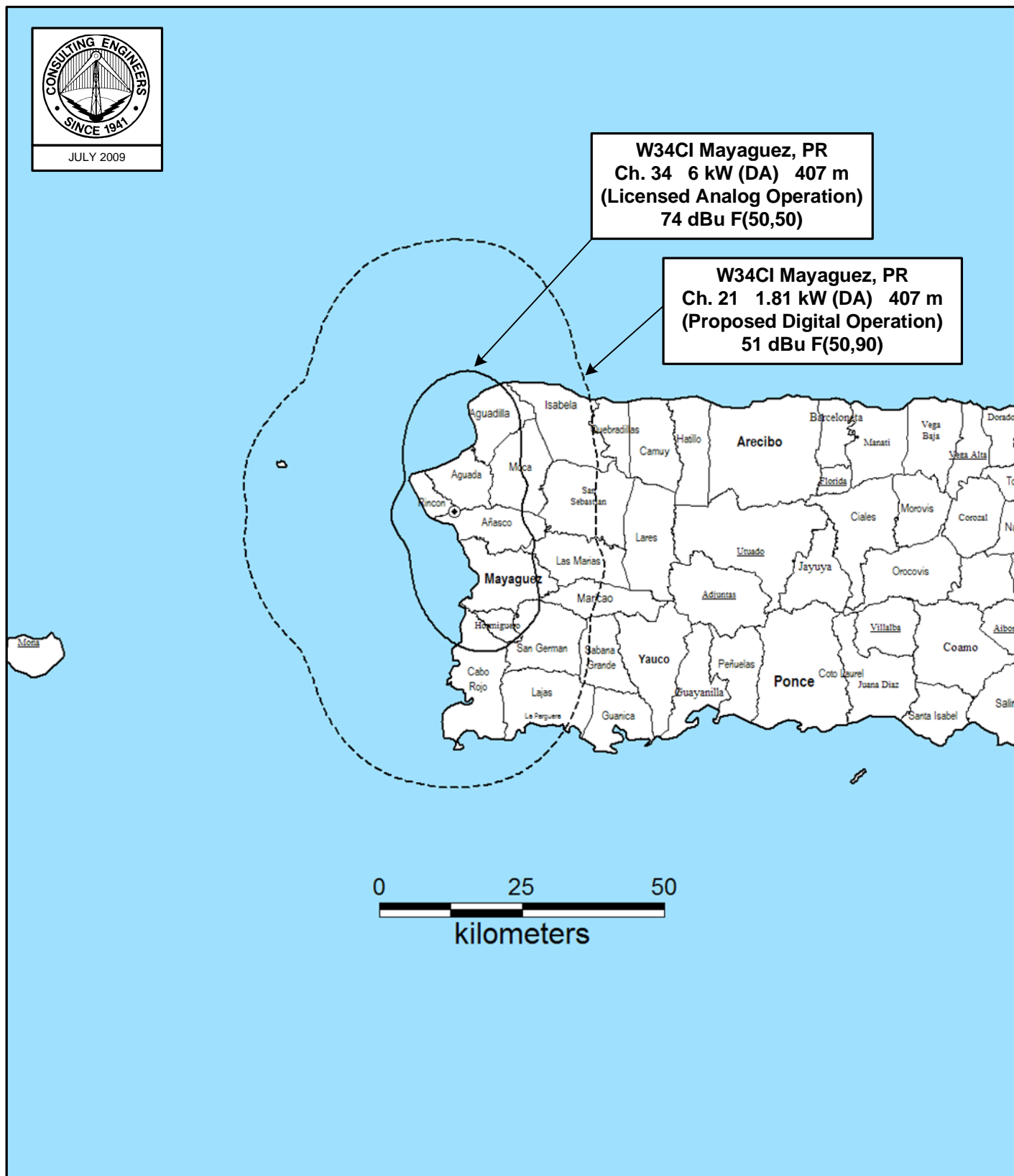
du Treil, Lundin & Rackley, Inc.

201 Fletcher Avenue

Sarasota, Florida 34237

(941) 329-6000

July 31, 2009



FCC PREDICTED COVERAGE CONTOURS

LPTV STATION W34CI

MAYAGUEZ, PR

CH 21 1.81 KW (DA) 407 M (RCAMSL)

du Treil, Lundin & Rackley, Inc Sarasota, Florida

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TV Interference and Spacing Analysis

{fourteen sheets follow}

W34CI Mayaguez, PR Post-Transition OET-69 Interference Analysis

Census data selected: 2000

Post DTV Transition Database Selected

TV INTERFERENCE and SPACING ANALYSIS PROGRAM

Date: 07-31-2009 Time: 12:33:40

Record Selected for Analysis

W34CI USERRECORD-01 ATALAYA PR US
Channel 21 ERP 1.816 kW HAAT 359. m RCAMSL 00407 m STRINGENT MASK
Latitude 018-18-51 Longitude 0067-11-30
Status APP Zone 2 Border
Dir Antenna Make CDB Model 00000000017721 Beam tilt N Ref Azimuth 270.
Last update Cutoff date Docket
Comments
Applicant

Cell Size for Service Analysis 1.0 km/side

Distance Increments for Longley-Rice Analysis 0.50 km

Not full service station

Facility meets maximum power limit

Azimuth (Deg)	ERP (kW)	HAAT (m)	51.0 dBu F(50,90) (km)
0.0	1.816	388.2	48.1
45.0	0.216	310.5	32.7
90.0	0.080	239.2	24.7
135.0	0.216	333.7	33.5
180.0	1.816	407.0	48.7
225.0	0.283	407.0	37.4
270.0	0.235	404.8	36.2
315.0	0.283	381.1	36.7

Contour Overlap to Proposed Station

Station
W31DK-D 21 MAYAGUEZ PR BNPTTL20000807ADI

Station inside contour of Digital LPTV station
W34CI 21 ATALAYA PR USERRECORD01

Contour Overlap Evaluation to Proposed Station Complete

Proposed facility OK to FCC Monitoring Stations

Proposed facility OK toward West Virginia quiet zone

Proposed facility OK toward Table Mountain

Proposed facility is beyond the Canadian coordination distance

Proposed facility is beyond the Mexican coordination distance

Proposed station is OK toward AM broadcast stations

Start of Interference Analysis

Channel	Proposed Station Call	City/State	ARN
21	W34CI	ATALAYA PR	USERRECORD01

Stations Potentially Affected by Proposed Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
20	WIMN-CA	ARECIBO PR	60.5	LIC	BLTTL	-20010102AAX
20	WIMN-CA	ARECIBO PR	60.5	CP	BDFCDTA	-20080512AAM
20	WIVE-LD	CEIBA PR	160.7	CP	BDCCDTL	-20061026AAC
20	WSJN-CA	SAN JUAN PR	108.2	CP	BDISDTA	-20090129AAF
21	W31DK-D	MAYAGUEZ PR	16.5	CP	BNPTTL	-20000807ADI
21	WJPX	SAN JUAN PR	141.2	LIC	BLCDT	-20060621ACJ
22	WXWZ-LP	GUAYAMA PR	117.5	LIC	BLTTL	-19931101IG
22	WOST	MAYAGUEZ PR	0.2	CP	BPCDT	-20080303AKY
24	WSJX-LP	AQUADILLA PR	11.1	LIC	BLTTL	-20050407AAH

