

## Training

I hope that each of you had a very enjoyable holiday season, and that perhaps you picked up some really neat flight-related goodies. But, in the event that you did not, I have found that it is just as enjoyable to make a gift *to yourself* of the things you really want! Not only that, but you can continue that tradition all year long!!!

In the past couple of columns we discussed how the basic training function should be conducted as well as how *not* to learn to fly. There is much more to “training” however than just learning to control the plane well enough to take-off, fly around and land. Consider, for example, that flying an RC airplane well requires the successful integration of many, many factors in addition to the pilot’s skill. These factors include the proper performance of mechanical parts and pieces, electrical devices, the airplane structure, the covering, the proper function of each of the control surfaces, the engine and the proper tuning thereof, the weather including the wind, the fuel system, linkages and so many more factors that we could make a very, very long list. Learning about these things makes us better pilots, makes the hobby more enjoyable as well as safer, and can be considered a part of our ongoing training. In addition there exists a myriad of tools and gadgets that can help us do things better and safer, and that can help protect our investment. Over the next months, and possibly years, we will endeavor to grow our basic knowledge pool, to organize this information and to make it easily available for use by our newer as well as more experienced pilots.

One such critical and useful piece of equipment is also, fortunately, quite inexpensive. The **Expanded Scale Voltmeter** is something that any new pilot should consider extremely important to have and should acquire as soon as possible. The importance of this meter has been discussed before, but it is so critical that we will review it again at this time and will include it in the information considered important for new pilots.

The term “Expanded Scale” actually tells only part of the reason this meter is so important. The other critical feature of these meters is the electrical “load” that they apply to the battery being tested. The “load” approximates the actual drain upon the battery when the plane is functioning (when the receiver is on and the servos are moving the control surfaces). Testing the battery with this load is important because batteries that appear fine in static no-load testing can often show problems when under load. And, as we go into larger planes and more aerobic flight, the demands for battery energy increase. It is quite likely that some of the “unexplained” crashes we see actually result from the inability of the battery to provide sufficient energy to satisfy the demands of all the components at a given point in flight!

And so to summarize; the Expanded Scale Voltmeter is a *critical test instrument* and any new pilot should get one as soon as possible. Also, any club member should hopefully be willing to help a “new” pilot by taking readings for him until he can acquire his own meter.

Remember to try something new each time you fly!

Steve Klute  
*Training Coordinator*