Three-Position Air Rifle Questions and Answers

By Gary Anderson, DCM Emeritus

Three-Position Air Rifle (3PAR+) emerged in the 1980s as an alternative to smallbore position shooting, which was declining because environmental concerns were closing ranges. The National Guard Junior Air Rifle Program and the introduction of the Daisy M853 air rifle encouraged its initial development. 3PAR participation experienced tremendous growth in the 1990s when JROTC commands



purchased large numbers of M853 air rifles for their units. 3PAR has now emerged as the USA's most popular youth rifle program with a quarter million participating youth and nearly 1,500 annual junior competitions.

3PAR became the dominant junior rifle program in the USA because its equipment, especially sporter equipment, is less expensive and because it offers so many exciting competitions. 3PAR is an ideal way to teach youth safe gun handling, range safety and real marksmanship skills. 3PAR is a more challenging step up from 4-position BB Gun shooting. It is a great foundation for advancing to standing air rifle and 3-position smallbore competitions. It can also be a foundation for outdoor disciplines like Rimfire Sporter and Highpower Rifle as well as a good way to prepare youth for pistol shooting.

This **On the Mark** article provides answers to several important questions that coaches, parents, match officials and young athletes have asked concerning 3PAR rules, benefits and policies.

Who governs junior three-position air rifle shooting?

The National Three-Position Air Rifle Council was organized in 1999 to be the national governing body for 3PAR. Council rules now govern the vast majority of 3PAR competitions in the USA. The Council is a confederation of national youth-serving organizations that promote junior 3PAR shooting. The CMP and USA Shooting were leading organizations in creating the Council. The American Legion, Daisy Manufacturing and the U.S. Army Marksmanship Unit are members because they sponsor major 3PAR championships. The Army, Navy, Marine Corps and Air Force JROTC programs are members because they support huge high school air rifle marksmanship instruction programs and national competitions. The National 4-H Shooting Sports program that sponsors massive grassroots BB gun and air rifle programs is another leading member. BSA Venturing, Crosman Air Guns and Orion LLC actively participate because they have vital interests in 3PAR success. The National Rifle Association has its own separate position air rifle program, but a cooperative relationship exists with the NRA.

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What are the National Council Priorities?

The National Council has three principal objectives: 1) fostering youth development through safety and marksmanship training, 2) developing high performance junior athletes, primarily through precision air rifle competitions, and 3) building massive grassroots participation in junior target rifle shooting, primarily through sporter air rifle competitions. Council priorities that support these objectives are:

Athlete-Centered Competitions. A fundamental reason for offering 3PAR programs to youth is to help them develop, physically, psychologically and socially. Learning marksmanship skills teaches valuable life skills like self-discipline, emotional control, responsibility and concentration. Acquiring these skills transforms youth marksmanship participants into winners.

National Standard Rules. The Council was originally organized at a time when several organizations conducted their own 3PAR programs with their own rules. Council members agreed that there must be one common rulebook for all 3PAR shooting in the USA. The Council created the National Standard Three-Position Air Rifle Rules to fulfill this objective and Council members all agree to use only these rules in their competitions.

An Accessible, Affordable Sporter Class.

The 3PAR program promotes mass participation by maintaining a sporter class with low cost air rifles and strictly limited equipment. To keep sporter class competitions affordable and accessible, the Council strictly defines what an approved sporter air rifle is and enforces a price ceiling to prevent this competition class from launching an "equipment race" that would drive out less affluent programs.

The Olympic Path. The Council wants youth who participate in position rifle shooting to have realistic opportunities to follow "the Olympic Path." The Olympic Path is a sequence of training and competition opportunities that, when diligently pursued, could ultimately lead to earning a place on a USA National Team and representing the USA in international competitions. This policy recognizes that even youth who do not advance along the Olympic Path benefit from having opportunities to share in the Olympic Dream.

Strong Local Clubs and Teams. Council decisions consistently favor strengthening local clubs and teams and opposing changes that would weaken local clubs



The National Three-Position Air Rifle Council, comprised of 11 national youth-serving organizations, approves the **National Standard Rules** that govern 3PAR shooting.

and teams. The Council believes strong, active local clubs and teams are the best foundation for growing youth participation in shooting.

How safe is three-position air rifle shooting?