%%%

Analysis of Interference to Affected Station 1

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
20	WIMN-CA	ARECIBO PR	BLTTL	-20010102AAX

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
16	WMTJ	FAJARDO PR	90.3	CP MOD	BMPEDT	-20070629AEN
16	WMTJ	FAJARDO PR	90.3	PLN	DTVPLN	-DTVP0576
17	WVEO	AGUADILLA PR	59.0	CP MOD	BMPCDT	-20060705ABD
17	WVEO	AGUADILLA PR	59.0	PLN	DTVPLN	-DTVP0614
18	WECN	NARANJITO PR	43.0	PLN	DTVPLN	-DTVP0646
18	WECN	NARANJITO PR	43.0	CP MOD	BMPCDT	-20090318ABI
19	WKPV	PONCE PR	43.1	PLN	DTVPLN	-DTVP0692
19	WKPV	PONCE PR	43.1	CP MOD	BMPCDT	-20040318ABY
20	WIVE-LD	CEIBA PR	103.9	CP	BDCCDTL	-20061026AAC

20	WSJN-CA	SAN JUAN PR	52.7	CP	BDISDTA	-20090129AAF
20	WSVI	CHRISTIANSTED VI	209.2	CP MOD	BMPCDT	-20081024ABS
20	WSVI	CHRISTIANSTED VI	209.2	PLN	DTVPLN	-DTVP0741
21	WJPX	SAN JUAN PR	84.9	LIC	BLCDDT	-20060621ACJ
21	WJPX	SAN JUAN PR	84.9	PLN	DTVPLN	-DTVP0774
22	WOST	MAYAGUEZ PR	60.3	CP	BPCDDT	-20080303AKY
22	WOST	MAYAGUEZ PR	60.3	PLN	DTVPLN	-DTVP0819
23	WNJX-TV	MAYAGUEZ PR	49.7	CP MOD	BMPCDT	-20040115ACG
23	WNJX-TV	MAYAGUEZ PR	49.7	PLN	DTVPLN	-DTVP0855
27	WAPA-TV	SAN JUAN PR	72.6	PLN	DTVPLN	-DTVP1010
27	WAPA-TV	SAN JUAN PR	72.6	LIC	BLCDDT	-20060621ACQ
28	WKAQ-TV	SAN JUAN PR	72.3	LIC	BLCDDT	-20020201AAG
28	WKAQ-TV	SAN JUAN PR	72.3	PLN	DTVPLN	-DTVP1048
34	WELU	AGUADILLA PR	50.1	CP MOD	BMPEDT	-20040316AFD
34	WELU	AGUADILLA PR	50.1	PLN	DTVPLN	-DTVP1270
35	WIPM-TV	MAYAGUEZ PR	49.7	CP	BPEDT	-20080619AEV
35	WIPM-TV	MAYAGUEZ PR	49.7	PLN	DTVPLN	-DTVP1306
21	W34CI	ATALAYA PR	60.5	APP	USERRECORD-01	

Proposal causes no interference

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Analysis of Interference to Affected Station 2

Analysis of current record

Channel	Call	City/State	Application Ref. No.
20	WIMN-CA	ARECIBO PR	BDFCDTA -20080512AAM

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application Ref. No.
19	WKPV	PONCE PR	43.1	PLN	DTVPLN -DTVP0692
19	WKPV	PONCE PR	43.1	CP MOD	BMPCDT -20040318ABY
20	WIVE-LD	CEIBA PR	103.9	CP	BDCCDTL -20061026AAC
20	WSJN-CA	SAN JUAN PR	52.7	CP	BDISDTA -20090129AAF
20	WSVI	CHRISTIANSTED VI	209.2	CP MOD	BMPCDT -20081024ABS
20	WSVI	CHRISTIANSTED VI	209.2	PLN	DTVPLN -DTVP0741
21	WJPX	SAN JUAN PR	84.9	LIC	BLCDDT -20060621ACJ
21	WJPX	SAN JUAN PR	84.9	PLN	DTVPLN -DTVP0774
21	W34CI	ATALAYA PR	60.5	APP	USERRECORD-01

Proposal causes no interference

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Analysis of Interference to Affected Station 3

Analysis of current record

Channel	Call	City/State	Application Ref. No.
20	WIVE-LD	CEIBA PR	BDCCDTL -20061026AAC

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application Ref. No.
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19	WKPV	PONCE PR	116.1	PLN	DTVPLN	-DTVP0692
19	WKPV	PONCE PR	116.1	CP MOD	BMPCDT	-20040318ABY
20	WIMN-CA	ARECIBO PR	103.9	LIC	BLTTL	-20010102AAX
20	WIMN-CA	ARECIBO PR	103.9	CP	BDFCDTA	-20080512AAM
20	WSJN-CA	SAN JUAN PR	52.6	CP	BDISDTA	-20090129AAF
20	WSVI	CHRISTIANSTED VI	109.0	CP MOD	BMPCDT	-20081024ABS
20	WSVI	CHRISTIANSTED VI	109.0	PLN	DTVPLN	-DTVP0741
21	WJPX	SAN JUAN PR	19.5	LIC	BLCDDT	-20060621ACJ
21	WJPX	SAN JUAN PR	19.5	PLN	DTVPLN	-DTVP0774
21	W34CI	ATALAYA PR	160.7	APP	USERRECORD-01	

Proposed station is beyond the site to
nearest cell evaluation distance

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Analysis of Interference to Affected Station 4

Analysis of current record

Channel	Call	City/State	Application Ref. No.
20	WSJN-CA	SAN JUAN PR	BDISDTA -20090129AAF

