
Scope Comparison

6-24 power Scope Shootout:

Athlon Argos, Hawke Airmax & Hawke Sidewinder 30 FFP

Sean Haggerty - April 1, 2018



Introduction

Recently I had the opportunity to compare 3 scopes that are popular (or soon to be) airgun scopes, each in with a magnification range of 6 - 24 power. While similar, each is a bit unique from the others, but all are well suited for use on airguns, as well as firearms. For some background as to why I am doing this comparison, here's a little history as I have stated on the AirgunNation.com forums.

For the past couple years, I've primarily been shooting a Rapid Air Weapon (RAW) HM1000x in .25 caliber, using a Hawke Sidewinder 30 with a SR-Pro reticle that I owned-until recently when I learned about the benefits of going with a first focal plane (FFP) scope after reading Long Range Shooting Handbook by Ryan M. Cleckner, where I saw the benefit of having the reticle units (MIL or MOA) the same as the adjustments on the turrets (MIL or MOA)-something my former Sidewinder 30 didn't have. After reading that, it seemed like absolute common sense to not mix units, so I picked up my first Athlon Argos (6-24x50) scope to try out-and was immediately hooked. After getting to know the Athlon Argos scope quite well, and enjoying it immensely, I decided to pick up a higher magnification version of the same scope (since it was on sale) so I purchased another Argos in 8-34x56 mm (when a 'flash sale' struck one of the major retailers) -which seemed to have better optical properties than the 6-24x50 scope in this review, but at the expense of the close focus being out at 15 yards vs the 10 yard min for the 6-24 x 50 scope. However, I recently parted with the higher magnification scope in order for my buddy to enjoy it on his new RAW-replacing his Hawke Airmax 30 scope (that is in this review). Thus I was then down to owning just the Athlon Argos 6-24x50 scope-so I put that back on my own RAW HM1000x (and immediately missed the higher magnification of the 8-34 scope!). About this same time, however, Hawke had announced the introduction of their very own FFP scope-and it came with consistent units between the reticle (MIL) and turrets (MIL) (finally!!!). So I waited several weeks until the new scopes finally hit the stores, and picked up one of the first ones available-which is also included in this comparison. Alas, I now had access to the 3 scopes in this review-if only for a very short time prior to sending off the Hawke Airmax 30 to its new owner.

With that brief background, let's begin the real comparison and dive into the nitty-gritty details of the various scopes...



Comparison Details

Overall size comparison:

In short, the newest Hawke Sidewinder FFP is the largest of the 3 scopes, with the longest overall length, the largest objective lens (at 56mm diameter), and the heaviest weight. It is not my intention to compare these scopes specs (the reader can do that all on their own by visiting web pages, etc), but rather to give subjective evaluations of each scopes pro's and con's when actually using them. Having said that, here's a photo of the 3 scopes, side by



side, that gives you the visual comparison that probably tells you all you need to know (Athlon Argos is on the bottom, Hawke Sidewinder FFP is in the middle, Hawke Airmax 30 is on the top).

Overall Construction, included features, etc.

A few features to note that are different between the scopes that may not jump out in the internet specs:

- The two Hawke scopes have smooth transitions on the outside of the scope body, with the newest FFP scope having the largest radii. The Athlon has hard edges with little to no radii. Visually this comes down to preference more than function-though I tend to like the look of the newest Hawke scope the best of the 3 scopes.
- The Hawke Airmax scope and the Athlon Argos scopes have illumination controls on the eyepiece end of the scope that houses the battery (accessible by a coin-style slot). The Athlon 'coin slot' seems to be pretty soft and almost always leaves light 'coin marks' when using a quarter to unscrew the cover-kind of annoying when trying to keep the appearance nice and new looking. A harder material would help solve this problem.
- The Hawke Sidewinder FFP has the illumination control and battery as part of the side focus mechanism-which I prefer between the two options.
- The two Hawke scopes include sun shades with the scopes-along with 4" side wheels for finer control of distance selection. The Athlon scope does not.
- The two Hawke scopes come with lockable turrets (the Sidewinder FFP being the much better design between the two). The Athlon Argos does not (you need to step up to the Helos lineup to get lockable turrets).
- The illumination options between the 3 scopes are very different:
 - The Hawke Airmax 30 scope has a continuous rheostat control for seamless dimming of a red (only) reticle. Perhaps it was due to a low battery, but the max brightness setting wasn't bright enough to view the reticle on a cloudy day. More on that below.
 - The Hawke Sidewinder FFP scope has 5 discrete settings-in two directions (like the other Sidewinder scopes) and offers either red or green illumination options. Details on brightness later-but this worked the best of the 3 scopes, in my opinion.
 - The Athlon scope has 11 levels of selectable brightness for a red (only) reticle. The entire reticle turns red when illuminated. Brightness details later.

