

# TANDAL AK-74S 5.45MM

BRINGING THE AK INTO THE 21<sup>ST</sup> CENTURY  
WITH MODULAR CAPABILITY!

BY CHARLIE CUTSHAW  
PHOTOS BY DOUG RICHARDSON



DoD PHOTO

**Tantal AK-74 S with modifications described in text is a modular carbine capable of accepting full range of accessories such as EOTech HWS, Laser Devices' DBAL-A<sup>2</sup> and CAA vertical foregrip with Laser Devices OP-6 150-lumen high intensity LED flashlight.**

**T**he AK in all its various configurations is one of the most recognizable small arms ever devised and despite the overwhelming use of AR-15 type rifles by American law enforcement, the AK remains a viable long gun for individual officer purchase, costing about half of an AR-15/M4 type semi-automatic carbine while being just as effective and more reliable in the long run.

In fact, AKs are designed to run with a minimum of maintenance while standard ARs are relatively maintenance intensive, requiring frequent cleaning and heavy lubrication due to the direct impingement gas system that blows hot gases, fouling and particulate matter back into the receiver. There are a few new ARs on the scene that make use of a gas piston and operating rod to alleviate the fouling issue, but these rifles are much more expensive than an AK.

The AK has no such issues and is available in several calibers, including 7.62x39mm, 5.56x45mm and 5.54x39mm. Our test rifle is in 5.45mm,

which is available at reasonable prices and has terminal ballistics that is just as effective as similar rounds in other calibers. The 5.45mm bullet's terminal ballistics is such that when the Russians in combat in Afghanistan first used it, the Mujahideen guerrillas called the 5.45mm the "Poison Bullet." The bullet's design causes enhanced terminal ballistics even in a FMJ round.

We have previously stated that if we could have only one tactical carbine, it would be an AK, but the basic AK has a few issues. First is a negative image along with the fundamental problem that the standard rifle is incapable of accepting the array of optics and accessories that can be fitted to AR-type rifles and carbines with MIL-STD-1913 rails on the receiver and handguard.

This has changed with the introduction of SureFire's M84 AK MIL-STD-1913 rail system and TAPCO's M4-style collapsible stock and SAW-type pistol grip that bring the AK into the 21st century with modular capability. Neither SureFire nor TAPCO sell complete rifles, so the user must provide his own rail handguard, stock and pistol grip although the

## TANDAL AK-74S 5.45mm

conversion is straightforward and requires only simple hand tools.

### About The Conversion

Our test rifle was a Polish-made Tantal with side-folding wire stock, which we frankly don't like. Not only is the wire stock uncomfortable when extended due to short length-of-pull (LOP), it doesn't provide a decent cheek weld and isn't adjustable for LOP. We immediately removed the side-folding wire stock and replaced it with one of TAPCO's T-6 type collapsible stocks. This stock is essentially identical in function to the M4 carbine stock and makes a huge difference in the feel and handling of the AK.

The AK's pistol grip is also too small and TAPCO's M249 SAW-type grip is set at a better angle plus it is larger in circumference to accommodate larger hands. As mentioned, the SureFire MIL-STD-1913 handguard enables the AK74 shooter to mount the full array of accessories that most users consider essential. An advantage of just about any AK is the fact that it can be had at a fraction of the price of most AR-type rifles.

The AK also has the advantage of being more reliable than almost any AR and requiring far less maintenance to keep it functioning. The downside of the AK is that most are generally less accurate than ARs, but in a CQB (close quarter battle) situation, which is where virtually all of

these rifles will be used, that isn't really an issue. At typical CQB distances of 25 to 50 yards, the AK is as good as any rifle in its class.

Our preference for the AK over the AR goes beyond the scope of this article, but basically stems from reliability and ease of maintenance. Although the basic AK is not modular, one can now purchase a brand-new AK and the components described above for less than the price



AK-74 controls are pure AK—nothing new to learn. TAPCO M249 SAW-type pistol grip enhances handling.

of a basic flattop AR that will still have to be modified to transform it into a modular carbine or rifle.

Polish AK-74s imported by J&G Sales and R Guns are representative of the type and installing the modular kits took only a few minutes after the original stock was removed. The Polish AK overall displayed higher quality than most AKs and fit and finish of parts was good. The conversion we performed takes the AK to the next

level of performance and transforms it into a true modular carbine capable of accepting the full spectrum of optics and accessories in use by today's military and law enforcement tactical teams.

The conversion process begins with removing the original stock and replacing it with a TAPCO collapsible stock. Collapsible stocks are virtually mandatory for members of tactical teams wearing body armor and gear that forces them to adjust the stock's LOP, not to mention accommodating shooters of all sizes. Another aspect of the conversion is that the appearance of the AK is altered so it no longer has a distinctly AK appearance. The distinctive front sight is still present, but the rifle's silhouette is definitely changed, especially after optics and accessories are added.

