

# KESQ (DTS), Palm Springs, CA, OET-69 Interference Analysis (worst-case scenarios)

Percent allowed new interference: 0.500  
Percent allowed new interference to Class A: 0.500  
TW Census data selected 2000  
Post Transition Data Base Selected /export/home/cdb/pt\_tvdb.sff

## TV INTERFERENCE and SPACING ANALYSIS PROGRAM

Date: 11-23-2009 Time: 08:51:09

Record Selected for Analysis (Record is a DTS)

KESQ-TV BDTS -30000101AAA PALM SPRINGS CA US  
Channel 42 ERP 42 kW HAAT 227 m RCAMSL 496 m  
Latitude 33 -51-58 Longitude 116 -26-02  
Status APP Zone 2 Border Site number: 01  
Dir Antenna Make CDB Model 00000000092841 Beam tilt N Ref Azimuth 0.0  
Last update Cutoff date 40000101 Docket  
Comments  
Applicant

KESQ-TV BDTS -30000101AAA PALM SPRINGS CA US  
Channel 42 ERP 0.73 kW HAAT 810 m RCAMSL 2424 m  
Latitude 34 -02-17 Longitude 116 -48-47  
Status APP Zone 2 Border Site number: 02  
Dir Antenna Make CDB Model 00000000023502 Beam tilt N Ref Azimuth 75.0  
Last update Cutoff date 40000101 Docket  
Comments  
Applicant

Cell Size for Service Analysis 2.0 km/side

Distance Increments for Longley-Rice Analysis 1.00 km

Facility (site # 01) meets maximum height/power limits

Facility (site # 02) meets maximum height/power limits

Site number	1			
Azimuth	ERP	HAAT	41.0 dBu F(50,90)	
(Deg)	(kW)	(m)	(km)	
0.0	1.214	33.0	29.1	
45.0	1.516	33.0	30.1	
90.0	15.120	187.8	60.4	
135.0	39.111	427.0	82.5	
180.0	35.549	354.8	77.0	
225.0	36.326	344.1	76.2	
270.0	37.111	226.3	67.5	
315.0	12.247	212.9	61.0	

Site number	2			
Azimuth	ERP	HAAT	41.0 dBu F(50,90)	
(Deg)	(kW)	(m)	(km)	
0.0	0.002	33.0	6.4	
45.0	0.020	311.4	32.2	
90.0	0.241	1108.9	64.3	
135.0	0.000	1316.6	11.4	
180.0	0.000	1516.3	10.3	
225.0	0.000	1345.6	7.0	
270.0	0.000	822.8	6.0	
315.0	0.002	33.0	6.2	

Evaluation toward Class A Stations from site # 01

Station inside contour of Class A station  
KPSP-LP 38 CATHEDRAL CITY, ETC. CA BLTTA 20020912ABB

Station inside contour of Class A station  
KRET-CA 45 CATHEDRAL CITY CA BLTTA 20010711AAF

Evaluation toward Class A Stations from site # 02

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No Spacing violations or contour overlap  
to Class A stations from site # 02

## Class A Evaluation Complete

### 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 within the Mexican coordination distance  
Distance to border = 141.1km  
Proposed station is 2.63km from AM station  
THOUSAND PALMS CA KNWZ Status: L Antenna: DA2

### Checks to Site Number 02

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 within the Mexican coordination distance  
Distance to border = 163.5km  
Proposed station is OK toward AM broadcast stations

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Start of Interference Analysis

Channel	Proposed Station Call	City/State	ARN	
42	KESQ-TV	PALM SPRINGS CA	BDTS	30000101AAA

### Stations Potentially Affected by Proposed Station

Chan	Call	City/State	Dist(km)	Status	Application Ref. No.
35	K35DG	LA JOLLA CA	136.8	LIC	BLTTA 20060621AAL
38	KPSP-LP	CATHEDRAL CITY, ETC. CA	0.3	LIC	BLTTA 20020912ABB
41	KLCS	LOS ANGELES CA	155.0	LIC	BLEDT 20030507AAS
41	KLCS	LOS ANGELES CA	155.0	CP MOD	BMPEDT 20080620AIZ
42	KWHY-TV	LOS ANGELES CA	154.6	LIC	BLCDT 20060629AFB
42	KBOP-CA	SAN DIEGO CA	138.1	APP	BDISDTA 20091117ADG
43	KCBS-TV	LOS ANGELES CA	155.5	CP MOD	BMPCDT 20080616ABQ
43	KSKT-CA	SAN MARCOS CA	107.5	APP	BDFCDTA 20051020AAP
43	KSKT-CA	SAN MARCOS CA	107.3	LIC	BLTT 19941201JC
45	KRET-CA	CATHEDRAL CITY CA	0.1	LIC	BLTTA 20010711AAF

