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Tackling the Turk

**An examination of tactics employed by the
New Zealand Mounted Rifles Brigade during
the Sinai-Palestine campaign of World War I**

A thesis presented in partial fulfilment of the requirements for the
degree of Master of Philosophy in Defence and Strategic Studies at
Massey University, Palmerston North, New Zealand

**Peter Wood
2004**

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ABSTRACT

This thesis examines the tactics employed by the New Zealand Mounted Rifles (NZMR) Brigade during the Sinai Palestine Campaign of World War I. It seeks to determine how the Boer War shaped mounted rifles tactical doctrine prior to World War I, what tactics were employed during the Sinai Palestine campaign itself, and how the tactics evolved over the course of the campaign. It begins by tracing the New Zealand experience in the Boer War, the ensuing development of mounted rifles tactical doctrine and the formation of yeomanry and mounted rifles units immediately prior to World War I. The thesis follows the campaign in Sinai and Palestine, focusing primarily on patrolling operations and attacks, from the re-building of the NZMR Brigade after its return to Egypt from Gallipoli in December 1915, until the conclusion of operations at Amman in September 1918.

The thesis finds that by 1914, New Zealand mounted rifles units trained to employ *fire tactics*, to move mounted, but to conduct attacks dismounted. New Zealanders undertook extensive mounted patrolling from the outset of the campaign. Most attacks were conducted as 'quick' attacks, despite Turkish defensive positions often being well prepared and stubbornly defended. Most attacks employed envelopment of enemy flanks and followed a general pattern of firing lines of dismounted troopers closing on the enemy under the combined weight of their own and neighbouring rifle fire, machine gun fire and artillery support. Attacks usually concluded with a bayonet charge from short range, once firing lines had got close enough to the enemy. Mounted charges were rarely undertaken, despite the spectacular success of the Australian mounted charge at Beersheba. Indeed, the New Zealand commander, General Chaytor, made a deliberate decision to continue employing dismounted tactics. The thesis finds that longevity in command appointments and the influence and experience of Boer War veterans had a positive effect on the tactics used by the NZMR Brigade.

Table of Contents

	Lists of Maps, Diagrams and Photographs	ii
	Acknowledgments	iii
Introduction	The New Zealand Mounted Rifles Brigade	1
Chapter 1	The Boer War	4
Chapter 2	Tactics and Doctrine Circa 1914	17
Chapter 3	Background to the Sinai-Palestine Campaign	32
Chapter 4	Operations in Egypt and Sinai	42
Chapter 5	The Invasion of Palestine	74
Chapter 6	The Jordan Valley and Beyond	101
Chapter 7	Command, Leadership and Tactics	120
Chapter 8	Conclusion	130
Appendix 1	NZMR Brigade War Diary	137
Appendix 2	NZMR Brigade Special Order No 24 of 9 July 1917	138
Appendix 3	NZMR Brigade Commanding Officers	139
Appendix 4	Analysis of NZMR Tactics	141
	Primary Sources	143
	Secondary Sources	145

Cover Photograph: NZMR riding through Es Salt, Powles, *Sinai and Palestine*, p. 248

Lists of Maps, Diagrams and Photographs

Maps

Map 1	Sinai Peninsular	42
Map 2	Romani	48
Map 3	Magdhaba	55
Map 4	Rafa	61
Map 5	Invasion of Palestine	74
Map 6	Gaza I and II	77
Map 7	Beersheba	88
Map 8	Ayun Kara	92
Map 9	Action at Jericho	98
Map 10	Palestine and southern Syria	102
Map 11	Night Attack at Amman	108
Map 12	Amman 25 September 1918	116

Diagrams

Figure 1	Levels of War	17
Figure 2	Frontal Attack and Envelopment	20
Figure 3	Use of Ground	20
Figure 4	Mounted Rifles Attack	25
Figure 5	Structure of the NZMR Brigade	35
Figure 6	Regimental Formations: Line and Column	56
Figure 7	Squadron Formation (Line of Troop Columns)	56

Photographs

De Wet's commando crosses the Orange River	68
Member of 5 th New Zealand Contingent, Boer War	68
Instruction on the Lewis Gun	69
Typical NZMR Troop	69
WMR horse lines	69
NZMR firing line at Rafa	70
Rafa	70
Hotchkiss Gun and crew, WMR	70
Somerset Battery RHA in action	70
Turkish machine gunners Gaza II	71
Turks in trenches near Gaza	71
NZMR troops move through Bethlehem to the River Jordan	72
Amman with Hill 3039 in the background	72
CMR crosses the Jordan	72
Dummy horses- Jordan Valley	72
Major General Sir EWC Chaytor	73
Corporal Williams and his horse rest in the sun- Palestine	73
Brigadier General W Meldrum	73

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INTRODUCTION

The Allied campaign in Egypt, the Sinai and Palestine during World War I remains virtually unknown. Even as it was being fought, it was considered a sideshow to the Western Front. In the immediate aftermath of World War I, the exploits of the New Zealand Mounted Rifles Brigade was overshadowed by Gallipoli, Passchendaele and the Somme. Even these, with the exception of Gallipoli, have been all but forgotten since World War II, where the battles of Crete, El Alamein, and Cassino, and the names, Freyberg, Kippenberger and Upham are far more likely to be recalled today. Few New Zealanders would associate the names Magdhaba, Ayun Kara or Amman with pitched battles, nor the names Chaytor and Meldrum with successful New Zealand formation commanders.

Despite the lack of awareness within contemporary New Zealand, the Sinai Palestine campaign is worth examination as it was highly mobile, with manoeuvre on a scale seldom seen on the Western Front. The New Zealand Mounted Rifles (NZMR) Brigade, re-formed after fighting as dismounted infantry at Gallipoli, comprised the New Zealand contribution to the campaign, and it played a key role in bringing the campaign to a successful conclusion.

This study will examine the tactics employed by the NZMR Brigade and its regiments during the Sinai Palestine Campaign. It will determine how the Boer War shaped tactical doctrine and mounted rifles organisations in New Zealand and Great Britain up until the commencement of World War I. The study aims to determine the tactics employed on operations by New Zealanders and note any developments as the campaign progressed. This provides the three focus questions of this thesis. They are:

- How did the Boer War shape tactical doctrine and mounted rifles organisations up until the commencement of World War I?
- What tactics were employed by the NZMR Brigade during the Sinai Palestine Campaign?
- How did NZMR tactics evolve during the course of the campaign?

The first chapter will examine Boer War operations from 1899 until 1902 in order to establish the 'legacy' for both Great Britain and New Zealand in terms of the 'cavalry

debate' and the development of mounted rifles organisations and tactics. The second chapter will identify basic tactical concepts, before determining doctrine and tactics that were in use by New Zealand mounted rifles immediately prior to World War I. The third chapter will background the Sinai Palestine campaign, explain the NZMR Brigade organisation and introduce the Turkish Army.

Chapters Four to Six chronologically trace NZMR Brigade operations focusing on patrolling and on offensive operations at brigade level and below; the advance, the attack and the pursuit. The tactics employed within the NZMR will be determined by analysing combat 'actions' between 4 March 1916 and 27 September 1918. Chapters detail the initial attacks at Rafa and Magdhaba, the breaching of the Turkish line at Beersheba and operations beyond the Jordan River concluding with Chaytor's Force capture of the Turkish IV Army. The thesis concludes by examining the influence of command and leadership on tactics, the role of Major General Chaytor, and a summary of NZMR Brigade tactics as they were at the conclusion of the campaign.

The study concludes that in the main, the NZMR Brigade employed fire tactics and the basic mounted rifles doctrine that was in use shortly before World War I. During the campaign, occasional mounted charges were attempted, but not on a scale to be of major significance in tactics. The New Zealanders became adept at mounted patrolling, developed their capacity for close reconnaissance and improved on the employment of machine guns and artillery as the campaign progressed. Longevity in command at brigade, regimental and squadron level along with the combat experience of Boer War veterans served to perfect a sleek fighting formation, whose final independent operation was a dismounted night attack.

NZMR tactics included many similar features to the Boer War operations of the New Zealand contingents. Fighting was mainly dismounted, with lines of soldiers supported by artillery and machineguns making their way forward in daylight, under fire, toward enemy strong points. A bayonet charge would usually prove to be decisive. Patrolling on horseback was extensive, whether as a security element during a combat action or between operations. Occasional mounted charges were attempted, although were most often unsuccessful due to unanticipated or unsuppressed enemy fire.

This study does not intend to determine if a distinctly New Zealand style of fighting emerged, nor to compare New Zealand tactics with those of their Australian or British counterparts. More often than not, New Zealanders were operating alongside Australian and other Allied troops. New Zealand mounted riflemen fought in most of the major actions of the campaign. Despite being but one brigade in a huge Allied army, the NZMR Brigade established a reputation as a first class fighting formation, just as their forebears had managed in the Boer War.

CHAPTER ONE: THE BOER WAR

More than 6,500 New Zealanders served in the Boer War 1999- 1902. The Boer War was New Zealand's first military deployment. The New Zealanders were amongst 29,000 colonial troops that went to South Africa to support Great Britain in her fight against the Boer South African Republic (Transvaal) and the Boers' ally, the Orange Free State. Most New Zealanders who fought in South Africa were mounted riflemen, sent to the war in ten contingents.

The creation of an Imperial General Staff and the publishing of military doctrine reflecting many of the tactical lessons learned in the South Africa were major Boer War outcomes for Great Britain. Like New Zealand, the British saw the need for the magazine loaded rifle, the range and weight of fire they produced, and understood the devastating effect they could have on close order formations. The debate over the continued utility of cavalry versus mounted rifles was not truly resolved, so Britain entered World War I with cavalry and with mounted rifles, which they called yeomanry.

Before examining the Boer War, it is necessary to distinguish between mounted infantry, mounted rifles and cavalry. Iain G. Spence's article 'To shoot and Ride: Mobility and Firepower', defines each:

'Mounted Infantry' denoted infantry (and usually Regular Army infantry at that) which had undergone additional training to allow them to ride into action. Once at the front, they would dismount and fight on foot, using traditional infantry tactics. 'Mounted Rifles' were essentially regarded as irregular cavalry. Equipped with infantry weapons but not trained as line infantry, they fought on foot but were not expected to be expert in traditional infantry tactics. 'Cavalry' were horsemen equipped with the sword or lance who generally fought while mounted, using traditional cavalry tactics.¹

New Zealand's contributions to the Boer War were, by Spence's definition, truly mounted rifles. They did not have the traditional infantry training. They fought more like irregulars so were well suited to flank duties, reconnaissance and skirmishing.

¹ Iain G. Spence, 'To Shoot and Ride: Mobility in Mounted Warfare' in, Dennis, Peter and Grey, Jeffrey (Eds), *The Boer War Army, Nation and Empire*, Army History Unit, Department of Defence, Canberra, 2000, p. 119.

Background

The Boers were horse mounted and well armed.² Just prior to the war, they had purchased thousands of modern rifles from Germany. This enabled the Boers to open fire at greater ranges than the British anticipated, and, as their rifles were magazine fed, the Boers could achieve a heavy weight of fire. Thus, Boer tactics were to open fire at extreme range, with volleys that caused maximum casualties amongst close order British infantry, who had further to advance before closing with the enemy for close combat.³ Artillery was the Boers' only professional military arm, the mass of their Army was based on irregular commandos, able to be called up by their commandants at any time.⁴

Boer commandos numbered from 300 to 3000 burghers, based roughly on electoral districts.⁵ Being predominantly of farming stock, the Boers had excellent knowledge of the land, and were capable shots and horsemen. This provided them with superior mobility and firepower, enabling their use of hit and run tactics. From concealed positions, they were able to engage British close order formations, breaking contact when threatened themselves. British tactics and dismounted infantry were not suited to counter Boer tactics, other than as static security elements. The Boers enjoyed a huge initial advantage in comparative mobility over the British forces.⁶

The Boer War had two distinct phases. The first was a 'conventional' phase where Boer formations fought the British in 'set piece' battles. This phase included the Boer sieges of Mafeking, Kimberley and Ladysmith, the battle of Spion Kop the Allied advance on Kimberley that ended with the capture of the Boer capital, Pretoria. In this phase, New Zealanders saw action at Jassfontein and Slingersfontein, and trekked and fought their way as part of Plumer's cavalry column to Kimberley, Johannesburg and Pretoria.

² Thomas Pakenham, *The Boer War*, Sphere Books Limited, 1979, reprinted 1991, p. 41 and 164.

³ Edwin L. Kennedy, Jnr, Maj, USA, 'The Australian Light Horse: A Study of the Evolution of Tactical and Operational Maneuver', U.S. Army Command and General Staff College, Fort Leavenworth, USA, 1991, p. 27

⁴ The Boers also built up their artillery, procuring four 155 mm howitzers (Long Toms), fourteen 75 mm field guns and four 120 mm howitzers.

⁵ D.O.W Hall, *The New Zealanders in South Africa*, War History Branch, Department of Internal Affairs, Wellington, 1949, p. 12.

⁶ William L. Taylor, 'The Debate over changing cavalry tactics and weapons', in *Military Affairs*, Vol XXVIII, 1964-1965, p.173.

The second phase coincided with an increase in Allied mobility. In this phase, the Boers abandoned conventional operations. Instead, they adopted guerrilla tactics, with hit and run raids behind British 'lines'. This forced the Allied forces to re-think their own tactics, leading to the development of 'flying columns' based on mounted troops, and the conduct of 'drives' to sweep Boer commandos onto lines of static blockhouses where they could be killed or captured. Boers tended to defend *kopjes* (hills) or *drifts* (river crossings) for as long as it suited them. They were content to snipe and raid and would break contact unless cut off. Neither side undertook set piece attacks on the scale of the first phase. Boers were usually 'dislodged by wide turning flanking movements with arcs of anything from five to fifteen miles from the position being attacked.'⁷ The New Zealanders participated in flying columns, new model 'drives' and in detaining Boer families and cattle as part of anti-guerrilla operations.

New Zealand troops participated in both phases, although the majority served in the latter. It is not intended to cover the Boer War in detail. However, an explanation of some of the operations that the New Zealanders were involved in will be necessary in order to determine the tactics that developed and whether these were repeated in World War I mounted operations doctrine during combat.

The New Zealand Experience

The First Phase

The actions undertaken by the First Contingent typify New Zealand experience during the first phase of the war. The contingent arrived in Cape Town on 23 November 1899. Within nine days of disembarking in Cape Town, they moved to the northern Cape Colony where they joined General John French's cavalry division at Naauwpoort. The troops were deployed straight on operations due to recent reverses suffered by the British.⁸ The rushed employment into combat was determined, upon reflection after the war, to be a mistake. Future New Zealand deployments to World War 1 and later conflicts would include 'in theatre training' and acclimatisation before commencing combat operations.

⁷ Richard Stowers, *Rough Riders at War History of New Zealand's involvement in the Anglo-Boer War 1899-1902 and information on all members of the ten New Zealand contingents*, published by R. Stowers, Hamilton, 2002, p.6.

⁸ Christopher Pugsley, *The ANZAC Experience: New Zealand, Australia and the Empire in the First World War*, Reed Publishing (NZ) Ltd, 2004, p. 42.

The Contingent's first major action was at Jasfontein Farm on December 1899. The New Zealanders advanced '... on the farm, which was done in extended line, dismounted, with bayonets fixed' expecting to fight the Boer occupants, however, the Boers had escaped.⁹ The New Zealanders then occupied the farm buildings themselves. Under the cover of artillery and rifle covering fire, the Boers attempted to outflank the New Zealanders in order to re-capture the farm. Some New Zealanders had to occupy a nearby kopje that overlooked both the farm and the flank route that the Boers were using, in order to prevent the Boers from occupying it themselves and making the farm position untenable. Lessons were learned from this action about enemy and flanking manoeuvre, the need to cut Boers off to prevent them escaping and about maintaining watch over one's own flanks. The cavalry division then moved to Slingsfontein where a base was established from which to patrol the local area.

The significance of high ground was further reinforced on 13 January 1900 at Slingsfontein Farm. Near the division's base there was a large kopje. It was not occupied, nor were outposts established on it. When it was determined that the Boers intended to occupy this feature and thus dominate the base, the New Zealanders were rushed to it, reaching the summit just ahead of the Boers. Thereafter a picket was maintained on the hill, despite periodic sniping. Two days later, the position came under intense fire signalling a major Boer attack. The New Zealanders and troops from the Yorkshire Regiment withstood heavy enemy fire, sustained significant casualties, but prevented the kopje being captured. The New Zealanders defeated the Boer attack with a spirited bayonet charge. The kopje became known as New Zealand Hill. The battle established the New Zealand reputation, just two months after arriving in theatre.¹⁰ Later the division moved to Orange River Station ready to participate in the relief of Kimberley.

With the arrival of more troops in South Africa, General French was tasked to relieve Kimberley. The plan to relieve Kimberley required mounted troops because of the distances involved and the speed required. Lord Kitchener made it clear to General French that the column must out flank and bypass the Boers, not take them head on.

⁹ Richard Stowers, *Kiwi Versus Boer, The First New Zealand Mounted Rifles in the Anglo- Boer War 1899- 1902*, Print House, Cambridge, 1992, p.29. At this point the New Zealanders were not experienced enough to have cut offs in place prior to the attack that would prevent the Boer escaping or to position troops on higher ground to overwatch and cover their dismounted advance to the farm. This would change as they gained combat experience.

¹⁰ *Ibid*, p. 46. General French's address to the New Zealander's following the battle included the words 'it gives me great pleasure to congratulate you on a very spirited and gallant manner in which you resisted a very clever and daring attack on the part of the enemy. It is not the first time nor the second time that you have been under heavy rifle fire when you have conducted yourself well.'

In order to achieve this, the regular (dismounted) infantry was left behind.¹¹ The column was issued three days rations to make them self-sufficient and all non-essential equipment was withdrawn in preparation for the twenty five mile “dash” to Kimberley. The trekking was arduous:

During six days continuous march, we had only 20 hours sleep at night in all. On Sunday 11th, we marched and fought for 21 hours and on Tuesday and Wednesday we marched continuously for 23 hours without water, and fought again on Thursday morning, after which we marched 25 miles to Kimberley, all this under a blazing sun...¹²

These long treks established the pattern for mounted operations. Night rides became accepted practice. These required good scouting and guiding skills, which the New Zealanders excelled in, despite their lack of formal cavalry training. Night movement avoided the heat of the day, minimised Boer observation and assisted in achieving the element of surprise

Following the relief of Kimberley the New Zealanders were attached to the South Welsh Borderers to instruct the Borderers in riding and scouting skills.¹³ The South Welsh Borderers were one of the British infantry regiments already in theatre that were hastily mounted as a means of achieving comparable mobility to the Boers, until such time as sufficient mounted troops could be brought out from England. The pattern of attaching contingents to different columns meant the New Zealanders were never under unified command, ‘but although they regretted its necessity they pointed out that it was the New Zealanders’ skill in reconnoitring untraversed country which caused them to be so much in demand.’¹⁴

The first phase ended with the capture of Pretoria, capital of the Transvaal on 5 June 1900. Although many thought the war was almost over, Boer leaders Christian De Wet, Louis Botha and Koos De La Rey conducted a guerrilla campaign that lasted until 1902.

¹¹ Pakenham, p. 313.

¹² Stowers, R., *Kiwi versus Boer*, p. 62. The final 25 mile ‘march’ was the mounted dash into Kimberley. New Zealanders are credited with being the first Allied troops to enter Kimberley. Note that the word march actually means ‘ride’, the effect on the horses was equally felt.

¹³ *Ibid.*, p. 67

The Second Phase

Further New Zealand Contingents arrived as the preceding contingent's tour was about to expire and the New Zealand commitment was extended. The remainder of this section illustrates typical New Zealand experience in the conduct of anti-guerilla operations.

In order to conduct anti- guerrilla operations, the Allies formed Flying Columns based on mounted troops. The columns had comparative mobility with the Boers although typically took too much baggage and were overly heavily reliant on slow ox carts for the carriage of horse fodder and supplies. The Kimberley Flying Column was typical. It comprised: Two Fifteen pounder guns and two Pom Pomguns from the Royal Artillery¹⁵, mounted Squadrons from 50th Imperial Yeomanry, Somerset Light Infantry, Scottish Rifles, Dennison Scouts (of the South African Rifles), a squadron of the British South African Police and C Squadron of the Fifth New Zealand Mounted Rifles. Frank Perham describes the Kimberley Flying Column:

The Column was a very mobile one and for the sake of speed always travelled with as little to hamper (it) as possible. It operated mainly in the Orange Free State.... Its main duties were convoy work and dealing with Boer guerrilla tactics, which it did quickly and effectively.¹⁶

Various tactics were developed by the columns to locate the Boers, often by making themselves targets:

April 15th. The Column was on the move at 4 a.m. My section was instructed to occupy a post on the flank until the column passed. At 8 a.m. we camped near two farms for breakfast. Afterwards, the Dennisons with one Pom Pom and the New Zealanders with the other were sent out patrolling in different directions looking for trouble. ¹⁷

¹⁴ Hall, p. 26. This was in response to Lt Col Alfred Robin, Commanding the 1st Contingent, on complaining about the 'continued dispersal of the New Zealanders'

¹⁵ The 'Pom Pom' was the nickname given to the Maxim automatic gun which fired belt-fed 37mm high explosive shells. The nickname was derived from the sound the shells made as they hit their target. The Pom Pom gun is the forerunner of today's 40mm automatic grenade launchers. Melvin M. Johnson and Charles T Haven, *Automatic Arms Their History and Development*, William Morrow and Co., New York, 1941.

¹⁶ Trooper Frank Perham, *The Kimberley Flying Column, Being Reminiscences of Service in the South African war of 1899- 1903* (sic), Print House, Cambridge, New Zealand, 1992, p. 41

¹⁷ *Ibid.*, p. 68.