Air rifle target shooting is almost certainly the safest of all youth sports! To verify this statement, we must examine the overall safety record of supervised air rifle target shooting. There were six known injury-causing incidents among all National Council programs during the 11-year period from 2004 through 2014. Injuries in high school and college sports are calculated according to injuries per athlete-exposure (A-E). Each practice or game counts as one A-E. In a recent study, boys' football had the highest injury rate with 4.36 injuries per 1000 A-Es. Girls' softball had the lowest with 1.13 injuries per 1000 A-Es. If school age air rifle shooting had six injuries during this period, and using an extremely conservative calculation of air rifle practice and competition A-Es during that same period, the air rifle injury rate was <0.0017 injuries per 1000 A-Es. This should be convincing evidence that position air rifle shooting is the safest sport now practiced by school age youth.



Junior athletes who compete and win in major 3PAR Precision Class National Championships are already well advanced in following the Olympic Path.

Why are 3PAR team rules so restrictive?

National Standard Rules require all teams to represent a local club or school team and require all team members to participate regularly in team or club activities. The National Jury of Appeal must review and approve any team members who live more than 75 miles from the club base. Why such restrictive team rules? This is because the most pernicious threats to keeping local clubs and teams strong and viable are attempts to form win-at-all-costs all-star teams by recruiting the best shooters from surrounding clubs. An all-star team that cherry picks the best shooters from two or three other clubs may have a better chance to win national honors, but taking the best shooter out of another club takes away the best role model younger shooters in that club have and often leaves them without enough shooters to field a team. Protecting the integrity of local clubs and teams helps them remain strong so they can continue to offer shooting sports opportunities for youth in their communities.

Why can't we use more expensive sporter air rifles?

This question usually comes with an explanation that the air rifles being proposed comply with the 7.5

lb. weight limit, the 1.5 lb. minimum trigger pull and have ambidextrous stocks. There is often an argument that better equipment will help athletes get better scores. Over the years, several more expensive air rifles have requested approvals, but the Council has remained firm in restricting its list of approved sporter air rifles to rifles that comply with a maximum price now pegged at \$525, when sold to junior shooting organizations. This Council policy is aimed at keeping the playing field level and keeping sporter class air rifles affordable. Yes, more expensive air rifles would produce higher scores, but they

will also generate an equipment race where well-funded clubs and teams buy the more expensive rifles while less affluent teams decide they cannot afford to keep up and stop competing. The Council policy of approving sporter air rifles according to model and price has proven to be an effective way to make sure competitors have equipment that is relatively equal in scoring capability. There is an inverse relationship between equipment costs and participation. Council sporter class restrictions keep the emphasis on participation.

The Council is not closed to allowing better equipment; it just wants to move deliberately so that any changes do not reduce participation. A good example of this approach has been the gradual change, over the last ten years, from pneumatic air rifles to CO2 and compressed air sporters. The Council also challenged manufacturers to improve the quality of sporter class air rifles while keeping prices under the price ceiling. Crosman, for example, was not successful with its original Challenger, but the firm worked hard to bring out the Crosman Challenger 2009 that has been very successful.

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Why do 3PAR rules follow international rules?

"International rules" are ISSF (International Shooting Sport Federation, the world governing body for Olympic shooting) rules. Youth who grow up today live in an increasingly interconnected world where international standards apply. *National Standard 3PAR Rules* are designed to introduce youth to international standards for shooting. This policy ensures that athletes who want to follow the Olympic Path can do so. It also recognizes that juniors who want to shoot in college or USA Shooting competitions learn to compete under rules based on ISSF rules.

Did the 2012 rule changes force teams to buy new equipment?

The Council adopted changes for shooting jackets, trousers and equipment in its 2012-2014 Rules that were adapted from ISSF rule changes. These were changes that could easily, and without additional cost, be made to current equipment, plus there was a two-year grace period for full compliance. Unfortunately, some coaches and officials ignored or did not understand that and aggressively alleged that the new Council rules would force junior programs to buy new equipment. Their allegations were incorrect at the time and experiences since then have clearly proven that their concerns were unfounded. No school or junior club was forced to throw away their equipment or buy new equipment in order to continue participating in 3PAR competitions.

Why can't we use manual scoring to recheck Orion scores?