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### Analysis of Interference to Affected Station 1

#### Analysis of current record

Channel	Call	City/State	Application Ref. No.
35	K35DG	LA JOLLA CA	BLTTA -20060621AAL

### Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application Ref. No.
34	KSDX-LP	SAN DIEGO CA	33.4	APP	BPTTL -20010112AAZ
35	KRCA	RIVERSIDE CA	170.2	CP	BPCDT -20080620AIN
35	KRCA	RIVERSIDE CA	170.2	PLN	DTVPLN -DTVP1276
36	KDTF-LP	SAN DIEGO CA	33.3	LIC	BLTTL -20040212ACB
42	KESQ-TV	PALM SPRINGS CA	136.8	PLN	DTVPLN -DTVP1489

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42	KESQ-TV	PALM SPRINGS CA	136.8	CP	BPCDT	-20090506ACR
50	K61GH	SAN DIEGO CA	33.3	APP	BDISTTL	-20060915A00
50	KVMD-DR	TWENTYNINE PALMS CA	139.8	APP	BPRM	-20080620AOJ
42	KESQ-TV	PALM SPRINGS CA	136.8	APP	BDTS	-30000101AAA
42	KESQ-TV	PALM SPRINGS CA	139.1	APP	BDTS	-30000101AAA

Proposed station is beyond the site to  
nearest cell evaluation distance

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## Analysis of Interference to Affected Station 2

### Analysis of current record

Channel	Call	City/State	Application Ref. No.
38	KPSP-LP	CATHEDRAL CITY, ETC. CA	BLTTA -20020912ABB

### Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application Ref. No.
30	KPBS	SAN DIEGO CA	137.9	LIC	BLEDT -20011203CEP
30	KPBS	SAN DIEGO CA	137.9	PLN	DTVPLN -DTVP1092
38	KNXT-LP	BAKERSFIELD CA	274.0	LIC	BLTTTL -20070524ADC
38	KSCD-LP	BIG BEAR LAKE CA	67.7	LIC	BLTTTL -20080630ADI
38	NEW	PALM SPRINGS CA	0.1	APP	BNPTTL -20000818ACV
38	KPAL-LP	PALMDALE CA	180.6	STA	BSTA -20060104ACS
38	KPAL-LP	PALMDALE CA	180.6	STA	BSTA -20050922AFW
38	KPAL-LP	PALMDALE CA	180.5	LIC	BLTTTL -19900723II
38	KPXN-TV	SAN BERNARDINO CA	154.9	LIC	BLCDT -20050623AAG
38	KPXN	SAN BERNARDINO CA	154.9	PLN	DTVPLN -DTVP1354
38	K38EE	TWENTYNINE PALMS CA	49.8	LIC	BLTT -19960925JC
39	NEW	PALM SPRINGS CA	0.2	APP	BNPTTL -20000825AJW
39	NEW	PALM SPRINGS CA	5.7	APP	BNPTTL -20000831BLT
40	KNSD	SAN DIEGO CA	138.0	LIC	BLCDT -20040805AAL
40	KNSD	SAN DIEGO CA	138.0	PLN	DTVPLN -DTVP1423
40	KNSD	SAN DIEGO CA	138.0	CP MOD	BMPCDT -20041029AHV
42	KESQ-TV	PALM SPRINGS CA	0.1	PLN	DTVPLN -DTVP1489
42	KESQ-TV	PALM SPRINGS CA	0.3	CP	BPCDT -20090506ACR
46	KMIR-TV	PALM SPRINGS CA	0.1	CP	BPCDT -20080619AGK
46	KMIR-TV	PALM SPRINGS CA	0.1	PLN	DTVPLN -DTVP1636
46	KMIR-TV	PALM SPRINGS CA	0.1	LIC	BLCDT -20021007ABN
53	KVMD	TWENTYNINE PALMS CA	38.7	ADD	BPRM -20000717AFU
42	KESQ-TV	PALM SPRINGS CA	0.3	APP	BDTS -30000101AAA
42	KESQ-TV	PALM SPRINGS CA	40.0	APP	BDTS -30000101AAA