An account of how they did this appears in Hall:

The main body of New Zealanders trailed a coat before the Boers' position and successfully induced them to open fire and disclose their positions to the British artillery. When at nightfall the Boers fell back, the advancing New Zealanders captured one of the Maxims.¹⁸

The Allies learnt that guard forces needed to be employed in order to protect the main body and to locate, or be located by, the Boers at sufficient range that the main body could still manoeuvre. Joseph Linklater explains the forces required to prevent major interference from the Boers when his squadron of New Zealand's Sixth Contingent were providing advance and flank guards for General Plumer's column:

When going through hostile country scouts always go first, then follows in extended order- that is, fifty to one hundred yards between files- the advance guard.... the supports to the advance, called flankers, follow on, on the extreme right and left of the advance. The big guns come next, protected either side by a strong escort, and then the main body of troops.¹⁹

This did not prevent Boers sniping at the columns and flanks by day and then harassing, even attacking, camps at night. Boers would occupy kopjes along anticipated Allied routes, from where they would snipe and delay the columns then disappear. Allied counter tactics were to fire the Pom Pom gun at the sniper post, however, the Boer would often retire from the kopje under fire, re-locate, then harass another portion of the column.²⁰ Sometimes the Boers would not fire from the kopje at long range, but would wait until the scouts had bunched up below ready to scale it dismounted and only then would the commandos unleash a fusillade. In one case, the Boers waited for the single breathless scout to reach the top before firing at him at point blank range.²¹

¹⁸ Hall, p. 30. The Maxim was a Boer machine gun and thus a significant capture. Presumably the coat was dragged to create dust and therefore suggest a worthwhile target. It would take courage to purposely induce the enemy to fire on one in that fashion.

¹⁹ Joseph Linklater, *On active Service with the Silent Sixth*, McKee and Co., date of publication not specified, p. 18.

²⁰ Perham, p. 46.

²¹ *Ibid.*, pp. 64-65. In this case, the New Zealanders were advance scouts for the column. On reaching the base of a steep kopje, Trooper Philpott dismounted and climbed to the top. On reaching the top he was fired upon at point blank range. Although he managed to get back down to his horse, he died of his wounds two hours later. Philpott was buried, wrapped in his own blanket, near where he had been shot.

Experience taught the Allies to adapt to Boer tactics. They would send out parties before dawn to occupy kopjes and drifts along the intended route of a column or convoy in order to minimise Boer interference. They learned to draw Boer fire and thus make the Boer a target for the Pom Pom guns, or once they had identified the Boer position, would attempt to outflank it. Both these tactics would cause the Boer to withdraw. On one occasion the Boers withdrew under the cover of smoke they had produced by setting fire to long grass.

Everything had to be picketed, escorted, protected. Mounted troops were detailed to escort guns and supply columns. Outposts were established at night to protect bases, or during night halts of a larger group. Usually an outpost would consist of five troopers and a Non Commissioned Officer. A main picket would be positioned nearer the base camp than the outposts. Being stronger, the main picket's duty was '... to come to the aid of the outpost if we were attacked...'²²

Boers proved to be elusive. Knowing, or at least suspecting, that the Boers stayed on farms where they could hide away and be fed, new tactics were developed to catch them. As Linklater explains:

Reveille 1 a.m; moved 3 a.m; camped at 7 a.m. This early morning marching was meant to surprise the Boers who were supposed to be lurking in farmhouses.²³

In surrounding any farmhouse our plan of action was as follows- a company of men, keeping in touch with each other would surround the house in extended order, thus forming a large circle around it. Each man would march towards the house, keeping as much hidden as possible, until the house was reached, when the surrender of it inmates was demanded.²⁴

Once the occupants came out, the house would be searched thoroughly. Often cattle would be confiscated.

Kitchener had lines of blockhouses constructed and introduced the tactic of 'new model drives'; large sweeps across the veldt, forcing Boer commandos and their cattle against blockhouse lines where they would (in theory) be killed or captured.

²² Linklater, p. 31.

²³ *ibid*, p. 51.

Boer counter-tactics included splitting their forces up and manoeuvring to the flanks of the sweeping forces hoping to locate a gap. Another Boer tactic was to conduct a mass break out. Break outs were occasionally achieved at night by forcing cattle through first, with the commandos following immediately behind the cattle, exploiting the confusion and the cover provided by the animals. Drives were not always effective as this example points out:

On the night of 5 February (1902), these four super-columns, about nine thousand strong, roughly one man for every ten yards, lined out across the fifty four miles of the open end of the rectangle. Meanwhile, other columns were sent to reinforce the blockhouses on the other three sides, and seven armoured trains, equipped with guns and search lights, steamed up and down the railway tracks..... By dawn on 8 February, only 285 out of 2,000 odd Boers had been accounted for.²⁵

In reality it was impossible to maintain a totally intact line. The Boers could always select a point at which to break out if they could not exploit a gap in a flank or infiltrate through a gap quietly by night. For the Allies, the need to have a continuous blockhouse line used up all available troops so there were never sufficient mobile reserves to act as reinforcements and blocking forces once the Boer break out point had been identified. Inevitably the Boers had local superiority at the point they chose to break out. This was the case at Langverwacht where the Boers broke through the cordon that members of the New Zealand Seventh Contingent were covering. Six hundred Boers escaped through the breach leaving 24 New Zealanders killed and a further 41 wounded.²⁶ This was a high casualty rate for the eighty New Zealanders defending that point of the line.²⁷ It highlights the effect of mass, 600:80 or 7.5: 1 that the Boers achieved at their breakout point.

Despite some local successes, Boer resistance finally collapsed. As part of the anti-guerrilla operations, many Boer farms had been burned. Over 120,000 Boer women and children were placed in concentration camps, thousands died in captivity.²⁸ On 31 May 1902 the Boers accepted British sovereignty under the Treaty of Vereeniging.

²⁴ *Ibid.*, p. 67

²⁵ Pakenham, p. 545- 546. Clearly, these drives were not always effective given the resources employed, with only 10% of the Boers being captured in the example quoted.

²⁶ Hall, pp. 68-69. Fourteen Boers were killed and 20 wounded by the New Zealanders.

²⁷ Stowers, *Rough Riders at War*, p. 9 and pp. 23- 24. The Boer night break out at Langverwacht caused the eighty Seventh Contingent defenders a total of 65 casualties.

More than 6,500 New Zealanders served during the war. Fifty eight New Zealand soldiers were killed in action, 11 died of wounds received and 27 were accidentally killed. One hundred and thirty six died of disease while 190 approximately were wounded.²⁹

Effects in Great Britain

The war resulted in a number of reforms within the British Army. Two key ones were the establishment of an Imperial General Staff and the publication of army doctrine. Mixed lessons were learned by Great Britain from cavalry and mounted infantry experience in the Boer War. Whilst the mobility provided by the horse was generally accepted, there was widespread debate, especially within military circles, over the continued utility of cavalry and whether mounted infantry or yeomanry could achieve the same tactical tasks as cavalry. Cavalry advocates believed, for instance, that colonial cavalry would not be suited to the battlefields of Europe³⁰, and that 'the Boer War was only a colonial struggle which had little bearing on the type of conflict to be expected among the major powers.'³¹

The Times was scathing over the utility of the cavalry troops, citing cavalry training and mentality as limiting their ability to compete with the Boers. It argued that cavalry manoeuvres in massed formation, based on *shock action* with the sword or lance, were extremely vulnerable to an enemy armed with long range magazine fed rifles operating from cover, seldom visible to the cavalry. Traditional cavalry training (and experience) called for fighting in close formations, usually against mounted or dismounted opponents, in the open. While cavalry units converted to the rifle on Kitchener's insistence, many viewed the Boer War as a 'one off' experience and thus argued that no lessons should be drawn from it that would detract from cavalry's continued utility, completely overlooking recent American Civil War experience.³²

However, the tactics employed by the mounted rifles and yeomanry forces were enshrined in doctrine that was produced for British yeomanry and colonial mounted

²⁸ Hall, p.3. Hall states that 20,000 Boer women and children died in (British) concentration camps.

²⁹ Stowers, *Rough Riders at War*, p. 43.

³⁰ Charles Sydney Goldmann, *With General French and the Cavalry in South Africa*, MacMillan and Co, Limited, 1903, p.416 and Jean Bou, p. 103.

³¹ Taylor, William, L., p. 174.

³² Bou, Jean, '*Modern Cavalry: Mounted Rifles, the Boer War, and the Doctrinal Debates*', in Dennis and Grey, p.100. Bou notes that the cavalry arm of both the Union and Confederate armies preferred firearms to blade type weapons, usually dismounted in order to use their carbines but if they remained mounted, their weapon of choice was the revolver. See also Taylor, p. 174.

rifles. Patrolling, fire tactics and the care of horses were all included in the doctrine intended for Territorial and colonial mounted infantry. Cavalry tactics, most notably the mounted charge, were excluded from this doctrine although remained within the handbooks written for British cavalry.

Effects in New Zealand

New Zealanders soldiered alongside the best from Australia, Canada and Great Britain, and proved they were more than equal to the task. This success, coupled with minimal casualties sustained, meant there would be a rush of volunteers for future deployments and ensured that New Zealand retained mounted troops within its armed forces, for home defence and for future force contributions. Thus New Zealand was in a position to immediately contribute a mounted rifles brigade in World War I.

The Boer War produced a group of experienced mounted riflemen. 'New Zealanders experienced the advantages of using mobility to outmanoeuvre an enemy whilst maintaining a fighting ethos.'³³ Some veterans maintained their association with the armed forces by joining the Volunteers or serving with the Permanent Force. The experience of Ex- Private Frank Perham (Fifth Contingent) was typical. After returning to civilian life he still yearned to be involved with the military. To achieve this, he joined the Canterbury Yeomanry Cavalry.³⁴

Military events found their way into agricultural shows, where they provided a spectacle, re-lived the Boer War experience and provided some training value for Volunteer units.

The end of the [Boer] war and the return of troops served to keep alive the military spirit in the many volunteer units which had been formed throughout the country and the members trained assiduously in military drill and rifle shooting etc... no agricultural show or pastoral show was complete without its program of military events...³⁵

³³ Mark Wheeler, 'Evaluating the Role of Mounted Infantry During the 1899- 1902 Anglo- Boer War in order to establish observations applicable to the New Zealand Mounted Infantry of the Future', Massey University Thesis, 4 December 2000, p. 47

³⁴ Perham, p. 85.

³⁵ 1997.503 Memoirs of Corporal McMillan ('*Forty Thousand Horsemen*'), Kippenberger Military Archive and Research Library (Army Museum, Waiouru), p. 5.

The Boer War highlighted serious issues in the administration and welfare of the men. By sending small contingents entirely of mounted troops, with no dedicated administrative staffs, the New Zealanders and Australians were significantly worse off than their British or Canadian counterparts. Future New Zealand deployments would ensure dedicated personnel deployed as part of the contingent to take care of pay, mail, medical and spiritual needs, to receive, hold and train reinforcements and to ensure the men had access to hot food and reasonable accommodation.³⁶

Horses

More than eight thousand were sent to South Africa, only one returned to New Zealand.³⁷ All contingents, except the Seventh, took horses with them aboard their troopships. Despite the New Zealanders care for their horses, conditions were harsh, for man and horse, resulting in casualties to both from more than enemy action. The hours were long, fodder was often scarce. If a horse died or became lame, the horseless trooper was consigned to an ox cart, or forced to walk, until a re-mount could be obtained. Lame or sick horses would be shot. The general shortage of horses in South Africa was a limiting factor on Allied mobility. Boer ponies were popular remounts, although not easily obtained. New Zealand horses were preferred, contingents usually passed them on to the other New Zealand contingents as they departed for home.

Many horses died in South Africa³⁸. '... the mortality of horses during the campaign was high: those which were not well looked after by their riders died first.' It is estimated that 400, 346 horses, mules and donkeys were 'expended' in the course of the war. As the horse was a bigger target than the rider, and also sometimes used for cover from enemy fire, it was only natural that horses should have a greater chance of being hit by enemy action than the rider. As well as enemy action and lack of adequate care by their riders, horses were also lost to disease and even due to unsupervised grazing. It is said that at times the route taken by the Allies on a long trek could be determined by following the lines of dead horses:

³⁶ Pugsley, *ANZAC Experience*, pp. 45-46. By contrast, when the British and Canadians came in from a trek they had access to hot food, tent lines that were already established, mail was waiting, and they could draw their pay. This is well covered by Chris Pugsley, and while not directly related to tactics, the issue of administration and command responsibility for the welfare of soldiers *by their officers* is closely linked to morale, and therefore to combat effectiveness.

³⁷ Stowers, *Rough Riders at War*, p. 29. The horse's name was 'Major', the mount of Major Robin, commander of the First Contingent.

³⁸ Stowers, *Rough Riders at War*, p. 29.

Between Bloemfontein and Kimberley it was something awful, the route was a scene of desolation, strewn with dead horses and oxen, with crowds of South African vultures flying overhead them, and starving horses left by the British grazing on the scanty grass.³⁹

Conclusions

The two main effects of the Boer War were the continuation of mounted rifles units within New Zealand's defence force and the production of doctrine by the British, for armed forces generally, but mounted rifles and yeomanry units specifically. The debate over the utility of cavalry was to some extent a sideshow. Certainly, the firepower of the rifle was acknowledged, although its full destructive potential in conjunction with the machine gun was not fully appreciated until World War I.

Additional benefits were an understanding by New Zealanders of the need to conserve horses and for the proper administration and welfare of deployed contingents. Boer War veterans provided an invaluable experience base from which future contingents could be trained and led.

³⁹ Spence, p. 122.

CHAPTER TWO- DOCTRINE AND TACTICS CIRCA 1914

‘Tactics always require judgement and adaptation to the unique circumstances of a specific situation’¹

Tactics and the Levels of War

There are three widely accepted levels of war: strategic, operational and tactical. The strategic level of conflict ‘is that level of war which is concerned with the art and science of employing national power.’² The operational level of war is the level at which campaigns and major operations within theatres are conducted. The operational level links the strategic objectives and the tactical employment of military forces.

Tactics is the employment of units in combat.³ The word tactics is derived from the Greek word *taktos*, meaning order, arrangement and disposition. According to New Zealand doctrine,

‘The tactical level of conflict is concerned with the planning and conduct of battle and is characterised by the application of concentrated force and offensive action to gain objectives.’⁴

The tactical level of war includes battles and engagements. Battles are a set of engagements related to the same overall objective that involve larger forces than an engagement. An engagement is a small encounter between opposing forces. Engagements are usually short. They may be measured in minutes or hours but usually less than a full day.⁵ The levels of war as they apply to the Sinai Palestine Campaign are shown in Figure 1 below:

Level of War	Applicability to Sinai Palestine Campaign
Strategic	Allied decision to defend the Suez Canal as a vital link and the allocation of troops to do so. Eventual decision to take the offensive against the Turks with a campaign in the Sinai and Palestine. Allocation of British and

¹ Headquarters Department of the Army (HQDA), FM- 3-90 *Tactics*, USA, July 2001, p1-1.

² Headquarters New Zealand Defence Force, NZDDP- D, *Foundations of New Zealand Military Doctrine*, February 2004, p. G-11.

³ FM- 3-90 *Tactics*, p1-1.

⁴ *Foundations of New Zealand Military Doctrine*, p. G-11.

⁵ FM- 3-90 *Tactics*, p.2-5.

		Commonwealth troops to achieve same.
Operational		Campaigns to; defend the Suez Canal, clear Sinai and then advance into Palestine itself, culminating in the surrender of Turkish Forces.
Tactical	Battle	The Palestine campaign included major battles such as Gaza 1 and 2, Beersheba and Megiddo.
	Engagement	Actions at Rafa and Maghaba, night attack at Amman.

Figure 1: Levels of War

Tactics, Techniques and Procedures

The military today commonly uses the terms Tactics, Techniques and Procedures (TTPs), when discussing, teaching or using tactics. Whilst these terms would not have been expressed this way circa 1914, together they provide an indication that there are some subtle, although significant, differences that the reader needs to be aware of. Tactics, as we know, is the employment of units in combat. Tactics are supported by techniques and procedures. Procedures are standard courses of action such as the instinctive drill a mounted squadron would take when it came under enemy fire, or the general scheme employed in a dismounted attack against an enemy in hasty defence. These are sometimes referred to as Standard Operating Procedures. Techniques are the methods that personnel and equipment are used to perform their functions or the unit mission. For instance, certain standard techniques are used to set up and move machine guns forward in contact with the enemy, the technique known as 'fire and manoeuvre' is employed if soldiers are to advance towards the enemy under the cover of their own fire.

Tactics is an Art and a Science

Tactics is an art and a science. The *science* involves knowing and applying the applicable TTPs. It includes understanding own and enemy organisations, weapons capabilities and ranges, and appreciating the limitations that time, weather and the ground will have on the tactics employed. This part can be taught, and is relatively straight forward.

'The *art* of tactics consists of three interrelated aspects: the creative and flexible array of means to accomplish the assigned mission, decision making under conditions of uncertainty when faced with an intelligent enemy, and understanding the human

dimension- the effects of combat on soldiers.’⁶ If tactics were just a science, then all tacticians would apply the same techniques and procedures in every similar situation. The art involves balancing options in the following areas; the type of operation and type of manoeuvre to execute, how the forces available will be used, what if any control measures will be applied, when and how quickly the operation will be undertaken, how much risk will be taken. The art is developed through experience, and it follows that the more experience a tactician has, the better they will become.

Selected Tactical Concepts

To appreciate the tactics being applied, it will be necessary to understand a few basic tactical concepts. There are many, so only those most relevant to reviewing mounted rifles tactics are included here.

Flanks are the right and left limit of ones own unit or of the enemy. Flanks are often the most vulnerable section of a unit, as less direct fire can be produced to cover them, so for that reason they provide a good objective to attack. Flanks may be protected by putting out security elements, such as sentries or observation posts, or they may be ‘denied’ by anchoring them against impenetrable terrain, such as a river.

Manoeuvre is not simply movement, it is more about positioning. A commander will attempt to manoeuvre his forces into a superior position relative to the enemy. If required, a commander will use direct or indirect fire to reduce his unit’s vulnerability to enemy fire. Fire and movement is a basic technique where individuals or small groups, up to squadron strength, provide their own cover by having some members fire while others move. Manoeuvre may also be supported by machine gun or artillery fire, or the fire from another unit. A unit that is under fire is often unable to manoeuvre.

Two basic forms of manoeuvre that a commander may employ in an attack are the *frontal attack* and *envelopment*. As the name suggests, the frontal attack is directed at the enemy’s front. As the enemy’s front is often his strongest point, this style of attack requires good numbers in the assault force and a heavy weight of supporting fire. An envelopment is an attack against one or more enemy flanks, or rear. This form of attack may be supported by or be part of a frontal attack. Envelopment generally avoids the enemy’s strongest defences, achieves surprise by the direction of the attack and should

⁶ FM- 3-90 *Tactics*, p.1-4.

cut the enemy off, thereby denying him the ability to withdraw or be reinforced. These manoeuvres are shown in Figure 2.

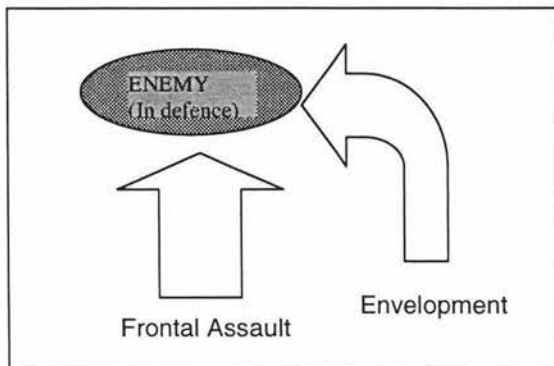


Figure 2: Frontal Assault and Envelopment

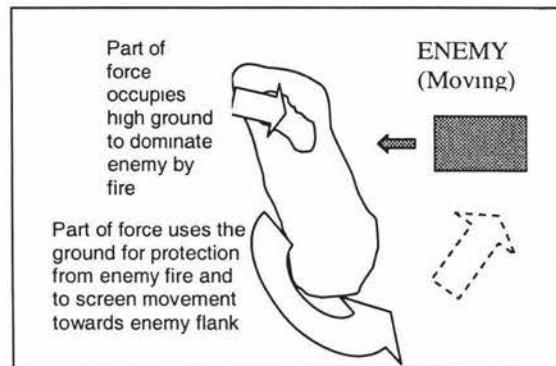


Figure 3: Use of Ground

If a unit, or the enemy, is suppressed, they cannot move without taking casualties and they cannot use their weapons. Effective *suppression of the enemy* is essential when mounting an attack. Suppression is achieved by applying rifle, machine gun and artillery fire onto the enemy being attacked, and if possible, to any other position from which the enemy could interfere with the assault. In an attack there should be at least one element assigned the role of suppressing the enemy with direct fire and supporting the assault element. This element is usually designated as 'fire support', especially if they are providing direct fire.

If used wisely, *selection and use of ground* can offer the commander a distinct advantage. Ground offers positions for observation and from which to provide fire, it may offer protection from fire. Ground can be used to provide cover, concealment and to mask movement. The position that dominates all ground around it is termed the *vital ground*. History is replete with examples of commanders who have selected a position, but ignored the vital ground, only to have the enemy seize it from them, causing the defence to fail. Defences will often be sited on ground that dominates the likely approaches, presenting significant challenges to an attacking force. Figure 3 illustrates the use of ground to provide fire and observation over the enemy and to screen movement towards an advancing enemy's flank, preparatory to an attack.

