

TTPs FOR THE GPMG

As you know the four fundamentals of machine gun marksmanship revolve entirely around the employment of machine guns on our tripods. This is reflected in our training, both in the tactical execution of offensive and defensive scenarios. As well as in static machine gun ranges focused on marksmanship. If you ask any senior machine gunner chances are they will hold firmly to the belief that machine gunners should always strive to employ from tripod. I offer this question then. Why do machine gunners in combat overwhelmingly choose to employ from bipod rather than tripod? And if that's the case, why does the doctrine we train to the standard not reflect in how we operate in combat?

Our machine gun doctrine was for the most part developed starting in post-WWI. Early on we developed the concept of the 'Sustained Fire Weapon Role' and the 'Light Support Weapon Role' for our different machine guns. These roles are still present by definition in the United Kingdom, Canada, and Australia's machine gun doctrine. The Light Support Weapon Role was the method of employment you see when machine guns are a part of the assault element. It doesn't differentiate from the tactics used by a squad automatic weapon or automatic rifle. The only distinguishing difference is that you will employ a machine gun squad in pairs, as a dedicated internal base of fire using loose principles of machine gun employment. The Sustained Fire Weapon Role is by far the most developed of the two. It's the basis for almost everything in the 3-01C It entails, all the basics for PICMDEEP, Defilade Fire, Direct Fire Support, Defensive Employment, Use and Mastery of the Tripod, and T&E, and Methods of Target Engagement. It's the meat and potatoes of machine gun theory and tactics. These defined roles and their tactics were still early in development but by the time we went into WW2, we had established weapons designed specifically for those roles. For the light role, we had the Browning Automatic Rifle (M1918) and for the sustained fire role, we had the water-cooled M1917 which was later replaced with the air-cooled M1919A3 for infantry use. For a weapon to be suited for the light role it had to be simple to fire and employ by one man. It needed to be ergonomic and provide easy operability. It had to allow for swift maneuverability on the battlefield and it needed to provide a large volume of fire compared to the standard issue rifles. Think of this as the blueprint for a good Light Machine Gun (LMG). For the sustained fire role, we needed a weapon that was accurate and effective at a greater range. It had to be suited for high volumes of fire without stoppage or malfunction, and it needed to fire a full-power cartridge to meet the ballistic requirements for its intended purpose. Designed for use with the tripod and T&E device. This is an example of a Medium Machine Gun (MMG). This was the case for most militaries at the time, having the two dedicated roles and their different systems that could provide the capabilities for each.

The first country to break away from this was Nazi Germany. They adopted the idea of a Universal Machine gun. They needed a weapon that better suited their Blitzkrieg tactics. It was a weapon light enough to be carried into aggressive attacks against the enemy and employed from a bipod, but sturdy and accurate enough to be able to handle prolonged high volumes of fire. So when they reached their objective and needed to switch roles into a hasty defensive position they could do so without their weapons overheating and failing. The first principle for this was a quick change barrel. This allowed them to carry two or more barrels for one weapon and swap them as they heated up. They also developed a soft mount that they could carry with them and attach the weapon to when they needed more accurate fire for long-range attacks or defenses. The first weapon they created was the MG34 followed by their war production MG42. The MG42 to this day is one of the most influential belt-fed machine gun designs in the world. Most of the machine guns we use today borrow ideas from its feeding mechanism and open bolt design. This weapon was the first General Purpose Machine Gun (GPMG). Suited for both roles which are now defined as General Support Weapon Role.

