

# Craftsmanship Model Submission: Some Helpful Hints

by Matthew Johnson NAR #86960

Having been fortunate enough to participate in judging NAR competitions from 2012 to 2014, I felt compelled to document a few helpful suggestions for the modeler that I have seen as consistent obstacles to entering an excellent craftsmanship event submission.

While I found that the NAR website does contain excellent synopses of the various craftsmanship contest events, and the NAR Pink Book details the point-driven judging parameters, I was still woefully unprepared for my first scale submission back at NARAM-49. I kept thinking of that virginal, uninformed submission as I gained more insight into the judging process while I was trained by Marc McReynolds, Steve Humphreys, Gary Miller, and others for the honor of being a Craftsmanship Judge at NARAM.

So I offer some insight into the mind of the Craftsmanship Judges beyond those venerable sources with the goal of providing modelers of all ages and skill levels with the opportunity to align their entry with the intricacies of judging parameters.

## The Judges

Keep in mind that, while not an excuse pleading for sympathy, the judges do have limited time to survey the provided information and determine its relevance to the presented model when dealing with the large number of entries at a NARAM event. Anything you can do to make the judges' comprehension of your accomplishments in building your model easier and more obvious will be exceedingly helpful and increase the accuracy of the scoring of your model.

I was told many a time by senior rocketeers to pretend that your judge is wholly ignorant of your rocket's design and concept. This may not be true in the sense that the judges may be aware of many rocket designs, but it is true in the sense with which the judges view your rocket. Judges are instructed to work with a blank slate of criticism and base their work off of the presented material.

## The Data Pack

The best thing you can do is to take the Pink Book Static Points listing for your contest and relay the required information to your judge in your Data Packet verbatim, step-by-step and as clearly as possible. Bullet-point the data down the line. Your judge will be working off of a judging sheet that mirrors the Static Point spread in the Pink Book, so you can do no harm by replicating the order with your information.

Tell your judge where your NAR number is hidden!

“The entry shall be judged by the data presented in the scale packet.”—Pink Book 50.12.1. Remember that your documentation will be the judge's guide as to the accuracy of the model, regardless of whether the judge has intimate knowledge of the rocket. So this is where the details and intricacies of your documentation, photos, and diagrams can be a double-edged sword. As you are showing the judge what you used as your guide, you are subsequently telling the judge that the level of detail in your documentation is commensurate with your model. If you use Peter Alway's *Rockets of the World* drawings for your documentation, then that is the level of detail, at a minimum, that you need to strive for in your model. If you go a step further and supply NASA style blueprints for your model, you have just upped the ante further, as those (assumed) extra details will then be looked for in your model as judging criteria.

You should build to the detail you are prepared to document, and document to the level of your model. Likewise, beware of conflicting information. Do not provide diagrams or blueprints for other versions of your particular model, or along with accurate diagrams for your model. (One problem is that a photocopy diagram may have information for multiple versions on one page. If so, delete or cross off the incorrect ones.) If there is no other choice, then be sure to make it clear in your Data Pack that you know of the discrepancy and that you are using a diagram for some specific purpose. “Points may be deducted if the scale packet contains data not pertinent to the prototype model, or is presented in such a manner as to complicate judging.”—Pink Book 50.12.1.

Another inherent danger with color documentation is the use of “faded” or “color-shifted” photographs. Unless you are prepared to paint your Saturn V pink, be sure to note and document through some other means what the colors actually are. Stating that you are aware that the colors shown in the “faded” photo are not correct, and documenting for the correct color, goes a long way toward fixing this problem.

## Kit-based and Custom Work

Be sure to document and explain any extra custom work you put into the model in an attempt to make it as accurate in agreement with your documentation as possible. This includes the difficulties in creating staging, making escape towers, rivets, antennas, decals, covers, and whatnot. If the model is based on a kit, make any improvements you made in constructing your model, or any difficulties you had overcome, plainly visible in the data.

## Scale Rockets

Scale submission requires an accurate listing of the following dimension data at a minimum:

- Scale factor
- Overall length
- Significant body diameter(s)
- Nose cone length
- Fin length and width (if applicable to the prototype)
- Length of transition pieces (if applicable)

—Pink Book rule 50.12.1

Also required by Pink Book rule 50.12.1: “For at least all required dimensions listed above, both the actual (prototype) dimensions and the scaled (model) dimensions presented in a table or on a drawing.” Making it easy to find the necessary comparison of the actual dimensions of the rocket to your scale rocket is a welcome gift to the judge. Be as clear as possible in displaying this information. Crating a small chart is an ideal method of registering this information.

## Displaying Your Rocket

Remember that the models submitted for judging will be handled. Even Sport Scale models can be handled after they are judged from the one meter rule distance. So, it is in your best interest to be sure that your model can be handled and placed back down on the judging table with ease and surety. A stand is an excellent way to ensure this if it is not a self-standing model (fins on the table type). Advise your judge if your model is or is not securely attached to a stand or if some parts may detach if it is tilted.

“Any launching attachment to be used (lugs, straps, etc...) ATTACHED.”—Scale Judging Guide (CB-8-80). As cited here, any material that is needed to launch your rocket must be attached during the static display. However, this does not apply to “fly-away” components that fall away and are not attached to the rocket in flight. So be as clever as you can with the need to stabilize your rocket off the rod. If the components for this fall away, then it is not part of the static display and will not affect your score.

After discussion last year with the judging team, it was also clarified that a necessary attachment of a recovery line that would make the component land horizontally, for example, (like making a triangular shroud line on a stage) need not be hanging off the rocket in static display. However the attachment point that may be sticking out would be judged for craftsmanship and its effect on the overall static display.

## The Score

After taking a deep breath and meditating for a few minutes, if there is any issue with your static judging score that you disagree with and have a reasonable alternative explanation for, you have two options. One of these is to speak to your judge directly. Most of the judges make a point of being in the display room during the “pick-up” period so that discussion can be had over the judging results. If this intercourse fails to satisfy, there is the second option of taking your claim to the Contest Jury. See Pink Book 12.1.

Thank you for this opportunity to spread some information to our community. Best of luck with your models!