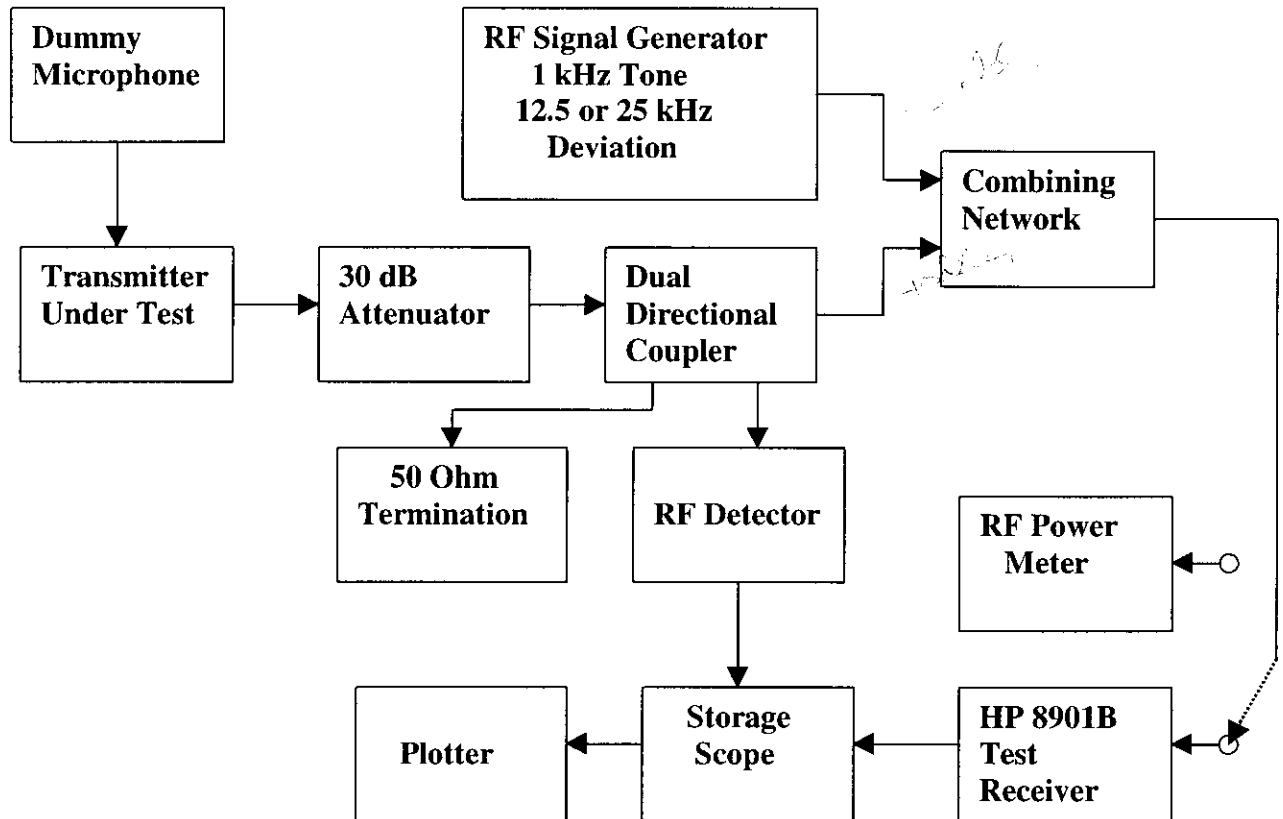


3. The transient frequency behavior test was performed according to TIA/EIA-603. The block diagram is shown below.



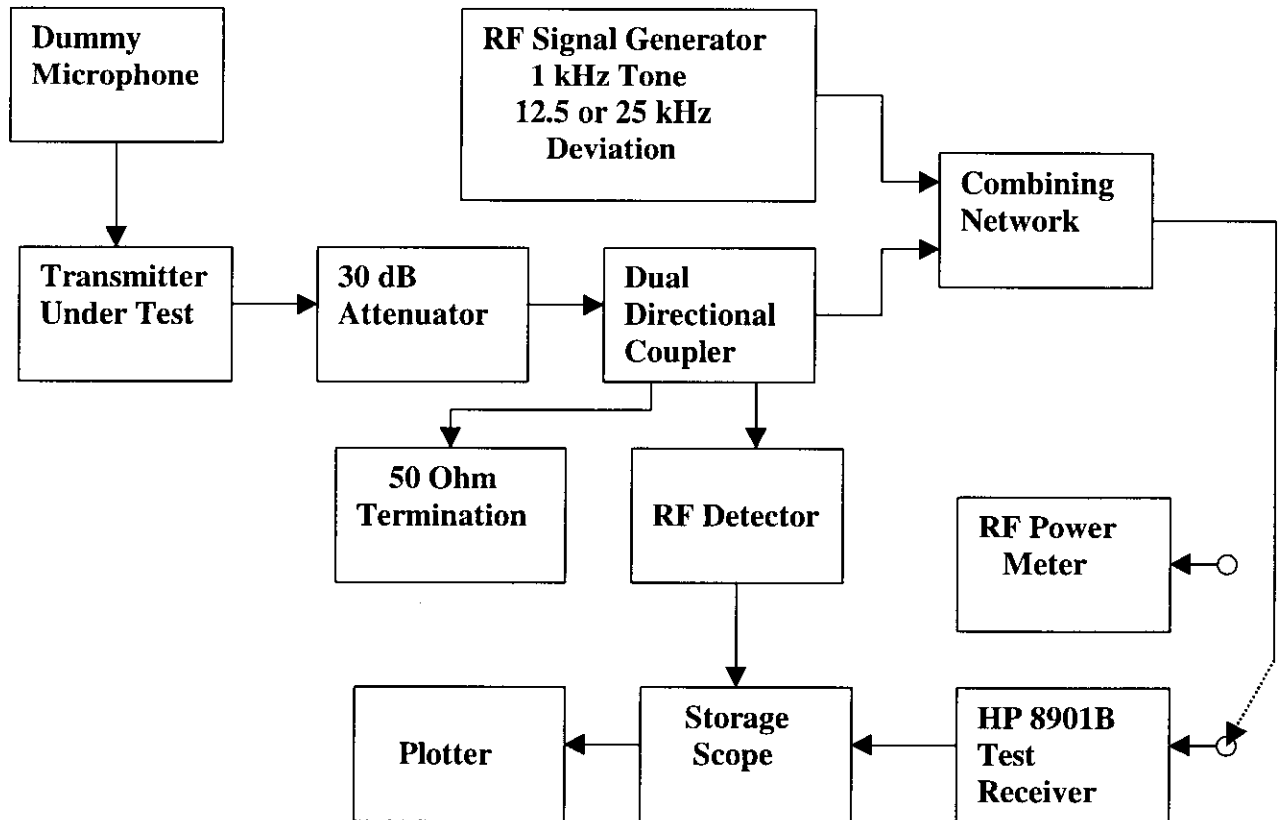
The level at the combining network input from the transmitter under test at the 50 watt level is about -10 dBm. Additional attenuation was used in the 30 dB block that was not shown. The RF signal generator was set at -30 dBm for the pictures sent which is per TIA/EIA-603 procedure. There is a degree of co-channel interference between the signal generator and the transmitter under test which accounts for the noise on the center line. We repeated the test with the signal generator set at -40 dBm. The characteristics are identical but the center line is now slightly less noisy.

4. The lower part of the original request contained a statement NOT to reply back but to just upload the data. We will send an email immediately after an upload from now on. Sorry for our confusion.

Thank you.

Engineering Manager

6. The transient frequency behavior test was performed according to TIA/EIA-603. The block diagram is shown below.



It should be noted that this equipment can have the transmitter PLL 'ON' continuously. The leakage is very low and the radiated tests were done with it powered and locked. As such, the transient lock for this equipment with the PLL 'ON' appears like nothing is happening. The unit was measured with PLL 'ON' and 'OFF' although it is recommended to the user the run the equipment with the PLL 'ON'

