Parallel Capacitance inside of Coils of Wire...

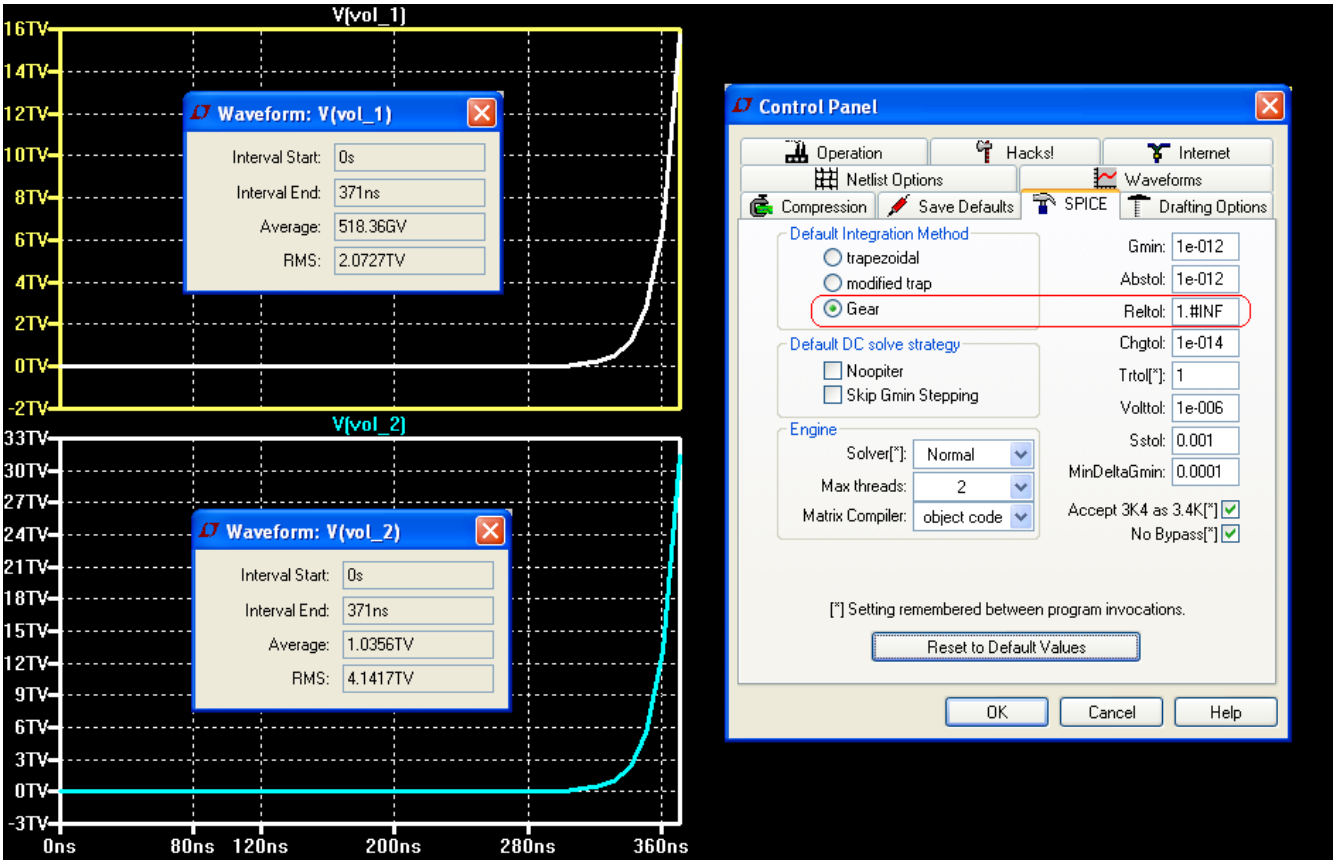
...is uncanny. It's not parasitic capacitance anymore whenever it is not spawned from the closely packed winding which is normally associated with this phenomenon.

Instead, it steers clear of the limitations which are normally associated with the transmittance of power over large distances by making them less relevant to efficiency. Hence, coils may retain their mutual inductivity at great distances with little loss of power.

I've seen this occur once before in Micro-Cap electronic simulator software, but now I also see this occur within LTSPICE as well. And all because I took the time and made the effort to look for it...!

