

# New innovative weapons for military and police!

## By Charlie Cutshaw

Photos by Chris Rohling except as indicated

oming up with a "top ten" of what I consider the best tactical gear I have tested in the past year was a daunting task. As you might imagine, I test many guns and much gear during any given year and most of it is damn good. If it isn't, I just return it to the manufacturer with an explanation of what I consider to be deficiencies. While most of the gear and guns I test are good, some are more significant than others-not better in the sense of fulfilling their intended purpose, but because they change the way we do business or give us new or improved tactical capabilities. Thus, a simple "wow" factor wasn't going to cut it—just because something looked cool, it wasn't necessarily going to make the list. I have included only items with which I have had "hands on" experience and that I believe make a true difference in the way we do business or enhance the operational capability of both our military and law enforcement personnel based on my own military and law enforcement experience. You may not agree on some or all of the things that follow, but in each case I have attempted to explain the rationale behind my including every item. There is no particular ranking in this list. Just because an item is Number 1 or Number 10 means nothing in itself. That was just the way they came to mind and trying to rank order them would be just too subjective. So with that, here goes....

1. Alexander Arms .50 Beowulf. For CQB use in urban environments where it may be necessary to shoot through concrete blocks or brick walls at short ranges, the big .50 Beowulf is just the ticket. The fat .50 caliber bullets pack a huge wallop on the receiving end, but recoil isn't bad at all. Bolt velocities are the same as a

# MY PERSONAL TOP TEN



Alexander Arms .50 Beowulf. Whether hunting dangerous game in heavy brush or hunting terrorists at CQB distances, the .50 Beowulf gets the job done!



The POF Gas Trap Carbine replaces the direct impingement gas AR gas system with a piston and operating rod, enhancing reliability and operability.

.223, so the Beo isn't going to beat an AR lower receiver to death. The .50 Beowulf uses standard AR mags, but magazine capacity is limited. Changing to .50 Beowulf is as simple as dropping on a new upper receiver. We understand that these powerful weapons are in use by our military in the War on Terror—with good reason.

2. Patriot Ordnance Factory "Predator" Gas Trap Carbine (GTC). The basic AR direct impingement gas system is fundamentally flawed because it throws fouling and hot gases directly into the receiver,

requiring that the moving parts have heavy lubrication. This has caused reliability problems in dusty environments unless the AR or M4 is given diligent and detailed maintenance. There have been several attempts to resolve this issue in the past, but POF's piston and op rod system is arguably the best. Even better, current Predators have receivers that are silicon nickel plated internally with hard chrome bolts and bolt carriers, so these weapons require no lubrication at all, except a little TW-25B on the bolt locking lugs. Nothing sticks to either substance. We'll be



Mark 14 Mod 0 Enhanced Battle Rifle brings the M14 into the 21st century.



Venerable M1911A1 is the only handgun still in military and law enforcement service that is approaching its 100th anniversary. Modernized versions like this Springfield Armory MC Operator continue in military service, especially with Special Forces.

doing a full evaluation on this significant new development in the near future, so stay tuned.

3. Mark 14, Mod 0 Enhanced Battle Rifle. Special Forces have been pulling M14 rifles from storage ever since the War on Terror began, but these old soldiers are not well suited to modern military operations, being too long, too cumbersome and, worst of all, unable to accept modern accessories such as night vision optics, white lights and lasers. Sage Engineering, working with Naval Surface Warfare Center, in Crane, Indiana, developed the Mark 14, Mod 0 Enhanced Battle Rifle for 21st century asymmetrical warfare. The Mark 14's barrel is shortened to 18.5 inches with a Vortex flash suppressor, a Sage stock that is fully adjustable for length of pull and cheek rest height. The forend has MIL-STD-1913 rails at top, bottom and sides, a pistol grip, "paddle" bolt release similar to that of the AR and a special bipod manufactured by Keng's Firearm Specialty. All military Mk14s are manufactured by Crane, but exact replicas in semiautomatic only are manufactured by Fulton Armory and are commercially available.