Comparison method and notes

Before I begin, I want to make a few comments about how I compared the three scopes-in case someone sees a flaw in my method, and understands that this particular comparison was done with the scopes not mounted to any gun. Having said that, I do share insights from shooting both the Athlon Argos and the Hawke Sidewinder FFP scopes throughout the article. A few points:

- First: the scopes were not mounted within rings, or on a rifle for comparison. This was done simply because I only had one gun to use and wanted a fair comparison. Thus, I unmounted all the scopes, and rested them on a soft, but solid platform to allow me to align my eye optimally behind each scope for optimal assessment of the scope's characteristics.
- Second: the scopes were set side by side on a soft cushion (a pillow) set on top of my shooting table. During comparison, I set the active scope on a shooting back for extra elevation for viewing purposes.
- During assessments of parallax error, I tried my best to keep the scope stationary by elevating the pillow that supported the bag (that the scope was resting upon) by placing my hand under the pillow, and positioning the scope's line of sight where I needed it-allowing

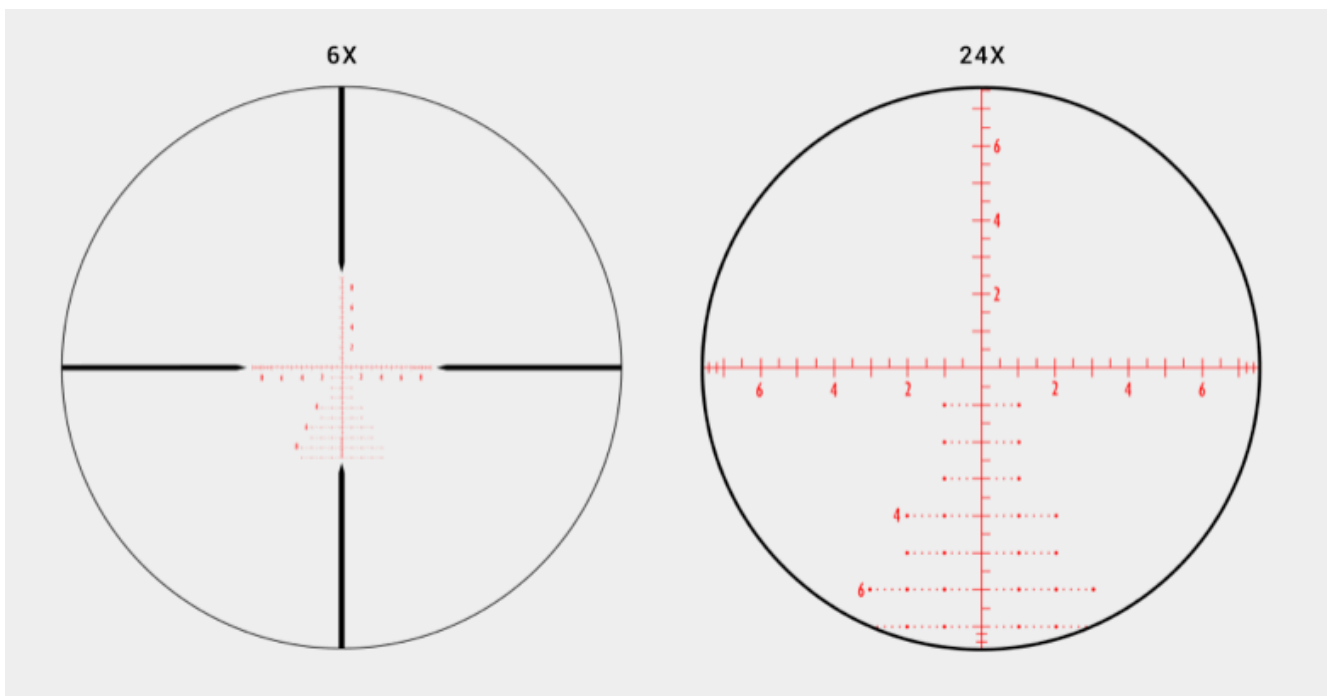
me to keep the scope steady and aimed, while moving only my eye position. It seemed to work pretty well.

- I did all my testing outdoors, and it was rather chilly at about 32F.

A few brief comments about each scope...

(**Note:** The technical specs for each scope are linked below by clicking on the title of each scope.)

The Athlon Argos 6-24 x 50mm scope is a first focal plane (FFP) scope with a reticle that changes size with zoom level so the 'MIL' marking is always correct with respect to the target size, regardless of magnification setting. Additionally, the scope that I own has the reticle and turrets both in Milliradian (MIL) units. The reticle looks like the following:



During my testing, I found that those views were pretty much spot on for what you can expect to see looking through the scope at the lowest and highest magnification settings. Personal opinion: I like this reticle the best of the three scopes, followed by the Airmax 30 AMX reticle second. For some reason, having the '2', '4', etc marked in plain view in the reticle just makes using it a touch quicker than counting crosses manually...

