Original: http://rpmgt.org/JoinBediniList.htm 2007-11-14

Link here: http://blog.lege.net/cosmology/JoinBediniList.html

PDF "printout": http://blog.lege.net/cosmology/JoinBediniList.pdf

The Simplified School Girl (SSG) Project

Schematic | Parts Kit | Introduction | Instructions | Materials | Parts Sources | Tools | Construction | Avoid | Safety | Group Tests | Resources for History, Theory, Advancement and Application

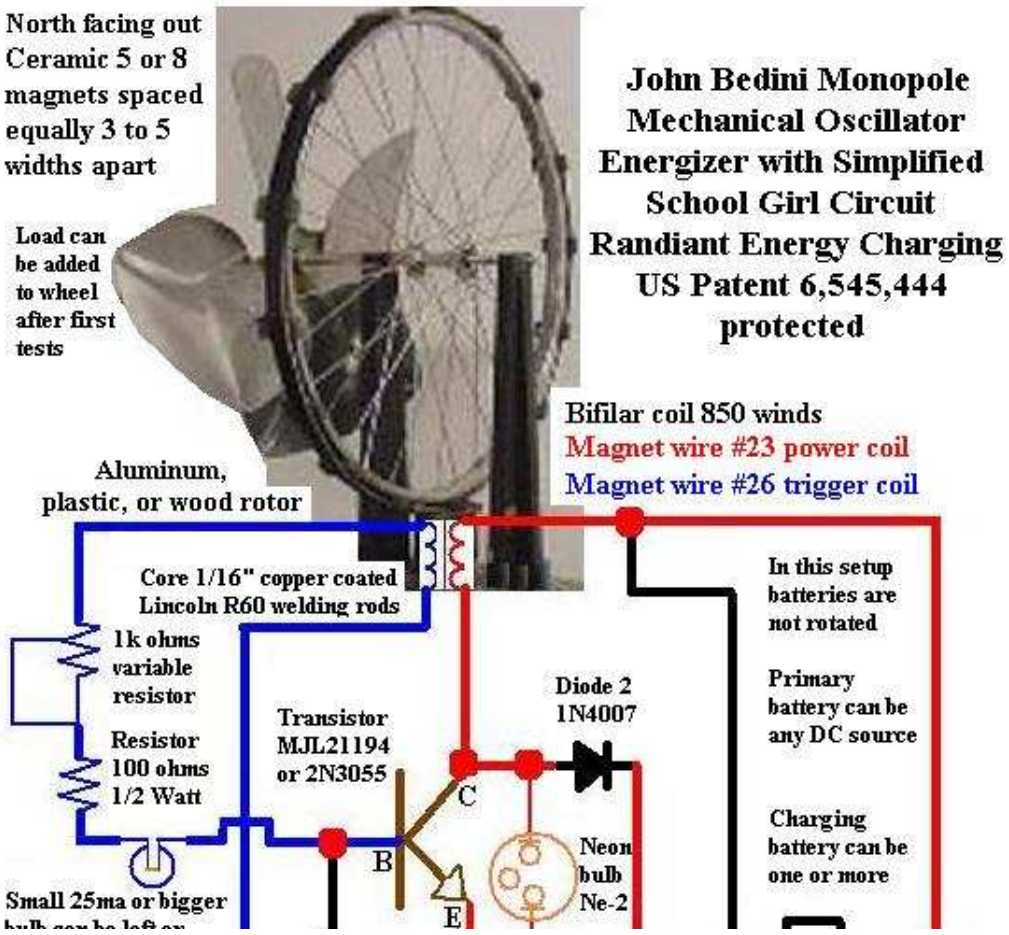
SEE NEW SSG PRESENTATION PAGE AND VIDEO

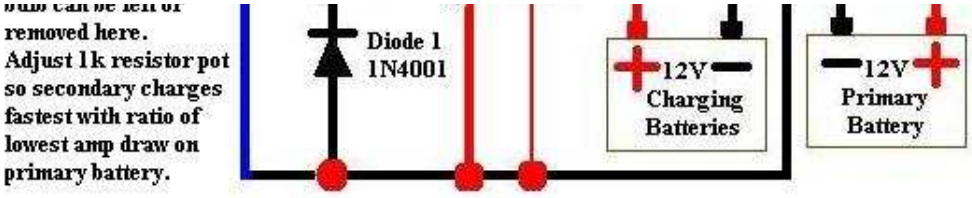
To join the *advanced* Yahoo Bedini_Monopole groups you must first build a Bedini Monopole Energizer and test it according to the information given. Additional construction details are found here: http://peswiki.com/index.php/Directory:Bedini_SG You must provide your real and full name and provide data showing you have done the basic load tests mentioned on the following beginner's group: Yahoo Bedini_Monopole3. If you cannot build according to the plans we cannot help you do that. Please do not ask questions about electronics. This list is for those who are willing to actively participate in doing simple testing of this Energizer.

Absolutely no questions about the advanced groups will be read and answered without people first building, testing, and providing test data to the following email address:

Bedini_Monopole3-owner@yahoogroups.com

Basic Schematic





SSG partial parts kit for the above setup available.

Introduction to John Bedini Monopole Mechanical Oscillator Radiant Energizer Simplified School Girl (SSG) Project

Summary Statement:
These documents contain all the information needed for building and testing the SSG Energizer. They also provide additional references to related theory and advancement beyond this starting point. Included are the policies of the Bedini_Monopole3 list, and the purpose of this group experiment. Thus organized, it may not take the new student more than a day to learn the essential details and build as directed.

What I Understand the SSG to Be:
The SSG is not a conventional motor, but primarily a mechanical oscillator that triggers a signal so that a battery bank will become charged. No conventional systems charge batteries in this unique and fundamentally different way. This unconventional signal, in relation to the battery, is the key to understanding the system.

Mental Preparation Necessary to Learn:
As such, the learning process starts when one refrains from assuming a conventional energy transfer from the primary source (battery), driving the motor, thereby pushing electron current into the charging bank. Only an insignificant amount of conventional charging could take place with the arrangement in the schematic (circuit diagram). Therefore the student must let go of previous theories, avoid urges to change the system to charge in an accustomed manner, and examine the phenomenon as it actually appears.

Twofold Purpose of this Experiment:
The first purpose is to observe a different kind of charging, fundamentally opposite from conventional systems. Only after we notice two different kinds of energies involved in the process can we carefully distinguish and manipulate them for practical advantages in powering various loads. The second purpose is to investigate some of the advantages in this charging method over conventional methods.

