What is the Point of Natural Point of Aim?

July 1, 2021 by [admin](https://peaksmart.co.uk/author/andrewnimmo_yzkr0i7l/)

Natural point of aim is something that is often overlooked, but getting it right will do great things to improve your hold. After getting a stable standing position this is probably the next biggest thing you can improve to get a better hold.

Your natural point of aim (NPA), sometimes referred to as zero point, is where your rifle will point without any input from you. It is a combination of your balanced, low tension standing position and the set-up of your rifle. If you do the same thing at the firing point, then the rifle will always point to the same place. The trick is to get that place to be the centre of the 10-ring… and then doing it every time.

How do I check my natural point of aim?

Checking your natural point of aim is quite a simple process, but it requires you to be really honest about how your position feels. If you have more tension than normal this will affect your NPA. Don’t check your vertical NPA until you feel settled.

* Pick the rifle off the stand go through the normal routine up to the point where your target approach is about to start.
* Move where your eyes are looking (don’t close them) without moving your head. Find something to focus on that is in your field of view. This could be the target next to you, the top of your stand or something on the bench.
* Let the rifle approach the target and settle into a hold without looking through the sights.
* When you feel it has settled in what should be your normal hold area, glance back through the sights enough that you can tell where the rifle is pointing.
* Replace the rifle on the stand.

For best results, maybe after you have broken position, you should repeat this process 3-5 times to give you the best estimate of where the rifle is pointing.

 How do I adjust my natural point of aim?

It is probably easier to think of adjusting your NPA as two separate components, namely left/right and up/down. The basic rule for adjustment is big changes will happen on the rifle, while small tweaks will be done with the body.

Horizontal Adjustment

Your horizontal adjustment is usually the easiest one. Assuming you are standing close to the centre line, small movements left or rifle with both feet will move your NPA by similar amounts on the target. If you find while stood on the centreline you a huge distance from the target this method may put you well off the centreline. This is usually an indication that something is wrong in the way you are standing.

Vertical adjustment

The first job here is to make sure the rifle is set up correctly. The main things that will affect your vertical natural point of aim will be the palm shelf and the butt plate height.

The palm shelf is usually more difficult to adjust and then adjusts in big steps. This is probably the first thing to look at in an early set up and can get some big movements in your NPA. The butt plate can usually be finely adjusted to the millimetre, and this is where you will fine tune your settings.

Small adjustments can be achieved using your feet. Moving your feet closer together or further apart will make small adjustments in the natural point of aim.

How often should I check my natural point of aim is still pointing at the 10-ring?

Every time you go to a different range you should be prepared to adjust your rifle settings. All targets are supposed to be the same height, but this is not always true. The best time to do the checking and adjusting (if required) is during free training or PET. For some competitions, without a training period, you may even need to do this in set up time before your match.

Even if you have confirmed it in pre-event training you should always check your natural point of aim when you build your position pre-match. Competition nerves might add a little tension into your position which may well move your natural point of aim. In addition, every time you break position for any reason you should build in the check when you come back to the firing point.

You should look to check things during the match too, even if you feel nothing has moved. Fatigue can cause our position to sink during a shoot. Tendons stretch over time, which would also cause your NPA to move. You could become more relaxed as the start of match nerves subside, or you could become more tense because you know you are doing well. Get into the habit of checking at regular intervals during a shoot so you can catch any changes before they become issues.

 Training session

How much effect does movement have on my natural point of aim?

A simple starting point to help you find out what effect adjustments have. We are only going to be concerned with vertical movement in this session as that is most likely to be an issue. We will start off with the butt plate.

* Get used to checking your natural point of aim based on the instructions above.
* When you are happy with the process. Make a note of where you think your NPA is relative to a target centre.
* Move your butt plate up by 1cm. Repeat the NPA check 5 times and then make a note of where you think your average NPA is.
* Move the butt plate 2cm down (1cm down to where it was and another 1cm down). Repeat the NPA check and mark down your new NPA.
* Are the gaps between the 3 points about the same? Do the form a straight line?
* Use this information to give you an idea of the effect of 1cm of movement in your butt plate.

And then follow up with your feet:

* Start with your feet in their normal position and find out a baseline natural point of aim.
* Move your feet about 3cm further apart and find your average NPA. Mark it in your notes.
* Move your feet back to where they normally are and then another 3cm closer together. Check your average NPA and mark it in your notes.
* Are the gaps between the 3 points about the same? Do the form a straight line?
* Did you feel any effect on your stability with your feet in a different place?

With both pieces of information, you can create a strategy for when to move your butt plate and when to move your feet. You will also an idea of how much movement is needed to adjust so you can quickly change things in a session or match.

Getting used to checking your natural point of aim when you set up.

In this drill you will not need to fire a shot.

* Set up on the firing point, check and adjust your position so that your average NPA is on the 10-ring.
* When you are happy with your NPA, break position.
* Repeat 20 times.

Firing with an natural point of aim check

This is a short drill to encourage you to be aware of your NPA.

* When you first set up do a full NPA check to get your average natural point of aim to coincide with the 10-ring.
* Fire 20 shots. On each shot you will complete an NPA check and adjust if required before you make the actual shot.
* Does your NPA change over time? How many times did you need to make an adjustment to keep your NPA consistently in the 10-ring?