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application Ref. No.
19	WKPV	PONCE PR	65.8	PLN	DTVPLN -DTVP0692
19	WKPV	PONCE PR	65.8	CP MOD	BMPCDT -20040318ABY
20	WIMN-CA	ARECIBO PR	52.7	LIC	BLTTL -20010102AAX
20	WIMN-CA	ARECIBO PR	52.7	CP	BDFCDTA -20080512AAM
20	WIVE-LD	CEIBA PR	52.6	CP	BDCCDTL -20061026AAC
20	WSVI	CHRISTIANSTED VI	156.5	CP MOD	BMPCDT -20081024ABS
20	WSVI	CHRISTIANSTED VI	156.5	PLN	DTVPLN -DTVP0741
21	WJPX	SAN JUAN PR	33.1	LIC	BLCDDT -20060621ACJ
21	WJPX	SAN JUAN PR	33.1	PLN	DTVPLN -DTVP0774
21	W34CI	ATALAYA PR	108.2	APP	USERRECORD-01

Proposed station is beyond the site to
nearest cell evaluation distance

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Analysis of Interference to Affected Station 5

Analysis of current record

Channel	Call	City/State	Application Ref. No.
21	W31DK-D	MAYAGUEZ PR	BNPTTL -20000807ADI

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application Ref. No.
14	WMEI	ARECIBO PR	58.9	CP MOD	BMPCDT -20080620ACV
14	WMEI	ARECIBO PR	58.9	PLN	DTVPLN -DTVP0507
17	WVEO	AGUADILLA PR	16.3	CP MOD	BMPCDT -20060705ABD

17	WVEO	AGUADILLA PR	16.3	PLN	DTVPLN	-DTVP0614
18	WECN	NARANJITO PR	89.9	PLN	DTVPLN	-DTVP0646
18	WECN	NARANJITO PR	89.9	CP MOD	BMPCDT	-20090318ABI
19	WKPV	PONCE PR	40.2	PLN	DTVPLN	-DTVP0692
19	WKPV	PONCE PR	40.2	CP MOD	BMPCDT	-20040318ABY
20	WIMN-CA	ARECIBO PR	58.2	CP	BDFCDTA	-20080512AAM
20	WIVE-LD	CEIBA PR	152.6	CP	BDCCDTL	-20061026AAC
20	WSJN-CA	SAN JUAN PR	100.4	CP	BDISDTA	-20090129AAF
21	WJPX	SAN JUAN PR	133.2	LIC	BLCDT	-20060621ACJ
21	WJPX	SAN JUAN PR	133.2	PLN	DTVPLN	-DTVP0774
22	WOST	MAYAGUEZ PR	16.4	CP	BPCDT	-20080303AKY
22	WOST	MAYAGUEZ PR	16.4	PLN	DTVPLN	-DTVP0819
23	WNJX-TV	MAYAGUEZ PR	14.1	CP MOD	BMPCDT	-20040115ACG
23	WNJX-TV	MAYAGUEZ PR	14.1	PLN	DTVPLN	-DTVP0855
25	WQTO	PONCE PR	40.1	CP	BPEDT	-20080620AEL
25	WQTO	PONCE PR	40.1	PLN	DTVPLN	-DTVP0931
25	WQTO	PONCE PR	40.1	LIC	BLEDT	-20060615ACV
28	WKAQ-TV	SAN JUAN PR	112.1	LIC	BLCDT	-20020201AAG
28	WKAQ-TV	SAN JUAN PR	112.1	PLN	DTVPLN	-DTVP1048
29	WORA-TV	MAYAGUEZ PR	13.5	CP MOD	BMPCDT	-20080813AAG
29	WORA-TV	MAYAGUEZ PR	13.5	PLN	DTVPLN	-DTVP1087
35	WIPM-TV	MAYAGUEZ PR	14.1	CP	BPEDT	-20080619AEV
35	WIPM-TV	MAYAGUEZ PR	14.1	PLN	DTVPLN	-DTVP1306
36	W36DP	YCAMUY PR	16.3	CP	BDISTTL	-20070629AJN
21	W34CI	ATALAYA PR	16.5	APP	USERRECORD-01	

Total scenarios = 4

Result key: 1
Scenario 1 Affected station 5 W31DK-D
Before Analysis

Results for: 21N PR MAYAGUEZ BNPTTL 20000807ADI CP

	POPULATION	AREA (sq km)
within Noise Limited Contour	2896	3.0
not affected by terrain losses	2896	3.0
lost to NTSC IX	741	1.0
lost to additional IX by ATV	0	0.0
lost to all IX	741	1.0

Potential Interfering Stations Included in above Scenario 1

36N PR YCAMUY	BDISTTL	20070629AJN	CP
22A PR MAYAGUEZ	BPCDT	20080303AKY	CP

After Analysis

Results for: 21N PR MAYAGUEZ BNPTTL 20000807ADI CP

	POPULATION	AREA (sq km)
within Noise Limited Contour	2896	3.0
not affected by terrain losses	2896	3.0
lost to NTSC IX	741	1.0
lost to additional IX by ATV	0	0.0
lost to all IX	741	1.0

Potential Interfering Stations Included in above Scenario 1

36N PR YCAMUY	BDISTTL	20070629AJN	CP
22A PR MAYAGUEZ	BPCDT	20080303AKY	CP
21A PR ATALAYA	USERRECORD01		APP

Percent new IX = 0.0000%

Result key: 2
 Scenario 2 Affected station 5 W31DK-D
 Before Analysis

Results for: 21N PR MAYAGUEZ	BNPTTL	20000807ADI	CP
	POPULATION	AREA (sq km)	
within Noise Limited Contour	2896	3.0	
not affected by terrain losses	2896	3.0	
lost to NTSC IX	741	1.0	
lost to additional IX by ATV	0	0.0	
lost to all IX	741	1.0	

Potential Interfering Stations Included in above Scenario 2

36N PR YCAMUY	BDISTTL	20070629AJN	CP
22A PR MAYAGUEZ	DTVPLN	DTVP0819	PLN

After Analysis

Results for: 21N PR MAYAGUEZ	BNPTTL	20000807ADI	CP
	POPULATION	AREA (sq km)	
within Noise Limited Contour	2896	3.0	
not affected by terrain losses	2896	3.0	
lost to NTSC IX	741	1.0	
lost to additional IX by ATV	0	0.0	
lost to all IX	741	1.0	