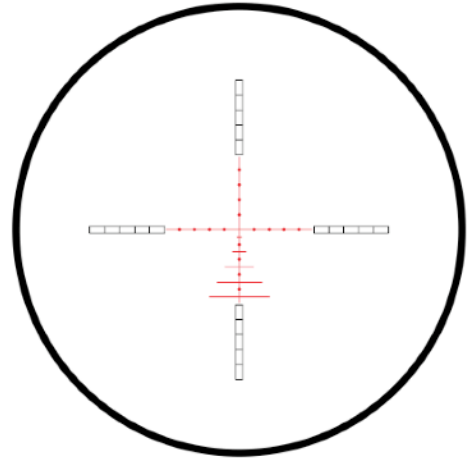
The Hawke Airmax 30 6-24 x 50mm scope is a second focal plane (SFP) scope with a reticle that remains the same size when the magnification level is changed so the 'MIL' marking is only 'correct' with respect to the target size, at a single magnification setting (in this case, that's at 10x, by design). Additionally, the scope that I reviewed has the reticle marked in MIL and turret adjustments in 1/4 MOA units. The reticle looks like the following:

AMX RETICLE

Both the AMX and AMX IR glass etched reticles are based on the spacing of a 10x Mil Dot. The AMX offers multiple aim points, useful when shooting air guns with loopy trajectories.

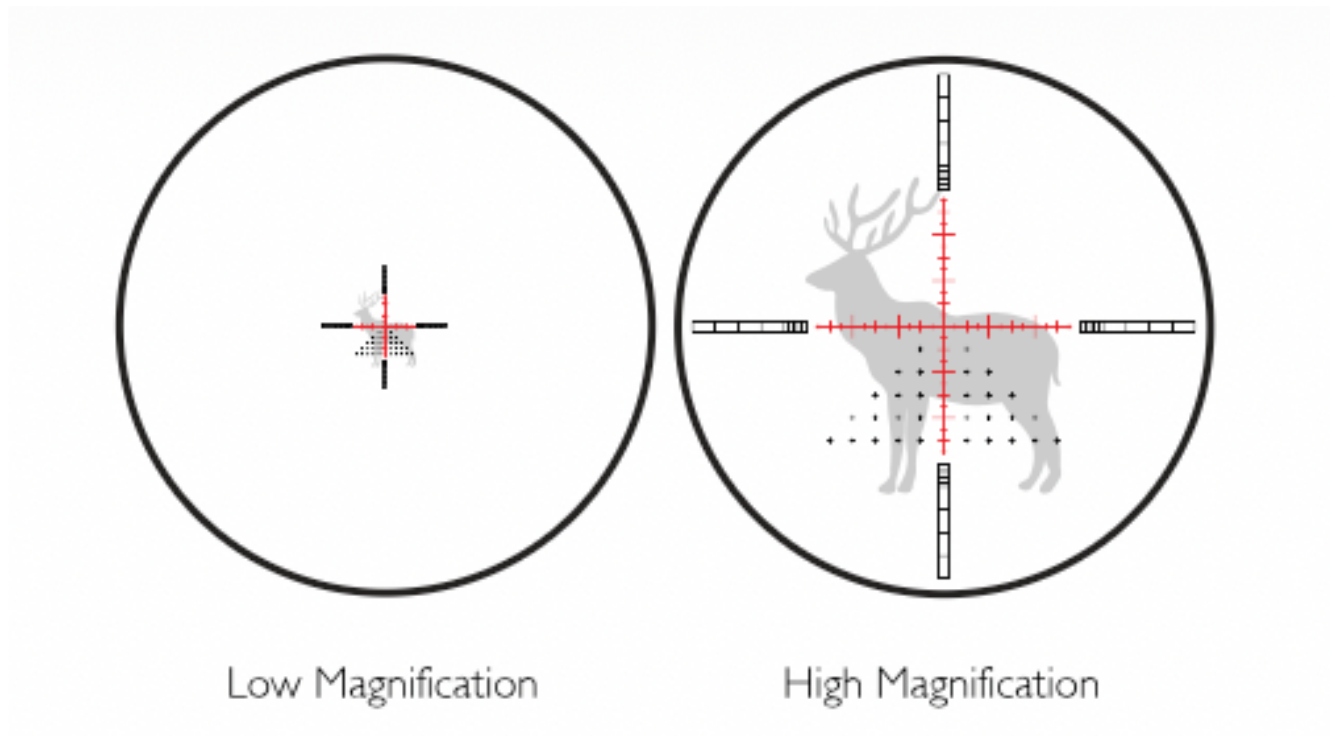
Half Mil Dot spacing on the lower post provides increased aim points for long shots.

The horizontal bars are calculated at 0.5, 1.5, 2.5, 3.5 and 4.5 mil spacing. Hollow posts are segmented into mil spacing and can be used for bracketing.



During my testing, I found that reticle view pretty much spot on for what you can expect to see looking through the scope at the lowest through highest magnification settings.

The Hawke Sidewinder FFP 6-24 x 56mm scope is a first focal plane (FFP) scope with a reticle that changes size with zoom level so the 'MIL' marking is always correct with respect to the target size, regardless of magnification setting. Additionally, the scope that I own has the reticle and turrets both in Milliradian (MIL) units. The reticle looks like the following:



During my testing, I found that reticle view *to be different sizes* than what is shown on the website (which is a good thing-because that lower power magnification is simply too small in my opinion), however the shape of the reticle is pretty much spot on for what you can expect to see looking through the scope as one changes the magnification settings from one extreme to another.

