

BATTLE PROCEDURE FOR ARTILLERY TROOP-LEVEL OPERATIONS

By

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If distributive operations throughout non-contiguous AOs are to remain strongly favoured over mass and artillery fires continue to support all manoeuvre operations, then artillery batteries, or in this case, artillery platoons, must be organized and equipped to support these distributive ops¹.

INTRODUCTION

The Canadian Field Artillery's recent experiences in Afghanistan represent a paradigm shift in the way it conducts operations. Current operations in the contemporary operating environment (COE) indicate that the vast majority of deployments conducted by the Field Artillery are troop-level deployments which are often executed in support of company- or even platoon-level combat operations². This is a marked departure from the battery-level operations which became *de rigueur* during peacekeeping operations in the former Yugoslavia in the 1990's and is completely anathema to the regimental level deployments which characterized Field Artillery operations during the Cold War. As the quotation above attests however, troop-level operations are here to stay.

This paradigm shift has significant implications for low level leadership. In the recent past young gun line officers and warrant officers often had more senior personnel on the gun line and in the gun area on whom they could rely on for experience and direction. These personnel, namely the Battery Captain (BK), the Gun Position Officer (GPO) and the Battery Sergeant-Major (BSM), held practical experience and could give positive direction to the young Troop Commanders (TC), Troop Leaders (TL) or Troop Sergeants-Major (TSM). With the emergence of troop-level operations, however, that backdrop of experience has evaporated and young gun line officers are being asked to fill bigger shoes under more dangerous circumstances. In order to ensure the continued provision of indirect fire support to manoeuvre units in theatre it is imperative that gun line leadership, namely TC, TL and TSM have an in-depth understanding of Battle Procedure (BP), in particular the Combat Estimate. They must be able to produce from the Combat Estimate clear, concise orders for the three standard operations a gun line routinely conducts namely reconnaissance, movement to a new gun position and force protection of the gun troop³.

AIM

The aim of this document is to provide gun line leadership with guidance on Field Artillery specific BP and the preparation and issue of orders to the gun troop.

BATTLE PROCEDURE

Battle Procedure is the entire military process by which a commander receives his orders, makes his reconnaissance and plan, issues his orders, prepares and deploys his troops and executes his mission⁴

As the quotation above illustrates, BP is the means by which a commander, any commander at any level, analyzes a tactical situation, develops a plan and executes a mission. At the various levels of command in the Army, the means of conducting this analysis vary. At formation level, BP is encompassed in the Operational Planning Process (OPP), while at the unit level often times a formal estimate is conducted by the Commanding Officer (CO) and his unit staff. Sub-unit commanders and their subordinates will often conduct a Combat Estimate which is a less structured yet similar methodology to that conducted by the CO. It is this tactical level, namely the Troop or sub-sub-unit on which this document will focus. Regardless of the

organizational level, the number of participants involved or the time dedicated to conducting it, with only minor variations BP follows the basic fifteen steps listed below:

1. Receive Warning Order	9. Conduct Reconnaissance
2. Conduct Quick Map Study/Time Estimate	10. Complete Estimate
3. Receive Orders	11. Issue Supplementary Warning Order
4. Conduct Mission Analysis	12. Prepare/Issue Orders
5. Issue Warning Order	13. Coordinate Activities
6. Detailed Time Estimate	14. Supervise Deployment
7. Map Study/Outline Plan	15. Execute Mission
8. Prepare Recce Plan	

Table 1.1 – The fifteen steps of Battle Procedure

THE COMBAT ESTIMATE

The estimate is a flexible tool that can vary in format from a commander's mental process, to a few notes jotted on paper, to a complete study of possible branches and sequels resulting in a contingency plan. Most importantly, the process clears the commander's mind of extraneous detail and allows him to focus on that which is truly important to the accomplishment of his mission.⁵

This process, which is taught to Canadian soldiers at all leadership levels, allows for a thorough analysis of the situation while also permitting concurrent activity to take place, facilitating a more rapid execution of the plan. An integral part of BP is the Combat Estimate which Field Artillery TCs and TSMs use to analyze and understand the tactical situation and how it affects them and their troops, and develop a plan to achieve the tasks issued by their superior commander. While sometimes viewed separately from BP, it must be understood that the Combat Estimate is a vital part of BP. Table 1.2 illustrates the four steps of a Combat Estimate as compared to the fifteen steps of BP.

