

November 2017
FM Translator K256CX
Beaumont, California Channel 256D
Engineering STA - Allocation Study

STA Technical Facility

ABC Radio Los Angeles Assets, LLC has been granted STAs (see FCC File Nos. BSTA-20171010AEC and BSTA-20171106ABM) to operate FM translator K256CX with the technical facilities described in the STA applications.

By the instant filing, ABC proposes to modify those technical parameters, to change the antenna pattern and main lobe ERP, and to allow testing with the antenna array oriented anywhere between 310 and 320 degrees True, in order to maximize performance and service to the listeners of K256CX while enabling it to conduct tests to ensure that its operation continues to be without interference to KGGL.

Antenna Structure Registration	1012885
Coordinates (NAD27)	34-06-50 x 117-59-50
Site Elevation	113 m AMSL
Antenna Height	98m AGL (H) 212m AMSL (H)
Max Lobe ERP	0.250 kW (H)
Antenna Model	Directional Composite Scala (2)CL-FMH Reduced Rear
Antenna Rotation	310 to 320 degrees

Allocation Study

The attached spacing study shows the spacing between the proposed translator site and the location of cochannel and adjacent channel stations and proposals. This study was made with the Commission's Class A spacing requirements, and individual situations were examined to determine the lack of prohibited contour overlap per the requirements of §74.1204 of the Rules. The attached allocation study map demonstrates compliance with the Commission's Rules for protection of FM broadcast stations and FM translators as outlined in §74.1204.

The allocation study map depicts the interfering contours from the proposed STA facility with the antenna oriented at both 310 and 320 degrees True. It is readily apparent that at any azimuth between 310 and 320 degrees True (the azimuth span requested herein), there is no prohibited contour overlap as defined in §74.1204.

KYSR 254B Los Angeles

The proposed translator transmitter site is located within the 60 dBu protected contour of second-adjacent channel station KYSR 254B Los Angeles. The following calculation, performed using the *Living Way* methodology, demonstrates interference protection to that station.

Protected Station	Distance & Bearing to Proposal	Station ERP and HAAT on that azimuth	Station Field Strength at Proposal	Corresponding Translator Interfering Contour	Distance to Translator Interfering Contour
KYSR 254B	36.40 km 91 deg True	75 kW 354 meters	77.44 dBu F(50,50)	117.44 dBu	148.8 meters Free Space

The aerial photo of the proposed transmitter site (below) depicts the 117.44 dBu contour from the proposed facility, with the antenna oriented at both 310 and 320 degrees True. There is no population within this contour. Therefore, the proposed facility is believed to satisfy the requirements of §74.1204(d) with respect to KYSR.



KKLA-FM 258B Los Angeles

The proposed translator transmitter site is located within the 60 dBu protected contour of second-adjacent channel station KKLA-FM 258B Los Angeles. The following calculation, performed using the *Living Way* methodology, demonstrates interference protection to that station.

Protected Station	Distance & Bearing to Proposal	Station ERP and HAAT on that azimuth	Station Field Strength at Proposal	Corresponding Translator Interfering Contour	Distance to Translator Interfering Contour
KKLA 258B	13.59 km 154 deg True	1.01 kW 1501 meters	83.31 dBu F(50,50)	123.31 dBu	75.7 meters Free Space

The 123.31 dBu contour from the proposed facility extends only 76 meters from the antenna and does not reach ground level. There is no population within this contour. Therefore, the proposed facility is believed to satisfy the requirements of §74.1204(d) with respect to KKLA-FM.

