Analysis of Dielectric Induction in an E-Field Ver1B

Pg 1

From my previous paper “Dielectric Charging via the E_Field”, there appears to be evidence of energy gain within a dielectric material with surface conductors, aka a capacitor, when placed in an active E-Field of a transformer and in this case, a toroid. This is an analysis with a closer look at the phenomena.

This version utilizes a charged input capacitor C2 to supply energy to the primary L1. The capacitor is pre-charged to 64v DC via R2 which has miniscule energy loss. C1 is a 1.06ufd- 2% precision film capacitor and is placed in the center of a 2” diameter ferrite toroid core. The schematic of the test circuit is shown in Figure 1 below.

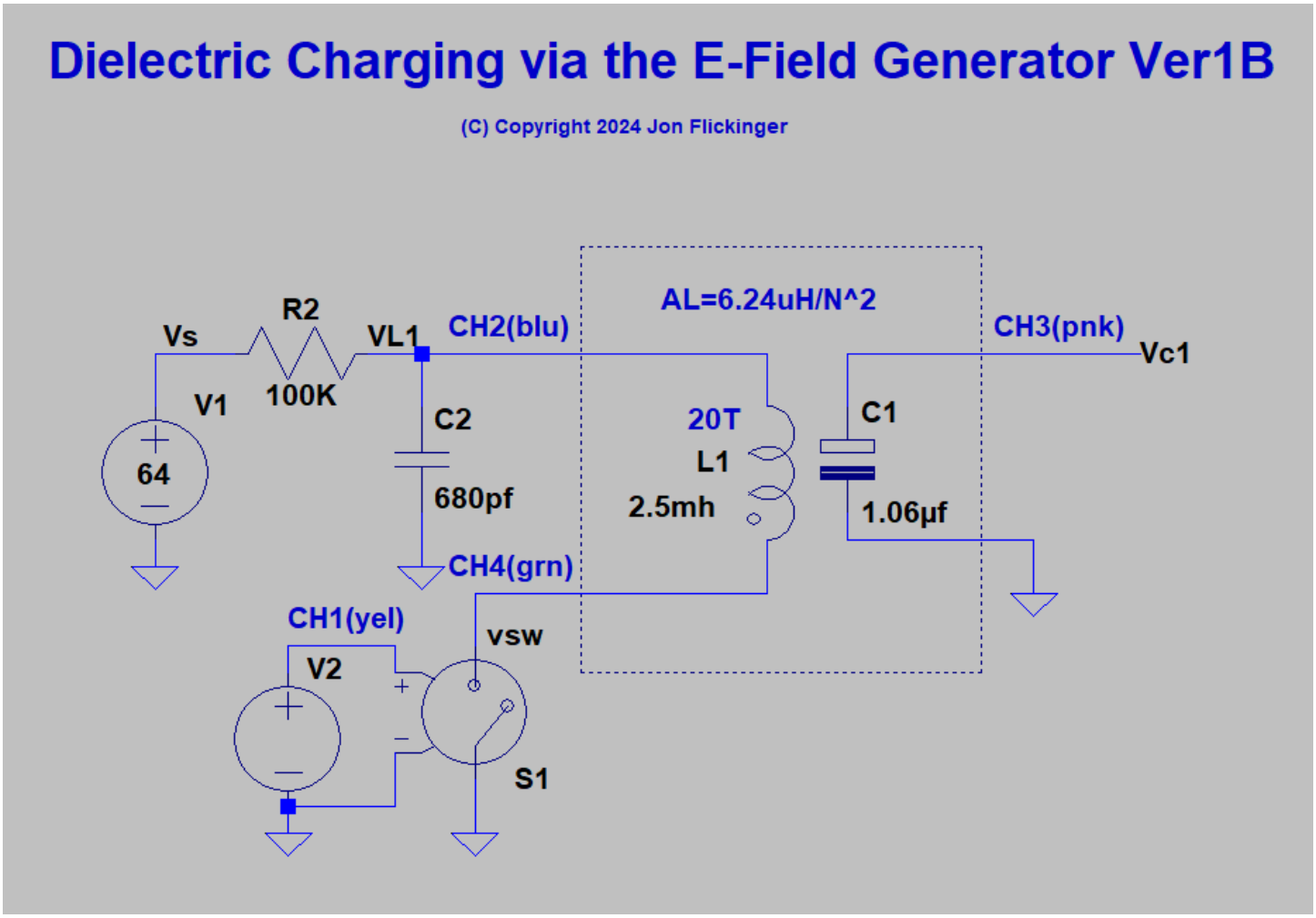

Figure 1

Pg 2

The scope pix below shows the rise of voltage on C1 to an average of 2.97v on cursor ‘b’, a fall time of 17ns on the bottom of L1 which is really the rise time in L1 with VL1 still held at 64v DC, and the delay of 146.8ns for C1 to rise to 2.97v.

