

# How to Conduct Competitions, Part II

*An On the Mark Series by Gary Anderson, DCM*

## Supplies and Equipment for Conducting a Junior Rifle or Pistol Competition

One of the best ways to foster the development of junior shooters in your area is to offer competitions where young shooters can test their skills and experience the many positive benefits of competition shooting. This *On the Mark* series discusses the essential planning and operational phases of properly conducting a competition for juniors. The last *On the Mark* issue featured an article on the work of range officers. This issue's article looks at the supplies and equipment needed to conduct junior air rifle, smallbore rifle or pistol competitions for junior shooters.

To conduct competitions properly, match sponsors must have proper equipment and supplies. By having the right equipment and supplies, match officials can assure that their competitions are correct, fair and enjoyable. It is also important to note that the supplies and equipment that are necessary to conduct a competition are minimal and, for the most part, readily available. The list of required supplies should not be a deterrent for any club, JROTC unit or school to conduct a junior shooting competition.

If you and your organization are considering conducting a match, use the check list printed with this article to make sure everything you need is available prior to the competition. Sources to obtain this equipment are listed in the "Sources of Competition Equipment" listing at the end of this article.

**Rulebooks.** No match sponsor should attempt to conduct a competition without rulebooks. One of the very first steps in planning a competition is to determine which rulebook will govern that competition. The rulebook that governs your competition should be clearly identified in the match program. Appropriate rulebooks are:

- 3-Position Air Rifle: **National Standard Three-Position Air Rifle Rules.** This rulebook is posted on the CMP web site at <http://www.odcmp.com/rulebook.htm> and may be downloaded or printed from there. Printed copies can be ordered from the CMP.

- Air Rifle Standing, 3-Position Smallbore (50 feet indoor, 50 meters outdoors), Air Pistol: **USA Shooting Rules.** USA Shooting publishes comprehensive rules for all shooting disciplines that are based on International Shooting Sports Federation rules. These rules may be downloaded from the USA Shooting website at <http://usashooting.org/modules.php?op=modload&name=UpDownload&file=index&req=viewdownlo>

### Required Supplies/Equipment:

- Rulebooks
- Competition Programs & Schedule
- Targets
- Stop watch(es)
- Scoring gauges
- Scoring template/Eagle Eye
- Magnifying glass (for scoring)
- Compressed air (for air rifle/pistol events)
- CO<sub>2</sub> gas (for sporter air rifle events)
- CBIs, OBIs

### Optional Supplies/Equipment:

- Laptop computer with spreadsheet program
- Printer
- Trigger weights
- Spotting scope/binoculars (for range officer)
- Range clock
- Carpenter's angle finder

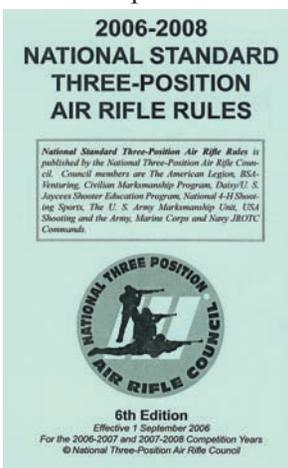
[d&sid=2](#). USA Shooting can also provide rules for the rapidly growing Progressive Position Air Pistol program.

- BB Gun. **NRA BB Gun Rules.** Official rules for BB gun competitions may be purchased from the NRA. Order on-line at <http://materials.nrahq.org/go/home.aspx>.

- The NRA also publishes other rulebooks for smallbore rifle, air rifle and pistol shooting that are used by many clubs for conducting certain types of junior shooting competitions.

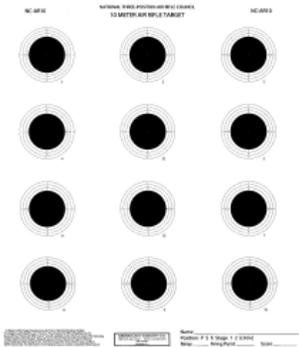
After obtaining rulebooks, make sure everyone who will be involved in conducting firing on the range (range officers) and scoring (statistical officers and scorers) has copies. Indeed, most experienced range officers and scorers have personal copies of the rules that are well-used and often marked with notations regarding rule interpretations. If anyone who will act as a range officer or scorer during your match is not familiar with the rules, be sure they study the rules that apply to their areas of responsibility before the match. You should also consider conducting a training session for them.

