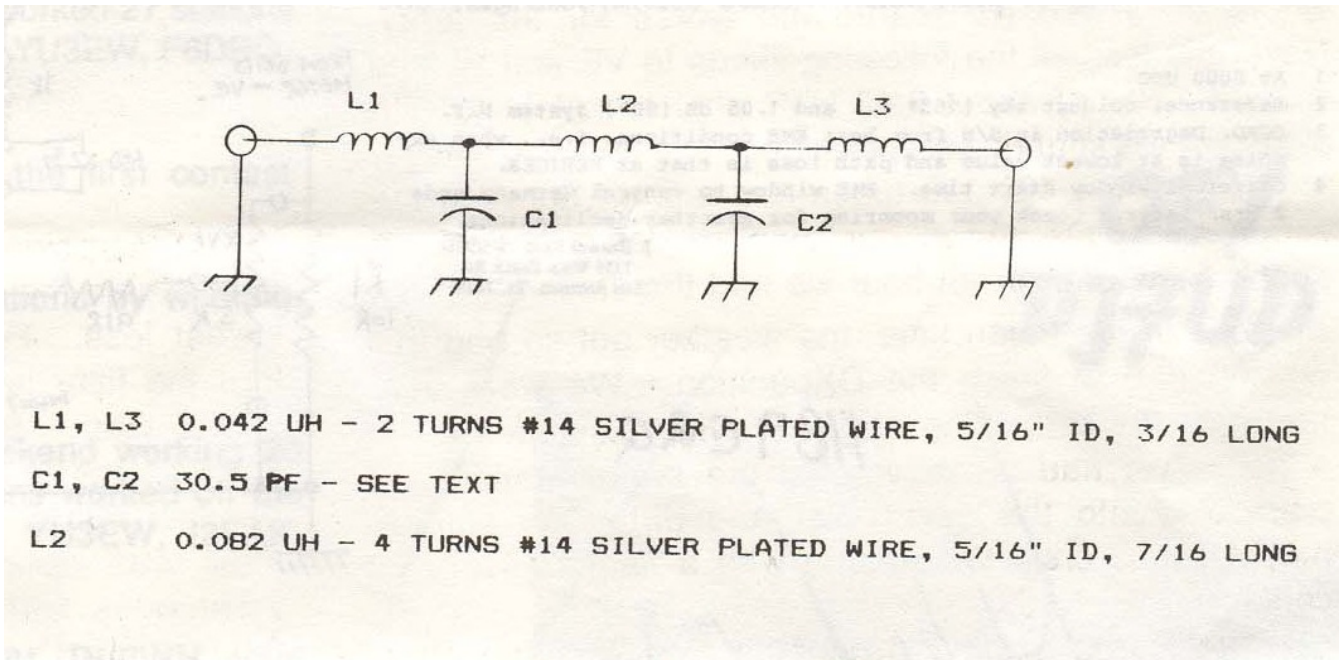
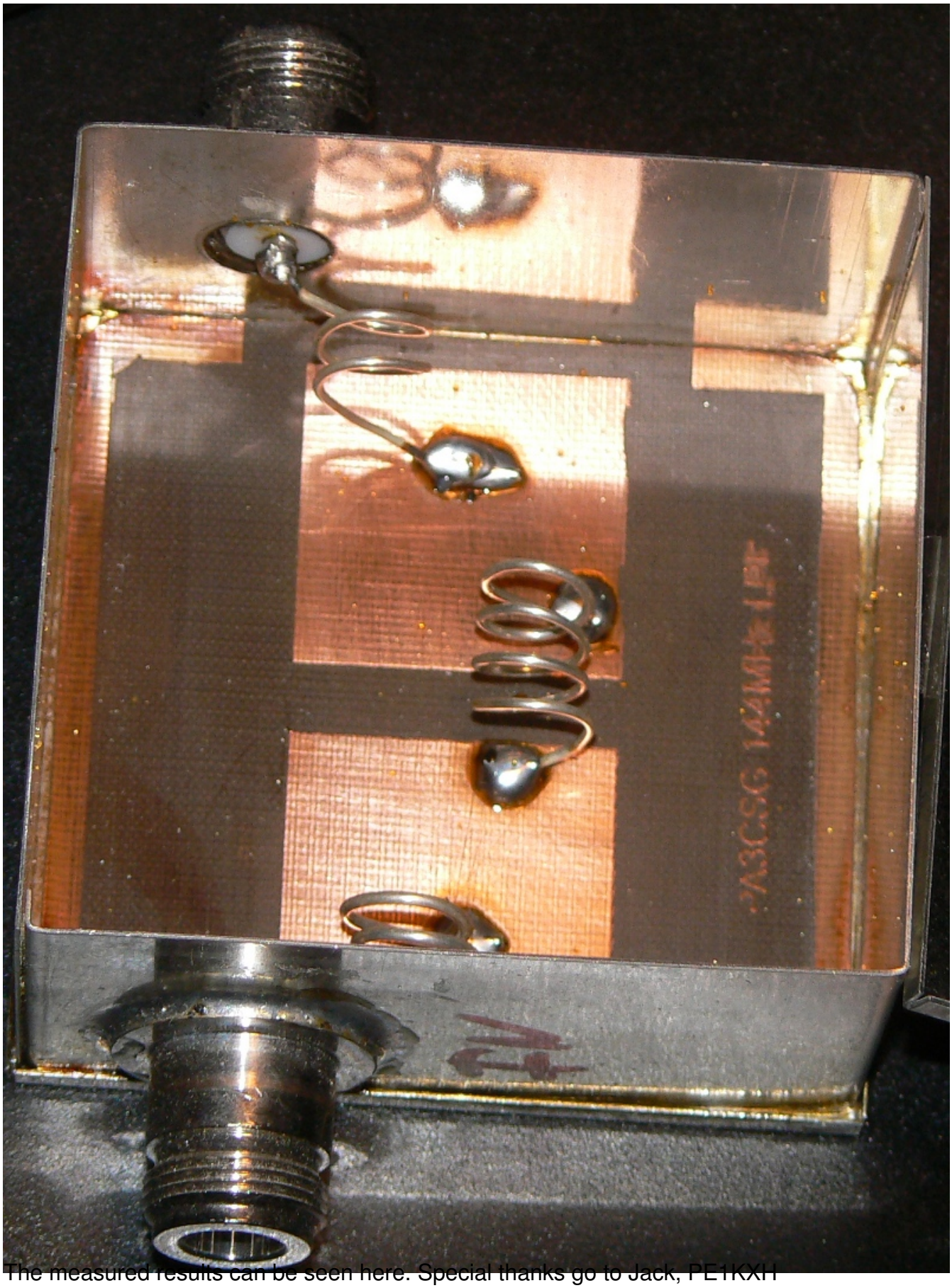
In a discussion I had with Peter, SM2CEW and Graham, F5VHX, the idea grew to make simple low pass filters. Simple but suitable for fairly high power. The idea originated from a design by M.W. Cook, AF9Y. The scan of the article gives no details about the magazine it originates from.

