Minkowski spacetime and relativity model it. Instead, we march through time like a peculiar sewing machine, one stitch at a time, and each stitch made is removed before the next one is made. This explains precisely why we cannot "see through time" as we see along the physical dimension. The time dimension is continually fragmented and destroyed.

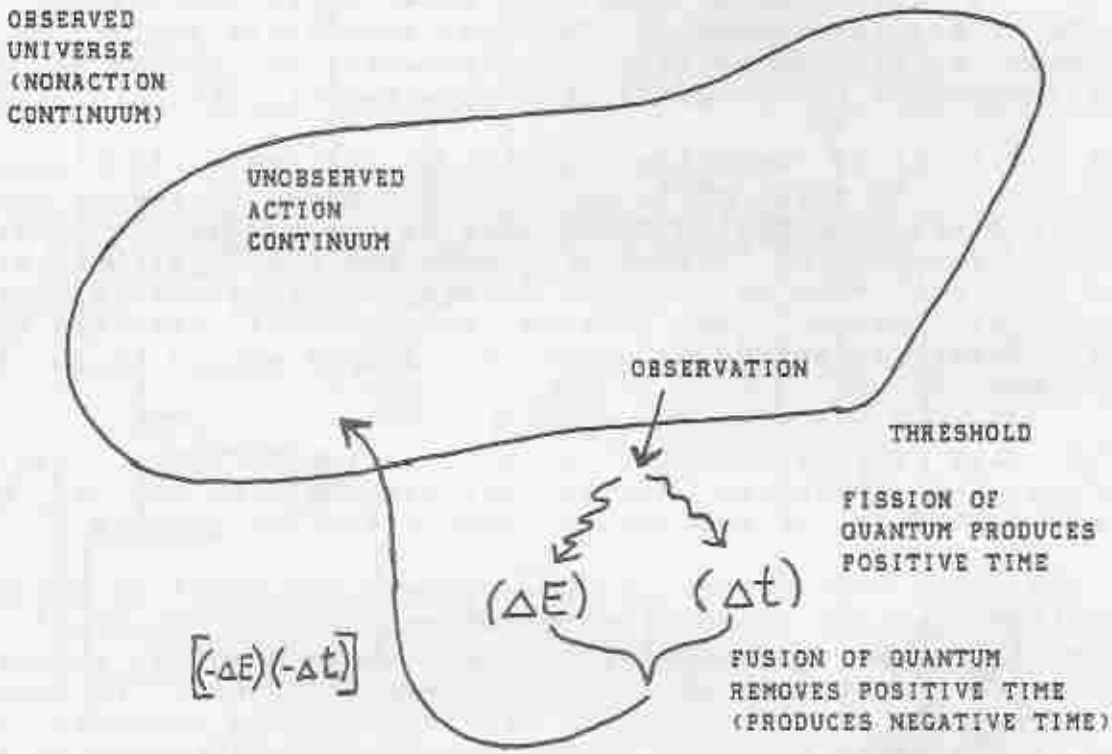


FIGURE 1. The Operation of Physical Detection at the Quantum Level.

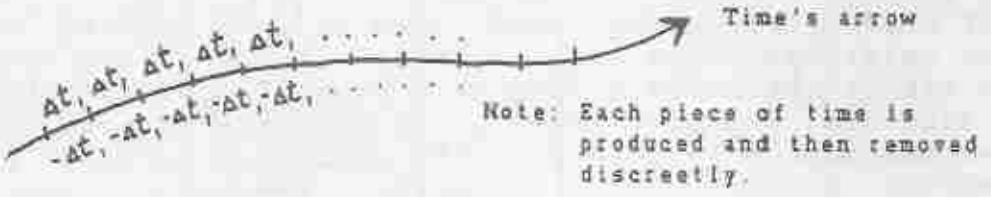


FIGURE 2. Passage of Object Through Time Occurs in Discrete Jumps

FIGURES 1 and 2 show the situation. Note that we can consider the "successive ripping out of time stitches" as the negative stream of time.

In this model, everything exists in both positive and negative time streams that usually are balanced. In this fashion, a completely new definition of mass was obtained, Newton's laws of motion (relativistic form) were derived, and the square law of gravitation was derived, albeit crudely. [2]

Now notice that, when an action quantum is split into conceivable energy and time, it may be split in two ways: a) it can be split into positive pieces of energy and positive pieces of time, or b) it can be split into a negative piece of energy and a negative piece of time. FIGURE 3 shows these possibilities of splitting. Note that, if we consider both the fission and fusion processes, both splits actually occur, depending upon which time stream one chooses to observe from.

