

ENGINEERING REPORT

Base Impedance Measurement

KKXX Radio, 930 KHz

Paradise, California

December 31, 2014

Following the installation of a translator antenna and isocoupler on the KKXX transmitting tower the Base Impedance at the KKXX operating frequency was measured.

This measurement was made on December 31, 2014 by the undersigned using a Delta Electronics model OIB-3 Operating Impedance Bridge. The signal source for this measurement was the station's broadcast transmitter. The impedance was measured at the point of RF current measurement at the output of the antenna matching network.

The base impedance of the KKXX antenna was measured to be 37.4 ohms resistive and 37.3 ohms inductive reactance ($37.4 + j37.3$ Ohms).

The Base Current Ammeter should read 5.17 amperes with the daytime power of 1.0 Kilowatt and 0.995 amperes with the nighttime power of 37 watts.

The matching network was adjusted to present a 50 ohm resistive ($50.0 + j0$ Ohms) load to the broadcast transmitter.


Dale L. Harry

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