

NAS El Centro Test Site TV Channel Study

This channel study has been prepared for operation in the VHF and UHF Television band for an experimental low power television transmission by SpaWar, located at the coordinates 32° 53' 24" North and 115° 47' 14" West. TV Channels 2, 4, 10, 14, 20 and 63 have been chosen for this experimental operation. Operation on channels 2 and 4 will be omnidirectional at a height of 50 meters with an ERP of 2 kilowatts. Operation on channels 10, 14 and 20 will be directional at a height of 15 meter with a max lobe ERP of 5 kilowatts. Operation on channel 63 will be omnidirectional at a height of 50 meters with an ERP of 5 kilowatts. Directional operations will employ an antenna with a half power beamwidth of 54 degrees and a horizontal azimuth orientation of 315 degrees.

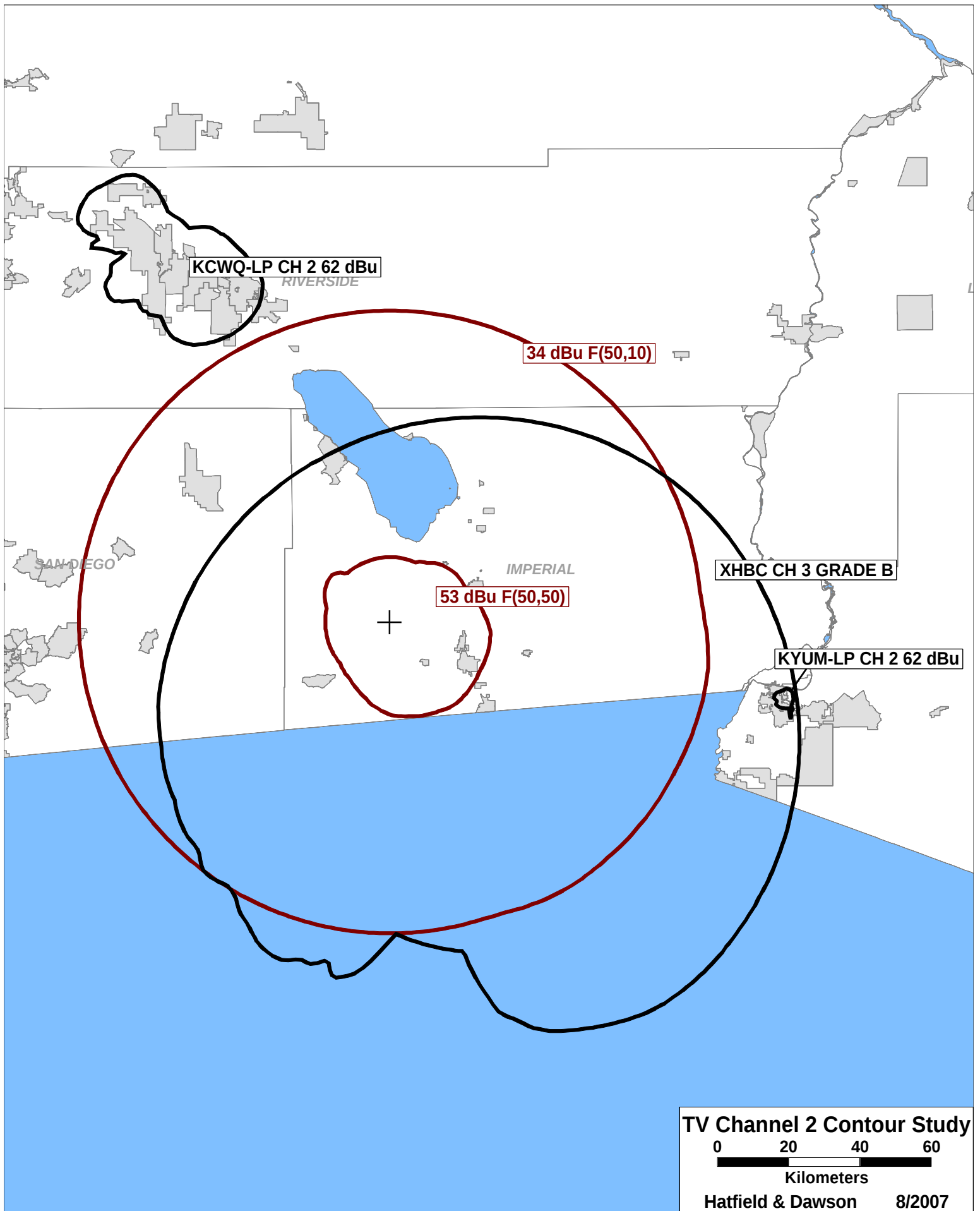
This study adheres to the co-channel and adjacent channel protection requirements set forth Sections 74.705 and 74.707 of the Commission's Rules. The attached contour maps show the protection provided and the interference caused, over an unpopulated area, by the proposed operation to co-channel and adjacent channel stations.

Operation on VHF TV Channels

Operation on channel 2 with a -10 kHz offset will provide protection to KCWQ-LP in Palm Springs, CA and KYUM-LP in Yuma, AZ. The 53 dBu F(50,50) interfering contour does not overlap the Grade B contour of XHBC inside Mexico. Operation on channel 4 with a -10 kHz offset will provide protection to KVER-CA and KEVC-CA in Indio, CA, and will the 59 dBu and 53 dBu F(50,50) interfering contours do not overlap the respective Grade B contours of XHBC and XHAQ in Mexico. For operation on channel 10 the attached contour maps show there will be no interference to K09XW in Palm Desert, CA and although the 62 dBu and 68 dBu F(50,50) interfering contours are within the respective Grade B contours of KYMA and KECY-TV they do not overlap these contours in a populated area (2000 census population centroids are shown in blue on the provided contour map).