Optical and Usage Comparison

Alright, enough background stuff, here's the comparison directly. I started off comparing 3 magnification setting of each scope: Low power (6x), mid power (16x) and highest power (24x) to assess how each scope performed. While I originally intended to also check the scopes at 3 different distances, I ended up settling on just one (50 yards, by laser rangefinder) and not completing a closer and further distance-since I was sitting out in the lower 30 degree temps for over 3 hours compiling my observations. In short-I was frozen at the end, so you only get the one distance to gain the insights I gained. But alas, I'm confident enough in the comparisons that they 'should' remain the same regardless of distance-leaving only the accuracy of the marked distances to vary between different distances.

Lowest magnification settings: 6x mag (@ 50 yards)

Athlon Argos: Comments and Observations @ 6x:

The view is very crisp, the reticle is very fine and well defined, the reticle covers less than 50% of overall scope view (my estimate is about 40%), I noted some 'bubble' distortion near edges (especially when moving the scope laterally and looking through it at the same time). The scope on this setting has very good contrast, a very crisp and clear image. Small amount of parallax is visible at 50 yard focus marking-it looks small now, but that grows as magnification is increased. (Note: I did NOT attempt to find the 'actual' correct location for 50 yards to get correct parallax, but rather used the manufacturers settings to avoid introducing my own, subjective adjustment error into the mix). 'Bubble distortion' is very visible when moving head to check for parallax error. The eye box (ability to move eye around, fore-aft, and laterally, while maintaining sharp edges, free of scope shadow on the scope's optical perimeter) was the second best of the 3 scopes, however, it did exhibit noticeable barrel distortion (or 'bubble distortion', as I loosely call it) when moving your head around. Overall, very usable, bright, crisp clear image.

Hawke Sidewinder FFP: Comments and Observations @ 6x:

The view is very crisp, the reticle is very fine (almost too small), the reticle covers less than 50% of view (my estimate is about 40%). I noted some very very minor 'bubble' distortion near edges (you really had to look for it to see it). The scope exhibited excellent clarity and contrast, at a cooler color than Athlon Argos. The scope had a very, very crisp and clear image. Very minor (almost totally non-existent) amount of parallax visible at 50 yard focus marking. Bubble distortion barely visible-but still present-when moving head to check parallax. At this magnification, the scope has a huge, cavernously large (and the clear best!)

eye box of all 3 scopes-notably larger than the Athlon. The Hawke Sidewinder FFP was my pick for best view at lowest magnification, though all 3 were definitely very usable.

Hawke Airmax 30 SFP: Comments and Observations @ 6x:

The view is very crisp, the reticle is very fine yet not too small. The reticle covers slightly more than 50% of view (guess of 60%-see image above). I did note some minor 'bubble' distortion near edges-it was probably the least amount of the 3 scopes. The scope's contrast was good, and the cooler color was similar to the Hawke FFP scope-which was cooler than the Athlon Argos. The image was crisp and clear, but probably not quite as good as the Hawke FFP (likely due to the larger objective lens of the Hawke Sidewinder FFP scope). Almost zero amount of parallax visible at 50y marking-almost identical to the Hawke FFP scope. Bubble distortion not really evident when moving my head to check for parallax error. Surprisingly (to me) the eye box on the Airmax 30 was very shallow and sensitive to eye position even at the lowest magnification setting. The barrel or 'bubble' distortion was hardly noticeable when moving around to check for parallax error. The resulting eye box was 'very tight' (or shallow both in fore-aft, and lateral positioning) and results in scope shadow very readily when moving eye around to check for parallax. This quickly made me declare the Airmax 30 as having the most finicky eye box of the 3 scopes. It was actually difficult to get my eye positioned perfectly for clear eye box. In my opinion, this would make it tough to have much room to move eye when shooting-forcing a VERY demanding adherence to eye location to shoot. Having said that, perhaps that is actually a good thing for repeatability between each shot? I'll leave that conclusion to the shooter's preference...

After playing further with the Airmax 30 scope, I found that scope shadow happens so readily that it actually masks the barrel distortion (which IS still present, despite my initial impression), thus, my initial conclusion about the barrel distortion being the least of the 3 was incorrect-it just hidden due to heavy shadowing. Parallax is nearly identical to Hawke Sidewinder FFP scope.

Medium magnification settings: At 16x mag (@ 50 yards)

Athlon Argos: Comments and Observations @ 16x:

Once zoomed in to 16x, the optics start to become notably cloudy and less crisp than at 6x. However, the reticle remains bold and crisp, with the line thickness increasing (due to the FFP design). The reticle now covers 100%+ of the view, and the Mil markings cover approximately +/- 11 Mil in each direction (total width across scope is approx. 22 Mil total at 16x mag). The eye box also shallows notably-making it hard to move without easily inducing scope shadow. However, the eye box still retains decent fore-aft size (in the direction of eye relief), but scope becomes rather finicky to move eye laterally without getting scope shadow. While the parallax distance wasn't changed from the previous 50 yard marking, the crispness of target does decrease noticeably from 6 power. I attributed this to a loss contrast, rather than a loss of resolution. I did play with the eyepiece focus a little bit, and did note that Crispness improves marginally-but contrast loss is still noticed.

