

# Training army officers in tactics



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*The training of staff and regimental officers in common tactical doctrine (the 'drills') is essential to developing teamwork within formations, headquarters and units. But developing tactical thinking (the 'skills') is more difficult. A range of tools presented herein have been formulated by Western armies over two centuries to develop the skills and the drills separately and then merge them to create combat-ready formations.*

**Key words:** tactical doctrine; battlefield tours; staff rides; tactical exercises without troops; war games; command-post exercises; tactical exercises with troops; virtual staff rides.

"The essential components of [an efficient] Army are a qualified Staff, an adequate equipment and a trained soldiery. I state them in what I believe are their order of importance, and my belief is based on the lessons that the war has taught me." (Monash 1923: 322)

From its inception in 1888 until 1945, the Royal United Services Institute for Defence and Security Studies, New South Wales (RUSI NSW), provided higher military education for officers of Her/His Majesty's naval and military forces in New South Wales, although this became very difficult during the two world wars.

After World War II, RUSI NSW resumed this function for army officers, providing regular lectures in tactical doctrine, military history and military law, and periodically conducting tactical exercises and war games without troops. Later, the Australian Army progressively assumed the formal aspects of this role, but RUSI NSW has continued to explore some aspects in depth via its studies and seminars in military history and tactics (e.g. Sutton 1996, 1999; Leece 2014).

This background briefing will explain the system for training army officers in land-warfare tactics and RUSI NSW's proposed evaluation of a new training tool, the virtual staff ride.

### Training Army Officers in Land-Warfare Tactics

The system for training staff and regimental officers for war is concisely described in the small British Army training manual, *Training for War* (British Army 1950). While now 70 years old, the principles, concepts and techniques remain largely unchanged and are summarised below.

### Tactical Doctrine

For a formation of any size to be able to function effectively as a team, its officers must be trained in the principles, standard operating procedures and techniques to be employed within each phase of war – advance, attack, defence, withdrawal and their variations such as delaying defence.

This common doctrine provides the knowledge base and the tactical drills which will be employed by the formation in tactical manoeuvre. It is usually laid down and

promulgated via training manuals (frequently referred to as 'pamphlets' or simply as 'pams' in the Australian Army) at army-wide level and as standing orders at formation and unit level.

But tactical doctrine must be applied in different tactical situations where the enemy's strength, the terrain, time, logistics and space considerations will differ. So, before any engagement with the enemy, commanders need to develop plans specifically for the situation they face and then adapt those plans to the changing situation as they fight the battle. Developing tactical thinking capability (tactical skill) is much more difficult than learning doctrine (tactical drills). So, let us now consider a range of approaches that have been formulated by Western armies over the last two centuries to develop tactical skill and then merge it with tactical drills to create combat-ready formations.

### Military History and Battlefield Tours

One of the earliest techniques used to develop the tactical skill of young officers was to require them to study military history, particularly military campaigns (military strategy<sup>2</sup>) and battles (tactics) from which lessons could be drawn. Where possible, after studying the campaign/battle, a tour of the battlefield would be undertaken. It would be led by an experienced military historian with an intimate knowledge of the terrain. The guide would point out from various vantage points the key features of the terrain and what transpired during the battle.

### Staff Rides

From the Napoleonic Wars of the early 19<sup>th</sup> century onwards, the training of his staff and his subordinate commanders became seen as an essential duty of formation commanders. One technique which became popular was called the 'staff ride' (from the German term *stabs-reise*). Essentially, this involved the commander, his subordinate commanders and his staff officers riding on horseback around historic battlefields, informally discussing the tactics employed by each side and how the outcome might have differed had either side employed different tactics or reacted differently to the enemy's moves.

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<sup>2</sup>Strictly speaking, 'tactics' relates to a specific battle. A campaign consists of more than one battle for which the term 'military strategy' traditionally is preferred. Campaigns, however, frequently are referred to today as 'the operational level of war'.

This not only enabled the commander to develop the tactical skills of his subordinate commanders and staff officers, it enabled him to expose them to his appetite for risk under different scenarios and, thus, give them an understanding of how he would wish them to make decisions on his behalf. In turn, this led to prospective or hypothetical battles based on possible future scenarios being studied in a similar manner.

From the mid-19<sup>th</sup> century onwards, staff colleges were established to more formally train the officers needed to staff the headquarters of formations from brigade to army-group level. The staff ride became an important teaching tool in such colleges. Indeed, Field Marshal Helmuth von Moltke, when chief of the Prussian General Staff from 1857 to 1887, formalised the *stabs-reise* and used it less for historic studies and increasingly for prospective ones – both to train the general staff in terrain appreciation and for contingency planning. This range of activities also allowed the students to be assessed under a range of conditions, and was used by von Moltke to ruthlessly identify the elite of each class for subsequent career advancement. His development of the technique to study potential future battlefields for the purpose of preliminary reconnaissance, terrain study and tactical preparation won recognition throughout Europe and more globally.