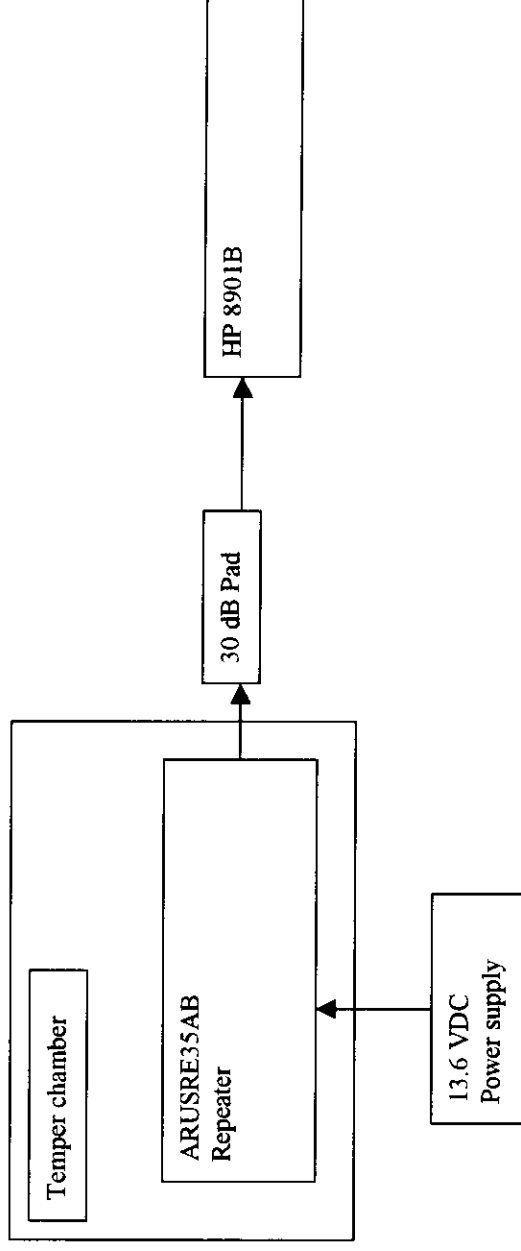
In the above block diagram, the RF signal generator is adjusted 20 dB below the signal from the Transmitter Under Test and the Test Receiver is fixed tuned to minimize any time delay in recovering the transient signal. This RF signal generator serves to provide a calibration to the transient display on the output of the test receiver. The use of a digital storage scope, however, causes aliasing to the calibration 1 kHz tone. Prior to plotting the screen, the scope was calibrated using the 1 kHz audio output of the test receiver (12.5 or 25 kHz deviation) for the full 8 cm display.

7. Data for item 90.214 for the narrow bandwidth channel is shown above in item four along with better labeled charts for the wide bandwidth channels.
8. Thank you.

