Sustainment Battalion Convoy Protection Platform Gunnery

Sustainment units often must provide their own protection for supply convoys but seldom are trained to do so. Using a new convoy protection training circular, the 49th Transportation Battalion (Movement Control) conducted gunnery training before deploying to Afghanistan.

On today’s battlefield, sustainment organizations with minimal self-defense capabilities are often exposed to direct combat. These organizations often lack sufficient training to ensure their survivability. Although convoy protection platforms (CPPs) are not new to the military, sustainment units are now beginning to establish and execute doctrine on how to use whatever platforms are available to successfully engage threats.

In April 2010, the Army Combined Arms Support Command released Training Circular (TC) 4–11.46, Convoy Protection Platform Gunnery, which outlines specific training requirements for sustainment units. Although this manual provides sustainment units with a great foundation for training convoy protection crews and certifying convoy protection platforms, it provides little detail regarding the execution of higher-level gunnery tables (GTs), such as section gunnery, TC 3–20.21.1, Individual and Crew Live-Fire Prerequisite Testing, and Field Manual (FM) 3–20.21, Heavy Brigade Combat Team (HBCT) Gunnery, complement TC 4–11.46, especially for planning and executing section gunnery (GTs VII to IX).

The gunnery program enables sustainment units to train and deploy convoy escort teams (CETs) with CPPs. Program participants become more proficient at implementing tactical procedures for direct combat using their assigned weapons to survive in any area of operations. The training enables CPPs to bring intense, accurate, and deadly fire on enemy targets.

The vehicle gunnery crew (VGC) gunnery program should be divided into four phases—preliminary, basic, intermediate, and advanced gunnery—in order to develop individual Soldiers and VGCs in a progressive manner. They should be sequenced to provide quality VGCs within resource constraints. Successful completion of all gunnery phases prepares the unit for a section gunnery that is an exercise intended for platoon-sized elements. (A section is made up of two CPPs.)

Convoys Escort Team

A CET is made up of at least four CPPs. These crews are groomed to function as one cohesive unit dedicated to protecting the force and ensuring the success and safety of the mission. This entails more than just going out to the range 1 day and firing a few bullets. The certifying event for CETs is the section gunnery.

Planning

The key to a successful gunnery is adequate preparation, effective presentation, practice, and thorough evaluation. Because of the challenge of coordinating gunnery training requirements (such as forecasting ammunition 90 days out and requesting facilities and training aids) with the available resources, the planning process should begin at least 6 months before the execution of the gunnery. The necessary resources, such as facilities, training products, simulators, ammunition, and any other resource critical to the execution of the gunnery, should be acquired as soon as possible. Coordination should be continuous from long-range planning through short-range and near-term planning and training execution.

The senior or master gunner should be at the forefront of the planning process. When planning the gunnery, the senior gunner is the most valuable asset. The senior gunner is a key player in gunnery training because he serves as the subject-matter expert.

Training Plan

The master gunner and the gunnery officer-in-charge (OIC) should create a gunnery training plan 6 months before execution, if possible. The training plan will allow the unit to maintain a consistent mission focus, coordinate with task-organized supporting organizations, and focus on the correct timeline. The 8-step training model (plan, develop an operation order, teach, perform a re-connaissance, rehearse, execute, conduct an after-action review, and re-evaluate) should be used.

A sample 6-month gunnery training schedule follows.

6 months out. Conduct senior gunner certification, and begin the planning process, to include acquiring resources, forecasting ammunition needs, and conducting simulator training.

5 months out. Conduct preliminary marksmanship training and qualification, and conduct diagnostic GST and GT I simulator training.

4 months out. Conduct classroom instruction, driver’s training, and tentatively schedule range maneuver areas and training devices.
A gunnery crew conducts after-action review.

and Close Combat Tactical Trainer (CCTT) allow crews to build the confidence and muscle memory needed to be successful in the live-fire execution. At the simulation, the crews start to see the culmination of all the individual and collective tasks they have trained on thus far. These simulators provide an opportunity for crews to conduct vehicle-mounted combat tasks in a virtual environment. The CCTT and WST can serve as the final gateway for crews moving forward to a live-fire gunnery range.

The 49th Transportation Battalion (Movement Control) developed a training and evaluation standard that served as a tool to determine if a crew was ready to move from simulation to blanks and live fire. The battalion saw a positive correlation between the amount of time a crew spent at the simulators and their success during live fire.

