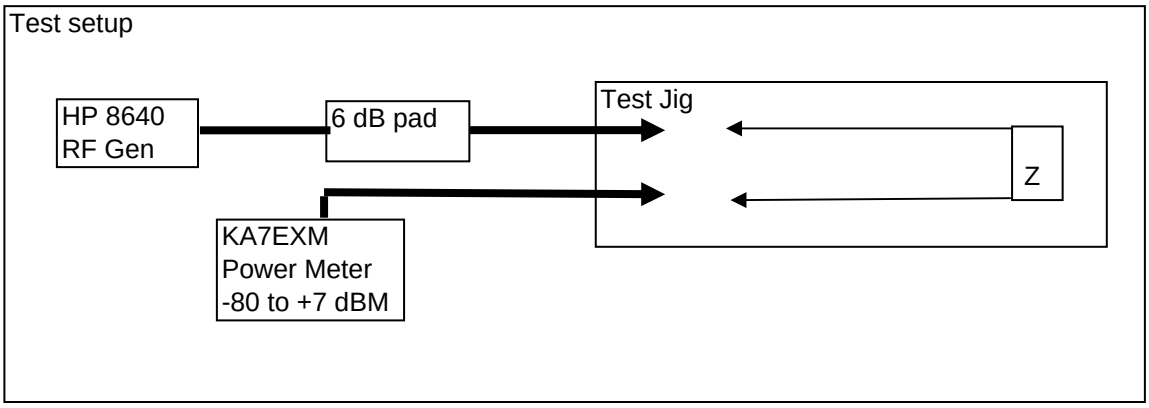
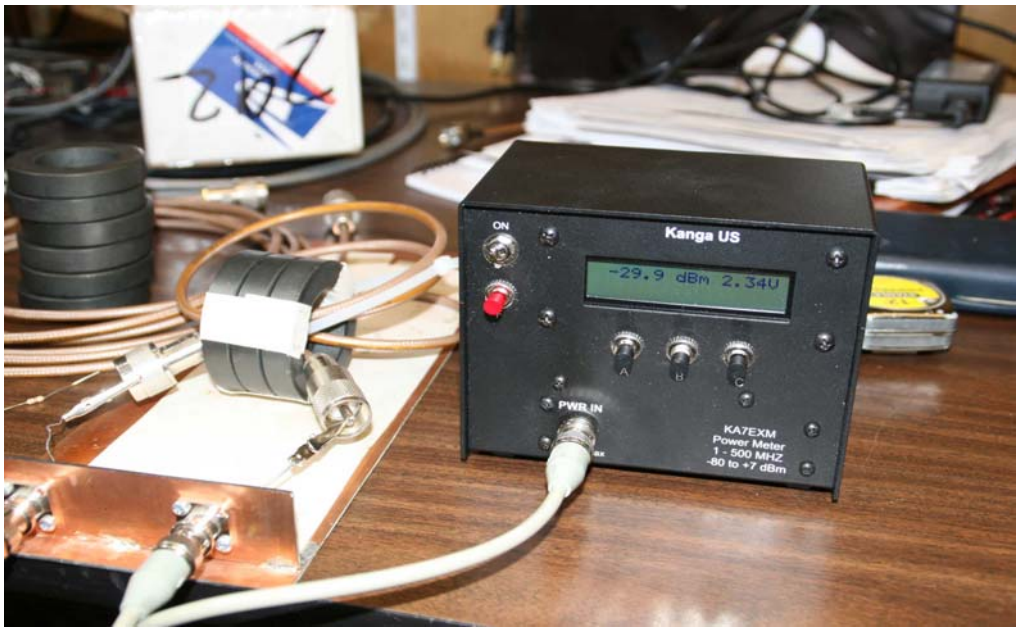
Measurements made Saturday July, 24, 2010