Potential Interfering Stations Included in above Scenario 2

36N PR YCAMUY	BDISTTL	20070629AJN	CP
22A PR MAYAGUEZ	DTVPLN	DTVP0819	PLN
21A PR ATALAYA	USERRECORD01		APP

Percent new IX = 0.0000%

Result key: 3
 Scenario 3 Affected station 5 W31DK-D
 Before Analysis

Results for: 21N PR MAYAGUEZ	BNPTTL	20000807ADI	CP
	POPULATION	AREA (sq km)	
within Noise Limited Contour	2896	3.0	
not affected by terrain losses	2896	3.0	
lost to NTSC IX	741	1.0	
lost to additional IX by ATV	0	0.0	
lost to all IX	741	1.0	

Potential Interfering Stations Included in above Scenario 3

36N PR YCAMUY	BDISTTL	20070629AJN	CP
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22A PR MAYAGUEZ BPCDT 20080303AKY CP

After Analysis

Results for: 21N PR MAYAGUEZ	BNPTTL	20000807ADI	CP
	POPULATION	AREA (sq km)	
within Noise Limited Contour	2896	3.0	
not affected by terrain losses	2896	3.0	
lost to NTSC IX	741	1.0	
lost to additional IX by ATV	0	0.0	
lost to all IX	741	1.0	

Potential Interfering Stations Included in above Scenario 3

36N PR YCAMUY	BDISTTL	20070629AJN	CP
22A PR MAYAGUEZ	BPCDT	20080303AKY	CP
21A PR ATALAYA	USERRECORD01		APP

Percent new IX = 0.0000%

Result key: 4
Scenario 4 Affected station 5 W31DK-D
Before Analysis

Results for: 21N PR MAYAGUEZ	BNPTTL	20000807ADI	CP
	POPULATION	AREA (sq km)	
within Noise Limited Contour	2896	3.0	
not affected by terrain losses	2896	3.0	
lost to NTSC IX	741	1.0	
lost to additional IX by ATV	0	0.0	
lost to all IX	741	1.0	

Potential Interfering Stations Included in above Scenario 4

36N PR YCAMUY	BDISTTL	20070629AJN	CP
22A PR MAYAGUEZ	DTVPLN	DTVP0819	PLN

After Analysis

Results for: 21N PR MAYAGUEZ	BNPTTL	20000807ADI	CP
	POPULATION	AREA (sq km)	
within Noise Limited Contour	2896	3.0	
not affected by terrain losses	2896	3.0	
lost to NTSC IX	741	1.0	
lost to additional IX by ATV	0	0.0	
lost to all IX	741	1.0	

Potential Interfering Stations Included in above Scenario 4

36N PR YCAMUY	BDISTTL	20070629AJN	CP
22A PR MAYAGUEZ	DTVPLN	DTVP0819	PLN
21A PR ATALAYA	USERRECORD01		APP

Percent new IX = 0.0000%

Worst case new IX 0.0000% Scenario 1

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Analysis of Interference to Affected Station 6

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
21	WJPX	SAN JUAN PR	BLCDT	-20060621ACJ

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
20	WSVI	CHRISTIANSTED VI	125.8	CP MOD	BMPCDT	-20081024ABS
20	WSVI	CHRISTIANSTED VI	125.8	PLN	DTVPLN	-DTVP0741
22	WOST	MAYAGUEZ PR	141.1	CP	BPCDT	-20080303AKY
22	WOST	MAYAGUEZ PR	141.1	PLN	DTVPLN	-DTVP0819
21	W34CI	ATALAYA PR	141.2	APP	USERRECORD-01	

Total scenarios = 4

Result key: 5

Scenario 1 Affected station 6 WJPX

Before Analysis

Results for: 21A PR SAN JUAN BLCDT 20060621ACJ LIC

HAAT 564.0 m, ATV ERP 1000.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	3321777	40548.4
not affected by terrain losses	3084080	39146.3
lost to NTSC IX	0	0.0
lost to additional IX by ATV	557	11.8
lost to ATV IX only	557	11.8
lost to all IX	557	11.8

Potential Interfering Stations Included in above Scenario 1

22A PR MAYAGUEZ BPCDT 20080303AKY CP

After Analysis

Results for: 21A PR SAN JUAN BLCDT 20060621ACJ LIC

HAAT 564.0 m, ATV ERP 1000.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	3321777	40548.4
not affected by terrain losses	3084080	39146.3
lost to NTSC IX	0	0.0
lost to additional IX by ATV	15632	221.5
lost to ATV IX only	15632	221.5
lost to all IX	15632	221.5

Potential Interfering Stations Included in above Scenario 1

22A PR MAYAGUEZ BPCDT 20080303AKY CP
21A PR ATALAYA USERRECORD01 APP

Percent new IX = 0.4889%

Result key: 6
Scenario 2 Affected station 6 WJPX
Before Analysis

Results for: 21A PR SAN JUAN BLCDT 20060621ACJ LIC
HAAT 564.0 m, ATV ERP 1000.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	3321777	40548.4
not affected by terrain losses	3084080	39146.3
lost to NTSC IX	0	0.0
lost to additional IX by ATV	7128	53.2
lost to ATV IX only	7128	53.2
lost to all IX	7128	53.2

Potential Interfering Stations Included in above Scenario 2

22A PR MAYAGUEZ DTVPLN DTVP0819 PLN

After Analysis

Results for: 21A PR SAN JUAN BLCDT 20060621ACJ LIC
HAAT 564.0 m, ATV ERP 1000.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	3321777	40548.4
not affected by terrain losses	3084080	39146.3
lost to NTSC IX	0	0.0
lost to additional IX by ATV	15632	223.5
lost to ATV IX only	15632	223.5
lost to all IX	15632	223.5

Potential Interfering Stations Included in above Scenario 2

22A PR MAYAGUEZ DTVPLN DTVP0819 PLN
21A PR ATALAYA USERRECORD01 APP

Percent new IX = 0.2764%

Result key: 7
Scenario 3 Affected station 6 WJPX
Before Analysis

Results for: 21A PR SAN JUAN BLCDT 20060621ACJ LIC
HAAT 564.0 m, ATV ERP 1000.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	3321777	40548.4
not affected by terrain losses	3084080	39146.3
lost to NTSC IX	0	0.0
lost to additional IX by ATV	557	11.8
lost to ATV IX only	557	11.8
lost to all IX	557	11.8

Potential Interfering Stations Included in above Scenario 3

22A PR MAYAGUEZ BPCDT 20080303AKY CP

Results for: 21A PR SAN JUAN BLCDT 20060621ACJ LIC
 HAAT 564.0 m, ATV ERP 1000.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	3321777	40548.4
not affected by terrain losses	3084080	39146.3
lost to NTSC IX	0	0.0
lost to additional IX by ATV	15632	221.5
lost to ATV IX only	15632	221.5
lost to all IX	15632	221.5

