

Some pseudoscience industry happenings.

ur usual reminder here that the *Resource Bin* is now a two-way column. You can get tech help, consultant referrals and off-the-wall networking on nearly any electronic, *tinaja questing*, personal publishing, money machine, or computer topic by calling me at (520) 428-4073 weekdays 8-5 Mountain Standard Time.

I'm now in the process of setting up my new *Guru's Lair* web site you will find at (where else?) *www.tinaja.com* This is the place you'll go for instant tech answers. Among the many files in our library, you will find complete reprint sets for all of the *Resource Bin* and other columns. Plus a brand new Research InfoPack Service.

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Some Pseudoscience Happenings

I have long been fascinated with pseudoscience. The ongoing "technical" developments that the Houyhnhnms would have very politely called "that which is not so". Things like perpetual motion, zero point scalar energy, 400 MPG carburetors, the earth resonance power, antigravity, dowsing, UFOs, instant AIDS and cancer cures, happy face crop circles, Orgone blankets, the area 51 enigmas, telepathy, the Tesla mania, magnet motors, channelling, or even antimatter propulsion.

Usually with an excessive dose of conspiracy and paranoia thrown in.

It turns out there's this rather well developed pseudoscience *industry*. It is made up of a number of individuals and smaller firms which offer a wide range of fascinating products. So, this month I thought we'd look at some of the major players here. And see just what they have to offer.

I do *like* pseudoscience for several reasons. First, pseudoscience fiction can be a wondrously bizarre read. Or superbly entertaining. Second, open

forums definitely should exist for all controversial or oddball thoughts.

Third, most pseudoscience gives us mesmerizingly awful samples of how *not* to do research, how *not* to desktop publish and how *not* to do technical communications.

Fourth, some of the weirdest and even dead wrong concepts sometimes may have the germ of a useful idea in them. Or simply some fresh way of looking at the world. Yeah, this is a needle-in-the-haystack type of thing. But it sure is fun to look at. And hope does spring eternal.

And finally, lots of pseudoscience demands an aura of "mystery" and "supression" and "lone underdog" or "lost technology" or similar hogwash. If we gather up all the pseudoscience info, stack it together on center stage, and shine a bright light on it, many people just might end up concluding "Yup, that's a big pile all right."

Now, I come to all of this from a traditional engineering background. I strongly believe in the experimental scientific method and in all the laws of thermodynamics. I also believe that observed effects can get measured in one manner or another; that low loss action at a distance is extremely rare;

NEXT MONTH: Don looks at opportunities and resources for electronic servicing.

that statistical laws for large numbers are to be believed in; and that, more often than not, lab measurements end up just plain wrong.

Or not even wrong.

But I would also freely admit that science is a religion like most others. And that any establishment certainly tends to villify anything which looks even remotely threatening.

Paraphrased, your thermodynamic

laws are (A) You cannot win, (B) You cannot break even; and (C) Sure, the dice are crooked, but this is the only game in town.

There are simple tests you can use to quickly separate real science from pseudoscience. The *objective* test asks two questions: "Is there some simple experiment which some disinterested third party might perform which will make their claimed effect show up?" Along with "Are the claims the most reasonable and logical explanation for the observed effects?"

I also use *subjective* pseudoscience filters. Does it like water, look like a duck, quack like a duck? Is it about to lay some eggs?

In mild cases, I use a "Tain't likely McGee" test. For medium severity, a "Boy, a whole flock of 'em flew over that time" measure. And for really far off pseudoscience, there's always the "What are they on, and where can we get some of it?" ploy.

Some pseudoscience is an outright scam. Other variants are hoaxes that got out of hand. Yet others are urban folklore. Pseudoscience often results when the lab work is missing, poorly done, or just plain wrong.

Ferinstance, say you build a motors and magnets style perpetual motion machine and connect it to the 110 volt ac power line. You then measure the current at 5 amperes. What is the real power being consumed?

Well, there's no way to tell with the information I just gave you. But you can safely bet the answer is nowhere near 550 watts.

Citations and peer review both form important parts of real science. Does the new development build on what's already been studied and learned?

Do others feel that what is coming down is reasonable and verifiable?

Much of pseudoscience does seem to choose slow-day stories in rather obscure rural newspapers for all their primary references. Or else will badly misquote a seemingly authentic real paper or researcher.

