

LESSON 9: PRACTICE AND SKILL DEVELOPMENT

PURPOSE

This lesson will help you understand how marksmanship skill is developed through study, analysis, and practice.



development
practice
shot plan
skills

INTRODUCTION

In previous lessons you learned the basic elements of target rifle shooting. These basics included safety; equipment; the standing, prone, and kneeling positions; the technique of firing shots; sight adjustment; and scoring. This lesson shows you how to put all those basics together so that you can play a complete game or, as it is called in shooting, fire a complete course of fire.

This lesson also begins to teach you some important ways to become a better shooter. When you reach the point where you can fire a complete course of fire, you are also ready to learn how to improve your shooting. The most effective ways to improve target rifle scores that will be covered in this chapter are **practice**, keeping a shooting diary, using a **shot plan**, and learning to relax and balance your position before each shot.

TARGET RIFLE RULES

The most common three-position air rifle competition event for JROTC and high school rifle teams is the 3x10 event. 3x10 means firing ten record shots in each of the three positions, prone, standing and kneeling. JROTC rifle team members also sometimes fire 3x20 events (20 shots in each position) in major competitions. The 3x10 and 3x20 events are sometimes also called courses of fire.

The standard instructional technique for teaching every complex sport is to break the game down into different individual **skills** and then to teach those separate skills one at a time. A golfer learns stance, grip and various stages of the swing before putting it all together. The same approach is used in shooting. Completing a 3x10 shooting event means putting everything you have learned so far together, to play a complete game of target rifle shooting.

When you are ready to play a complete game in any sport, there are special rules for that sport. Sport rules provide order and consistency for competitions and ensure fair play among all participants. The rules that govern three-position air rifle shooting are called the *National Standard Three-Position Air Rifle Rules*. A National Three-Position Air Rifle Council establishes these rules. The Council includes representatives of almost all major shooting sports organizations and the military cadet commands (Army, Navy and Marine Corps JROTC).

This rulebook is often called the “Blue Book.” A copy of the National Standard Rules should be available at your JROTC unit. If a copy is not available there or if you want to print out a copy of your own, check the Civilian Marksmanship Program Web site at <http://www.odcmp.com/Forms/3posair2001.pdf>

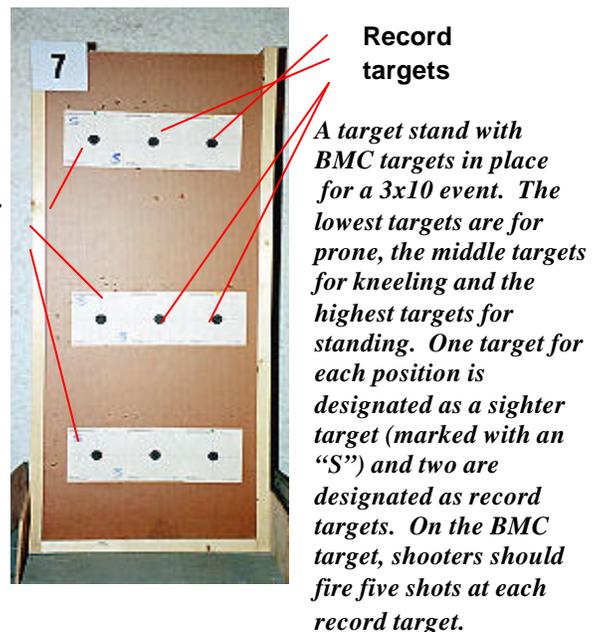
A complete copy of the National Standard Rules is posted at that Web site.

In competitions, the 3x10 event has a specific order for the positions to be fired as well as time limits for preparation before the event, for each of the positions, and for changing from one position to the next. The chart shows how this event is conducted.

| Individual 3x10 Event | Time Limit |
|-----------------------|------------|
| Preparation period | 10 minutes |
| 10 shots prone | 15 minutes |
| Change-over period | 5 minutes |
| 10 shots standing | 20 minutes |
| Change-over period | 5 minutes |
| 10 shots kneeling | 15 minutes |

When you fire a shooting event according to competition rules, there are some rules you will especially need to know.