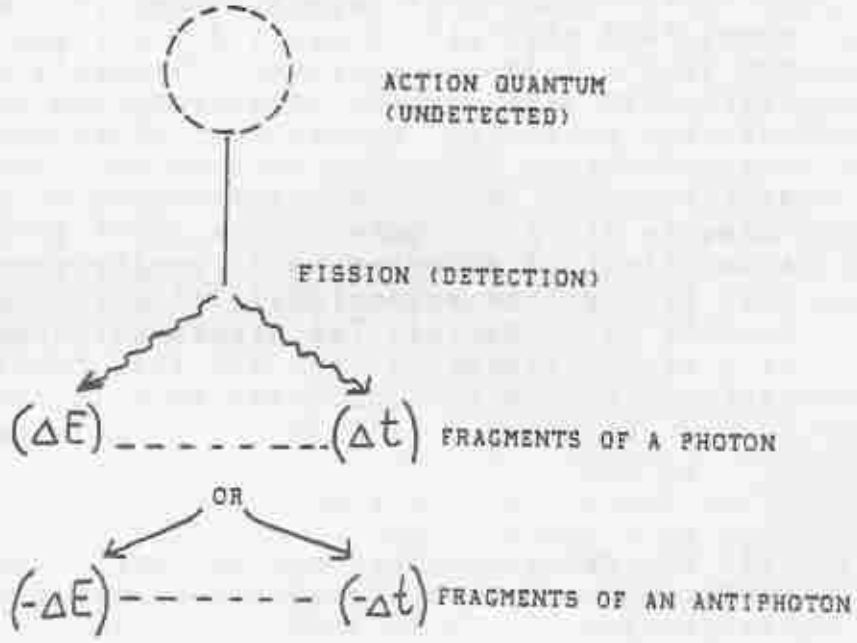


FIGURE 3. Two Possibilities of Action Quantum Fissioning

This is most interesting. We now have a concept whereby each object is passing through both the negative time flow and the positive time flow in an interweaved manner; to the macroscopic observer, this appears to be simultaneously.

So an object may be said to possess both positive and negative energy, simultaneously, as a first order approximation. It possesses positive energy in positive time, and negative energies in negative time. In all normal processes, we have considered and developed only positive time processes. However, we point out that negative time operation is well-known in modern physics. Feynman diagrams involve extensive negative time travel. Originally Dirac did not predict the positron as a positive particle travelling forwards in positive time. Instead, he predicted a negative particle (traveling in negative time, in our

view), which we could only observe (with positive time instruments!) as a positive particle traveling forwards in time. In the view of modern physics, real particles already travel backwards in time sometimes.

But if we can actually produce some extra negative time in a device which normally is observed only to produce positive time, we shall obtain a reversal of entropy. Systems which tend to disorder in positive time, tend to order in negative time. Such an effect (production of negative time) involves the concomitant production of negative energy. However, negative electromagnetic energy will still run motors and burn light bulbs. The photon, you see, is its own antiparticle: and an antiphoton is just observed as another photon.

We will choose to regard an antiphoton as consisting of negative energy and negative time, and producing these two fragments if detected in the laboratory frame. The production of antiphotons and negative time will yield negentropy and additional or "free" negative energy, appearing to us to violate the ordinary "conservation of energy" law. This is no problem; production of unbalanced time streams, and hence the appearance of negative energy and negative time, is itself a "curved spacetime" phenomenon. Any system exhibiting this effect is existing in a locally curved spacetime (FIGURE 4). That is, it is now a general relativistic system, and energy need not locally be conserved. The system can appear to contain either a source or a sink, depending upon the individual system's functioning, to an external laboratory observer. We will return to this effect shortly.

Note the two time lines are of equal length. The negentropy device is producing negative energy and negative time, with respect to the lab observer.

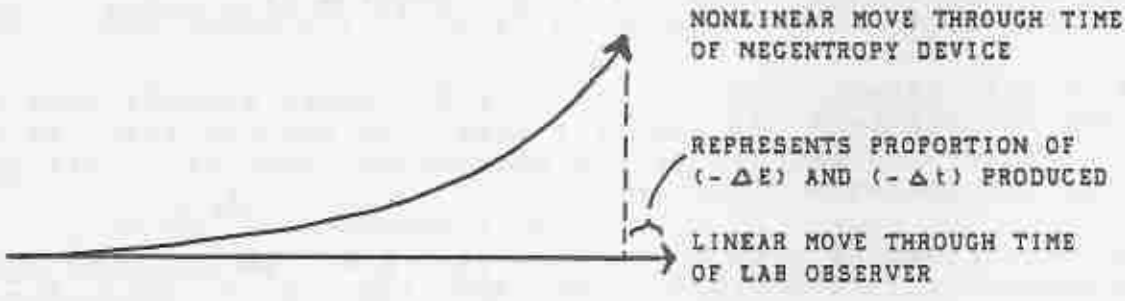


FIGURE 4. Production of Negentropy by Local Curvature of Spacetime Vacuum.

Three Kinds Of Electromagnetics

There are actually three types of electromagnetics (TABLE I), as I pointed out in my paper [3] to the IEEE Colorado Springs Tesla Centennial Symposium on 11 August 1984:

a) The ordinary kind of EM, described in classical electromagnetic theory. In classical EM theory, the vector force fields are considered primary and causative, and the potentials are considered to be only mathematical figments. In a region where the force fields are zero, classical EM theory assumes that all the electromagnetic effects cease.