In the United States, in contrast, when staff rides were introduced at the Fort Leavenworth staff school in the late 19<sup>th</sup> century, they were used almost exclusively for historic studies, particularly of American Civil War battles. According to Robertson (1987), they are still used for historic studies, but the staff ride now is more formalised and consists of three phases: a preliminary study phase, to prepare the student for the visit to the battlefield; the field study phase, which is the culmination of all previous efforts to understand the historic events, to analyse their significance, and to derive relevant lessons for professional development from them; and the integration phase, where students and instructors reflect jointly upon their experience.

### **Tactical Exercises without Troops**

Once horses had been retired from general use, the term ‘staff ride’ generally was replaced in British Commonwealth militaries by ‘tactical exercise without troops’ (TEWT), but the term was retained by the United States Army. While the purpose of TEWTs did not change, they became more formalised.

TEWTs in the British system may consider an historic battle or campaign, but more commonly consider a hypothetical prospective one. The four phases in the conduct of the TEWT are:

- the preliminary study phase, during which each participant studies the tactical scenario set by the directing staff and usually derives the aim of the appreciation to be undertaken in phase 3;
- the reconnaissance phase, usually involving observation of key terrain features from vantage points (with movement by foot, vehicle and helicopter), supplemented by topographic maps, air photos and satellite images;
- the planning phase, in which each participant (whether an individual or group) conducts a military

appreciation and arrives at a battle plan; and

- a discussion phase, during which participants present their plans, which are debated by their peers and assessed by the directing staff.

A military appreciation<sup>3, 4</sup>, which is the central component of the planning phase, itself involves several steps:

- an assessment of relative strengths, *i.e.* a comparative assessment of the strengths and weaknesses of the enemy force and our own force;
- a terrain analysis to derive vital ground, key terrain, approaches and withdrawal routes, assembly areas, forming-up places and the like, from both an enemy and a friendly-force perspective;
- determining and assessing the courses open to the enemy and to the friendly force, considering the likelihood and effects on the friendly force of the enemy adopting each course open to him, and then the strengths and weaknesses of each course open to us, and how the enemy might respond if we adopted each course;
- deciding on a preferred course and how to mitigate its weaknesses; and, finally
- preparing a battle plan – including a mission, concept of operations, allocation of troops and resources to tasks, key co-ordinating and logistical arrangements, and key time, space, command and control considerations – in sufficient detail to enable a trained staff to formulate operation orders for the formation from it.

A TEWT is normally conducted as a one-sided exercise – that is, while the courses open to both the friendly and enemy commanders are considered, a plan is only developed for one of them, usually the friendly-force commander.

### **War Games**

A TEWT teaches an officer how to plan a battle. A war game teaches him/her how to fight one. A battle plan simply launches a force into battle. The plan will rarely survive the initial encounter unscathed and will need modification and adaption as the battle proceeds. War games introduce the officer to this concept and develop her/his capacity to be flexible in the face of the enemy.

War games can be used to evaluate battle plans developed during TEWTs or in other ways; and to develop a commander’s ability to conduct and control the battle as it proceeds.

A war game is two-sided exercise without troops. Like a game of chess, it is played by two players (or two teams), one representing the friendly-force commander, the other the enemy-force commander. Traditionally, it is played on a

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<sup>3</sup>The ADF and all North Atlantic Treaty Organisation forces now employ the joint military appreciation process (JMAP) for joint (inter-service) planning at the operational level. JMAP is a structured process used by the staff, with injections by the commander at key points, to formulate plans for campaigns and joint operations. It is explained in detail in ADF (2019).

<sup>4</sup>The Australian Command and Staff Course (which has replaced the single-service staff colleges) uses the JMAP during the operations phase of the course in TEWTs, command-post exercises and war games (also known as ‘operational simulations’). The Australian Army’s Land Warfare Centre has moved from individual participant to group (syndicate) appreciations.

table-top, with a topographic map or a terrain model ('cloth model') between the players, on which are indicated the positions of the opposing forces as they change throughout the game. These take the place of a chess board and chess men. With a suitable digital terrain model and overlays, however, the war game may be played on a computer.

Before the game starts, each player needs to undertake a military appreciation and make a battle plan which is represented on the topographic map/terrain model at the start of play. The players next take turns to make a move in response to their opponent's move. A set of moves is adjudicated, allocating casualties and the like, before the next set of moves is made. This adjudication can be made by fixed rules, as in chess, but usually also requires an impartial umpire to rule on the outcome. The game proceeds until one side is declared the winner.

