

Bulldog Assistant Gunners Kit Information Paper

BLUF: The goal for Bulldogs AG Kit is to increase the Warfighters individual capability on the battlefield. The Bulldog AG Kit will leverage new technology to improve an existing system to provide small unit weapons with improved efficiency over current systems at reduced weight, while providing equivalent lethality.

The Bulldog AG Kit includes:

- 1) Rail Frame: Reconfigurable, Accessory, Integrated, Load Carriage System
 - o Molle Compatible Frame
 - o Constructed from Aircraft Aluminum, all bends are welded.
 - o Stainless Steel Nylon Lock Nuts, and Bolts
 - Drop Down Tray prevents the Sag of the 2 day pack and allows the frame to be reconfigured for resupply.
- Light Weight Spare Barrel Quiver for the M249 Saw, M240B, Mk46, Mk48: 1.5 Lb
- Light Weight Spare Barrel Mat (Cooling area for the Spare Barrel)
- (2) Rapid Access Ammunition Pouches: 1 Lb
- (1) 2 Day Assault Back Pack (1250 Cubic Inches) 1Lb 5 Oz
- Accessory Pouch: 3 oz
- Hydration Pouch: 3 oz
- M249/M240 B Weapon Sling
- Heat Mitt: 4 Oz

This product information paper is on the Bulldog Assistant Gunners (M249/M240B AG Kit). This will increase the Warfighters effectiveness while improving survivability. The Bulldog AG Kit allows total equipment integration from the Qty (2) ammunition pouches that are designed to SPECIFICALLY hold either Saw or 240 Ammo. The M249 Saw Ammo Bags hold 750 Rds each Qty (2) 1500 Rd Capacity, The 240 ammo Bag hold 400 or 500 Rounds of Linked Ammo Each Qty (2) 800 or 1000 Rd Capacity /; Spare Barrel Quiver, Spare Barrel Mat and a way to carry the Tripod. As well as a 2 day Assault Back Pack (1250 Cubic Inches) 1Lb 5 Oz, (1)Accessory Pouch: 3 oz, (1) 100 OZ Hydration Pouch: 3 oz, Heat Mitt: 4 Oz, and a M249/M240 B Weapon Sling.

All of this equipment can be integrated and is MOLLE (Modular Light weight Load carrying Equipment) compatible. When the equipment is mounted on the Bulldog Rail Frame it allows for

uncompromised load distribution. The Spare Barrel Bag and Mat are 75% lighter than what are issued (3.25 Lb. weight reduction), improved accessibility and greater security regarding the tripod retention. The ammunition is readily accessible allowing for rapid reloading of the weapon system it supports. Currently the AG, AB and Gunner carry the equipment. With the Bulldog AG Kit the AG and Gunner will have the ability to carry all the necessary accessories to support the weapon system reducing the minimum number of personnel from 3 to 2 for employment of this weapon system. Some units have used the Bulldog AG Kit independently, depending on the strength of the Soldier.

Warfighters currently comment that the current method to carry needed ammunition and accessories negatively impacts survivability and mission accomplishment, as the Warfighter must be exposed to enemy fire for extended periods of time utilizing current packing system to gain access to needed weapon accessories before the weapon system is operational. The current Squad and Platoon machine gunners must carry a sling; spare barrel bag (which holds the spare barrel and tripod) as well as ammunition pouches of various sizes. The necessity of exchanging ammunition drums or rapidly linking the additional belts of ammunition to the weapon is paramount since there are only 50 rounds in the CAP (Combat Assault Pack).

Advantages of the Bulldog AG M249/M240 Ag Kit include:

- Soldiers can rapidly reload the machine guns resulting in an sustained rate of fire that is unable to be accomplished with today's equipment while in contact with the enemy.
- Soldier movement in restrictive terrain is improved due to a better integration and distribution of weight of the weapon accessories mounted on the Bulldog Rail Frame.
- The improved integration of the machine gun accessories with the use of the Bulldog Rail Frame and AG Kit will improve direct fire lethality to the unit of action. The overall goal of the Bulldog AG Kit is to increase Warfighter's lethality and survivability on the battlefield by providing integration with the current accessories which make for rapid weapon deployment.