Commitment to the Policy:
The simple policy in this group experiment is to build as directed before changing anything, in accordance with the true scientific method. There is a great temptation to use different parts because they are on hand, or to try and improve upon the system. If gratified, these temptations will result in frustration and wasting of time. For this research to progress, members are asked to commit to one simple directive: follow the instructions politely. Do not assume you are entitled to receive personal instruction or other free gifts from others; such demands are out of place. All diversions from the simple purpose, no matter how useful or interesting, are outside the scope of this focused experiment. In the interest of educating as many people as possible without undue demands on the volunteer moderators, please rely on the public information sources that have been provided. Occasionally the moderators may recommend some

relevant information to encourage members and show what may lie ahead in this research. The membership list has become so large that we must all remain on topic to meet our learning/teaching objectives.

The Quest for Free Energy or Over Unity:
Most researchers here want free electrical energy. When this desire takes the form of a blinding passion, it hinders proper scientific research and prevents one from learning how to get it. You will not discover free energy while gripped by a fierce desire to rush and bypass procedure. Only when the two purposes of this experiment are personally realized will the researcher understand what this technology offers in relation to free energy. This is why we emphasize following instructions and progressing naturally. Do not begin by attempting to charge one battery faster than the primary battery discharges, as most want to do right away. First we must know that our machines are built right and then get a feel for how they work. Then we must learn how batteries work in general and how they relate to this system. This requires time to cycle at least one battery through a charging and loading scheme many times to learn how it responds. None of this is hard to do, but it takes patience, not blind passion. John Bedini has always said there is no truly "free" energy, as you have to work in several ways to gather and use it. Our first discovery of Over Unity may come unexpectedly. Instead of looking at the battery that powers the system, we look at the charging battery and measure its inputs and outputs over the charge and discharge cycle. When the machine is properly built and tuned, by measuring with conventional meters we will see more energy leaving the receiving battery via a constant load than entered it. By the time this is realized, the student will also appreciate some of the other benefits of this kind of charging as compared with other chargers. The student who has observed Over Unity in the charging battery can then conclude that something else is charging the battery and will naturally progress onward in this research. Only those who are known for following directions and contributing to this research will be considered for invitation to other advanced groups.