A *reserve* is an element that is kept out of battle to be used to counter unforeseen circumstances and to exploit opportunities. While there is no set size for a reserve, a brigade sized organisation should at least retain a company or squadron sized reserve. When and where to commit the reserve are key decisions for a commander to make. A reserve is generally only maintained at regiment, brigade and higher.

Besides being a principle of war, *surprise* is a combat multiplier. Commanders seek to surprise an enemy, and in turn, take reasonable precautions to prevent being surprised themselves. Surprise can be achieved in a number of ways including; attacking from an unanticipated direction, or much sooner than expected, unexpectedly occupying ground that dominates an enemy position, attacking by night, conducting a silent attack or by changing the pattern or style of operations. Commanders prevent their own forces from being surprised by deploying guard forces to their front, flanks and rear during movement, and by the placement of outposts and picquets on likely enemy approach routes when halted, irrespective of whether enemy contact is deemed likely or not.

Doctrine

Tactics used in combat are based on accepted ideas and experience that are recorded in what becomes the accepted *doctrine* of the day. Doctrine is a guide for military forces. It has been defined as,

Fundamental principles by which military forces or elements thereof guide their actions in support of national objectives. It is authoritative but requires judgement in application.⁷

A key point is, as the definition states, that doctrine requires 'judgement in application', an acknowledgment that doctrine should not be followed slavishly, but should be used by commanders as a guideline, as every situation will be unique.

At the beginning of the 20th Century, British and New Zealand Army doctrine was contained within (British) 'Field Service Regulations, 1912' (hereafter referred to as FSR). FSR was supported by a number of corps publications including, 'Yeomanry and Mounted Rifle Training, 1912' (hereafter referred to as YMRT).

Tactical Doctrine circa 1914 will now be reviewed very briefly to establish a framework from which written and oral accounts of battles involving New Zealand mounted rifles may be analysed to determine the tactics they employed in World War I.

⁷ *Foundations of New Zealand Military Doctrine*, p. G-3.

Tactical Doctrine Circa 1914

Field Service Regulations (FSR)

Work on the FSR started before the Boer War, however, the campaign delayed their completion.⁸ The result of the delay was that the content of FSR was influenced by the combat experience of that campaign. FSR were,

... TO BE REGARDED BY ALL RANKS AS AUTHORITATIVE, for their violation in the past has often been followed by mishap, if not disaster. **They should be so thoroughly impressed upon the mind of every Commander,** that whenever he has to come to a decision in the field, he instinctively gives them his full weight.⁹

By 1914, 'most tactical doctrines ... showed a healthy respect for the effects of firepower'.¹⁰ The range and effect of the rifle, the effect of smokeless cartridges in making it more difficult to locate firers as well as the effects of machine guns and artillery, experienced in the Boer War and other 'recent' wars, were reflected in the FSR. Mounted rifles attack tactics, once dismounted would resemble those of the infantry. This article written immediately after the war sums up the tactics based on the FSR as at 1914:

The tactical training ... was of the extended order type, the object aimed at being to get within striking distance of the enemy with the minimum loss to our infantry, by advancing in short rushes with widely extended lines, covered by the rifle fire of units on the right and left. Then, having built up a strong firing line, and beaten down the fire of the enemy, to assault with the bayonet... it was constantly impressed upon him that the end and aim of all his training was to enable him to close with the enemy and finish him off with the bayonet.¹¹

Despite developing a healthy respect for firepower, this did not necessarily reflect in a significant change in tactics, instead authorities 'responded by urging a corresponding

⁸ Major- General E.A. Altham, *The Principles of War Historically Illustrated*, MacMillan and Co Limited, 1914, p. vi.

⁹ Major H.G. Eady, *Historical Illustrations to Field Service Regulations, Operations, 1929*, Sifton Praed & Co., London, 1930, p. 14. Bold in original.

¹⁰ Captain Jonathan M House, *Toward Combined Arms Warfare: A Survey of 20-th Century Tactics, Doctrine and Organization*, Combat Studies Institute Research, 1984, p. 8.

¹¹ 'Infantry Tactics 1914- 1918', in *Journal of the Royal United Service Institute*, Vol 64, 1919, p. 460.

increase in the moral qualities, discipline, or collective enthusiasm of the individual.¹² Thus, the charge, aggression and the bayonet were to overcome the effect of fire, rather than a change in tactics, as this passage from *Tactical Notes*, a 1914 guide to regimental officers on the elements of tactics, suggests:

Superior numbers on the battlefield are an undoubted advantage, but skill, better organization and training, and above all **a firmer determination in all ranks to conquer at any cost, are the chief factors of success.**¹³

Mounted Rifles Tactical Doctrine

Tactical doctrine for mounted rifles troops and yeomanry was contained within YMRT. From the first page, YMRT made it abundantly clear that mounted rifles were *not* cavalry. Mounted rifles were to be infantry, trained to ride to the battle area, but who would dismount and use their rifles rather than fight from the saddle as cavalry.

... mounted rifles are cavalry soldiers... who are trained to use their rifles as their principle offensive or defensive weapon. (*Mounted shock action*) is to be considered for use on special emergencies only, and altogether secondary to fire action, which is the dominant method of fighting of these troops... they fight on foot only and are not trained or armed for mounted shock action, which they are not intended to employ.¹⁴

YMRT was divided into two parts; Training and War. Part 1 (Training), was a comprehensive guide to take a recruit who had never ridden a horse through to being a competent horse mounted soldier.¹⁵ Subjects within this section included fitting a saddle, how to mount, secure and lead a horse. Chapters progressed to troop, squadron and regimental formations, how to change formation as well as 'dismounting for action', laying out a camp, crossing rivers and the conduct of training. Training included fire tactics, use of the Machine Gun Section, reconnaissance, the use of dispatch riders and elementary instruction in night operations. Part One was not strictly doctrine, it was a training manual of basic skills.

¹² T.H.E. Travers, Technology, Tactics and Morale: Jean de Bloch, the Boer War and British Military Theory, 1900-1914, in *Journal of Modern History*, The University of Chicago, June 1979, pp. 284- 285.

¹³ Lieut- Col H.J., Kinsman, *Tactical Notes*, Hugh Rees Ltd, London First Reprint 1916, p. 141. Bold in original.

¹⁴ General Staff, War Office, *Yeomanry and Mounted Rifle Training Parts I and II, 1912* (YMRT) (Reprinted with amendments 1915), His Majesty's Stationery Office, p. 1.

¹⁵ No doubt influenced by Boer War experience so that units could be converted to mounted formations from scratch, if the need arose, and to ensure commonality of basic skills and standards across regiments.

Part 2 (War) is more relevant to this thesis. Part 2 covered picquets, scouts and patrols, the use of machine guns in combat, night movement and most relevant, the tactical action of mounted rifles. In discussing the command and leading of mounted troops, YMRT noted that:

... the personality of the commander and a thorough understanding between him and his subordinates are of great importance. The rapidity of action, which is one of the chief characteristics of mounted troops, allows only the shortest time for consideration. In any case it will be impossible for the commander to gauge, with any degree of accuracy, the strength of his adversary from the preliminary resistance he encounters. Orders, therefore, must be based on a general consideration of the circumstances and will frequently no more than indicate what is required.¹⁶

Commanders of mounted bodies were therefore key figures, who were expected to make rapid decisions and not wait for detailed knowledge of the enemy strengths and intentions before committing their unit to action, and who would execute plans that could be amended as the battle unfolded. This would require leaders who positioned themselves forward so that they would have an accurate appreciation of the battle situation.

General Principles

General principles and tactical actions described in YMRT Part 2 are summarised in the following paragraphs.

Mounted rifles operations differed from line infantry because of the mobility afforded by the horse. Mounted rifles were more mobile and could move into a position to generate firepower much more quickly than line infantry, however, their numbers in the firing line were always reduced as one in four mounted troopers was automatically out of action in order to take charge of the 'led horses'.¹⁷ Line infantry units can deploy all their riflemen into the firing line, although as a group they are slower to get into position than

¹⁶ YMRT, p.132.

¹⁷ When a mounted unit dismounts for action, horses are not left on their own. They are handed to the designated horse holder in each section and become 'led horses'. The horse holder is one man from a section of four, thus 25% of a mounted force is actually out of action as they are required to hold and guard the horses, usually well to the rear. In an extreme emergency, some of the horse holders may be called forward to the firing line.

their mounted counterparts, and cannot be moved around the battlefield as quickly either. Mounted rifles generate firepower quickly than line infantry because they ride into action and because the horse enables them to exploit and envelop more rapidly.

The tactics were to close with the enemy rapidly, dismounting out of effective enemy rifle range. 'Effective range' is the distance that it could be reasonably expected that a firer could hit the target being aimed at, or in the case of massed fire, that such fire would start causing casualties. The maximum range was usually far greater. A firing line would be adopted, by a squadron (depleted by 25% due to horse holders) who would then engage the enemy with rifle fire. Machine guns would add to the weight of fire. Other squadrons might move to flank positions, increasing the weight of fire upon the enemy. The lines would, under the cover of their own fire, gradually move closer to the enemy position. Once they were deemed to be close enough, a 'general assault' would be ordered. This would be a bayonet charge, where the enemy were expected to surrender, flee or be killed in place. The tactics were based on linear formations, producing frontage and firepower. Closing with the enemy was achieved under the cover of ones own fire, culminating in close combat with the bayonet. The basic process is shown in Figure 4.

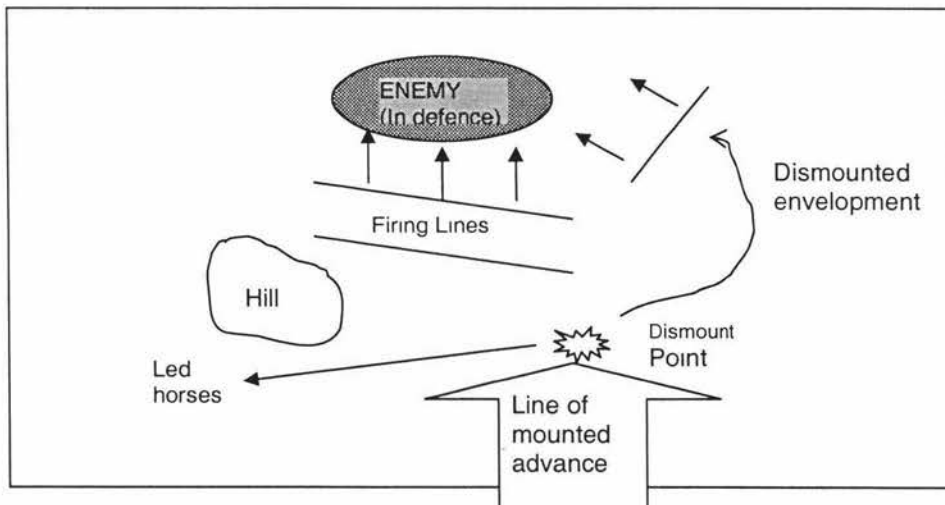


Figure 4: Mounted Rifles Attack

Night action was only covered in outline, and then only as a medium for movement. YMRT did not envisage or explain night combat, certainly not a night attack, except that 'men should be taught to capture small hostile posts, to lay traps to catch despatch riders and other tasks of this nature ...'¹⁸ Night attacks were envisaged for infantry,

¹⁸ YMRT, p. 129.

however, 'It [a night attack] cannot be successfully carried out unless your **troops** have been previously thoroughly **trained in night work**.'¹⁹

Despite being designated mounted rifles and yeomanry, the fighting methods of all mounted elements, less cavalry, more closely resembled Spence's 'mounted infantry' classification, as their tactics and employment were to be infantry based, with the horse providing a means to move them around the battlefield.²⁰

With respect to cooperation with other arms, such as artillery, infantry, cavalry or engineers, the YMRT gave scant guidance other than for infantry to relieve mounted troops once the infantry arrived at the battle, and for mounted troops to remain close enough to exploit any 'success gained by the guns or the infantry'.²¹

Artillery tactics were very rudimentary in 1914. Guns could only fire direct, that is to say, they had to be able to observe their target. There was minimal ability to control the guns once battle was joined, or to coordinate their fire. According to one writer:

Adjustment of fire was primitive and was generally estimated on the gun position itself. Communication with observers was by means of limited numbers of telephones, semaphore or megaphones. In the case of the British field army, all artillery ammunition was shrapnel.²²

Fire Tactics (Fire Action)

By 1911, the concept of using infantry firepower rather than shock action to defeat the enemy and to cross the 'fire-swept zone', was known as *fire tactics*, which YMRT called fire action as a means of distinguishing it from cavalry shock action. Fire tactics were the establishment of a dismounted firing line which would close with the enemy, to a point from where the line was near enough to launch a general assault.²³ Depth was sacrificed by mounted units in order to get sufficient rifles in the firing line. To be employing fire tactics, fire was expected to be opened from successive positions and from unexpected directions. Fire tactics included producing 'effective fire from the first opening, preliminary orientation and ranging, anticipatory orders for fire direction, rapid

¹⁹ Kinsman, p. 239. Bold in original.

²⁰ Spence, p. 119.

²¹ YMRT, p. 137

²² Maj Gen J.B.A. Bailey, *Field Artillery and Firepower*, Naval Institute Press, USA, 2004, p. 240.

²³ Captain E. ff. W Lascelles, 'Schools of Musketry and Cavalry Fire-Tactics', in *The Cavalry Journal*, Royal United Service Institution, Vol VI, No 23, July 1911, pp. 351.

advance to the fire position, simultaneous opening of fire in full volume and control of fire to ensure a means of breaking off an action as necessary.²⁴

Although fire tactics were supposed to be practiced by cavalry, Striguil reports that 'systematic training plays no very prominent part either before or during manoeuvres.'²⁵ Even when they were incorporated within exercises, umpiring was difficult and so the effect of 'enemy' fire was ignored. Thus the actual practice of fire tactics was less effective than the doctrine envisaged.

Application of Mounted Rifles Tactics in New Zealand circa 1914

In a study of 20th Century tactics, doctrine and organisation, Captain Jonathan House identified five elements that needed to be present to allow doctrine to be practiced and refined. These were; the need to have weapons that allowed the doctrine to be employed, the means to disseminate and explain the doctrine to those who would be using it, the requirement for commanders to follow the doctrine, units with sufficient training and morale to actually execute the doctrine, and finally, the existence of a command system that would allow passage of information and orders required to follow the doctrine as written.²⁶

New Zealand mounted rifles had the horses and weapons required to carry out the tactics specified. It is assumed that they had access to YMRT as Lieutenant Colonel William Meldrum refers to it specifically in his 1914 essay on the handling of mounted rifles.²⁷ Lt Col Meldrum was CO WMR. He succeeded Chaytor as GOC NZMR Brigade on 23 April, 1917. In his report in the *Cavalry Journal*, Lieutenant Colonel Arthur Bauchop describes actions undertaken during training that indicate that fire tactics were practiced.²⁸ The limited standard of training that could be achieved by a volunteer force was also an issue identified to by Bauchop.

By 1903, the Permanent New Zealand Forces consisted of two branches only, artillery and engineers. The remainder consisted of volunteers. The Commandant of the New Zealand Forces had this to say about the state of the mounted corps:

²⁴ Lascelles, pp. 353.

²⁵ Striguil (pseudonym), 'Some Thoughts on Dismounted Action', in *The Cavalry Journal*, Royal United Service Institution, Vol VI, No 22, April 1911, p. 146.

²⁶ House, p. 5.

²⁷ Lieutenant Colonel Meldrum, Essay on "The Handling of Mounted Rifles Independently and in Brigade", 14- 11- 14, p.1. WA 42/3. (National Archives Head Office, Wellington).

²⁸ Lieutenant Colonel A Bauchop, 'The New Zealand Mounted Rifles', in *The Cavalry Journal*, Vol IX, No. 33- January 1914, Royal United Service Institution, 1914, pp. 95-96.

The weak point in the mounted branch at present is their knowledge of dismounted duties. It has been impressed on all concerned that dismounted action is the true *metier* of the mounted riflemen, and great improvement must be looked for in this most important part of their duties.²⁹

This is an interesting and telling observation, as the Boer War had only ended in 1902. Clearly the infantry skills of the mounted corps was not at the standard the Commandant thought necessary, and had not been transferred directly from Boer War veterans into the Volunteers.

In the January 1914 edition of the *Cavalry Journal*, Lieutenant Colonel Bauchop described training conducted at the 1913 Otago Mounted Rifles camp. He noted that a day was spent siting and digging fighting trenches, definitely not cavalry tasks, 'the chief work was the Mounted Rifles Regiment and Mounted Rifles Brigade in attack.'³⁰ Bauchop described an attack:

The ground... favoured bold movement to the first fire position. Covering fire was then used to allow of (sic) a forward movement. This forward movement was often made mounted to a tactical position, to assist, in turn, the covering party. The fact that risk had usually to be taken at some stage was impressed on all ranks. The attack was composed almost entirely of alternate rushes under covering fire from both rifle and artillery, which obviated dismounting and carrying out long advances on foot.

In the brigade attack the regiments deployed about three or four miles from the objective and the squadrons carrying out the decisive attack made a detour and covered five or six miles.³¹

By 1914, New Zealand's field army had been structured to one infantry division and one mounted (rifles) brigade for each island. The state of New Zealand's mounted rifles in June 1914 was noted by Major General Sir Alexander Godley in his report to the New Zealand Government:

²⁹ *NZAJHR 1903, Volume III, H-I, H-19 Defence Forces of New Zealand (Report on the)* by Major General J.M. Babbington, Commandant of the Forces.

³⁰ Bauchop, p 95.

³¹ Bauchop, pp. 95-96.

A great improvement in the training was evident this year. Units might still make more use of the ground at their disposal... Squadron leaders should take every advantage of the concentrations for troop and squadron training which will, it is hoped, precede the next annual camps to more thoroughly instruct their troop and section leaders in the control of fire. I was glad to see at the field operations for the Inspector General that the training of scouts has begun to bear fruit.³²

Use of ground, the control of fire and scouting; these fundamental skills for infantry and mounted rifles, were still below of the required standards on the eve of the war.

As for next years training, Godley recommended that the best areas to concentrate on were coast-defence commands and mounted rifles. Lamenting the apparent lack of mounted rifles doctrine, he hoped to concentrate each of the North and South Island mounted rifles regiments in order to 'give them the benefit of my experience of the twelve years during which I served practically continuously with mounted troops'. He hoped to '... inculcate the principles of the employment of mounted troops in comparatively large bodies.'³³ Movement of 'large bodies' is taken to mean regimental and brigade level operations, and points to a lack of experience in that level of operations at the time, despite the training described by Bauchop.

In a report signed by General Sir Ian Hamilton, the following comments were made:

The squadrons have a good pace and come into action quickly... the result was a flank attack delivered at the exact psychological moment when it was wanted. There is sometimes a tendency to begin dismounted action too far from the enemy; mounted rifles are not at all suited for a long advance under fire on foot, which usually cannot succeed unless it is supported in depth. Every use should be made of cover and mobility to get within close ranges before dismounting for action.³⁴

Whilst not a glowing report, it confirms that mounted rifles were dismounting for action and attacking from a flank.

³² NZAJHR 1914, Volume III, H-I, H-19 Defence Forces New Zealand: report of the GOC the Forces for the period from 20th June 1913 to 25th June 1914, Section II, Part 4.

³³ NZAJHR 1914, Volume III, H-I, H-19 Defence Forces New Zealand: report of the GOC the Forces for the period from 20th June 1913 to 25th June 1914, Section II, Part 27

³⁴ NZAJHR 1914, Volume III, H-I, H-19A Military Forces of New Zealand: report to the Inspector General of Overseas Forces, paragraphs 102- 104.

Boer War Veterans in the NZMR Brigade during World War I

Previous experience effects tactics. *Rough Riders at War* has a record, 154 pages long, of all 6151 New Zealand veterans of the Boer War. Each veteran has a short paragraph that records any subsequent military service. Eighty five New Zealand veterans of the Boer War are listed as serving in New Zealand mounted rifles units during World War I.³⁵ Although the figure is small in relation to the total number of New Zealand Boer War veterans and the numbers of men who served in the NZMR Brigade in World War I, Boer War veterans held, in the main, senior and influential appointments. These included:

E. W. C. Chaytor	NZMR Brigade Commander and later GOC ANZAC Mounted Division
J. Findlay	Commanding Officer of the Canterbury Mounted Rifle Regiment (CMR)
J. Whyte	Commanding Officer Wellington Mounted Rifle Regiment (CMR)
C. Guy Powles	Brigade Major of the NZMR Brigade and later AA and QMG of the ANZAC Mounted Division

The Boer War experience of these influential leaders was transferred to mounted operations in the Sinai Palestine campaign, although this is hard to quantify.³⁶ Their experience and influence overcame many of the shortfalls identified in mounted rifles units between 1903 and 1914. Their expertise manifested itself in the tactics applied by the units and formations under their command on operations.

³⁵ Stowers, *Rough Riders at War*, pp. 48- 202. In addition to service with the NZMR Brigade, almost an equal number of NZ Boer war veterans saw service in NZ non- mounted rifles units in WW1, or with foreign armies, most notably Great Britain and South Africa. The NZ Boer War veterans produced three WW1 Major Generals; Capt EWC Chaytor (GOC ANZAC Mounted Div), Capt RH Davies (commanded 20th Div in Ypres and the first New Zealander to command a division on operations) and Pte J. Whiteman (3rd Contingent, Maj Gen Royal Naval Division, died of wounds Arras, 1917). Fourteen of the 85 Boer War veterans who fought in NZMR units in WW1 were killed or died of wounds sustained at Gallipoli.