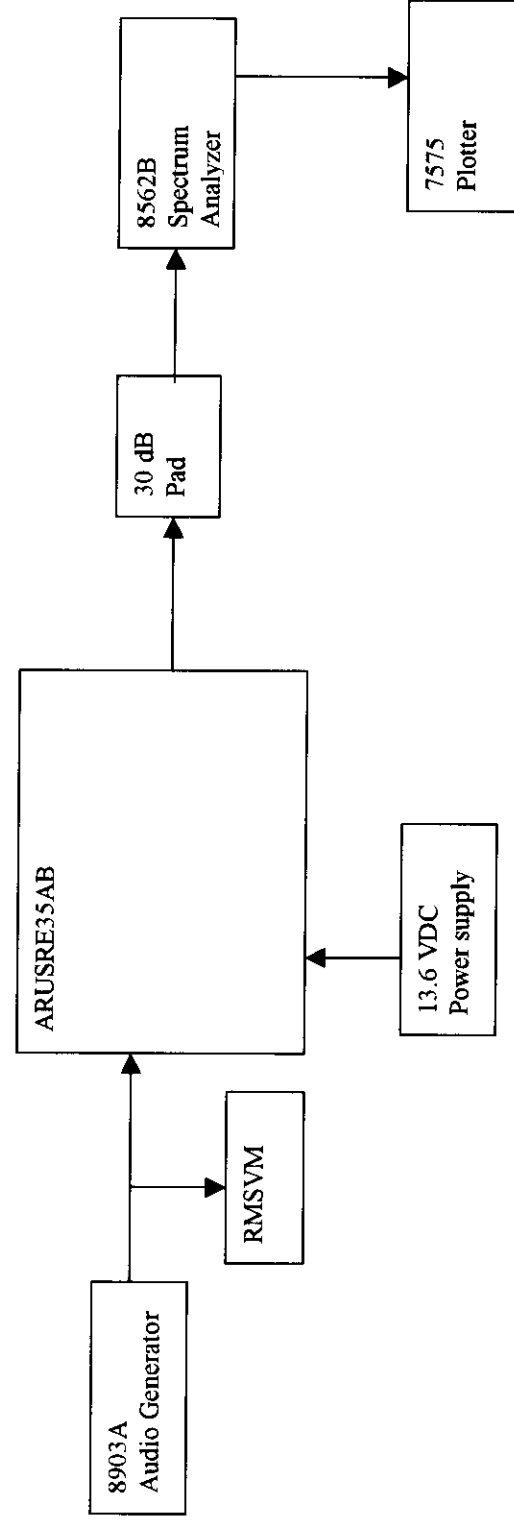
Walter C. Smith
Engineering Manager

2.10 Figures

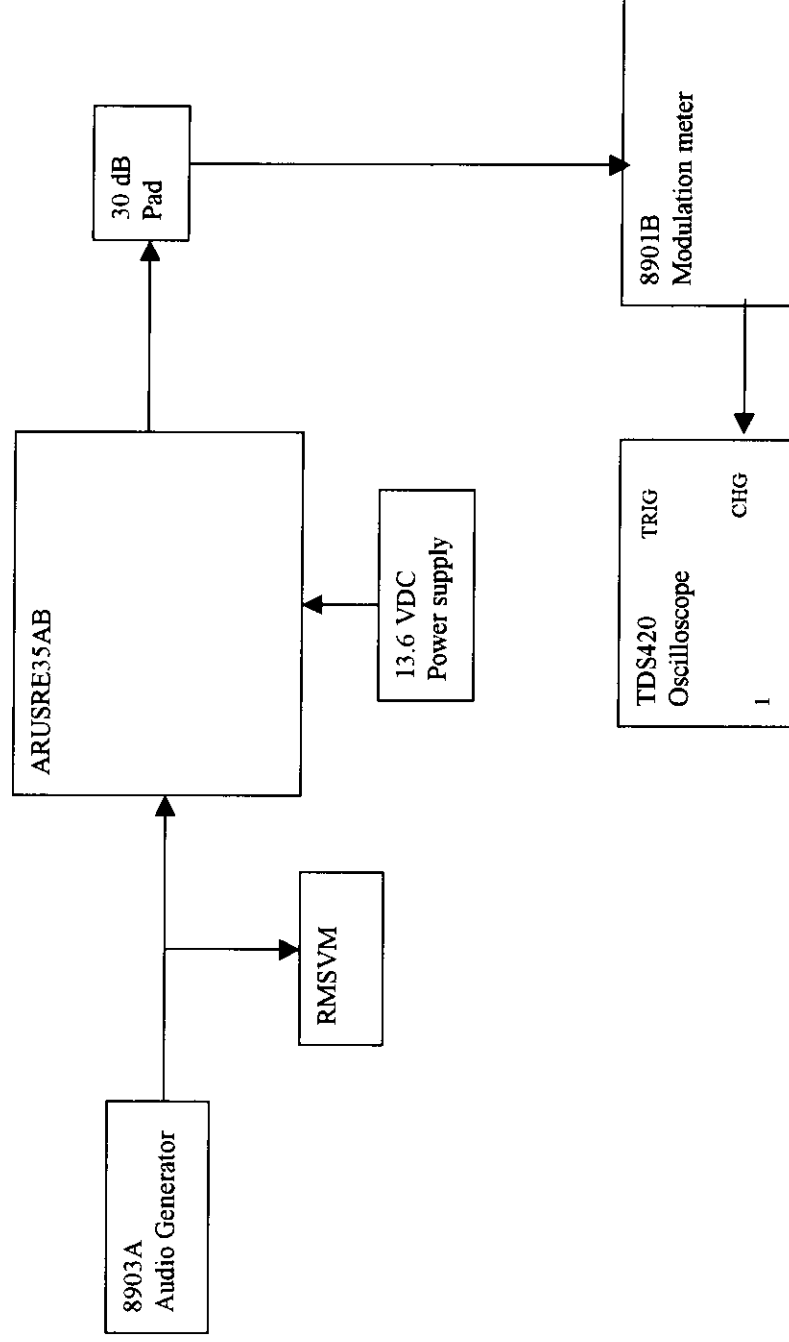
2.10.1 Figure 1. This test set up was used to test RF power output and Frequency Stability