4. M1911/M1911A1 pistol.

Continued on page 74



6

Regardless of manufacturer, the M1911 will be serving in the world's dark places well beyond the 100th anniversary of its adoption by the US military. This is truly remarkable, since not one other firearm from that era is in military service anywhere or is a serious candidate for self-defense. The military currently buys M1911-type pistols for special operations from both Kimber and Springfield Armory. The US Army has announced that it will return to .45 caliber for its next handgun and the Army's requirement for the new pistol does not disqualify the M1911. Could it be that the next American military handgun will be an M1911 type, modernized with dust cover MIL-STD-1913 rail, beavertail grip safety, high capacity magazine and other upgrades? The military is already buying upgraded M1911s like

this, so reintroduction of the M1911 isn't beyond the realm of possibility. Will we someday see a "US Pistol, Caliber .45, M1911A2?" Regardless, Browning's classic remains the weapon of choice for many military personnel who are at the "pointed end of the spear." We hear through our military connections that anyone in Iraq and Afghanistan who doesn't have one, wants one.

# 5. FN Herstal Mark 16 and Mark 17 Special Forces Combat Assault Rifle (SCAR). A 2001

SOCOM report on the deficiencies of the M4 carbine stated that the current special operations M4 was fundamentally flawed, which led to development of the Mark 16 SCAR-L and Mark 17 SCAR-H. These weapons were developed with full participation of the military special forces community and were modular in design from the outset. The SCAR-L is currently in 5.56mm NATO, but can also be chambered in 6.8mm SPC or other calibers. The SCAR-H is chambered for 7.62x51mm. With

the demise of the Army's XM-8 program, the question of what will replace the M16 arises. There are currently no plans to replace the M16 family of small arms in the immediate future, but when the time comes, logic dictates that a rifle currently in production for the US military will be a strong candidate. We are not predicting that the Mark 16 will eventually replace the M16, but we have fired the Mark 16 and Mark 17



FNH USA's Mark 16 Special Operations Assault Rifle (SCAR) is replacing M4A1 carbines in Special Operations units. Mk16 was designed with full participation of SOCOM and is modular by design.

Optical Systems Technology's AN/PVS-22 Universal Night Sight represents current state of the art.



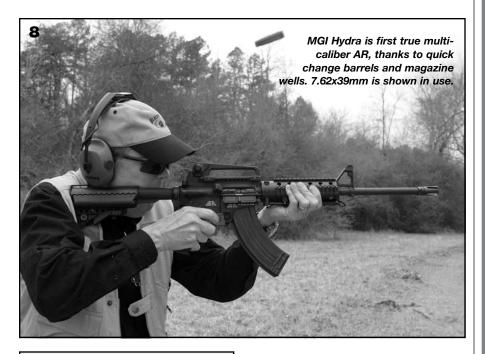
VItor Weapons Systems' Modstock dramatically enhances M4-type carbine ergonomics.

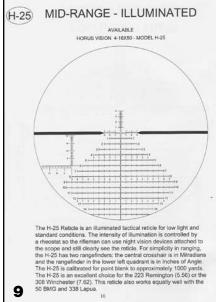
and believe that the basic SCAR design corrects most, if not all the deficiencies of the M16 family.

**6. AN/PVS-22 Universal Night Sight (UNS).** Current military and law enforcement operations are 24/7, with night operations being just as common as day ops. In fact, American advances in night vision technology are some of the "unfair advantages" that give our forces the capability to operate under

conditions that were impossible until recently. The PVS-22 or UNS represents current state of the art in night vision image intensification (I2) technology and gives our military and law enforcement an "unfair advantage." Not only is this device among the best of its type in the world, as a night weapon sight it mounts ahead of the day optic, eliminating the need for illuminated reticles and adapters for "behind the optic" night vision devices like the AN/ PVS-14 that cause eye relief issues and will function properly only when used in conjunction with infrared illuminated reticles. The PVS-22 is only slightly larger than the earlier PVS-14, but has far better performance with an image clarity that must be seen to be appreciated. The PVS-22 can also be used as a handheld night vision optic.

