

Percent allowed new interference: 0.500  
Percent allowed new interference to non Class A LPTV: 2.000  
Census data selected 1990  
Data Base Selected  
/space/software/cdbs/pt\_tvdb.sff  
TV INTERFERENCE and SPACING ANALYSIS PROGRAM

Date: 04-19-2011 Time: 16:32:35

Record Selected for Analysis

WDDN USERRECORD-01 US  
Channel 23 ERP 0.025 kW HAAT 255. m RCAMSL 00290 m  
Latitude 039-00-00 Longitude 0077-03-26  
Status APP Zone 2 Border Offset -  
Dir Antenna Make CDB Model 00000000104173 Beam tilt N Ref Azimuth 90.  
Last update Cutoff date Docket  
Comments  
Applicant

Cell Size for Service Analysis 1.0 km/side

Distance Increments for Longley-Rice Analysis 1.00 km

Not full service station  
Service Class = TX  
Maximum height/power limits not checked

Site number	1			
Azimuth	ERP	HAAT	74.0 dBu F(50,50)	
(Deg)	(kW)	(m)	(km)	
0.0	0.000	160.7	1.0	
45.0	0.000	182.7	1.0	
90.0	0.000	243.0	1.0	
135.0	0.000	248.5	1.0	
180.0	0.000	254.8	1.0	
225.0	0.000	209.6	1.0	
270.0	0.000	201.9	0.5	
315.0	0.000	180.1	1.0	

Contour Overlap Evaluation from LPTV Station to Full Service TV & DTV

Contour overlap to station  
WLYH-TV 23 LANCASTER PA BLCDT 20040922AAC

Station inside contour of station  
WNVC 24 FAIRFAX VA BLEDT 20090612ACS

Contour Overlap Evaluation from LPTV to Full Service TV & DTV Complete

Contour Overlap Evaluation from LPTV Station to LPTV Stations

Station inside contour of station  
WMDO-LD 22 WASHINGTON DC BDISDTL 20110329ACN

Station inside contour of station  
WDDN-LD 22 WASHINGTON DC BSTA 20110224ACD

Station inside contour of station  
WDDN-LD 22 WASHINGTON DC BDISDTL 20110224ACB

Station inside contour of station  
WDDN-LP 23 WASHINGTON DC BLTTL 20080327AAI

Contour overlap to station  
WDWA-LP 23 DALE CITY VA BDFCDTL 20110310ABW

Contour Overlap Evaluation from LPTV to LPTV Stations Complete

Contour Overlap to Proposed Station

Station  
WDDN-LP 23 WASHINGTON DC BLTTL20080327AAI

Is inside contour of station  
WDDN 23 USERRECORD01

Station  
WDWA-LP 23 CLARKS CORNER VA BLTTL20080814AAR causes

Contour overlap to station  
WDDN 23 USERRECORD01

Station  
WDWA-LP 23 LURAY VA BSTA20080321ACV causes

Contour overlap to station  
WDDN 23 USERRECORD01

Contour Overlap Evaluation to Proposed Station Complete

NO LANDMOBILE SPACING VIOLATIONS FOUND

Checks to Site Number 01

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 0.04km from AM station  
WASHINGTON DC WGAY Status: L Antenna: DA2

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Start of Interference Analysis

Channel	Proposed Station	ARN
23	Call WDDN City/State	USERRECORD01

Stations Potentially Affected by Proposed Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
22	WMDO-LD	WASHINGTON DC	7.0	APP	BDISDTL	-20110329ACN
23	WLYH-TV	LANCASTER PA	149.2	LIC	BLCDT	-20040922AAC
23	WDWA-LP	DALE CITY VA	33.3	CP	BDFCDTL	-20110310ABW
24	WNVC	FAIRFAX VA	20.0	LIC	BLEDT	-20090612ACS

%%%

Analysis of Interference to Affected Station 1

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
22	WMDO-LD	WASHINGTON DC	BDISDTL	-20110329ACN

