

Model Boat Competition Design Booklet

Engineers and designers are required to make numerous decisions during any design process and as such, they require a record of these decisions that can be referred to in the event of problems or concerns. It also forms a good reference for future designs when some of the very same decisions may need to be made again. Because you are essentially creating something from nothing, there's a saying designers sometimes use, "experience is the thing you get right after you need it". The design booklet is a record of that experience and can be used to make informed decisions in the future. While none of you are designing for commercial enterprises, it is still very good practice to keep a record of your decisions. It is for this reason that we are asking for a design booklet to supplement your model boat design and construction.

The ***Design Booklet*** for your project should be a record of what you did to design and build your model boat. Tell us how you decided on the final design (shape) of the hull – this may include discussions among yourselves, with your mentor(s) or with other individuals who may have guided you in your decisions. Tell us how you decided on the material for the hull and how you actually built it. Did you have any problems? What, if any calculations did you do to support the design? Some other questions to answer are:

- How did you arrive at the final arrangement for steering?
- What, if any problems did your tests highlight?
- What would you do different next time?
- What new information have you learned about *Naval Architecture & Marine Engineering Systems Design*?
- What was the most enjoyable thing about the project?

The design booklet should be in some form of a binder or duo tang and should be placed on the table in front of your poster display. It will be judged on the information included (how you answered the questions above and any supplementary information you may have included), the format, spelling and grammar. All calculations and units should be in metric format. The booklet can also include pictures. The design booklet will be judged at the same time as the poster display.

Remember that it is a record of what you did - including any mistakes you may have made! Mistakes will not adversely affect your score, especially if you learned a valuable lesson and it improved your design.