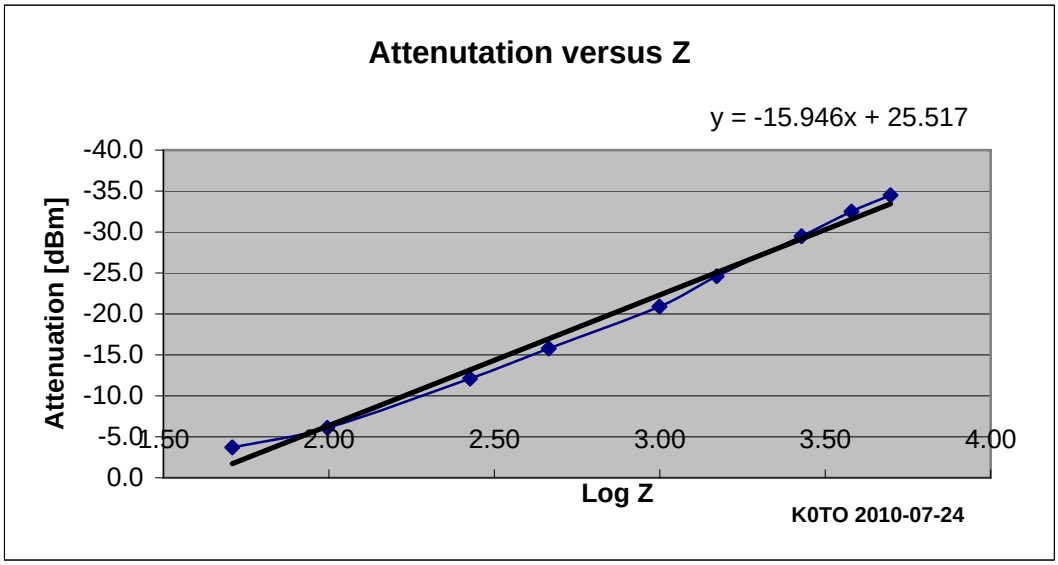


Experiment 1 - measurement of resistors. Freq=3.75MHz

Resistor	dBm		
Z	KA7EXM	log Z	Attenuation
0	-10.0	#NUM!	0.0
51	-13.7	1.71	-3.7
99	-16.1	2.00	-6.1
267	-22.1	2.43	-12.1
462	-25.8	2.66	-15.8
998	-30.9	3.00	-20.9
1487	-34.6	3.17	-24.6
2680	-39.5	3.43	-29.5
3800	-42.5	3.58	-32.5
4980	-44.5	3.70	-34.5

Experiment 2- Measurement of resistors at 1.875 MHz

No change in the values shown above when frequency was reduced to 1.875 from 3.35 MHz.