³⁶ D.M. Horner, 'The Influence of the Boer War on Australian Commanders in The First World War, in Dennis and Grey, *The Boer War Army, Nation and Empire*, Army History Unit, Department of Defence, Canberra, 2000, p. 187 In his assessment of the influence of the Boer War on *Australian* commanders in World War I, Horner notes that "unless each individual expressed his thoughts [about previous service] on paper it is now probably impossible to prove the case either way.' Horner records that 15 out of 20 Australian generals, and 33 out of Australian brigadiers in the First World War had previous Boer War

Summary

The application of tactics is both an art and a science. There are basic tactical principles, but there are many options for how tactics are applied in any battle or engagement. FSR and YMRT stipulated doctrine, techniques, tactics and procedures for use in combat. YMRT reinforced speed of movement on horseback, fighting dismounted, the generation of a heavy weight of controlled firepower and the envelopment of the enemy as basic mounted rifles tactics. The doctrine was, however, to be a guide. Commanders would ultimately decide what was to be done, and how, very much dependant on the situation at the time. Mounted rifles fighting was to be based on *fire tactics*, rather than mounted shock action.

No papers, books or articles have been produced that focus specifically on the tactics used by New Zealand mounted rifles troops in Sinai and Palestine during the World War I. Written and oral accounts of operations, therefore, have had to be analysed so that the tactics employed could be deduced.

It is fully acknowledged that the NZMR Brigade was usually operating as part of a larger multi-national force and even when operating independently, was still part of a higher level campaign plan. Further, this thesis is not an attempt to compare tactics with the other allied mounted forces, nor to suggest the tactics employed by the NZMR Brigade were either different or superior than those of the other allies.

On the eve of World War I, doctrine had been established for mounted rifles units. *Fire tactics* were the principle means for mounted rifles to close with and destroy the enemy. New Zealand mounted rifles units were trained in these tactics in the years leading up to the war, even if the standard they achieved in training was found to be wanting.

service. General Chaytor is included within Horner's figures as Chaytor commanded Australians as GOC ANZAC Mounted Division.

CHAPTER THREE- BACKGROUND TO THE SINAI PALESTINE CAMPAIGN

The Sinai Palestine campaign is considered by many to be a sideshow in relation to other theatres of operations in the World War I, however it ensured the Suez Canal remained in Allied hands, provided the Allies with some much needed victories and held the attention of the Turkish Army.¹ The campaign offered opportunities for mounted manoeuvre on a scale that was not achieved on the Western Front.

Background to the Campaign

British troops had long been garrisoned in Egypt to defend the Suez Canal, an important line of communication. The garrison's principal task was to protect the canal and railway from sabotage. When Great Britain and France declared war on Turkey on 4 November 1914, there were 70,000 Turkish nationals in Egypt, so the threat of sabotage and from the Turkish Army was real.

Australian and New Zealand troops, destined for the war in Europe, were diverted to Egypt in order to train for the war in Europe in a better climate than the English winter, and would coincidentally bolster security of the canal zone.² In 1912 it had been agreed with Australia that a combined expeditionary force would be provided. The New Zealand Expeditionary Force (NZEF), commanded by General Godley, comprised of an infantry brigade and a mounted rifles brigade. This force sailed from New Zealand in October 1914, arriving off Alexandria in December 1914.

In January 1915, 20, 000 Turks under the command of German military adviser Colonel Kress von Kressenstein advanced towards the Suez Canal, from their base at Beersheba 160 kilometres to the east. Although Kressenstein's night attack on 3 February 1915 failed, it prompted the British to review their concept for the defence of the canal. A Turkish force had been able to threaten the canal and escape eastwards. Apart from the static nature of the defence and the large numbers of troops required to defend the complete canal length³, the major tactical flaw was that the defence was based on the west side of the canal leaving approaches from the

¹ Lieut- Gen Sir Archibald Wavell, *The Palestine Campaigns*, Third Edition, Constable and Co Limited, London, 1941, p. 14.

² Christopher Pugsley, *Gallipoli The New Zealand Story*, Hodder and Stoughton, Auckland, 1984, p.42.

³ 30,000 troops at the time of the Turk attack.

east largely unopposed.⁴ The establishment of a defensive line 10 miles east of the canal marked the transition to a more offensive defence of the canal zone.

Gallipoli

When the ANZAC Force sailed for Gallipoli, the NZMR Brigade, commanded by Brigadier General Andrew Russell, remained in Egypt. The Brigade deployed to Gallipoli on 12 May 1915, as dismounted infantry. The fighting at Gallipoli was tough, for infantry and mounted riflemen. New Zealand casualties were high.⁵ New Zealanders became adept at patrolling, reconnaissance and sniping. 'Johnny Turk' proved to be a formidable opponent. NZMR regiments took their place in 'the line' and participated in attacks on Chunuk Bair and Hill 60. Casualties mounted, the effect was to degrade the strength and experience of the brigade. At Chunuk Bair the NZMR Brigade sustained 151 killed, 485 wounded and 53 missing in action.⁶ 'The magnificent brigade of the New Zealand Mounted Rifles which was responsible for the main advances (at Hill 60) had been worked until it was almost entirely consumed.'⁷ When the New Zealand forces returned to Egypt from Gallipoli, there were few originals left amongst them, the numbers being made up by members of the reinforcements that had joined them whilst on Gallipoli.

Withdrawal and Reorganisation

Following the withdrawal of Allied troops from Gallipoli to Egypt, there was a large amount of re-building and re-organisation to be undertaken. A New Zealand Division was formed for service on the Western Front from Gallipoli survivors, reinforcements and from the New Zealand Rifle Brigade that had recently arrived in Egypt from New Zealand. The NZMR Brigade was to remain in Egypt, although many mounted men from within it were drafted into the Division and sent to France.⁸ The Western Front remained the British Cabinet's clear focus.⁹ The recent fighting on the Western Front

⁴ H.S. Gullett, *Official History of Australia in the War 1914- 1918: Sinai and Palestine*, Angus and Robertson, Australia, Twelfth Edition, 1944, p.26. Lord Kitchener is reported to have remarked during a visit to the canal 'Instead of you guarding the canal, the canal is guarding you.'

⁵ 8556 New Zealanders fought at Gallipoli, 7473 became casualties. 2515 were KIA, 206 died from accidents or disease and 4752 were wounded. Pugsley, C., *Gallipoli The New Zealand Story*, p.24.

⁶ Pugsley, *Gallipoli The New Zealand Story*, p. 315.

⁷ *Ibid.*, p.327, quoted from CEW Bean.

⁸ Lieut.- Colonel C.G. Powles (Ed), *The New Zealanders in Sinai and Palestine: Official History of New Zealand's Effort in the Great War*, Whitcombe and Tombs, Auckland, 1922, pp. 7-8. Powles records that the NZMR Brigade was directed to produce 50 officers and 2000 men for the Division. The numbers quoted by Powles are likely to be an error, as the total strength of the NZMR Brigade was a little over 2,000 men. Nevertheless, a significant number were transferred out of the Brigade representing a substantial loss of operational experience within the Brigade.

⁹ Gullett, pp. 22- 23.

at Verdun meant that reinforcements were urgently needed. An ANZAC Mounted Division would, however, be formed.

The ANZAC Mounted Division

The Australian and New Zealand Mounted Division, referred to hereafter as the ANZAC Mounted Division, was formed on 15 March 1916.¹⁰ Commanded by Major General H.G. (Harry) Chauvel, of Australia, the division consisted of the 1st, 2nd and 3rd Light Horse Brigades, the NZMR Brigade and four Royal Horse Artillery (RHA) batteries. Additional divisional units¹¹ included a Field Squadron (engineers), a Signals Squadron and the Divisional Train.¹²

Australian and New Zealand Brigades within the ANZAC Mounted Division were organised along similar lines. Each brigade had three mounted regiments, (the Australian regiments being 'Light Horse' and the New Zealand regiments 'Mounted Rifles'), a machine gun squadron and a signals troop. In addition, Territorial Artillery Brigades of the RHA allocated an artillery battery of six horse drawn field guns to support each brigade. Each brigade had approximately 2,000 men.

Rebuilding the NZMR Brigade

A total of 62 officers and 1329 Other Ranks of the NZMR Brigade returned to Egypt from Gallipoli on 26 December 1915.¹³ The brigade was to be brought back up to strength with the general reinforcements waiting in Egypt. The brigade's horses had been maintained in good condition in Egypt during the Gallipoli fighting, so the main task confronting the brigade before it could begin training was the selection of suitable mounted soldiers from amongst the general reinforcements. Sound horsemanship was an essential requirement within a mounted rifles unit, so riding tests were made part of the selection criteria. Details Squadrons were formed for each regiment, their role being to improve the riding skills of 'indifferent' horsemen.¹⁴

¹⁰ Powles, *The New Zealanders in Sinai and Palestine*, p. 12.

¹¹ Divisional Units are those units retained at divisional level and not within the subordinate brigades. Often elements of the divisional troops, such as engineers, would be allocated to support the brigades.

¹² In this context, 'train' designates logistics and supplies, carts and camels, not a locomotive and wagons.

¹³ Powles, *The New Zealanders in Sinai and Palestine*, p.1.

¹⁴ Colonel C.G. Powles (Ed)., *The History of the Canterbury Mounted Rifles 1914- 1919*, Whitcombe and Tombs, Auckland, 1928, p. 83.

Brigadier Russell was promoted to Major General and given command of the New Zealand Division which was to serve on the Western Front. Brigadier Sir E.W.C. Chaytor was appointed General Officer Commanding (GOC) of the NZMR Brigade.¹⁵ Chaytor had been on Gallipoli, as a senior staff officer on Birdwood's ANZAC Corps HQ. A Boer War veteran and New Zealand's first ever graduate of Camberley Staff College, Chaytor was a well qualified mounted rifleman and professional soldier, fit to assume command of the NZMR Brigade from Russell. Later in the campaign, Chaytor would be promoted to Major General and succeed Chauvel as commander of the ANZAC Mounted Division. Chaytor would effectively command a multi-national corps, 'Chaytor's Force', in the closing stages of the campaign.

The NZMR Brigade consisted of three mounted rifles regiments; the Auckland Mounted Rifles Regiment (AMR), the Wellington Mounted Rifles Regiment (WMR) and the Canterbury Mounted Rifles Regiment (CMR). Each regiment had three squadrons. Each squadron had a regional affiliation. The NZMR Brigade also had a Machine Gun Squadron, a Signals Troop, a Field Troop (engineers), a Mobile Veterinary Section and a Mounted Field Ambulance. The structure of the NZMR Brigade is shown below.

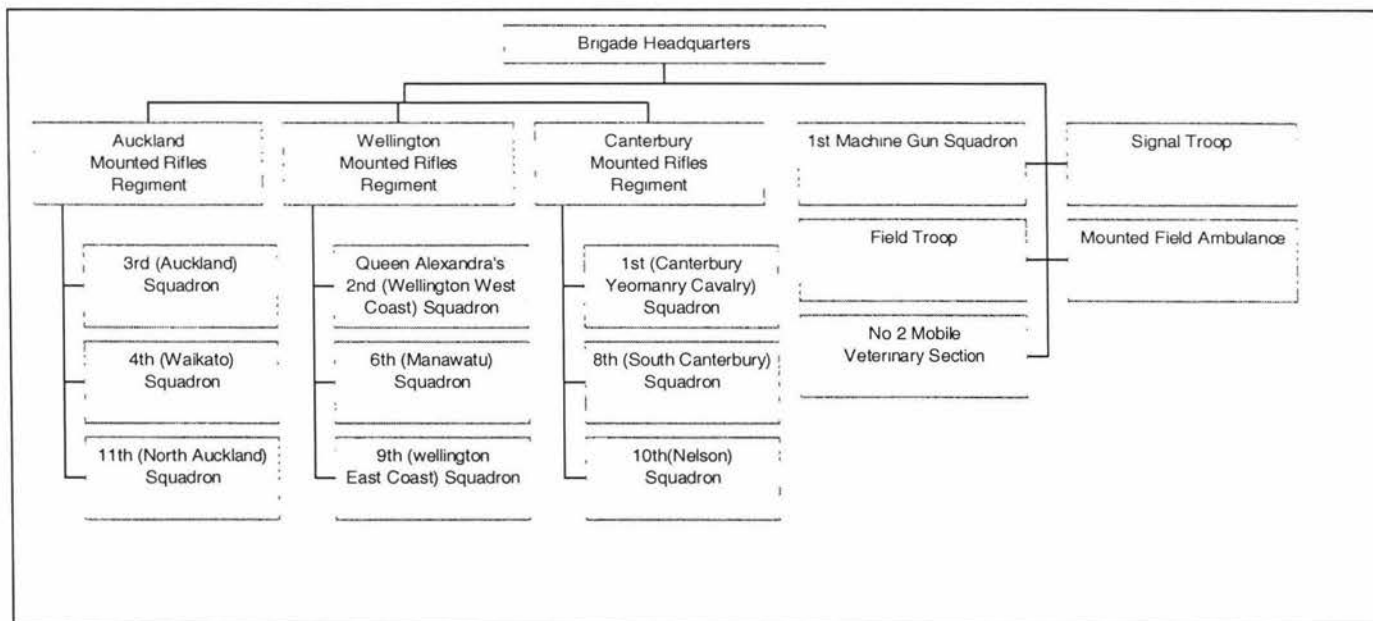


Figure 5: Structure of the NZMR Brigade¹⁶

¹⁵ See Colin Richardon, 'Major General Sir Edward Walter Clervaux Chaytor', in Glyn Harper and Joel Hayward (Eds), *Born to Lead? Portraits of New Zealand Commanders*, Exisle Publishing Limited, Auckland, 2003, pp. 69- 84.

¹⁶ Powles, *The New Zealanders in Sinai and Palestine*, pp. 3-6.

The strength of the NZMR Brigade was as follows:

	Officers	Other Ranks	Total Troops	Horses
Brigade Headquarters	6	43	49	55
Three Regiments (each 24/499/523/616)	72	1497	1569	1848
Machine Gun Squadron	8	222	230	321
Signal Troop	1	36	37	36
Field Troop	2	50	52	67
Veterinary Section	1	29	30	28
Mounted Field ambulance	6	133	139	127
Total ¹⁷	96	2010	2106	2482

The standard rifle within the Brigade was the .303 inch Short Magazine Lee Enfield (SMLE). The SMLE had a maximum range of 3,000 yards, although the maximum effective range was 550 yards.¹⁸ Ammunition was carried in two bandoliers. One bandolier was worn on the man, with bayonet scabbard attached, the other looped around his horse's neck.¹⁹ Each trooper had an additional 'wallet' that contained a change of clothes and carried a blanket and overcoat. The men would usually deploy with forty eight hours rations and three days of horse feed.²⁰

According to the scale of small arms ammunition, each trooper carried 240 rounds, with an additional forty carried in his wallet. Each regiment maintained a reserve of 24, 000 rounds, at 50 rounds per man. The Brigade's ammunition column (with the train) carried an additional 29, 760 rounds. Records show that each regiment carried four boxes of grenades, however the scale of issue is unknown.²¹

From June 1916 onwards, the Brigade's machine guns were centralised from within the regiments into a single Machine Gun Squadron. The Machine Gun Squadron had six Light Vickers and six Maxim machine guns initially, although the Maxims were

¹⁷ *Ibid.*, p. 5. Totals exclude the NZMR Brigade Band and ASC Company.

¹⁸ Maximum effective range is that distance at which the rifle would be expected to fire accurately enough to inflict casualties or damage. The SMLE sight was graduated from 200 to 2,000 yards.

¹⁹ Major A.H. Wilkie, *Official History of the Wellington Mounted Rifles Regiment 1914- 1919*, Whitcombe and Tombs Limited, Auckland, 1924, p.85.

²⁰ A. Briscoe Moore, *The Mounted Rifleman in Sinai and Palestine The Story of New Zealand's Crusaders*, Whitcombe and Tombs, Limited, 1920, p. 46.

replaced by more Vickers when they became available. Pack horses were used to carry the guns and ammunition. The Maxims proved to be too heavy for desert warfare, and were more prone to stoppages than the Vickers.²² The role of the machine gunners in Sinai and Palestine is explained in the Official History:

The machine guns in the desert warfare were not used from well-entrenched positions, on set objectives, like guns in France: the gunners had to advance their guns from time to time as the attack developed, keeping up covering or enfilading fire until masked by their own troops, and then on to new positions until the operation was completed.

.... the successful employment of machine guns depends on the speed with which they are brought into action and the initiative displayed by the section officers in handling them.²³

The Vickers maximum effective range was 4,500 yards (4,115 metres) and it could fire at a cyclic rate of between 450 and 600 rounds per minute. Each Vickers gun carried 7,500 rounds, with 8,000 rounds per gun maintained as a reserve.²⁴

For most of the campaign, the NZMR Brigade was supported by the Somerset Battery, RHA. The strength of the battery was 154 All Ranks and 246 horses. The battery was equipped with six 18 pounder guns. This gun, weighing 1.26 tons, was able to fire high explosive or shrapnel rounds out to a maximum range of 6,525 yards.²⁵ Communication with the gun line was achieved by using flags to pass corrections in fire.²⁶

²¹ The New Zealand Mounted Rifles Brigade Scale of Small Arms Ammunition, Grenades and Very Pistols to be carried in the Field, 12th August 1917 WA 40/4/10i (National Archives Head Office, Wellington).

²² Major J.H. Luxford, *With the Machine Gunners in France and Palestine The Official History of the New Zealand Machine (Gun) Corps in the Great World War 1914- 1918*, Whitcombe and Tombs Limited, Auckland, 1923, p. 187

²³ *Ibid.*, pp. 179- 180.

²⁴ The New Zealand Mounted Rifles Brigade Scale of Small Arms Ammunition, Grenades and Very Pistols to be carried in the Field, 12th August 1917 WA 40/4/10i (National Archives Head Office, Wellington).

²⁵ General Sir Martin Farndale, *History of the Royal Regiment of Artillery The Forgotten Fronts and Home Base, 1914- 18*, The Royal Artillery Association, Woolwich, 1988, p. 444. All the guns listed in the Annex that this data was drawn from fired either HE or shrapnel, sometimes both. No guns fired smoke or illumination munitions.

²⁶ Sergt C.G. Nicol, *The Story of Two Campaigns: Official History of the Auckland Mounted Rifles Regiment 1914- 1919*, Wilson and Horton, Auckland, 1921, p. 157

Training

Trooper Fred Dill described his regiment's training camp as two rows of tents, with the horses kept in a double line between the rows. His regiment trained in the desert every day and was sometimes out for a week at a time, as if on real operations in the desert. They undertook mock battles; officers would nominate an 'objective' to be attacked and whether the attack would be frontal or flank. He recalls that most training was in flank attacks. They would get close to the objective, dismount and hand the horses over to the Number 3 in the section (of four troopers) who would take the section's horses away to cover. The dismounted troopers would then go into action.²⁷

The NZMR Brigade left Zeitoun Camp in Egypt on 23 January 1916, for the Suez Canal. They established a camp at Serapeum, just west of the canal, and commenced training and operations in defence of the canal. Operations mainly consisted of lengthy patrols, ensuring members of the brigade to become used to living and moving in the desert. Training included marksmanship, machine gun shooting and tactical exercises.²⁸

Harry Porter recorded that he had some training, but not much, between his arrival in Egypt and his deployment with the NZMR Brigade. Essentially he was trained to shoot straight and to perform like an infantryman, rather than as cavalry. His whole squadron would gallop into a position, usually behind cover. The officers would select the dismount location, hand the horses over to the horse holders and then the remainder would go forward towards high ground, take cover and look for signs of the 'enemy'.²⁹

The NZMR Brigade established a Training Regiment at Moascar in Egypt. Commanded by a Lieutenant Colonel, its role was to train reinforcements so that they could quickly take the place of casualties and so maintain the fighting strength of NZMR regiments.³⁰ This was a different, but superior, system than was used in the

²⁷ Frederick Gordon (Fred) Dill, interview by Jane Tolerton and Nicholas Boyack, 29 Sep 1988, World War I Oral History Archive, Alexander Turnbull Library, OHInt-0006/23.

²⁸ Powles, *The New Zealanders in Sinai and Palestine*, pp. 6 and 7.

²⁹ William Henry (Harry) Porter, interview by Jane Tolerton and Nicholas Boyack, 29 Sep 1988, World War I Oral History Archive, Alexander Turnbull Library, OHInt-0006/62.

³⁰ Wilkie, p.83.

Boer War. There, whole contingents came and went, with no individual reinforcements or training organisation whose sole responsibility was to provide trained reinforcements.

The Turkish Army

The Turkish Army consisted of some thirty six divisions at the outbreak of the war.³¹ A Turkish division nominally consisted of three regiments, each of three battalions and a machine gun detachment. These would be supported by artillery. Germany and Austria provided specialist units and advisers to overcome deficiencies in Turk artillery, and specialist services including engineers. Wavell recorded his impressions of the Turkish soldier in his summary of operations against the Turks:

The true Anatolian Turk, in spite of short rations, poor equipment, and a complete ignorance of the causes and objects of the war, retained his morale, and fought well to the end. On the defensive, his eye for ground, his skill in planning and entrenching a position and his stubbornness in holding it made him a really formidable adversary to engage. In the offensive he always attacked gallantly though often with little skill. The Turkish artilleryman handled his guns well but the cavalry were poorly mounted and seldom effective.³²

Wavell noted that the Germans placed officers into key appointments within the Turkish Army. This was no doubt to ensure greater effectiveness of the Turkish formations by placing 'advisers' close to their commanders. Wavell also noted that the Germans often ordered counter-attacks or manoeuvre that required speed of action or were complex in nature. As these concepts were foreign to the Turks, such operations often ended in failure.