b) Quantum mechanics, which holds quite a different view of EM. In QM theory the potentials are considered to be real and fundamental, and the EM force fields are merely created from them by differentiation. That is, QM considers the force fields such as E and B to be derived effects, not fundamental causes. Further, when these derived force fields are zero, this only means that the gradients of the potentials are horizontal and hence "zero vectors." The potentials are still there, however, and their interference in a region of zero EM force fields can and does still cause effects. Thus, when classical EM effects reduce to zero, QM EM effects can still exist due to the potentials. In addition to violating classical EM theory, this also violates classical mechanics. It is true and experimentally proven nonetheless. [4] [5]

c) An extension to the EM view of quantum mechanics, which I have named "scalar electromagnetics." The view of a potential by QM is essentially that it is composed of randomly fluctuating little virtual flux vectors, each representing a moving virtual particle and hence a moving virtual force. That is, QM fundamentally assumes that the virtual vector substructure comprising a potential stress of spacetime is totally statistical and sums to zero. My own contribution, arrived at by noting the work of many unorthodox researchers, is to point out that the virtual substructure need not be random at all. We can simply form EM force field vector zeros by opposing or summing ordinary E and B vectors, for instance, to a zero vector. In this case, the sum of the absolute values of their magnitudes represents an artificial potential, an artificial stress in spacetime, but one that now has a rigorously deterministic substructure. This represents a deterministic ordering placed into the virtual state (inside the zero vector, in its substructure). We have therefore violated one of the fundamental assumptions of quantum mechanics. We have deliberately ordered and formed the stress of spacetime itself. In other words, we have accomplished general relativistic warping or curving of spacetime as we deliberately chose, and partially ordered the otherwise statistical disorder of the virtual-flux vacuum-ether. The third kind of electromagnetics allows us to transcend many of the limitations of classical EM and of quantum mechanics.

TABLE 1 THREE KINDS OF ELECTROMAGNETICS

CLASSICAL

-> POTENTIALS JUST MATHEMATICAL CONVENIENCES
-> ACTIONS CAUSED BY NONZERO FORCE FIELDS
-> NO ACTION WHEN FORCE FIELDS ZERO

QUANTUM MECHANICS

-> POTENTIALS REAL
-> STATISTICAL SUBSTRUCTURE
-> FORCE FIELDS BY DIFFERENTIATIONS
-> ACTIONS WHEN FORCE FIELDS ZERO

ARTIFICIAL POTENTIALS

-> POTENTIALS REAL
-> FORCE FIELDS EXTERNALLY ZEROED, INTERNALLY ACTIVE
-> ZEROS INDIVIDUALLY DIFFER
-> SCALAR INTERFEROMETRY
-> SCALAR RESONANCE

TABLE 2 shows the specific characteristic features of each of the three kinds of electromagnetics. The first two EM's are already proven; the third follows by simple summation of ordinary force field vectors to zero, to produce artificial potentials.

Note what an astounding change this simple vector summation-to-zero, to make an artificial potential, represents to physics. In deliberately forming order in what was previously vacuum disorder, we have accomplished -- simply and directly -- the production of negentropy. We have reduced disorder and increased order.

If so, we must inevitably have produced negative time and negative energy, as seen by the external, linear laboratory observer, as was shown in FIGURE 4.

TABLE 2 COMPARISON OF EM CONCEPTS

Theory / Characteristic	Classical EM	Present linear Quantum Mechanics	Scalar EM (Artificial ∅)
Vacuum spacetime	Linear no charge	Linear, Charged (virtual) statistically.	Nonlinear, Charged (virtual) with deterministic components.
virtual substructure	none (fluid equations)	yes statistical	yes, statistical but deterministically weighted
force in vacuum?	cause yes	effect yes	effect no
zero force fields	no effect	Bohm-Aharonov effects	substructure effects engineerable
potentials	ficticious	real, primary statistical substructures	real, primary deterministic substructures
causative agent	force fields	potentials	potentials and infolded fields of substructures
charge	with mass	with mass	masseless
relativistic effects due to	velocity	velocity, interfering potentials	interfering potentials
hidden variables	no	statistical negligible	deterministic, major role
vector theory applied to EM	okay	okay	requires revision
vacuum EM wave	transverse	transverse	longitudinal with swirls
energy/mass conservation	yes	yes	not necessary, anenergy conserved
charge conservation	yes	yes	not necessarily

TABLE 2 (continued) COMPARISON OF EM CONCEPTS

Theory Characteristic	Classical EM	Present linear Quantum Mechanics	Scalar EM (Artificial Ø)
action at a distance	no	no, except Bohm-Aharonov	yes, scalar interferometer
scalar (zero-vector) resonance	no	no	yes
inertia is electrical	no	no	yes
gravity is electrical	no	no	yes
mass is electrical	no	no	yes

Negative Time Effects

Eike Mueller's tests of John Bedini's free energy devices directly demonstrate the effects of the production of negative time. That is, the Bedini devices produce some negative time and negative energy, during any macroscopic interval in which they produce positive time and positive energy.

For example, in all three devices Bedini has built to date, a battery is used as an accumulator for the energy, whether it be positive energy or negative energy. By feeding back some "negative potential current" (or ϕ-dot) to the battery, the battery accumulates -- and charges up with -- negative timespace energy. The battery can furnish the extra negative energy to motors and light lights, with certain peculiarities to be mentioned shortly.

First, however, a most unusual effect occurs in the battery. Note that in modern theory the vacuum is considered to be filled with little "holes" or negative energy states, each normally filled by an electron. (FIGURE 5). This "sea of little negative energy electrons in holes" is called the Dirac sea, after the eminent scientist P.A.M. Dirac, who conceived the theory.