- Time Limits.** In competitions, there are time limits for each position. In the 3x10 event, competitors have 15 minutes to fire 10 shots prone, 20 minutes for 10 shots standing, and 15 minutes for 10 shots kneeling. The time limit includes the time for practice or sighting shots that must be fired before the 10 record shots for each position. No shots may be fired after a time limit expires.
- Preparation Period.** Shooters must be given ten minutes before the start of the first position, prone, to set up their equipment, and prepare to fire. Shooters should get into position during this period and dry fire to prepare for shooting. Dry firing is permitted during preparation periods. However, it is not permitted to charge air rifles with gas, discharge gas or load and fire a shot during preparation periods.
- Changeover Periods.** Shooters are given five minutes between positions to change their equipment and prepare for the next position. Shooters may get into the next position and dry fire during the changeover period.
- Team Events.** Teams normally consist of four shooters. Team members must be named before the competition starts. Team scores are calculated by adding the individual scores of the four team members.
- Sighters and Record Shots.** The targets that each shooter fires at are designated as either sighter or record targets. Shots fired on sighter targets are for practice. Most shooters fire several sighting shots before they start for record, to determine whether sight adjustments are necessary. Sighting shots also serve as warm-up shots. Every shot fired on a record target counts in the shooter's score. Once a shooter begins to fire record shots it is not permitted to return to the sighter or practice target.





The 3x10 course of fire begins with firing sighters and 10 record shots in the prone position. It continues with firing in the standing and kneeling positions.

The first time you fire a 3x10 course of fire will probably be in a practice setting where the instructor will not enforce time limits. By the end of the marksmanship course, however, you should have an opportunity to fire a 3x10 event where official time limits are enforced. When you do this, the procedure you follow should include these steps.

- After the instructor or range officer calls you to the firing line and starts the preparation period or gives instructions to get ready, lay out your shooting mat and rifle and prepare to fire in the prone position.
- Get into the prone position and align your position on the prone sighter target. Dry fire several times to check your position and prepare to fire. Dry firing is permitted during the preparation period.
- After the commands **LOAD, START**, are given, fire three or four practice shots on your sighter target. If you have a spotting scope or a pair of binoculars available to see the location of your shots, check to see if your shot group is centered or if sight adjustments are required. If you do not have an individual spotting scope or binoculars, your instructor may have one. Coaching assistance is permitted during sighting shots in most competitions. The instructor or coach can check the sighting targets of the shooters on the firing line to advise them if sight adjustments are needed.
- After firing few sighting shots to be sure your rifle is zeroed, “go for record” by shifting to your first record target. You may need to move your whole body slightly to be sure your natural point of aim is aligned on the new target. Fire five shots on each record target. Shift your position to the second record target and fire five shots on it.
- When you finish 10 record shots in the prone position, open your rifle action and lay it on the mat. You may get out of position and move to the rear of the firing line after the instructor has inspected your rifle to be sure the action is open.
- When all cadets complete ten record shots in the prone position, you will be instructed to change targets and prepare for firing in the standing position.
- After the commands **LOAD, START**, are given, you should again fire a few sighting shots and five record shots in each target from the standing position.
- The process of changing from standing to the kneeling position should be the same as it was from prone to standing. After you are in the kneeling position, the commands **LOAD, START**, will be given for you to begin firing in this position.
- After all 30 record shots are fired, you will have an opportunity to score your targets and post scores on a chart or score sheet.

PRACTICE - THE KEY TO IMPROVEMENT

Shooting is a skill sport where natural ability has little to do with ultimate success. Fortunately in shooting, how much a person practices, is the most important determinant in how well that person does. Shooting is also a sport where your first scores on targets are not a good way to predict how well you will ultimately do. The best way to predict how well someone will do in shooting, is again how much they are willing to practice. A shooter with the motivation to practice and work hard will almost always do well.



Two JROTC rifle team members in a practice session. They are using precision air rifles and shooting jackets that are permitted in many school competitions. Practices should be as frequent as possible and stress work in the standing and kneeling positions.

If you want to improve in rifle shooting, take advantage of the practice opportunities that your instructor makes available to you. When you have a chance to practice, spend as much time on the firing line actually shooting as you can. There are some important training principles that also will make your practices more productive.