Operation on UHF TV Channels

The attached contour maps show that there is no overlap of the interfering contours of the proposed operation on channels 14 with a -10 kHz offset, 20 with a -10 kHz offset, and 63 with the respective protected contours of the co-channel and adjacent stations. Using a -10 kHz offset for channels 14 and 20 will produce interfering contours that will overlap the protected contours of co-channel Mexican stations inside Mexico.



KVER-CA CH 4/KEVC-CA CH 5 62 dBu

34 dBu F(50,10)

IMPERIAL

68 dBu F(50,50)

59 dBu F(50,50)

53 dBu F(50,50)

XHBC GRADE B CH 4

XHAQ GRADE B CH 5

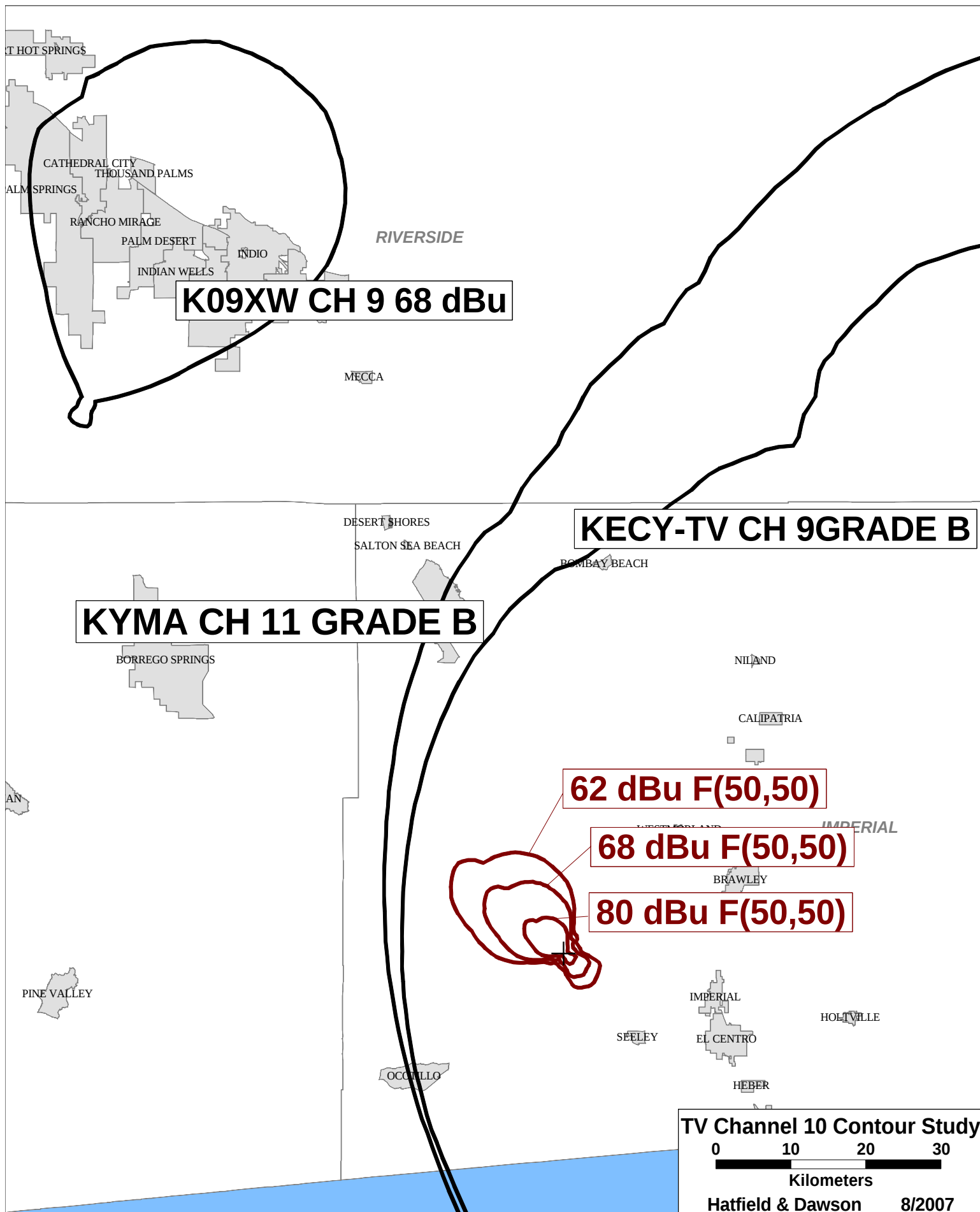
TV Channel 4 Contour Study

0 10 20 30

Kilometers

Hatfield & Dawson

8/2007



KYMA CH 11 GRADE B

KECY-TV CH 9 GRADE B

62 dBu F(50,50)

68 dBu F(50,50)



TV Channel 10 Interference to Population

0 2 4 6

Kilometers

Hatfield & Dawson

8/2007

