

hile it is possible to improve a sight picture through technique (a topic for a future article), this review catalogs several products on the market and highlights what ultimately worked best for me—the MicroSight rear hood from Stallings Machine.

ONE SIZE DOES NOT FIT ALL

My optometrist confirmed that I am slightly near sighted (20/25) with a minor astigmatism (football-shaped eye rather than round). At age 60, I don't wear reading glasses (yet) and use glasses mostly to drive or watch the evening news from across the room. None of these benched me from the shooting roster, but an important disclaimer is appropriate here: The observations in this article are from the bias of a near-sighted shooter with astigmatism. To learn which may be the best solution for you, start with your eye doctor.

LEARNING TO SPEAK "OPTOMETRY"

A challenge during early discussions with eye care professionals and lens inventors was that I didn't speak their language and, as it turned out, few of them spoke mine as a competitive

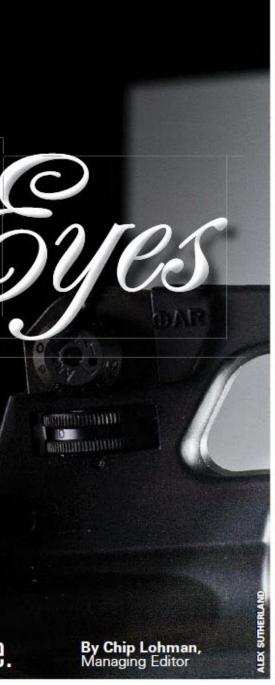
shooter. Enter Dr. Norman Wong. I strongly encourage you to retrieve his articles from our archives to better understand your eyesight.

SUPERFOCUS GLASSES

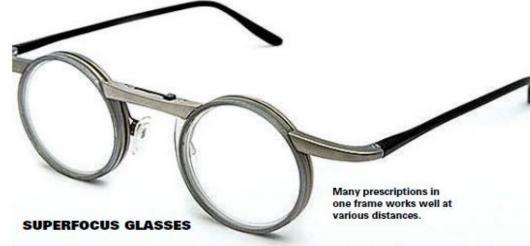
PRO Convenient "many glasses in one" design. Big improvement over street glasses.

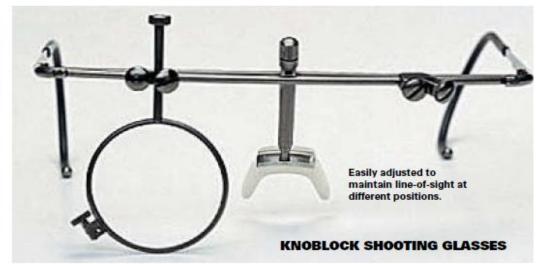
con Expensive (\$900). Small lens sometimes difficult to keep in line-of-sight. Doesn't bring both sight and target into *clear* focus. (See review in August, 2010, issue of *SSUSA*.)

Action Shooter legend Rob Leatham uses four sets of glasses at the



Bianchi Cup-one for each firing line. When I approached him for an opinion on my SuperFocus glasses, I noticed that his shooting glass lenses were larger than mine. What I like about the SuperFocus glasses is that I can adjust them to any distance as if I had several pair of glasses. The round lens is an improvement over my street glasses as far as having enough lens to keep them in my line-of-sight in the prone position. However, larger shooting glasses like Leatham's or the Decots worn by world champion Nancy Gallagher offer an even larger field of view.





KNOBLOCK SHOOTING GLASSES

PRO Purpose built. Quick, "no tools" adjustment for each position. Lens perfectly centered in the line-of-sight.

CON No lens for scoping eye. Doesn't bring both sight and target into clear focus. (\$285)

Visit www.knobloch-schiessbrillen. de/allframes.html

My Knoblocks do a much better job of centering the lens than the SuperFocus or street glasses and they can adjust from standing to prone. Perhaps petitioning the company to combine a single SuperFocus lens and a Knoblock frame would be popular among some shooters.

BOB JONES SIGHTS

PRO "Reading glass" insert with helpful hood tool, Affordable (\$85). Many shooters use them with success.

CON Somewhat of a compromise for me since I don't need a correction to see the near front sight post.



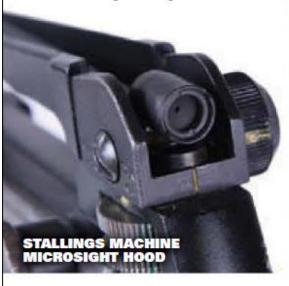
Visit www.bjonessights.com

BJones Sights was established in 1994 with lenses and fixtures for match rifle sights. Following petitions to NRA and then DCM, lenses were approved for service rifles beginning in 1996. The BJones sight lenses are designed to be used with the shooter's eyeglasses to balance a clear front sight and target. BJones lenses are available in 1/8th diopter increments from -6.25 to +5.50 and

FEATURE // IRON SIGHTS

come in two types for the AR-15 with an assortment of apertures from .042 to .059. The kit also has a long socket tool to RnR the apertures buried inside the carry handle channel. The Type-II BJones hoods are designed

Voila! Both sight and target are clear.



to be a direct replacement for your current hood and are threaded for the industry standard 1/4 x 28, 1/4 x 32 and the 7/32 x 40 leafs. Bob also offers prescription shooting glasses for left or right-handed shooters that place the lens in the line-of-sight.

STALLINGS MACHINE MICROSIGHT

PRO They work as advertised. Rear sight should be pinned. An alignment tool is available from Creedmoor Sports. (\$140)

CON Note that you now have an optic in the rear sight hood. Take care when cleaning. (Don't ask how I know.) Visit www.stallingsmachine.com

The MicroSight hood replaces a standard AR-15 hood as found in most NM AR-15 rear sights. I can enthusiastically attest to the fact that the MicroSight simultaneously brings both front sight post and target into focus. The first version I tested relied on me for proper alignment, something the zone plate technology demands. The second lens was laser-aligned by Wayne Forshee of Stallings Machine, and the improvement was dramatic.

NEW TECHNOLOGY

Research from the Idaho National Laboratory (INL) uses a zone plate that bends light to bring near and far objects into focus. Similar to Fresnel lenses used in light houses, a zone plate is ground with concentric rings that alternate between transparent and opaque. The transparent sections let some light waves pass through unchanged, focusing objects that are far away (basically, at infinity). Light passing through the edges of the opaque rings gets diffracted, which brings nearby objects into focus.



The result—sharp images of distant and near objects, simultaneously.

From David Crandall of INL, a member of the U.S. National Long-Range Rifle team and developer of the zone plate concept: "The MicroSight gives you much of the performance you'd get out of a holographic (red dot) or telescopic sight, but it's more reliable, much lighter-weight and less expensive." Whereas lenses focus light by using refraction—essentially changing the direction of light waves by altering their speed-zone plates use diffraction. Diffraction describes how waves bend, break up, spread out and interfere with each other as they encounter obstacles. The diffraction of sound waves, for example, explains how you can hear someone's voice from around a corner.

A high power champion in his own right, Stallings Machine owner Wayne Forshee has helped transform the INL theory into practical application on the firing line. Forshee has combined his own shooting knowledge and machine engineering expertise with the precision zone plate lens for a workable and affordable solution. In short, the MicroSight works—without compromise.

See your doctor, order your preferred solution and fall in love with your iron sight gun all over again.