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
21	WBOC-TV	SALISBURY MD	133.8	LIC	BLCDT	-20090618ABK
21	WVPY	FRONT ROYAL VA	108.0	LIC	BLEDT	-20100209AAB
22	W22DA	FREDERICK MD	57.8	LIC	BLTTL	-20050207AEK
22	W22DH-D	SALISBURY MD	141.6	CP	BDCCDTL	-20061027AGV
22	WNJS	CAMDEN NJ	211.4	CP	BPEDT	-20080620ALH
22	WNJS	CAMDEN NJ	211.4	LIC	BLEDT	-20070611AAY
22	WJAC-TV	ALTOONA PA	215.1	LIC	BLCDT	-20110105ABC
22	WRIC-TV	PETERSBURG VA	165.0	LIC	BLCDT	-20090209ABZ
22	W22CV	MOOREFIELD WV	158.0	LIC	BLTT	-20030429AAL
22	W22CV	MOOREFIELD WV	158.0	APP	BDFCDTT	-20110218ABQ
23	WDWA-LP	DALE CITY VA	27.3	CP	BDFCDTL	-20110310ABW
23	WDDN		7.0	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.
23	WLYH-TV	LANCASTER PA	BLCDT	-20040922AAC

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
22	WNJS	CAMDEN NJ	150.2	CP	BPEDT	-20080620ALH
22	WNJS	CAMDEN NJ	150.2	LIC	BLEDT	-20070611AAY
23	WPXJ-TV	BATAVIA NY	319.8	LIC	BLCDT	-20090612AHY
23	WFTY-DT	SMITHTOWN NY	304.4	CP	BPCDT	-20080613ACJ
23	WFTY-DT	SMITHTOWN NY	304.4	LIC	BLCDT	-20030113ABS
24	WNYE-TV	NEW YORK NY	216.4	CP MOD	BMPEDT	-20070124AAX
24	WNYE-TV	NEW YORK NY	216.4	LIC	BLEDT	-20071228ABM
24	WATM-TV	ALTOONA PA	170.9	LIC	BLCDT	-20050603ACF
24	WNVC	FAIRFAX VA	167.4	LIC	BLEDT	-20090612ACS
23	WDDN		149.2	APP	USERRECORD-01	

Total scenarios = 4

Result key: 1  
Scenario 1 Affected station 2  
Before Analysis

Results for: 23A PA LANCASTER BLCDT 20040922AAC LIC  
HAAT 381.0 m, ATV ERP 500.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	3410741	28570.7
not affected by terrain losses	3019181	25215.4
lost to NTSC IX	0	0.0
lost to additional IX by ATV	40428	105.6
lost to ATV IX only	40428	105.6
lost to all IX	40428	105.6

Potential Interfering Stations Included in above Scenario 1

22A NJ CAMDEN	BPEDT	20080620ALH	CP
23A NY BATAVIA	BLCDT	20090612AHY	LIC
23A NY SMITHTOWN	BPCDT	20080613ACJ	CP
24A VA FAIRFAX	BLEDT	20090612ACS	LIC

After Analysis

Results for: 23A PA LANCASTER BLCDT 20040922AAC LIC  
HAAT 381.0 m, ATV ERP 500.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	3410741	28570.7
not affected by terrain losses	3019181	25215.4
lost to NTSC IX	13570	33.2
lost to additional IX by ATV	39877	102.7
lost to ATV IX only	40428	105.6
lost to all IX	53447	135.9

Potential Interfering Stations Included in above Scenario 1

22A NJ CAMDEN	BPEDT	20080620ALH	CP
23A NY BATAVIA	BLCDT	20090612AHY	LIC
23A NY SMITHTOWN	BPCDT	20080613ACJ	CP
24A VA FAIRFAX	BLEDT	20090612ACS	LIC
23N	USERRECORD01		APP

Percent new IX = 0.4371%

Result key: 2  
Scenario 2 Affected station 2  
Before Analysis

Results for: 23A PA LANCASTER BLCDT 20040922AAC LIC  
HAAT 381.0 m, ATV ERP 500.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	3410741	28570.7
not affected by terrain losses	3019181	25215.4
lost to NTSC IX	0	0.0
lost to additional IX by ATV	41705	127.1
lost to ATV IX only	41705	127.1
lost to all IX	41705	127.1

Potential Interfering Stations Included in above Scenario 2

22A NJ CAMDEN	BPEDT	20080620ALH	CP
23A NY BATAVIA	BLCDT	20090612AHY	LIC
23A NY SMITHTOWN	BLCDT	20030113ABS	LIC
24A VA FAIRFAX	BLEDT	20090612ACS	LIC

After Analysis

Results for: 23A PA LANCASTER BLCDT 20040922AAC LIC

HAAT 381.0 m, ATV ERP 500.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	3410741	28570.7
not affected by terrain losses	3019181	25215.4
lost to NTSC IX	13570	33.2
lost to additional IX by ATV	41154	124.2
lost to ATV IX only	41705	127.1
lost to all IX	54724	157.4