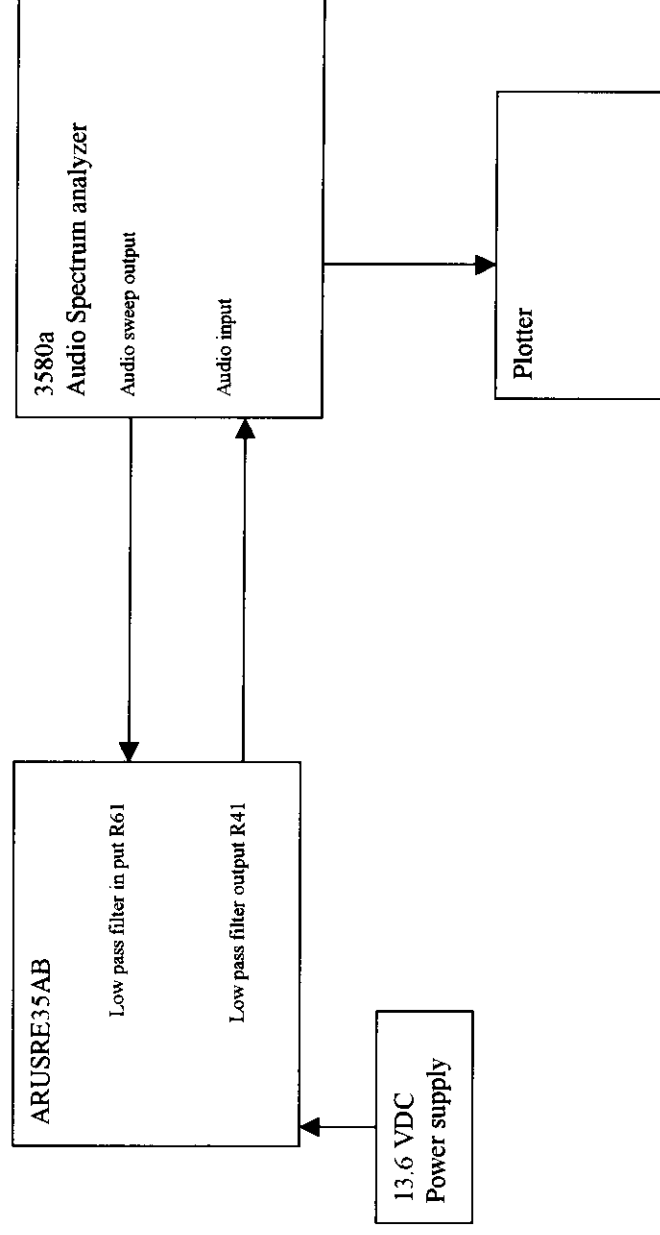
2.10.2 Figure 2. This test set up was used to do the Occupied Bandwidth Test



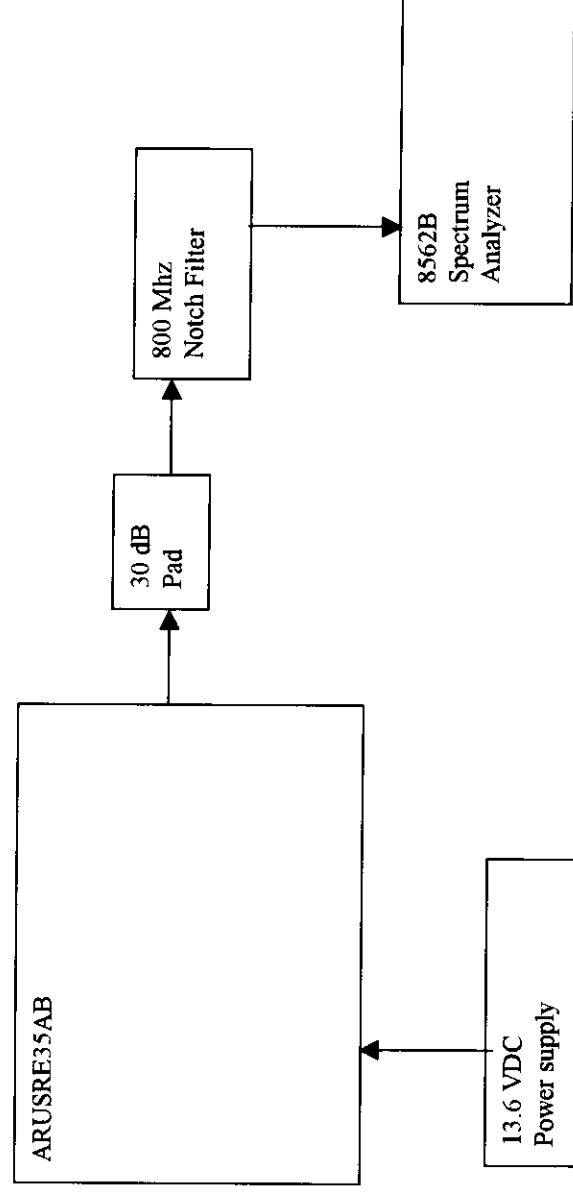
2.10.3 Figure 3. This test set up was used to do the Modulation Deviation Test and the Transmitter Audio Frequency Response Test



