

NAS El Centro Test Site TV Channel Study

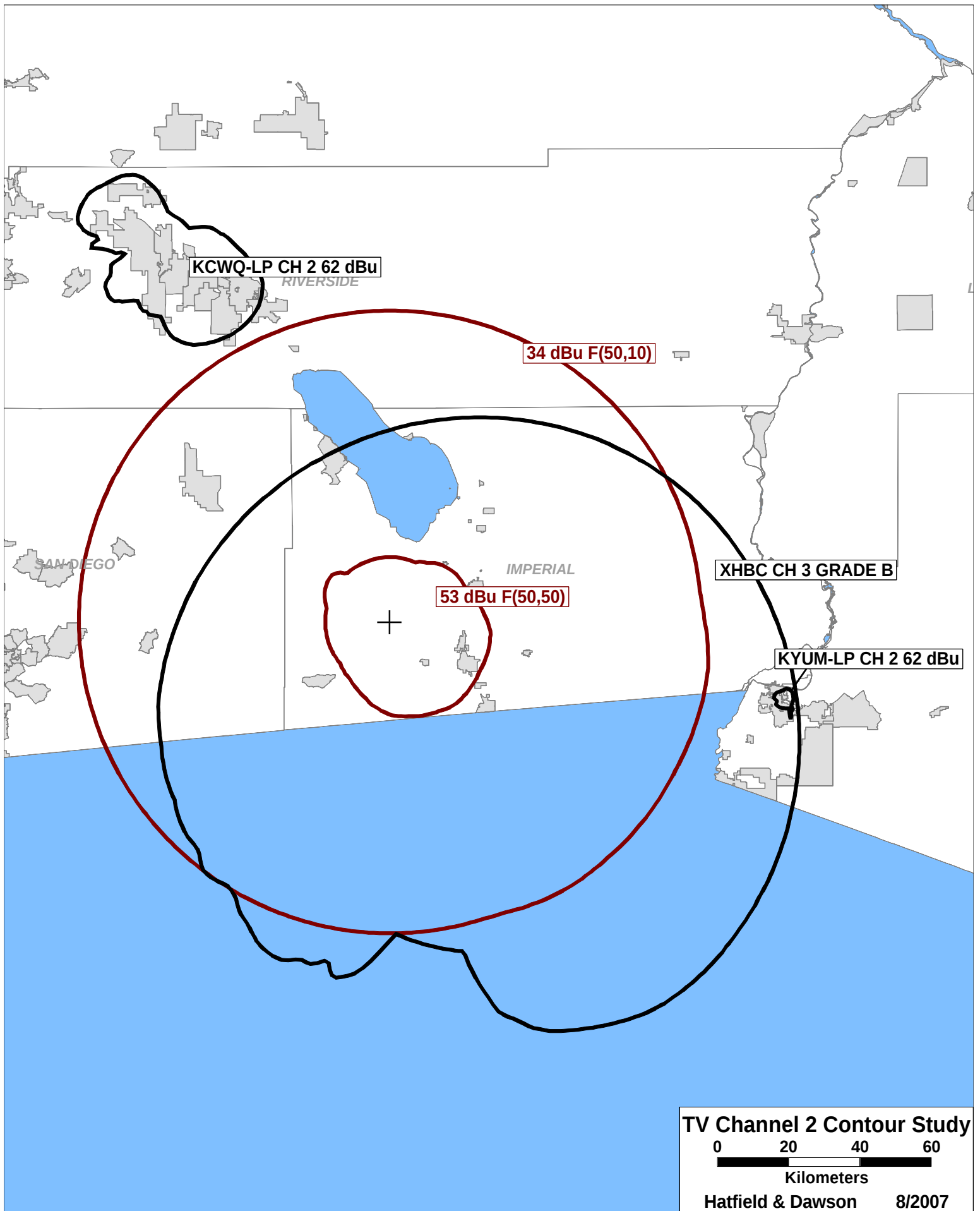
This channel study has been prepared for operation in the VHF and UHF Television band for an experimental low power television transmission by SpaWar, located at the coordinates 32° 53' 24" North and 115° 47' 14" West operating at a height of 50 meters with an ERP of 2 kilowatts (for omnidirectional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