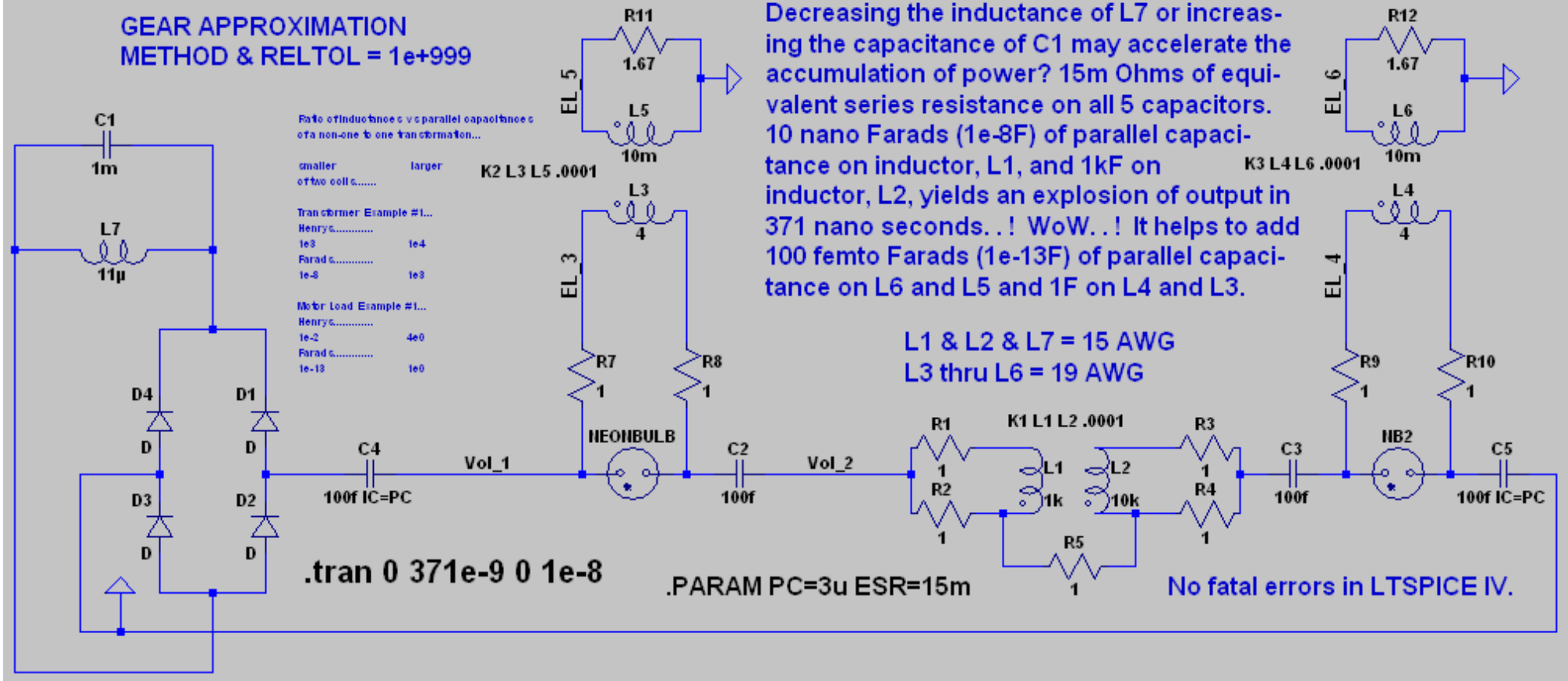
Here's the data in the form of screenshots and the software files (zipped up)...enjoy!

Output and customized settings within the Control Panel's SPICE tab of LTSPICE IV...



And here is the schematic...

Maybe parallel capacitance can be built into a coil by using bare iron wire electroplated with aluminum oxide instead of the more commonplace usage of magnetic insulated copper wire to wind inductors: L1 thru L6? Parallel capacitance is phenomenal if it is within all inductors which are engaging in mutual inductivity, namely: magnetic coupling, in as much as it won't matter what coupling coefficience exists among each set of inductors which are magnetically coupled to each other as if the distance between them doesn't matter.!



Here is the fine print on the left side of the schematic...

Ratios of inductances versus series resistances versus parallel capacitances of coupled inductors...

Transformer, 15 AWG	**Smaller Coil = L1**	**Larger Coil = L2**
Inductance	**1e+3 = 1k H**	**1e+4 = 10k H**
Series Resistance	**1e+2 = 100 Ω**	**1e+3 = 1k Ω**
Parallel Capacitance	**1e–8 = 10n F**	**1e+3 = 1k F**
Motor Load, 19 AWG	**Rotors = L5 & L6**	**Stators = L3 & L4**
Inductance	**1e–2 = 10m H**	**4e0 = 4 H**
Series Resistance	**2.5e–3 = 2.5m Ω**	**1e0 = 1 Ω**
Parallel Capacitance	**1e–13 = 100 femto F**	**1e0 = 1 F**

All of the mutual inductances must possess parallel capacitance of sufficient value in order for you to be able to get away with the severe reduction of the coupling coeffience *of any individual set of coils* to ridiculously low levels of coupling which indicates how unimportant it is to maintain a close proximity between coils among each coupled, pair of, or set of, coils in order to maintain a high efficiency of power transfer between them. In other words, it becomes possible to envision the transfer of power without wires and without any significant losses over significant distances *even when judged by the conventional standards of our so-called modern era.*

C. Earl Ammann claimed a range of ten miles must exist between his power supply and any inductive load activated by placing a coil adjacent to steel. So, it could not be an air cored coil. It had to be an iron cored inductive load (a coil acting as a receiver) to transfer power to any other type of load, such as: a resistive load, connected to the receiver coil.

By the way...

I should probably state more plainly, whenever I post these rantings of mine, how symbolic a simulator is…so much so that even time becomes a symbol within the virtual domain of its processes. The simulator can't tell the difference between reality and its own version of reality. That's the job of the user of this type of software….. to be able to translate from its world into our world and also from our world into its world as fluently as if the user were a multilingual child living in a multilingual world.

...or, a multidimensional human easily handling multiple dimensions of reality, simultaneously.

Each has its shortcomings and peculiar traits (any one of which may prove useful now and then).