

**T**HE SOVIET AKM rifle has been widely acclaimed during the last thirty years as THE ultimate assault rifle.

Apart from its legend as the basic weapon of the opposition, it must be admitted the AKM is compact, reliable, simple, sturdy, cheap and properly configured, perfectly meeting the requirements of the basic soldier. In this writer's opinion, its only drawbacks are the lack of a hold-open device, quite surely leading to accidents with a closed-bolt automatic gun, and its marginal accuracy when fired in the semi-automatic mode beyond 100 yards.

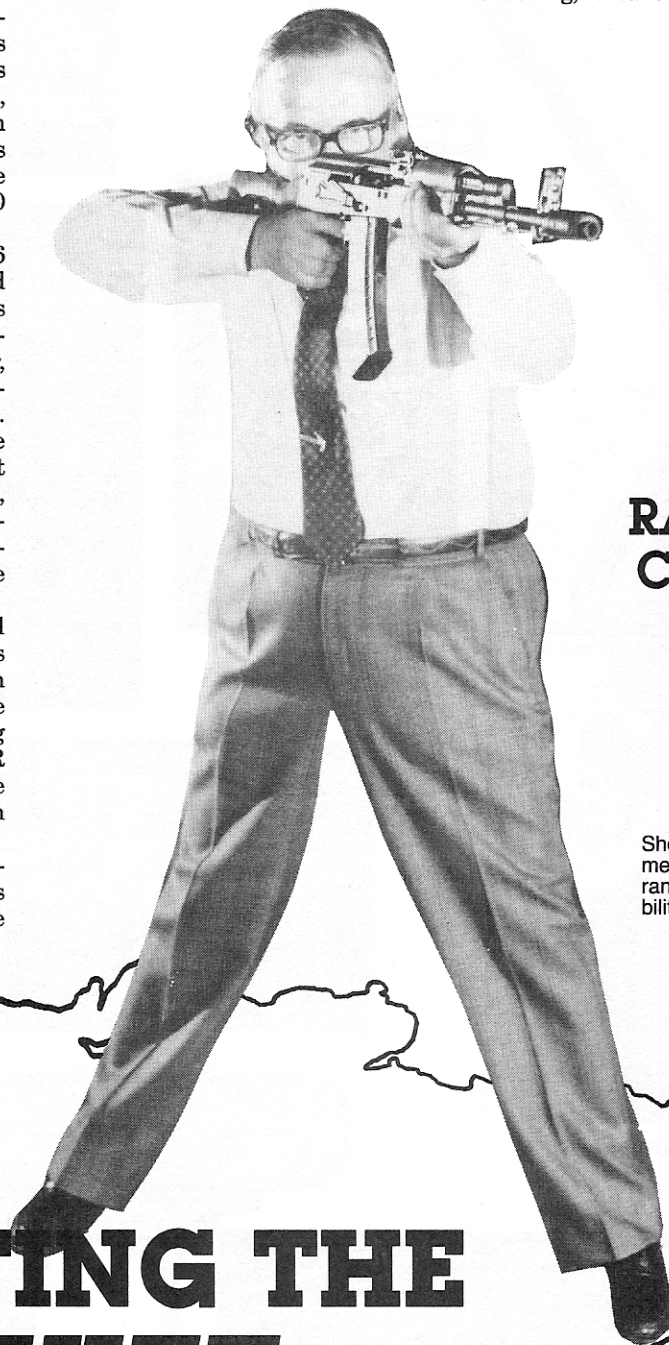
The United States adopted the M-16 in due time and properly distributed it to friendly countries. While less compact, more expensive and quite sophisticated, the U.S. M-16 is lighter, more accurate, and it uses a generation-ahead military ammunition. More recently, the Austrian AUG rifle created quite a stir with its significant improvements: modular construction, plastic-coated springs, bullpup configuration, basic optic sight, interchangeable barrels and extensive use of synthetic materials.

Even though it's produced by a small neutral European nation, the AUG has been selected by many armed forces in spite of its high cost. Everybody else is holding their breath while awaiting the issue of the new American ACR program involving, among others, the controversial German Heckler & Koch caseless rifle.

However, even if these highly advanced designs achieve the hopes placed in them by the most progressive

Western armies, it can be doubted, in view of the experience of both World Wars, that arsenals will hold enough of them when needed. And, finally, if all the improvements contemplated meet the professional soldier requirements, what of the casually enlisted man?

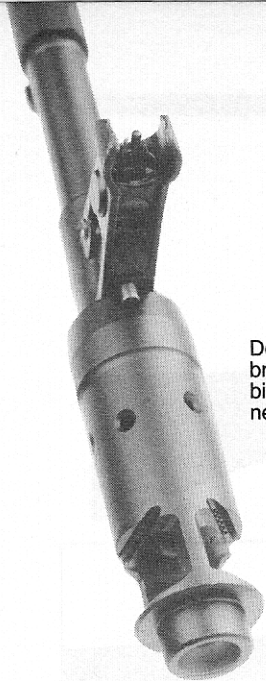
As a leading South American arms merchant asked this writer some years ago: . . . "Do you think that an \$800 modular design made of synthetic materials and fitted with a scope and removable barrels is necessary for waving it above the head while shouting, 'Viva la Revolucion?'"



by  
**RAYMOND  
CARANTA**

Shooting standing at 25 meters with the AK-74, Caranta found the controllability outstanding.

