

New Generation Small Arms – A Generic Overview

Design. Many of the newer generation of military small arms are of the “bullpup” design. (See Annex B for pictures of the FN P 90 and the AUG Steyr). Although the concept is almost 100 years old, the bullpup certainly looks “futuristic”.⁴⁵ The barrel is moved well back into the stock and the action and magazine are placed behind the trigger assembly. What this does (something which other more conventional small arms do not do) is to optimize the space taken up by the stock. The result is a more compact and often lighter weapon with less recoil, making it easier to control for those with less strength and thereby rendering the weapon more accurate. Such designs often combine the attributes of a sub-machine gun and an assault rifle. Most are 30 centimetres shorter than comparable assault rifles. While there are technical supporters and detractors of the weapon concept, it does appear to be the design of choice for replacing the current standard inventories in many armies. The majority of newer small arms, including those of the bullpup design, maximize the use of polymers and other synthetic material in order to help lighten the weapon and keep production costs down. Most of these new small arms are easier to handle and maintain and are much less susceptible to fouling or other problems than those of previous generations. With a few exceptions, these small arms continue to fire the same 5.56 x 45 mm round as their predecessors (or for the Russians, a 5.45 x 39 mm round).

Ammunition Capacity and Type. Most of the newer small arms do have larger magazine capacities than their predecessors. Magazine capacity ranges from 25 to 100 rounds, depending on the weapon and its configuration, with most small arms using a 30 round magazine. Some of these have side-by-side magazines (double or triple) giving the weapon an enhanced rapid change capability over older generations of assault rifles. New plastic pre-loaded throw away magazines are also being developed. Ammunition type continues to be the standard 5.56 x 45 mm or 9 x 19 mm, albeit with a few notable exceptions. These are the 5.7 x 28 mm used in the new FN P90 and the 4.73 x 33 mm caseless ammunition designed for the HK-G11 and HK-ACR. Both these rounds could have significant implications regarding SALW control issues should they become widely available to non-state actors (particularly criminal elements). In addition, the Chinese are also producing a new round – the 5.8 x 42 mm – which is being issued to troops in Hong Kong.

Rates of Fire. The rate of fire is not necessarily a positive indicator in determining a small arm’s effectiveness. The small arm is basically a discriminatory weapon and in most cases it is desirable to have controlled and accurate fire with a minimum expenditure of ammunition

⁴⁵ See: Peter Kokalis. “Steyr AUG; This Bullpup’s No Dog,” *Soldier of Fortune Magazine* (February 1985). It is interesting to note that some older firearms can be modified to a bullpup design, and, at least in the USA, conversion kits are available for civilian purchase. The design itself does not necessarily mean that it will make a firearm more effective or lethal after such a conversion, particularly if it still meets all other regulatory requirements. It will however decrease the overall length of the firearm. The bullpup design firearm is illegal for civilian use in Canada. See <http://www.bushmaster.com/catalog/bullpup.html>. and <http://www.sksman.com/aku/aku94>