- **Frequency.** The more times each week that you can practice, the better you will become.
- **Difficulty.** Spend more time on the most difficult positions, standing and kneeling.
- **Problem Solving.** When you are having a special problem with some phase of your shooting, spend extra time trying to solve the problem. Ask your instructor to help you find books or other resources that will give you information about how to solve the problem.
- **Goals.** Set short-term goals for your practice. For example, you may set a goal of shooting all of your shots inside the 8 ring on the BMC target or making a smooth trigger release on all your shots in a 3x10 course or having the left arm completely relaxed on every shot. Goals can also be focused on scores or averages if they are realistic and attainable.

KEEPING A SHOOTING DIARY

One of the best ways to advance in target shooting is to keep a Shooting Diary. The diary is a written record of all practice and competition firing. Keeping a diary gives you an opportunity to write down things that you learn or to identify problems that you need to solve in future practices. A diary is one of the best ways to analyze your shooting so that you can reinforce what you are doing right and correct what you are doing wrong.

| | | | | | |
|--|-------------------|---------------------|-----------------|--------------------------------|----------------------|
| Date | | Location | | Rifle/Ammunition: | Training/Competition |
| Scores -Prone | Scores -Standing | Scores -Kneeling | Totals | Sight Changes | |
| | | | | KN to PR +/- _____ L/R _____ | |
| | | | | PR to ST +/- _____ L/R _____ | |
| | | | | ST to KN +/- _____ L/R _____ | |
| What I Learned | | | | | |
| Problems to Solve | | | | | |
| Date | | Location | | Rifle/Ammunition: | Training/Competition |
| 15 October 01 | | School Range | | Daisy 853, reg. pellets | Practice |
| Scores -Prone | Scores -Standing | Scores -Kneeling | Totals | Sight Changes | |
| 92 | 78, 86, 83 | 91, 86 | Practice | KN to PR +/- <u> +4 </u> L/R | |
| | | | | <u> L2 </u> | |
| | | | | PR to ST +/- <u> -2 </u> L/R | |
| | | | | <u> R3 </u> | |
| | | | | ST to KN +/- <u> -2 </u> L/R | |
| | | | | <u> L1 </u> | |
| What I Learned | | | | | |
| <i>My standing scores got a lot better after my first ten shots when I started checking my balance before each shot.</i> | | | | | |
| <i>My first kneeling was very good for me—I concentrated on keeping the bull inside the front ring—I stopped paying attention to that on my second 10 and my score went down.</i> | | | | | |
| Problems to Solve | | | | | |
| <i>In prone, when I get back into position after loading I am not getting my left arm relaxed—I have to learn to do that.</i> | | | | | |
| <i>In kneeling, I do much better when I really concentrate on my sight picture—I must do that on every kneeling shot.</i> | | | | | |
| <i>I still have quite a bit of body movement in standing—I think I can stop some of that by checking my balance before every shot.</i> | | | | | |

This is a Shooting Diary page with one part left blank and one part filled out, to show how information is kept in a Shooting Diary.

Copies of blank Shooting Diary pages will be provided to you during the marksmanship course. Entries in your Shooting Diary should include:

- Data about the firing activity including date, rifle and pellets used, etc.
- Scores you fired in each position.
- Sight changes you make (or should have made) when you fire in each position (+/- means clicks up or down, L/R means clicks left or right).
- Write down at least one thing you learned or did well during your firing exercise.
- Write down at least one problem you encountered that you would like to correct the next time you practice.

DEVELOPING A SHOT PLAN

One of the keys to marksmanship success is consistency. Consistency is doing exactly the same thing at the same time each time you fire a shot. The best way to **develop** consistency is to have a “**shot plan**.” The shot plan is simply a step-by-step outline of the different things that you do to fire a shot. Using the same techniques each time you fire a shot is so important in learning target skills, that even beginner shooters should have a shot plan.

It is easy to prepare a plan. Think about each step that you follow when firing a shot, from loading the rifle, to placing it in position, to the details of your shot technique. Decide how you do each of those steps. Write that action down in your plan.

Once you have a shot plan, it is important to follow your plan on every shot you fire. The more closely you follow your plan, the more effective the plan will be in helping you develop consistency that leads to improved scores.