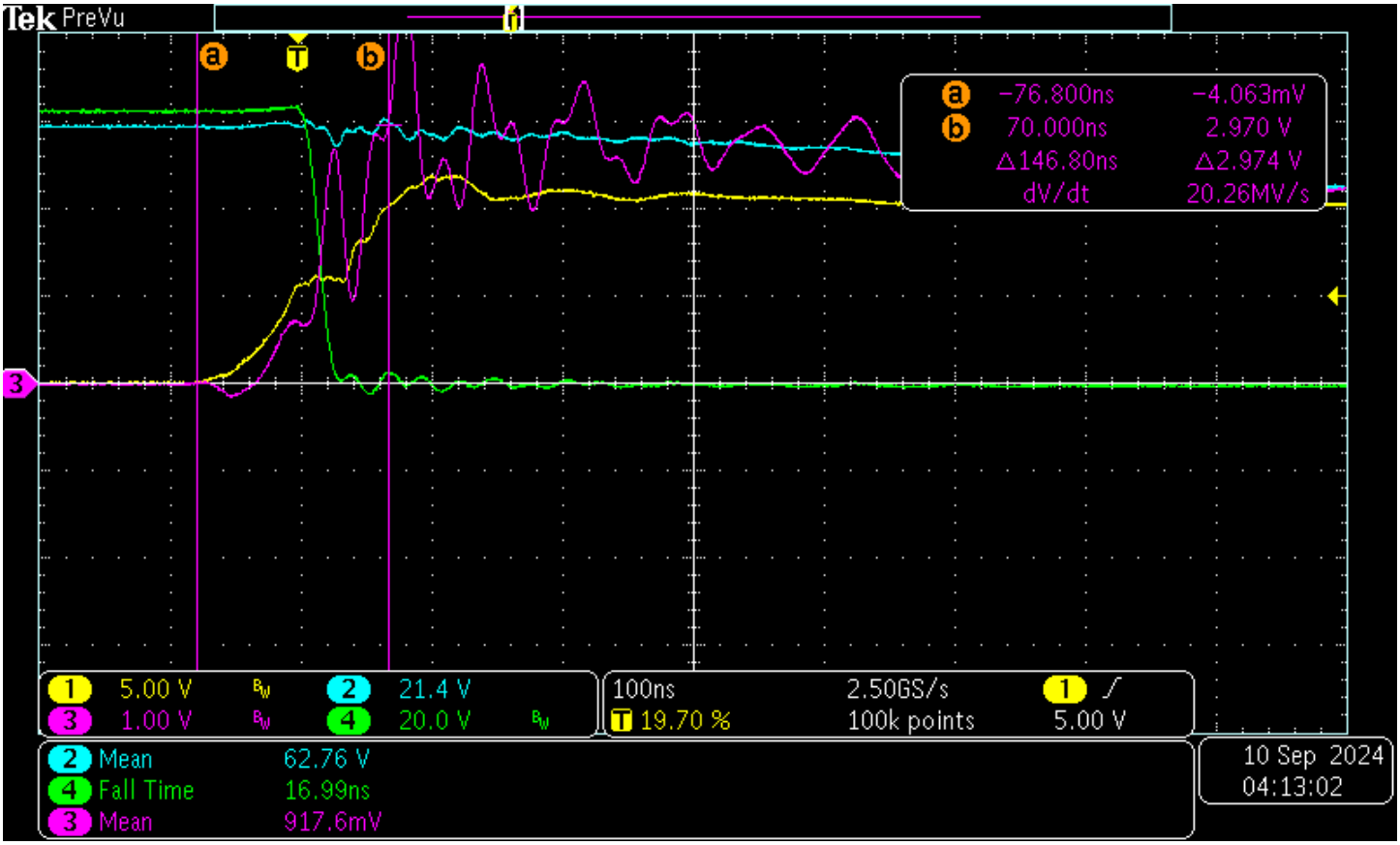

Figure 2

To solve for a voltage across a capacitor we can use the basic formula dV=i*dt/C. Solving for current we have i=dV*C/dt. Plugging in our numbers we have i=2.97*1.06e-6/146.8e-9=21.4A which is the amount of current required to charge C1 to 2.97v in 146.8ns.

Now I would ask, where is this current coming from, what is it’s source? Is it seen in the discharge of C2? No! The answer is, we don’t have a visible source in our simple test. Therefore, the only answer is the current is supplied by an outside source. What outside source is available, the aether of course. IMO, this is our free source of energy that is charging C1 to 2.97v! I would be pleased to hear other ideas on any other possible sources!

Pg 3

Now let's look at the energy levels involved. The energy level in C1 after reaching a charge of 2.97v is UC1=2.97^2*1.06e-6/2=4.675uJ. As can be seen, the voltage level across C2 has hardly changed at all but even if it was fully discharged during the time C1 reached 2.97v, the energy consumed in C2 would be UC2=64^2*680e-12/2=1.39uJ. However, since the voltage across C2 has dropped insignificantly, the energy gain in this circuit over the first 146.8ns is huge!