Battle Procedure	The Combat Estimate
1. Receive Warning Order	1. Conduct Mission Analysis
2. Conduct Quick Map Study/Time Estimate	
3. Receive Orders	
4. Conduct Mission Analysis	
5. Issue Warning Order	
6. Detailed Time Estimate	2. Consideration of Factors
7. Map Study/Outline Plan	
8. Prepare Recce Plan	3. Consider Courses Open
9. Conduct Reconnaissance	
10. Complete Estimate	
11. Issue Supplementary Warning Order	4. Choose and Issue Plan
12. Prepare/Issue Orders	
13. Coordinate Activities	
14. Supervise Deployment	
15. Execute Mission	

Table 1.2 – Battle Procedure and the Combat Estimate

Essentially, the Combat Estimate is a formalized means of analyzing a situation and producing a plan. It imposes a very rigorous, structured thought process which allows leaders to carefully consider all the relevant factors. It is a “mind-set, a way of thinking stamped in our

conscious and subconscious minds from years of experience.”⁶ Although somewhat foreign to modern young leaders accustomed to technological solutions and shortcuts⁷, it is nonetheless an invaluable way to analyze pertinent tactical factors.

Time is the critical factor. If the troop has been tasked to support a deliberate operation to take place in a significant amount of time, the TC may have plenty of time to conduct a thorough Combat Estimate, and possibly even have enough time to conduct it in a more formal manner, such as with the assistance of a computer or a formal, written proforma. On the other hand, the TC may receive a Fragmentary Order (Frag O) in the midst of an operation or task which gives him only hours, or potentially only *minutes* to conduct an estimate. A thorough understanding of the estimate process will therefore allow the TC the flexibility to know which factors to focus his analysis upon.

The amount of detail the TC will use in conducting the Combat Estimate is directly proportional to the amount of time available prior to the commencement of the operation or task. Leaders at all levels should attempt to follow the 1/3-2/3 rule of time management. To facilitate this, one can see how important it is to conduct a quick time appreciation early in BP. This will allow the leader the opportunity to divide the amount of time available into the 1/3-2/3 ratio, allowing 1/3 of the time for himself to conduct the estimate, develop a plan and issue orders (it is often misunderstood that the time taken to issue orders is included in the 2/3 allocation). The remaining 2/3 of the time available should be left to the detachment commanders to conduct their own BP and estimate, develop a plan and issue orders to their subordinates. It is in this 2/3 of time that all preparations for the operation or task will be conducted which is why it is allocated a greater proportion of time. Of tremendous significance is the time required to conduct rehearsals. The United States Field Artillery conducts Pre-Combat Inspections (PCI) and Pre-Combat Checks (PCC) whereby TC and Detachment Commanders identify what unique technical tasks may be performed during the upcoming task/operation, such as danger close missions, reaction to ambush etc, and rehearse the drills associated with that event. The Canadian Field Artillery, and gun line leaders, should look at emulating this drill.

ORDERS

Regardless of the task for which the TC is giving orders, there are several important rules to which he should adhere.

Use of a Map. While it seems obvious, many leaders issue orders without a map present. Maps should be used and placed in a location where the audience can easily observe them. The TC should orient the audience to the map *at every order group* and refer to the map every time he mentions a location, grid, route, area or any other important piece of information. Use of a map will ensure complete battlefield visualization amongst his subordinates and increase overall situational awareness.

Location for Orders. Orders groups should be given in a location free from distractions, and if possible, in a location where the audience can see the ground. For tasks such as reconnaissance of a gun position or movement to a new position this may not be possible, but for force protection orders the audience should be able to see as much of the ground as possible.