Developing a personal shot plan means starting with how you load the rifle and then determining exactly how you perform each step in sequence in firing a shot. Shot plans work wonders when they are followed for each shot fired.

| PERSONAL SHOT PLAN | |
|-----------------------------|---|
| SHOT PLAN STEP | DESCRIPTION OF HOW THIS STEP IS DONE |
| Loading | <i>Use left hand to open and close cocking lever. Use right hand to take pellet from pocket, load and close bolt.</i> |
| Placing rifle in position | <i>Lift rifle to shoulder, but butt plate on arm-shoulder joint. Hold rifle with right hand, form fist with left hand, put fist under cocking handle, get left elbow under rifle and drop arm and rifle onto side.</i> |
| Align rifle with target | <i>Start with front sight above target and lower rifle down to bull's-eye.</i> |
| Pre-shot checks | <i>Check to be sure left arm relaxes and is directly under rifle.</i> <i>Check balance—weight should be evenly spread on both feet.</i> |
| Breathing | <i>After checks, take two more breaths, let it out and hold.</i> |
| Aiming | <i>As soon as I start to hold my breath, try to center the bull's-eye in the front ring.</i> |
| Starting to squeeze trigger | <i>Take up the trigger slack when I start to aim. Put about half of the pressure on the trigger immediately.</i> |
| Hold control | <i>Concentrate on the sight picture, try to hold the bull inside the front sight ring as much as possible.</i> |
| Completing trigger squeeze | <i>When the sight picture is centered, add another step of pressure to the trigger. When it is centered again, add another step. The shot should go after two or three steps.</i> |

The “Personal Shot Plan”, illustrated here, demonstrates a shot plan for a beginner shooter who uses a pneumatic air rifle and sporter class equipment. Normally a separate plan is prepared for each shooting position. (This plan is for the standing position.)

The key to having an effective shot plan is identifying how you complete each of the steps listed. By writing them down you have a plan that you can now follow for each shot that you fire. There is no perfect shot plan for every shooter. Each shooter will have different ways of doing each of these steps. It is not as important that you do something a certain way as it is to have a plan that assures that you do it your way every time you fire a shot.

PRE-SHOT ROUTINE

To consistently fire accurate shots, one additional action is necessary. To do your best on every shot, you also must learn to properly prepare for each shot so that your body performs its very best in holding the rifle steady. For your body to hold the rifle as steady and well controlled as possible, it must be:

1. **Balanced**, with the body-rifle system centered as perfectly as possible over the support points for the position.
2. **Relaxed**, with only the minimum muscle tension necessary to hold the rifle being used.

The best way to assure that your body is relaxed and balanced when you fire each shot, is to perform a simple pre-shot check before each shot. This should be done after the rifle is placed in position and before you start to aim at the target.

You may have noticed that in the Personal Shot Plan chart you just looked at, that there was a blank for “pre-shot checks.” To make a pre-shot check, just take a few extra seconds after aligning the rifle with the target to complete these steps.

1. As you bring the rifle down to the target, pause **BEFORE** beginning to aim. The illustrations at the end of this lesson show how two champion shooters who competed in the 2000 Olympic Games, pause to make pre-shot checks before they start to aim.
2. The first check should be for **balance**. In the standing position, take a few seconds to think about how the weight of the body and rifle is distributed on the feet. The weight should be balanced equally between the feet (left-right balance) and between the balls and heels of the feet (forward-rearward balance). In the kneeling position, the weight of the body and rifle should be balanced above the right heel on the kneeling roll and the left heel that supports the weight of the arm and rifle.
3. The second check is to make sure the body is **relaxed**. Do this by taking two or three breaths. Each time you exhale, let the muscles in your body relax or let go, especially the muscles in your support (left) arm. Do not start to aim and fire the shot until you feel calm and relaxed.
4. When your shot plan is written out, it should identify how you check your balance and relaxation before you start to aim and fire.

CONCLUSION

This lesson has prepared you to fire a 3x10 event. Now you know how to play a complete game of three-position air rifle target shooting. This lesson also provided your first insights into how to improve your skills and scores as a target shooter. If you remain active in target shooting, you will discover that the challenge of becoming a better target shooter is a quest that takes many years of training, where you continually discover new ways to improve. Attaining excellence in all sports requires that kind of effort, but it is especially important in shooting.





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