### **Command-Post Exercises**

Tactical doctrine, military history, battlefield tours, staff rides/TEWTs and war games are used for the individual training of the officer for command, staff and regimental appointments.

The next step in the training of a formation for war is the collective training of the officers and other ranks of the formation headquarters so that they can effectively and efficiently support their commander by undertaking formal appreciations, develop contingency plans, prepare operation orders, manage battles and perform the myriad of other tasks that can befall a headquarters staff during the heat of battle. This training is done via command-post exercises.

A command-post exercise in its simplest form involves the headquarters that is to be trained (say a brigade headquarters), a higher control (usually a division or force headquarters) and one or more lower controls (usually the headquarters of each of the subordinate units which constitute the brigade group). The formation's signals squadron/regiment also will be fully exercised in transmitting messages between the various headquarters.

The exercise directing staff will include an exercise director who determines the lessons to be taught and how this is to be done; and umpires at the exercised headquarters and at the higher and lower controls to assist the exercise director achieve her/his aims. To assist the umpires, the director will issue a tabulation containing a sequential series of events designed to trigger actions to bring out the lessons.

The exercise usually commences with the higher control issuing an operation order to the exercised headquarters which necessitates the exercised headquarters planning and issuing orders to its lower controls. This generally launches actions by the lower controls which are governed by serials in the exercise instruction, supplemented by instructions from umpires, in order to draw out responses from the exercised headquarters consistent with the lessons that the exercise director wishes to teach. Umpires at the exercised headquarters assess the performance of the exercised headquarters and report thereon to the exercise director who may then adjust subsequent serials in the exercise instruction to ensure that the relevant lessons are drawn out.

### **One-sided Exercises with Troops**

The one-sided exercise with troops links the command-post exercise with the command, control and deployment of troops. It practises the officer in exercising the command function; and extends the officer's real-time understanding of time, space and logistics considerations. Further, it enables the lessons of the classroom, TEWT and war game to be reinforced in an actual combat setting.

The exercise normally is conducted at formation (e.g. brigade group), unit (e.g. infantry battalion group) and/or sub-unit (e.g. rifle company group) level; and focuses on a specific phase of war (e.g. advance, attack, defence or withdrawal).

The exercise is run by an exercise director who is independent of the formation being exercised. The director is supported by:

- a small staff, who assists him/her write the exercise instructions and oversee the exercise;
- a 'controlled' enemy, which the exercise director uses to create realism and to bring out the lessons that s/he wishes to emphasise; and
- umpires at each headquarters, unit and sub-unit being exercised, whose role is:
  - o to ensure the commander understands the battle situation ('to paint the picture'),
  - o to create realism (e.g. by employing pyrotechnics to simulate artillery fire),
  - o to liaise with the controlled enemy, and
  - o to debrief the exercised troops at the end of each exercise phase to ensure the lessons have been brought out and are understood.

If the exercise is to achieve its aim and the lessons are to be brought out effectively, it needs to be planned very carefully. Steps involved include the following:

- A higher headquarters selects an exercise director and informs him/her of the formation to be exercised, the phase of war to be practised and the resources at his/her disposal.
- The exercise director then selects the exercise aim, the lessons to be emphasised, the ground on which to conduct the exercise so as to enable the chosen lessons to be brought out, and decides how best to bring out the lessons.
- The exercise director and his/her staff then write the exercise narratives and instructions. How skilful they are in doing this will usually determine the exercise's success or otherwise.
  - o The narratives 'paint the picture' for the participants and generally consist of an opening narrative, which positions the exercise within a hypothetical, but realistic, strategic situation, and subsequent tactical bridging narratives as needed to launch each new phase of the exercise. The narratives usually will be accompanied by relevant topographic maps and exercise-specific overlays.
  - o The exercise instructions should include a schedule of events for each phase stating where interventions by umpires and/or the enemy are to occur so as to create situations designed to bring out one or more lessons. Separate event schedules are needed for the enemy and for each

headquarters, unit and sub-unit being exercised – these schedules operate concurrently.

- o The exercise instructions will also include administrative and other instructions essential to its effective execution.

Once the exercise has been conducted, there will need to be a comprehensive evaluation of the performance of the formation exercised and of the conduct of the exercise.

Properly conducted, one-sided exercises with troops can be valuable training tools. They are, however, incredibly resource intensive and the temptation is to cut corners in the exercise direction and umpiring. When this occurs, the various headquarters may still benefit, but the soldiers at sub-unit level and below can spend long periods ‘twiddling their thumbs’. In my experience, nothing is worse than this for soldier retention, especially of reservists.