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.
41	KLCS	LOS ANGELES CA	BLEDT -20030507AAS

### Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application Ref. No.
40	KNSD	SAN DIEGO CA	199.4	LIC	BLCDT -20040805AAL
40	KNSD	SAN DIEGO CA	199.4	PLN	DTVPLN -DTVP1423
40	KNSD	SAN DIEGO CA	199.4	CP MOD	BMPCDT -20041029AHV
42	KWHY-TV	LOS ANGELES CA	1.2	LIC	BLCDT -20060629AFB
42	KWHY-TV	LOS ANGELES CA	1.2	PLN	DTVPLN -DTVP1488
42	KESQ-TV	PALM SPRINGS CA	155.2	PLN	DTVPLN -DTVP1489
42	KESQ-TV	PALM SPRINGS CA	155.0	APP	BDTS -30000101AAA
42	KESQ-TV	PALM SPRINGS CA	116.8	APP	BDTS -30000101AAA

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.
41	KLCS	LOS ANGELES CA	BMPEDT -20080620AIZ

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### Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
40	KNSD	SAN DIEGO CA	199.4	LIC	BLCDDT	-20040805AAL
40	KNSD	SAN DIEGO CA	199.4	PLN	DTVPLN	-DTVP1423
40	KNSD	SAN DIEGO CA	199.4	CP MOD	BMPCDT	-20041029AHV
42	KWHY-TV	LOS ANGELES CA	1.2	LIC	BLCDDT	-20060629AFB
42	KWHY-TV	LOS ANGELES CA	1.2	PLN	DTVPLN	-DTVP1488
42	KESQ-TV	PALM SPRINGS CA	155.2	PLN	DTVPLN	-DTVP1489
42	KESQ-TV	PALM SPRINGS CA	155.0	APP	BDTS	-30000101AAA
42	KESQ-TV	PALM SPRINGS CA	116.8	APP	BDTS	-30000101AAA

Proposal causes no interference

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### Analysis of Interference to Affected Station 6

#### Analysis of current record

Channel	Call	City/State	Application	Ref. No.
42	KWHY-TV	LOS ANGELES CA	BLCDDT	-20060629AFB

### Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
41	KLCS	LOS ANGELES CA	1.2	LIC	BLEDIT	-20030507AAS
41	KLCS	LOS ANGELES CA	1.2	PLN	DTVPLN	-DTVP1458
41	KLCS	LOS ANGELES CA	1.2	CP MOD	BMPEDT	-20080620AIZ
42	KESQ-TV	PALM SPRINGS CA	154.8	PLN	DTVPLN	-DTVP1489
43	KCBS-TV	LOS ANGELES CA	1.6	CP MOD	BMPCDT	-20080616ABQ
43	KCBS-TV	LOS ANGELES CA	1.6	PLN	DTVPLN	-DTVP1527
42	KESQ-TV	PALM SPRINGS CA	154.6	APP	BDTS	-30000101AAA
42	KESQ-TV	PALM SPRINGS CA	116.5	APP	BDTS	-30000101AAA

Total scenarios = 6

Result key: 5

Scenario 5 Affected station 6

Before Analysis

Results for: 42A CA LOS ANGELES BLCDDT 20060629AFB LIC

HAAT 892.0 m, ATV ERP 486.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	15909535	35090.5
not affected by terrain losses	14589215	25100.7
lost to NTSC IX	0	0.0
lost to additional IX by ATV	218318	532.5
lost to ATV IX only	218318	532.5
lost to all IX	218318	532.5

### Potential Interfering Stations Included in above Scenario 5

41A CA LOS ANGELES	BMPEDT	20080620AIZ	CP
43A CA LOS ANGELES	BMPCDT	20080616ABQ	CP
42A CA PALM SPRINGS	DTVPLN	DTVP1489	PLN

After Analysis

Results for: 42A CA LOS ANGELES BLCDDT 20060629AFB LIC

HAAT 892.0 m, ATV ERP 486.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	15909535	35090.5
not affected by terrain losses	14589215	25100.7
lost to NTSC IX	0	0.0
lost to additional IX by ATV	249351	728.7
lost to ATV IX only	249351	728.7
lost to all IX	249351	728.7

### Potential Interfering Stations Included in above Scenario 5

41A CA LOS ANGELES	BMPEDT	20080620AIZ	CP
43A CA LOS ANGELES	BMPCDT	20080616ABQ	CP
42A CA PALM SPRINGS	BDTS	30000101AAA	APP