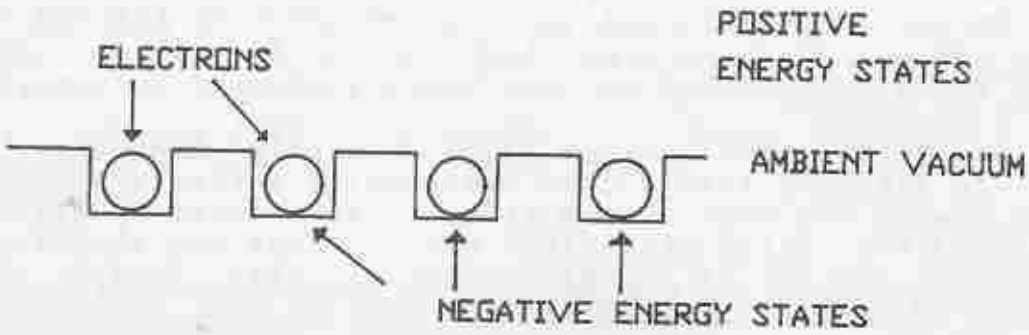


FIGURE 5. The Normally-Filled Dirac Sea

Now, in the negative time portion of the machine's operation, we shall consider that the Dirac sea is inverted. That is, the negative energy electrons will now "fall out of" the holes during the negative time portions, producing negative energy. This of course is real energy, and drives motors and lights. However, a battery which has been charging with negative energy has accumulated a pool of emptied holes in its Dirac sea (FIGURE 6). Everything seems normal, until we remove the battery from the negative-entropy device and hook it up to a normal battery charger. Now we find an amazing effect: the battery will at first "eat" or consume electricity, while the electrons in the charging current are filling the empty Dirac holes. During this filling time, the battery will not recharge to recover its voltage. After these Dirac holes have been filled again with electrons, the battery will start to charge up normally, and will contain normal, positive energy when charged (FIGURE 7).

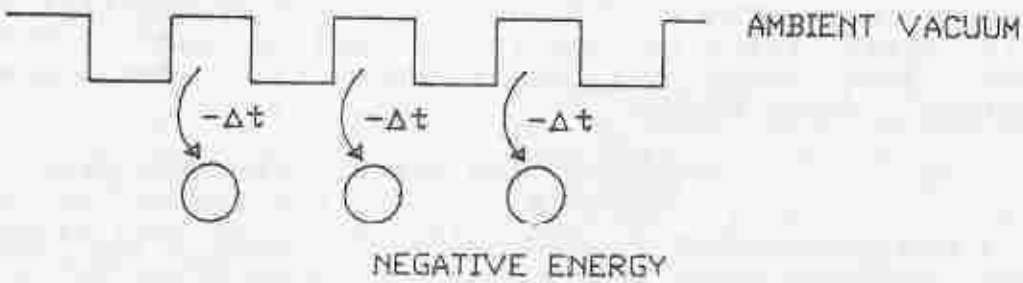


FIGURE 6. The Partially-Emptied Dirac Sea

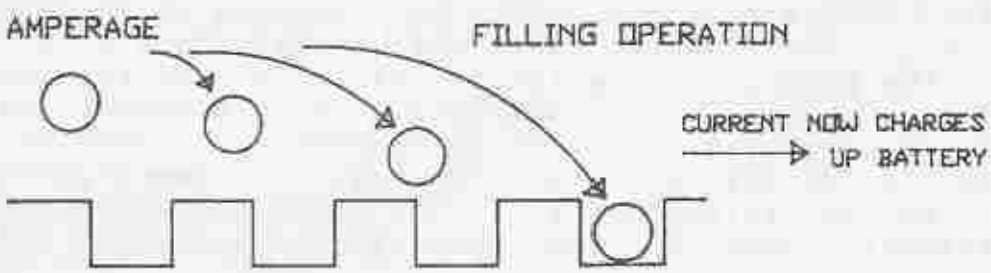


FIGURE 7. Filling The Dirac Sea Holes

On one test, a Bedini battery removed from the operating Kromrey-type device consumed electrical current for 110 minutes before the Dirac holes were filled and the battery started to charge normally.

At the Colorado Springs Tesla Centennial Symposium, the battery from Jim Watson's Bedini-type free-energy device was stolen -- probably by agents who know of the effect, and wanted to see if the battery exhibited the "Dirac fill time" effect. That is, they could absolutely ascertain whether or not his device was real, simply by testing the battery to see if it exhibited the effect.

On any free-energy device which is powered from a recharging battery, this is a positive test to ascertain whether the device is genuine or a fake.

Other negative time effects are evidenced by a motor running at least partially on negative energy. The way to understand these effects is to reverse in our minds what would happen to a normal motor running on positive energy and positive time.

For example, one may visualize a motor running at constant speed as containing some constant value of energy at any given time. If all the energy is positive and the time passing is positive, when one shorts the terminals one removes positive energy. The motor thus dies. On the other hand, if the motor contains a negative energy and negative time, shorting the terminals removes negative energy and negative time. This is equivalent to increasing negative energy in positive time. Therefore the laboratory observer will observe the motor to increase its speed when the terminals are shorted. Eike Mueller directly observed this effect in the Bedini device.

Similarly, if one adds additional loads to a negative energy/negative time motor, one is again removing negative energy and negative time, which is identical to adding negative energy in positive time. Thus again the motor increases its speed precisely as Eike Mueller's tests showed.

