A remarkable tinkerer who accidentally out-performed NASA.

By George Wiseman, version Feb. 23, 2011

This Information Release is about Darol Mason and his "Mighty Mite" version of Eagle-Research's <u>HyZor Technology</u> (on-board Brown's Gas electrolyzer).

In July 2008 Darol Mason bought one of our <u>HyZor kits</u>. In late August of 2008, he sent us a testimonial "Have just finished installation and testing of erHyZor and EFIE. We are very satisfied with a 61% increase in fuel efficiency" By March 4, 2009 he had built his own version of HyZor and presented it for sale on eBay (see <u>Appendix A</u>). He then sent me a copy of a test report (see <u>Appendix B</u>).

I immediately saw that, **if true**, his version of the HyZor Technology was at least twice as efficient as our version C (which he had purchased). I asked a lot of questions to verify the results... AND to find out what he did to achieve such impressive electrolyzer efficiency.

Darol patiently and completely answered every question I asked. It took a couple of months, with Darol making follow up experiments and tests, for me to be completely convinced that his modifications of the HyZor did get the gains he reported. We eventually figured out the main change that caused his super-efficiency.

Since the version C HyZor worked better than anything else he'd ever tried... he wanted to make more, based on that design, and sell them. He used his creativity to manufacture parts that he thought would do exactly the same job. His parts (and how he put them together) contained simple and seemingly innocent modifications that **tripled** the HyZor efficiency.

Darol's current Mighty Mite design (version 4.5) gets about 12 MMW (about 130% efficiency). NASA electrolyzers don't get 90% efficiency even using exotic materials, electrolytes, high temperatures and high pressures. But to be fair... they aren't making Brown's Gas (BG).

Darol and I have started a collaboration to incorporate my improvements and his together. He bought specialized equipment for bench-top power supply control and gas volume testing. We have built dozens of test units and have learned a lot more ③. We ultimately test our HyZors in vehicles, because there are several factors that cannot be duplicated with 'bench testing', (like the quality of the gas and CEIT adjustment) to optimize for the best performance.

I'm certain that our collaboration has produced the most practical on-board electrolyzer technology in the world. It can be built from common components and has performed up to 40 MMW or 0.5 Wh/L. We have made TWO significant and several minor advances in electrolyzer design. We will be releasing these changes soon.

May the Blessings Be George Wiseman Eagle-Research.com