Meet Info Here, Logos at Sides

TCC Plastic Model Conversion Judging Form

Contestant Information

Name: _____

NAR Number: _____ Division: _____ Section: _____

Plastic Model: _____

(include scale, if known)

Note: PMC is judged under two main rules: 16 & 55. Judges should also be familiar with Rules 1 – 13. Scores shown are the maximum allowed by the appropriate USMRSC rule. Record your scoring the the left of the slash.

Qualification Checklist (Entry may not receive points unless all requirements are met.)

- ☐ NAR number, team number, or name on model. (Rule 9.4)
- ☐ Exterior is in flight-ready condition: i.e. dummy nozzles, transparent fins, etc. (Rule 16.5)
- ☐ The entry must be representative of the kit chosen, as designed by the manufacturer. (Rule 55.1)
- ☐ The entry is a commercially available plastic model kit of a guided missile, rocket vehicle, space vehicle, or jet whose engines are in or spaced apart to the rear of the fuselage that was not designed to be flown. (Rule 55.1)

Static Judging – Don't exceed max/total scores. Record points awarded. Is there a Contestant's Note? (Rule 55.5.2.)

Craftsmanship – Includes plastic fins for stabilization (Rule 55.3) and NAR number (Rule 16.4).					
Rules: 16 and 55.5.1				Maximum total score:	**500/500**
Neatness and care of construction:	/150	Craftsmanship of details :	/100		
Degree and quality of finish:	/100	General Appearance:	/150	Craftsmanship Total Score:	**/500**
Degree of Difficulty					
Rules: 16 and 55.5.1				Maximum total score	**300/300**
Asymmetries in the model:	/40	Intricacy of paint pattern:	/80	Degree of detailing required:	/80
Difficulty of stabilizing model:	/50	Difficulty of adapting the model for flight:	/50	Degree of Difficulty Total Points:	**/300**
Total Static Score – Add the above static judging subcategory totals (shaded areas):					**/800**

Flight Characteristics –Mission types and points shown are suggestions. Use your own judgment, but don't exceed maximum total scores. Record points awarded. Contestant should state the mission.

Mission – Start from 0. Add points for successful simulated mission function documented for this prototype.			
Rules: 55.6.1		Maximum total score:	**200/200**
Spin, deployment, release: 10	2 engine cluser: 25 (3=45, 4=65)	Glide, 2 stage, working payload: 50	
Payload producing reduced data for the judges to review: 50 – 100		Mission: Flight #1:	/200
		Mission: Flight #2:	/200
General Flight – Start from 300. Deduct points for problems. Flight must be safe & stable to qualify.			
Rules: 16.6, 16.7, 16.8, 55.4, 55.6.2		Max total score:	**100/100**
#1 Flight:	#1 Damage:	General Flight: Flight #1	/100
#2 Flight:	#2 Damage:	General Flight: Flight #2	/100
Flight Score – Add Mission score to General Flight score for each official flight (shaded areas).			
		Total Flight Score: Flight #1	**/300**
		Total Flight Score: Flight #2	**/300**

Final Score	Add Total Static Score to best Total Flight Score.	**/1100**

Date:_____

Judge's Name:_____ Judge's Signature:_____

Using the TCC PMC Judging Form

Contestant Information:
Fill in the contestant's name, NAR number, competition division, section number/IND/Non-NAR as apropriate. Fill in the prototype's name and the reference such as the name of a book, magazine article, or simply drawings and/or photos, etc. Give the scale if the contestant has provided it.

Qualification Checklist:
Each check box lists the rule that requires this item. Check off each item if the entry meets the requirement of the rule. The entry is NOT a qualified entry if ANY box is unchecked.

Static Judging:
Static Judging has two scoring sections: Craftsmanship and Degree of Difficulty. Each scoring section on the TCC PMC Judging Form starts with a one line statement regarding judging the section followed by the rule numbers that apply to that section. The form has a blank for each element that you can score. Each blank is divided by a slash. Enter the number of points you award for each element to the left of the slash. Do not exceed the maximum points which is the number to the right of the slash.

Flight Judging:
Flight Judging is conducted in the same manner as Static Judging. See Peter Alway's comments below on awarding mission points. General Flight can score a maximum of 100 points. This should probably be broken down equally into two major components: Flight and Damage. Scoring Flight is a little different in that Flight and Damage points start at a maximum (say 50) and you deduct points from that maximum for flight/recovery problems and for damage the model receives as a result of flying and landing. Thus, if there is no damage, award 50 points.

Total Score:
The Static Judging Score will not change as a result of flying. However, since each contestant can make up to two attempts to achieve a qualified flight, the form has blanks for these possible flight scores. If the contestant makes two flight attempts, add the Flight and Damage points for flight one to get the Total General points for flight #1. Add the Flight and Damage points for flight two to get the Total General points for flight #2. Add the Total Mission points for flight one to the Total General points for flight one to get the Total Flight Score for flight #1. Do the same for flight two. Pick the highest Total Flight Score and add it to the Total Static Score to determine the Final Score.

Finishing the Paperwork:
Enter the date in the Date field, print your name and NAR number in the Judge's Name field and sign the form in the Judge's Signature field.

Mission Points

(NOTE: Peter provided these insights for Sport Scale, but they apply equally to PMC. O. Lee James, III NAR 15058 SR)
by Peter Alway, NAR 26985 (used by permission)

I wrote the guidelines on the principle that the most complex mission I could think of would max them out. So I think and Ariane 4 with 3 stages, 4 strap-ons, and a 4-cluster first stage would reach the 200 mark.

Start from zero for a model that lifts off, deploys a parachute or two, and comes down. Add points for successful in-flight functions if documented as representative of prototype flight: Suggestions for some common missions:

- 2-stage, 50
- 3-stage, 100
- 2-engine cluster, 25
- each additional engine, 20
- deploying components, 10 each
- glide recovery, 50
- scale spin on ascent, 10
- simulated vapor release at ejection, 10
- working payload (transmitter, camera, or smoke generator in nose), 25-50
- payload returning data to judge (e.g. transmitted temperature, developed aerial photo, wind speeds calculated from video of smoke trail), 50-100
- radio control should be judged by effect, not the mere presence of a receiver aboard the model

You can probably equate the difficulty of other effects with one of the above. A simple gimmick that any rocket could perform with a quick field modification (such as special selection of parachutes) may be worth 5 or 10 points. The maximum score of 200 points requires a complex flight with multiple effects. If the mission doesn't happen, there are no mission points

Let's see--100 points for 3-stage, 65 for core cluster. strap-ons get 30 each, for 120 points, adding up to over 200

Space shuttle: 2 SRB's plus 3 main engines--85 points, plus glide recovery--50 points, plus SRB and tank sep--30 points, R/C roll program on ascent--10 points, RC heading alignment circle to pre-determined runway--10 points, RC flare maneuver, 10 points, R/C landing gear deploy--10 points.

I'm figuring each R/C event is worth as much as spin on ascent.