Additional negative time effects are exhibited. Utilization of negative energy produces IR^2 cooling instead of heating. Thus resistors and semiconductors run cold. The more load added, the more negative energy current drawn -- and devices get cooler, even though the lights get brighter and the motor runs faster. Also, to the negative energy/negative time operation, the frequency/temperature spectrum appears to be inverted. That is, instead of "heating up" through infrared, into visible, into ultraviolet, and into X-rays and gamma rays, the negative energy device exhibits "cooling down" from gammas to X-rays to visible to infrared. In this manner one finds that a simple low voltage (positive instrument measurement!) spark exhibits profoundly unusual effects: Its negative time/negative energy/"voltage" may be extremely high . The spark therefore may appear of extraordinary length for the (seemingly) low voltage indicated by posi-

tive-time instruments. In addition, the spark may be unusually rich in UV emission or X-ray emission. For uncontrolled very high-energy negentropy devices, even gamma emission may be observed from seemingly "low voltage" devices. The long-sought X-ray laser and gamma ray laser should be easily constructable along negative entropy device principles.

These are just some of the exciting effects that have become apparent in the negentropy devices built by John Bedini. Further, John has magnanimously released sufficient details so that other experimenters can produce working models of two of his devices. Jim Watson has already successfully replicated the first Bedini motor, and scaled it up into a much larger device. In addition, Eike Mueller himself has replicated a simplified version of Bedini's Tesla switch device.

We are on the threshold of a new science, a new world, and a new life, given to us by the pioneers such as Tesla, Moray, Bedini, and others.

Let us get on with it and put it to immediate use to power our cities, our homes, and our industries.

References

[1] Bearden, Thomas E., "Quiton/Perceptron Physics: A Theory of Existence, Perception, and Physical Phenomena," March, 1973, NTIS # AD 763210

[2] Ibid.

[3] Bearden, Thomas E., "Tesla Electromagnetics and Its Soviet Weaponization," presented to the IEEE Tesla Centennial Symposium, Colorado College, Colorado Springs, Colorado 11 August 1984

[4] Y. Aharonov and D. Bohm, "Significance of Electromagnetic Potentials in the Quantum Theory," The Physical Review, Second Series, 115 (3), August 1, 1959, pp. 485-491.

[5] R.G. Chambers, Phys. Rev. Lett., Vol.5, 1960, p.3.

ADDITIONAL TESTS BY EIKE MUELLER

30 August / 1 September 1984

In the first series of tests I used the rotary switch. The batteries were labeled as #1 and #2 (left side) and #3 and #4 (right side).

Here are the major events.

EVENT 1 Start at 12:25 pm; voltage measurements taken.

EVENT 2 At 12:45 pm voltage measurements taken.

EVENT 3 At 1:00 pm the 12V, 75W lamp replaced by a 110/10V transformer.

EVENT 4 At 1:15 pm voltage measurements taken.

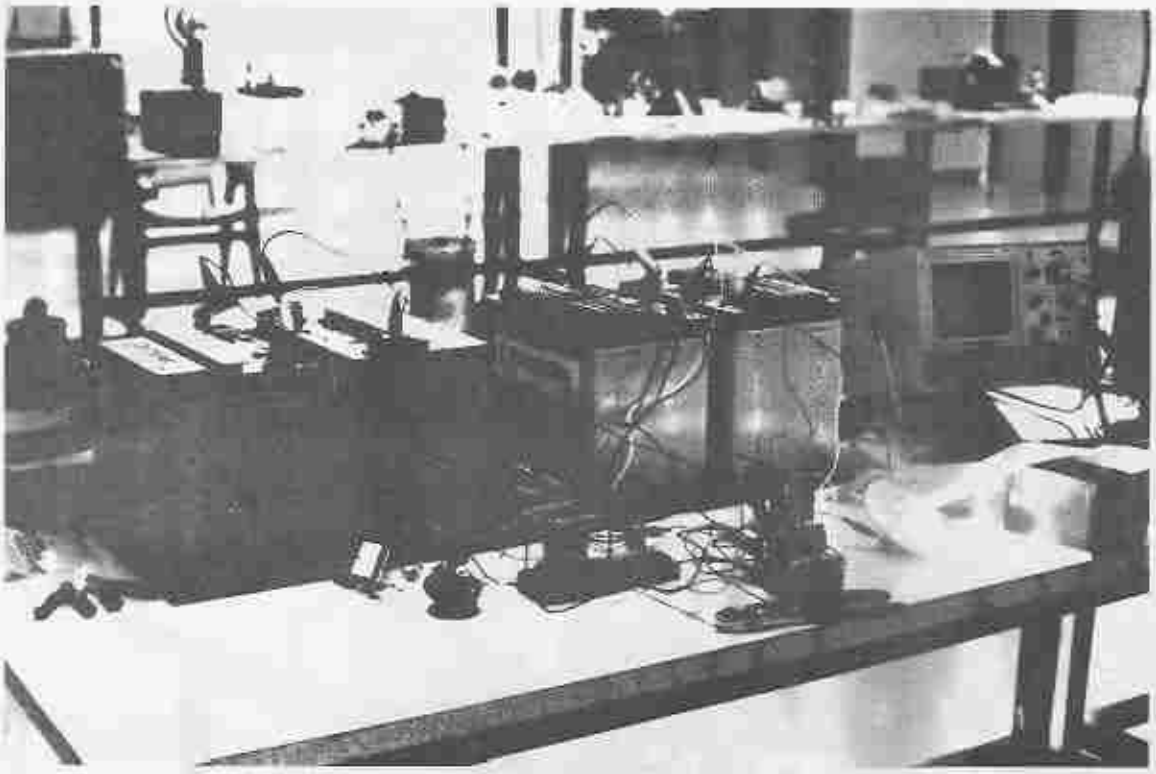
EVENT 5 At 1:30 pm test stopped, voltage measurments taken.

