

Ballistics Basics: Holding Or Dialing For Drop And Windage?

By Ryan Cleckner -February 13, 2018

There are two methods of correcting for elevation and windage when shooting at extended distances — holding or dialing. The choice is yours.

Some things to know about elevation and windage corrections and holding or dialing:

- You can compensate for elevation and windage two ways — holding or dialing.
- Holding for drop involves Kentucky windage — holding high to compensate.
- Its biggest plus is speed; there are new reticles that improve this method's accuracy.
- Dialing involves adjusting scope turrets to address bullet drop and wind.
- To start, it's best to dial for elevation and hold for wind.
- As you advance, you can hold for both.

If you've been following this column, you already know that the only two variables that affect the path of your bullet on the way to the target are [gravity](#) and [wind](#). Yes, there are [other variables](#) that also have an impact. However, they only change how much of an effect gravity and wind have.

Gravity causes your bullet to begin falling the moment it leaves the barrel, and wind can blow it off of its original path. So what? What do we do with that information?

We compensate for it!

To counter the effects of gravity, we aim higher. To offset the wind, we shoot "into the wind" so that the wind blows our bullet back into exactly where we want to hit.

You can compensate for elevation and windage — it figures that the horizontal correction for wind is called "windage" — two ways:

You can "hold" the reticle

You can "dial" the reticle

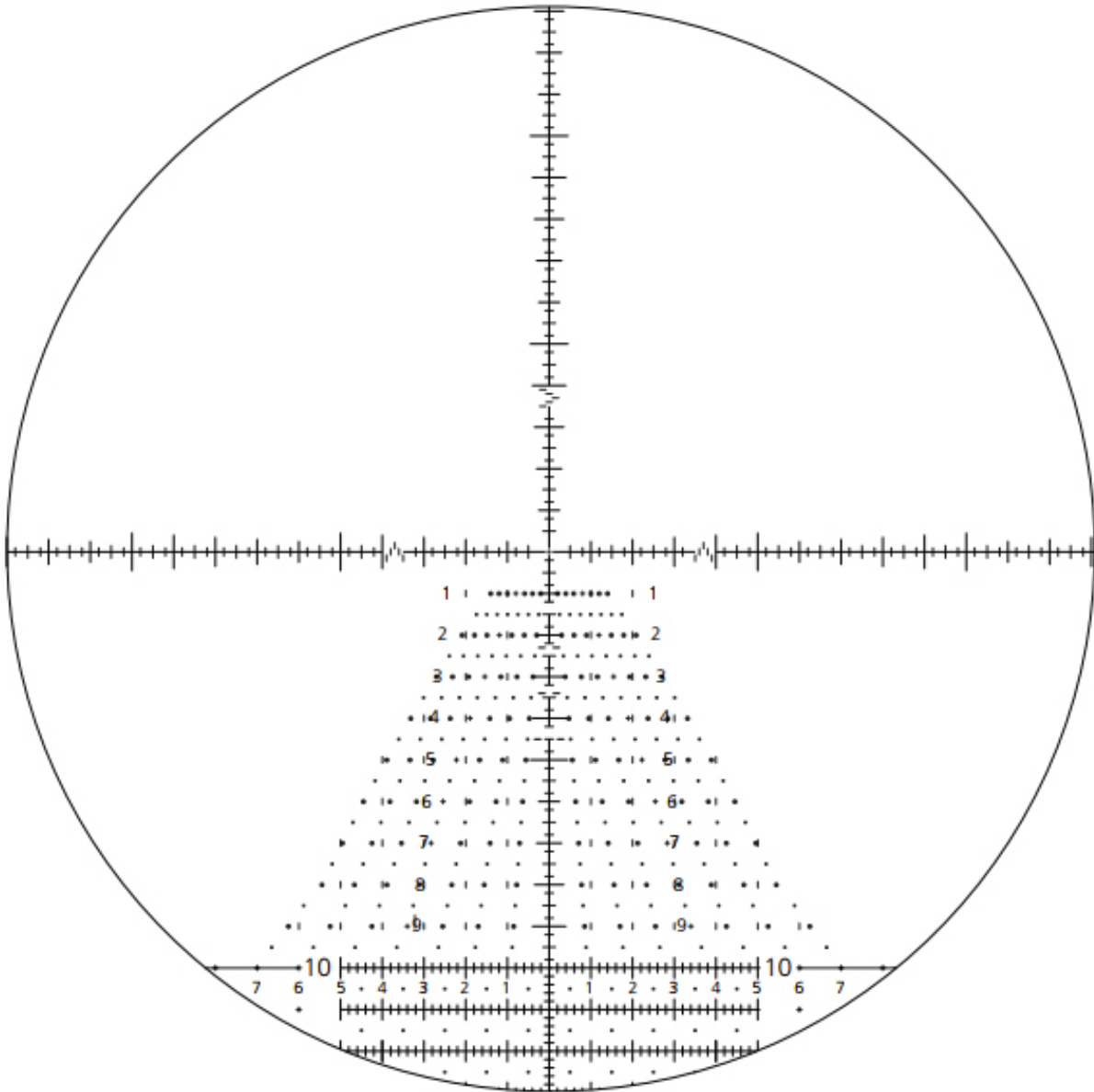
Thus begins the debate between holding or dialing.