Audience. Orders are given to leaders. There is a tendency in the Field Artillery for Detachment Commanders to remain at the gun while their Second in Command attends orders. It is imperative that it is the Detachment Commander who attends orders, especially force protection orders, as it is he who will be commanding the gun during the battle, or during the

operation. If the Detachment Commander is expected to carry out the same BP as the TC, he must be the person receiving the orders.

ORDERS FORMAT FOR STANDARD ARTILLERY TASKS

Operations in the COE have dictated that gun troops may conduct a wide variety of operations. This could include such non-doctrinal tasks as leader engagements, security tasks, infantry operations etc. Regardless of the task, the estimate process as mentioned above will allow the TC to develop an effective plan for any task he may be given, either standard or non-standard. Notwithstanding the potential of gun troops to conduct non-standard tasks, the standard tasks that a gun troop will, without doubt, execute as part of its primary combat role include the reconnaissance of a gun position, movement to a new gun position and the force protection of a gun position.

As mentioned above, the estimate process is a suitable tool to use with each of these standard tasks. The standard orders format of Situation, Mission, Execution, Service Support and Command and Signals is applicable to each of these operations, but in addition each of these tasks have unique tactical considerations which must be present in the TCs mind while conducting the Combat Estimate, and addressed in the orders to his subordinates. The unique circumstances of each of the three standard Field Artillery tasks will be addressed below.

RECONNAISSANCE ORDERS

Reconnaissance parties should clear positions thoroughly before the arrival of the main body to counter the threat of surprise attack. Once cleared, a site should remain permanently occupied lest the reconnaissance itself give advance warning to an enemy... there is a constant risk of snipers... and if they have been previously occupied by the enemy, penetration by enemy assault teams is likely to be that much easier.⁸

A TC may find himself tasked to conduct the reconnaissance of a new gun position, or he may task that responsibility to one of his subordinates, including one of the gun line TSM. Regardless of who is conducting the reconnaissance, the orders are far more detailed than the simple issuance of the standard Artillery Movement Order paragraphs. It is imperative that reconnaissance orders are accurate, detailed and issued in a clear and concise manner.

A warning order to the Reconnaissance Party will significantly reduce the amount of time necessary for the preparation of the party by allowing concurrent activity to occur. This, of course, will allow for more time to be spent on the actual reconnaissance of the new area. When issuing a warning order, the TC should include as much information as possible, given the amount of time available.

Many of the points included in the Reconnaissance Orders are similar to those included in orders for the movement of the troop as the route reconnaissance carried out by the Reconnaissance Party is an integral part of the operation. These points will be covered in detail in the next section but suffice to say that the entire Reconnaissance Party must be aware of the Reconnaissance Officer's Scheme of Manoeuvre and in particular what they are to be doing during each stage of the reconnaissance. It is beyond the scope of this paper to discuss what drills are carried out during the reconnaissance which can be found in 371-2 Artillery in Operations (Draft) but suffice to say the orders must be sufficient to allow the Reconnaissance Party to conduct these drills in accordance with the twelve steps of the reconnaissance sequence. These twelve steps are:

1. Quick Map Reconnaissance
2. Quick Time Estimate
3. Issue Warning Order
4. Detailed Map Reconnaissance
5. Detailed Time Estimate
6. Prepare Orders
7. Issue Reconnaissance Orders
8. Route Reconnaissance
9. Area Reconnaissance
10. Detailed Area Reconnaissance
11. Reconnaissance Briefing
12. Detailed Technical Reconnaissance

Table 1.4 The Twelve Steps of the Reconnaissance Sequence

ORDERS TO MOVE THE TROOP TO A NEW POSITION

Artillery will be most vulnerable when moving and deploying, since the insurgents will seek to create moments of superior firepower in locations of their choice... the classic ambush scenario⁹

Due to tactical reasons, it may be required to move the troop from one gun position to another. This presents a unique tactical challenge to the TC as a battery in march formation can be extremely vulnerable, in particular due to the fact that the troop's primary source of firepower, the guns, cannot quickly be brought to bear. In modern, decentralized operations, gun troops may find themselves moving from one gun position to another with little to no mutual support from manoeuvre elements. As a result, the TC must conduct a thorough estimate and produce a detailed plan in order to ensure the safe arrival of the guns at the new position. In order to ensure the movement takes place as expeditiously and safely as possible, clear, detailed orders must be produced and issued to the troop leadership.