Percent new IX = 0.2159%

Worst case new IX 0.2159% Scenario 5

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# KESQ (DTS), Palm Springs, CA, OET-69 Interference Analysis (worst-case scenarios)

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## Analysis of Interference to Affected Station 8

### Analysis of current record

Channel	Call	City/State	Application Ref. No.
42	KBOP-CA	SAN DIEGO CA	BDISDTA -20091117ADG

### Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application Ref. No.
41	KLCS	LOS ANGELES CA	199.3	LIC	BLEDT -20030507AAS
41	KLCS	LOS ANGELES CA	199.3	PLN	DTVPLN -DTVP1458
41	KLCS	LOS ANGELES CA	199.3	CP MOD	BMPEDT -20080620AIZ
42	KWHY-TV	LOS ANGELES CA	198.3	LIC	BLCDT -20060629AFB
42	KWHY-TV	LOS ANGELES CA	198.3	PLN	DTVPLN -DTVP1488
42	KESQ-TV	PALM SPRINGS CA	138.1	PLN	DTVPLN -DTVP1489
43	KCBS-TV	LOS ANGELES CA	199.8	CP MOD	BMPCDT -20080616ABQ
43	KCBS-TV	LOS ANGELES CA	199.8	PLN	DTVPLN -DTVP1527
42	KESQ-TV	PALM SPRINGS CA	138.1	APP	BDTS -30000101AAA
42	KESQ-TV	PALM SPRINGS CA	149.5	APP	BDTS -30000101AAA

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.
43	KCBS-TV	LOS ANGELES CA	BMPCDT -20080616ABQ

### Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application Ref. No.
42	KWHY-TV	LOS ANGELES CA	1.6	LIC	BLCDT -20060629AFB
42	KWHY-TV	LOS ANGELES CA	1.6	PLN	DTVPLN -DTVP1488
42	KESQ-TV	PALM SPRINGS CA	155.6	PLN	DTVPLN -DTVP1489
43	KGMC	CLOVIS CA	339.5	CP MOD	BMPCDT -20080620AAE
43	KGMC	CLOVIS CA	300.8	PLN	DTVPLN -DTVP1526
44	KHIZ	BARSTOW CA	83.2	PLN	DTVPLN -DTVP1564
44	KHIZ	BARSTOW CA	83.2	APP	BMPCDT -20090601AAG
44	KHIZ	BARSTOW CA	117.2	APP	BMPCDT -20090601AAG
44	KHIZ	BARSTOW CA	83.2	LIC	BLCDT -20070620ADR
44	KHIZ	BARSTOW CA	1.6	APP	BMPCDT -20090601AAG
44	KHIZ	BARSTOW CA	83.2	CP	BPCDT -20080403ABK
42	KESQ-TV	PALM SPRINGS CA	155.6	APP	BDTS -30000101AAA
42	KESQ-TV	PALM SPRINGS CA	117.2	APP	BDTS -30000101AAA

Proposal causes no interference

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## Analysis of Interference to Affected Station 11

### Analysis of current record

Channel	Call	City/State	Application Ref. No.
43	KSKT-CA	SAN MARCOS CA	BDFCDTA -20051020AAP

### Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application Ref. No.
42	KWHY-TV	LOS ANGELES CA	167.7	LIC	BLCDT -20060629AFB
42	KWHY-TV	LOS ANGELES CA	167.7	PLN	DTVPLN -DTVP1488
42	KESQ-TV	PALM SPRINGS CA	107.5	PLN	DTVPLN -DTVP1489
43	KCBS-TV	LOS ANGELES CA	169.2	CP MOD	BMPCDT -20080616ABQ
43	KCBS-TV	LOS ANGELES CA	169.2	PLN	DTVPLN -DTVP1527
44	KHIZ	BARSTOW CA	180.3	PLN	DTVPLN -DTVP1564
44	KHIZ	BARSTOW CA	180.3	APP	BMPCDT -20090601AAG
44	KHIZ	BARSTOW CA	115.3	APP	BMPCDT -20090601AAG
44	KHIZ	BARSTOW CA	180.3	LIC	BLCDT -20070620ADR
44	KHIZ	BARSTOW CA	167.7	APP	BMPCDT -20090601AAG
44	KHIZ	BARSTOW CA	180.3	CP	BPCDT -20080403ABK
42	KESQ-TV	PALM SPRINGS CA	107.5	APP	BDTS -30000101AAA
42	KESQ-TV	PALM SPRINGS CA	115.3	APP	BDTS -30000101AAA