# SHOOTING THE SOVIET AK-74



Detail of AK-74 muzzlebrake—certainly every bit as complex as it need be.

The Soviet answer to all this *and* the M-16 started to be better known at the beginning of the Afghanistan War in the early 1980s, though first disclosed about 1978. Except for its brown plastic magazine and bulky muzzlebrake, the new small-bore AK-74 looked very much like a conventional AKM. As a matter of fact, such was the case.

The magazine capacity of thirty is the same. Its 5.45x39 (also referred to as 5.45x40) ammunition is theoretically slightly less powerful than the 5.56mm NATO round loaded with the regular 62-grain bullet. The bullet construction is characterized by a mild steel jacket, an armor-piercing steel

core and a hollow tip. As far as the gun behavior is concerned, the most significant effect of this ammunition is the recoil reduction it offers.

In European military practice, it is commonly admitted that the simplified recoil velocity should not exceed 2.5 meters per second (m/s), which is approximately 8 feet per second, for guns firing only single shot; and that it should be as much as possible under 1 m/s (3.27 feet per second) for those capable of burst firing. While the conventional AKM weighing 3.8 kilograms (8.38 pounds) and chambered in 7.62x39 has a 1.47 m/s (4.8 feet per second) recoil velocity, the same gun chambered in 5.56mm NATO recoils at .96 m/s (3.14 feet per second, i.e., under the required threshold) and the AK-74 recoils at .81 m/s (2.65 feet per second), which is even better, *notwithstanding* the terminal effect of the bullet. If compared to the 7.62x39 ballistics, the reduction in recoil is 45 percent, which is quite important.

The AK-74's external differences are the magazine material, the cross-punching of the trigger mechanism pins, the big muzzlebrake and the slotted stock and forearm, the latter being thicker. Curiously, there is no night sight provision.

In relation to the AKM, the AK-74 is 1.77 inches longer due to the muzzlebrake, and the empty gun is 14.3 ounces lighter. When both guns are loaded, the AK-74 is 22.32 ounces lighter.

The AK-74's magazines are easily filled and inserted, but the gun is rather hard to charge. The safety-se-

lector lever is also quite hard to operate. The stock is very short and the gun is muzzle heavy. The grip is the same as that of the AKM, but the thicker forearm is more comfortable.

The rear sight notch is deep and narrow, with little space around the square front sight. The bent front sight protective flaps avoid any possible confusion in rapid fire. These sights are good in single shot, but too tight for burst firing. The AK-74's trigger is smooth, reasonably wide and properly shaped, with a let-off set at 5 pounds. However, it is a typically Russian two-stage pull with a creepy .4-inch slack and a soft second pull not easy to feel.

We were required to testfire our sample in a closed range, downtown, in artificial light and under the flashes of two photographers who did the utmost to simulate a night fight. First, we shot the gun prone at 50 meters, and then standing at 25 meters, in semi-automatic and full-automatic fire.

At 50 meters, the windage was good, but our groups were 5 inches too low. We corrected this by setting the rear sight in the 300-meter position. Our five-round grouping was 3.30 inches high and .80-inch wide. The vertical scattering probably resulted from the artificial lighting which made the front sight too bright. At 25 meters, standing, the best grouping measured .78x1.57 inches and was 3 inches low.

However, the big surprise came when shooting five-round bursts standing at 25 meters. The rifle plainly did not rise and groupings were about 6 inches in height, quite like those from the American 180 22 Long Rifle gun! This beautiful achievement seems to result mostly from the sophisticated muzzlebrake which is 3.22 inches long and probably requires expensive machinery for production.

In view of the current Western developments, is the AK-74 the product of a winded industry, a half-measure, or a smart solution to an expensive modernizing problem? Before shooting, we were leaning toward the first assumption, but after our test it is felt the truth lies in the third one.

Indeed, the AK-74 rifle brings nothing new besides its muzzlebrake design, but it can be made using the AKM machinery; it is easily field-stripped; it seems to be accurate and reliable; and it does not require a complete updating of training and infantry manuals. As a bonus, it is probably the most efficient for the moment in burst firing.

#### BALLISTICS

Caliber	5.45x39	5.56mm NATO
Cartridge length	2.23"	2.26"
Cartridge weight	165 grains	192 grains
Bullet weight	52.6 grains	61.5 grains
Muzzle velocity	2950 fps	3000 fps
Muzzle energy	1020 foot pounds	1250 foot pounds



Above, an East German AKM; below, a Soviet AK-74 which offers low recoil and easy control as its chief advantages.

