Minimum Arc of Movement

I have some good news and I have some bad news. Good news first: you’re alive and well, getting involved in the great sport of pistol shooting. Now the bad news: since you’re living, you will never be able to stand absolutely still. More to the point: you cannot stand still and hold your pistol motionless. Why? Well to name just a few reasons, your heart is pumping, you’re breathing (or wanting to breath), and your body is responding to a myriad of nerves firing throughout your body. Suffice it to say, there are a lot of important things happening inside of you and you can’t switch them off. As a result, when you look at your sights, you’ll see them moving in front of your target. This is known as the arc of movement. Your goal is to minimise this movement and adapt your shooting to it. Here are some things to remember about minimum arc of movement:

- You cannot force yourself to be motionless. Odds are that you will have the opposite effect. Accept the movement and shoot through it.
- Minimum movement is usually achieved shortly after raising the pistol and lasts less than 6 seconds. As such, you should train yourself to get the shot to break within 6 seconds of your raise (that is, once you’ve raised the pistol into the firing position, not from when you start your raise.) Holding longer and trying to become motionless is counter-productive. Once you lose the minimum arc of movement, it does not come back. As such, abort and try again.
- The movement that you see at the tip of your barrel isn’t all that much. In most cases, its range of movement would be within the black, and could possibly be within the 10 ring. While you should learn to reduce the arc of movement, having an arc of movement isn’t the worst thing. In this case, you’ll probably deliver a good shot, if you adhere to all of the other basics.
- More important than initially reducing your arc of movement is controlling how you respond to it. First, you must learn to keep the sights aligned as they float in front of the target. If you lose sight alignment, that error is multiplied many times over and you’ll get wild shots. If your sights are aligned, you’ll shoot within your arc of movement. If your sight alignment is poor, who knows where the shot will land!
- Similarly, knowing that your sight is floating, some people think “Pull the trigger as it crosses the area of aim.” Well, in theory that sounds good; but, in practice, it is very wrong. Pulling fast on the trigger as the sights move through the area of aim tends to destroy trigger control (resulting in pushing, pulling, snatching, jerking - you’ve heard them all) and disturb the alignment of the sights (here comes the error multiplier.) As a result, the shot tends not to land within your group. Accept that your pistol will move, let it float and shoot in an area. Increase the pressure on the trigger while the sights are in that area and maintain sight alignment. Your shots will group very nicely.
- You may perceive that the sight is moving a lot because your attention is on the target and not on the front sight. Look at the sights! Your concentration must always be on the front sight which will, in turn, make the target look like nothing more than a grey blob down range. This will reduce the perception of your sights moving all over the place.
- We know that you can’t force yourself to stand motionless. However, you can work on your stance to reduce body sway and you can look into ways to enhance your core stability. Furthermore, you can look into footwear and balance (equilibrium) training.

Achieving a minimum arc of movement takes work and confidence in yourself and your hold. You must accept that a little bit of movement is inevitable and okay. Don’t overreact to this movement and forget the critical basics of sight alignment and trigger control. You’ll be surprised at how well you can shoot!