The increased threat posed by improvised explosive devices (IED) and enemy action on current operations means it is unacceptable for a TC to simply issue the standard Artillery Movement Order paragraphs to his subordinates. It is absolutely essential that as much pertinent information is transmitted to the troop Detachment Commanders as possible in order to allow them to complete the mission should the Troop come in contact with the enemy, become vehicle casualties due to mechanical malfunction or even suffer the unfortunate displeasure of getting lost *en route*. These contingencies must be planned for, and the reactions to them understood at all levels.

Movement orders promise to be lengthy and detailed and the TC must take as much time as possible to produce as concise a plan as possible. Many of the points mentioned above can be addressed by the use of Standard Operating Procedures (SOP), in particular the "actions on." The use of SOPs will be addressed later in this document.

The most important thing the leader of a convoy can do is impress on his subordinates that, once they leave the confines of the base, they are no longer engineers, no longer a service support unit – they are combat Soldiers in a manoeuvre unit.¹⁰

A Troop is extremely vulnerable while moving in march formation and it is a leadership responsibility that force protection and risk mitigation is maintained at a high standard. To

accomplish this, the TC and TSM must conduct a thorough estimate of the situation and produce an in depth plan. It should be issued to the lowest possible level to ensure all personnel fully understand their role in the upcoming operation. The movement of a gun troop in the COE through what could easily be called “bandit country” means the old practice of detachment members sleeping in the back of the gun tractor while one gun follows the gun in front who follows the Command Post is a recipe for disaster. The movement of a gun troop from one gun position to another is not administrative, it is an operation. The Troop must be prepared for any contingency and be poised to react. Rehearsals and clear ROE will help facilitate this.

ORDERS FOR THE DEFENCE OF THE GUN POSITION

The value of any weapon system is largely dependent upon its capacity to survive on the battlefield, and today force protection is deemed to be more important than ever.¹¹

Operations in the COE have indicated that the enemy has identified the combat power inherent in the Field Artillery and has taken steps to mitigate against it. This has come in passive form, namely “hugging” the civilian populace and infrastructure to limit the friendly commander’s ability and desire to use indirect fire due to a wise aversion to collateral damage; and in a more active form by specifically targeting friendly Field Artillery assets. The decentralized nature of the COE indicates that the mutual support provided by the manoeuvre elements or even flanking firing units may not be available to the TC. As a result, force protection has become the priority¹² and the TC must be able to conduct a thorough estimate and develop a workable plan based on accurate deductions of the threat.

Force protection orders are extremely detailed, and should remain so based of course on the amount of time available. The TC may find it is appropriate to issue a very quick Frag O to his Detachment Commanders upon the initial occupation of the gun position in order to ensure there is a secure “foot on the ground” while the guns are deploying. This initial force protection plan could be based on SOP, but must be updated as soon as possible with detailed force protection orders. It is during these orders that the TC will be able to convey his intent and scheme of manoeuvre for the Detachment Commanders to understand where they fit in the force protection battle. It is because of this that it is absolutely imperative for the Detachment Commander to attend the orders and not his Second-in-Command, unless for reasons of personnel tempo the second in command must attend.

As mentioned above, the use of a map during force protection orders is imperative. In addition, the TC must have a large, easily understandable force protection sketch on which he should lay out the location of all the key elements of the force protection plan. This sketch will be invaluable for the battlefield visualization and situational awareness of his Detachment Commanders, in particular during periods of duress and fatigue. It should be mounted in a centralized, secure position for any member of the troop to refer to.

The force protection plan should follow the fundamentals of defence, although it is important for the TC to have the mental flexibility to recognize these fundamentals are not a checklist for success but a series of rules which have worked well in the past and should be considered only in the context of the current tactical situation.

Force protection orders are, by their very nature, very detailed and extensive. To facilitate the speed of execution of these orders, clear SOPs will assist in the speedy establishment of an effective force protection plan. While incredibly helpful, SOPs are not a panacea and have the potential to hinder rather than help the TC implement and execute his orders.