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SEARCH PARAMETERS                               FM Database Date: 171114
Channel: 256A      99.1 MHz                      Page 1
Latitude: 34 6 50
Longitude: 117 59 50
Safety Zone: 50 km
Job Title: K256CX

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Call Status	City St	FCC File No.	Channel Freq.	ERP(kW) HAAT(m)	Latitude Longitude	Bearing deg-True	Dist (km)	Req (km)
KTCN	ACTON		202A	0.100	DA 34-28-10	345.1	40.82	10
CP MOD	CA	BMPED-40224AAV	88.3	-96.0	118-06-42		30.82	CLEAR
KTCN	ACTON		202A	0.100	DA 34-28-09	345.1	40.80	10
CP	CA	BNPED-71022AOT	88.3	-96.0	118-06-43		30.80	CLEAR
KTCN	ACTON		202A	0.100	DA 34-28-09	345.1	40.80	10
CP MOD	CA	BMPED-40203ACN	88.3	-96.0	118-06-43		30.80	CLEAR
KCSN	NORTHRIDGE		203B1	0.370	DA 34-19-10	294.2	56.16	12
LIC	CA	BLER-20905AAM	88.5	501.0	118-33-15		44.16	CLEAR
KCSN-FM1	WEST LOS ANGELES		203D	0.800	DA 34-03-42	261.6	39.07	0
LIC	CA	BLFTB-30115ADF	88.5	0.0	118-24-57		0.00	BOOST
KYSR	LOS ANGELES		254B	75.000	34-07-08	271.0	36.40	69
LIC	CA	BMLH-90709ACO	98.7	360.0	118-23-30		-32.60	SHORT
KHHT	METTLER		255A	0.225	DA 34-54-11	316.8	120.81	72
LIC	CA	BLH-61122AEV	98.9	502.0	118-54-14	SS	48.81	CLEAR
K256CX	BEAUMONT		256D	0.200	DA 34-06-50	0.0	0.00	0
LIC	CA	BLFT-70712AAF	99.1	144.0	117-59-50		0.00	TRANS
K256CX	BEAUMONT		256D	0.240	DA 34-06-50	0.0	0.00	0
APP	CA	BMPFT-70525AMV	99.1	143.0	117-59-50		0.00	TRANS
K256CX	BEAUMONT		256D	0.080	34-06-50	0.0	0.00	0
APP	CA	BSTA-71106ABM	99.1	0.0	117-59-50		0.00	TRANS
K256CX	BEAUMONT		256D	0.080	34-06-50	0.0	0.00	0
APP	CA	BSTA-71010AEC	99.1	0.0	117-59-50		0.00	TRANS
KWSV-LP	CHATSWORTH		256D	0.006	DA 34-15-24	285.2	61.36	0
LIC	CA	BLFTB-70724AAA	99.1	0.0	118-38-25		0.00	BOOST
KLBP-LP	LONG BEACH		256L1	0.100	33-44-47	212.6	48.39	67
CP MOD	CA	BMPL-60601AHB	99.1	12.0	118-16-45		-18.61	SHORT
KLBP-LP	LONG BEACH		256L1	0.100	33-44-47	217.1	51.13	67
APP	CA	BMPL-70519ACM	99.1	-38.2	118-19-52		-15.87	SHORT

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SEARCH PARAMETERS                               FM Database Date: 171114
Channel: 256A      99.1 MHz                      Page 2
Latitude: 34 6 50
Longitude: 117 59 50
Safety Zone: 50 km
Job Title: K256CX