Turkish tactics showed a level of sophistication and dedication. Entrenched positions were covered by artillery and machine gun fire and the most obvious close in approaches were protected by small outposts. Pre-dug trenches were used to cover the retirement from Turk positions. Snipers were widely used in defence and as stay-behind forces to harass and interdict. Turk cunning included laying ambushes on

³¹ Wavell, pp. 20.

³² Wavell, pp. 20- 21.

known Allied observation posts.³³ For all that, the Turks generally maintained little protection to the rear of their positions, and their early warning on possible Allied avenues of approach was often lacking.

General Chaytor's report following the attack at Maghaba had this to say about the Turkish defenders,

(1) The enemy's trenches were very well constructed, and cleverly concealed, and their trenches were often difficult to locate, even within 80 yards. (2) The enemy fought stubbornly, throughout, and in one or two of the stronger positions, it was only when bayonet attack by our troops was imminent, that he surrendered.³⁴

Despite fighting stubbornly, the Turks were beset by problems. Supplies and reserves were difficult to acquire, and the lines of communications all the way back to Constantinople, difficult and slow.³⁵ At times the Turkish Army was 'much weakened by sickness and desertion, and its mobility hampered by loss and sickness among the transport animals.'³⁶

Start of the Campaign

By January 1916, there were three separate commands in Egypt and the numbers of troops there had swelled following the withdrawal from Gallipoli. There is no need to discuss the problem here, however the end result was to create the Egyptian Expeditionary Force, or EEF, with General Sir Archibald Murray in charge. In assuming command, Murray reviewed the whole problem of the defence of Egypt and the Canal and concluded that:

the passive defence of the Canal was very wasteful of men and material; that the true strategical base for the defence of Egypt lay between El Arish and Kossaima; and that a mobile force placed at or about El Arish would directly bar the northern route across Sinai, could attack any force moving by the central or southern routes, and might even forestall any advance across the

³³ Ion L. Idriess, *The Desert Column, Leaves from the Diary of an Australian Trooper in Gallipoli, Sinai and Palestine*, Angus & Robertson Limited, Sydney, Second Impression, 1932, pp. 119, 121- 122, 125

³⁴ NZMR Brigade Report by G.O.C. NZMR Brigade on Operations carried out at Maghaba on 23rd, December, 1916. WA 40/3/5 (National Archives Head Office, Wellington).

³⁵ C.T Atkinson, 'General Liman von Sanders on his experience in Palestine (with Map)', in *The Army Quarterly*, Vol 3(2), Jan 1922, p. 260.

³⁶ Kressenstein, von 'The Campaign in Palestine from the enemy's side', in *Journal of the Royal United Service Institution*, 67, 1922, p. 506.

Egyptian frontier into Sinai, by attacking and breaking up any enemy concentrations in Southern Palestine.³⁷

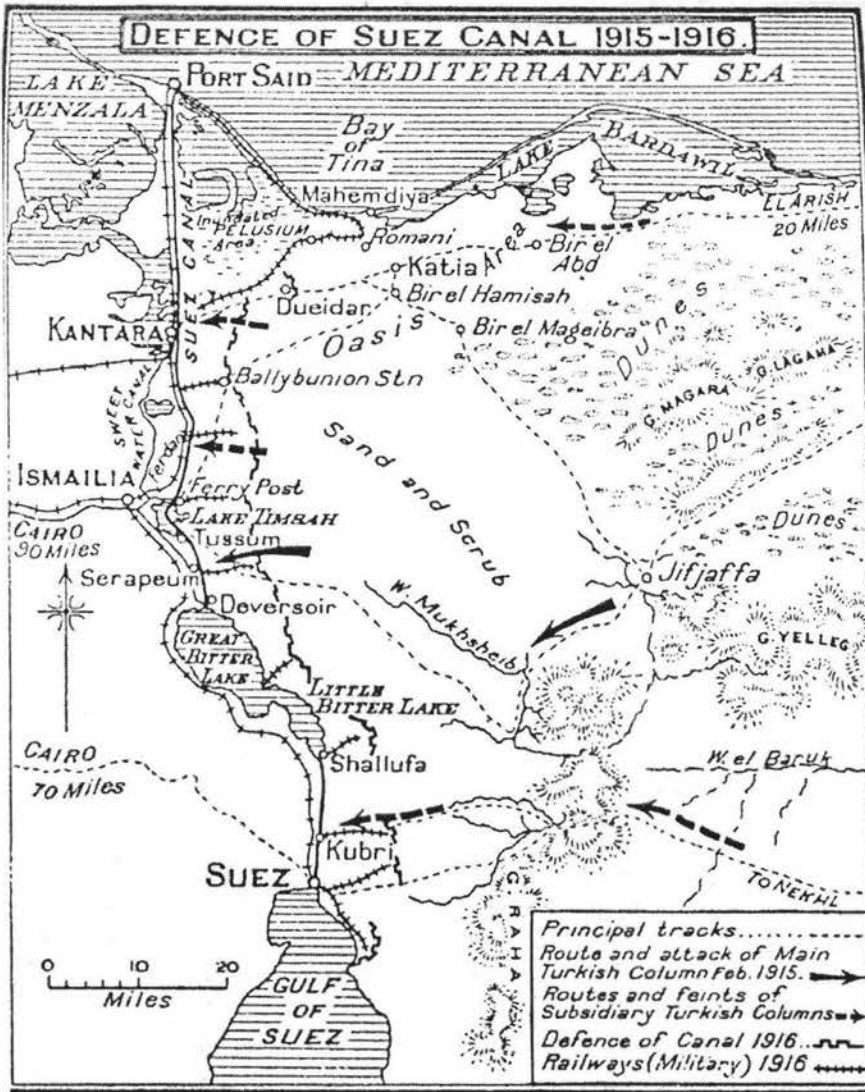
The Defence of Egypt thus lay to the east of the Canal, at least as far away as the border with Southern Palestine. As an interim step, defensive positions would be established near Katia and Romani, twenty five miles east of the canal.

The next three chapters will examine tactics employed during the Sinai Palestine Campaign. Appendix 1 summarises the key activities undertaken by the NZMR Brigade in the course of the whole campaign.

³⁷ Wavell, p. 42.

CHAPTER FOUR- OPERATIONS IN EGYPT AND SINAI: JAN 1916- FEB 1917

This phase of the Sinai Palestine campaign commenced in January 1916 with the decision to mount the defence of the Suez Canal from east. Following the defeat of the Turks at Romani, the campaign became a pursuit and clearance eastwards to the border with Palestine, concluding in February 1917. This phase included extensive mounted patrolling and screening operations, the defensive battle of Romani and two major battles; Magdhaba and Rafa. Above all, it was a predominantly mounted operation where the NZMR Brigade and other mounted formations of the Allies learned to live and fight in the desert.



Map 1: Sinai Peninsular
Wavell, p. 24.

Initial Operations in Egypt May- August 1916

As a result of the decision to defend the Suez Canal from the east, the 52nd (Lowland) Division, an infantry division, established a defensive line near Romani. The position provided a natural north to south block astride the northernmost route to the Canal. A line of redoubts had been dug north from Romani to the coast. Each redoubt was able to hold two machine guns and an infantry company. The line provided a strong defensive barrier that would require considerable Turk combat power to penetrate. The northern or left flank approach to the position was untenable. (See Map 2, p.47)

The position at Romani was selected as it offered ideal terrain for defence and reduced the Turks offensive options to attempt a bypass to the south, most likely supported by a holding action in the centre. Major General Sir H.A. Lawrence, commander of Number 3 Section Canal Defences, which included Romani, intended to exploit the bypass, indeed induce it, by having his outpost line troops retire in echelon, deeper in the south, thus 'opening' the southern corridor. To bypass to the south, the Turks would have to negotiate steep and difficult sand dunes (named Mounts Royston and Meredith) where their mobility and cohesion would be reduced severely. This would produce the ideal conditions for a counter attack.

General Lawrence intended the counter attack to be an infantry attack, from the centre of the Romani line, supported by a mounted attack to the Turk left (southern and exposed) flank. The mounted counter attack was to be made by the NZMR Brigade (less WMR who were attached to 2nd LH Brigade), under command of General Chaytor. What complicated the execution of the plan, although not evident until later, was the convoluted command structure that was in place which disconnected the mounted commander (Chaytor) from the infantry defences on the Romani defensive position. In the meantime all mounted brigades undertook outpost and reconnaissance duties.

On 12 May 1916 the NZMR Brigade was ordered east of the Romani defensive position to establish an Outpost Line. The NZMR line linked up with the 2nd LH Brigade's outposts further to the north, thus establishing a wide screen east of Romani able to cover all possible routes used by Turk patrols and their main body. From the Outpost Line, mounted reconnaissance patrols pushed even further east in order to gain better knowledge of the ground to the front and to look for signs of the

Turk, or Bedouin. Patrols located the enemy's forward positions then maintained undetected 'contact' with them in order to monitor and report their movements, activities and intentions.¹ Maintaining contact entailed a five hour patrol out to the Turk area, dismounting and observing the position, then returning to the Brigade camp along the Outpost Line, all on the same day.

The duties of an Outpost Line were reconnaissance and resistance.² Each outpost in the line was to ensure that any enemy movement was observed. If enemy movement was detected, it was to be reported back, and opposed. This required that outposts be dug in if time permitted and that they be supported by fire from artillery and machine guns. Ideally, the line of outposts would screen all possible enemy routes. If an enemy attack was imminent, the troops would bivouac in the immediate vicinity of their battle positions on the line rather than further to the rear. The imperative was to occupy positions from which the enemy advance could be blocked and thus prevent the main positions at Romani from being surprised.

In addition, standing patrols were maintained. These were deployed further forward again to observe likely lines of enemy advance. Consisting of two to eight mounted riflemen under command of a non-commissioned officer, standing patrols covered areas where an enemy might concentrate without being observed, such as a forming up place for an attack. Mounted troops would not be allowed to off-saddle during the conduct of a standing patrol, usually several hours long, so that they would be ready for instant action.³

Extensive mounted patrolling was undertaken. Wilkie explains that 'This work was exacting, but it was during this time that the men became accustomed to live as the Bedouins do, and the horses to traverse the waterless stretches of desert.'⁴ This activity paid dividends later when the mounted riflemen and their horses were able to travel greater distances, and faster, than the Turks assumed and they were thus able to achieve surprise. Contact patrols were maintained until the Turks attacked Romani in August. Corporal Ben Gainfort of 3rd Squadron, AMR recalls that:

¹ Powles, *The New Zealanders in Sinai and Palestine*, pp.28-29.

² Kinsman, p.49.

³ General Staff, War Office, *Field Service Regulations Part I, Operations 1909*, reprinted 1912, HMSO, p. 111.

⁴ Wilkie, p.87

The mounted man's life is really one of patrol. You are on patrol from daylight to dark. You can meet anything or meet nothing.⁵

Troop patrols were standard operations. The patrol consisted of twenty to twenty five men, commanded by an officer. Patrolling was sometimes undertaken in brigade strength, allowing a wide area to be covered and providing sufficient force at hand to deal with any opposition encountered. Basic patrol tactics are described in CMR's official history:

Once clear of the camp they spread out in a line, riding three or four yards apart, with a section of four men in diamond formation in front and two men far out on each flank. As daylight increased the men in front and on the flanks spread out and kept further away from the main body, but never so far that they could not communicate by signals.⁶

The patrol would halt short of its objective, which it would then scan by binoculars for sign of the enemy. If none were seen, sections would then fan out on short patrols before returning to meet up and then begin the patrol back to camp. Most patrols came in after dark, having covered forty eight kilometres on average.

It was possible to get lost on patrol because there were so few recognisable landmarks. A patrol commander could usually get his patrol to the designated patrol area where 'sentries would be posted in suitably located positions to watch for enemy movement.' At the end of the day, the 'patrol could now set off back to camp, with the usual precautions of putting men out [in] advance, flank and rear guards, reaching there sometime in the late evening, perhaps after darkness had set in.'⁷ The first priority was then to water the horses.

When patrolling in brigade strength, the NZMR Brigade adopted a formation known as the 'screen', in order to provide itself with protection when moving across the desert.⁸ The formation was led by an advance guard, a line of horsemen, well spread out, on a broad frontage. Behind the screen moved another line of horsemen whose role was to support the screen who would, on contact with the enemy, gallop forward

⁵ Ben Gainfort, interview by Jane Tolerton and Nicholas Boyack, 1 Nov 1988, World War I Oral History Archive, Alexander Turnbull Library, OHInt-0006/28.

⁶ Powles, *The History of the Canterbury Mounted Rifles*, p. 95.

⁷ 1997.503 Memoirs of Corporal McMillan ('*Forty Thousand Horsemen*'), Kippenberger Military Archive and Research Library (Army Museum, Waiouru), p. 68- 69.

to reinforce the firing line, but were far enough back initially not to be pinned down. A line of 'flank guard' horsemen rode in lines to the left and right of the main body, and a similar line rode at the back to protect the rear. Sometimes the brigade might be accompanied by a single 18 pounder artillery piece.

Whilst undertaking an aerial reconnaissance, General Chaytor located Turks advancing west towards Romani on a frontage of 8 miles.⁹ His report was received at Divisional HQ and then passed to 2nd LH Brigade (with WMR, commanded by Lieutenant Colonel Meldrum, attached) who were forward of Romani on a mounted reconnaissance mission towards Katia.

Colonel Meldrum described the tasks undertaken on a mounted reconnaissance mission in an essay he wrote in November 1914, entitled "The Handling of Mounted Rifles Independently and in Brigade". He described the task of a regiment as: 'In its tactical work it reconnoitres for the enemy's advanced troops, gets into touch with them and then manoeuvres with a view to defeating them.' Once this was accomplished, the second task was to 'gain and keep touch with the enemy's main forces observing his strength, movements, etc, and sending the information back to the main body'. Meldrum then described how a regiment would undertake a screening mission:

At the time arranged he will move out, securing his own protection, and adopting a fighting formation that is to say he throws out tactical patrols or scouts, on not too broad a front, and follows with strong supports and if he thinks fit a reserve. These should move in formations and at distances and intervals that do not expos (sic) them unnecessarily and render concerted action easy. Squadrons, for instance, as a rule may safely march in irregular line of troop columns at intervals of 50 yards or more. Both supports and reserve may move in a similar fashion. Once touch is gained with the enemy's mounted troops, no time should be lost in taking a vigorous initiative... once an attack is decided upon it should be pushed through with energy and vigour.'¹⁰

⁸ Moore, p. 49.

⁹ Rhodes AET, fl 1916- 1917: Diary kept while campaigning in the Sinai. Alexander Turnbull Library 76-123. This was probably the first ever aerial reconnaissance by a senior officer, and it paid dividends. Aircraft played an important role in the campaign, although will not be covered in this paper.

WMR would have been moving as per the methods described in Meldrum's essay when the regiment located a Turk advanced post at Umm Ugba. The regiment's official history records the tactics adopted, essentially a combined arms attack made by two squadrons (the third squadron in reserve), with fire support. The attack was:

made by two WMR Squadrons under cover of machine-gun and artillery fire, and carried out at the point of the bayonet with great determination. The enemy were driven out of the Hod, leaving sixteen dead and eight unwounded prisoners in our hands. The Lewis gunners, under Lieutenant Herrick, performed particularly good work.¹¹

Colonel Meldrum, shows an understanding of the principles of combined arms, and he applied this tactic with the use of machine guns and artillery to support his regimental attack at Umm Ugba. The firing line, in extended order, provided maximum firepower to the front, suppressing the enemy, while forward movement was alternated between sections of the firing line, all movement being covered by fire. Supports (immediate reserves) and the reserve were all maintained but followed in columns, with their leaders at the front, in order to make passage of instructions easier and reaction times faster.

Whilst the Australian mounted brigades and WMR screened forward of Romani, the NZMR Brigade (less WMR) maintained contact with the enemy's left (southern) flank and conducted patrols, in strength, along the water pipe line and railway line west of Romani from its position in depth.

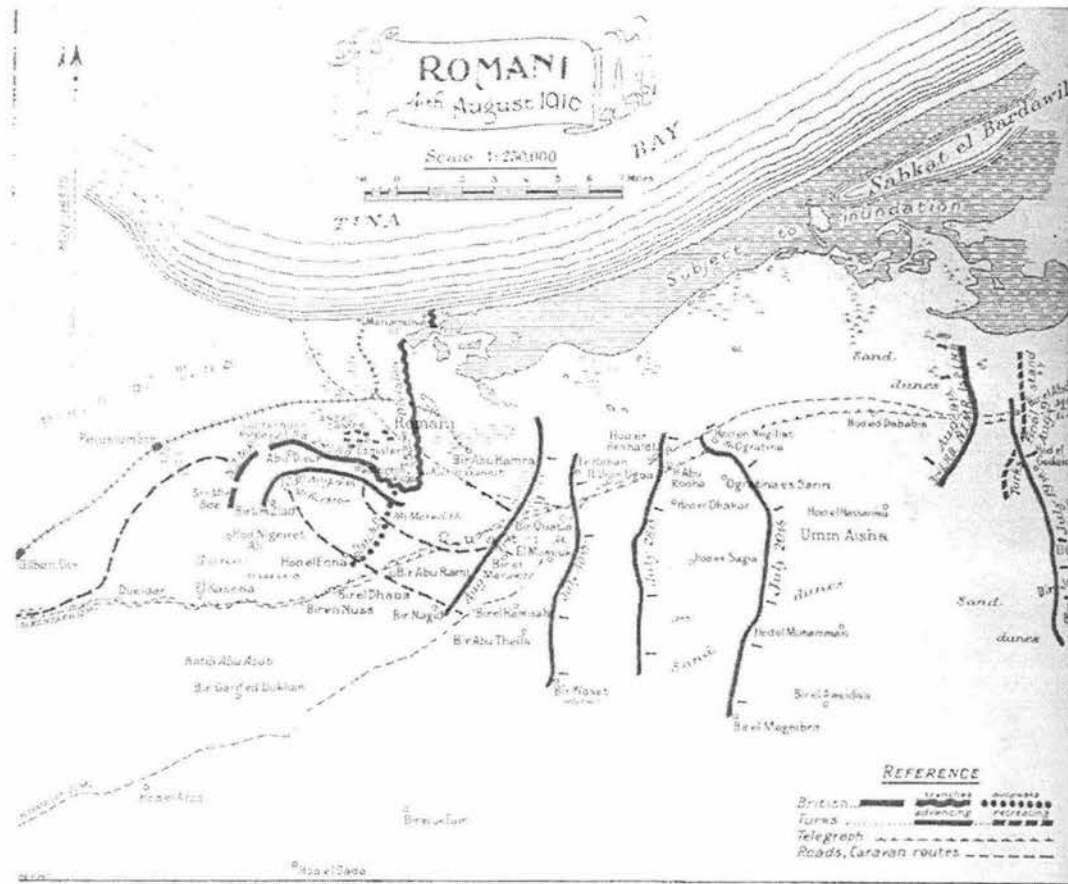
Romani 4-5 August 1915

The first major 'test' of the NZMR Brigade was at the defensive battle of Romani, where, it will be recalled, the brigade was entrusted with the important counter attack task. Von Kressenstein chose to exploit a weakness in the Allied routine by following up immediately behind the 2nd LH Brigade as it returned to Romani at nightfall of 3 August 1916 on completion of its outpost task. He had determined that outposts returned en mass at night, and did not leave patrols out during darkness. He planned to seize the high ground of Wellington Ridge during the night, by using the dark to

¹⁰ Essay on "The Handling of Mounted Rifles Independently and in Brigade" by Lieutenant Colonel Meldrum, 14- 11- 14. WA 42/3. (National Archives Head Office, Wellington).

¹¹ Wilkie, p.93.

conceal his movement so he could secure a bypass route south of Romani and avoid a difficult and possibly costly attack to penetrate the Allied defensive line in the north.¹²



Map 2: Romani
Powles, *Sinai and Palestine*, p.32.

However, that same night General Chauvel had deployed 1st LH Brigade in an *additional* north to south running Outpost Line that would remain out overnight, immediately east of Romani and Wellington Ridge. Kressenstein was unaware of this additional line- either his troops did not maintain surveillance of the Romani position or his scouts failed to detect it. This additional line intercepted the Turks as they followed after the other brigade in the dark and prevented the seizure of the ridge, but was unable to prevent the Turks gaining Mount Meredith, further south of

¹² Wavell, p. 48.

Wellington Ridge again.¹³ From there, the Turks put heavy rifle and machine gun fire into the Allied positions. This allowed the Turks to press further around the Allied right (south) flank, protected by Mount Meredith, than General Lawrence had anticipated. Bypass of the position now seemed possible.

The NZMR Brigade, with an additional Yeomanry Regiment to replace WMR, had been held in reserve up to that point waiting to be called forward for the counterattack. By the time General Chaytor reached the vicinity of Romani, at about 1100 hours, 2000 Turks were located digging in on Mount Royston and on the foothills immediately forward of it in preparation for succeeding Turk infantry to bypass Romani. General Chaytor decided to attack immediately, despite the unfavourable odds, in order to prevent the enemy defence becoming better established.

CMR attacked with all three squadrons forward, thus achieving maximum frontage and firepower. AMR followed behind in close support, available as immediate reserves should they be required. The Yeomanry Regiment attacked from the Turk's open southern flank. Corporal McMillan of CMR reported that when the troopers were ordered to dismount, 'excitement was high', the objective was within rifle range but 'still some distance away', the led horses were guided to safety and then the advance commenced.¹⁴

One section from the NZMR Brigade Machine Gun Squadron was assigned to AMR, two sections to CMR and three sections were held in reserve. The machine guns supported the infantry attacks, to good effect:

The [machine gun] section officers, with the aid of their scouts, located these forward Turks and directed the fire of their guns on to them. The ranges were only from 500 to 1000 yards: on the sand surface the gunners had no difficulty in observing their fire and quickly got onto the target.¹⁵

In his report of the action, General Chaytor recorded that:

¹³ As 4 August was the end of a Moslem feast that General Chauvel (GOC ANZAC Mounted Division) determined that the Turks might attack that day positioned 1st ALH Brigade out deliberately on the night 3rd August as an additional Outpost Line covering all approaches, to the Allied position.