This question is slowly going away as more people understand that by asking this question they demonstrate how they don't understand scoring and favor giving unfair advantages to some shooters. The fundamental reason this cannot be done is that manual scoring and electronic scoring use two different systems of measurement. Manual scoring relies on human vision. Orion uses scanned target images and computer vision techniques. Manual scoring compares the outside edges of a scoring gauge and a scoring ring while Orion

scoring calculates the distance from the center of the target to the center of the shot hole.

No scoring system yet devised is absolutely perfect, but on average, Orion computer vision scoring is far more accurate than manual scoring and probably more accurate than current electronic targets. No matter what scoring system is used, some shots are going to be so close that the plus or minus decisions could be debatable. Coaches and athletes need to understand that close decisions are part of sport and that some go your way and some don't. In most sports, a referee or umpire makes those calls. In shooting, one scoring system must make those calls, not two different systems.

A second reason for not using manual scoring to recheck Orion scoring is because the traditional challenge system is manifestly unfair. Allowing athletes to select shots for rescoring lets them select only those shots that just missed while conveniently ignoring any shots that just made it. This old challenge system ensures that only selected shots that could possibly go up in value will be rechecked and then only for athletes who are willing to pursue a "point-buying" strategy.

Council rules still allow athletes the right to protest shots they believe may have been scored incorrectly. On rare occasions, a shot hole will tear in such a way that the Orion algorithm may not read it correctly. If it appears that this may have occurred, the athlete should ask the Statistical Officer to examine the shot and determine if there was an obvious error (Rule 8.5.5). Statistical Officers who are experienced in using Orion electronic scoring are trained to make this evaluation and are authorized to make corrections when necessary.

3PAR Resources

Anyone who is new to 3PAR will find these resources especially useful in learning more about this popular youth shooting activity:

- CMP Air Gun webpage, with links to many 3PAR programs, http://thecmp.org/air/.
- Air Rifle Marksmanship for Youth, a 4-page brochure explaining the benefits of 3PAR shooting for youth, http://thecmp.org/wp-content/uploads/AirForYouth.pdf
- National Standard Three-Position Air Rifle Rules.
 http://thecmp.org/air/national-standard-three-position-air-rifle-rules/
- National Council webpage, with links to the National Council Annual Report and instructional articles for 3PAR officials, http://thecmp.org/air/national-three-position-air-rifle-council/.



This athlete is firing in an "adapted" standing position for wheelchair athletes. Athletes who use adapted positions approved for IPC SH1 class athletes can compete with all athletes in 3PAR competitions on a relatively equal basis.

3PAR Rules still allow athletes to challenge close shots, but more and more match sponsors are deciding not to allow challenges because they are fundamentally unfair. If challenges are allowed and made, the original computer scan can be rescored, but if the athlete loses the challenge, a two-point penalty must be applied to the score of that shot. Other countries where electronic scoring systems like Orion are used permit the correction of obvious errors, but prohibit rescoring correctly scored shots. German Shooting Federation Rules, for example, state, "only one method of scoring may be used" and that when an electronic vision system is used "the scoring rings may not be used" and "it is not permitted to use a scoring gauge."

Why is it so difficult to disqualify someone for violating the rules?

Some old-school match officials who came from traditions where the Range Officer was god and could instantly disqualify anyone they thought violated a rule have questioned why today's 3PAR rules seem to

reduce their authority. 3PAR rules require match officials to first decide if a violation is a "concealed violation" where an unfair advantage was gained (7.19.2) or an "open violation" where there is no evidence of an unfair advantage. In the latter case, the match official must first give a warning and opportunity to correct the fault. If the athlete continues to fire without correcting the fault, two points must be deducted. Only if an athlete refuses to correct the fault can disqualification be considered. And disqualification can only be decided by two officials, not just one. Further, any person who is penalized or disqualified has a right to protest that decision. These rules were adopted because there have been unreasonable, arbitrary disqualifications in the past and because 3PAR rules are athlete centered. 3PAR rules recognize that most rule violations by junior shooters come from not knowing or understanding the rules. These rules see education as the foundation of enforcement. For most violations, a simple warning, with an explanation of the rule, will bring a quick correction and a grateful athlete, parent and coach. That leaves disqualification as an extreme step that should only be considered for the most serious offenses.