I also noted the the barrel distortion on the Athlon seemed to improve a bit at 16x mag, leaving me to conclude that the distortion is more notable at lower powers due to wider field of view. So what, who will notice this distortion? This will probably be more evident if you primarily shoot from a shaky platform (kneeling while hunting, for example) at lower magnifications because the distortion or 'bubble effect' seems to become more visible when the scope moves, than when it is sitting still. If you shoot from a stationary, stable platform (bench rest shooting), you likely will not notice this much at all. The other time the distortion becomes apparent is when one moves their eye around within the eye box at 16x mag-the distortion presents itself if you're looking for it.

Hawke Sidewinder FFP: Comments and Observations @ 16x:

Increasing the magnification on the Hawke Sidewinder FFP scope finds the optics to be remain very bright and clear-probably due to larger diameter objective lens when compared to the other two scopes. The reticle grows in size (FFP design) and becomes bolder, yet still very crisp. Interestingly, on this scope, the reticle appears to be a little bit 'less black' than either of the other two scopes-almost taking on a slightly reddish hue to it if you study it closely (my guess is that it's due to the illumination design in this reticle). This wasn't terrible by any means, and likely wouldn't even be noted had I not been directly comparing against two other scopes with 'blacker' reticles.

Due to the FFP design, when the mag is increased to 16x, the reticle grows to covers approximately 90% of the scope's view, with the Mil markings covering approximately +/- 11.5 Mil in each direction (total width across scope is approx. 23 Mil total at 16x mag). At this magnification, the eye box reduced in size slightly-but not much at all-and it was still very generous and comfortable to use (much better, in my opinion, than Athlon Argos 6-24 scope). The eye box still retains excellent fore-aft size, but I did also note that the scope does tend to be a little more sensitive (compared to 6x mag) to the onset of scope shadows-albeit much more tolerable than Athlon Argos. I was thrilled to note this eye box performance of the new Hawke scope because the eye box sensitivity was one of my main gripes with the Athlon Argos scope when I first switched from my old Hawke Sidewinder 30 (SFP, SR-Pro reticle) scope to the Athlon. I yearned for a more tolerant eye box on the Athlon and, good news, the Hawke Sidewinder FFP scope seems to have delivered on that front in a very pleasant way!

Again, while the parallax distance on the scope wasn't changed from the previous 50 yard marking, the crispness of target excellent-with excellent contrast still present (again, likely due to the larger objective lens letting in more light, and a better overall optical/coating design). Parallax performance is excellent at this magnification setting (again, the parallax focus was not adjusted)-almost zero parallax movement noted when moving around eye box. The next day, while shooting groups with the new scope at both 50 and 75 yards, I did note that, while the eye box is generous, there is still a small location (laterally) where the image in the scope appears evenly illuminated, and more brightly so than when your eye drifts slightly off-center. I learned to look for this behavior to know I had repeated my eye position correctly, and was rewarded with several very tight groups (5 shot groups of 0.280", followed by 0.260" at 50 yards, later followed by a 4 shot group 0.320" CTC at 75 yards-before the 5th shot fell off the regulator and dropped about 1/4" below the 4 shot group, opening it up to 0.590" at 75 yards.)