**Match Program and Schedule.** While the rules do not always require that an "official match program" be produced for a competition, doing so is highly recommended for all competitions, even the smallest ones. A match program is a document that provides essential information about your competition. Programs typically list the name of the competition, the date(s), locations, rules that apply, event(s) that will be



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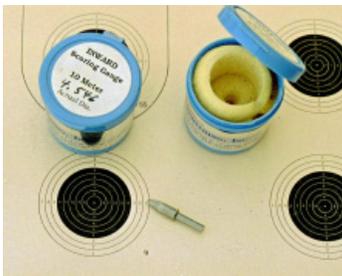
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conducted and other essential information. The program should also provide a detailed schedule with times when events take place. Prepare a match program for your competition, distribute copies to your match staff and potential participants in advance and have extra copies available during the match.

**Targets.** Providing an ample supply of targets that are appropriate for your competition is absolutely essential to the successful conduct of a competition. Be sure the targets you order for your competition are the targets that are specified in the official rules for your competition.

**Scoring Gauges.** The only accurate way to score doubtful shots is to use a scoring gauge or “plug” that is appropriate for the event being fired. For air rifle scoring, two types of gauges must be used. An “outward scoring” gauge 5.45-5.50 mm in diameter is used to score shots with values 3-10. An “inward scoring” gauge is used to score shots with values 1-2. Inside and outside scoring gauges are also used for air pistol and smallbore rifle indoor competitions. To properly conduct a competition, it is necessary to have one set of scoring gauges for each scorer or pair of scorers. This and having sufficient trained scorers available will assure that scoring keeps up with the flow of fired targets. Very high quality scoring gauges may be ordered from Gunsmithing, Inc. RIG scoring gauges may also be used and can be ordered from Champions Choice, Champions Shooters Supply, Gunsmithing, Inc. and the NRA.



**Scoring Template or Overlay.** When shot holes are torn or ripped, they must not be scored with a gauge. Inserting a plug or gauge in a torn hole will not produce an accurate score because the gauge will move towards the tear and away from the true location of the actual pellet hole. The proper method of scoring torn shot holes is to use a template or overlay that allows the scorer to “overlay” and align a 4.5mm ring on the actual pellet hole. The Eagle Eye scoring gauge is an overlay-type gauge with a built-in magnifier that is especially suited for scoring torn shot holes. It is available from Champions Choice. Order item #M1722, \$16.00. Transparent air rifle scoring aids with 4.5mm rings printed on them may also be purchased from the NRA.

**Magnifying Glass (Rule 8.2.1).** To precisely see where the edges of scoring rings and scoring gauges lie, the target being scored must be well lighted and a magnifying glass must be used. Good magnifying glasses are commonly available from local retail outlets. Each person who scores targets should have a high-quality magnifying glass available. The Eagle Eye scoring device can also be used as an excellent magnifying glass for checking gauged shots.

**Compressed Air and CO<sub>2</sub>.** In any air gun competition where teams and competitors must travel long distances, it is important that a supply of compressed air and CO<sub>2</sub> gas be available on the range for competitors to use to fill their air rifle cylinders. Provide compressed air in scuba tanks with DIN valves that can be purchased from a local diving shop. Obtain CO<sub>2</sub> tanks from local welding supply stores. Competitors are expected to bring their own adapters to connect their air rifle cylinders with the compressed air or CO<sub>2</sub> tank.

**Trigger Weights (Rule 4.2.2).** A trigger weight weighing 1.5 lbs. must be used to check triggers on sporter class air rifles. The weight should be configured so that it can be suspended from the trigger with the rifle held in the vertical position. Official trigger weights for the National Three-Position Air Rifle Council are made and sold by Pilkington Competition Equipment.