Consider now what would happen if we placed a DC bias voltage on C2 of say 64v. We will still find a dV of 2.97 volts on C1 over the first 147ns of the cycle. Now our energy increase in C1 would be dUC1=(66.97^2-64^2)*1.06e-6/2=206.1uJ with the same miniscule input energy taken from C2 which is next to nothing! Higher bias voltage equal higher energy differential!

See Figure 3 for an example of the above.

So, here is a means of tapping energy from the aether. Now need to learn how to utilize it to produce a useful generator.

Regards,

Jon Flickinger

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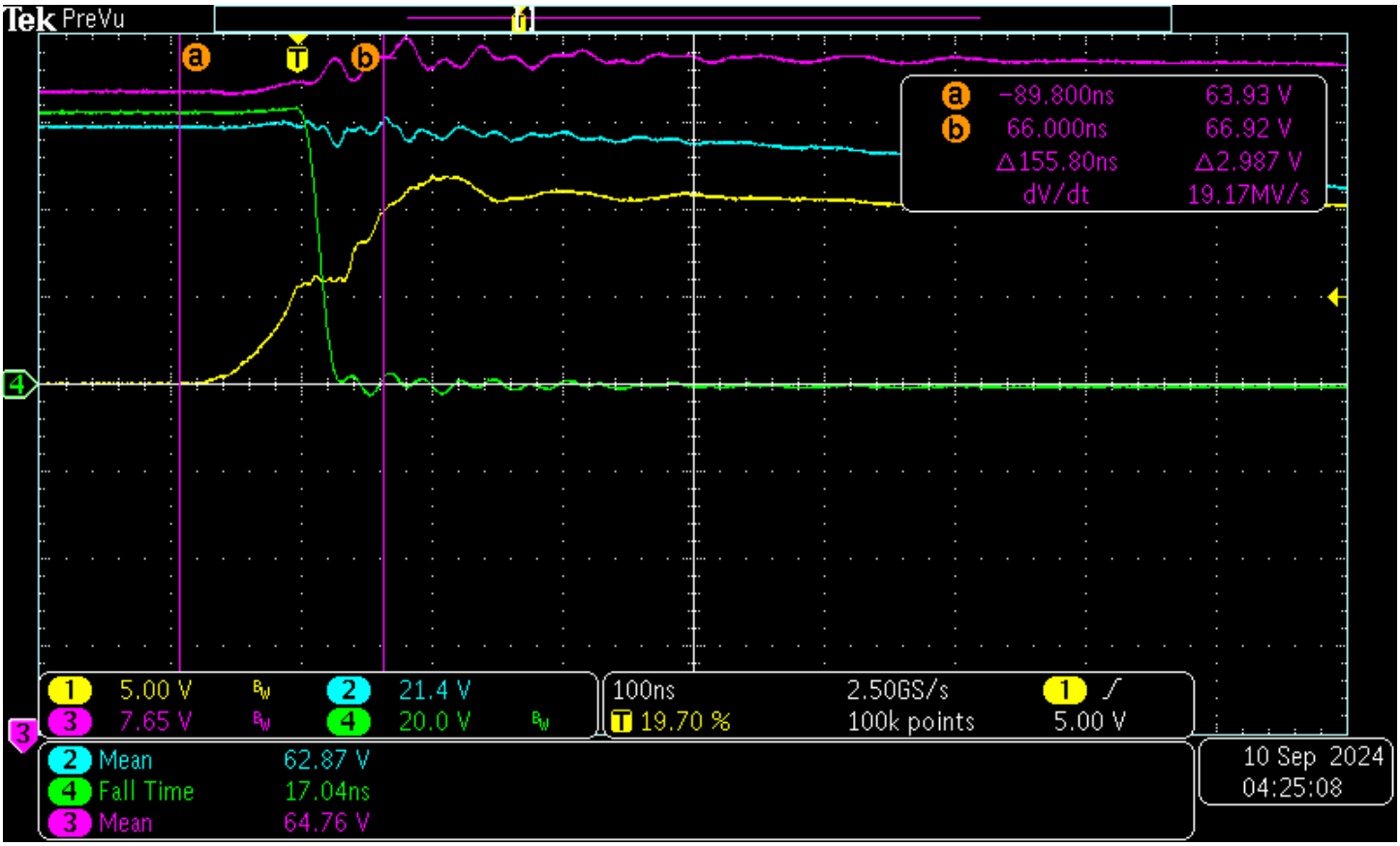
Tek PreVu
a
T
b
a -89.800ns 63.93 V
b 66.000ns 66.92 V
Δ155.80ns Δ2.987 V
dV/dt 19.17MV/s
4
1 5.00 V
3 7.65 V
2 21.4 V
4 20.0 V
100ns 2.50GS/s
T 19.70 % 100k points
1 5.00 V
2 Mean 62.87 V
4 Fall Time 17.04ns
3 Mean 64.76 V
10 Sep 2024
04:25:08

Figure 3