Can disabled athletes participate in 3PAR competitions?

YES, disabled athletes are welcome in 3PAR competitions. The National Council recognizes that this is an area where there is still much to learn, but, in principle, athletes with limitations who use adaptive positions approved by the International Paralympic Committee (IPC) are encouraged to compete in 3PAR matches alongside able-bodied athletes. For example, an athlete in a wheelchair is allowed to place a table on the wheelchair and to rest both elbows on the chair for and "adapted" prone position and one elbow for kneeling. For standing, the table must be removed and the athlete must rest his/her support arm on the side just as an able-bodied athlete would. Any program with a disabled athlete who wants to compete should study Rule 5.1.4 in the National Standard Rules. Athletes with more profound disabilities and limited upper body control are in the IPC SH2 category where rifles can be held in a support stand. The Council is still experimenting with how scores fired by these athletes can be handicapped to allow them to compete in 3PAR competitions. For further information on IPC adaptive positions, contact the National Paralympic Coach, Bob.Forth@usashooting.org.

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These spectators at the London Olympics 10m Air Rifle Men final demonstrate the same kind of enthusiasm one would expect in any modern sport. Shooting's 'dark ages' are over--young shooters today must be trained to concentrate even when there is lots of noise on the range.

Should we maintain silence in our ranges so athletes can concentrate?

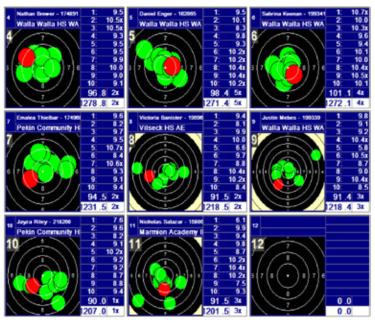
NO, match officials and coaches that try to keep their ranges silent are doing their athletes a big disservice. Furthermore, silent ranges are not modern sports venues where parents and spectators can enjoy themselves. 3PAR rules explicitly say "spectators and media must be allowed to speak in normal tones" and that spectators should even "be allowed to cheer" (7.18). Normal conversation on the range is always OK as long as someone does not start shouting or deliberately disturb an athlete. The coach's responsibility is to prepare athletes for conversations and noise that will take place on competition ranges by allowing this in practice. Athletes who are taught that spectator enthusiasm is part of sports will soon get used to this. Besides, if an athlete advances to higher competitions they will have to perform in lots of noise. Anyone who ever witnessed an Olympic shooting final knows that the noise there can be deafening.

How big is the 3PAR competition program?

The answer: VERY BIG. Athletes need local and regional matches to develop competition skills and

gain confidence as well as national competitions to provide ultimate tests for their skills. One of the great benefits of 3PAR shooting is that it offers many top-class competition opportunities, all conducted according to one national standard rulebook. The program includes:

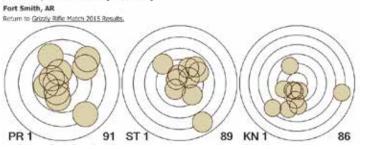
- Sanctioned and non-sanctioned matches of all types, with approximately 1,500 matches per year.
- CMP 3PAR Championship, with a national postal and state, regional and national championships.
- Junior Olympic 3PAR Championship, with state and national championships.
- **JROTC Championships**, with four national postals (8,000 competitors), four service championships at three locations and a national championship.
- American Legion Junior Air Rifle Championship, with two national postals and a national championship.
- U. S. Army Junior Championship, with regional qualifying competitions coordinated through the Orion Results Center and a national championship.
- 4-H Shooting Sports, with numerous state championships and a National Invitational.
- Daisy Air Rifle Championship, with a national competition offered in conjunction with the Daisy BB Gun Championship.



Live target images from CMP Ranges allow fans to track athlete scores.



FLOOD, Samantha (174705)



3PAR matches are supported with an impressive award and reward system. In addition to traditional medals and trophies, many teams qualify to receive travel funding, two athletes from the Junior Olympic Championship advance to the National Junior Team, cash prizes and several thousand dollars in college scholarships are awarded and Larry and Brenda Potterfield of the MidwayUSA Foundation provides over \$600,000 in endowment funding for winning teams.

Should we try to attract spectators and fans? How?