Potential Interfering Stations Included in above Scenario 3

22A	PR	MAYAGUEZ	BPCDT	20080303AKY	CP
21A	PR	ATALAYA	USERRECORD01		APP

Percent new IX = 0.4889%

```
Result key:      8
Scenario        4 Affected station        6 WJPX
Before Analysis
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Results for: 21A PR SAN JUAN BLCDT 20060621ACJ LIC
 HAAT 564.0 m, ATV ERP 1000.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	3321777	40548.4
not affected by terrain losses	3084080	39146.3
lost to NTSC IX	0	0.0
lost to additional IX by ATV	7128	53.2
lost to ATV IX only	7128	53.2
lost to all IX	7128	53.2

Potential Interfering Stations Included in above Scenario 4

22A PR MAYAGUEZ DTVPLN DTVP0819 PLN

After Analysis

Results for: 21A PR SAN JUAN BLCDT 20060621ACJ LIC
 HAAT 564.0 m, ATV ERP 1000.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	3321777	40548.4
not affected by terrain losses	3084080	39146.3
lost to NTSC IX	0	0.0
lost to additional IX by ATV	15632	223.5
lost to ATV IX only	15632	223.5
lost to all IX	15632	223.5

Potential Interfering Stations Included in above Scenario 4

22A	PR	MAYAGUEZ	DTVPLN	DTVP0819	PLN
21A	PR	ATALAYA	USERRECORD01		APP

Percent new IX = 0.2764%

Worst case new IX	0.4889%	Scenario	1
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Analysis of Interference to Affected Station 7

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
22	WXWZ-LP	GUAYAMA PR	BLTTL	-19931101IG

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
14	WMEI	ARECIBO PR	47.9	CP MOD	BMPCDT	-20080620ACV
14	WMEI	ARECIBO PR	47.9	PLN	DTVPLN	-DTVP0507
15	WTIN	PONCE PR	50.7	PLN	DTVPLN	-DTVP0542
15	WTIN-TV	PONCE PR	50.7	CP MOD	BMPCDT	-20040803ABE
15	WVIF	CHRISTIANSTED VI	143.0	PLN	DTVPLN	-DTVP0552
18	WECN	NARANJITO PR	32.8	PLN	DTVPLN	-DTVP0646
18	WECN	NARANJITO PR	32.8	CP MOD	BMPCDT	-20090318ABI
19	WKPV	PONCE PR	66.7	PLN	DTVPLN	-DTVP0692
19	WKPV	PONCE PR	66.7	CP MOD	BMPCDT	-20040318ABY
20	WSVI	CHRISTIANSTED VI	143.0	CP MOD	BMPCDT	-20081024ABS
20	WSVI	CHRISTIANSTED VI	143.0	PLN	DTVPLN	-DTVP0741
21	WJPX	SAN JUAN PR	39.2	LIC	BLCDDT	-20060621ACJ
21	WJPX	SAN JUAN PR	39.2	PLN	DTVPLN	-DTVP0774
22	WOST	MAYAGUEZ PR	117.3	CP	BPCDT	-20080303AKY
22	WOST	MAYAGUEZ PR	117.3	PLN	DTVPLN	-DTVP0819
22	WMNS-LP	CHARLOTTE AMALIE VI	128.8	CP	BDFCDTL	-20060327AIN
22	WMNS-LP	CHARLOTTE AMALIE VI	128.8	CP	BDFCDTL	-20090611AAN
22	WMNS-LP	CHARLOTTE AMALIE VI	128.8	LIC	BLTTL	-20041015ABV
23	WXWZ-LP	GUAYAMA PR	14.4	CP	BDCCDTL	-20061027ABM
23	WNJX-TV	MAYAGUEZ PR	92.2	CP MOD	BMPCDT	-20040115ACG
23	WNJX-TV	MAYAGUEZ PR	92.2	PLN	DTVPLN	-DTVP0855
25	WQTO	PONCE PR	66.8	CP	BPEDT	-20080620AEL
25	WQTO	PONCE PR	66.8	PLN	DTVPLN	-DTVP0931
25	WQTO	PONCE PR	66.8	LIC	BLEDT	-20060615ACV
29	WORA-TV	MAYAGUEZ PR	92.8	CP MOD	BMPCDT	-20080813AAG
29	WORA-TV	MAYAGUEZ PR	92.8	PLN	DTVPLN	-DTVP1087
30	WDWL	BAYAMON PR	27.2	PLN	DTVPLN	-DTVP1115
30	WDWL	BAYAMON PR	27.5	CP MOD	BMPCDT	-20081103ACW
21	W34CI	ATALAYA PR	117.5	APP	USERRECORD-01	

Proposal causes no interference

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Analysis of Interference to Affected Station 8