TABLE 1 shows the detailed voltage measurements during the conduct of this test.

TIME	12:25	12:45	1:00	1:15	1:30
EVENT	1	2	3	4	5
VOLTAGE					
BATT.#1	12.0	12.0	12.1	12.1	12.1
BATT.#2	11.9	11.9	12.2	12.2	12.2
BATT.#3	12.2	12.1	12.7	12.8	12.8
BATT.#4	12.2	12.2	12.7	12.7	12.8

TABLE 1 TESLA/BRANDT/BEDINI SWITCHING DEVICE FIRST SERIES

PICTURE 1 shows the conduct of this test. The batteries were labeled from #1 to #4 from left to right. In the center the rotary switch, and to the left of it the potentiometer for its speed control (frequency control of circuit), can be seen. To the right of the rotary switch is the relay which switches the battery banks. To the right of the relay is the 12 V, 75 W quartz lamp which is connected to the negative terminals of batteries #2 and #4.



PICTURE 1 FIRST SETUP OF TESLA SWITCH EXPERIMENT

At 3:00 pm the Tesla switch was reconnected. This time the relay was driven by the timer which was built by Louis Pollaehn of COMTEC. FIGURE 1 shows the circuit diagram for this timing device and PICTURE 2 shows the solid state timing device in operation.

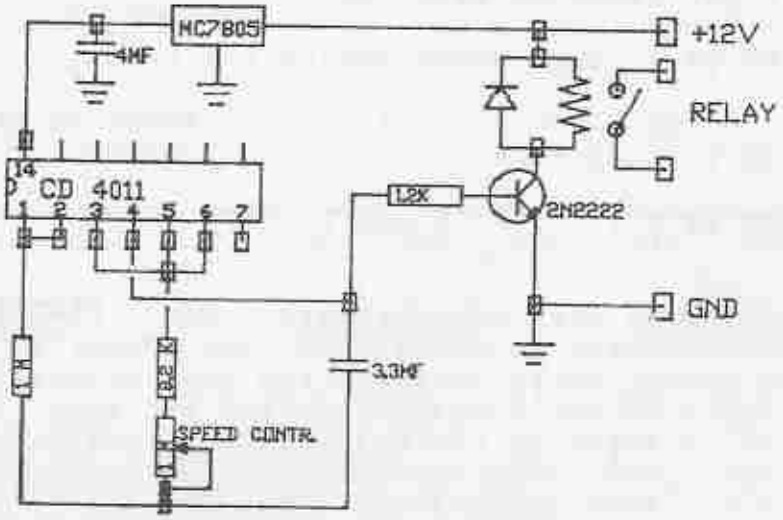
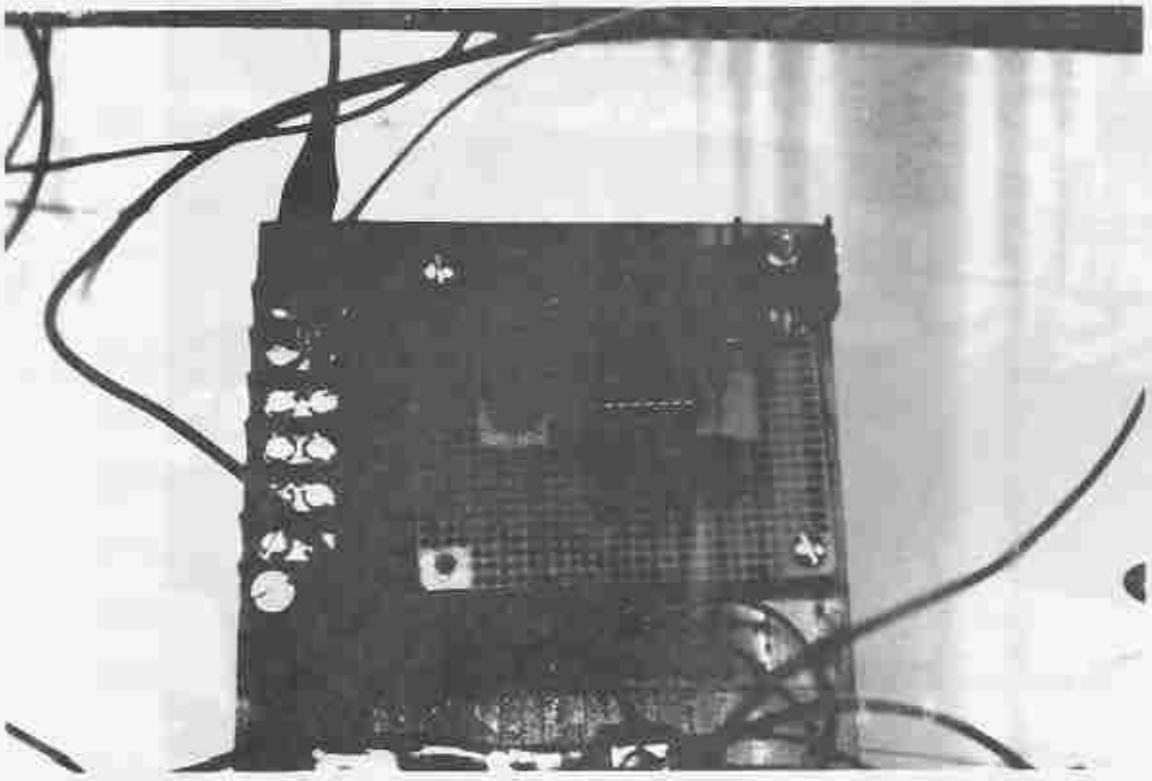