Instructions

Medium Resolution Video of the Presentation for high speed:
Trailer
1.4GB wmv edition

Low Resolution Video for dialup:
84MB wmv edition

Materials List

The following is a list of materials that may be necessary to replicate the Bedini School Girl circuit and motor as presented in this guide. Some of the parts are flexible.

Alligator Clips

Specifications

Wires need to be larger than #20; clips need to be rated for at least 5 Amps. at least 12" recommended.

Batteries, Rechargeable *Lead Acid, deep cell (like Golf cart 6v or 8v preferred). But you can use car batteries or small 1 to 12 ah lead acid or gel.*

Bicycle Wheel Rim -- Or Other Rotor Device

Non-magnetic wheel rim

Other rotor devices used successfully: - CD ROM drive mechanism, - target board; - Child's bike wheel (plastic). Use your imagination.

Coil Spool

Purpose

To wind the parallel lengths of magnetic wire around to (1) create an electromagnet to pump the magnets on the wheel and (2) receive pulses of energy from the magnets for the receiving battery.

Specifications

plastic, 3 inch diam. by 3 inches long, with 3/4 inch center opening. Or smaller for smaller setups.

Tolerance

opening needs to be +/- 20%. Length of spool can be +/- 40%. Material needs to be non-metallic, non-magnetic, and adequately sturdy.

Sourcing

Radio Shack spool for speaker or soldering wire will work. Remove wire from spool. ~$3.00 for spool with speaker wire.

Precision-Spools.com Solder Spools (without solder)
http://www.precision-spools.com/precision-spools/plastic-spools.html - In stock: 3.5" diam flange x 3" transverse x 3/4" bore opening. $0.20 each, $200 minimum order. Will send one free sample.

Contact: Pittsfield Plastics Engineering Inc., Precision Spools Division
PO Box 1246; Pittsfield, MA 01202
Tel: (413) 442 - 0067; Fax: (413) 445 -7849
E-mail info@pittsplas.com

Diode (D1)

Specifications

recommended: 1N4001; 1 A, 50 V (or 1N914)

Parameters

50-300 volt range; low power, fast silicon diode

Sourcing

See Digikey.com part number 1N4001MSTR-ND
http://www.digikey.com/scripts/DkSearch/dksus.dll?Detail?Ref=212290&Row=34087&Site=US

Estimated cost

less than $0.50 each

Diode, 1000 Volt (D2)

Specifications

1N4007 (1000 Volt; 1 Amp)

Sourcing

See Digikey.com part number 1N4007MSTR-ND
http://rocky.digikey.com/scripts/

ProductInfo.dll?Site=US&V=353&M=1N4007

Estimated cost

less than $0.50 each

Magnet Core (Welding Rod)

Specifications

Welding rod; 0.042" inch diameter copper coated soft steel rod. 3 foot lengths. (will be cut to length of the coil spool) Lincoln R60 works best but many others will work just fine.

Quantity

Get 3-5 lbs. (around 10 rods of 3 feet each).

Tolerances

Rough cut okay. Diameter not crucial, could be smaller by 50% or larger by 100%.

Sourcing

Available at your local welding supply store (such as Oxyarc) or hardware store (such as True Value or Ace). Try also an auto parts store.

Estimated Price

$0.60 per rod.

Magnet Wire for Coil Winding

Specifications

#20 wire, coated. Can't have splices.