SOPs

SOPs will greatly assist the TC in the implementation of his plan during any of the above mentioned “standard” Field Artillery operations, but only if they are truly fully understood by the personnel executing him. Many young officers fall into the trap of issuing the order “as per SOP” without ever really checking to see if their subordinates know or understand what that SOP is. Many times this is based on a misguided notion of doing the attendee a favour by decreasing the amount of time spent in orders. If the SOP is well-known, this order will be very effective. The only way to ensure that the SOP is well-known is through repetitive rehearsals of the SOP. This will give the TC the opportunity to see if his soldiers actually understand the SOP, or if he has a collection of detachments each with its own idea of what the SOP is.

One particular area where SOPs are incredibly useful is in the realm of “actions on.” These are pre-programmed reactions to events such as ambushes, artillery strikes or vehicle malfunctions. These actions, if they are to be used as SOP, must be thoroughly rehearsed so that the action is indeed a drill. The TC must take pains to remember that, in the COE a drill-based reaction is not necessarily the best reaction. The COE presents the TC with unique challenges which may require mental flexibility, rather than blind adherence to drill, to resolve. As MGen JBA Bailey states in *Field Artillery and Firepower* “There is an apparently widening variety of other lethal threats to Western interests that may be less focussed and dire than that perceived during the Cold War, but whose very diversity and even ‘disembodiment’ present perhaps an even greater intellectual challenge.”¹³

SOPs when used in orders should be used sparingly and only when the TC is confident his subordinates understand the SOP and have proven so during rehearsals.

CONCLUSION

Canada’s recent experience in the COE has indicated a significant departure from the classic paradigm of regimental- or battery-level deployments. The disparate challenges of counter-insurgency (COIN) and Operations Other Than War (OOTW) have caused CF elements to conduct decentralized, distributed operations throughout a growing battlespace. This has had a corollary impact on the way the Field Artillery conducts operations by requiring the CF to rely on troop-level gun deployments as the norm rather than the exception.

This has removed the previously invaluable experience possessed by the BK, GPO and BSM on which the TC and TSM could rely and has caused the Troop leadership to have to do more under increasingly dangerous circumstances. As a result, the TC and TSM now require a much higher standard of professionalism and leadership than was required in the past when the senior battery leadership could provide guidance and direction when needed. This document attempted to provide some direction to gun line officers to assist in their admittedly challenging struggle to adapt to this new role. TC and TSM must be experts in the accurate and detailed completion of the Combat Estimate to produce logical and effective deductions and plans. These plans must form the basis of accurate, clear and concise orders to set the conditions for success in every operation a gun troop participates in. What is contained in this document is only the foundation, and every gun line leader is encouraged to develop his own SOPs and his own aide memoire to assist in this regard.

¹ Captain Shane P. Morgan, 1Sgt Robert H. Levis and LTC Harry C. Glenn III, *B/377 PFAR: Platoon Based Fires in Afghanistan*, Field Artillery Journal, March-April 2005, p. 30

² Lesson Synopsis Report (06-048) JTFA Roto 2 – Op MEDUSA Indirect Fire Support Lessons dated 10 Nov 06 (hereafter LSR 06-048) p.1

³ Of course these three types of operations are not exhaustive. Gun troops could be asked to conduct any variety of operation, but these three in particular are characteristic of basic Field Artillery combat operations.

⁴ B-GL-300-003 Command, p. 89

⁵ Ibid, p. 123

⁶ Colonel Jeffrey R. Sanderson and Captain Scott J. Akerley, *Focussing Training: The Big Five for Leaders*, Military Review, July-August 2007, p. 73

⁷ Ibid, p. 73

⁸ MGen(Retired) J.B.A Bailey, *Field Artillery and Firepower*, Naval Institute Press, Annapolis, 2004. p. 130

⁹ Ibid p. 123

¹⁰ Sanderson and Akerley, p. 75

¹¹ Ibid p. 117

¹² LSR 06-048, p. 1

¹³ Bailey, p. 502