The disadvantages with the current method of carrying machine gun essential items are:

- The current Warfighter weapon accessories lack integration capability on any Back Pack Frame or MOLLE Panel.
- Therefore individual pieces of equipment must be carried; They include a 4.5 Lb. spare barrel bag, tripod and standalone ammo pouches.
- The ammunition is stored in 100 round card board boxes which disintegrate when wet and are cumbersome to rapidly link rounds together.

• Without better integration of this equipment there is a decrease in effectiveness during engagements through reloads procedures which removes the unit's most casualty producing weapons from the close fight.

Bulldog Equipment has integrated a new (Patented) system allows for the extreme weight of the accessories not to be a factor with the current Army Issue MOLLE System. Bulldog's MOLLE design is 75% lighter. This was accomplished by using a single layer of ½ to 3/4" webbing, removal of the plastic stiffener and the permanent mounting of a stamped metal one inch Tri Glide from ITW Nexus. This allows for the webbing to be locked in place preventing accessory movement.

The Bulldog AG Kit ammunition pouches are designed around the dimensions of 5.56 or 7.62 ammo. Therefore depending on your units preference you can choose to carry 1500 Rds of 5.56 Saw ammo or 800 Rounds of 7.62 x 51, 240 Ammo. The ammo pouches are integrated with a patented ammunition tension feed system. This bracket provides enough tension on the rounds to prevent rounds from falling from the pouch onto the ground regardless of its position, even if inverted. The tension however does not interfere with the feeding of rounds into the weapon.

This (Patented) Ammunition Pouch allows the ammunition to be rapidly accessed and linked to the ammunition in the CAP. The current issue CAP holds 50 rounds and it takes more than 45 seconds to link the ammunition together using current issue ammo bags. The Bulldog Ammo Bags allows for expedited and efficient ammunition access, units have linked the ammo to the pouches in under 10 seconds.

Bulldog Equipment developed the current issue Spare Barrel Bag NSN# Coy 1005-01-5369646 in 2003, that Spare Barrel Bag weighs 4.5 Lbs. Bulldogs Spare Barrel Bag generally has a life span of 3-5 years proving its design exceeds any durability requirement. With the knowledge learned from previous solutions we utilized the same materials for this new Spare Barrel Bag and Spare Barrel Mat. By changing the design we were able to save 3.25 Pounds with our new design, our current Spare Barrel System weighs 1.25 Pounds. Also the Spare Barrel Mat and Bag are two separate products. This allows replacement of individual components creating a cost savings for the military.

The current issue spare barrel bag is not MOLLE compatible, extremely cumbersome as well as having a large foot print that makes carrying and deployment difficult. The ease of use and rapid access of Bulldog AG Kits Spare Barrel Bag and Spare Barrel Mat allow for rapid barrel change. A large number of machine guns are being serviced or rebuilt in theater due to damage caused by soldier failure to properly change the barrel.

The Tripod is secured in the Barrel Mat during movements by using 1 inch Fast Tacks from ITW Nexus mounted on the Rail Frame. The Bulldog AG Kit comes with a variety of spare hardware which will allow for personalized equipment placement and repair in the field of all plastic components.



The machineguns are first and foremost close combat fighting weapons; M249 / M240B AG Kits will provide lethality enhancements to all dismounted units including: Infantry, Heavy, and Stryker Brigade Combat Teams (SBCT), as well as Combat Support (CS) and Combat Service Support (CSS) organizations. The 240 AG Kit will provide other joint services with weapon accessory capability not currently matched by any equipment currently provided or commercially available. The 240 AG Kit will aid small units, under the control of maneuver companies and battalions, to dominate conventional or asymmetrical threats in close combat through increased mobility and increased efficiency.