He describes an simple low pass filter, according to his finding suitable for 2 kW power. Off course I didn't have the same PCB material available as he did, but a short search on the internet provided the formulas to calculate the capacitance. Even a online PCB capacitance calculator popped up HERE

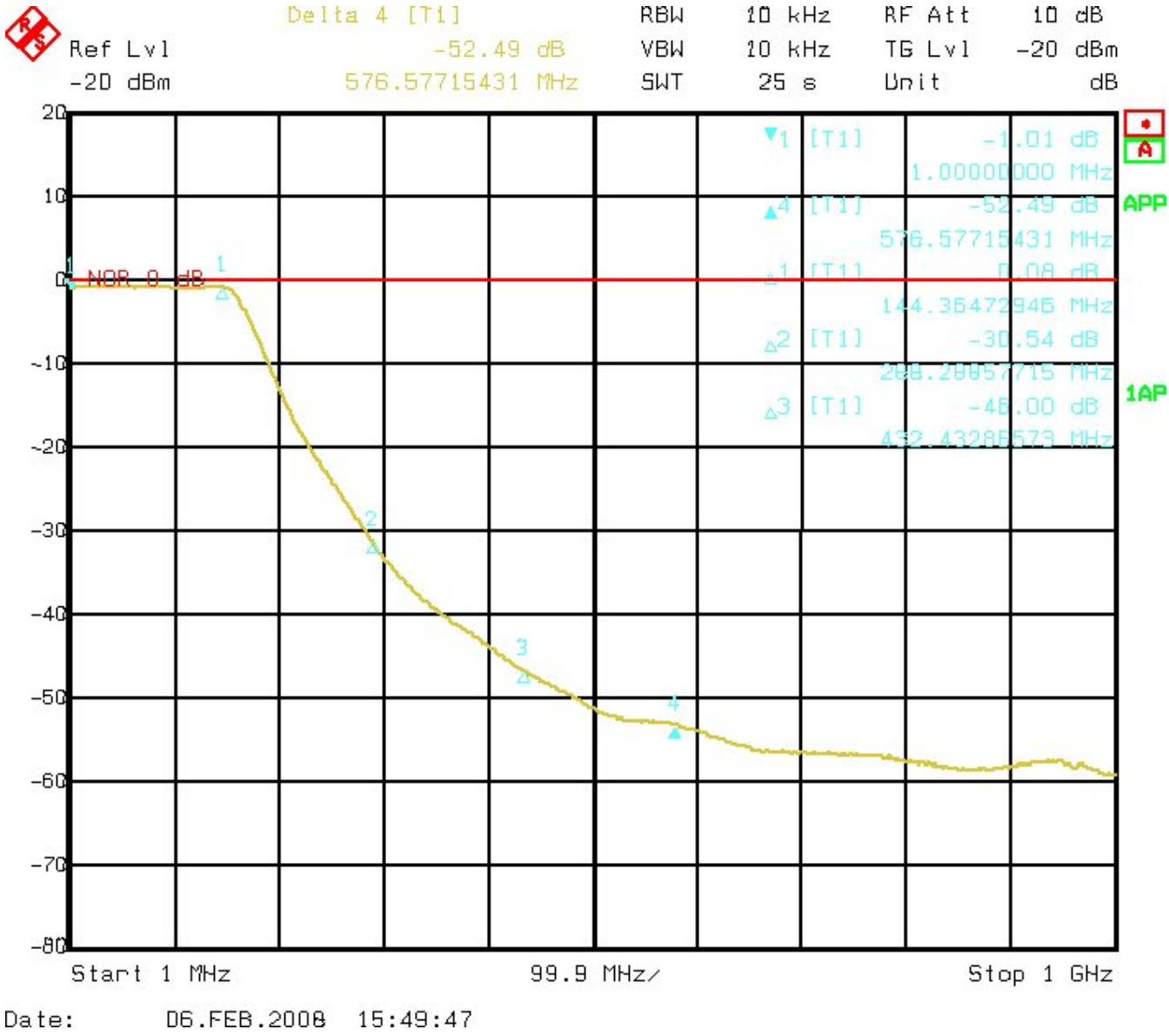
The schematic presented by AF9Y



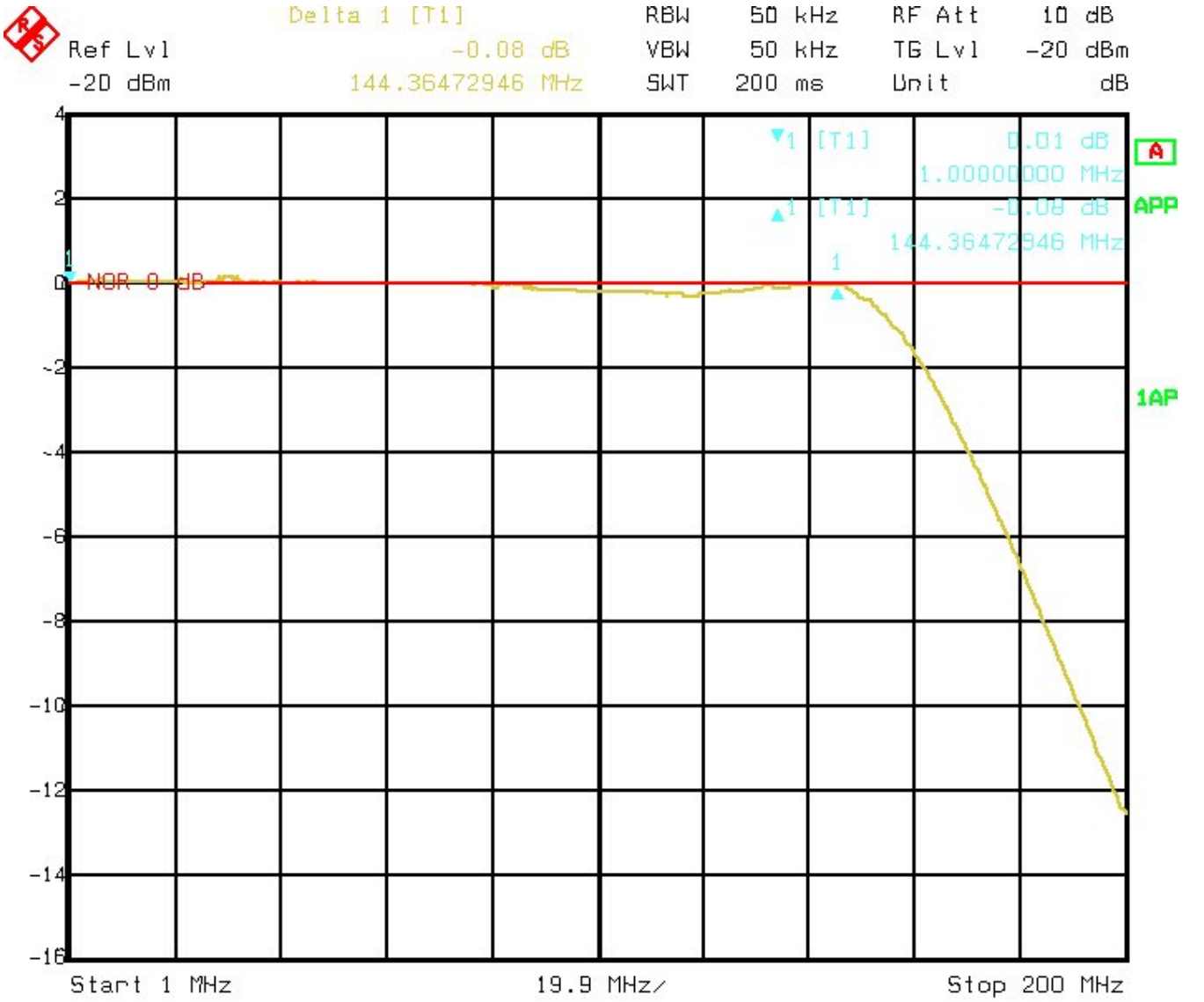
My prototype of the 144 PCB LP filter



The measured results can be seen here. Special thanks go to Jack, PE1KXH


Delta 4 [T1]
Ref Lvl
-20 dBm
-52.49 dB
576.57715431 MHz
RBW 10 kHz
VBW 10 kHz
SWT 25 s
RF Att 10 dB
TG Lvl -20 dBm
Unit dB
1 [T1] -1.01 dB
1.00000000 MHz
4 [T1] -52.49 dB
576.57715431 MHz
1 [T1] 0.08 dB
144.36472946 MHz
2 [T1] -30.54 dB
288.28857715 MHz
3 [T1] -48.00 dB
432.43286573 MHz
APP
1AP
NOR 0 dB
20
10
0
-10
-20
-30
-40
-50
-60
-70
-80
Start 1 MHz
99.9 MHz/
Stop 1 GHz
Date: 06.FEB.2008 15:49:47


PA3CSG 144MHz LPF


Delta 1 [T1]
RBW 50 kHz
RF Att 10 dB
Ref Lvl
-0.08 dB
VBW 50 kHz
TG Lvl -20 dBm
-20 dBm
144.36472946 MHz
SWT 200 ms
Unit dB
1 [T1]
0.01 dB
1.00000000 MHz
1 [T1]
-0.08 dB
144.36472946 MHz
NOR 0 dB
A
APP
1AP
4
2
0
-2
-4
-6
-8
-10
-12
-14
-16
Start 1 MHz
19.9 MHz/
Stop 200 MHz