The purpose of GT II, or the crew proficiency course, is to prepare the VGC for live qualification. VCEs must consider the VGC’s ability to determine the engagement time to quickly engage threat targets in order to successfully complete GT II and proceed to GT III, the basic gunnery phase.

Gunnery Phases
Training for gunnery is conducted in four phases and encompasses individual and collective training. The first phase is the preliminary phase, which includes the GST and GTs I and II. During this phase, individual Soldiers and VGCs are trained using classroom instruction, simulator training, or virtual training, and home-station training.

Proper planning allows for tough, realistic, and intellectually and physically challenging gunnery training. Realistic gunnery training will build competence and confidence by developing and honing skills while inspiring excellence by fostering initiative, enthusiasm, and eagerness to learn.

Preliminary Gunnery Phase
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Simulators are essential in the “walk” phase of the gunnery. They are used most during the GST and GT I. Simulators provide realistic training and serve as a platform for the training and evaluation of the GST. The GST evaluates each crew member’s ability to execute selected gunnery-related skills, and GT I evaluates the entire crew’s ability to execute selected tasks. A list of the required tasks can be found in TC 4–11.46. Simulators such as the Warrior Skills Trainer (WST) and VGCs are trained using classroom instruction, simulator training, or virtual training, and home-station training.

Three different forms are used to document all training and ultimately factor scores from each gunnery table. These results should be maintained and compiled to determine statistics and unit weaknesses. The statistics help to develop firing scenarios and are maintained by the master gunner, small arms master gunner, or senior gunner.

Ammunition Allocation
Determining the total amount of ammunition needed for gunnery training can prove to be quite a challenge. Ammunition requests are based on firing scenarios. TC 4–11.46 provides Department of the Army Pamphlet (DA Pam) 350–38, Standards in Training Commission, as a reference for determining how much ammunition is needed for gunnery training.

DA Pam 350–38 allocates 1,500 rounds for gunnery qualification all the way through the advanced phase. However, FM 3–20.21 allocates 2,450 rounds just for the basic phase. Furthermore, the HBCG gunnery manual allocates 50 rounds per target. The TC does not break down the number of rounds per target.

Since sustainment units can only engage two targets per engagement, in order to limit the number of engagements, there are a total of ten engagements per GT. The 49th Transportation Battalion Battalions 4,000 rounds per crew in consideration of the possibility on the chances having to re-engage one or more tables. The battalion experienced no ammunition shortages or large excess with this forecast.

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The 49th Transportation Battalion’s Experience
Because of the high operating tempo for sustainment units, it is imperative that gunnery be a battalion-level event. Balancing the gunnery training requirements and sustainment requirements is quite a challenge. Therefore, it is important for the battalion section responsible for the training (usually S–3) to work closely with the unit commander and first sergeant.

I recommend qualifying only 6 to 8 crews at a time. However, the 49th Transportation Battalion was faced with the challenge of training and certifying 24 crews. Six weeks were allocated for the gunnery, and 5 of those weeks were dedicated to crew certification on GTs II, III, V, and VI. Approximately eight crews per week went through the entire engagement. One week was dedicated to section Gunnery for CET certification.

Scoring
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Preparation of Crews
Crews to move on to the standard GT II set forth by TC 4–11.46, a virtual qualification had to be created; it had to have an evaluation form to capture the standards necessary to meet the virtual trainer certification. The qualification guidelines closely paralleled those of the actual live-fire GTs. The only major difference was that the tasks were not timed because the virtual trainer was available to accommodate gunnery for sustainment units. However, the evaluation form that was created for sustainment units contained all the criteria that the live-fire tables have by task.

The guidelines were that the crews had to meet the minimum proficiency levels outlined in the TC for 10 tasks, including vehicle commander engagements, defensive and offensive engagements, moving targets, short halts, a short-range engagement, and a long-range engagement. Other conditions evaluated were the defilade and enfilade, the proper commands given, and the timeliness from the last command given by the vehicle commander. The termination command given by the vehicle commander. Once the evaluation form was created, the VCEs were trained on how to use it and were evaluated on its
use for 2 days for a total of approximately 16 hours. The only obstacle that was not resolved was that the virtual trainer was not tailored to sustainment unit gunnery. This obstacle included the system’s lack of scenarios with the capability of tracking the open and closed times, delay times, defilade and enfilade times, and moving targets.