The attack was carried out by two Squadrons Canterbury M.R. Regiment, with one squadron in support, on the left, and one Squadron Auckland M.R. Regiment on the right, with the Composite Regiment of Gloucester and Worcester Yeomanry on the extreme right- the whole supported by my Horse Artillery Battery.¹⁴

This successful combined arms action resulted in the capture of Mount Royston, twelve hundred Turk prisoners and a battery of guns. At last light, Outpost Lines were established and the brigade moved out of the line to the railway near Pelusium, watered their horses, restocked with ammunition and by midnight they were able to rest.

The NZMR attack at Romani had regiments attacking in line, supported by machine guns and horse artillery. The standard mounted rifles drills of dismounting, adopting a firing line and then advancing in bounds, covered by other sections of the firing line were used. Limited envelopment was attempted, no doubt this was because of the need for maximum frontage and because the extent of the Turk positions and their follow on forces were unknown. The tactic employed, to sweep forward in an extended line supported by machine guns and artillery was therefore best suited for this situation, but more akin to infantry than mounted rifles tactics.

The decision by Chaytor to attack the Turks immediately was important for while it limited the time available to coordinate fire support and to liaise with infantry to the north, it meant the enemy had less time to prepare stronger defences. Further, it exploited the disorganised state that infantry often find themselves in immediately after an attack, as they attempt to reorganise.

The Pursuit and Action at Katia 6-12 August 1916

The pursuit commenced early the following morning, with lead elements of the ANZAC Mounted Rifles Division moving from 0400 hours. For the NZMR Brigade, watering and feeding the horses began at 0300 hours, the brigade started moving east towards Katia at 0600 hours.

¹⁴ 1997 10503 Memoirs of Corporal McMillan ('*Forty Thousand Horsemen*'), Kippenberger Military Archive and Research Library (Army Museum, Waiouru), p. 82.

¹⁵ Luxford, p. 182.

¹⁶ NZMR Brigade report on recent operations 19th July, 1916 to 13th August, 1916. WA 40/3. (National Archives Head Office, Wellington).

The next Turk line of resistance was at Katia. The ANZAC Mounted Division plan, decided by a conference of brigadiers, was for NZMR Brigade to attack from the south, with 1st and 2nd LH Brigades and the Yeomanry attacking from the west and north west. H Hour was to be 1430 hours on 5 August 1916.

The attack was conducted as a mounted charge, inconsistent with mounted rifles doctrine and a tactic not trained for. The machine gun sections kept up in the charge initially, then dismounted on high ground that overlooked the axis of assault to provide covering fire. The attack is described, along with a caution about mounted troops attacking over untried ground:

...1st and 2nd and New Zealand Brigades attacked the strongly defended Katia position, charging with bayonets fixed in two lines, squadrons in line of troop columns, and shouting as loudly as their parched throats would allow. It was the first time the Australasians had attempted a cavalry charge, but unfortunately a swamp in front of the Turk entrenchments, as soon as it was reached, the leading horses foundered... bogged to their knees.¹⁷

In a letter dated 16 August 1916, Corporal Hull recalled the action. '... plenty of bullets came at us, especially after we dismounted and went forward on foot'. Turks employed snipers a lot, they had to be dealt with so the New Zealanders 'advanced with fixed bayonets like hunting out a rat' and three snipers surrendered.¹⁸ Corporal Hull also noted a universal weakness of mounted rifles units, that the number of troops available to fight was reduced immediately by 25% once the horses were handed over to the horse holders on dismounting.

Unfortunately the attack was unable to be pressed home fully as the 3rd LH Brigade attack from the right had failed to materialise. The action was therefore broken off at dusk ensuring that the troops could retire under cover of darkness, thus avoiding aimed enemy fire and minimising casualties. The Division returned to Bir et Maler to rest and bivouac leaving a single AMR Troop in position as a Listening Post.

¹⁷ The Marquess of Anglesey, *A History of the British Cavalry, Volume 4 1914- 1919 Egypt, Palestine & Syria*, Pen and Swords Ltd, 1994, p. 70.

¹⁸ Letter to Burton and Fred from Corporal JK Jull, dated 16/8/16, 1993.1039, Letters by John Hull, Kippenberger Military Archive and Research Library.

The tactics employed for the attack at Katia were more like those of cavalry, given the wild charge. In the event the attack was unsuccessful. Reconnaissance of the position was poor and direct fire in support of the attack limited. No screen was employed. There is no record of supports and reserves being allocated. The advantages of speed and shock action usually gained by a charge were quickly lost when the brigade became bogged just forward of the enemy. Corporal Hull described the heavy fire that came at the troops once they had dismounted. This should have been suppressed by direct fire, only it had not been established in advance as the machine guns were charging forward also. Had the Turk position been poorly sited or considerably weaker, the attack might have succeeded.

The following day, the Katia position was found deserted. The Turks had retired to Oghratina, their next line of resistance. This pattern continued through to the 11th, with Turk subsequent delay positions at Oghratina and Bir El Abd being strongly supported by counter attacks and artillery fire. On the 12th Bir El Abd was found deserted, the enemy rear guard being located at Salmana. Despite giving ground, the Turks proved tough fighters, especially when conditions suited them and if their flanks and rear were not threatened. Such was the case on 8 August with WMR leading the advance. The Turk:

movements indicted he intended to retire, but a little later he changed his plans. Finding that he could hold his position, and that his flanks were not threatened, he became aggressive, and with respect his great numerical strength he reinforced his line with fresh troops from time to time, counter-attacking with great determination... At the same time the enemy used his big guns with great effect...¹⁹

The pursuit halted temporarily at Bir El Abd due to supply problems and to allow the construction of the railway and water pipe to catch up. Bir El Abd was utilised as a patrol base from which to reconnoitre the ground forward towards El Arish, looking for the enemy and identifying wells that could support future operations. Whilst waiting, the regiments 'sent out patrols daily to explore the country as far afield as possible' and 'to establish listening posts at night in selected positions to guard against a surprise raid'.²⁰ Daylight patrols were generally conducted in Troop

¹⁹ Wilkie, p.103.

²⁰ 1997 10503 Memoirs of Corporal McMillan ('*Forty Thousand Horsemen*'), Kippenberger Military Archive and Research Library (Army Museum, Waiouru), p. 102.

strength, but sometimes by only two men. If a pilot reported an outlying *hod* (well), then a small patrol would be sent out to investigate.

Following an Allied 'reconnaissance in strength' of the garrison at Bir El Mazar, midway between Bir El Abd and El Arish, the Turks abandoned Bir El Mazar.²¹ This was then occupied by the Allies as an advanced base. The Turks then abandoned El Arish.

To maintain momentum, the ANZAC Mounted Division was instructed to occupy El Arish immediately. By dawn the Division had surrounded the town and patrols entered to confirm that it had been abandoned. A series of Outpost Lines were established to the east of El Arish and patrols deployed into the surrounding area. The El Arish garrison had retired to Magdhaba, a village forty-eight kilometres inland and south of El Arish. The defence of El Arish was quickly handed over to the Yeomanry and 52nd Division then the ANZAC Mounted Division moved to a *wadi* half way towards Magdhaba, ready for a night march so as to be in position to attack Magdhaba at first light.

Magdhaba presented a better organised enemy defence than had previously been encountered by the NZMR Brigade, and also challenging terrain. So far, the attacks undertaken had constituted 'quick actions', attacks from the line of march, with fire and movement by the firing line being sufficient to cover forward movement. Magdhaba consisted of strong redoubts and well concealed supporting positions. The enemy would be difficult to locate, so weight of fire would be important to allow forward movement by the assault troops.

Magdhaba 23 December 1916

At 0450 hours on 23 December 1916, the ANZAC Mounted Division halted six kilometres short of Magdhaba. The Divisional Commander, General Chauvel, went forward to reconnoitre the position. Camp fires indicated the extent of the Turk position, but not the detail, as smoke masked a lot of that.²² It can be assumed that the Turks did not keep El Arish under surveillance nor did they maintain security elements forward of Magdhaba along likely routes to provide sufficient early warning of the Allies approach. Fires would not have been lit had the Turks thought the Allies

²¹ 2nd and 3rd ALH Brigades and the NZ machine Gun Squadron undertook this reconnaissance.

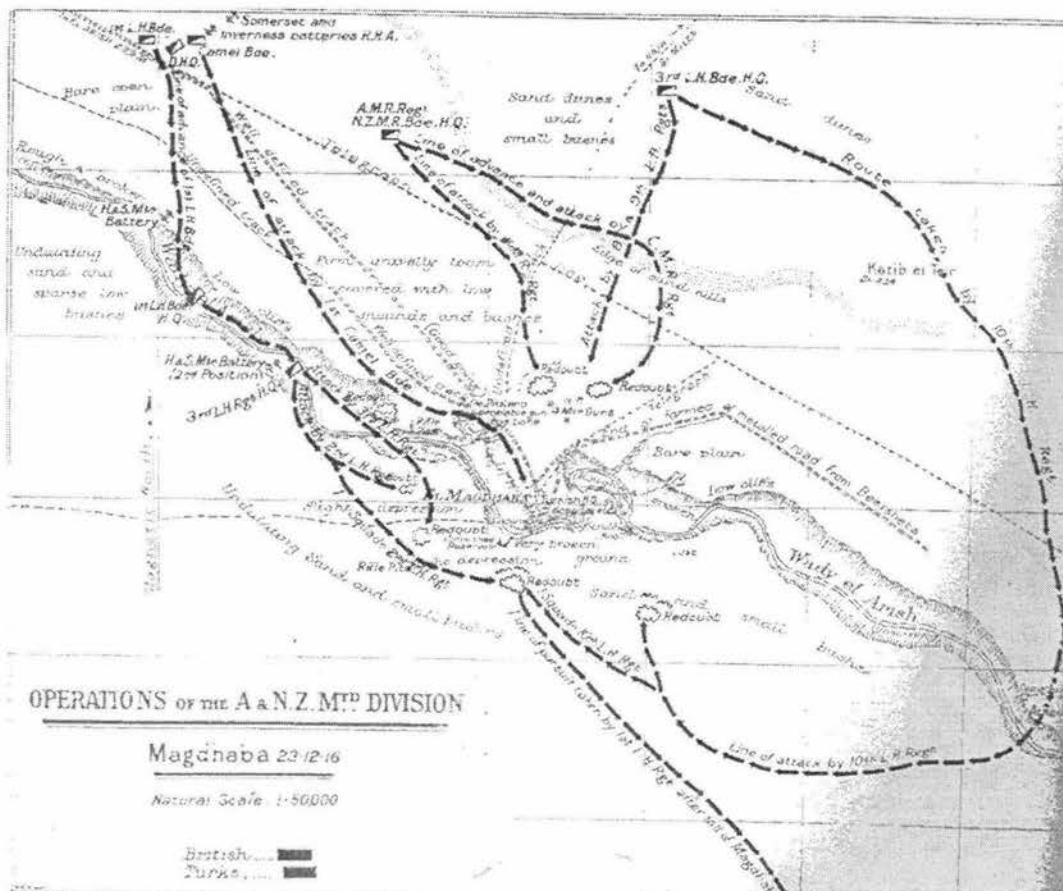
²² A.J. Hill, *Chauvel of the Light Horse*, Wilkie and Co. Ltd, Victoria, 1978, p. 88.

could have followed up so quickly from El Arish, demonstrating the speed and surprise that could be achieved by mounted troops. It should be noted that this operation was undertaken solely by mounted troops, all (foot) infantry being left behind to guard El Arish.

The enemy position consisted of five redoubts, supported by mountain guns. The ground was ideal for defence, it provided excellent cover for the defenders. The strongest point of the position consisted of the two northern redoubts, which were connected by a series of well camouflaged fighting trenches, with four co-located mountain guns. This was the objective that the NZMR and 3rd LH Brigades, both under General Chaytor's command, were directed to attack. This axis of assault was selected to force the Turks away from the wells; water and the capture of it being essential.

A report on the action at Magdhaba indicates how the operation was intended to unfold.²³ The NZMR and 3rd LH Brigades were to approach from the north and to attack Magdhaba from the east and south. H Hour would be as soon as the divisional artillery opened fire on the enemy position. The 1st LH Brigade was to be kept out of action as the divisional reserve. Artillery was positioned in the west, firing flank on to the enemy but not directly in support of each attacking brigade. This action was to be an envelopment of the enemy's northern flank, supported by artillery. No flank guard elements were deployed to warn of enemy reinforcements, nor was there any attempt to block the enemy's withdrawal by the placement of cut off forces to their rear along the Wadi El Arish. At 0822 hours Division Headquarters issued orders for the attack.

²³ Report dated 24 December, 1916 by GOC NZMR Brigade on Operations Carried out at Magdhaba on 23rd December 1916. WA 40/3, Part 5, Operations Records. (National Archives Head Office, Wellington).



Map 3: Maghaba
Powles, *Sinai and Palestine*, p. 48.

At 0925 hours, an hour after divisional orders were issued, General Chaytor and his Regimental Commanders moved forward to conduct their own reconnaissance of the NZMR Brigade objective. CMR was directed onto Hill 345 and WMR onto the enemy held ridge to the right of Hill 345.

The NZMR Brigade commenced the attack mounted, in line of troop columns, with WMR on the right, CMR on the left and AMR in depth. The attacking regiments were preceded by a screen commanded by Lieutenant Edward Levien. The screen advanced at the gallop, drawing enemy fire. The two forward regiments, following some distance behind the screen, were each accompanied by two sections of machine guns, with the remaining machine gun sections held in reserve.

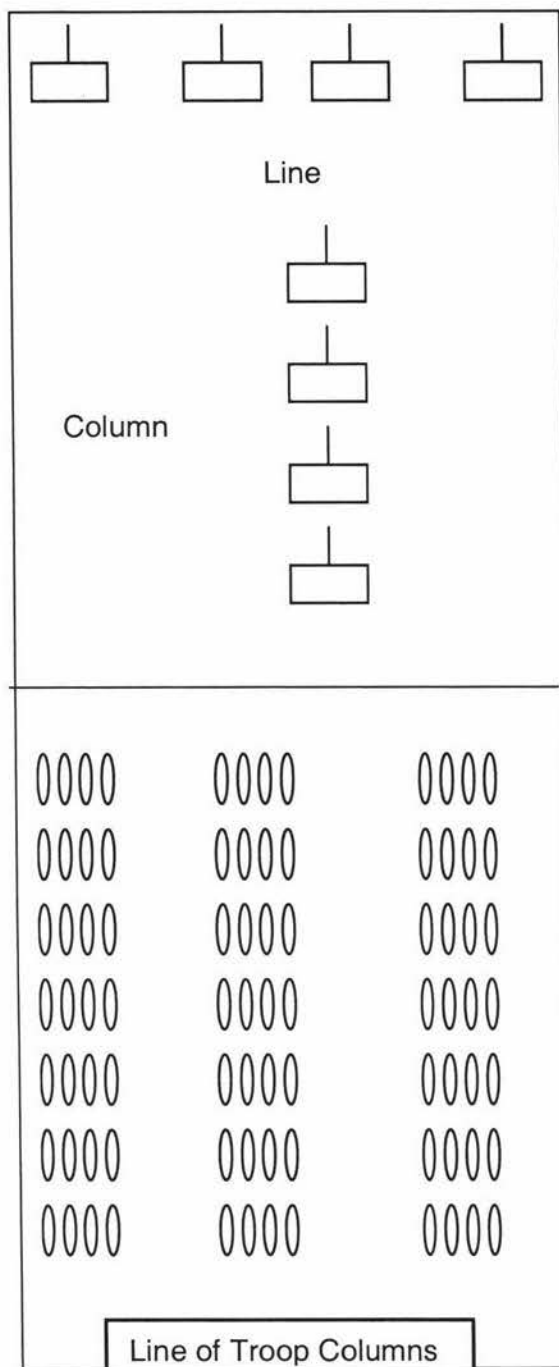


Figure 6: Regimental Formations: Line and Column

Figure 7: Squadron Formation (Line of Troop Columns)

At 2000 metres from the enemy position the assaulting troops came under fire from snipers and the four mountain guns, but they continued moving forward. At 1600 metres they dismounted and continued on foot. Meanwhile Lieutenant Levien had manoeuvred the screen to within 400 yards of the Turk position, drawing fire and thus exposing the Turk locations.²⁴

²⁴ Lieutenant Levien went on to win the Military Cross. Wilkie, p. 188.

Corporal McMillan states that the attack by NZMR commenced 'with a wild gallop over the open plain before the troop dismounted to go forward on foot and sending the horses back out of range.'²⁵

The forward regiments, supported by their attached machine guns, manoeuvred to within 600 metres of their objective before being held up by heavy fire. Machine gun sections moved into the firing line ready to support a general attack over the open ground. The method of employment was to place the guns forward, on the flanks, to produce a cross fire. Corporal Ben Gainfort recorded that while the machine guns attracted a lot of Turk fire onto themselves and anyone nearby, it was good for the attacking troops to know they had machine guns supporting their attack.²⁶

General Chaytor ordered 3rd LH Brigade, his reserve, to be prepared to assist the forward regiments or to envelop Magdhaba from the east. At 1230 hours General Chaytor committed the 8th and 9th Regiments of the 3rd LH Brigade into the 800 metre gap that had opened between CMR and WMR, thus adding to the weight of fire on the New Zealand objectives but reducing his reserve to a single regiment. One and a half hours later he sent the remaining regiment of 3rd LH Brigade on an enveloping attack from the east. This regiment, 10th LH Regiment swept right around the east and attacked Magdhaba from the south.

As the attack developed, it became evident that the enemy position of well sited redoubts and trenches would be more difficult to capture than originally anticipated. Powles recorded in the NZMR Brigade's official history that 'the fire from enemy mountain guns and from his rifles and machine guns was very heavy, but the guns were very badly served and the small arms fire most inaccurate.'²⁷ Word had been received at 1300 hours that water could not be found at Bir Lahfan. This meant that unless Magdhaba was captured before nightfall the engagement would have to be broken off as the horses would have to return to El Arish forty eight kilometres away to be watered. General Chauvel recommended to the Desert Column Commander that orders be issued to for the force to break off the attack and withdraw.

²⁵ 1997 10503 Memoirs of Corporal McMillan ('*Forty Thousand Horsemen*'), Kippenberger Military Archive and Research Library (Army Museum, Waiouru), p. 102.

²⁶ Ben Gainfort, interview by Jane Tolerton and Nicholas Boyack, 1 Nov 1988, World War I Oral History Archive, Alexander Turnbull Library, OHInt-0006/28.

²⁷ Powles, *The New Zealanders in Sinai and Palestine*, p.53.

By 1400 hours, however, the Australians had secured some trenches and by 1600 hours the New Zealanders captured further trenches at the point of the bayonet. The dismounted troopers were supported by machine guns and artillery firing onto the enemy redoubts, whilst the troops 'advanced in short rushes over open ground', the assault concluded with a 'final assault with fixed bayonets.'²⁸ The action ceased at nightfall, with the position secured. NZMR Brigade casualties were eight killed and 36 wounded.²⁹

Hundreds of Turks had been killed yet Allied casualties were light. Casualties amongst the entire ANZAC Mounted Division were only 12 killed and 134 wounded. This is despite attacking a position containing well sited and camouflaged trenches and redoubts that commanded excellent fields of fire. More than 1200 Turks were captured, along with a battery of four mountain guns. It had been difficult and exhausting work, 'fighting through the heat of the day, after a long night march, proved very trying for all ranks... but they were in good spirits and keen to get at the enemy...'³⁰

This attack established a general model used in subsequent mounted attacks; the night approach then simultaneous attacks at different points to cut off the enemy, to establish multiple opportunities to break into the enemy position and keep the enemy fixed by weight of fire. The attack would culminate in a bayonet charge, generally leading to rapid surrender of the rest of the enemy position. It should be noted, however, that the subsequent envelopment and cutting off of the enemy was not planned initially, but developed out of necessity as the battle unfolded. Perhaps the position was determined to be too extended to envelop on both sides initially. A night approach aided in security and surprise, ensured that lengthy movement to the objective was undertaken during the coolest hours and that maximum daylight was available. This tactic was especially useful as the Turks did not maintain an active night patrolling programme which could have otherwise seriously disrupted night moves by the Allies. This general model is consistent with mounted tactics developed in the Boer war.

²⁸ 1997 10503 Memoirs of Corporal McMillan ('*Forty Thousand Horsemen*'), Kippenberger Military Archive and Research Library (Army Museum, Waiouru), pp. 120- 121.

²⁹ Powles, *The New Zealanders in Sinai and Palestine*, p.56.

³⁰ Report dated 24 December, 1916 by GOC NZMR Brigade on Operations Carried out at Magdhaba on 23rd December 1916. WA 40/3, Part 5, Operations Records. (National Archives Head Office, Wellington).

Reconnaissance of the position prior to commencing the attack was limited to binoculars³¹ (although binoculars were a rarity³²) and a few reports, some spurious, from aircraft. Detailed reconnaissance to determine enemy strengths, weaknesses, the location of key weapon systems and possible covered approaches to the objective was not undertaken. This would have been an ideal cavalry task, the type that is undertaken now by an infantry unit's reconnaissance element. Later in the campaign, certain members specialised in close reconnaissance of enemy positions, although a dedicated reconnaissance squadron or troop was not organised within the NZMR Brigade.