7. Vitor Weapons Systems' Modstock. While there are a number of other improved/enhanced replacement stocks for M4 type carbines, the Modstock is arguably the best with features that are available nowhere else. The Modstock incorporates two small waterproof compartments that can be used for storing spare batteries or other small items; but more important, Modstocks provide a slightly raised flat cheekrest that is, in our opinion, superior even to a standard full-length AR stock. The compartments can be accessed without removing the stock from the buffer tube. There are two versions, standard and Clubfoot. The latter





Horus Vision H-25 tactical long-range scope reticle was designed by a Special Forces trainer.

has a "hook" at the toe of the butt so the stock can be drawn tight against the shooter's shoulder. VItor also manufacturers Modstocks for full-length ARs. The only "down side" is that carbine-length Modstocks are sized for military carbine buffer tubes rather than commercial ones, which is what is to be found on most civilian collapsible stock carbines. The commercial tubes are slightly greater in diameter than MILSPEC tubes, so if one's carbine has a commercial tube (1.171 inches OD), it will be necessary to obtain a MILSPEC 1.151 inches OD tube. Threads are identical, so commercial and MILSPEC

tubes can be interchanged on carbine lower receivers. Full-length stock buffer tubes are all the same. Several AR manufacturers now offer Modstocks as options and we recommend them without reservation.

8. MGI, Inc's "Hydra" multi caliber carbine. Largely without success, small arms designers have been trying for years to come up with an AR-type rifle in 7.62x39mm that will function reliably, until the Hydra, which takes its name from the seven-headed monster of Greek mythology. The Hydra features standard AR barrels less the barrel nut that can be changed in a matter of seconds without tools via a lever and cam design. Since the cams lock the barrel flange into place without significant pressure, wear isn't an issue. By combining bolt heads and barrels of different caliber, any cartridge that fits the AR platform can be chambered and fired, from .223 to .50 Beowulf and everything in between. By changing barrels, bolt carrier assembly and the magazine well adapter, the Hydra will fire 7.62x39mm ammunition using AK magazines. We have tested the Hydra extensively in all its permutations and our test carbine performed flawlessly. The problem with earlier designs that attempted to use the standard AR magazine well was that the AR magazine must have a straight profile in the magazine well, while the AK magazine is curved along its entire length. Thus, any AR-type magazine set up for 7.62x39mm would not feed reliably. MGI solved this problem by simply redesigning the lower receiver to accept interchangeable magazine well adapters that slide into heavy verti-



cal grooves and lock into place. Once in place, the magazine wells are rock solid. Because barrels can quickly be removed, thus opening up the receiver, cleaning and maintenance is also simplified. The Hydra is one of the most significant developments in the history of the AR, because for the first time it provides a true multi-caliber capability for the classic rifle without changing upper receivers.

9. Horus Vision Sighting System (HVS) with H25 tactical reticle designed for military and law enforcement sharpshooting use, has achieved notable success with Army Special Forces in both Afghanistan and Iraq and has been used by the winners of the US Army Sniper Competition held at Fort Benning, Georgia, for the last three consecutive years. The HVS is a true sighting system that encompasses scope, PDA with ballistic software, Kestrel pocket met station, waterproof "come-up" cards and software for desktop or notebook computers. Horus Vision scopes eliminate "dialing in" clicks of elevation or windage and are calibrated in standard milliradians, but without Mil-Dots. Each milliradian is subtended into 0.2-inch milliradian increments, so range estimation using the mil system is far more precise than with standard Mil-Dots. Horus Vision scopes use a targeting grid that looks "busy" at first glance but soon becomes second nature. In use, the shooter generates "come-up" data for his specific load using the Horus Vision handheld computer. This data is transferred to a waterproof, adhesivebacked paper card that's used to determine precise holdovers for elevation and windage. If time is available and exact precision is desired, the Horus PDA can be used to generate ballistic targeting data, to include elevation and windage holds for the target to be engaged, but we find the "come-up" card to be satisfactory in all but the longest range engagements. The rifleman can use a variety of loads without adjusting his scope. All that is necessary is to generate the "come-up" card for any load desired and confirm zero. The HVS is available in scopes from several manufacturers.