Tolerance

#20 gauge or larger (smaller number). Don't go smaller than #20, or more than 100% larger.

Quantity

one length about 100-150 feet

Sourcing

McMaster-Carr, p. 715 *http://www.mcmaster.com/ctlg/DisplCtlgPage.asp?ReqTyp=CATALOG&CtlgPgNbr=715&CtlgEdition=&sesnextrep=427184613727949&ScreenWidth=640&McMMainWidth=428* (scroll down to "magnet wire"). example: 22 awg, 1500 ft/spool for $20.00. 20 awg available in 900 foot spool.

Froogle > (*http://froogle.google.com/froogle?q=%22magnet+wire%22*)

ThomasNet *http://www.thomasnet.com/nsearch.html?which=prod&navsec=campaign&heading=94721602&WT.mc_t=PPC&WT.mc_n=gaw&*

WT.srch=1&regnext=1 directory of magnet wire suppliers

Try eBay (*http://www.eBay.com*)

Resources

OZ.net explanation of purpose and parameters of magnet wire
http://www.oz.net/~coilgun/theory/magnetwire.htm

Magnet Wire for Trigger Coil Winding

Specifications

#23 wire, coated. Copper with high voltage coating.

Tolerance

#23 gauge or larger. #20 gauge will work fine. Don't go smaller than #23, or more than 100% larger.

Magnets

Specifications

Ceramic 5 or 8; dimensions: 1" x 2" x 3/8" inches. Magnet sizes can vary depending on size of coil and rotor.

Quantity

16 for a 24-inch wheel. Get some extra in case of breakage. You also might consider one or two for a control, to measure Gauss before and after experimental runs.

Tolerance

Must be ceramic (strontium ferrite). Number of magnets is not essential, though an even number and even spacing will be necessary if you wish to try and add more coil/circuits later.

Source

Magnet Sales & Manufacturing Inc. (*http://www.magnetsales.com*) - part number 21989; Ceramic 5, standard dimensions: 1.875 x .875 x .387 inches, 150,000 in stock ; $1.60 each for 20; $0.74 each for 200. $250 minimum. For smaller orders contact their authorized distributor: Culver City Industrial Hardware 310-398-1251. $1.99 each for 20; and $0.89 each for 200.

Bunting-Magnetics.com Part #MA740 (*http://www.bunting-magnetics.com/magnets/ceramic.cfm*) - $2.86 each for minimum purchase of 18 magnets. 240 in stock as of Sept. 28, 2004; 2 weeks lead time when out.

AZ Magnets (*http://www.azind.com*) - 2-3 week lead time; $8.82 each for 17 magnets. Price goes down to $2.50 for 160 magnets. (as of Sept. 28, 2004)

Radio Shack; Catalog #: 64-1877 *http://www.radioshack.com/product.asp?catalog%5Fname=CTLG&product%5Fid=64-1877* - 1-7/8x7/8x3/8" specs *http://support.radioshack.com/support_supplies/doc53/53236.htm* According to tech support, for these magnets, they do not give rating (e.g. "Ceramic 5"). $1.29 each.

International shipping http://www.magnetsales.co.uk

Neon Lamps

Purpose

The lamp provides a path for the output energy in case the receiving battery is disconnected while the motor is running. This prevents burn-out of the transistor. The light should not go on unless the output battery is disconnected.

Specifications

Chicago Miniature Neon Base Wire Terminal T-2 65VAC .6mA NE-2

Quantity

one

Make & Model

A1A by Chicago Miniature (definite)

See also Lumex P/N GT-NE3S1025T, lumex.com*http://www.lumex.com/product.asp?id=1000657* Free sample

Source

Mouser.com part number 606-A1A (*http://tinyurl.com/65apu*) Estimated Factory Lead Time: 1 week.

Estimated Price

$0.38 USD each.

Resistor

Purpose

Varying the resistance is the "volume/speed" control for this device.

Specifications

680 Ohms should work well for this particular arrangement.

Tolerance

47 ohms to 20k ohms; 1/2 W to 2 W. See Resistance specifications page.

