

GUNS & AMMO

Optical Acronym

Gun Notes

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When it comes to military and law enforcement riflescopes and binoculars, ELCAN defines state-of-the-art.

Although **G&A** readers tend to be in the know on firearms and related equipment, don't be embarrassed if the ELCAN name doesn't ring any bells. To tell you the truth, it didn't with me either. This is odd when you consider that ELCAN has been in the precision-optics business more than 50 years.



Although much of ELCAN's current efforts are devoted to a soon-to-be-unveiled commercial product, development still continues to make military optics sights lighter and more compact.

There is an explanation. The name "ELCAN" comes from "Ernest Leitz of Canada." OK, that rings some bells, right? In 1952 descendants of Ernest Leitz—whose company began making optics in Germany in 1849—moved to Canada and founded ELCAN. Originally, the business centered around camera optics, but in the 1980s the company began designing riflescopes for military applications. Also in the 1950s, Texas Instruments acquired the W.I. Mann Optics Company of Monrovia, California, and moved it to Texas. This business centered around high-end optics for defense and space industries. In 1997 Raytheon blended the capabilities into ELCAN Optical Technologies, as it is known today.

But you've still never seen an ELCAN riflescope, have you?

Actually, you have. But, like me, you just didn't know it. ELCAN Optical Technologies—with design, engineering and manufacturing facilities in Ontario, Texas and Spain—is part of the Raytheon family of companies.

Raytheon (who brought us, among many other things, the Patriot missile system) has long concentrated on defense-related technologies. And as part of the Raytheon group, so has ELCAN.

As a precision-optics manufacturer, ELCAN makes lenses, prisms and parts for cameras, medical systems and other applications. But its flagship products are riflescopes. Specter Rifle Sights are in use around the world but are designed for—and primarily sold to—military and law enforcement. Seen any stubby little scopes mounted on our troops' rifles and machine guns in the newspapers or on TV? They are—very probably—ELCAN products.

The Specter OS (Optical Sight) 3X, a 3.4X scope, was developed in cooperation with the Canadian armed forces and has been in widespread use for many years. The newer Specter M145 3X, designed for the U.S. Army, is a newer version, also in 3.4X magnification. There are also 6X and 10X versions for special applica-



The Phantom IR is the first thermal-imaging "binocular," a handheld night-vision device. The author was extremely impressed at both the distance and clarity with which he could see human forms in the dark.

tions (snipers, SWAT, Special Operations). These, in ELCAN lexicon, are some of the “day” products. And then there are “night” products, a growing family of night-vision optics using thermal imaging.

Not too long ago my friend at ELCAN, Rusty Mauldin, invited me to a range session west of Dallas. We started in the late afternoon with optical sights mounted on M16-type rifles. Unfortunately, in my Reserve career I’ve been out of the small-arms arena for some time, so I didn’t have any firsthand experience with the Specter M145 scope. I like it. It’s rugged and compact, with truly superb optics. The scope has an integral mounting system for the mil-spec (Picatinny) rail, with windage and elevation adjustment in the base. The ranging reticle is illuminated, and I found it fast and easy to use.

At first we had a bit of a panic; we just couldn’t get one of the rifles in zero. Turns out the barrel (and probably the receiver) were shot out, like, I’m afraid, many M16A2s still in service. We put the same scope on a different rifle, and in short order several of us were shooting MOA groups. Mind you, there was a time when I could have done this with the standard receiver sights, but not so easily, and never, ever in the fading light that we were contending with.

Honestly, it was a weird feeling to be shooting scoped M16s and M4s. As a hunter, I have accepted that I shoot faster and more accurately—especially in low light—with a scope. When I use iron sights, I do so mostly for fun, consciously handicapping myself almost as if (though to a lesser level) I were choosing a handgun, muzzleloader or archery tackle. But as a 30-year Marine grunt, I have questioned whether we really needed to scope the standard service rifle. But the

answer is clear to me now. Troops *will* shoot faster with greater accuracy, especially in low light.

When it got dark we switched out the optical scopes for thermal-imaging night-vision models. No, you can’t see a paper target with these scopes. They aren’t intended for punching paper. Instead we filled jugs with ice. Cold or hot, thermal-imaging technology doesn’t care; it “sees” differences in heat signature from the surrounding area. I’ve had some experience with this stuff but never in a rifle sight. This, too, was quite a revelation—what I saw was a whole lot better than the “starlight scopes” I grew up with so many years ago.

Later, with the range completely cold, some of the guys went way downrange, and we messed with the brand-new Phantom IR thermal-imaging binocular. *Wow!* The night had turned dark and very cold, and the binocular was truly amazing; we could “see” human forms clearly—and even see what they were doing at distances considerably greater than the actual rating of the device. We even saw, quite clearly, the nose-to-tail

form of a coyote as it dashed across the range at several hundred yards.

Now, some of you may have either professional or hobbyist interest in advancing defense and law enforcement technologies. ELCAN Optical Technologies is the largest manufacturer of military infrared optical systems and one of the largest manufacturers of military optical sights. If these applications interest you, visit the ELCAN website, elcan.com.

However, the rest of you hunters and shooters may be wondering what all the fuss is about. Well, what if a company like ELCAN decided to develop a purely commercial product line to offer the hunter and sport shooter something new and exciting? Do you suppose it could do it? We’ll have to wait and see. Take a closer look at some of the news photos coming out of Southwest Asia. You’ll see ELCAN products in use, and now you’ll recognize their origin. And I predict you’ll be hearing a lot more about this brand name in the near future. ■



The Specter M145, incorporating an illuminated ranging reticle, was developed for the United States Army and is in use in Southwest Asia. Chances are you’ve seen pictures of this ELCAN product on TV newscasts and in the papers.

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