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by Don Lancaster

The Worst of Marcia Swampfelder

It seems I had this sometime associate by the name of **Marcia Swampfelder** who tended to appear only in the April issues of various magazines I wrote columns for. So, in response to an ever diminishing number of requests, I thought I'd gather some of Marcia's better Q&A stuff together here.

More details on Marcia are found in my **Unauthorized Autobiography**. As before, I categorically deny the ugly rumor that many of the individuals and companies in Marcia's work bear a suspicious resemblance to the names of Arizona fire lookout towers. On which much of Marcia's work was authored. Marcia's classics appeared in the April 1977 and 78 **Popular Electronics** and one or more later issues of **Modern Electronics** that I seem unable to even date, let alone recover. I've also added more recent items.

Several Marcia projects that don't quite fit the Q&A format can be found elsewhere on **my website**. These include her **Hostess Twinkies Szechwan Style**, **Poison Ivy in a Spray Can**, those **Schizo Badges**, and **Mitzi's Yuppy Fare**. Plus her only slightly bogus **How to scam a student paper** and another of her **Mass Teleportation** products. Because of its 4X cloning feature, Marcia reports current teleport production going exclusively to importers of specialty herbs and spices. Where they eliminate all of those long delays at customs and allow users to set their own international currency exchange rates.

The insider secrets of how Marcia created the tapioca pudding scene in the film noir cross-genre classic **Godzilla versus the Night Nurses** remain under strict NDA.

Marcia's water soluble swimsuits have become a very real product of ours that is being snarfed up by quilters, felters, magicians, and boatbuilders. These are unconditionally guaranteed to fully dissolve in warm water. We do pride ourselves in being the web's preeminent supplier. Both on **eBay** and our **Bargain pages**.

A special section of my **Guru Archive Reprints** has been set aside for Marcia's unique contributions.

Ummm. let's see here. **3,7 Dimethylpentadecan-2-ol Propionate** is the sex pheromone of the pine sawfly. You normally use this stuff in picoliter quantities, time released from wax over half a year or so. Because they needed image rework, I left the combined Apple II reset protector and miniature guillotine off, as well as the laterally anamorphic floppy disk that worked in both 5-1/4 and 8 inch drives. Finally, any AN-WBL-XXX **mil spec device** would have to be part of the military's underwater pigeon searchlight control program. But let's let Marcia tell it instead...

Q: Should car stereo speakers be pointed to the rear for more thrust or up for more traction?

A. That depends on your particular driving conditions. On long trips, the 20- to 30% improvement in gas mileage you might get with speakers pointing to the rear is certainly worthwhile. On the other hand, if you drive on snow or ice, the extra traction of speakers pointing upward gives you added control. Be sure to watch the volume when you do this. Recent tests show that extra loud rock music can delaminate radial tires.

Q: I found an apparently brand-new, unused 1934 Majestic "Mighty Monarch of the Air" radio in the hayloft of an old barn, still in its original factory carton. After I carefully reformed all of the wet electrolytics, it seems to work perfectly, except for one tiny detail. All it gets is 1934 music. Why?

A. This is a beautiful example of the time lapse or **Ohaco Retrograde**, named after the historian Dr. Chevelon Ohaco, who has long been using factory-fresh 1942 surplus command receivers to reconstruct World War II battles.

A lot of people using this effect prefer to keep their receivers as they are, rather than resetting them for more recent program material. If you really want to update, you can add a **time lapse compensator** such as the **Springer labs** TLC-995. You usually put the time lapse compensator module between the second detector valve and the grid leak of the first audio triode.

The compensators are tapped for various amounts of update, so if you are a "golden oldies" fan, you can simply select a tap or two closer to the input. Full instructions are provided with the compensator. One tip—be extremely careful **never** to select any tap that exceeds your time difference between the exact date of manufacture and the date the unit was originally unpacked and powered.

Q: With recent environmental changes, what is the main factor preventing dramatic sea level rises?

A. The sponges. Those latest estimates from the **Bigelow Institute** reveal that sea levels would rise by 1473 feet if it were not for the sponges holding all the excess water.

Q: I have a Colcord XW15 4-channel amplifier. The louder I play it, the longer it gets. It has totaled a fourteenth century Ming vase by pushing it off the end of the bookshelf. Is this normal?

A. Colcord has a policy of using as many interchangeable parts as possible on their electronic and small appliance lines. The output transformer in the XW15 is made of a special high-nickel alloy core. They were able to pick up a **magnetostriction effect** far higher than usual.

This way, the same component that's used as an output transformer on the XW15 doubles as the drive motor on the orange juicer, and the power nutcracker impulser.