Sourcing

digikey.com part number 680W-2-ND *http://www.digikey.com/scripts/DkSearch/dksus.dll?Detail?Ref=228167&Row=136988&Site=US* - includes component spec information.

Radio Shack has a wide range of resistors and potentiometers.

Estimated Price

$0.23 USD each. Usually come packaged in 5 or 10. Potentiometers run around $3.00.

Super Glue

Tape

Purpose

For second level of adhesion of magnets to wheel (beyond just glue).

Tolerances

Any tape that is adequately sticky and non-magnetic. Stringed packing tape is best.

Transistor

Specifications

2N3055 Transistor, 100V, TO-3 case; fully metal.

Quantity

One, for the circuit. Several extra in case you burn one up.

Sourcing

See Digikey.com part number 2N3055OS-ND *http://www.digikey.com/scripts/DkSearch/dksus.dll?Detail?Ref=232453&Row=71372&Site=US* (View spec sheet *http://rocky.digikey.com/WebLib/ST%20Micro/Web%20Data/2N3055,%20MJ2955.pdf*

Estimated Cost

$2.10 USD each

Wood (Stand)

Purpose

to hold the wheel steady, and to fasten the circuit and hold the coil.

Specifications

plywood or solid wood

Quantity

one sheet approximately 3’ x 2’ feet square by ~3/4" inch thick (to be cut into three pieces -- two for uprights and one for base)

two lengths of 2" x 6" or larger of about 6 inches long (to hold coil and stabilize uprights)

Tolerance

any non-magnetic material of size and thickness adequate to hold the wheel

Sourcing

available anywhere; try any construction site or do-it-yourself friend's garage; or junk yard. Last resort, try lumber yard or hardware store.

Estimated Price

free, from scrap pile (any construction site); or $17.00 for new 4' x 8' sheet of particle board; $3.00 for new six-foot 2" x 4".

Tools Needed

Wire cutter.

Something to cut the welding rods to length (may want to use cutter available where you purchased the rods).

Something to fabricate the stand for the wheel. (e.g. jig saw to cut wood).

Soldering gun and solder.

Metal drill to put hole in aluminum heat sink to fasten circuit to device.

Screw driver and 2-4 screws to screw heat sink to stand.

Skill Saw, to cut boards.

Drill, to wind wires on coil.

Digital voltmeter, analogue ampere meter.

Oscilloscope is needed for more advanced testing.

Contacts

Digikey

Digi-Key Corporation *http://www.digikey.com/digihome.html* 701 Brooks Avenue South Thief River Falls, MN 56701 USA

Phone: 800-344-4539 or 218-681-6674 Fax: 218-681-3380

Email: webmaster@digikey.com

Radio Shack

1-800-THE-SHACK (1-800-843-7422)

Parts Sources (US and International)

http://tech.groups.yahoo.com/group/Bedini_Monopole3/links

Tools

Construction

Avoid

Safety

SIMPLE GROUP EXPERIMENT TO SHOW TWO ENERGIES USED IN BEDINI MONOPOLES.

Refined instructions are forthcoming. See http://groups.yahoo.com/group/Bedini_Monopole3 for details.

A set of instructions is given below for three simple steps. This is where everyone should start with learning about these machines. As you will see in the instructions, you are not to assume anything or change anything. No need to do anything but the simple SSG setup. No upgrades needed. No need to worry about a perfect setup. We are looking to see what happens to the charging battery. What is the difference between what the meter says goes into it, and what kind of work we can get out of that battery on a repeated basis. Do as many presentations as you wish to help in this project.

Below the specific instructions are misc. coaching instructions you will want to pay attention to. Each set of instructions follows the posting where it was found on the main list. Further clarifying remarks between these [ ] brackets may be added later.

STEP BY STEP INSTRUCTIONS:

From http://groups.yahoo.com/group/Bedini_Monopole/message/2868

1. Take a small, 1 coil, smooth running, SSG. No capacitor

dump [setup], just take the diode output of the coil and put

it to a secondary battery positive [that is the SSG setup with the diode and not the SCR]. The secondary

negative terminal should be hooked to the primary

positive. Set it to where the mechanical efficiency

of the motor peaks out at 75ma input current or below. [If you cannot build that small of a machine, then report your results with higher draws.]