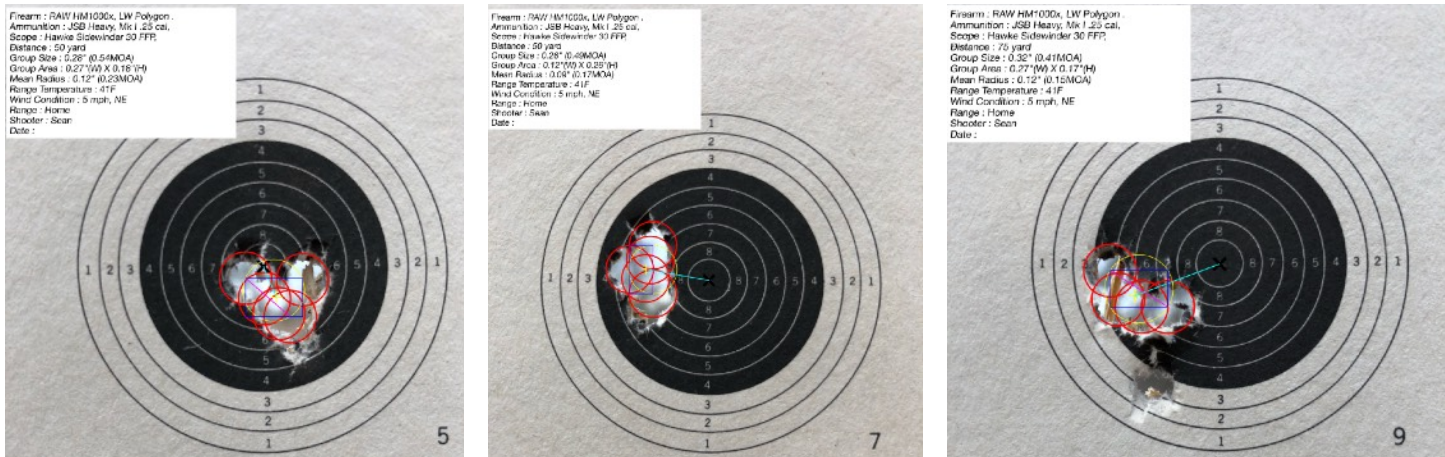


Fig X: Groups shot with Hawke Sidewinder FFP scope mounted to RAW HM1000x, .25 cal polygon (60 fpe) setup: (L to R: 0.280" @ 50 yds; 0.260" @ 50 yds; 4 shots at 0.320" @ 75 yds). Note: black circle OD measure 1.2008".

At this magnification level, barrel distortion was not noticed-however, this is again due to scope masking it at the extreme edges when scope shadow sets in.

Before moving on to the Hawke Airmax scope, I did play with the eyepiece focus a bit and found that a slight adjustment did seem to improve the reticle 'blackness' marginally.

As soon as I moved on to the Airmax scope, it again was noted just how much brighter and clearer the new Hawke Sidewinder FFP scope was at 16x magnification-showing itself as the clearly superior scope (optically) to either the Athlon or Airmax scopes at this magnification.

Hawke Airmax 30 SFP: Comments and Observations @ 16x:

Increasing the magnification on the Hawke Airmax 30 SFP scope showed the optics start to become somewhat more cloudy, due to a loss of contrast, while the reticle remained the same size (SFP design) and was just as bold and crisp as it was at 6x magnification. The reticle size and viewfinder coverage remained unchanged at approx 60% of the view (+/- 15 Mil, 30 total) from the 6x magnification setting. While the image became notably more cloudy due to the reduced contrast, the resolution remained excellent, with sharpness being better than the Athlon scope-this was further evident when the scopes were taken to max magnification @ 24x.

The reticle is nice, crisp and 'very black' similar in performance to the Athlon Argos scope.

To my surprise, the Hawke Airmax's eye box became super finicky at this magnification-very shallow, fore-at—making it near impossible to move at all without getting scope shadow easily. The eye box was very thin in the fore-aft direction and demanded excellent eye alignment laterally to even be usable, making the scope exceptionally finicky- to the point where one almost can't move their eye without getting shadow. While this performance may

be workable when shooting from a bench, I now think that it would make use in the field more difficult due to the less forgiving eye box performance. I was very surprised by this and had no idea I would see this behavior prior to this comparison test. I will leave it to the reader to determine if this performance is desirable or not for, on the one hand, it demands precise placement of the eye on the optical axis of the scope-yet that very fact may indeed be precisely what is desired for a repeatable position, shot after shot (it really depends on how one wants to use the scope).

As with the other scopes, I did not adjust the side wheel parallax position from the 6x magnification, and the crispness of target did seem to decrease due to lost contrast, yet a careful study showed the resolution was still excellent at 16x.

It was almost impossible to see at first, but the barrel distortion was noticed, if you looked extremely closely, before the rapid onset of scope shadow covered it near the edges.

The parallax performance itself is actually excellent-virtually the same as the H-FFP scope-showing little to no movement of the reticle's cross on the center of the target when attempting to move my eye through the eye box (laterally).

Other notes: I was again surprised at just how finicky the Hawke Airmax scope was in regard to the eye box, and how razor thin the eye relief is-even at low mags. Overall, however, reticle is very fine and cleanly marked, yet not as ultra fine (and small!) as the FFP scopes at 6x magnification. Reticle is indeed very nice.

Highest magnification settings: At 24x mag (@ 50 yards)

Athlon Argos: Comments and Observations @ 24x:

At its highest magnification, the Athlon became even dimmer yet-likely the dimmest of the bunch (hard to tell due to the excessive scope shadowing of the Airmax scope), appearing milky due to further lost contrast-and resolution (compared to the lower magnifications). Even though the resolution was still acceptable at the higher mag (reader should note: this may have been due to the parallax setting of 50 yards not really being the correct setting for the scope at that distance) the lost contrast and brightness was definitely notable.

At the highest magnification setting, the parallax error observed in the lower magnifications was about the same, yet easier to measure at the higher power. I would guess it to be approx 3/4", based on my visual estimate, due to knowing that the black circle of the 10m ISSF air rifle target's size is 1.2008", per ISSF standards. Before alarm bells go off and the reader cries foul, please note that the parallax is likely to be improved if the user takes the time to find the 'correct' parallax focus setting: it is widely noted in the airgunnation.com forums that the markings on this particular scope (Athlon Argos BTR 6-24x50 FFP scope) do not appear to be 'correct' for the distance marked on the side knob. The correct position is reportedly frequently 'off' (substantially) from where the marking is located. Field curvature in the optics may actually be playing a role in the finicky selection of the correct focus distance / parallax distance on this scope-I'm not really certain. Thus, if you do own this scope, or are

thinking about buying this scope-do plan to take the time required to create your own side wheel markings on a piece of tape-preferably on an aftermarket side wheel. Once done, I suspect the resolution will improve a small amount, and am certain the parallax performance will improve as well.