It is also possible to make a trigger weight by attaching a hook to a hanging weight. The hook must be 18-20 inches long and be shaped so that one end catches the trigger as it suspends the weight directly below the butt plate when the rifle is held in a vertical position. The hook must be bent so that it does not contact the stock when the trigger lifts the weight. The total weight of the weight and hook must be checked on a calibrated scale so that it weighs exactly 1.5 pounds.



Official scorers at competitions must be equipped with the correct scoring gauges, scoring templates or Eagle Eye devices (for scoring torn shot holes) and magnifying glasses. They also need supplies such as pencils and small calculators.

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**Stopwatch.** Each range used for competitions should have at least two stopwatches. One must be used to control the timing of the preparation period and shooting times for each position. Each Range Officer should also have a stopwatch that they use to determine the start and stop times of any interruptions or malfunctions.

**Range Clock.** A count-down clock that is mounted in the range so that it is visible to all competitors and coaches can help them know exactly how much time is remaining in an event or stage.

**Carpenter's Angle Finder.** To enforce the prone position rule requirement that the angle of the shooter's forearm from the floor must be at least 30° degrees, it is necessary to have an accurate means of measuring that angle. The best way to do this without having to physically disturb the shooter is to use a carpenter's angle finder. Hold the angle finder in front of you and visually align its edge with the "axis of the forearm." You can then read the shooter's forearm angle in degrees on the gauge. If the angle is less than 30°, the position is too low. Carpenter's angle finders are inexpensive and can be obtained in local retail stores.

**Spotting Scope or Binoculars.** To enforce the rules for "Irregular Shots," it is often necessary to see shots fired on a competitor's target. This lets the range officer see, for example, the location of a sighting shot that is a miss, determine if sighting shots are being fired after the first record shot or identify an alleged crossfire. A pair of binoculars will work well for this purpose in air gun events, but a spotting scope is more suitable for this purpose in both air and smallbore matches.

**Computer and Printer.** Match sponsors can still conduct very good competitions by using manual bulletin boards to post results, but with lap top computers being commonly available, the best method of tracking competitors and their results is to have a lap top computer and small printer at the match to use for this purpose. These tools, combined with a spreadsheet program, are all that is needed to maintain data files on all competitors entered in the match, to print start lists and to record, print and post results.

**ECIs, CBIs.** Now that the use of Clear Barrel Indicators are required in all air rifles and Empty Chamber Indicators are required in all smallbore rifles while they are on ranges, match sponsors should have a supply available. While all shooters are expected to have these with them, there may be new shooters or teams attending who are unfamiliar with the rules and arrive without them. No shooter should be permitted to carry a rifle on the range without having an ECI or CBI inserted.



## SOURCES OF COMPETITION EQUIPMENT

These organizations and firearms provide competition equipment listed in this article:

### American Target Company

1328 South Jason Street  
Denver, CO 80223  
303-733-0433  
[americtgt@aol.com](mailto:americtgt@aol.com)

### CMP (Civilian Marksmanship Program)

P. O. Box 576  
Port Clinton, OH 43452  
419-635-2141  
[programs@odcmp.com](mailto:programs@odcmp.com)

### Champions Choice

201 International Blvd.  
Laverne, TN 37086  
615-793-4066  
[champchoice@nashville.com](mailto:champchoice@nashville.com)

### Champions Shooters Supply

P. O. Box 303, 42 N. High Street  
New Albany, Ohio 43054-0303  
614-855-1603  
[www.championsshooters.com](http://www.championsshooters.com)

### Gunsmithing, Inc.

208-B West Buchanan  
Colorado Springs, CO 80907  
1-800-284-8671  
<http://nealjguns.com/>

### National Target Company

3958-D Dartmouth Ct  
Frederick, MD 21703  
Phone: 301-874-4767 or 1-800-827-7060  
[www.nationaltarget.com](http://www.nationaltarget.com)

### Pilkington Competition LLC

P. O. Box 97  
Monteagle, TN 37356  
931-924-3400  
<http://www.pilkguns.com>