The way I tune this is to measure the ratio of rpm and convert to

magnets/minute then divide by the ma. You'll have to have a

tachometer, or count scope traces to get your mpms. [Or use a meter that measures Hertz]

Measure your input current with both your

analog meter and your digital meter, and note any major

discrepancies. If there is, report the measurement from your analog meter.

From http://groups.yahoo.com/group/Bedini_Monopole/message/2880

Step 2

Now that we have optimized motor output, the next step is to measure the current going into the output battery. At this point we will not be concerned with the current being used by the input battery. This will come into play later; so for now, as hard as it is, just forget it. Now everyone who has played with this circuit knows that measuring the pulsed dc current is a little trickier than normal. I try to measure it with at least two different methods until I can get the two to agree with one another. Then I know that I am close. Here are the two easiest ways I have found to measure this energy.

#1) The easiest. Get yourself an ANALOG current meter and put it in series with the 2ndary battery. Measure the voltage of the secondary battery. Multiply the two together to get the watts.

#2) Get 2 identical small flashlight bulbs (12v 100ma for example). Replace the secondary battery with one of the light bulbs. Run the motor. Now take the other light bulb and put it in series with a potentiometer and a current meter. Hook it to the same battery you are running the motor on. Adjust the potentiometer until both light bulbs glow at the same brilliance. Then read the ampmeter. Put an voltmeter across the lightbulb. Multiply the volts times amps to get the watts.

From http://groups.yahoo.com/group/Bedini_Monopole/message/2899

Step #3) Stop the motor. Take your secondary battery out of the circuit and put a known load across it (I like to use a 10watt 10 ohm, for example [that is too high for really small batteries which could use a higher ohm resistor like 50 ohm more or less). Get a stopwatch and measure, as precisely as you can, the time you are discharging the battery. Put a digital volt meter across the resistor and note the voltage levels during the discharge time. You will be needing to get an approximate average voltage across the load resistor during this time. You want to take the

voltage down to a predetermined voltage level which you will be watching precisely say 12.40V for example. When it gets close to this level (12.41 in this case) disconnect the load from the battery and stop the stopwatch as soon as the meter first flashes 12.40. We are going to call this, for future simplicity's sake, the load termination point. Now measure the power in joules (or watt-sec) that you took out of the secondary battery. Multiply the duration of the load from the stopwatch (in seconds) * AVERAGE voltage * AVERAGE voltage / the resistance of the load (in ohms).

This will give you the output of the system in joules. Write this down.

Now, take the battery and put it back in the charge circuit in the SSG and run the motor for an hour. Set a timer and run the motor charging the battery back for precisely an hour (3600 sec). (If the battery tops out before this just shorten the duration but make it constant.)

Multiply your input energy figured in step 2 (watts) times 3600 (or your arbitrarily decided charge time) and you will have your input power in joules. Write this down.

Repeat this experiment at least 5 times in a row or until you can get consistent input and output measurements. The amount of power you can take out will reduce significantly the first few times until it stabilizes. When you do the experiment twice in a row and get the same results you will know that your particular system has stabilized and you can get an exact figure of the cop on the back end.

MISC. INSTRUCTIONS.

http://groups.yahoo.com/group/Bedini_Monopole/message/2882

The data from this experiment will be continually posted under the database section of this group. I am encouraging everyone to CONTINUE to see this experiment through if you have begun it, even if you want to change things after viewing everyone else's numbers. If you want to change your setup, do it AFTER this experiment and report your findings. We will add another column for your next setup. This is

not a competition, it is mass experimentation for the learning benefit of all involved. The data from those who have extreme numbers, even on the low side, is important. Everyone needs to learn what to do and (as equally important) what not to do.