### Optics Options

We installed an EOTech Holographic Weapon Sight (HWS) on the top handguard rail. Although not directly over the receiver, the EOTech reticle is approximately the same distance from the shooter's eye as the standard rear sight, so eye relief isn't an issue. The EOTech is one of our favorite CQB optics and is



SureFire M84 MIL-STD-1913 handguard allows use of EOTech HWS.

one of the fastest on target of any such device. Optics are the rule in both military and law enforcement tactical operations for a number of reasons.

Using open sights requires that the shooter correctly align front sight and rear sight to achieve what is called sight alignment. Once the sights are aligned, the target is added to the equation, so the shooter is actually focusing on three distinct elements. By far the most critical is sight alignment, which will cause the target to be completely missed if it is off by even a small degree.

Moreover, for shooters like the author whose middle age eyes can no longer focus as well as they once could on close objects like rear sights, optics are absolutely mandatory. We understand that the HWS also is used for building clearing by some forces in Iraq and Afghanistan with

### SPECIFICATIONS

## TANDAL AK-74S 5.45X39MM

<b>CALIBER:</b>	5.45x39mm
<b>BARREL:</b>	16 inches
<b>OA LENGTH:</b>	39 inches
<b>WEIGHT:</b>	6.7 pounds (empty)
<b>STOCKS:</b>	Folding wire
<b>SIGHTS:</b>	Post front, folding rear
<b>ACTION:</b>	Gas-operated, semi-automatic
<b>FINISH:</b>	Black
<b>CAPACITY:</b>	30-shot mag
<b>PRICE:</b>	\$489-599



### PERFORMANCE

LOAD	VELOCITY			ES	SD	ACCURACY
	HIGH	LOW	AVERAGE			
Wolf 70 FMJ	2751	2637	2683	114	42	1.75

Bullet weight in grains, velocity, extreme spread (ES) and standard deviation (SD) in feet per second (fps) by Oehler 35 chronograph, accuracy in inches for two five-shot groups from 50 yards in a standing position. Temperature: 55 degrees Fahrenheit.

**“AK-74 muzzle brake reduces felt recoil to near .22LR levels.”**

the reticle switched off. All the individual does is frame the target in the sight and shoot it.

Since the MIL-STD-1913 rail on our AK-74 was too short to accommodate weapon mounted night vision sights (NVS) like the military's current standard AN/PVS-22, so we obtained a PS-23-CGT head-mounted night vision goggle from American Technologies Network (ATN). The PS-23 runs on a single EL123 lithium battery with a life of approximately 60 hours. The PS-23 comes with a head mount, so it can be worn and used hands free, enabling the user to see the weapon sights and the target.

The HWS has an IR (IR) reticle for use with NVGs or NVS that mount behind the reticle. In addition to the head mount, the PS-23 has an infrared illuminator. The PS-23 also has automatic brightness control that turns the unit off if it is exposed to bright light for more than 10 seconds and then automatically reactivate when darkness returns. Needless to say, high quality NVGs like these requires State Department approval for export. These devices must be actually used to appreciate their full effect on night operations.

**Lights & Lasers**

Most tactical carbines are equipped with a vertical foregrip and ours is no exception. We chose one of Command Arms Accessories (CAA) Flashlight Grip Adapters that accepts any tactical light having a standard tube diameter of approximately 1-inch. The CAA adapter also has side receptacles for pressure pads to actuate accessories. The grip adapter clamps the light firmly in place and has a thumb button to activate any light having a rear pressure switch. A “crossbolt” safety locks the button to prevent unintentionally activating the light.

As to the light itself, we opted for a Laser Devices' OP-6 “Operator.” This compact LED light is the brightest in the industry with a blinding 150 lumens output in a 1-inch tube diameter light that uses two EL 123 lithium batteries. The

light is intense white with a focused center “hot spot” and a less intense corona that enables the user to illuminate over a wider area for searches and then to highlight items of interest using the 150-lumen hot spot.

The tube itself is made of 6061T-6 aircraft aluminum, hard anodized to military specification. The OP-6 enables facial recognition at 30 feet, is waterproof to 20 meters and has a continuous runtime of 1.5 hours. The OP-6 lights are available with three interchangeable tailcaps: momentary/constant on push button like our test unit, toggle switch and pressure pad. Pressure pads are available with either straight or coil wire.