Experiment 3. - measurement of an existing 160/80m RF Choke

4 turns of RG400 through 3 cores of Type 31 material

KA7EXM		Attenuation		est Z
-32.2	dBm	-22.2	dBM	1000 ohms

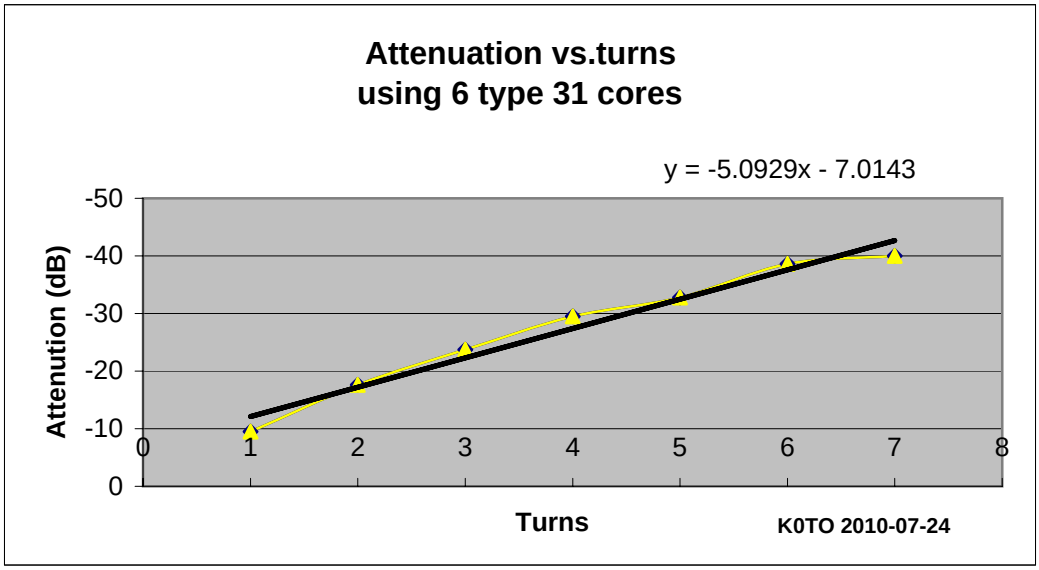
Experiment 4 - series use of RF Chokes

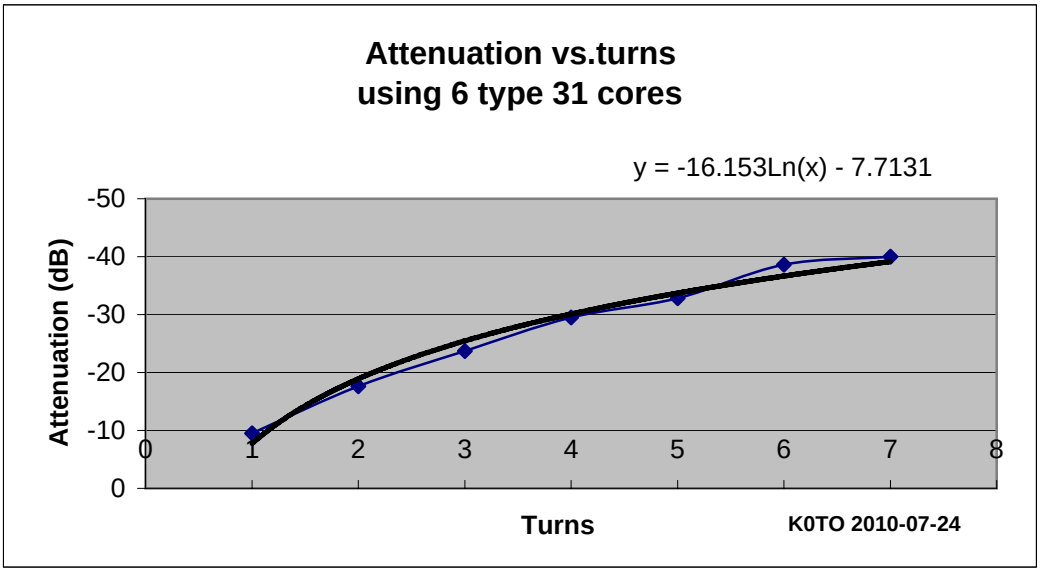
uesd the 4 turn 160/80 RF choke plus a similar choke fabricated
from a longer length of RG 400. Adjusted position of turns in both to
get largest attenuation of each one.
length #1 => -20.6 dB ; length #2 => -22.4 dB [#2 had much longer coax]
measured series #1 and #2 to get => -26.7 dBm

The addition of two chokes in series [within 12 inches of each other on the feedling]
seemed to add only 6 or 7 dB of attenuation. ***** Why???***

Experiment 5 -Turns of RG400 through 6 cores of Type 31

Turns	KA7EXM	Attenuation	
	-11.4	-1.4	dB
1	-19.5	-9.5	dB
2	-27.6	-17.6	dB
3	-33.7	-23.7	dB
4	-39.5	-29.5	dB
5	-42.8	-32.8	dB
6	-48.6	-38.6	dB
7	-50.0	-40.0	dB




Attenuation vs.turns
using 6 type 31 cores
y = -16.153Ln(x) - 7.7131
Attenuation (dB)
-50
-40
-30
-20
-10
0
0
1
2
3
4
5
6
7
8
Turns
K0TO 2010-07-24