http://groups.yahoo.com/group/Bedini_Monopole/message/2888

If you want in the experiment, forget the conditioning for now. Just put one battery on the back end and one on the front. The wall charger is fine. Don't worry now about matching to the c20 rate of the primary, just find the sweet spot of the motor, the most magnets per minute per miliamp wherever that may be. Just report your measurements for steps 1 and 2.

http://groups.yahoo.com/group/Bedini_Monopole/message/2889

----------Don't cheap out on the 2ndary battery if you are efficiency testing.----------

You will be disappointed and all your efforts will be in vain. Yes, this circuit can desulphate old batteries, but it can't put electrolyte back in dried up gel cells, and it can't straighten warped plates, and it can't repair shorted cells.

The better shape the back battery is the better it will take the charge and that's the ONLY thing we are after in this experiment.

I bought loads of batteries at "great deals" only to find that they must have sat on the shelf for too long and could only be charged to 50-75% of their rated capacity.

If you want to do multiple setups that's fine, just report each separately and we'll log the data accordingly.

http://groups.yahoo.com/group/Bedini_Monopole/message/2911

One point for future consideration. I would not get in the habit of taking the battery down to 12.00V. It will shorten the battery's life considerably if this is habitually done. I would work between say the 12.4V and 13.0V range [12.40 and 12.70 is ideal for efficiency tests.].

By all means, don't let it set for days uncharged.

http://groups.yahoo.com/group/Bedini_Monopole/message/2923

The simple reason being that the secondary battery is a lot lower in impedance than

your 10ohm load, so it will naturally pull more power. Granted, it can't take the whole power pulse, as the bottom 24V of it is not great enough to push through the secondary, but none the less, it consumes more power than your 10ohm load resistor, (not to mention has much more smoothing action than your capacitor).

http://groups.yahoo.com/group/Bedini_Monopole/message/2924

If you wanted to adjust to the C20 rate, you could. The battery would have less "bounce". But that is about the only difference.

It is true, for longer durations, and for a little more accurate results, you could go for the c20 rate. Your battery would not heat up as much in discharging. But the 10ohm resistor for this test, will expedite the load testing, and will not throw the results off significantly.

http://groups.yahoo.com/group/Bedini_Monopole/message/2927

I agree that the one spike vs.

many spikes needs to be investigated further. However, I don't believe John has said anywhere to limit this to 1 spike. I'll tell you that in some of my setups, one spike per pulse worked the best, others liked multiple spikes per pulse. We are not looking for specific waveforms. We are looking for arbitrary data which shows maximum efficiency.

http://groups.yahoo.com/group/Bedini_Monopole/message/2935

I know the temptation is very strong to jump forward into another experiment, and I expect that everyone will want to try different things. That is to be expected and encouraged. But I am suggesting to all, at this point, to maximize all their efforts in getting the best possible numbers for steps 1, 2, and 3. There has been an overabundance of speculation and presupposition on these groups that tend to drown out the results of successful scientific experimentation.

I would really like to see this forum transform from a group of Bedini enthusiasts to a fast-growing consensus of researchers with documented proof of the legitimacy of this technology.

Resources for History, Theory, Advancement and Application.

John Bedini's book, a few of his DVDs and an SSG parts kit: rpmgt.org/order.html

The following is the Yahoo forum we are using to discuss and build these machines: http://groups.yahoo.com/group/Bedini_Monopole3

Some of the plans for building this device come from the following web site: http://peswiki.com/index.php/Directory:Bedini_SG

The theory and information behind this are found at the following webs sites: US Patents 7,109,671 6,545,444.

Bedini websites: icehouse.net/John1 | icehouse.net/John34 | Energenx Products energenx.com/john1/index001.html, energenx.com/john1/intro.html, energenx.com/john1/john1.html
r-charge.com

Thomas Bearden: cheniere.org

Transcribed Tesla Patents 588177 APPARATUS FOR PRODUCING OZONE highlighted Some Tesla's patents relating to Bedini SSG Patents 512340 593138 685012
Select Tesla Publications ELECTRICAL OSCILLATORS Electrical Experimenter July 1919 THE TRUE WIRELESS May 1919.