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
22	WOST	MAYAGUEZ PR	BPCDT	-20080303AKY

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
21	WJPX	SAN JUAN PR	141.1	LIC	BLCDDT	-20060621ACJ
21	WJPX	SAN JUAN PR	141.1	PLN	DTVPLN	-DTVP0774
23	WNJX-TV	MAYAGUEZ PR	28.4	CP MOD	BMPCDDT	-20040115ACG
23	WNJX-TV	MAYAGUEZ PR	28.4	PLN	DTVPLN	-DTVP0855
21	W34CI	ATALAYA PR	0.2	APP	USERRECORD-01	

Proposal causes no interference

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Analysis of Interference to Affected Station 9

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
24	WSJX-LP	AQUADILLA PR	BLTTL	-20050407AAH

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
16	WMTJ	FAJARDO PR	143.5	CP MOD	BMPCDDT	-20070629AEN
16	WMTJ	FAJARDO PR	143.5	PLN	DTVPLN	-DTVP0576
17	WVEO	AGUADILLA PR	10.2	CP MOD	BMPCDDT	-20060705ABD
17	WVEO	AGUADILLA PR	10.2	PLN	DTVPLN	-DTVP0614
21	WJPX	SAN JUAN PR	137.7	LIC	BLCDDT	-20060621ACJ
21	WJPX	SAN JUAN PR	137.7	PLN	DTVPLN	-DTVP0774
22	WOST	MAYAGUEZ PR	11.0	CP	BPCDDT	-20080303AKY
22	WOST	MAYAGUEZ PR	11.0	PLN	DTVPLN	-DTVP0819
23	WXWZ-LP	GUAYAMA PR	116.0	CP	BDCCDDTL	-20061027ABM
23	WNJX-TV	MAYAGUEZ PR	33.6	CP MOD	BMPCDDT	-20040115ACG
23	WNJX-TV	MAYAGUEZ PR	33.6	PLN	DTVPLN	-DTVP0855
25	WQTO	PONCE PR	55.9	CP	BPEDT	-20080620AEL
25	WQTO	PONCE PR	55.9	PLN	DTVPLN	-DTVP0931
25	WQTO	PONCE PR	55.9	LIC	BLEDT	-20060615ACV
27	WAPA-TV	SAN JUAN PR	120.7	PLN	DTVPLN	-DTVP1010
27	WAPA-TV	SAN JUAN PR	120.7	LIC	BLCDDT	-20060621ACQ
28	WKAQ-TV	SAN JUAN PR	120.4	LIC	BLCDDT	-20020201AAG
28	WKAQ-TV	SAN JUAN PR	120.5	PLN	DTVPLN	-DTVP1048
31	WSJU-TV	SAN JUAN PR	112.6	PLN	DTVPLN	-DTVP1156
31	WSJU-TV	SAN JUAN PR	112.6	CP MOD	BMPCDDT	-20060628ACE
32	WTCV	SAN JUAN PR	112.6	LIC	BLCDDT	-20040722ADD
32	WTCV	SAN JUAN PR	143.6	PLN	DTVPLN	-DTVP1194
32	WTCV	SAN JUAN PR	143.6	CP	BPCDDT	-20070125AAX
39	WJWN-TV	SAN SEBASTIAN PR	33.6	PLN	DTVPLN	-DTVP1411
39	WJWN-TV	SAN SEBASTIAN PR	33.6	CP MOD	BMPCDDT	-20040120AES
21	W34CI	ATALAYA PR	11.1	APP	USERRECORD-01	

Proposal causes no interference

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Analysis of Interference to Affected Station 10

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
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21

W34CI

ATALAYA PR

USERRECORD-01

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
20	WIMN-CA	ARECIBO PR	60.5	CP	BDFCDTA	-20080512AAM
20	WIVE-LD	CEIBA PR	160.7	CP	BDCCDTL	-20061026AAC
20	WSJN-CA	SAN JUAN PR	108.2	CP	BDISDTA	-20090129AAF
21	W31DK-D	MAYAGUEZ PR	16.5	CP	BNPTTL	-20000807ADI
21	WJPX	SAN JUAN PR	141.2	LIC	BLCDT	-20060621ACJ
21	WJPX	SAN JUAN PR	141.2	PLN	DTVPLN	-DTVP0774
22	WOST	MAYAGUEZ PR	0.2	CP	BPCDT	-20080303AKY
22	WOST	MAYAGUEZ PR	0.2	PLN	DTVPLN	-DTVP0819

Total scenarios = 4

Result key: 9

Scenario 1 Affected station 10 W34CI

Before Analysis

Results for: 21A PR ATALAYA

USERRECORD01

APP

HAAT 359.0 m, ATV ERP 1.8 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	544434	5069.8
not affected by terrain losses	494340	4880.8
lost to NTSC IX	4246	6.9
lost to additional IX by ATV	40459	675.4