YES. Attracting spectators and fans is another way to make junior shooting competitions more meaningful. Every 3PAR match should do what it can to welcome spectators, starting with simple actions like placing chairs at the back of the range. Good lighting over the firing line (at least 1000 lux) will ensure that athletes can be seen and photographed (but don't permit flash). Few 3PAR ranges have the luxury of electronic scoring to instantly display shots and scores for spectators, but the key to attracting spectators is still bringing the audience into the competition. There should be an active scoreboard for spectators. The Orion system provides an electronic scoreboard (leaderboard) that scrolls through the top team and individual scores. With a spare computer and projector or LED TV panel, updated scores and rankings can be seen throughout the match.

A promising way to promote fan growth is by posting scores and rankings on Internet websites. The CMP, NRA, USA Shooting and the Orion Results Center are implementing innovative ways to make match results available to fans via the Internet. The CMP posts live electronic target images (http://thecmp.org/air/cmp-marksmanship-centers/live-target-images/). The Orion Results Center (http://www.orionresults.com/team/Home.aspx) has been remarkably successful in posting live scores and target images on the Internet during competitions and in tracking fan responses. Orion results are scored and uploaded to dedicated webpages as soon as targets arrive from the firing line.

Orion tracks visitors to its match results postings and its viewer statistics provide evidence that junior shooting can attract fans. In the 12-month period ending on 30 June 2014, the Orion Results Center recorded

The Orion Results Center displays ranked results and an opportunity to view athletes' shot groups on a webpage dedicated to each match sponsor. Clicking on an athlete's name will display shot groups and scores.

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Finals bring spectators and lots of pressure to shooting, but junior athletes have repeatedly shown that they can handle the pressure and enjoy shooting in finals.

35,000 unique viewers who logged more than 100,000 sessions with over one million page views. Another key feature of the Orion Results Center is that it allows individual athletes to post their scores and targets on Facebook® or send them via Twitter®. Social media is becoming a new way junior shooters can reach fans and friends who cannot come to the ranges to watch them.

What are Finals? Should we have Finals in our Matches?

Shooting developed finals as a way to become more exciting for spectators and media, as well as for the athletes. In finals, the top eight athletes fire ten additional shots with qualification and final scores being added to determine medal winners. Major international competitions have had finals since 1986 and finals have been included in major 3PAR competitions for 20 years. In 2013, international finals were taken one big step further with finalists starting at zero (qualification scores are not carried forward) and firing 20 to 45 shots in the final. The International Olympic Committee is pushing all Olympic sports to move in this direction so the new start-from-zero finals are here to stay for athletes who rise to the highest levels in national and international competitions.

3PAR Rules have not yet adopted start-fromzero finals, but the use of finals that combine the top eight qualification scores with finals scores to determine medal winners is done in almost all major 3PAR competitions. Comments from junior athletes affirm that they like shooting finals and that winning in a final where there are dozens or even hundreds of spectators is far more meaningful than looking at a posted results list to see who won. For athletes who want to pursue the Olympic Path, giving them opportunities to shoot finals is absolutely essential. For most 3PAR athletes, having opportunities to qualify for and compete in finals makes those competitions more meaningful.

YES, 3PAR competitions should include finals whenever practical. The *National Standard Rules* (Rule 10.0) describe several options for conducting finals when using paper targets. The Orion Scoring System even offers a way to conduct the newer start-from-zero finals while shooting on paper targets.

About the Author

Gary Anderson, Director of Civilian Marksmanship Emeritus, retired as the full-time CMP Director at the close of 2009. He continues to work with CMP as the senior marksmanship instructor. During his remarkable career, he won two Olympic gold medals, seven World Championships and 16 National Championships. He is a Vice President of the International Shooting Sports Federation, the President of USA Shooting, a former Nebraska State Senator and was one of the two Olympic Games Technical Delegates for Shooting during the 2012 Olympic Games in London.

In June, 2012, the International Olympic Committee awarded Gary Anderson the IOC's highest honor, the Olympic Order, "for

outstanding services to the Olympic Movement."

In 2014, the CMP expanded their world-class air gun center at Camp Perry and renamed the facility the Gary Anderson CMP Competition Center, in honor of Anderson's contribution to the organization and the marksmanship community.