As anywhere, interesting patterns emerge when you follow the cash flow. Who benefits and why? Which egos are reinforced? Which magazines get sold? Who goes on tv? Who gets the attention? Who gets paid?

Let's take a look at who is offering what these days...

Rex Research

Robert Nelson is a researcher up in Jean, Nevada. Who has now carefully gathered together scads of reprints on pseudoscience, weird science, oddball technology, and similar off-the-wall topics. He filters and assembles these into Infolios available by way of his Rex Research tech venture.

The typical Infolio covers a subject such as anti-gravity, magnet motors, free energy generators, Tesla, Hall devices, vortex coolers, or whatever. The collection will usually include a few tech papers, some patent copies, and the related news stories. Costs are typically in the \$6 to \$12 range.

To keep the costs down, the Infolios are simply stapled Xerox copies.

While there are several copy-of-acopy legibility problems, the service can often be your fastest and cheapest way to pick up background on hard to research nontraditional topics.

UPDATE: Not sure these are still being sold. The web is a good choice for comparable info these days. Check www.tinaja.com/pseudo01.html

Untapped Technology in Review

Here is a brand new magazine out of Mesa, Arizona. This straddles the boundary between pseudoscience and real technology. Real technology that, for one reason or another, hasn't yet seen the light of day. They try to keep a semblance of scientific objectivity while treating pseudoscience and real science on an equal footing.

They are also strong in abstracting unusual energy related patents and in reviewing obscure books.

Why doesn't some real technology see the light of day? Often because of the hidden gotchas.

Such as embrittlement in hydrogen power. Or those commutation hassles over ultra high currents in homopolar generators. Or that need in a Stirling engine for a regenerator that is short and fat. And is long and thin. Or that intolerably poor efficiency for higher power thermoelectric coolers.

Borderland Research

This is one of the oldest members of the pseudoscience establishment. For many years they have published their Journal of Borderlands Research. This one is a bizarre mix of pseudoscience and new age topics, covering healing energy, alien communications, brain waves, perpetual motion machines, or nether world channeling. Along with heaping bunches more.

They also have an extensive direct mail bookstore that carries hundreds of pseudoscience, Tesla, and new age titles. Many of them difficult to find elsewhere.

Colorado Highs

High Energy Enterprises is a group of related Colorado services. They offer a direct mail bookstore having many titles involving Tesla, free energy, or perpetual motion. They run a walk-in Tesla Museum. And they maintain a foundation or two. They also put on yearly conferences. Tesla in one year, free energy the next. Reprints are also published and stocked.

Apparently, there are some really high spirited pseudoscience people in central Colorado. One spinoff here is that International Association for New Science. These folks do run an annual International New Energy Symposium and publish thick sets of conference reprints. Typical subjects include zero point energy, cancer cures, the Reed magnetic motors, new electrogravitic propulsion, element transmutation, or vortex extraction.

Two similar groups elsewhere are California's Tesla Bookstore plus that Planetary Association for Clean Energy in Canada. And there are a few more where these came from.

Phaedra Enterprises

David Blevins has just reissued the third printing of his Almanac of UFO Organizations & Publications. This one is offered by Phaedra Enterprises. It's a combined Michelin Guide and Thomas *Registry* to the UFO industry.

Listed are many hundreds of UFO resources. These include lots of clubs, clipping services, videos, bookstores, magazines, newsletters, and the other publications.

Even services that are provided by the aliens themselves!

Popular topics these days seem to include the extraterrestrial technology our government has stashed away in Nevada's Area 51, those Swiss UFO

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photographs, crop circles, channeling, cattle mootillations, contactees, and even antimatter propulsion.

It's really unlikely that you will see spacecraft antimatter propulsion any time soon. Although there was one incident just last tuesday when an Italian restaurant exploded when they put the pasta and their antipasta on the same plate.

Skeptical Inquirer

This quarterly journal attempts to debunk pseudoscience and offbeat science topics. It is written mainly by name brand mainstream science and technical authors. Aided by a first rate stage magician or two.

They recently successfully rebuffed a major liability lawsuit from a world class spoon bending mentalist. They also thoroughly trashed that MJIC-12 document which proportedly showed where the government was hiding the aliens they salvaged from the Roswell flying saucer demolition derby.