The 'Holding' Technique

"Holding" the reticle, which is sometimes called "Kentucky windage," involves aiming higher than your target to allow the bullet to drop into the target and aiming to the left or right to compensate for the wind. There are pros and cons to this method.

The biggest benefit to holding is speed. It's much faster to aim at a new location than it is to adjust the turrets on your riflescope.

If you have a standard duplex reticle or simple crosshairs, the biggest downside to holding for both elevation and windage is that your target is now in the clear portion of your scope. This is a problem because I believe that one of the keys to successful long-range shooting involves focusing on the reticle instead of the target. Another problem with a standard reticle involves knowing exactly how much you're holding in either direction.



Even while using a reticle with measurement marks (a mil-dot reticle, for example), this is near impossible. Yes, you have precise marks for measuring your hold; however, you'll need to keep shifting your eye from the target to the horizontal and vertical portions of your reticle to ensure that you're holding the correct amount. This is OK for a quick shot, but it's a recipe for disaster if you're expecting accurate hits.

There are newer reticles that can help eliminate this problem. These reticles don't feature simple crosshairs. Instead, they have a series of gradually longer horizontal lines below the main reticle that allow a shooter to focus on the correct line for their elevation hold and also for their windage hold. The pattern of these lines has caused these types of reticles to be called "Christmas tree" reticles.

Another problem with holding is that many scopes with mil-dot reticles used to have adjustable turrets with MOA adjustments. This meant that you might have known your MOA adjustment for a certain target distance, but you now needed to convert from MOA to Mils to make that quick holdover shot.

Thankfully, riflescope manufacturers have figured out that shooters want measurement marks on their reticles in the same measurement system as their turrets. My personal favorite scopes, the Vortex Razor line, come in either MOA turrets with a MOA Christmas tree-style reticle, or in a matching Mil variety.

I learned on MOA and that's what my brain naturally thinks in first. If you're just starting out, go with Mils — you'll thank me later.

With these newer Christmas tree reticles, you don't just have the benefit of holding for both windage and elevation in precise measurements while still focusing on the reticle, you also no longer need to rely on the precision of the scope's turret adjustments. Previously, a large cost of the scope was due to how precisely (and consistently) it could adjust. With these new reticles, you could zero your rifle and then realistically never need to touch the turrets again!

The 'Dialing' Technique

The second method for compensating for wind and gravity in the holding or dialing debate is adjusting your turrets to move the reticle within the scope. I call this "dialing."

With a standard or a [mil-dot](#) reticle, I strongly recommend dialing only your elevation into the scope via the turrets. In other words, if you choose to dial for elevation adjustments you should still hold for windage adjustments.

This is for three reasons:

1. ☑Your elevation adjustment should stay consistent while shooting at a certain target
2. The wind often changes faster than you can stop, readjust and then get ready to shoot again
3. ☑You can quickly move from side to side along the horizontal reticle for windage and still focus on the reticle while shooting. This is because once you dial for elevation, the horizontal line of the reticle will be lined up with the target.

If I have the time, I still find myself dialing for elevation even with the newer Christmas tree-style reticles. Maybe it's an old habit that hasn't died, or maybe I like not having to worry about losing track of which elevation line I'm supposed to be using.

Where Should You Start?

So, here we go again. Is holding or dialing the proper course of action? Well, especially if you have a standard reticle with only one vertical and one horizontal line, you should learn by dialing your elevation and holding for your windage. It's most efficient.

Don't dial for wind! You likely won't have an accurate wind-hold as the wind changes, and you're setting yourself up to forget your currently dialed wind adjustment and miss the next shot completely.

This will help keep things simple and consistent as you shoot.

After you've mastered that, then you can graduate to holding for both windage and elevation. However, you really should have one of the newer Christmas tree-style reticles if you're going to hold for both.

And here's something I always teach my students — if you dial, turn your turrets back to the zero setting between targets (if you have time) and when you get off the rifle. Too often I see a new adjustment stacked on top of a forgotten prior adjustment.

That's about the gist of the holding or dialing debate. Ultimately, you'll have to make the choice.

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