FIGURE 1 CIRCUIT DIAGRAM OF TIMING DEVICE BY LOUIS POLLAEHN



PICTURE 2 THE SOLID STATE TIMING DEVICE IN OPERATION

Test history:

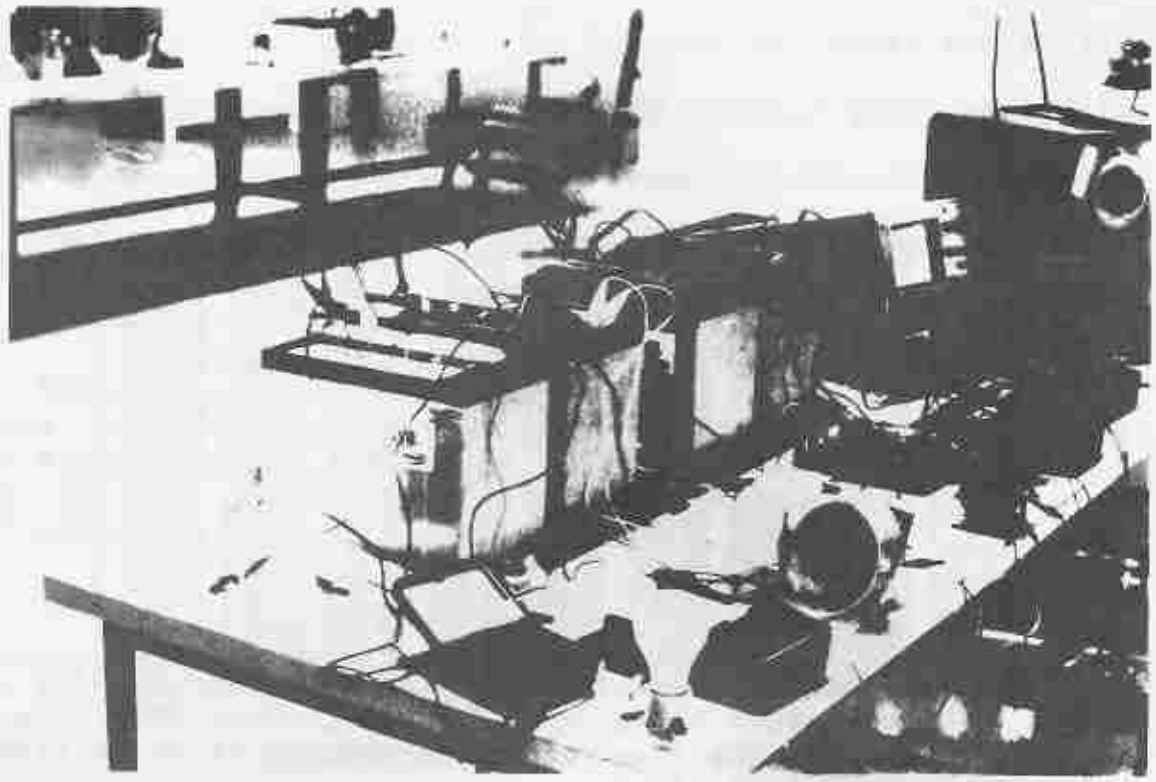
EVENT A At 3:10 pm test started, load was a 110/10 V transformer between the two negative terminals of batteries #2 and #4. The secondary side the transformer was connected to two 40W, 110V light bulbs in parallel.

EVENT B At 4:00 pm voltage measurements taken.

EVENT C At 4:30 pm a small 110 V fan was added in parallel to the two 110 V light bulbs.

EVENT D At 5:40 pm a 12 V, 75 W quartz lamp was connected to battery #1.

EVENT E At 6:00 pm voltage measurements taken. PICTURE 3 shows this setup. At left is the quartz lamp connected to battery #1. In the center foreground are the two incandescent lamps. To the right of the lamps is the 110 VAC fan. Behind the fan and out of sight is the relay. Next is the 110/10 V transformer, hooked up to the two negative terminals of batteries #2 and #4. The solid state timing device is located between the transformer and battery #4.



PICTURE 3 Tesla/Brandt/Bedini Switching device loaded with two 110V light bulbs, 110V fan and a 12V 75W quartz lamp.

EVENT F At 6:30 pm voltage measurements taken.

EVENT G At 7:00 pm one 110 V light bulb disconnected.

