National Rocketry Competition (NRC)

The New Look of NAR Competition!

Expanding Competition Subcommittee

   Ed LaCroix – Chairman
   Scott Alexander, Glenn Feveryear,
   Jim Filler, Chad Ring

August 2017
Despite a 50% growth in NAR membership since 2010 the number of members doing NAR competition has been declining, putting the long-term health of this important NAR activity at risk.

After two years of development by the Subcommittee, major changes to the NAR Model Rocket Sporting Code have been implemented to make competition more appealing to NAR members of all ages:

- Eliminates past emphasis on year-long point accumulation for individuals and sections.
- Permits anyone to compete on a national basis based on their individual performance at any launch, not just at meets run by a section that emphasizes competition.
- Standardizes the events for competition nationally, focusing on events that do not require big launch sites.
There are 8 NRC events from which 6 events are selected annually (4 by the Contest Board, 2 by the NARAM CD) to create the NRC Contest Year that goes from the end of the previous NARAM until June 30.

- 1/4A through A Parachute Duration (one power class picked for the year)
- 1/4A-A Streamer Duration
- 1/4A-A Helicopter Duration
- 1/4A-A Boost Glider Duration
- B-C Egg Lofting Duration
- 1/2A-B Altitude - Altimeter
- A-B Payload Altitude - Altimeter
- B-C Egg Lofting Altitude - Altimeter
The 6 NRC events chosen for the 2017-2018 contest year are:

- C Eggloft Altitude w/Altimeter (best flight in 2 tries)
- A Payload Altitude w/Altimeter (best flight in 2 tries)
- A Helicopter Duration (up to 360 sec max from sum of 2 flights)
- A Streamer Duration (360 sec max, sum of 2)
- 1/2A Parachute Duration (360 sec max, sum of 2)
- 1/2A Boost Glider Duration (270 sec max, sum of 2)

Flight times greater than the “max” are recorded and reported, but anyone who gets at least the “max” gets a national rank of #1

All 6 of these events, plus several others, will be flown at NARAM-60

- To be held August 4-10, 2018 in Pueblo, CO
Any NAR member may participate at any launch by following three simple steps.

Individuals and teams* are scored in the following competition divisions:

<table>
<thead>
<tr>
<th>Division</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>A Division</td>
<td>Individuals and Teams, ages 0 – 14</td>
</tr>
<tr>
<td>B Division</td>
<td>Individuals and Teams, ages 15 – 22</td>
</tr>
<tr>
<td>C Division</td>
<td>Individuals ages 23 years old and older</td>
</tr>
<tr>
<td>D Division</td>
<td>Teams ages 23 years old and older</td>
</tr>
</tbody>
</table>

*Teams fly in the division of the oldest member.
Step 1. Sanction an **NRC** Launch

Go to the NAR homepage and from the left-hand menu select **Contest Flying** > Sanction an **NRC** Launch to open a page where information is entered about your launch in order to sanction it.

- The information you provide will automatically generate a listing on the NAR Launch Calendar so others may find your event.

- Any NAR member 18 or older can sanction an **NRC** launch.

- **The person who sanctions an NRC launch becomes the Contest Director** for the launch and is responsible for submitting all results from the launch to their regional contest chair for Scoreboard verification.

- There is no limit on the number of **NRC** launches an individual may sanction or fly in
Step 2. Fly **NRC** Events

Fly any **NRC** event at as many **NRC** launches as you want during the year.

- An **NRC** launch may be held with as few as two NAR members (only one of whom must fly) as long as one of them is 18 years of age or older and serves as the Contest Director. Teams are treated as one competitor for this purpose.

- An **NRC** launch **IS** a competition. **NRC** events are flown as they have always been at a contest. Example: If you were to fly 1/2A Parachute Duration, you would get two flight attempts and your score is the sum of those two flights. However, no return is required for any duration flight.

- At any **NRC** launch, any or all six **NRC** events are permitted to be flown, and any other events can also be flown if desired.

- Be sure the Contest Director for the launch has your contest entry form and all flight cards for the **NRC** events you flew before you leave!
Step 3. Get on the **NRC** National Scoreboard!