Crew Qualification
Successfully certifying all of the crews on all GTs required many personnel and much effort by everyone involved. The success of the gunnery depended on the careful planning and staging of all training required to qualify the crews for the life-fire GTs. This involved careful selection of the right tasks to train on, weapons to be used, the right resources, and most importantly, time management.

Another important element was the leaders (master gunner, gunner OIC, range OIC, range noncommissioned officer in-charge [NCOIC], company commander, first sergeant, and executive officer) conducting in-process reviews to ensure that all that was needed was being acquired. This also included selecting the right OIC, NCOIC, from that phase was complete, the section conducted a tactical road march (which was several miles) to the section gunnery range. The section was still being evaluated by the evaluator, who rode in the vehicle with the section commander.

After arriving at the section gunnery range, the evaluation process paused so that crews could receive a safety brief and get oriented to the range and so vehicle safety issues could enter each vehicle. The evaluator served as the safety in the section commander’s vehicle. After the safety brief, the crews mounted their vehicles and the evaluation process continued. The crews drove their ammunition and executed the live-fire portion of GT IX.

Through the live-fire portion, the crew received the weapons and the section conducted a final situational training exercise, where they were evaluated on selected battle drills and reports. All five sections successfully completed GT IX.

Crew gunnery is a long, drawn-out process that requires extensive planning and preparation. However, if it is done according to the TC guidelines, any unit can conduct it to standard. The 49th Transportation Battalion never deviated from the TC. It conducted the gunnery the way every unit should.

**Gunnery Table III**

GT III proved to be the most difficult table for most of the crews. During week 1, none of the 24 crews received a Q1 (qualification the first time through) and only 8 of the 24 crews receive a Q2 (qualification the second time through). During the second time through, crews only fired the engagements on which they had not qualified.

Subsequent crews were required to re-engage the entire table, and they did so successfully. I believe the crews had the most difficulty with this table because it was the first time that they had to put all the skills they had learned together with the difficult task of quickly engaging actual targets, including some that were moving. The crews that achieved a Q2 on GT III did very well, with scores ranging from 743 points in 8 engagements to 887 points in 9 engagements.

**Gunnery Tables V and VI**

Despite GT V having a more difficult scenario, with further targets and more moving targets, this was by far the crews’ best table. By GT V, the crews’ confidence was up and their skill sets were well developed, leading to outstanding scores. Five crews achieved a Q1, with scores ranging from 750 points in 7 engagements to 115 points in 10 engagements. Eleven crews achieved a Q2, with scores ranging from 712 points in 7 engagements to 980 points in 10 engagements.

The 49th Transportation Battalion was the first sustainment unit to complete section gunnery. The battalion’s section gunnery consisted of five sections with four to five CPPs in each section. The evaluation began with the unit commander being alerted through a notification sequence from his higher echelon (the battalion’s Section Gunnery Range). Each section had a set time that it was to be at the motor pool with 100-percent accountability to receive further guidance.

The evaluators (two captains and one major, since evaluators had to be at least the same rank as the company commander) met the sections at the motor pool where the assessment would begin. The evaluators issued an operation order to the section commander, who in turn conducted a convoy brief using a sandtable. The section commander was evaluated on his troop-leading procedures. Once that phase was complete, the section conducted a tactical road march (which was several miles) to the section gunnery range. The section was still being evaluated by the evaluator, who rode in the vehicle with the section commander.

**Section Gunnery**

Section gunnery is no more than a lanes evaluation culminating with a certifying live-fire exercise. The tasks are selected based on the unit’s mission-essential task list or mission to be conducted if deploying. Once the tasks are selected, the training is set up for those specific tasks and trained accordingly.

The overall section certification is based on a two-part evaluation. The sections that have been selected for certification and are evaluated in a T (trained), P (needs practice), U (untrained) evaluation format. The other part covers live-fire certification and is based on the same minimum proficiency levels as the crew gunnery, with a four- or five-vehicle section participating as the CET. The only difference is that the CET commander assigns the sections of fire and authorizes the crews to fire engagements on which they had not qualified.

The scoring is based on the number of targets presented and the number of targets hit. The baseline for the target scoring requires that 50 percent of the targets engaged must be hit. This percentage is then added to the T, P, U evaluation. The section must have a total of at least 70 percent for the evaluated tasks and targets hit.

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After the live-fire portion, the crews cleared the weapons and the section conducted a final situational training exercise, where they were evaluated on selected battle drills and reports. All five sections successfully completed GT IX.