Potential Interfering Stations Included in above Scenario 2

22A NJ CAMDEN	BPEDT	20080620ALH	CP
23A NY BATAVIA	BLCDT	20090612AHY	LIC
23A NY SMITHTOWN	BLCDT	20030113ABS	LIC
24A VA FAIRFAX	BLEDT	20090612ACS	LIC
23N	USERRECORD01		APP

Percent new IX = 0.4372%

Result key: 3  
Scenario 3 Affected station 2  
Before Analysis

Results for: 23A PA LANCASTER BLCDT 20040922AAC LIC  
HAAT 381.0 m, ATV ERP 500.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	3410741	28570.7
not affected by terrain losses	3019181	25215.4
lost to NTSC IX	0	0.0
lost to additional IX by ATV	22082	73.3
lost to ATV IX only	22082	73.3
lost to all IX	22082	73.3

Potential Interfering Stations Included in above Scenario 3

22A NJ CAMDEN	BLEDT	20070611AAAY	LIC
23A NY BATAVIA	BLCDT	20090612AHY	LIC
23A NY SMITHTOWN	BPCDT	20080613ACJ	CP
24A VA FAIRFAX	BLEDT	20090612ACS	LIC

After Analysis

Results for: 23A PA LANCASTER BLCDT 20040922AAC LIC  
HAAT 381.0 m, ATV ERP 500.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	3410741	28570.7
not affected by terrain losses	3019181	25215.4
lost to NTSC IX	13570	33.2
lost to additional IX by ATV	21531	70.4
lost to ATV IX only	22082	73.3
lost to all IX	35101	103.6

Potential Interfering Stations Included in above Scenario 3

22A NJ CAMDEN	BLEDT	20070611AAAY	LIC
23A NY BATAVIA	BLCDT	20090612AHY	LIC
23A NY SMITHTOWN	BPCDT	20080613ACJ	CP
24A VA FAIRFAX	BLEDT	20090612ACS	LIC
23N	USERRECORD01		APP

Percent new IX = 0.4344%

Result key: 4  
Scenario 4 Affected station 2  
Before Analysis

Results for: 23A PA LANCASTER BLCDT 20040922AAC LIC

HAAT 381.0 m, ATV ERP 500.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	3410741	28570.7
not affected by terrain losses	3019181	25215.4
lost to NTSC IX	0	0.0
lost to additional IX by ATV	23359	94.8
lost to ATV IX only	23359	94.8
lost to all IX	23359	94.8

Potential Interfering Stations Included in above Scenario 4

22A NJ CAMDEN	BLEDT	20070611AAY	LIC
23A NY BATAVIA	BLCDT	20090612AHY	LIC
23A NY SMITHTOWN	BLCDT	20030113ABS	LIC
24A VA FAIRFAX	BLEDT	20090612ACS	LIC

After Analysis

Results for: 23A PA LANCASTER BLCDT 20040922AAC LIC  
 HAAT 381.0 m, ATV ERP 500.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	3410741	28570.7
not affected by terrain losses	3019181	25215.4
lost to NTSC IX	13570	33.2
lost to additional IX by ATV	22808	91.9
lost to ATV IX only	23359	94.8
lost to all IX	36378	125.1

Potential Interfering Stations Included in above Scenario 4

22A NJ CAMDEN	BLEDT	20070611AAY	LIC
23A NY BATAVIA	BLCDT	20090612AHY	LIC
23A NY SMITHTOWN	BLCDT	20030113ABS	LIC
24A VA FAIRFAX	BLEDT	20090612ACS	LIC
23N	USERRECORD01		APP

Percent new IX = 0.4346%

Worst case new IX 0.4372% Scenario 2

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Analysis of Interference to Affected Station 3

Analysis of current record

Channel	Call	City/State	Application Ref. No.
23	WDWA-LP	DALE CITY VA	BDFCDTL -20110310ABW

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application Ref. No.
22	WMDO-LD	WASHINGTON DC	27.3	APP	BDISDTL -20110329ACN
23	W23ED-D	SALISBURY MD	156.1	CP	BNPDTL -20100204AAT
23	WUNK-TV	GREENVILLE NC	360.4	LIC	BLEDT -20021007ABG
23	WUNK-TV	GREENVILLE NC	360.4	CP MOD	BMPEDT -20090831ACZ
23	WLYH-TV	LANCASTER PA	179.9	LIC	BLCDT -20040922AAC
23	WITD-CA	CHESAPEAKE VA	230.2	LIC	BLTTA -20060614AAE
23	NEW	HARRISONBURG VA	137.2	APP	BNPDTL -20100714AAJ
23	W23DR-D	ROMNEY WV	133.1	LIC	BLDTT -20090609AAZ
24	WNVC	FAIRFAX VA	13.3	LIC	BLEDT -20090612ACS
23	WDDN		33.3	APP	USERRECORD-01

