

At last, I found a defective relay in the system. Spare parts aboard ship are carried in a number of steel trunks, but a replacement relay could not be found. Consequently, I had to improvise a repair on the bad relay itself. The repair worked and our ship was able to come into port with it's radar working.

After engaging in some light banter with Dean Barnett last week, I've decided to take a more serious look at the business of repairing the faulty relay. He said that fixing the relay was probably the most important thing that I had done in my life. I'm quite sure that he said it in jest, but on reflection, he may be right. The battleship was probably worth a few billion dollars. Additionally, there were more than ten thousand souls aboard, who had survived the Pacific conflict. How awful it would be if this enormously overcrowded vessel would collide with another at this time. A ship without radar is a ship with impaired vision. Who knows what may have happened if the ship had gone into port without its radar working?

Interestingly, my schooling in electronics must have cost the U.S. Navy many thousands of dollars. Fixing the relay was the only constructive thing, relating to my training, that I ever did for them. However, I suppose that "being trained and available", does have a compensating monetary value.

In another story, I hope to tell you how I managed to get into the Navy's Radar program, but for now we need to get on with "Impedance Matching."

I'm going to get a bit technical for a while but stay with it. It will widen your horizons. I will talk about energy and work. The dimensional units of energy and work are identical: millimeters squared divided by time squared. Energy may also be defined as the capacity for producing effects, said effects being of widely different character. Energy may be classified as being stored or in transition. Examples of stored energy (1) mechanical, as in a flywheel, where the stored energy in the revolving wheel is given by the formula: Energy equals one half times the velocity (speed of rotation) squared. (2) Another type of stored mechanical energy can be found in a spring or (3) in a rock that could fall off a roof. (4) energy can also be stored as heat by insulating a hot object. (5) In electricity, a condenser containing a charge of electrons would constitute an example of stored electrical energy.

The chart that follows gives several types of energy, together with their extensive and intensive factors. are listed. The product of these two quantities is equivalent to the energy which is commonly measured in the units indicated.