- At the conclusion of the launch, **the CD has 7 days** in which to post the scores for any **NRC** event flights to the online national Scoreboard.

- Since the **NRC Scoreboard** is real-time, the faster a CD can post **NRC** launch scores to the Scoreboard, the sooner competitors can check to see how they rank among the other competitors in their competition division in any of the **NRC** events they flew.

- The **Scoreboard** will only display a competitor’s best score.

- For scores to become official, the CD must submit a Contest Manager file to their Regional Contest Board Chair for verification.
The **NRC** is one *BIG* year-long contest!

- **NRC** permits anyone to compete at any launch without waiting for a formally-organized contest to be available in their area and without requiring everyone else in the section to be part of the competition flying – just two competitors, at least one of whom must fly and of which at least one (the CD) is 18 or older.

- A sanctioned contest simply means that the CD is allowing **NRC** competitors access to that launch to make **NRC** flights.

- Each time you fly an **NRC** launch, you are competing with everyone in your competition division nationwide in a year-long effort to improve your rank on the national Scoreboard.
Any **NRC** event may be flown by any NAR member at any sanctioned launch regardless of any other events or activities that may be scheduled.

Sections may hold **NRC** sanctioned launches as often as they wish:
- No longer any section point accumulation or national championship.

Sections may hold contests with whatever events they want (**NRC** or otherwise), and as many events as they want, as often as they want:
- Sporting Code rules still available for use (and are required for **NRC** events) but local “fun” events with their own rules may be flown as well.
- All awards/places are local, no “points” are reported.
- Flight scores are reported for any **NRC** events that are flown.
A More Exciting NARAM

- NARAM competition is where National Champions are determined, nobody comes in with “points” already accumulated.

- NARAM consists of the 6 NRC events and whatever other events the Contest Director selects from the Sporting Code.

- Competitors who wish to be a National Champion or receive Event Specialist Award (ESA) national recognition must meet NRC qualification requirements and declare their intentions when they register for NARAM.
The NAR will recognize the top ten competitors in each of the NRC events at the close of the NRC year based on Scoreboard standings.

Competitors who meet the NRC qualifying requirements may then compete at NARAM for:

- **Event Specialist Awards** - Will recognize the best NRC event competitor in each competition age division over the year.

- **National Champion Awards**
  - Will recognize the best overall performance in each competition division over the course of the NRC year.
  
  (If competing for a National Award, you are ineligible for a NARAM Meet Champion award.)

Anyone can compete at NARAM for **Meet Awards** regardless of whether they have flown in the NRC during the year.
At the close of the NRC year (June 30\textsuperscript{th}) competitor scores on the Scoreboard become final and determine a competitor’s national rank in each of the NRC events they flew.

Event Specialist Award (ESA) – Winning a national ESA requires:

- At the close of the NRC year finishing in the top 10 or 10% (whichever is greater) in your selected NRC event(s) to become “NRC qualified”.
- Competing at NARAM in your selected event(s).
- Being the NRC qualified competitor with the highest finish in your selected event(s) in your competition division at NARAM.
Winning a National Champion Award

For competitors seeking a National Champion Award, the qualifying process hinges on a competitor’s *combined* Scoreboard rank resulting from flying all six NRC events. The top 10 (or 10%) of overall ranked competitors qualify to compete for overall National Champion recognition at NARAM.

The **NRC** qualified competitors accumulating the most points at NARAM receive the National Champion awards in their competition division.

Everyone starts NARAM with **zero points** and there is a points schedule for places all the way to 10th in each event.
Fairplay and Trust
Essential to **NRC** Participation

- Competitors will fly **NRC** altitude and duration events on a level national playing field. But trusting that participants will respect the new rules in their less-structured launches is the only way the **NRC** can be successful.

- **ALL** altitude events require launch site temperature to be recorded prior to each flight as Contest Manager will require it for altitude event scoring.

- **NRC** duration events have no return rule during the year (it will be in effect for NARAM, though).

- **NRC** duration events include a new feature called the **NRC** Maximum. Based on the sum of two duration flights, if a competitor can achieve an official score equal to or greater than the event’s stated **NRC** Maximum, that competitor will receive a national Scoreboard rank of 1 in that event.