lost to ATV IX only	40459	678.4
lost to all IX	44705	682.3

Potential Interfering Stations Included in above Scenario 1

21N PR MAYAGUEZ	BNPTTL	20000807ADI	CP
21A PR SAN JUAN	BLCDT	20060621ACJ	LIC
22A PR MAYAGUEZ	BPCDT	20080303AKY	CP

Result key: 10

Scenario 2 Affected station 10 W34CI

Before Analysis

Results for: 21A PR ATALAYA

USERRECORD01

APP

HAAT 359.0 m, ATV ERP 1.8 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	544434	5069.8
not affected by terrain losses	494340	4880.8
lost to NTSC IX	4246	6.9
lost to additional IX by ATV	118941	985.6
lost to ATV IX only	118941	988.6
lost to all IX	123187	992.5

Potential Interfering Stations Included in above Scenario 2

21N PR MAYAGUEZ	BNPTTL	20000807ADI	CP
21A PR SAN JUAN	BLCDT	20060621ACJ	LIC
22A PR MAYAGUEZ	DTVPLN	DTVP0819	PLN

Result key: 11
Scenario 3 Affected station 10 W34CI
Before Analysis

Results for: 21A PR ATALAYA USERRECORD01 APP
HAAT 359.0 m, ATV ERP 1.8 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	544434	5069.8
not affected by terrain losses	494340	4880.8
lost to NTSC IX	4246	6.9
lost to additional IX by ATV	42522	765.0
lost to ATV IX only	42522	768.0
lost to all IX	46768	771.9

Potential Interfering Stations Included in above Scenario 3

21N PR MAYAGUEZ	BNPTTL	20000807ADI	CP
21A PR SAN JUAN	DTVPLN	DTVP0774	PLN
22A PR MAYAGUEZ	BPCDT	20080303AKY	CP

Result key: 12
Scenario 4 Affected station 10 W34CI
Before Analysis

Results for: 21A PR ATALAYA USERRECORD01 APP
HAAT 359.0 m, ATV ERP 1.8 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	544434	5069.8
not affected by terrain losses	494340	4880.8
lost to NTSC IX	4246	6.9
lost to additional IX by ATV	120550	1074.2
lost to ATV IX only	120550	1077.2
lost to all IX	124796	1081.1

Potential Interfering Stations Included in above Scenario 4

21N PR MAYAGUEZ	BNPTTL	20000807ADI	CP
21A PR SAN JUAN	DTVPLN	DTVP0774	PLN
22A PR MAYAGUEZ	DTVPLN	DTVP0819	PLN

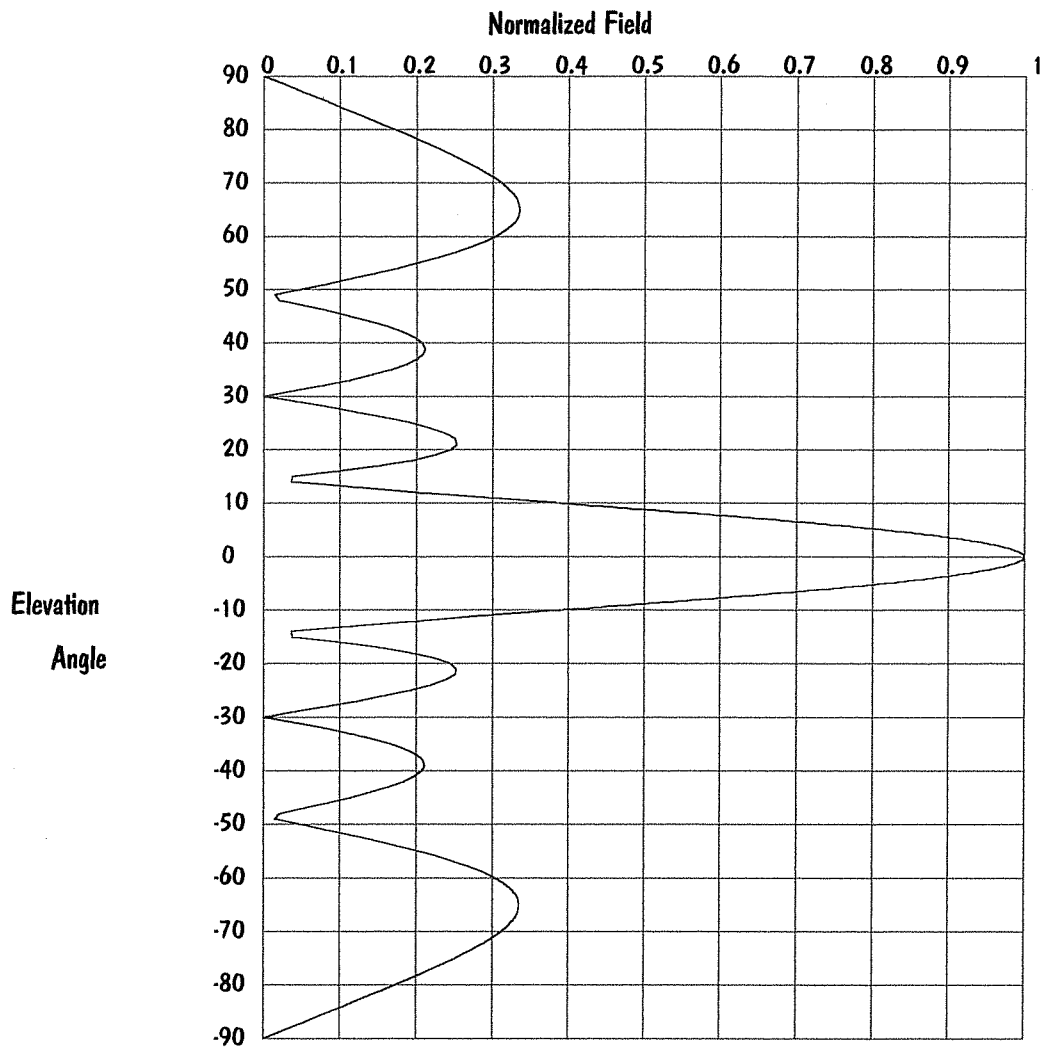
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FINISHED FINISHED FINISHED FINISHED FINISHED FINISHED

TECHNICAL EXHIBIT
AMENDMENT TO PENDING
DIGITAL DISPLACEMENT APPLICATION
TV TRANSLATOR W34CI (FACILITY ID 71730)
MAYAGUEZ, PR
CH 21 1.81 KW (DA)

Manufacturer's Vertical Plane Pattern Data

{three sheets follow}



Elevation Pattern

Scale: Linear

Units: Absolute

Antenna Concepts Inc.

CLIENT: *du Trier, Lundin & Rackley, Inc.*

Date: 4/13/1998

ANTENNA TYPE: *ACS4 bay Low Power slot*

FREQUENCY: *UHF*

PATTERN POL.: *Horizontal*

Beam Tilt (Deg.) : *0*

Elev. DIRECTIVITY: *4.2588/ 6.2928dBd*

Null Fill (%) : *, ,*

Field Strength Tabulation

Elevation Heading	Field strength(dB)	Elevation Heading	Field Strength(dB)
6.00	.74 (-2.54)	-1.60	.98 (-.16)
5.80	.76 (-2.37)	-1.80	.97 (-.21)
5.60	.77 (-2.20)	-2.00	.97 (-.26)
5.40	.79 (-2.04)	-2.20	.96 (-.32)
5.20	.80 (-1.88)	-2.40	.95 (-.38)
5.00	.82 (-1.73)	-2.60	.95 (-.45)
4.80	.83 (-1.59)	-2.80	.94 (-.53)
4.60	.84 (-1.46)	-3.00	.93 (-.61)
4.40	.85 (-1.33)	-3.20	.92 (-.69)
4.20	.87 (-1.21)	-3.40	.91 (-.78)
4.00	.88 (-1.09)	-3.60	.90 (-.88)