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

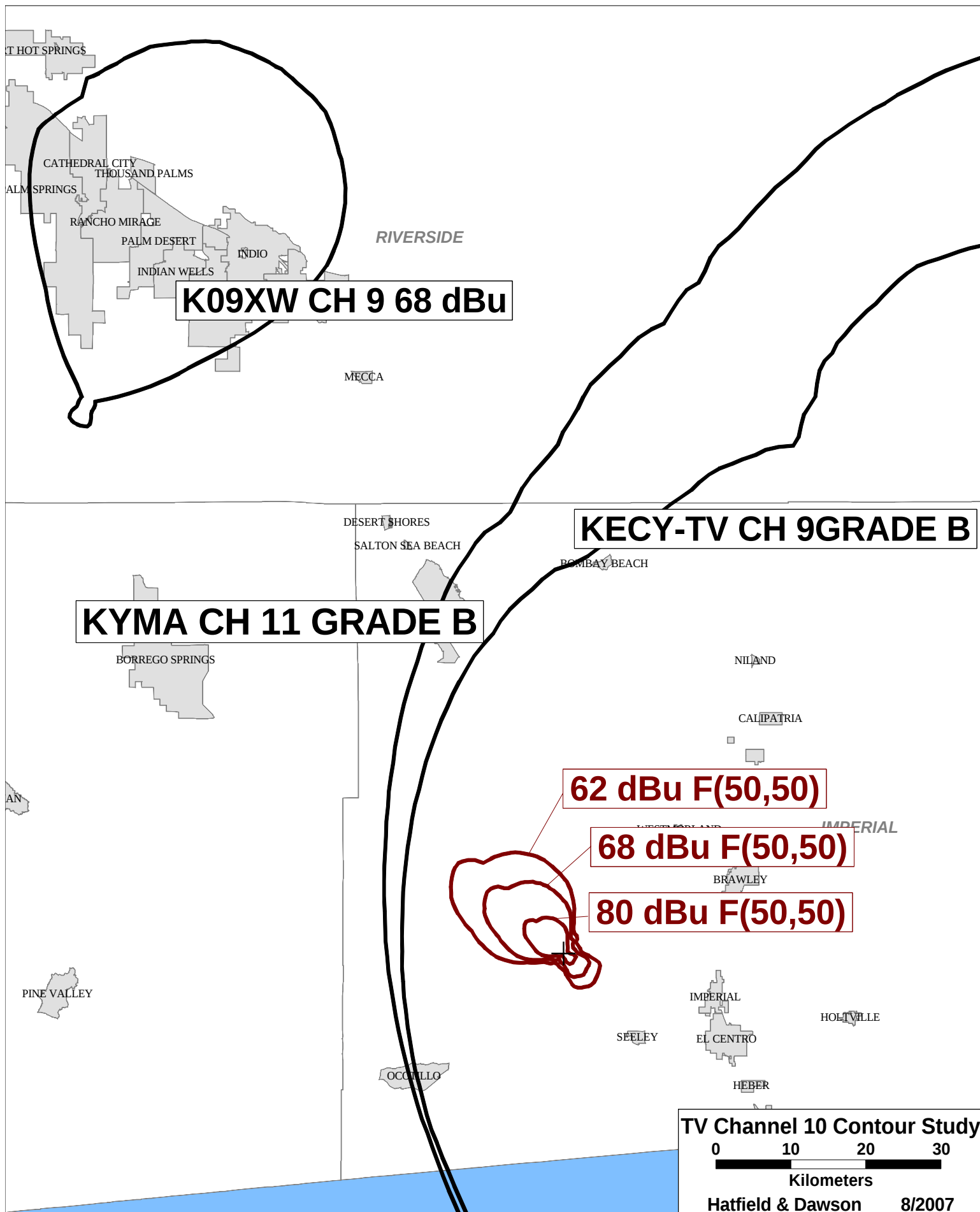
TV Channel 4 Contour Study

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