#### 10. Gladius tactical flashlight.

The Gladius performs several tasks in addition to being simply a first-rate tactical light. Perhaps foremost is the ability to actually use the Gladius as a disorienting non-lethal weapon. When we were told that the strobe feature of the light could be used to disorient, we were skeptical. It took exposure to the Gladius to convince us. Several journalists, all of who had military or



Gladius tactical flashlight also functions as a less-lethal disorienting weapon. (Photo courtesy BlackHawk Industries.)

law enforcement experience, were invited to a nighttime Gladius demonstration. We were individually exposed to a Gladius in strobe mode from a distance of about 15 yards. We were on a gravel surface, so approaching footsteps should have been apparent. With the strobe flashing, we all were almost completely disoriented to the point that we were off balance. Worse, two individuals were able to approach each of us without our detecting them either by sound or visually. The Gladius' strobe is REALLY that effective at disorienting! In testing, the Gladius' strobe caused many non-compliant persons to become confused, distracted, disoriented or in some cases, frightened.

The Gladius has a three-position rotating switch with three "channels." Channel 1 is a momentary on switch like that of any other tactical light. Channel 2 is the strobe channel. Channel 3 is a constant on/off switch, but with a difference. By holding the on/off button in for 1.5 seconds, the lamp begins to dim from highest to lowest output level over a period of about three seconds. The dimming ratio is approximately 100:1. Releasing the button stops the dimming process. Pressing and holding the button again gradually raises the light output to its maximum level. The constant on/off can be reprogrammed to individual or team requirements. What we have just described is Mode 1, although the Gladius can be programmed in several other modes.

The Gladius' switch has no conventional contacts to wear or become corroded and can also be used to lock the system entirely by pressing the on/off button halfway down in "Constant on" channel and rotating the switch counterclockwise. In this position the light cannot be turned on, but rotating the switch clockwise can be accomplished by simply rotating the switch; it isn't necessary to press the on/off button.

All in all, BlackHawk Products Night Ops division has raised the bar for high intensity tactical lights to new levels.

#### Final Notes

And so, dear reader, that completes my "Top Ten" for this time. I'll probably be taken to task for omitting some development that a reader considers more significant than anything included herein, but as I mentioned at the beginning the items I've included are those about which I have personal, first-hand experience. There is not a single one that I haven't used myself and if I didn't think they enhanced tactical operations, they wouldn't be here.

# For more information contact:

#### **Alexander Arms, LLC**

U.S. Army Radford Arsenal, Dept GW/LE P.O. Box 1 Radford, VA 24143 540-639-8356; www.alexanderarms.com

#### BlackHawk Products Group

4850 Brookside Court, Dept GW/LE Norfolk, VA 23503 800-694-5263; www.blackhawk.com

#### **FNH USA**

P.O. Box 697, Dept. GW/LE McLean, VA 22101 703-288-1292; www.fnhusa.com

#### **Fulton Armory**

8725 Bollman Place #1, Dept GW/LE Savage, MD 20763 301-490-9485; www.fulton-armory.com

# **Horus Vision, LLC**

659 Huntington Ave., Dept GW/LE San Bruno, CA 94066 650-583-5471; www.horusvision.com

#### Kimber

1 Lawton St., Dept GW/LE Yonkers, NY 10705 800-880-2418; www.kimberamerica.com

#### MG Industries, Inc.

102 Cottage St., Dept GW/LE Bangor, ME 04401 207-945-5441; www.MGIMilitary.com

### Optical Systems Technology, Inc.

110 Kountz Ln., Dept GW/LE Freeport, PA 16229 724-295-2880; www.omnitechpartners.com

## **POF-USA**

23623 N. 67th Avenue, Dept GW/LE Glendale, AZ 85310 623-561-9572; www.pof-usa.com

#### **Springfield Armory**

420 W Main St., Dept GW/LE Geneseo, IL 61254 800-680-6866; www.springfield-armory.com

# Vitor Weapon Systems, LLC

3735 N. Romero Rd., Dept GW/LE Tucson, AZ 85705 520-408-1944; www.vltor.com