3.80	.89 (-.98)	-3.80	.89 (-.98)
3.60	.90 (-.88)	-4.00	.88 (-1.09)
3.40	.91 (-.78)	-4.20	.87 (-1.21)
3.20	.92 (-.69)	-4.40	.85 (-1.33)
3.00	.93 (-.61)	-4.60	.84 (-1.46)
2.80	.94 (-.53)	-4.80	.83 (-1.59)
2.60	.95 (-.45)	-5.00	.82 (-1.73)
2.40	.95 (-.38)	-5.20	.80 (-1.88)
2.20	.96 (-.32)	-5.40	.79 (-2.04)
2.00	.97 (-.26)	-5.60	.77 (-2.20)
1.80	.97 (-.21)	-5.80	.76 (-2.37)
1.60	.98 (-.16)	-6.00	.74 (-2.54)
1.40	.98 (-.12)	-6.20	.73 (-2.73)
1.20	.99 (-.08)	-6.40	.71 (-2.92)
1.00	.99 (-.05)	-6.60	.69 (-3.12)
.80	.99 (-.02)	-6.80	.68 (-3.33)
.60	1.00 (.00)	-7.00	.66 (-3.55)
.40	1.00 (.01)	-7.20	.64 (-3.77)
.20	1.00 (.02)	-7.40	.63 (-4.01)
.00	1.00 (.03)	-7.60	.61 (-4.25)
-.20	1.00 (.02)	-7.80	.59 (-4.51)
-.40	1.00 (.01)	-8.00	.57 (-4.77)
-.60	1.00 (.00)	-8.20	.56 (-5.05)
-.80	.99 (-.02)	-8.40	.54 (-5.34)
-1.00	.99 (-.05)	-8.60	.52 (-5.64)
-1.20	.99 (-.08)	-8.80	.50 (-5.95)
-1.40	.98 (-.12)	-9.00	.48 (-6.28)

Antenna Concepts Inc.

CLIENT: *du Triel, Lundin & Rackley, Inc.*

Date: 4/13/1998

ANTENNA TYPE: *ACS4 bay Low Power slot*

FREQUENCY: *UHF*

PATTERN POL.: *Horizontal*

Beam Tilt (Deg.) : *0*

Elev. DIRECTIVITY: *4.2588/ 6.2928dBd*

Null Fill (%) : *, ,*

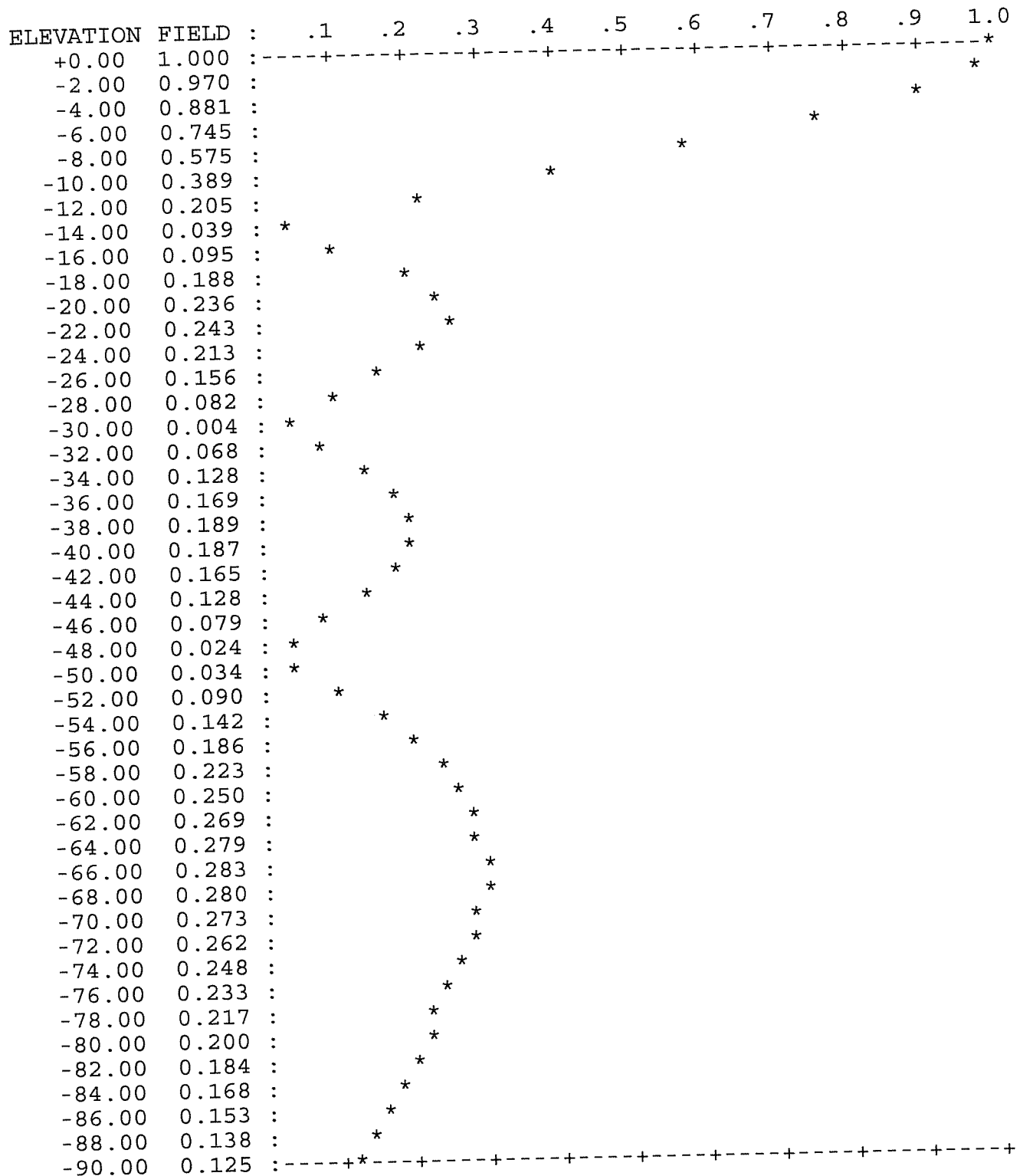
Software Design by: *Micro-Tek Engineering*

ANTENNA CONCEPTS, INC.

ELEVATION PATTERN
4 BAY SLOT

DATE 04/13/98
ANTENNA GAIN :

BEAM TILT 0
NULL FILL 0 %



Record of input data: 4 BAY SLOT WITH 4 BAYS.
GAIN BT/NF 0 DEG. & 0 PERCENT.
0 BAYS OFFSET. PHASE 0 DEGREES. DATE: 04/13/98

TECHNICAL EXHIBIT
AMENDMENT TO PENDING
DIGITAL DISPLACEMENT APPLICATION
TV TRANSLATOR W34CI (FACILITY ID 71730)
MAYAGUEZ, PR
CH 21 1.81 KW (DA)

Notification to the National Astronomy and Ionosphere Center

{one sheet follows}



201 Fletcher Ave.
Sarasota, FL 34237-6019
941-329-6000
941-329-6031 FAX

Grafton Olivera
Direct Dial 941-329-6001
e-mail: grifton@dlr.com

July 31, 2009

Via email (prcz@naic.edu)

Dr. Bob Kerr, Director
Reinaldo Velez, Spectrum Manager
National Astronomy and Ionosphere Center
Arecibo Observatory
HC3 Box 53995
Arecibo, PR 00612

Gentlemen:

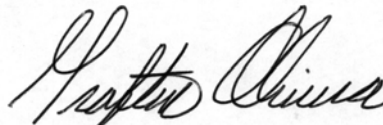
On behalf of our client, Western Broadcasting Corporation of Puerto Rico licensee of TV Translator Station W34CI, Mayaguez, Puerto Rico, in accordance with Section 73.1030 of the FCC Rules, we hereby notify you of an amendment to a pending application for channel displacement. The particulars of the amendment proposal are as follows:

Proposed Facility:

Geographical coordinates of antenna location (NAD83): 18-18-44 / 67-11-29
Antenna height (radiation center): 45 m AGL; 407 m AMSL
Max Antenna Gain: 14.1 dBd
Main Lobe Orientation: 270° True
Digital Channel: 21 (512-518 MHz)
Type of emission: 6M00D7W
Max. Effective isotropic radiated power (horizontal polarization, average power): 3.0 kW

Please review this proposal and let us know your findings. Please feel free to communicate via email ([mailto:Grafton@dlr.com](mailto:grifton@dlr.com)), telefax (941-329-6031) or regular mail.

Very truly yours,



Grafton Olivera, P.E.