The enemy position was not subjected to any serious preparatory fire by the artillery so casualties, destruction and the effect that artillery can have on the defenders morale before the attack was mounted, was limited. At this stage in the campaign, concentrated artillery fire was not generally a feature of an attack. Chauvel had actually left two batteries, the Ayrshires and the Leicestershires, back at El Arish.³³ The three batteries supporting the attack were held in the north west, a considerable distance from the NZMR line of attack. Communications between the attackers and their supporting guns would have been difficult. On the positive side, the angle of fire meant that any shots that were short or 'over' their target should not have landed amongst the attackers. The fact that the signal for H Hour was the firing of the three gun batteries suggests that communications were probably non-existent, other than by runner or heliograph. Further, the mirage effect caused the guns some difficulty in finding their targets. As an indication of the ammunition used in the seven hour battle, the Inverness Battery fired a total of 498 rounds during the battle, approximately seventy rounds per hour of combat.

The machine guns were used well, providing excellent covering fire- keeping the enemy suppressed so they were not firing accurately on the attackers- and ultimately this contributed to the low overall casualty rate sustained by the division.

³¹ A Note on the Recent Cavalry Fighting up to 7th April 1917 WA 40/4/10. (National Archives Head Office, Wellington) The report noted that as reconnaissance at Maghaba (and Rafa) was carried out by binocular viewing, this meant that attacking brigades 'only had a very general idea of the ground' and enemy. The reports first deduction was that 'Very careful reconnaissance of the ground, as well as the enemy's position, before attacking is essential.'

³² Powles, *Canterbury Mounted Rifles*, p. 108. In commenting about binoculars, Powles records that 'Field glasses were very scarce, and those issued being of poor quality, competition was very keen for the Zeiss glasses of the prisoners, but very few were secured.'

³³ Farndale, p. 77

The use of the screen is consistent with the tactics in YMRT for a deliberate attack. When 'a party of the enemy, behind good cover from artillery fire, hold a position which cannot be turned and denies the most suitable line of advance', in that the attack should be preceded by 'scouts'.³⁴

At the completion of an attack, the urgent need for water by the men and horses precluded immediate follow up of the enemy and usually resulted in a long ride back to the bivouac from which the attack was mounted. On completion of the attack at Magdhaba, the Division conducted a long night march back to El Arish, arriving exhausted at 0600 hours the next morning, Christmas Eve. For WMR the rest was short lived, as they were assigned to outpost duty that night.

Action at Rafa 9 January 1917

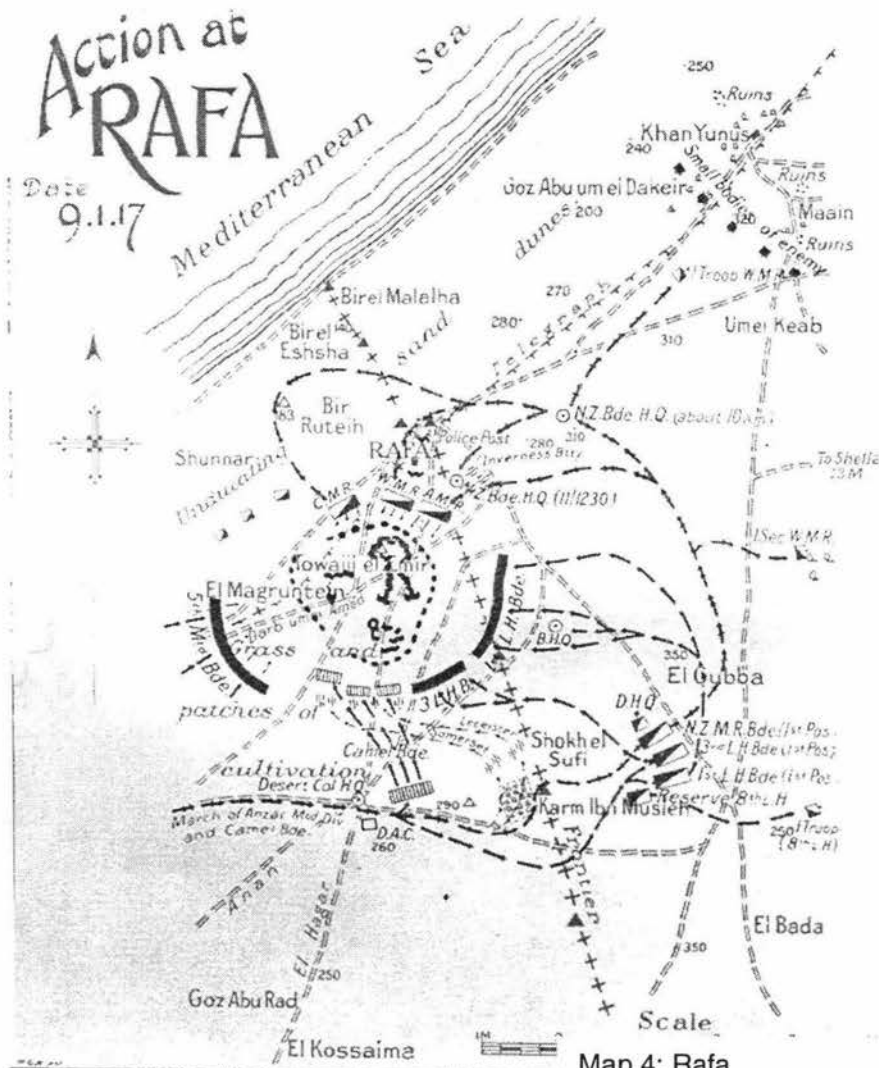
The final Turkish outpost in Egypt was based on the town of Rafa, located on the Egypt- Palestine border, forty kilometres east of El Arish. The main position consisted of a central redoubt on the high ground of El Magruntein (Point 255), immediately south of Rafa. The NZMR official history records that the strength of the enemy position was:

in its rising ground with its central "keep" on El Magruntein, a conical grassy sloped hill some 200 feet above the surrounding country. Clear for 2000 yards or more all around this position lay a beautiful turf land, slightly rolling...³⁵

³⁴ YMRT, p.175.

³⁵ Powles, *The New Zealanders in Sinai and Palestine*, p. 69.

The position, which commanded excellent fields of fire, was strongly defended by two battalions supported by mountain guns. The "keep" was defended by lines of defensive works: trenches and smaller redoubts. The attackers would have to assault in the open as no cover or concealment was available after dismounting. The assaulting troops would thus be heavily reliant on machine guns, artillery and from their own rifle fire when moving forward, noting that artillery ammunition did not include smoke to mask movement from the defenders. Mounted movement would have to be conducted quickly and out of range of Turk small arms fire. Led horses would have to be held some ways off which would limit the speed with which they could be brought forward, and thus the ability to shift the point of attack. At Rafa, the attackers would be clearly visible to the defenders and therefore more vulnerable than if there was cover along the axis of assault.



Map 4: Rafa
Powles, Sinai and Palestine, p. 64.

The NZMR Brigade departed at 0100 hours on 9 January 1917 for Rafa. By 0515 hours the brigade had rounded up Arabs from villages near Rafa in order to maintain security. A Divisional Headquarters reconnaissance was conducted at 0615 hours whilst the Division was moving near Karm Ibn Musleh. ANZAC Mounted Division Headquarters issued orders for the attack at 0830 hours. H Hour was set for 1000 hours. The enemy position at Rafa was to be completely surrounded by the Division so that it would be isolated, unable to break out or be reinforced. 3rd LH Brigade was kept out of the action, as Divisional Reserve.

The NZMR Brigade commenced movement at 0935 hours, advancing at the gallop around the east flank of the objective, in artillery formation, until reaching a prominent knoll 3 kilometres east/ north east of the objective. Their movement was preceded by mounted patrols, one of which cut the telegraph line north of Rafa to deny communications between Rafa and the main garrison at Khan Yunus.

AMR was directed to attack high ground 1.5 kilometres South East of Rafa. WMR, less one squadron, was to follow and support CMR Regiment whose task was to attack from the north, to the right of AMR. A squadron from WMR was designated the reserve. A section from WMR was detailed to watch towards Shellal whilst another WMR troop was to patrol towards Khan Yunus and look for sign of enemy reinforcements.³⁶ A section of two machineguns was assigned to AMR, two sections to CMR and the remainder were retained under control of OC Machine Gun Squadron. The attack commenced at 1000 hours.

AMR attacked the defences from the north, dismounting three kilometres short of their objective '... in some slight hollows, which gave only partial cover for the horses...' ³⁷ CMR pushed to the right of WMR, approaching the objective from the NNW, capturing the town of Rafa along the way against little opposition other than a few snipers. WMR, less the squadron on flank security and reserve duties, filled the gap between AMR and CMR. The attack was conducted with three regiments forward. As the history of CMR records:

The advance was slow but steady, the men advancing on foot as though they were carrying out manoeuvres... A troop would rise from the ground and,

³⁶ Rhodes, Arthur E T (Captain), fl 1916- 1917, Diary kept while campaigning in the Sinai, 23 Apr- 12 Jul 1916, 8- 10 Jan 1917

³⁷ Moore, p. 58.

covered by the fire of their comrades on either flank, dash forward a few yards, the men throwing themselves down, and bringing fire to bear on the trench in front of them till the remaining troops had come into line.³⁸

CMR attacked with all three squadrons in line. 8th Squadron, who had led as the regimental Advance Guard and captured the town of Rafa, was joined on its right by 10th Squadron. Finally, 1st Squadron came into action on the right of 10th Squadron.

The Brigade reserve was a squadron from WMR, less the two troops detailed for flank security tasks towards Khan Yunus and Shellal. This reserve was committed at 1300 hours, into a gap between 1st LH Brigade and NZMR Brigade.³⁹ Their movement into the gap was covered by direct fire from the Inverness Battery. There is no record of a regimental level reserve being maintained by CMR. On the other hand, AMR maintained a squadron sized reserve which was not deployed until 1400 hours, when it was committed to support the AMR's two forward squadrons who were both far enough forward for the general assault.⁴⁰

Although at 1130 hours the attack had been reported to be progressing well, it was then held up for some three hours by weight of enemy fire.

The Australian official history for the campaign records:

as the dismounted attack became general, with the successive waves of riflemen still about 1,000 yards from the enemy trenches, the seriousness of the British task was vividly disclosed. The circle was yet too far wide for contact; each brigade was more or less isolated, with its flanks exposed; and the admirable placing of the enemy posts left most of the British troops open to enfilade fire. For a time the Turks shrewdly withheld their fire and all the regiments made rapid progress until they came within about half-a-mile of the earthworks. Then the Turks opened vigorously with all arms, and Chauvel's men, still beyond charging distance, were held by a hail of lead...⁴¹

In the ideal situation, the surrounding regiments would link up, thus totally encircling the Turks, leaving no gaps that the enemy could exploit. Initial successes, or possibly

³⁸ Powles, *Canterbury Mounted Rifles*, p. 134.

³⁹ Wilkie, p. 126.

⁴⁰ Nicol, pp. 131- 132.

the Turk tactic of holding fire, had allowed the Allied brigades to commit to the attack but they could not get close enough to finish it off rapidly. Reserves had to be committed to close gaps rather than exploit success or react to unseen enemy action, and depth in the attacks was sacrificed to achieve sufficient frontage.

Due to the ground, there were limited opportunities in CMR's sector to fire overhead so the machine guns moved forward with the firing line:

...these being distributed along the line of attack, as far as the sector being held by the Canterbury M.R. Regiment on the right, advanced with the troops, giving them and one another mutual support, and were able to bring effective covering fire to bear on the redoubt right up to the time of its capture... The cooperation between our guns and our troops enabled the latter to advance across very exposed ground, up to an extremely strong position with comparatively few casualties.⁴²

Knowing that Turk reinforcements were approaching from the east, Chaytor ordered a general assault at 1600 hours. At that time, all remaining reserves moved into the firing line in order to participate in the assault. At 1630 hours the brigade charged, in two 800 metre dashes, with covering fire from machine guns and rifles. They captured Point 255. Troops were reported to be firing from the hip as they charged forward. At this point the enemy advance guard was only four kilometres north east of Rafa, but were too late to effect the outcome.

Harry Porter described the battle at Rafa from his perspective as a member of the AMR. The Regiment rode all night in order to reach Rafa before dawn. The Regiment galloped into action, led by their CO, Lieutenant Colonel J. McCarroll over a ridge, under heavy fire, to reach their dismount point. They dismounted in cover, but once they left it, no more cover was to be had. As the attack developed, troops advanced in 50 metre dashes, supported by the fire of the other troops. Men shot whilst others moved. Enemy trenches 'smoked' from the strike of bullets, indicating a great weight of fire being applied in order to cover the attackers. Porter recalls that once they had

⁴¹ Gullett, p. 235.

⁴² Report on the action of Brigade Machine Gun Squadron During Recent Engagement at Rafa of 30th January, 1916. WA 196/1b NZMR MG Sqn War Diaries. (National Archives Head Office, Wellington).

got close enough and fixed bayonets that the Turks then surrendered rapidly. New Zealanders shouted, in Turkish, to 'surrender, throw down your arms'.⁴³

Again, the bayonet and the machine gun proved decisive. The attack necessitated high expenditure of ammunition to make up for the lack of cover available to the attackers. The Inverness Battery ran out of ammunition. The ammunition situation caused a great deal of anxiety as all ammunition limbers and camels had been left behind on the orders of General Chauvel. This tends to indicate that the strength of the position was underestimated and that the need for additional ammunition to make up for lack of cover during the assault was not taken into account. Machine gun fire for the final assault was, for AMR at least, from overhead fire, from behind, rather than from flanks or from the front line as had occurred at Maghaba.

The following observations have been extracted from General Chaytor's report on the attack:

... progress was slow for a time as the ground from RAFA to Pt 255 was an easy grassy slope affording no cover and our advance was several times held up by our own shells bursting to far over the redoubt and sweeping the ground in front of our attack... during the last part of our attack there was no artillery support- our Bty had run out of ammunition. The Australians mostly dismounted too far from their objective and lost their drive long before they got close up- many [of their] men lay down and fired at long range instead of pressing on their only success was in taking the trench just N. of the big tree.⁴⁴

General Chaytor's comments highlight issues with artillery control at that stage in the war. The procedures for coordinating artillery fire were still crude, there were no radios linking the attackers with the gun line and the effect of 'overs', rounds falling beyond their intended target, was overlooked. An 'over' is not generally an issue, provided the style of attack does not require friendly troops to be behind the intended target. Further, the location of the guns, as depicted on the map in the official history would place the NZMR Brigade in direct line of fire of any shots firing over the top of the objective from both the Leicester and Somerset Batteries.

⁴³ William Henry (Harry) Porter, interview by Jane Tolerton and Nicholas Boyack, 29 Sep 1988, World War I Oral History Archive, Alexander Turnbull Library, OHInt-0006/62.

The 9th LH Regiment history records that all units were issued discs painted black and white which were used to indicate the locations of friendly troops to the artillery. The same history records 'men were seen moving about on the sand hills north of the enemy position, and waving discs painted black and white for the purpose of disclosing their position to the artillery, as shells from one of our batteries were falling close to their front line.'⁴⁵ The troops being fired upon were likely from NZMR.

Clearly, there is a balance to be struck between dismounting too far from the objective and too close. In this instance, General Chaytor was critical of the Australians who had, in his opinion, dismounted too far from their objective and then done too little to maintain the momentum to go forward dismounted.⁴⁶ The point Chaytor makes is that troops must not be dismounted too far out, even if it means closing in under some fire and risking casualties. Note that Porter's regiment was led to the dismount point by its CO, under 'heavy fire'. Once the troops have handed over their horses, the officers must maintain momentum and not allow the firers to remain in cover, static.

The overall style of the attack at Rafa conformed to the tactics in YMRT. The NZMR Brigade was directed to cut off the enemy and attack the rear. Flank security elements were deployed to warn of Turk reinforcements coming from Khan Yunus and Shellal. Security elements were kept small, troop sized and below, so as not to further reduce the numbers in the assault.

CMR deployed a wide flanking movement in order to approach from the North West, moving in open formation. This formation kept casualties from Turk artillery and rifle fire on the approach to just two or three only. The sand hills then provided a covered route towards the objective. Coincidentally, the route used cut off six Germans and over one hundred Turks who were using the sand hills to effect their escape. It also ensured a shorter covered withdrawal route along the beach for NZMR Brigade should the need have arisen.

⁴⁴ Letter from General Chaytor dated 19th January, 1917 WA 40/4/5 (National Archives Head Office, Wellington).

⁴⁵ Major T.H. Darley, *With the Ninth Light Horse in the Great War*, The Hassell Press, Adelaide, 1924, p.67

⁴⁶ Letter from General Chaytor dated 19th January, 1917 WA 40/4/5 (National Archives Head Office, Wellington).

Having got the firing line (and supports) close enough to the objective, a decision had to be made to commence the 'general assault'. This was conducted as a bayonet charge, supported by machine gun fire. It was not clear whether the New Zealanders actually bayoneted any Turks, for 'The Turks would not meet the bayonet and surrendered',⁴⁷ although Briscoe Moore recorded that many of the casualties sustained were in this phase of the battle and that there was '... hand to hand fighting in the Turkish Trenches.'⁴⁸ The noise and the rush spurred the Australian and Camel Brigades to charge in also, leading to the rapid collapse of the defence.

A reserve squadron, less a troop, was maintained by the Brigade. AMR maintained a reserve. The Brigade reserve was committed to cover a gap between NZMR and the 1st ALH Brigade, whilst the AMR Reserve was committed to reinforce the firing line preparatory to the general assault.

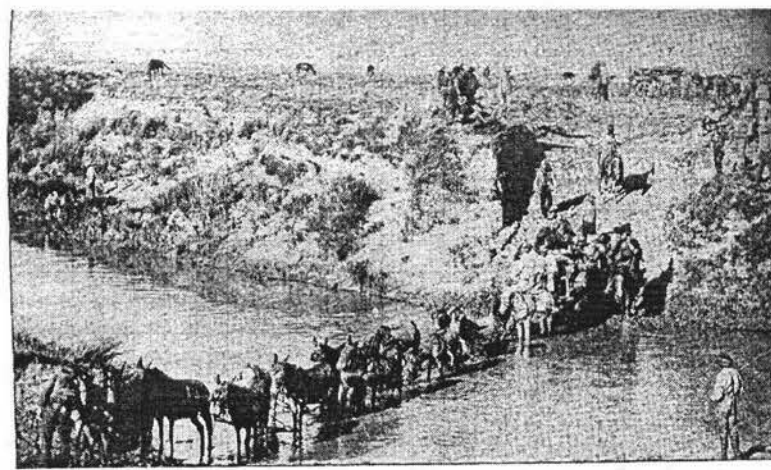
New Zealand casualties sustained in the battle were once again slight given the strength of the position attacked and the duration of the battle. Seventeen men were killed, nine officers and eighty four soldiers were wounded. Total Allied casualties were 71 killed and 415 wounded. The Turks had 200 killed. Two thousand Turks were taken prisoner, of whom 168 were wounded.⁴⁹

This opening stage of the campaign started well and ended on an even higher note for the New Zealanders. The NZMR Brigade played a key role in all major operations and was widely credited with the success at Rafa, despite being but one of the five brigades engaged. Ahead were battles on a grander scale and a few reverses too.

⁴⁷ Powles, *Canterbury Mounted Rifles*, p. 136.

⁴⁸ Moore, p. 59.

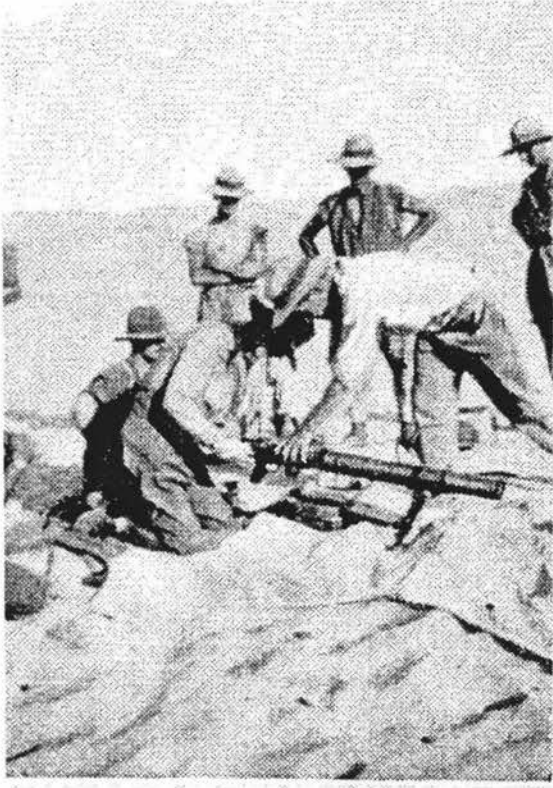
⁴⁹ Gullett, p. 242.