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Call Status	City St	FCC File No.	Channel Freq.	ERP(kW) HAAT(m)	Latitude Longitude	Bearing deg-True	Dist (km)	Req (km)
KFEP-LP APP	LOS ANGELES CA	BMPL-70628AAS	256L1 99.1	0.100 -9.5	34-05-21 118-20-14	265.1	31.49 -35.51	67 SHORT
KFEP-LP CP	LOS ANGELES CA	BNPL-31114BEK	256L1 99.1	0.002 276.1	34-07-34 118-22-03	272.4	34.19 -32.81	67 SHORT
KLDB-LP CP MOD	LOS ANGELES CA	BMPL-70329AAA	256L1 99.1	0.100 -17.0	33-59-58 118-27-55	253.7	45.04 -21.96	67 SHORT
KZUT-LP LIC	LOS ANGELES CA	BMLL-70725ACA	256L1 99.1	0.003 190.0	34-07-32 118-22-11	272.3	34.39 -32.61	67 SHORT
DKRKD-LP CP MOD	LOS ANGELES CA	BMPL-60607ACT	256L1 99.1	0.100 12.0	33-44-47 118-16-45	212.6	48.39 -18.61	67 SHORT
KBUU-LP CP	MALIBU CA	BPL-70807ABE	256L1 99.1	0.071 36.0	34-02-26 118-47-20	263.8	73.52 6.52	67 CLOSE
KJBU-LP CP	OXNARD CA	BNPL-31113AKO	256L1 99.1	0.100 8.6	34-11-04 119-09-37	274.5	107.55 40.55	67 CLEAR
K256CU LIC	PALM SPRINGS CA	BLFT-70329AAF	256D 99.1	0.054 DA 383.0	33-51-55 116-26-10	100.4	146.86 0.00	0 TRANS
K256BS LIC	PALMDALE CA	BLFT-50707ABO	256D 99.1	0.010 DA 763.0	34-32-51 118-12-47	337.7	52.04 0.00	0 TRANS
KGGI LIC	RIVERSIDE CA	BLH-910802KF	256B 99.1	2.550 562.0	34-14-04 117-08-24	80.1	80.16 -97.84	178 SHORT
KXFM LIC	SANTA MARIA CA	BLH-910429KE	256B 99.1	2.300 581.0	34-54-37 120-11-08	294.4	219.51 41.51	178 CLEAR
KWSV-LP LIC	SIMI VALLEY CA	BMLL-50413AAO	256L1 99.1	0.100 6.1	34-16-55 118-39-17	287.4	63.41 -3.59	67 SHORT
KWSV-LP CP	SIMI VALLEY CA	BPL-70717AAT	256L1 99.1	0.100 11.0	34-16-55 118-39-17	287.4	63.41 -3.59	67 SHORT
KTPC-LP LIC	VENICE CA	BLL-71010AAE	256L1 99.1	0.050 -17.0	33-59-58 118-27-55	253.7	45.04 -21.96	67 SHORT
K257EX LIC	BORON CA	BLFT-70817ACV	257D 99.3	0.020 46.0	35-00-04 117-39-04	17.7	103.42 0.00	0 TRANS
KKLA-FM LIC	LOS ANGELES CA	BMLH-60325AAB	258B 99.5	10.000 DA 902.0	34-13-26 118-03-44	334.0 SS	13.59 -55.41	69 SHORT

===== END OF FM SPACING STUDY FOR CHANNEL 256 =====

KYSR 254B Los Angeles

The proposed translator transmitter site is located within the 60 dBu protected contour of second-adjacent channel station KYSR 254B Los Angeles. The following calculation, performed using the *Living Way* methodology, demonstrates interference protection to that station.

Protected Station	Distance & Bearing to Proposal	Station ERP and HAAT on that azimuth	Station Field Strength at Proposal	Corresponding Translator Interfering Contour	Distance to Translator Interfering Contour
KYSR 254B	36.40 km 91 deg True	75 kW 354 meters	77.44 dBu F(50,50)	117.44 dBu	148.8 meters Free Space

The aerial photo of the proposed transmitter site (below) depicts the 117.44 dBu contour from the proposed facility, with the antenna oriented at both 310 and 320 degrees True. There is no population within this contour. Therefore, the proposed facility is believed to satisfy the requirements of §74.1204(d) with respect to KYSR.



KKLA-FM 258B Los Angeles

The proposed translator transmitter site is located within the 60 dBu protected contour of second-adjacent channel station KKLA-FM 258B Los Angeles. The following calculation, performed using the *Living Way* methodology, demonstrates interference protection to that station.