EVENT H At 7:25 pm the same 110 V light bulb connected back into the circuit.

TABLE 2 shows the results of this test.

TIME	3:10	4:00	4:30	5:40	6:00	6:30	7:00	7:25
EVENT	A	B	C	D	E	F	G	H
VOLTAGE								
BATT.#1	12.0	12.3	12.3	12.3	12.2	12.1	12.0	12.0
BATT.#2	12.1	12.5	12.5	12.4	12.2	12.1	12.1	12.1
BATT.#3	12.3	12.7	12.6	12.5	12.4	12.5	12.4	12.4
BATT.#4	12.3	12.7	12.6	12.5	12.4	12.5	12.4	12.4

TABLE 2 TESLA/BRANDT/BEDINI SWITCHING DEVICE SECOND SERIES

TABLE 3 shows the continuation of above measurements.

Here again first the events:

EVENT I 8:30 pm voltage measurements taken.

EVENT J 9:15 pm voltage measurements taken.

EVENT K 10:30 pm voltage measurements taken.

EVENT L 11:05 pm voltage measurements taken.

EVENT M 11:30 pm voltage measurements taken.

EVENT N 10:30 am (1 Sep) discovery after unit has been operated during all night that both 110 V lamps were out and that one wire was broken due to overheating. Voltage measurements taken.

EVENT O 11:30 am voltage measurements taken.

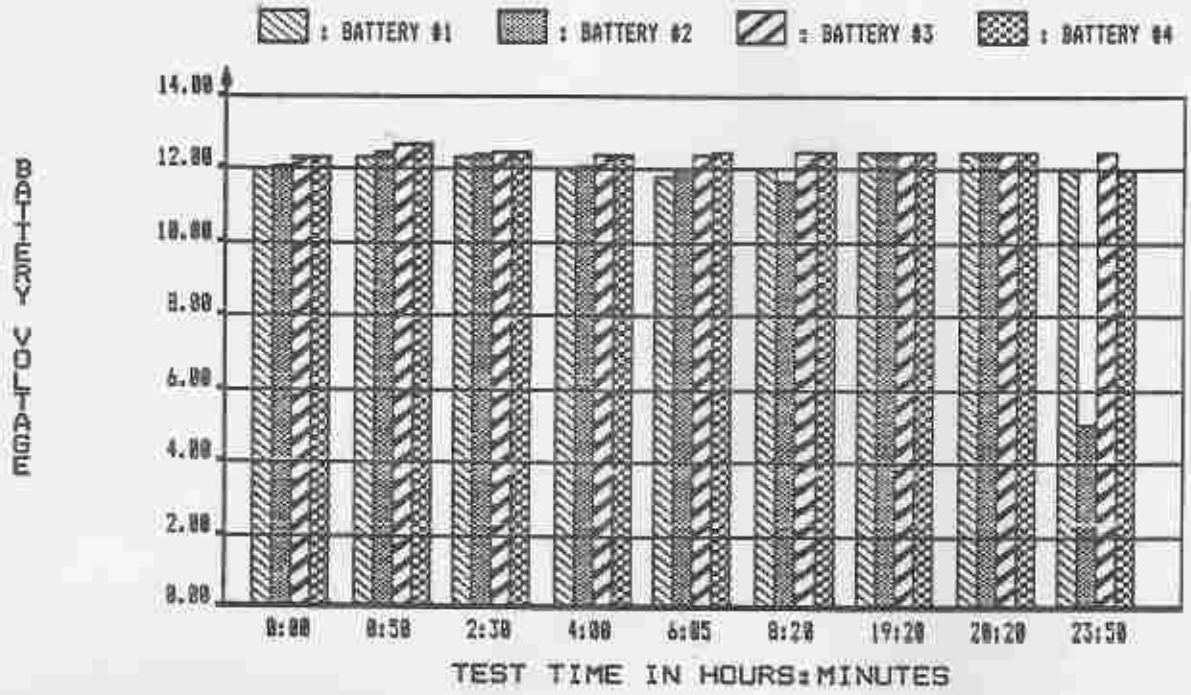
EVENT P 3:00 pm all lights again out, voltage measurements taken. The low voltage of battery #2 - marked with (*) in the **TABLE** 3 - is most probably caused by the back EMF from the transformer. The ideal tranformer would be an inverter transfcrmer 10 V to 110 V.

The summary of this test can be seen in **TABLE 3** which is a direct continuation of **TABLE 2.**

TIME	8:30pm	9:15	10:30	11:05	11:30	10:30am	11:30	3:00pm
EVENT	I	J	K	L	M	N	O	P
VOLTAGE								
BATT.#1	11.7	11.8	12.0	11.8	12.0	12.5	12.5	12.0
BATT.#2	12.1	12.0	12.1	11.9	11.7	12.5	12.5	5.0 (*)
BATT.#3	12.4	12.4	12.4	12.5	12.5	12.5	12.5	12.5
BATT.#4	12.4	12.5	12.5	12.4	12.5	12.5	12.5	12.0

TABLE 3 CONTINUATION OF MEASUREMENTS SHOWN IN TABLE 2

The total test run is summarized in **GRAPH** 1 on the following page. In this graph I show the voltages of all batteries over the test time in hours.



GRAPH 1 TESLA/BRANDT/BEDINI SWITCHING DEVICE TEST SUMMARY