DISTRICT 5, UNITED STATES POWER SQUADRONS
JANUARY 2016 ANNUAL MEETING, ORLANDO
REGISTRATION FORM

SQUADRON NAME: PATAPSCO RIVER POWER SQUADRON, DISTRICT 5

EXHIBITOR'S NAME/E-MAIL ADDRESS: J Brian Becker, AP jbrianbecker@verizon.net

APPLICABLE COURSE/SEMINAR: SAIL / ADVANCED SAIL

DESCRIPTION OF AID:

A free standing sail model with all rigging/balance/sails to demonstrate the effects of wind and balance. The model is "hinged" and balanced on a shaped mounting board. Wind is "supplied" by the placement of an electric fan that causes the model to react much as a sailing vessel underway. The base holding the vessel and deck of the vessel is ½ "[+/-] plywood. The masts/booms/spreaders are aluminum tubes. The rigging is light wire. The sails are intricately [see 1 below] stitched light fabric. The lines are simply cord.


(The fan is off camera just behind the instructor. )

FACILITIES/SERVICES REQUIRED: Table space approx. 3' x 5'. Electric source to operate the fan. A three speed fan is preferred to assist in demonstrating wind conditions. A turn-table enhances the ability of the instructor to adjust the vessel bearing versus the wind direction.

**STATEMENT OF PURPOSE**. To provide a visual demonstration of the reaction of the components of a sailing vessel using an electric fan to provide the wind source.
Construction notes are provided in the crude drawing of the training aid that is attached. The model has been in service for many years. Working with the model underscores the many different facts in the SAIL course chapters. The model will demonstrate the teaching points of just about every chapter in the SAIL text.

**OPERATING INSTRUCTIONS**.

1. Mount the model on a "lazy susan" [or a serving cart] with access for the instructor on all sides.
2. Place an electric fan at the bow of boat. (A "strong fan" with several levels of output is recommended.) Place the boat in a position where the student body has a clear sight path.
3. With the fan operating, change just the bearing of boat to demonstrate response to the wind as the boat changes course. Change the fan speed to demonstrate reaction to wind strength.
4. Adjust the keel device to higher/lower holes to demonstrate the keel/stability factor
5. Have fun.

[1] "Intricately" defined by an expert: We could elaborate on the accurate construction of the crosscut sail panels, with reef points, cunninghams, reinforced head, clew, tack, and reefed clew and tack panels. We could indicate the it has a working jib, genny and spinnaker, along with spinnaker pole, topping lift, foreguy, sheet, and guy, and its running and standing rigging accurately depict a real sailboat, but it's not necessary and might make it seem too daunting for an amateur teacher to build.
Asking them to rig halyards, sheets, vangs, along with stays, shrouds and spreaders is too much gobbledegook, so KISS works well.