

# MERIT EVALUATION, CONTEST JUDGING AND DOCUMENTATION (OH MY!)

How to help us help you

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# What are the differences?

## Merit Evaluation

- For Merit Awards
- Can be either at home or at a club site
- Evaluators talk with the builder

## Contest Judging

- Builder is **not** present in the room
- Judges broken into teams
  - Only judge one category without looking at other categories unless documentation directs them
  - You are better off copying text that applies to different sections



# Why is Evaluation Important

- Achievement Program certificates that require Merit Awards:
  - Motive Power
  - Cars
  - Structures
  - Civil Engineering
  
  - Scenery
  - Prototype Models



# What are “we” looking for?

- What did you try to do?
- How well did you do it?
- We won't assume much (if anything), so document **everything** you want us to know – especially departures from “prototypical “ practices
- Evaluators **want** to give a model a passing score



# Points Breakdown

Category	Points
Construction	0-40
Detail	0-20
Conformity	0-25
Finish and Lettering	0-25
Scratchbuilt	0-15

- Merit Award: 87.5 points of possible 125



# Documentation

- The NMRA web site is sort of your friend:
  - Category matrixes and contest forms are available from <http://www.nmra.org/education/achievement/apf/forms.html>
  - Evaluators and judges are used to using the matrix so organize documentation according to the point categories



# Why is documentation important?

## 70' Howe Truss Bridge

- Merit Evaluation – Full documentation
  - Received Merit Award
- Contest Judging – Quick documentation at last minute
  - Did not receive merit award

## 80' Howe Truss Bridge

- Merit Evaluation – Full documentation
  - Received Merit Award
- Contest Judging – Quick documentation at last minute
  - Did not receive merit award



# My Overall Strategy

- Err on the side of excess
  - More documentation better than less
  - Photographs of the modeling process
    - Helps remember what you did later
    - Input for articles/clinics for other certificates!
- Take photographs of the finished model
  - The camera will point out blemishes better than your eyes
  - If you've got the "wow" factor, then you've done the model right.





# What is meant by construction?

## Guidelines

- How complex is the model?
  - Part fabrication
- How well is it constructed?
  - Joint quality
  - Alignment issues
- The entry form should cover
  - Starting point for the model
  - materials and techniques used
  - major steps in construction

## Strategy

- List each step in construction
  - Provides a record if you need to repeat
- Take photographs of each step
  - Along with the list of steps is source material for “how to” article or clinic



# Construction Example: B&CC Flat Car #103

- Self-drawn plans
- Built up over a series of 14 steps
  - Board by board wooden under frame construction
  - Wiring for brake system piping and torsion bars
  - Board by board deck construction
- Score: 31/40 points



# What is meant by detail?

## Guidelines

- Model refinement and subordinate parts
- Working details receive more points
- Entry form should list details and whether they work or not.

## Strategy

- Provide list of all additional details
  - Flat car example:
    - Additional end sill NBWs
    - Westinghouse brakes
    - Torsion bars w/ turnbuckles
    - Stake pockets with holes drilled in them
    - NBWs for reinforcement rods in truck supports
    - Underside beams notched



# Detail Example: Double Tracked Pole Trestle

- NBW details added on all pole/brace joints
- Lower sway braces omitted and bent spacing modified to provide under track clearance
- Score: 17/20



# What is meant by conformity?

## Guidelines

- Prototype appearance
- Following prototype construction
- Is it logical?
- Supporting plans and/or photos needed (or max score 15/25)
- Explain why your model differs from whatever source material you used.

## Strategy

- Include plans and prototype photographs
  - Extra copies better than referring to base car
- Explain why things are missing/damaged
  - Retainer valves
  - Stake pockets
  - Torsion bars
- Paint conformity (also include in finish/lettering section)



# Conformity - Cars

- Roof section
- Number and spacing of windows
- Trucks
- Brake rigging and interiors
- Out of era parts



# Conformity Example: B&CC Flat Car #103

- Circa 1870, 30' x 7' 9" flat car
  - Original car bought from USMRR war surplus
  - Updated by adding Westinghouse brakes
    - Patented in late 1860s so not "out of era"
    - No retainer valves – patented in 1882.
  - Missing stake pockets and torsion bar damage from "wear and tear" and not replaced
- Drew my own plans
- Score: 23/25



# Conformity – Structures and Displays

- Architectural practice
- Scale thickness of exposed walls
- Window and Door construction





# Conformity Example: Lode Mountain Freight Station

- Drew my own plans
- Back window damage due to break in and has temporary “slap dash” repair with pitch
- Drunk construction team put back wall on upside down - rather than replace, caulked with more pitch
- Comments:
  - Roof should overhang fascia
  - Ramp supports not touching ground
  - Hinges are oversized for scale
- Score: 18/25



# Conformity - Bridges

- Member sizes
- Span lengths
- Bracing and Support details



# Conformity Example: 80' Howe Truss Bridge

- Used construction plans
- Used in-line torsion reinforcement as the railroad would be “more economical” than side-by-side reinforcement
- Deck members not precisely even (should have used scale lumber spacer)
- Score: 23/25



# What is meant by finish and lettering?

## Guidelines

- The complexity and quality of finish and lettering
  - Accuracy is covered under conformity
  - Color placement rather than matching
- Weathering is *\*not\** necessary – just consistent
  - Just claim that the model is new or under construction

## Strategy

- List how it was done
- Explain why it was done (also in conformity)
- Consider weathering inside of structure/car (if chasing “best in show”)



# Example: B&CC House Car

- Two color airbrushing
  - Light Fright Car Red
  - Grimy Black (but note the trucks!)
- Decal
  - Ok on the trimming
  - Forgot the step of painting the car with gloss before applying
  - “Ghosted” Decal with 10/1 wash (Thanks, Fred!)
- Score: 13/25 (2010), 19/25 (2014)



# What is meant by scratchbuilding?

## Guidelines

- How much of the model is scratchbuilt
- How difficult is the scratch building

## Strategy

- Suggestion: List either all scratchbuilt parts or all non-scratchbuilt parts.
- The judges/evaluators will check this for accuracy



# Example: B&CC Flat Car #103

- Non scratchbuilt parts
  - Westinghouse brake parts
  - Gladhands
  - End sills and link pockets
  - Stake pockets
  - Trucks (but they don't count)
  
- Score: 14/15



# Thanks for Attending!

- Questions?