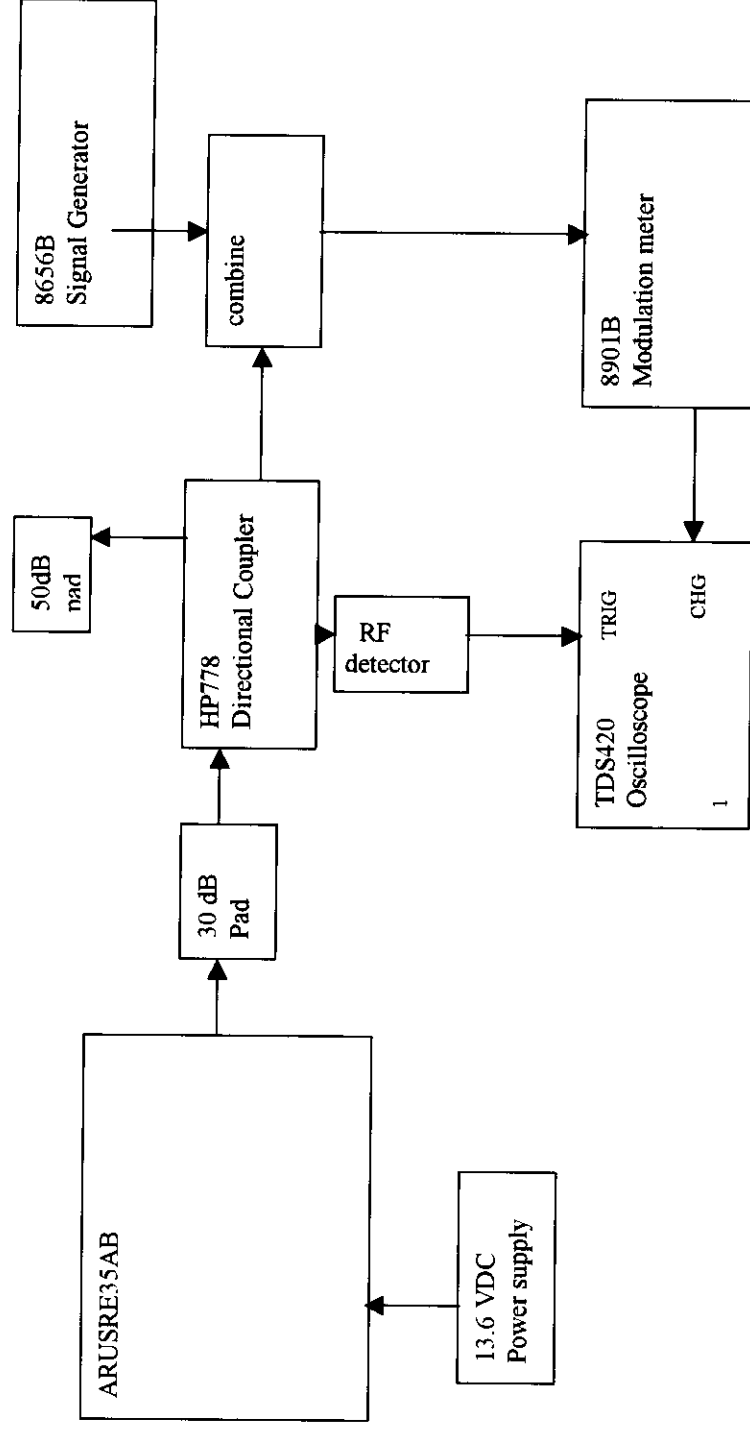
2.10.4 Figure 4 This test set up was used to do the Transmitter low pass filter Test