Total scenarios = 3

Result key: 5  
 Scenario 1 Affected station 3  
 Before Analysis

Results for: 23A VA DALE CITY BDFCDTL 20110310ABW CP  
 HAAT 190.0 m, ATV ERP 15.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	2430402	6436.3
not affected by terrain losses	2430185	6411.3
lost to NTSC IX	0	0.0
lost to additional IX by ATV	786156	719.5
lost to ATV IX only	786156	719.5
lost to all IX	786156	719.5

Potential Interfering Stations Included in above Scenario 1

23A PA LANCASTER	BLCDDT	20040922AAC	LIC
24A VA FAIRFAX	BLEDT	20090612ACS	LIC

After Analysis

Results for: 23A VA DALE CITY BDFCDTL 20110310ABW CP  
 HAAT 190.0 m, ATV ERP 15.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	2430402	6436.3
not affected by terrain losses	2430185	6411.3
lost to NTSC IX	13225	7.0
lost to additional IX by ATV	772931	712.5
lost to ATV IX only	786156	719.5
lost to all IX	786156	719.5

Potential Interfering Stations Included in above Scenario 1

23A PA LANCASTER	BLCDDT	20040922AAC	LIC
24A VA FAIRFAX	BLEDT	20090612ACS	LIC
23N	USERRECORD01		APP

Percent new IX = 0.0000%

Result key: 6  
 Scenario 2 Affected station 3  
 Before Analysis

Results for: 23A VA DALE CITY BDFCDTL 20110310ABW CP  
 HAAT 190.0 m, ATV ERP 15.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	2430402	6436.3
not affected by terrain losses	2430185	6411.3
lost to NTSC IX	0	0.0
lost to additional IX by ATV	799600	724.5
lost to ATV IX only	799600	724.5
lost to all IX	799600	724.5

Potential Interfering Stations Included in above Scenario 2

22A DC WASHINGTON	BDISDTL	20110329ACN	APP
23A PA LANCASTER	BLCDDT	20040922AAC	LIC
24A VA FAIRFAX	BLEDT	20090612ACS	LIC

After Analysis

Results for: 23A VA DALE CITY BDFCDTL 20110310ABW CP  
 HAAT 190.0 m, ATV ERP 15.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	2430402	6436.3
not affected by terrain losses	2430185	6411.3
lost to NTSC IX	13225	7.0

lost to additional IX by ATV	786375	717.5
lost to ATV IX only	799600	724.5
lost to all IX	799600	724.5

Potential Interfering Stations Included in above Scenario 2

22A DC WASHINGTON	BDISDTL	20110329ACN	APP
23A PA LANCASTER	BLCDDT	20040922AAC	LIC
24A VA FAIRFAX	BLEDT	20090612ACS	LIC
23N	USERRECORD01		APP

Percent new IX = 0.0000%

Result key: 7  
 Scenario 3 Affected station 3  
 Before Analysis

Results for: 23A VA DALE CITY BDFCDTL 20110310ABW CP

HAAT 190.0 m, ATV ERP 15.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	2430402	6436.3
not affected by terrain losses	2430185	6411.3
lost to NTSC IX	0	0.0
lost to additional IX by ATV	786156	719.5
lost to ATV IX only	786156	719.5
lost to all IX	786156	719.5

Potential Interfering Stations Included in above Scenario 3

23A PA LANCASTER	BLCDDT	20040922AAC	LIC
24A VA FAIRFAX	BLEDT	20090612ACS	LIC

After Analysis

Results for: 23A VA DALE CITY BDFCDTL 20110310ABW CP

HAAT 190.0 m, ATV ERP 15.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	2430402	6436.3
not affected by terrain losses	2430185	6411.3
lost to NTSC IX	13225	7.0
lost to additional IX by ATV	772931	712.5
lost to ATV IX only	786156	719.5
lost to all IX	786156	719.5

Potential Interfering Stations Included in above Scenario 3

23A PA LANCASTER	BLCDDT	20040922AAC	LIC
24A VA FAIRFAX	BLEDT	20090612ACS	LIC
23N	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 4

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
24	WNVC	FAIRFAX VA	BLEDT	-20090612ACS