At this setting, the reticle continues to grow to its maximum size and is nice, bold-yet not excessively bold, and very 'black'. The reticle covers +/- 7.75 Mil across the scope (total width across scope is approx. 15.5 Mil total at 24x magnification).

When pointing the scope up at a tree, with a well lit sky behind the tree, the out of focus tree branches exhibit noticeable chromatic aberrations (purple-green halos or spectrum shifts) near edges of branches in the out of focus areas. Not a big deal, but just something that the user will likely note when shooting at squirrels up in trees, for example.

At the maximum magnification, the Athlon's eye box is shallower still when compared to 16x- however, it is still more usable than Hawke Airmax at 16x magnification. The Athlon exhibits shallow fore-aft (direction of eye relief) performance, and scope shadow sets in quickly when one's eye moves slightly off axis laterally. Again, I'll leave this up to the user to decide whether that is a 'pro' or a 'con' of this behavior.

Overall, the performance was usable overall-especially if the gun is to be benchrested, or shot from a stable bipod-which is likely the case at the highest magnification. This overall performance is fine for a rifle scope at its extreme magnification (but would not be acceptable performance from a camera lens, for example).

Hawke Sidewinder FFP: Comments and Observations @ 24x:

When at the maximum magnification of 24 x, the Hawke Sidewinder FFP's optics were still bright and clear, but slight contrast reduction started to become evident. The reticle, grown to its max size and thickness, was bold and crisp-the thickest of the bunch. The reticle covers approximately 100%+ of the view, with the Mil markings cover approx +/- 7.5 Mil in each direction (approx 15 Mil total across the width of the scope at 24x magnification).

At the maximum magnification, the eye box was somewhat reduced in size-but still much bigger/better than either the Athlon Argos or Hawke Airmax 30, and still very generous and easy to use. Even at max magnification, the eye box was still very generous fore-aft (not nearly as thin as either of the other two scopes). At this magnification, the scope does tend to be a little more sensitive to scope shadows when eye moves laterally off-axis, but much more tolerable than Athlon (and especially the Hawke Airmax) scope.

At same parallax setting, crispness of target is excellent-with good contrast still present, even if slightly reduced from the lower magnifications. Parallax performance is still excellent with no change to parallax dial setting-showing almost zero parallax error (crosshair movement on the target) noted when moving one's eye laterally around eye box. Parallax error appeared to be contained with the 9 ring of ISSF 10m target at 50 yards.

The reticle looks 'black enough'-even if not quite as bold as the Argos or Airmax reticles- despite the aforementioned 'reddish' hue from the illumination system being present.

When pointing the scope up in a tree, some chromatic aberration is seen along the edges of the tree branches with the sky as the backdrops, but not objectionable like Argos scope.

At the max magnification setting, the crossing point of the crosshairs covers the 10 ring (0.5mm dot) and most of 9 ring on the noted ISSF 10m air rifle target. Reticle is thicker than Athlon Argos at max magnifications, though I don't find it objectionable at all (especially since one is supposed to focus their eye on the reticle-NOT the target-while shooting). Overall, the Hawke Sidewinder FFP optics showed notable better resolution than Athlon Argos BTR 6-24x50 FFP scope at 24x magnification in contrast, overall clarity, and resolution. Overall, this is excellent overall performance, in my opinion, from the Hawke Sidewinder FFP scope-I was left very impressed indeed.

Hawke Airmax 30 SFP: Comments and Observations @ 24x:

When set to the maximum magnification, the Airmax's optics still remained bright and clear, but contrast reduction is noted albeit not as severely as the Athlon—that is "*when*" you can find the right position for your eye due to almost unworkable eye box and resulting onset of scope shadow.

As noted at the previous two magnifications, the reticle remains crisp and thin, reticle covers same amount as previously mentioned—approximately 60% of the view. At this magnification, the Airmax reticle is the thinnest of them all.

However, the eye box on the Hawke Airmax 30 makes the highest magnification almost unusable—making it appear resolution has been reduced when it really hasn't been. The eye box at this magnification is very thin-and very finicky to even the slightest off-center positioning of eye (lateral movements), as well as exhibiting very shallow fore-aft characteristics. As a result, the scope tends to shadow very easily when one's eye moves laterally off-axis, even the slightest amount.

At the same parallax setting, crispness of target (resolution) is excellent-when you can find the sweet spot for your eye location-with good contrast still present, despite being reduced a bit from lower magnification settings. The scope's parallax performance at this magnification is still excellent with no change to setting-almost zero parallax movement noted when moving around eye box-though shadowing prevents almost all eye movements.