In the post-war era, massive weapons development began borrowing ideas from German weaponry and small arms. During the later stages of the war and the post-war development period the US, who realized the advantages of the GPMG, started redesigning their current M1919s to get them as close to being GPMGs as possible. This was a stop-gap solution, but it spawned the M1919A6. It incorporated a metal buttstock, a bipod attached to the barrel jacket, and a muzzle booster device that allowed the barrel to be changed from the front of the gun rather than requiring a field strip for replacement. This weapon was used during the end of WW2 and the Korean War but even during its development, it was intended to be replaced. Its replacement was the M60. Essentially an FG42 adapted to belt-fed using the MG42 feeding mechanism. This was the US military's first true GPMG. It was very lightweight and controllable, due to its low rate of fire, but what the military found out early on was that it was very unreliable. On top of a poorly designed barrel change feature, it had all kinds of feeding and cycling issues that they just couldn't be bothered to fix when there

was a readily available alternative. That alternative was the M240 (MAG-58) This weapon is easily the standard for machine guns, and though on the heavier side of things, a very versatile GPMG.

There lies a major issue though that hasn't yet been addressed. In all the decades of weapons development and technical research, there was zero development in our tactics. We now have a very capable GPMG but no tactics developed for this new General Support Weapon. Now pay attention because this is important; the M240 is not a MMG. MMGs are crew-served machine guns employed solely on a tripod. GPMGs are crew/individually operated machine guns employed from either the bipod or tripod. The last true MMG used by the US military was the M1919A4. The term MMG has been loosely thrown around and redefined to fit our adoption of the M60 but that needs to stop. Why? Because the tactics need to match the weapon capabilities and tasking that they are given in combat. The 3-01C is a lazy combination of pre-existing MMG tactics (Sustained Fires Weapon) and automatic rifle tactics (Light Support Weapon). Neither ends of the spectrum in relation to its content reflect how we truly employ. What it needs to be is a well-developed manual of tested TTPs, built to match the way 0331s are operating in modern conflicts. It needs to be able to grow and expand with each new lesson learned but right now it's sitting in an almost 100-year-old stalemate. Look at how our Urban tactics have grown since WW2. Why has the way we employed machine guns remained the same, without reevaluation, even though we have twice since adopted completely new weapons and capabilities? Granted, there is quite a lot of experience and know-how that has been passed down through the generations from lessons learned. Most machine gunners these days understand that we employ differently in combat than our doctrine dictates in training, and they have good instincts as to how, but this is a failure on our part. We aren't meeting our potential when we accept a faulty doctrine.

If you don't yet understand how our doctrine is faulty, then let me break it down for you. Our principles for the employment of a Line Company machine gun squad are almost always situated around long-range suppressive fire / Medium Machine Gun Tactics. This is why we are held to the standard of always employing a Tripod when possible. Even to the extreme of employing when the target is 100-200m away. This is ridiculous if you think about it. The size in mils of an enemy squad at 200m and the speed they can close within that range completely offset the advantages the Tripod can offer. At those ranges you need the speed of a GPMG employed on bipods, not a MMG set up on tripod for long-range fire. So why is this trained into our heads that we must employ from tripods at these ranges when it will inevitably lead to the gun team's death or capture? In a study done after WW2, it was revealed that a majority of small arms engagements (including machine guns) occurred within 300m, and within those engagements, a large percentage occurred within 100m. In any combat footage you see, you'll be hard-pressed to find examples of tripods being used in offensive engagements, the soldiers and Marines in those operations revert to their common sense and forget all their past use of tripods in training in favor of using bipods. They see that the advantages of bipods at these common ranges they encounter in combat are key to their survival. Below are these advantages for both the tripod and bipod.

Pros of Tripod:

- Provides a stable firing platform to mount the gun.
- Absorbs majority or rearward recoil when legs are planted firmly and leveled into the ground.
- Traversing Slide Bar and T&E Mechanism allows for very accurate adjustments of fire in Mils.
- Allows gunners to set accurate pre-planned targets, based on T&E data, and quickly adjust between them in both day and night.
- Allows the Gun team to perform accurate defilade fires.
- Allows the gunner to set safety stops for maneuver and prevents any firing outside of the gun's elevation and traverse limits/adjustments.