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
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23	WLYH-TV	LANCASTER PA	167.4	LIC	BLCDT	-20040922AAC
24	WNYE-TV	NEW YORK NY	346.5	CP MOD	BMPEDT	-20070124AAX
24	WNYE-TV	NEW YORK NY	346.5	LIC	BLEDT	-20071228ABM
24	WATM-TV	ALTOONA PA	215.3	LIC	BLCDT	-20050603ACF
24	WJET-TV	ERIE PA	426.3	CP MOD	BMPCDT	-20080612ABV
24	WDRL-TV	DANVILLE VA	292.0	CP	BPCDT	-20080317AIL
25	WTVE	READING PA	214.2	CP	BPCDT	-20100129ADA
25	WTVE	READING PA	199.8	CP	BPCDT	-20100129ADA
25	WTVE	READING PA	208.2	APP	BPCDT	-20100422ACQ
25	WTVE	READING PA	214.2	LIC	BLCDT	-20081117ADZ
25	WTVR-TV	RICHMOND VA	154.9	LIC	BLCDT	-20021204ABA
23	WDDN		20.0	APP	USERRECORD-01	

Proposal causes no interference

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Analysis of Interference to Affected Station 5

Analysis of current record

Channel	Call	City/State	Application Ref. No.
23	WDDN		USERRECORD-01

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application Ref. No.
15	WFDC-DT	ARLINGTON VA	7.0	LIC	BLCDT -20070215AAB
15	WFDC-DT	ARLINGTON VA	7.0	CP	BPCDT -20080618AKE
21	WBOC-TV	SALISBURY MD	134.3	LIC	BLCDT -20090618ABK
21	WVPY	FRONT ROYAL VA	110.2	LIC	BLEDT -20100209AAB
22	WMDO-LD	WASHINGTON DC	7.0	APP	BDISDTL -20110329ACN
23	WUNK-TV	GREENVILLE NC	386.2	LIC	BLEDT -20021007ABG
23	WUNK-TV	GREENVILLE NC	386.2	CP MOD	BMPEDT -20090831ACZ
23	WLYH-TV	LANCASTER PA	149.2	LIC	BLCDT -20040922AAC
23	WDWA-LP	CLARKS CORNER VA	73.3	LIC	BLTTL -20080814AAR
23	WDWA-LP	DALE CITY VA	33.3	CP	BDFCDTL -20110310ABW
23	WDWA-LP	LURAY VA	73.3	APP	BSTA -20080321ACV
24	WNVC	FAIRFAX VA	20.0	LIC	BLEDT -20090612ACS
26	WHAG-TV	HAGERSTOWN MD	107.3	CP MOD	BMPCDT -20080619AJL
27	WETA-TV	WASHINGTON DC	5.9	LIC	BLEDT -20070727ACJ
30	WGCB-TV	RED LION PA	108.5	LIC	BLCDT -20050615AAB
30	WNVTV	GOLDVEIN VA	52.9	LIC	BLEDT -20031230AAR
38	WMAR-TV	BALTIMORE MD	51.1	LIC	BLCDT -20090619ACA

Total scenarios = 3

Result key: 8  
Scenario 1 Affected station 5  
Before Analysis

Results for: 23N	USERRECORD01	APP
	POPULATION	AREA (sq km)
within Noise Limited Contour	11096	4.0
not affected by terrain losses	11096	4.0
lost to NTSC IX	0	0.0
lost to additional IX by ATV	2110	1.0
lost to all IX	2110	1.0

Potential Interfering Stations Included in above Scenario 1

15A VA ARLINGTON	BPCDT	20080618AKE	CP
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Result key: 9  
Scenario 2 Affected station 5  
Before Analysis

Results for: 23N		USERRECORD01	APP
		POPULATION	AREA (sq km)
within Noise Limited Contour		11096	4.0
not affected by terrain losses		11096	4.0
lost to NTSC IX		0	0.0
lost to additional IX by ATV		2110	1.0
lost to all IX		2110	1.0

Potential Interfering Stations Included in above Scenario 2

15A VA ARLINGTON	BPCDT	20080618AKE	CP
22A DC WASHINGTON	BDISDTL	20110329ACN	APP

Result key: 10  
Scenario 3 Affected station 5  
Before Analysis

Results for: 23N		USERRECORD01	APP
		POPULATION	AREA (sq km)
within Noise Limited Contour		11096	4.0
not affected by terrain losses		11096	4.0
lost to NTSC IX		0	0.0
lost to additional IX by ATV		2110	1.0
lost to all IX		2110	1.0

Potential Interfering Stations Included in above Scenario 3

15A VA ARLINGTON	BPCDT	20080618AKE	CP
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