Protected Station	Distance & Bearing to Proposal	Station ERP and HAAT on that azimuth	Station Field Strength at Proposal	Corresponding Translator Interfering Contour	Distance to Translator Interfering Contour
KKLA 258B	13.59 km 154 deg True	1.01 kW 1501 meters	83.31 dBu F(50,50)	123.31 dBu	75.7 meters Free Space

The 123.31 dBu contour from the proposed facility extends only 76 meters from the antenna and does not reach ground level. There is no population within this contour. Therefore, the proposed facility is believed to satisfy the requirements of §74.1204(d) with respect to KKLA-FM.

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SEARCH PARAMETERS                               FM Database Date: 171114
Channel: 256A      99.1 MHz                      Page 1
Latitude: 34 6 50
Longitude: 117 59 50
Safety Zone: 50 km
Job Title: K256CX

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Call Status	City St	FCC File No.	Channel Freq.	ERP(kW) HAAT(m)	Latitude Longitude	Bearing deg-True	Dist (km)	Req (km)
KTCN	ACTON	202A	0.100 DA	34-28-10	345.1	40.82	10	
CP MOD	CA	BMPED-40224AAV	88.3	-96.0	118-06-42	30.82	CLEAR	
KTCN	ACTON	202A	0.100 DA	34-28-09	345.1	40.80	10	
CP	CA	BNPED-71022AOT	88.3	-96.0	118-06-43	30.80	CLEAR	
KTCN	ACTON	202A	0.100 DA	34-28-09	345.1	40.80	10	
CP MOD	CA	BMPED-40203ACN	88.3	-96.0	118-06-43	30.80	CLEAR	
KCSN	NORTHRIDGE	203B1	0.370 DA	34-19-10	294.2	56.16	12	
LIC	CA	BLEED-20905AAM	88.5	501.0	118-33-15	44.16	CLEAR	
KCSN-FM1	WEST LOS ANGELES	203D	0.800 DA	34-03-42	261.6	39.07	0	
LIC	CA	BLFTB-30115ADF	88.5	0.0	118-24-57	0.00	BOOST	
KYSR	LOS ANGELES	254B	75.000	34-07-08	271.0	36.40	69	
LIC	CA	BMLH-90709ACO	98.7	360.0	118-23-30	-32.60	SHORT	
KHHT	METTLER	255A	0.225 DA	34-54-11	316.8	120.81	72	
LIC	CA	BLH-61122AEV	98.9	502.0	118-54-14	SS	48.81	
K256CX	BEAUMONT	256D	0.200 DA	34-06-50	0.0	0.00	0	
LIC	CA	BLFT-70712AAF	99.1	144.0	117-59-50	0.00	TRANS	
K256CX	BEAUMONT	256D	0.240 DA	34-06-50	0.0	0.00	0	
APP	CA	BMPFT-70525AMV	99.1	143.0	117-59-50	0.00	TRANS	
K256CX	BEAUMONT	256D	0.080	34-06-50	0.0	0.00	0	
APP	CA	BSTA-71106ABM	99.1	0.0	117-59-50	0.00	TRANS	
K256CX	BEAUMONT	256D	0.080	34-06-50	0.0	0.00	0	
APP	CA	BSTA-71010AEC	99.1	0.0	117-59-50	0.00	TRANS	
KWSV-LP	CHATSWORTH	256D	0.006 DA	34-15-24	285.2	61.36	0	
LIC	CA	BLFTB-70724AAA	99.1	0.0	118-38-25	0.00	BOOST	
KLBP-LP	LONG BEACH	256L1	0.100	33-44-47	212.6	48.39	67	
CP MOD	CA	BMPL-60601AHB	99.1	12.0	118-16-45	-18.61	SHORT	
KLBP-LP	LONG BEACH	256L1	0.100	33-44-47	217.1	51.13	67	
APP	CA	BMPL-70519ACM	99.1	-38.2	118-19-52	-15.87	SHORT	