It appears the key signature came from the Harry Truman library. They even could tell which Xerox machine got used by measuring the percentage reduction. The fact that the document was typed on a machine that did not exist until over twelve years later did not help the cause much.

Alternate Medicine

I'm hesitant to include sources for any highly questionable medical info in a popular publication. On the other hand, some of what was yesterday's quackery becomes tomorrow's clinical procedures. It has become painfully obvious to me that some of the most horrendously inexcusable quackery of all time is now coming from within the medical establishment.

After studying on this topic for a while, I've concluded that (A) Many medical problems are your own dumb

fault and are either directly caused by or made worse by lifestyle, excercise, emotional, and nutritional factors. (B) A patient that wants to get better and thinks they are taking positive steps towards that end is more likely to do so. Without exception, all medical personnel have a hidden agenda that might not be in your best interests.

And, (C) Accurate information from multiple sources is the key to solving most medical problems.

In particular, I have found that the Dialog Information Service gives you the latest and best medical info from exactly the same sources the medical pros use. Your goal here should be to explore options that let you become a more fully informed patient.

UPDATE: Free Medline on the web is now a better choice. For links, see www.tinaia.com/beewb01.html

The following pair of resources are provided for your needs as a serious pseudoscience researcher and are in any manner intended for anybody seeking an instant cure for anything: One resource for highly questionable medical stuff is Lor'd Industries. The second is Super Science who is big into Rife Resonators, Orgone Blankets, and new methods to electronically amplify your telepathic communications. Run by, of all people, Klark Kent.

More Miles Per Gallon

Miracle carburetors have beguiled the public for generations. Needless to say, there has been an awful lot of legitimate research into improved gas mileage. It's real unlikely that instant miracle fixes that use nothing but cow magnets or similar low tech parts are going to work out very well.

A unique source for pseudoscience improved mileage stuff these days is H & A Industries. Plus, of course, the usual items from J.C. Whitney.

Something really cute did happen

once over one super mileage product that is worth repeating. Long ago, an "obvious" scam offered to sell "magic tablets" that let you run your car on water. Just drop a few of these tablets into a gallon of water and drive away. Well, yes, it was a scam. And yes, all those establishment scientific people insisted it was absolutely impossible for it to ever work.

The only little kicker here is that these tablets were real! Yup, there are definitely magic tablets you can drop into a gallon of water and then power an internal combustion engine using them. Er, there were a few tiny side effects like only getting 200 miles per engine instead of 200 miles per gallon. And their economics were not all that great. But let us not quibble. There really are drop-in tablets that convert tap water into a motor fuel.

So much for the experts. And yes, you can still buy these. Fairly cheap too. Ask any caver for details.

Opportunities Passed By

There certainly are more technical nooks and crannies to explore these days. My own feelings are "Why get involved with pseudoscience when so much more happens so much better if you use real science instead?"

Beyond, of course, pseudoscience's superb entertainment value.

If you want to accomplish anything positive, the odds are overwhelming that you'll do better by staying within the laws of physical science. And use the scientific goals of experiments that can be duplicated, that have credible explanations, and that include careful research of previous work.

If there was a simple and easy way to beat all those thermodynamic laws, beginning power lab students would have found it years ago. If there was something weird coming down with Tesla coils, this should have become

apparent to all those EHV power line experiments and to those color tv set horizontal oscillator designers a long, long time ago.

Every obvious connection of motors and magnets and coils has now gotten explored a zillion times over. With zero over-unity results that could ever be reliably duplicated.

All of this ground has now gotten thoroughly plowed. Many times.

Yet sometimes I wonder. I certainly know what it is to scream and shout about a new or unpopular idea only to be ridiculed and ignored. And then have the plans stolen when the time was ripe for a ripoff.

All personal computers were once that way. Nobody ever asked a model railroader *why* he played with his toy trains. But *everybody* used to ask what personal computers were good for. You'd answer just for fun, to compute or to get filthy rich. And they'd come back with "Yeah, but what are they good for?" Over and over again.

I dunno. I've waded through most of the UFO stuff pretty thoroughly. And have personally written most of it off. Nearly all of it, in fact. *except* possibly for Roswell. Which I feel at least remotely approaches the bounds of potential credibility and possibly be worth a closer look.