The Airmax's reticle appear 'black'-very nice and thin-the best of the bunch at this magnification.

When pointing the scope up in a tree, some chromatic aberration seen, not as objectionable as Athlon Argos, but worse than Hawke Sidewinder FFP, placing the Airmax between the two scopes in chromatic aberration performance.

The crossing of crosshairs covers 10 ring only on 10m target at 50 yards-a very fine performance. Overall the optics were notable better in resolution and contrast compared to

the Argos scope at 24x magnification, but a notable step down from the Sidewinder FFP. Overall, I would like to say the optical performance of the Airmax at 24x magnification was very good, yet the eye box makes high mag use very difficult-if not impossible-for any purposes aside from bench resting the rifle.

Illumination of scopes:

A quick review of the illumination of the reticles under overcast daylight conditions yielded the following observations (all scopes set to 16x magnification):

Athlon Argos BTR:

On full 'highest' illumination setting, the reticle's red illumination is nearly non-visible in normal, overcast daylight-save a slight red hue being observed. A solid black reticle is clearly more prominent than the red illumination. If the target was mostly dark colored, the red reticle may have shown through slightly better-but I didn't waste much time trying to find out. Essentially I deemed it non-usable in overcast daylight.

Hawke Sidewinder FFP:

Under the same conditions noted above, the illuminated reticle was very visible—clearly obvious at the 'Red 5' (max) setting, visible at 'red 4', and borderline 'not visible' at 'red 3' setting. Since this scope has both red and green illuminations-in five intensities each, I checked the green illumination as well and found the following: the reticle was clearly obvious at both the 'green 5' and 'green 4' settings, and still clearly visible at the 'green 3' setting, dropping off to 'nearly not visible' at 'green 2'. Great performance overall-and the reticle is clearly usable in daylight conditions-if desired.

Hawke Airmax 30:

The Hawke Airmax 30 has a rheostatic dial to control it's intensity and, with the rheostat on the highest level, the reticle was barely visible in the same lighting conditions. It was so poor, as a matter of fact, it made me wonder if battery was spent (in retrospect, I suspect it was low at least). I wouldn't draw too grand of conclusions regarding these findings, on this scope as I suspect a fresh battery would have improved the daylight performance (however, I was freezing by this point, and ready to call it a day!).

Scope caps:

There's really little to discuss on this one: both Hawke scopes come with very nice, integrated scope caps which are clearly nicer in feel, appearance, and operation compared to the Athlon 'Butler Creek' style caps. Thus the best caps are easily the Hawke.

Turrets:

Both the Hawke scopes come with locking turrets, though the Sidewinder is much nicer to use than the Airmax 30's. The Athlon does not come with lockable turrets. The Athlon seemed to have a better tactile feel to the clicks on the turret, though the clicks are not very audible. The Hawke scopes were both much more audible, yet they seemed to lack the

tactile feedback of the Argos scope's turrets. I prefer the feel of the Argos, but with the audible feedback and locking mechanics of the Sidewinder FFP. Additionally, the Hawke Sidewinder FFP turrets are easily resettable-simply zero the scope, lock the turrets down, use the supplied torx wrench to loosen the turret screws until the cap turns easily, re-align, and gently tighten down again making sure the alignment with the 'zero' on the turret matches perfectly. The alignment then becomes as good as your eye can set the lines together-in other words, it's not limited to falling into certain spline positions like the Argos scope. I much prefer the Sidewinder resetting to the Argos.

Accessories:

Both Hawke scopes come with a 4" sunshade, a 4" side wheel for more precise parallax focus, a spare battery, cleaning cloth, manuals, and the super nice scope caps. Accessories are also a no-brainer and the win clearly goes to Hawke for the included sun shade and dedicated 4" side wheel, which do not come with the Athlon scopes.

Reticles (subjective opinion):

Best reticle: Athlon Argos BTR, followed by the Hawke Airmax AMX-IR, then the Hawke FFP reticle.

Other notes and things not checked:

I did not run the scopes through the same scrutiny at closer and further distances, though I am convinced little would change based on my noted observations.

I did not mount the scopes to a rifle (back to back) to check things like tracking, etc. however, I did just recently have the Argos mounted on my RAW HM1000x and the tracking worked flawlessly when sighted in at 50 yards, requiring +1.3 Mil correction to be dialed in at 70 yards, +1.6 Mil at 75 yards, and +3.6 Mil at 100 yards, then returning back to 50 yards, a +0.0 was again spot on. At the end of the comparison, I did mount the Hawke FFP scope to the same gun. The next day I confirmed that the +1.3 Mil @ 70 yards and +1.6 Mil at 75 yards tracked exactly as expected as well-however, I haven't had a chance to check beyond those point yet. Still, I have no reason to believe it won't perform acceptably at 100 yards, etc.



Conclusion:

At this point, I think the winner is clear: I am choosing to keep the Hawke Sidewinder FFP for the wonderful eye box, bright optics, locking turrets, excellent construction, great accessories supplied with the scope, great parallax performance, and overall look of the scope.