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Call Status	City St	FCC File No.	Channel Freq.	ERP(kW) HAAT(m)	Latitude Longitude	Bearing deg-True	Dist (km)	Req (km)
KFEP-LP APP	LOS ANGELES CA	BMPL-70628AAS	256L1 99.1	0.100 -9.5	34-05-21 118-20-14	265.1	31.49 -35.51	67 SHORT
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KLDB-LP CP MOD	LOS ANGELES CA	BMPL-70329AAA	256L1 99.1	0.100 -17.0	33-59-58 118-27-55	253.7	45.04 -21.96	67 SHORT
KZUT-LP LIC	LOS ANGELES CA	BMLL-70725ACA	256L1 99.1	0.003 190.0	34-07-32 118-22-11	272.3	34.39 -32.61	67 SHORT
DKRKD-LP CP MOD	LOS ANGELES CA	BMPL-60607ACT	256L1 99.1	0.100 12.0	33-44-47 118-16-45	212.6	48.39 -18.61	67 SHORT
KBUU-LP CP	MALIBU CA	BPL-70807ABE	256L1 99.1	0.071 36.0	34-02-26 118-47-20	263.8	73.52 6.52	67 CLOSE
KJBU-LP CP	OXNARD CA	BNPL-31113AKO	256L1 99.1	0.100 8.6	34-11-04 119-09-37	274.5	107.55 40.55	67 CLEAR
K256CU LIC	PALM SPRINGS CA	BLFT-70329AAF	256D 99.1	0.054 DA 383.0	33-51-55 116-26-10	100.4	146.86 0.00	0 TRANS
K256BS LIC	PALMDALE CA	BLFT-50707ABO	256D 99.1	0.010 DA 763.0	34-32-51 118-12-47	337.7	52.04 0.00	0 TRANS
KGCI LIC	RIVERSIDE CA	BLH-910802KF	256B 99.1	2.550 562.0	34-14-04 117-08-24	80.1	80.16 -97.84	178 SHORT
KXFM LIC	SANTA MARIA CA	BLH-910429KE	256B 99.1	2.300 581.0	34-54-37 120-11-08	294.4	219.51 41.51	178 CLEAR
KWSV-LP LIC	SIMI VALLEY CA	BMLL-50413AAO	256L1 99.1	0.100 6.1	34-16-55 118-39-17	287.4	63.41 -3.59	67 SHORT
KWSV-LP CP	SIMI VALLEY CA	BPL-70717AAT	256L1 99.1	0.100 11.0	34-16-55 118-39-17	287.4	63.41 -3.59	67 SHORT
KTPC-LP LIC	VENICE CA	BLL-71010AAE	256L1 99.1	0.050 -17.0	33-59-58 118-27-55	253.7	45.04 -21.96	67 SHORT
K257EX LIC	BORON CA	BLFT-70817ACV	257D 99.3	0.020 46.0	35-00-04 117-39-04	17.7	103.42 0.00	0 TRANS
KKLA-FM LIC	LOS ANGELES CA	BMLH-60325AAB	258B 99.5	10.000 DA 902.0	34-13-26 118-03-44	334.0 SS	13.59 -55.41	69 SHORT

===== END OF FM SPACING STUDY FOR CHANNEL 256 =====

K256CX STA at 320 deg T
34 dBu F(50,10)
40 dBu F(50,10)

K256CX STA at 310 deg T
34 dBu F(50,10)
40 dBu F(50,10)

KZUT-LP 256L1 License
60 dBu F(50,50)

KFEP-LP 256L1 CP
60 dBu F(50,50)

KGCI 256B License
54 dBu F(50,50)

KFEP-LP 256L1 App
60 dBu F(50,50)

LOS ANGELES

SAN BERNARDINO

ORANGE

K256CX STA Cochannel Study Map

0 5 10 15
Kilometers

Hatfield & Dawson 11/2017