We set the OP-6 up in the CAA adapter so that we could use the momentary on function by pressing partway and the constant on by pressing a bit further until a tactile “click” was felt. With an optional IR filter in place the OP-6 could be used in conjunction with the ATN NVGs to illuminate and search with light that was invisible to the naked eye. Of course, people with night vision devices of their own could see the IR light, but most thugs don't have night vision equipment.

Finally, we installed a Laser Devices Dual Beam Aiming Laser-Advanced<sup>2</sup> (DBAL-A<sup>2</sup>), whose military designation is Multi-Functioning Aiming Laser System (MFAL). Whatever it is called, this device is the military's most recent laser aiming and illuminating device. The DBAL-A<sup>2</sup> provides an IR pointer, IR illuminator and red visible laser pointer and probably will eventually replace the larger and less capable AN/PEQ-2. Modes are selected using a rotary switch to select between the visible laser and the various IR modes, including IR pointer only, IR illuminator only or both.

A low power engagement mode reduces the IR output for indoor use and CQB. Optical glass generators project different illumination patterns that include circle, square, triangle, plus sign or “T” for target designation and pointing. When used with the ATN NVGs the DBAL-A<sup>2</sup> enables the shooter to illuminate his target with a laser

that is invisible to the naked eye, a major advantage in night operations. Windage and elevation are adjustable in 0.4 milliradian increments.

The DBAL-A<sup>2</sup> is provided with optional mounts for MIL-STD-1913 rails—either a thumbscrew or quick detach (QD) throw lever mount like that of our test unit. The DBAL-A<sup>2</sup> is constructed of 6061-T6 aircraft aluminum and weighs only eight ounces. Power is from a single AA battery.

**Range Time**

Like all AK-type rifles we have ever fired, our converted modular AK was utterly reliable. We did not experience a single stoppage of any type during testing. The revised stock with AR-type tube in combination with the highly effective muzzle brake brings the recoil forces down nearly to .22LR levels, significantly enhancing control. With this little rifle, double and even triple taps were a snap. Muzzle rise was virtually nil. The MIL-STD-1913 rail mounts allow the user to tailor his rifle to the particular task at hand, whether it is a dynamic entry, building clearing, or any situation where a patrol carbine is called for. Pinpoint accuracy is not the strong suit of any AK, but our test rifle was as accurate as any military-type rifle.

The prospective purchaser of any AK should not expect match accuracy, but our testing revealed that our rifle delivered the goods at 50 yards. AK-type rifles are designed for relatively short range work and also are limited by the fact that there is no match grade ammunition available for them, except for .223 versions. Within its intended range envelope, however, the CAA Modular AK is extremely effective. We tested the AK with Wolf Russian ammunition that is essentially made to Russian military specification. Our 50-yard groups averaged about 1.75 inches.

**Final Notes**

The AK-74 rifle, combined with the modifications listed, redefines the AK, modernizing and changing it into a tactical carbine capable of accepting modular accessories and is a low cost alternative to AR-type rifles that must also be modified to achieve modular status. AKs are as close to being totally reliable as a mechanical device can be, so for anyone looking for a reasonably priced, utterly reliable, reasonably accurate carbine for patrol, defense or competition use in three gun matches, the AK-74 is worth serious consideration.



Soldier conducts training drill with AK-74S.

**FOR MORE INFORMATION**

**J&G SALES**  
40 Millar Valley Rd, Dept. GW/LE  
Prescott, AZ 86301  
928-445-9650  
[www.jgsales.com](http://www.jgsales.com)

**R GUNS**  
140 N Western Ave, Rte 31, Unit B,  
Dept. GW/LE  
Carpentersville, IL 60110  
847-428-3569  
[www.rguns.net](http://www.rguns.net)

**AMERICAN TECHNOLOGIES NETWORK (ATN)**  
1341 San Mateo Ave, Dept. GW/LE  
S San Francisco, CA 94080  
800-910-2862  
[www.atncorp.com](http://www.atncorp.com)

**COMMAND ARMS ACCESSORIES**  
780 Haunted Lane, Dept. GW/LE  
Bensalem, PA 19020  
267-803-1518  
[www.commandarms.com](http://www.commandarms.com)

**L-3 EOTECH**  
1201 E Ellsworth Rd, Dept. GW/LE  
Ann Arbor, MI 48108  
734-741-8868  
[www.L-3com.com/eotech](http://www.L-3com.com/eotech)

**LASER DEVICES**  
2 Harris Ct, Ste A-4, Dept. GW/LE  
Monterey, CA 93940  
800-235-2162  
[www.laserdevices.com](http://www.laserdevices.com)

**SUREFIRE**  
18300 Mount Baldy Circle  
Fountain Valley, CA 92708  
800-828-8809  
[www.surefire.com](http://www.surefire.com)