Proposal causes no interference

# KESQ (DTS), Palm Springs, CA, OET-69 Interference Analysis (worst-case scenarios)

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## Analysis of Interference to Affected Station 12

### Analysis of current record

Channel	Call	City/State	Application Ref. No.
43	KSKT-CA	SAN MARCOS CA	BLTT -19941201JC

### Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application Ref. No.
40	KNSD	SAN DIEGO CA	34.9	LIC	BLCDDT -20040805AAL
40	KNSD	SAN DIEGO CA	34.9	PLN	DTVPLN -DTVP1423
40	KNSD	SAN DIEGO CA	34.9	CP MOD	BMPCDDT -20041029AHV
42	KESQ-TV	PALM SPRINGS CA	107.4	PLN	DTVPLN -DTVP1489
42	KESQ-TV	PALM SPRINGS CA	107.3	CP	BPCDDT -20090506ACR
42	KBOP-CA	SAN DIEGO CA	34.9	APP	BDISDTA -20091117ADG
43	NEW	YUMA AZ	199.7	APP	BNPTTL -20000831BKF
43	NEW	BRAWLEY CA	134.1	ADD	BPRM -20000717ACQ
43	KCBS-TV	LOS ANGELES CA	169.2	CP MOD	BMPCDDT -20080616ABQ
43	KCBS-TV	LOS ANGELES CA	169.2	PLN	DTVPLN -DTVP1527
43	KDUO-LP	PALM DESERT CA	107.4	LIC	BLTTTL -20071210ABX
43	KBOP-CA	SAN DIEGO CA	34.9	LIC	BLTTA -20080421ABQ
44	KHIZ	BARSTOW CA	115.2	APP	BMPCDDT -20090601AAG
46	KMIR-TV	PALM SPRINGS CA	107.5	CP	BPCDDT -20080619AGK
46	KMIR-TV	PALM SPRINGS CA	107.5	PLN	DTVPLN -DTVP1636
46	KMIR-TV	PALM SPRINGS CA	107.5	LIC	BLCDDT -20021007ABN
50	KVMD-DR	TWENTYNINE PALMS CA	117.1	APP	BPRM -20080620AOJ
42	KESQ-TV	PALM SPRINGS CA	107.3	APP	BDTS -30000101AAA
42	KESQ-TV	PALM SPRINGS CA	115.2	APP	BDTS -30000101AAA
44	KHIZ	BARSTOW CA		APP	BMPCDDT -20090601AAG
44	KHIZ	BARSTOW CA		APP	BMPCDDT -20090601AAG

Proposal causes no interference

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## Analysis of Interference to Affected Station 13

### Analysis of current record

Channel	Call	City/State	Application Ref. No.
45	KRET-CA	CATHEDRAL CITY CA	BLTTA -20010711AAF

### Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application Ref. No.
42	KESQ-TV	PALM SPRINGS CA	0.1	PLN	DTVPLN -DTVP1489
42	KESQ-TV	PALM SPRINGS CA	0.1	CP	BPCDDT -20090506ACR
44	KHIZ	BARSTOW CA	113.8	PLN	DTVPLN -DTVP1564
44	KHIZ	BARSTOW CA	113.8	LIC	BLCDDT -20070620ADR
44	KHIZ	BARSTOW CA	113.8	CP	BPCDDT -20080403ABK
45	KUVI-DT	BAKERSFIELD CA	273.8	CP MOD	BMPCDDT -20080618AEJ
45	KUVI-TV	BAKERSFIELD CA	273.8	PLN	DTVPLN -DTVP1600
45	KHTV-LP	INLAND EMPIRE CA	154.7	APP	BPTTL -20021016AAZ
45	KRMV-LP	MORENO VALLEY CA	39.8	LIC	BLTTTL -20070130AJO
45	NEW	NORTH LAS VEGAS NV	286.2	ADD	BPRM -19960725AAJ
46	KMIR-TV	PALM SPRINGS CA	0.2	CP	BPCDDT -20080619AGK
46	KMIR-TV	PALM SPRINGS CA	0.2	PLN	DTVPLN -DTVP1636
46	KMIR-TV	PALM SPRINGS CA	0.2	LIC	BLCDDT -20021007ABN
42	KESQ-DTS	YUCCA VALLIE CA	39.8	APP	USERRECORD-01

Proposal causes no interference

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