Pros of Bipod:

- Allows for rapid target acquisition.
- Allows for almost instantaneous adjustments and follow-up bursts.
- Allows the gunner to control the shape of the beaten zone rather than being restricted to the limitations of the T&E.
- Allows the gunner to quickly shift between sectors.
- Can be employed by an individual and can be emplaced much faster than the Tripod.
- The gunner can fire on the move and during transitions between firing positions.
- Can be emplaced almost anywhere while not being restricted to level firing positions.
- Allows the gunner to shoot much lower to the ground and creates a smaller target.
- The machine gun can be repositioned forward or backward much faster and without having to drag the Tripod rearward then readjust the T&E.

As you see from the list, any engagements within small arms range are going to be much more survivable given the benefits of employment on bipods. If your squad is assigned to be in support of a platoon and their platoon-level tasks, chances are you will be engaged by the enemy from within small arms range. This will constitute a majority of the missions you execute. This is the task of a GPMG in a company-level General Support Weapon Role (not to be confused with GENERAL/DIRECT SUPPORT, I know that's confusing but bear with me). So why are we leaning so heavily on the tactics of a Medium Machine Gun within the Sustained Fire Weapon Role? Shouldn't we develop TTPs for General Support Weapon Role? This includes TTPs for range-to-target considerations (i.e. When to use the tripod and when to use the bipod, practical actions upon contact, methods of engagement, as well as target assignment and control, and practical machine gun marksmanship from both bipod and tripod)

These are tactics and methods that simply do not exist on paper. Instead, they are taught by word of mouth, but even then it is mixed with all the counterintuitive TTPs from the 3-01C and like I've stated before, with one generation of laziness that can be completely lost. Not only that, but without training guidelines and solid standards for effective employment, based on our actual role in combat, how can we possibly train to be effective in combat? We are training for the wrong job, and every range or training event we do these days reflects that. The training lacks any sense of realism or practicality especially when we get live rounds down range. This is a sentiment that almost any 0331 will agree on. So how do we solve this?

Here is an idea for a potential guide in deciding to employ from either Tripod or Bipod and the considerations in effective employment given varying ranges/situations. This is very minimal but these considerations are a result of the survey we all did with our guys. Every section leader and squad leader was asked in what situation they would employ Tripods/Bipods and why. Their answers were taken and an average of these effective ranges and situations was created.

Bipod:

- Offensive engagements at day within 600m
- Hasty defensive engagement within 300m when an FPL mission is not assigned.
- Dug-in defensive engagements while firing secondary or supplementary sectors, when the tripod is set on an FPL

Tripod:

- Offensive engagements at day past 600m.
- Hasty defensive engagements past 300m. The exception is when assigned an FPL mission.
- Dug-in defensive engagements until the enemy begins their final assault or displacement criteria met.
- Defilade Fire Missions or any use of hasty defilade fires (this tends to be at greater ranges due to the trajectory of the 7.62x51)

These ranges are a culmination of experience but still, are unproven theories. There needs to be experimentation and live fire studies conducted to test these. There have been so many advancements in communication, optics, and weaponry that alone make it necessary to reevaluate our outdated doctrine. Below are some additional considerations for use of either the bipods or tripod.

- During night engagements, a tripod will be used based on visibility, this call will be made by the squad leader but can be refined at the gun team's discretion.
- During patrols, unless a long-range engagement is anticipated, the tripod can be left at the PB/FOB to reduce unnecessary weight, in favor of extra ammunition, and decrease the machine gun team's overall load.
- In a defense, where the primary sector for a machine gun is the FPL mission, the tripod should be positioned permanently on the fighting hole. Laid on that sector so that the traversing slide bar is "steel on steel" in relation to the FPL. The gunner should detach the gun and utilize the bipods for the secondary sector rather than moving the tripod around their fighting hole.
- The tripod and T&E mechanism should be used when firing from minimum position defilade if there are not any viable aiming points for the Distant Aim Point Method.
- Like an automatic rifleman, the M240 gunner should have a minimum MSL of 15° rather than 45° when employed from the bipod. The weight of the M240 absorbs just as much, if not more recoil than an M27 fired from the prone, so it should be allowed the same permissiveness in its sector of fire.