### **Two-sided Exercises with Troops**

The two-sided exercise with troops, sometimes referred to as ‘manoeuvres’, differs from the one-sided exercise in that the enemy force is largely uncontrolled by the exercise director – the enemy commander is generally free to conduct his/her battle as s/he sees fit. Essentially, it is a war game with troops. As such, it is a valuable tool to practise commanders in adjusting their plans as necessary as they fight the battle, with troops participating on both sides to provide realism. It also tests the opposing commanders and their headquarters against a realistic and innovative opponent.

In most cases, though, the training the troops receive is usually less beneficial and, at times, they can spend long periods waiting for something to happen. If, however, the *auftragstaktik* (mission command) approach is fully adopted, it can allow the troops to innovate/adapt aggressively to a dynamic battlefield in order to achieve their commander’s intent.

The principal beneficiaries of two-sided exercises, however, are the officers, especially the opposing commanders, involved. It is generally a very expensive way to train them and should only be considered when fine-tuning highly-trained formations.

### **Virtual Staff Rides**

In 2005, the United States Army began developing a new officer-training tool – a computer-based ‘virtual’ staff ride (Combat Studies Institute 2020).

As mentioned above, a United States Army staff ride is a study of an historic campaign or battle that involves a preliminary study phase, an extensive field study phase on the actual historic site, and an integration phase to capture the lessons derived therefrom. A virtual staff ride (VSR) aims to achieve the same degree of leader development and education as in a field staff ride and follows the same methodology, but, where restrictions of whatever type preclude a visit to the battlefield, the VSR replicates the terrain in a virtual environment in the classroom.

This replication of the terrain draws on satellite imagery, maps, photos, videos, sketches, first-hand accounts of participants, etc., and then constructs of a three-dimensional (3D) environment to immerse the student in the virtual terrain. The intention is to provide the

most realistic vision of the battlefield possible without leaving the classroom.

The Combat Studies Institute’s currently-available VSRs are set in the American Civil War, World Wars I and II, Korea, Afghanistan and Iraq; and are based on CSI-published materials developed since 2001. The development of additional VSRs is underway. Further details may be found at <https://www.armyupress.army/mil/Educational-Services/Staff-Ride-Team-Offerings/>.

The Combat Studies Institute has provided RUSI NSW with a copy of one of its studies based on an action which occurred during the 2003 Allied invasion of Iraq – the ambush of the U.S. 507<sup>th</sup> Maintenance Company at Nasiriyah on 23 March 2003 during the advance towards Baghdad. The computer model enables evaluation of different scenarios and battle plans developed by the participants, allowing them to ask ‘what if’ questions and assess different outcomes. RUSI NSW will be evaluating the study in the near future.

### **Conclusion**

The training of staff and regimental officers in common tactical doctrine, techniques and standing operating procedures (the ‘drills’) is an essential component of developing teamwork within formations, headquarters and units. But developing tactical thinking processes (the ‘skills’) is more difficult. A range of tools presented herein have been formulated to develop the tactical skills and the drills separately and then merge them to create a combat-ready formation.

A new tool for developing tactical thinking processes, the virtual staff ride, has been produced by the United States Army. RUSI NSW will evaluate it in the near future.

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#### **Addendum – Training naval and air force officers in tactics**

It is interesting to compare the foregoing to the way naval and air force officers are trained in tactics.

From a naval perspective, since a 'maritime staff ride' is not possible, navies long ago moved first to floor exercises – like moving model ships around a gigantic chess board – but from the 1960s took the electronic path into 'tactical trainers'. There, the directing staff act as the enemy and pose issues which the friendly force has to counter and overcome, with command teams manning replicas of ship operations rooms.

On the real ocean, real ships are deployed in tactical scenarios and manoeuvre as they would in real combat. As part of this, real weapons are usually discharged, but at targets operating on instrumented ranges where their

effectiveness can be assessed and reported upon. The biggest of these exercises in Australia's part of the world is the two-yearly RIMPAC cycle, but there are several locally organised and conducted exercise series designed with similar principles in mind. However, we do not have all the instrumented ranges that the United States operates, which is where we have to go for trials and proving of weapons systems.

Further, every ship before reaching operational readiness goes through an extensive training programme of increasing complexity, culminating in an evaluation. Not only tactical operations ability is tested, but a bunch of mean-minded experts in ships' systems systematically move around inhibiting its propulsion, equipment and personnel by inflicting 'damage' and 'casualties' to test the ability of command and crew to respond.

The Air Force uses many of the military training regimes described in the paper in the staff environment, and, in conjunction with the other Services, it is expected that it will be required to shape the environment for joint activities. Outside the staff environment, it uses virtual and live-flying aircraft exercises to test their systems and personnel.

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