Much of UFO lore is single sourced, coming from a lone individual. Who could simply be lying or stoned out of their gourd. Or a few chips shy of a full board. There are *hundreds* of bit players in that Rosewell story. Each seems to offer credible factoids.

AN UPDATE: The "good enough" explanation for Roswell turned out to be a super secret weather balloon. See BASHPSEU for details.

As an electronic engineer, I flat out do not buy perpetual motion. At least not on a normal everyday scale. But then again, maybe, just maybe some perpetual motion attempt might mask something else useful that *might* be coming down.

So, let's go and build us...

A Perpetual Motion Machine

There was quite a flap a decade ago over a magic motor which seemed to run forever on batteries. This one still shows up on late night tv shows, and the books are still offered. Obviously, it hasn't gotten anywhere.

Yet, there were true believers who genuinely felt that something unusual was happening to cause the batteries to self-recharge.

Instead, could something totally different be coming down? Something both within the bounds of real science and possibly useful?

Uh, it seems that while perpetual motion was claimed, the real effect seemed to dissapear when you used a power supply instead of batteries. Or even placed a diode in series with the batteries. Also, as our second clue, the motor did tend to spark a lot while it generated high current spikes.

Now let's turn to some real science. Carbon-zinc batteries do not exhaust themselves because they've run out of chemical energy. Instead, their series resistance keeps increasing until they can no longer deliver useful power.

This process is called *polarization*. In theory, *so long as even a tiny scrap of the zinc case remains, there still is some recoverable chemical energy remaining.*

A second observation is that most carbon-zinc batteries *last much longer when used intermittently*. The curves clearly show more deliverable power if you discharge them four hours per day instead of continuously.

What happens if we *recycle* some of our battery power in the form of large but brief high current spikes? Could we slow down how fast your internal resistance goes up this way?

Any battery uses electrochemistry. Electroplaters routinely *reverse* their supply current every now and then to purposely *reverse* their supply current every now and then. They will do this to smooth out the finish and prevent any jaggies and blemishes.

So what happens if we, say, draw 200 mils out of our D cell all the time. But *return* perhaps 10 amps for five milliseconds per second. One quarter of our power would go right back into the battery. Now, normally, this will not accomplish much. But maybe, just maybe, it could delay the onset of the increasing cell resistance and increase the apparent life.

The evidence from the perpetual motion machine, from the life curves, and from the electroplaters says this just may work. Naturally, whether it would be useful and cost effective is another matter entirely.

The battery people have made all sorts of recharging tests. But as far as I know they never have tried to find out what happens when you recycle part of the load current as narrow and high power current spikes.

Conceivably, this could lead to a snap-on cap that may increase battery life. Reusable, of course.

Why don't you try it and tell me whether it works? This might make an interesting student lab project or a science fair entry. If it really works, there are big bucks to be made. One safety tip, though: Do use a "bomb shelter" consisting of a paint can full of sand. Just in case. And work with plain old carbon-zinc cells.

At first, you wouldn't have to really recycle the power, just keep track of power out versus power in and see if there is any net change in overall life.

Any old power MOSFET could do the pulse switching.

Your snap-on cap could include a step-up inverter and capacitor storage system. A timing circuit would then discharge the stored energy back into the cell as a brief pulse.

If anything promising shows up, the next steps are to find out which currents and duty cycles perform the best. And how well they'll behave on different brands of cells.

UPDATE: Quite a patent squabble has erupted over various new pulse charging methods.

This Month's Contests

For our contests this month, just tell me your favorite pseudoscience story. Or put me on to any pseudoscience resource that I don't know about yet. Or see if you can get a measurable net battery life gain using continuous pulse energy recycling.

There should be a largish pile of my new *Incredible Secret Money Machine II* books going to the dozen or so better entries, plus an all-expense-paid (FOB Thatcher, AZ) *tinaja quest* for two that will go to the very best of all.

Send all your *written* entries to me here at *Synergetics*, rather than to *Nuts* & *Volts* editorial. �

Microcomputer pioneer and guru Don Lancaster is the author of 35 books and countless tech articles. Don maintains his no-charge US tech helpline found at (520) 428-4073, besides offering all of his own books, reprints, and consulting services. Don also offers a free catalog full of his unique products and resource secrets. The best calling times are 8-5 on weekdays, Mountain Standard Time.

Don is the webmaster of his Guru's Lair found at http://www.tinaja.com

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