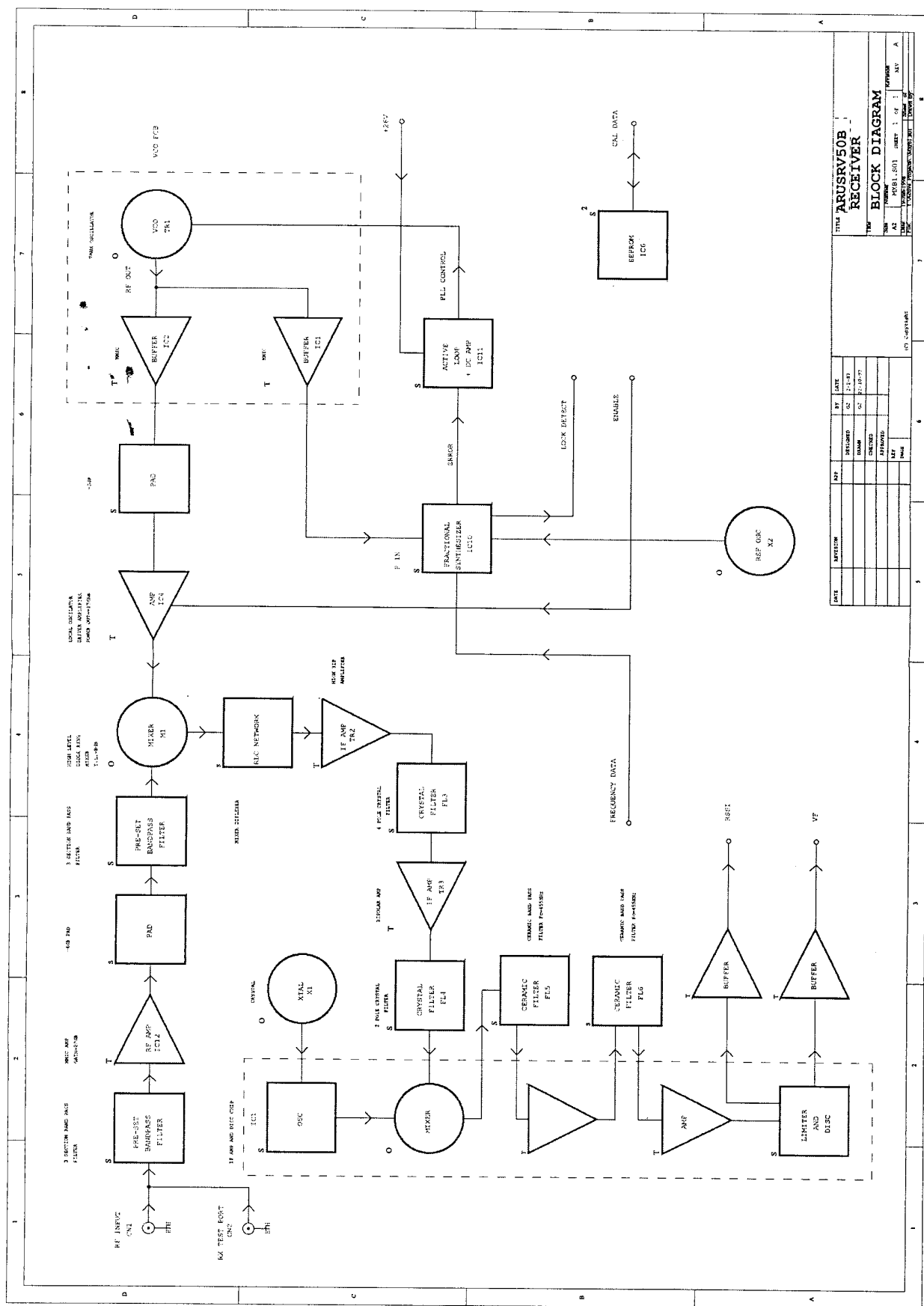


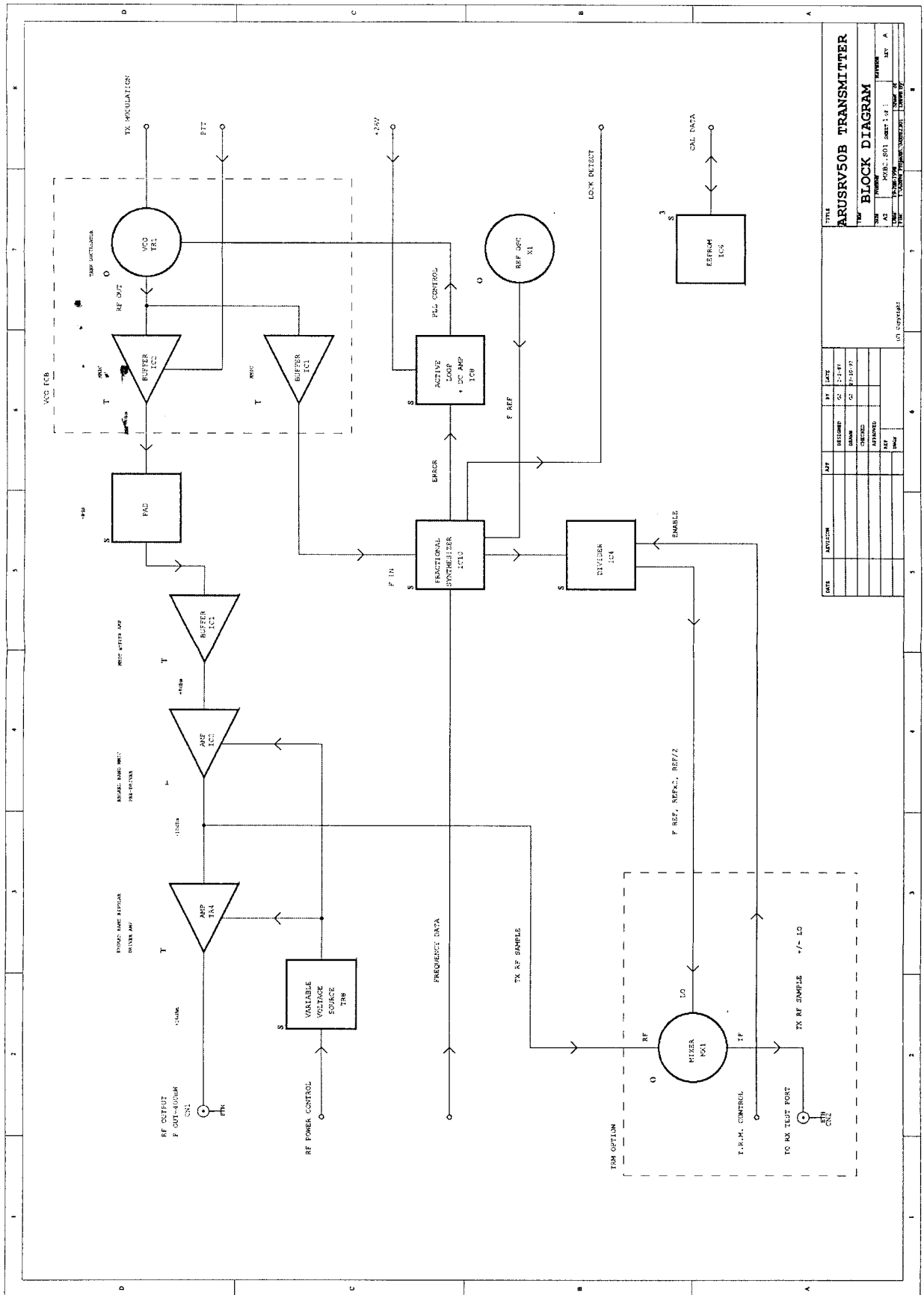
2.10.5 Figure 5. Conducted Emissions Test



2.10.6 Figure 6 This test set up was used to do the Transmitter Transient Behavior test







ARUSRV50B TRANSMITTER			
BLOCK DIAGRAM			
DATE	REVISION	BY	DATE
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	99	W. J. R.	10-10-77
	100	W. J. R.	10-10-77