Your instruction manual should clearly warn you not to put anything within 6 cm (about 2-1/8") of the right side of the amplifier. Two other solutions to your problem are to buy the companion clip-on juicer and self-pour snout, or else simply put things on your bookshelf only while the unit is at **maximum** volume. This way, it will move **away** from other things on the shelf as volume is lowered.

Q: I built a pair of your mass teleporters from Volume XXXVII, pages 2048-2073 of the International Journal of Mass Transference and Teleportation.

They seem to work just find, but after I teleported my girlfriend to Petaluma, she claims she is now three inches shorter and newly lefthanded. But she complains a lot anyway. What gives?

A. The original paper cautions you to **never** apply the anamorphic settings when teleporting live cargo! Here's what you can try: First, make a copy of your girlfriend using the clone backup feature. Then teleport your original girlfriend back, leaving your horizontal polarity set to negative, but resetting the vertical gain to +1.04. You may have to experiment with your vertical gain setting to get the exact new height she is happy with.

Then, you reset the teleportation terminals to their 1:1 normal mode, and send her back to Petaluma. Finally, transfer your backup copy girlfriend to archival storage.

Or sell her on **eBay**.

Q: What is the insider secret to quickly evaluating pseudoscience?

A. Being able to rapidly draw the distinction between useful adjuncts to porcine whole body cleanliness from **total hogwash**.

Q: Are there really any special problems when you use MOS integrated circuits?

A. MOS IC's and transistors do have extremely high input impedances. Early versions of these devices were extra easy to destroy by static electricity. Simply scuffing across a carpet or using a styrofoam storage block could ruin them.

Just about all MOS IC's today include very good input and output protection methods, which almost entirely eliminate these problems.

However, one thing that's never mentioned in the MOS literature is the extreme geomagnetic sensitivity of MOS devices. They can only be used on the north side of your circuits. They are thus unsuitable for portable equipment unless a compass and clear alignment marks are provided.

Q: What is a ZPE phase nutator?

A. The military has recently been rethinking their entire WBL program, and bunches of AN/WBL54-D/U's have newly flooded the surplus market. There appears to be

some moderate interest in these since they can reduce your electric utility power bills by over 98%.

In normal use, the power utility input is used only as a phase and amplitude reference and your actual ZPE energy gets directly extracted from the internuance space fabric. Your power utility also benefits as their peaking demands and harmonic content are greatly reduced.

Your usual setup is to go to the main synchrodyne panel and connect X243 and X244 to the line and Z157 and Z194 to your load. Jumper J479 to J480 . And be sure to turn off the primary lateral immanance switch.

AN/WBL54-D/U's are usually available through **Monte Vista Surplus** and similar outfits for around \$23.50 each plus shipping. Even when not used for energy efficiency apps, they can sometimes end up a pretty good buy, since there are 35 pounds of silver in the slip rings alone. Full schematics are found in MIL-TFD-41.

Q: What is a MacDonald computer interface?

A. Dr. Jerome F. MacDonald is the senior member of a design team that has long been working in the Dairy Science division of the US Department of Agriculture. They have come up with a communications input-output (I/O) and interchange code for computers and terminals.

The coding is simple, effective, and easy to use. It's spreading rapidly to to other government agencies and now is becoming an industry wide standard. In fact, the code now has an **Electronics Industries Evaluatory** (EIE) status and should shortly go international. Thus, the old MacDonald farm interface is now an EIE I/O.

Q: As I drive around town, I have to keep fine-tuning my AM car radio. Why is this, and how do I fix it?

A. Your problem is caused by the **Doppler effect**. As you drive towards a radio station, you intercept the rf cycles progressively earlier in each cycle, and the frequency goes up. As you sit still or drive at right angles to the station, you get the normal frequency. As you drive away from the station, you see each cycle later in time, and the frequency goes down. This is why constant retuning may be needed.

To get around the problem, you can go to a rather expensive phase-locked-loop tracking circuit. But it is far simpler to arrange your driving so that you always travel a constant distance circular path from your favorite station.

By the way, this is the real reason those loop thruways were built around many cities. It also explains why traffic on them is heaviest during the most popular programs.

Q: My kid brother claims he is possessed by demons and apparently is serious about it since he has just changed his civics teacher into a frog. Is there any electronic cure I can try?

A. The question of whether high school civics teachers should or should not be converted into frogs is a highly complex one, with both sides of the issue raising many valid points. But your brother's cure is simple: Virtually any hex inverter will work. Try the 7404 (TTL), the MC789 (RTL), or the 4049 (CMOS).

Q: What is the meaning of the term "ten to one" or "10:1" on a scope probe?

A. This is just engineering slang. There is no real technical

meaning. The term apparently started due to the extreme amount of scope probe pilferage that goes on in larger electronic labs. If you turn your back on your probes, they ten to one away. Hence, the term.

