

Shooting Clinic, Alaska Biathlon – Anchorage

7 July 2009

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Session 12: Review Topics, Ski-Shoot Transition

A. Review

1. Biathlon Training and Biathlon Racing

- The same amount of effort should be devoted to practice sessions as you do for races so that when you get in a race situation it is no different than the procedures you've been practicing during your training sessions; you should not define any of your biathlon training as "just practicing," for to do that almost assures that you will not put out the effort required to obtain full value from the time you spend at the range or other training venues,

- Attitude is important in all aspects of the sport of biathlon -- when you come to the range or other training venue your attitude should say 'I'm here to learn, to improve my techniques in both shooting and skiing'; it should be the same whether you are practicing or racing,

- Biathlon training with the goal of rising to higher levels, like that for other sports, is serious business; athletes need to come to training sessions willing to undertake serious preparation and ready to shoot (and ski) according to coach-recommended procedures, rather than just stopping by to shoot up some ammunition in the hope that doing so will make them a better shot and a better biathlete,

- As in other sports, at times it may seem difficult to relate specific drills you are asked to perform and the effort you are expending in current training sessions to future success, so it is important to keep in mind that all the biathletes competing at higher levels went through the same process to get there – keep your mind and heart in the game whether training or competing, and remember to encourage your fellow athletes!

2. Training

- Making sure you correctly do each element of the pre-shooting, shooting, and post-shooting process each time you practice will result in them becoming effective and second nature,

- Early in this process you will need to depend on others' expertise in suggesting how to accomplish each step of the shooting and competition processes; during the later stages, after each step in each process has become automatic, you can try modifications of various aspects of the process (position, breathing, etc.) that don't feel quite right; record changes made and why in your shooting diary, and any effect you think they had,

- Dry firing each day is the easiest and quickest method for achieving good results on the firing line,

- Remember to structure your training program weekly and seasonally according to some logical model: participants in formal training programs in Anchorage will need to add biathlon

elements to the model that the program uses; athletes not enrolled in a formal program can get ideas from coaches, athletes who do participate in programs, or the model presented in the manual for Bill Meyer's 2008 USBA biathlon clinic.

B. Transition

1. Physiological and Mental Aspects

- It is important to minimize the effect of intense skiing physiology on shooting – by the time you arrive at your shooting position you need to have slowed your HR and breathing somewhat to the physiology (still elevated) that you have learned through practice still will allow accurate shooting (it's a good idea to continue breathing deeply as you approach to blow off CO₂ and take in as much O₂ as possible),

- However, you should slow only enough to get into the upper end of the physiological zone where you typically hit most or all the targets so you don't spend an excessive amount of time in the slowing mode since this will increase your overall race time; this means you still will have a relatively high heart rate (use a heart rate monitor) while shooting,

- As you slow down from your race lap where your heart was enlarged and beating very fast to provide a large volume of blood and O₂ to the body tissues, and approach the range and your shooting point, it still is somewhat enlarged and still providing good volume pumped per contraction, so there is a window of a few minutes during which the tissues still are well supplied with O₂ even though the heart rate has slowed to a level where it does not affect your vision, and thus your sight picture, significantly,

- You should determine the approximate distance from the range where your physiological transition from skiing to shooting should begin, and then practice the complete procedure required to accomplish this so it becomes second nature; give yourself enough time/distance to accomplish your transition, you can tighten it later on if that doesn't cause your hit percentage to decrease,

- It may be useful for you to pick a landmark where this process should begin so you don't have to think about it; this is easy at your home venue but would need to be determined when you race at other venues outside Anchorage; or just depend on a general feel for the distance,

- Mental transition from skiing to shooting also is necessary; for example, from thinking about when and where to push harder on the race course to a) slowing your physiology as you approach the range, b) checking the wind flags, c) picking a shooting point as you ski along the ramp, and d) getting into the proper mental zone so you automatically accomplish the basic steps for each shot,

- The entire process from adjusting your physiology and mental preparation as you approach the range and your shooting point on the range; needs to be practiced first at an easy no-stress level, then transitioned to your race-pace level,

2. Process Summary

- Deceleration: slowing your pace as you approach the range,

- Breathing is slower and deeper,

- Remove pole grip attachments, open snow covers (optional), and expose your trigger finger (if you have a slit in your glove) as you ski along the shooting ramp to your firing point,

- You should try to choose a firing point as close to where you zeroed as possible unless it is a race format where points (at least for the first bout of shooting) are pre-determined by the rules or indicated by a range official (pursuit, mass start, relay); when the range is divided into right half for prone and left half for standing, you'll probably be able to shoot near your zero point only half the time unless by chance you zeroed in the center of the range,

- You cannot begin to remove the rifle until you are fully stopped on the mat and have dropped your poles,

- Place the poles either between your feet, so you will be lying on them in the prone position, or next to and parallel to the right edge of the mat (right-handed shooter), not extending over the firing line; in this position they might get kicked away from the mat by a ski -- if this occurs you cannot take action to retrieve poles unless your rifle is unloaded with the bolt open and loaded magazine removed; it is more efficient to wait until finished shooting, in which case the rifle can have a shell casing in the chamber, the bolt closed, and an empty magazine in the receiver just as on the race course (this depends on the circumstances – you can wait to retrieve a pole only if it does not constitute a hazard to or interfere with any other competitor,

- Just before or while you get into position, check the wind flags and determine if you need to make any sight corrections, either from your no-wind zero setting or from the settings you made during zeroing; make the appropriate sight adjustments,

- To avoid the chance of crossfire, when you are in position check the number on the large sign above the target and make sure it is the same as those on the firing line signs marking the shooting lane you are occupying,

- Apply the fundamental steps to each of the five shots,

- Pause for your usual ½-1 sec follow-through after the 5th shot, take the windage adjustments off your sight when you are using the no-wind zero setting so you don't have to try to remember what they were when you return for the next shooting bout if the wind is different (you will need to evaluate the wind conditions when you return for your next shooting bout),

3. Shoot-Ski Transition

- Don't spend time thinking about the shooting bout just completed,

- Pop out of position, close snow covers, mount the rifle on your back, pick up the poles, ski along the ramp while re-attaching the pole grips, and V-2 out of the stadium (or did you miss a target, which means a detour onto the penalty loop first?),

C. Exercise

1. To practice your transition procedure ski/run a few 100 m away from the range, then reverse and return at a moderate breathing/HR pace (e.g., basic endurance to threshold),

- As you approach the range, decrease your speed to fast walk/moderate ski to slow the HR and breathing (deepen the breathing); mentally go through the range process and shooting steps so you are prepared to shoot; with repetition, this is automatic and won't require conscious thought,

- Each shooting session, do four prone bouts and four standing bouts.