Q: I've been wanting to get into TTL or "Tee Squared Ell" integrated circuits for quite some time now. But I've never had a drafting course and do not even own a tee square. What do you suggest?

A. Offhand, we'd recommend hang gliding, decoupage, or possibly aquaculture.

Q: How is bulk hydrogen produced?

A. Electrolysis is wildly inappropriate for bulk hydrogen energy production because of its staggering **loss of exergy**. Instead, virtually all commercial bulk **hydrogen** to date is done through the reformation of methane.

But the methane really has to want to reform.

Q: What is the "in-situ" solar cell process?

A. That is the big breakthrough in solar cell design that drops the cost of solar power to \$9 per kilowatt. Actually, the **in-situ** (Latin for "in place") technique is stunningly simple. Instead of refining the silicon and then building cells, you build the cells first and then refine the silicon.

The process generates a cell from ordinary beach sand (silicon dioxide). After your cell fabrication, the sand is chemically treated.

The reaction drives off the oxygen, leaving an almost pure polycrystalline silicon. Conveniently, any remaining impurities rearrange themselves to form uniformly doped series connected pn junctions through a little understood process called **Barfoot Layering**.

For each centimeter of cell thickness, you typically get several hundred series pn junctions or about 120 volts dc under normal sunlight.

The thickness of the panel determines the voltage and the area the current. The typical current densities are four amperes per square meter of panel.

You can easily build a 100 watt cell on your own. Simply take any ordinary metal cookie sheet, cover it uniformly with a one centimeter thick layer of beach sand, and cover that with a piece of screening for the front collector and add a protective glass cover. Clamp everything with large rubber bands or bungee cords.

To do your chemical refinement, carefully remove the glass cover and then spray your sand using two liters of **3,7 Dimethylpentadecan-2-ol Propionate** (available from larger chemical supply houses). An ordinary window cleaner bottle makes a handy spray source. Reaction time is four hours. Since the reaction is photoisotropic, it should only be done under magenta safelight. Such as that from a **Portal Industries** JJ-668 source.

Your front terminal is positive and the greatest output will be obtained when the panel is pointed due south at an elevation of your latitude plus ten degrees. A group of panels can be wired in parallel for grid-free power.

Q: Are there any known reasons for getting a patent?

A. Certainly. There is at least some anecdotal evidence that getting a patent, framing it, and placing it on the east wall of your lab or office will either outright prevent or at least

substantially reduce the severity of walrus attacks.

Some recent double blind Nebraska research has been exceptionally supportive of this method. Proof of efficacy is that there are apparently now enough framed patents on enough Nebraska east facing walls that not one major walrus attack has been reported in the last ten days.

Effective, isn't it? More at our **Patent Help** web library.

Q: Where can I get the left mounting bracket for a Gentry-Heber PLX-20 combination home laser fusion power source and psychedelic lighting center?

A. Between the energy crunch and the unique lighting fad, the demand for these five kilowatt home units has been incredible. Especially after the writeup in **Personal Power Quarterly** (Deer Springs Press Vol XII, No 4 p 167-185.)

The main problem with the bracket is that Gentry-Heber is going through a metrication program so that export units will use the same parts as the standard model. They estimate another six months to work out the backlog.

Meanwhile, several readers have reported working out suitable substitutes using ordinary railroad ties. But be sure there is at least ten centimeters or four inches of clearance between the bracket and the Deuterium return line.

Q: When using barbed wire to connect speakers, is it better to use two-point or four-point barb?

Specifically, are the claims that four point barb definitively quantifies the transient interphase gribient dynamosity worth the extra expense?

A. The Barbie and Barbie Doll proponents tend to feel that two point is better for Barry Manilow and four point for Metallica. Either way, oxygen free wire is a must. Studies have shown that 4-point exhibits corona effects over 100 watts, while 2-point only loses half as many electronics.

Both 2-point and 4-point tend to raise the pitch of the music because they are sharp. To compensate, connect a length of flat ribbon cable in parallel. The excess pitch sharpening can also be mitigated by flattening each point with a hammer blow.

Certain researchers claim that grebient dynamosity (especially its transcendental interphase manifestation) is unaffected by even integer testing. With the exception of mundancily fortuitous positive shift economics. A few mathematicians have verified this with their $2+2=4$ rule that seems valid except for very large values of two.

Other proponents do feel that 4-point gives a better soundstaging, reduced midrange granularity, and better bass speed. The phase balance gets compensated by the inherent quadrilateral symmetry.









There is a possibility of group delay, since the intended purpose of barbed wire is to inherently delay groups of people or animals. ♦

*Microcomputer pioneer and guru Don Lancaster is the author of 35 books and countless articles. Don maintains a US technical helpline you will find at (928) 428-4073, besides offering his own **books**, reprints and **consulting services**.*

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