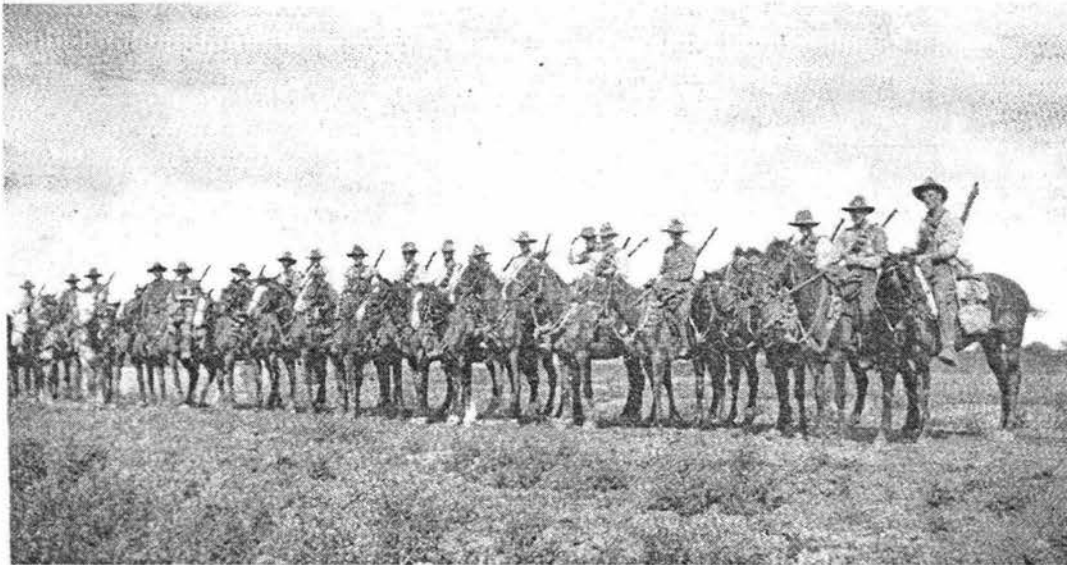
De Wet's Commando crossing the Orange River
Stowers, *Kiwi versus Boer*, p. 56



Member of 5th New Zealand Contingent
Pugsley, *ANZAC Experience*, p.41



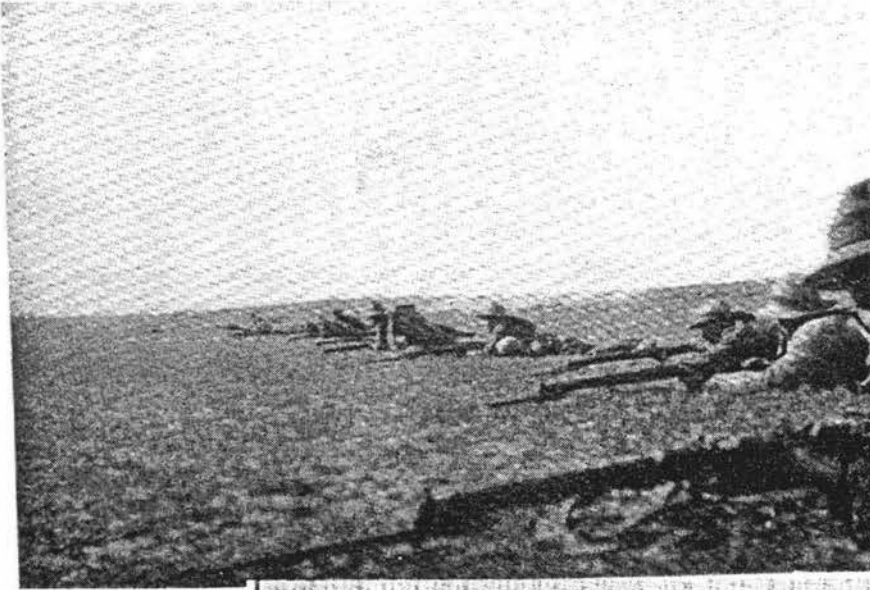
Instruction on the Lewis Gun
Wilkie, p177



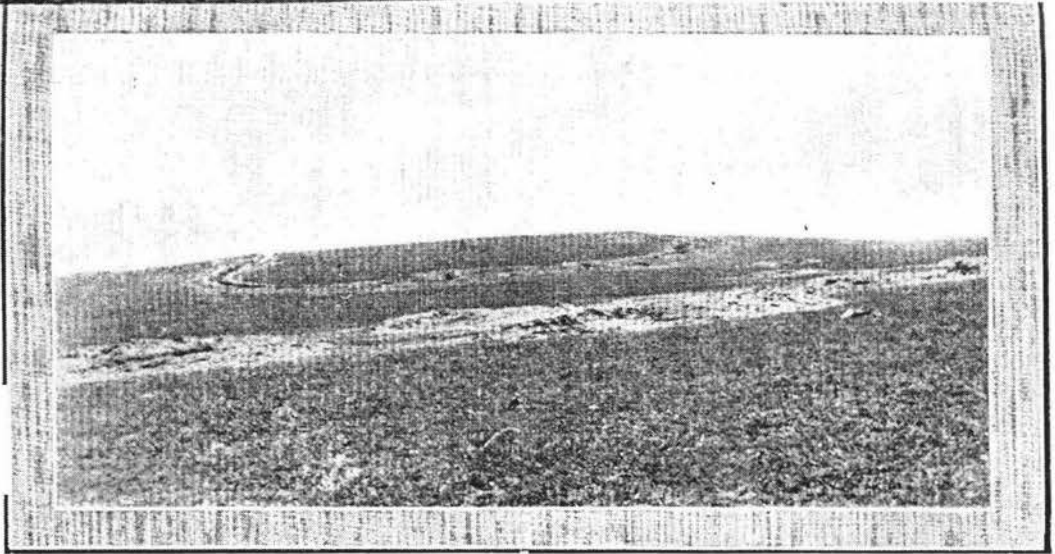
Typical
NZMR Troop
A. Briscoe
Moore, p. 33



WMR horse lines
Wilkie, opp p. 160



Firing Line at Rafa
 Powles, *Sinai and Palestine*, p.73



Rafa
 Nicol, opp p. 120

THE FIELD OF RAFA. WHICH WITNESSED A PERFECT ENVELOPING ATTACK.



Hotchkiss Gun and Crew, WMR
 Powles, *Sinai and Palestine*, p. 118



Somerset Battery RHA in action
 Powles, *Sinai and Palestine*, p.3



ENEMY MACHINE-GUNNERS IN ACTION AT THE SECOND BATTLE OF GAZA. (THE SECOND MAN FROM THE RIGHT IS USING A RANGE-FINDER.)

From a German photograph; cut by Tpr. E. P. Yeatman, 9th L.H. Regt. Aust. War Museum Collection No. A577.

To face p. 309.

Turkish machine gunners Gaza II
Gullett, facing p.309



Turks in Trenches near Gaza
(Captured photo.)

Turks in trenches near Gaza
Robertson, opp p. 81



NZMR Brigade moves through
Bethlehem to the River Jordan
LF Wilson Collection
Alexander Turnbull Library, NZ
F-66833-1/2.



Amman with Hill
3039 in the
background
Powles, *Sinai and
Palestine*, p. 210

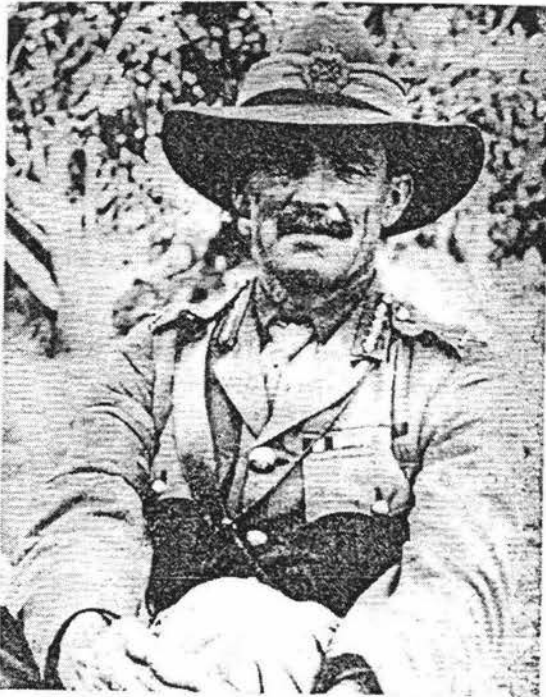


Where the Mounted Forces were supposed to be

Dummy Horses- Jordan Valley
Robertson, p. 200



NZMR Brigade crosses the Jordan
at Jisr ed Damieh
Powles, *Sinai and Palestine*, p.247



(Australian War Memorial)
Major General Sir E. W. C. Chaytor.

Major General Sir EWC Chaytor,
KCMG, KCVO, CB, ADC
R. Hopkins, p.31



Brigadier General W Meldrum, CB,
CMG, DSO
Powles, *Sinar and Palestine*, facing p.1



Corporal Williams and his horse rest in the
sun- Palestine
LF Wilson Collection
Alexander Turnbull Library, NZ
F-66835-1/2

Reconnaissance of Khan Yunus: 23 February 1917

After the battle of Rafa, the NZMR Brigade undertook patrolling, as far north as the Wadi Ghuzze. The ground was open rolling pasture, some of it under cultivation, different to the desert conditions the brigade had become used to. On 23 February 1917, the NZMR Brigade conducted a reconnaissance in strength towards Khan Yunus, with the intent of capturing Sheikh Ali el Hirsch a suspected Turkish agent. The Brigade surrounded the town, forced in some of the Turk defenders but did not capture the Sheikh. Nevertheless, this bold operation caused the Turks to abandon Khan Yunus and all its defences.

First Gaza: 26 March 1917

Following the loss of Rafa and Magdhaba, Kressenstein based his next line of resistance on Gaza and Beersheba, whilst holding the bulk of his forces at Tel es Sharia and near Huj until the Allies intentions and direction of advance could be determined. The garrison at Gaza consisted of seven infantry battalions, five artillery batteries and some machine gun companies, all told approximately 3,500 rifles and twenty artillery pieces.¹ Kressenstein's air cover had improved with the arrival of newer aircraft, the Turks continued to dominate the air, where bombing of horse lines was a particular threat to the Allies' mounted troops.

The Gaza position was a defended town located on top of a small hill three kilometres inland from the coast and five kilometres north of the Wadi Ghuzze. It was surrounded by two kilometres of cultivation, each of the small plots being bordered by thick cactus hedges, making the southern approach impossible. The western approach was considered impassable also, due to its high tangled sand dunes. The eastern approach, over the Ali Muntar ridge, was more suitable for the attackers, however it was defended by a strong Turkish position of its own.

The Allied intent was to repeat the style of manoeuvre employed successfully at both Magdhaba and Rafa, although on a larger scale. Due to the water situation, it was essential that Gaza be captured by nightfall. The general plan was for the mounted troops, including the NZMR Brigade, to form a screen to the north and east of Gaza, thus isolating the garrison from reinforcements from the north, or from Beersheba.

¹ Wavell, p. 70.

Once Gaza was isolated, a reinforced infantry division, the 53rd, was then to attack Gaza from the south.

The mounted troops crossed the Wadi Ghuzze before dawn, according to plan and moved around the east to establish their cordon. The ANZAC Mounted Division was positioned north of Gaza. A small force undertook a deception operation to the west. Due to a series of delays, the infantry were not in position to commence their attack onto Ali Muntar until midday. The delay was caused by a dense fog and the time taken by the infantry to move into position and undertake reconnaissance, which was under-estimated and probably excessive due to the limited combat experience of the assaulting infantry division. Once the attack was launched it came under heavy fire. Progress slowed further when the infantry attempted to penetrate cactus hedges on the approaches to Ali Muntar. In order to hasten the capture of Gaza, General Sir Philip Chetwode, Commander of the Desert Column, ordered the mounted troops to break from their cordon duties and attack Gaza from the north.

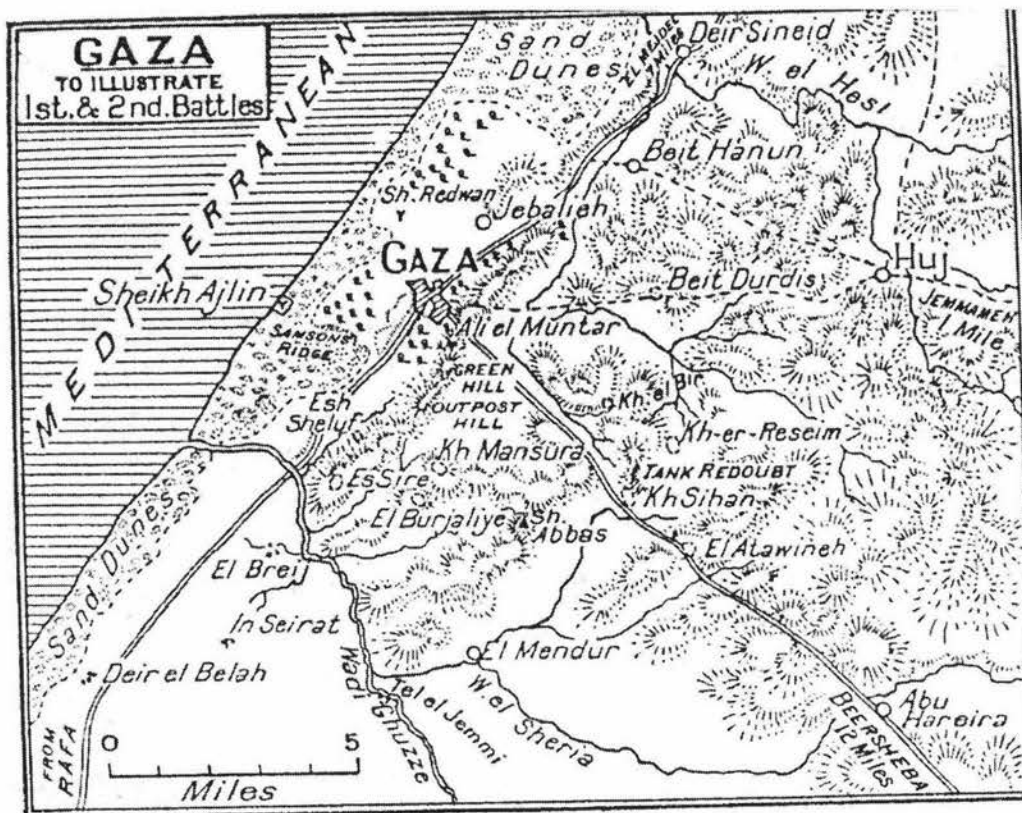
The ANZAC Mounted Division attack was launched at approximately 1600 hours, three hours after Chetwode's order was issued. The division attacked three brigades in line. 2nd LH Brigade was on the right, with the sea on its right and the Gaza Road as its left flank. NZMR Brigade was in the centre. 22nd Mounted Brigade advanced on the extreme left of the NZMR Brigade. Despite the hedges, the ANZAC Division's advance, dismounted, was 'rapid'.²

The NZMR Brigade attacked with two regiments forward (CMR and WMR), whilst the three AMR Troops available were maintained out of contact as the Reserve. The remainder of AMR were still out on screening duties, waiting to hand over to the Imperial Mounted Division. They remained out of action until the mounted troops were withdrawn after dark. Machine guns were allocated to CMR and WMR, four guns were maintained as a reserve. The WMR Official History describes the formation that the regiment attacked in:

The C.M.R. advanced along ANZAC Ridge and the W.M.R. along the valley, with the 6th Squadron extended from the right of the C.M.R. in two lines at fifty yards distance... , the 2nd Squadron (less one troop with Divisional Headquarters) following with two troops extended in support, 100 yards

² Powles, *The New Zealanders in Sinai and Palestine*, p. 90.

behind, and one troop on the right to protect the flank and to gain touch with the 2nd A.L.H. Brigade... The 9th Squadron followed in reserve, extended on a narrow front in two lines, 150 and 200 yards behind the 2nd Squadron.³



Map 6: Gaza I and II
Wavell, p. 72.

The formation described has 6th Squadron forward as Assault, the 2nd Squadron following behind as Support, whilst 9th Squadron trailed further back, as Reserve.

The battle proceeded as a series of minor attacks and dismounted charges. Turks were cleared in hand to hand fighting. Troopers used their bayonets to cut through the hedges that the Turks were concealed behind in order to close with them. Small charges were used to cover short distances quickly, the bayonet was put to good use:

a trench manned by the enemy and protected by a shallow lagoon in front offered some opposition, but two troops, under Lieutenants Allison and Foley

³ Wilkie, pp 135- 136.

respectively charged across the lagoon, which was only from twelve to eighteen inches deep, and put thirty two occupants of the trench to the bayonet.⁴

The Turks employed snipers. During one of the attacks, members of WMR captured some Turk field guns and turned at least one of them onto a house that had been difficult to neutralise, thus clearing it of snipers.⁵

Cactus astride the axis of attack made it difficult for the machine guns to keep pace with the infantry. As a result, no long range supporting fire was able to be undertaken. The machine guns supporting the CMR did very effective work in the anti- sniper role, although this function consumed large quantities of ammunition.⁶

By 1800 hours, WMR had got into the outskirts of Gaza. CMR and members of 53rd Infantry Division had linked up and were in possession of the Ali Muntar Ridge. At that point, an order was received that all mounted troops were to be withdrawn, much to the disgust of the troops. The decision was made because of the onset of darkness and the possibility of Turk reinforcements penetrating the outer cordon of the Imperial Mounted Division, now that it was thinly spread due to the commitment of the ANZAC Mounted Division to the attack on Gaza.⁷ With victory imminent, the attack on Gaza was abandoned and the troops retired across the Wadi Ghuzze.

Casualties were remarkably light. WMR had one soldier killed and sustained four officers and fifteen Other Ranks wounded.⁸ Casualty figures for CMR could not be located.

The tactics used by the NZMR Brigade demonstrated the use of supports and reserves within regiments. Limited reconnaissance was able to be undertaken as the attack tasks were allocated at short notice to support failed or failing infantry attacks. Machine guns continued to be used effectively, and assaults finished with the bayonet.

⁴ *Ibid.*, p. 136.

⁵ *Ibid.*, p. 137

⁶ Luxford, p. 199.

⁷ Powles, *The New Zealanders in Sinai and Palestine*, p. 93.

⁸ Wilkie, p.139.

From the abandonment of the attack until the second battle for Gaza in April, the NZMR Brigade participated in daily reconnaissance, patrolling and outpost duty. The right (south) flank of the Allied positions was vulnerable to Turk envelopment, so particular attention was placed on security duties in that direction. CMR's official history describes the conduct of a regimental strength outpost line duty at that time:

The Regiment would leave camp after dark with instructions to hold a line detailed on a map. Knowing nothing of the general formation of the country, on reaching the appointed place it was very hard to place the posts in the best positions, or where they could do most good in the event of being attacked. Usually two squadrons held the line in a series of detached posts, while the remaining squadron was held in readiness to support. Mounted patrols, each consisting of five or six men, were sent out at intervals during the night, patrolling, in open country, for two or three miles to our front.⁹

Corporal McMillan of CMR noted that both the Turks and Allies might use the same high ground for Observation Posts, requiring NZMR patrols to approach with caution in case their intended patrol position was already occupied by the enemy. Even if it were, McMillan records that an attempt to capture the enemy might still be possible:

[The] tendency of the enemy to open fire on our scouts while still some distance away indicated that only a few of them occupied the post. This being so, it was decided that our patrol should attempt to capture a post...¹⁰

The plan was that the patrol would advance in extended line towards the possible enemy location. Once the Turks opened fire at extreme range, it would be determined from their fire whether or not the Turks were in great strength. If they were not, the Troop would split into two sections and gallop around each side of the hill to cut the Turk patrol off as it attempted to escape. There is no record of whether this tactic was successful or not, however it indicates a degree of confidence that the New Zealanders had in themselves and that they were capable of developing their own innovative tactics. It also confirms that forward scouts were used, even for small patrols, demonstrating that the New Zealanders appreciated the need to keep forces out of contact so that they could manoeuvre against the enemy.

⁹ Powles, *Canterbury Mounted Rifles*, p.149.

¹⁰ 1997 10503 Memoirs of Corporal McMillan ('*Forty Thousand Horsemen*'), p. 158, , Kippenberger Military Archive and Research Library (Army Museum, Waiouru).

In the meantime, the Turks improved the Gaza defences significantly, strengthening the defence of Gaza itself and developing a continuous line of redoubts between Gaza and Beersheba.

Second Gaza: 17- 19 April 1917

The second attack on Gaza was to be an infantry attack, just as Gaza I had been, except that this time all infantry available was to be employed. The main attack would be a frontal assault by the infantry, from the south, on a frontage of 15,000 metres. The Imperial Mounted Corps was to screen the right flank of the attack from enemy interference.¹¹ The attack was supported by 150 guns, one gun per hundred yards of assault frontage, considerably less than was required, especially as Turk defences were now well prepared.

The first two days of the attack were uneventful for the Desert Column. The NZMR Brigade formed part of the screen and was therefore not in contact with the main enemy forces. Only one infantry attack was successful, elsewhere all failed. On the third day, WMR was ordered to support an Imperial Mounted Division attack onto 'Sausage Ridge'.

At 0930 hours WMR was sent to support an attack 5th Mounted Brigade of the Imperial Mounted Division. When Lieutenant Colonel Meldrum (CO WMR) reached Sausage Ridge, at 1100 hours, his first action was to undertake a reconnaissance of the objective, with the Officer Commanding the Inverness Battery, before committing WMR to attack at 1130 hours. 6th Squadron led the attack along Sausage Ridge, with 9th Squadron in right rear as Support and 2nd Squadron held in reserve. The attack was supported initially by the Inverness Battery and four machine guns. As the attack progressed, more artillery arrived. In the end, a total of ten guns were firing directly in support of the WMR attack. The Turks reinforced the redoubt that was WMR's objective, slowing the attack. Colonel Meldrum then committed his reserve squadron.

¹¹ Wavell, p. 88.

The machine guns sections supporting the attack played a significant role, with the personal actions of Second Lieutenant L.A. Craven leading to the award of the Military Cross.

With bold handling the guns were pushed forward, engaging many enemy targets at ranges from 1000 to 1600 yards, and inflicting heavy casualties. Craven's work was of particularly high order; he personally reconnoitred the positions for the guns, which enabled them to play such havoc among the enemy. About 3 p.m. he observed a large enemy party advancing through a field in heavy crop. Holding fire until the enemy party were 400 yards, he gave the order to open fire; the waiting gunners did not take a second to respond, and had the extreme satisfaction of wiping out the advancing Turks.¹²

The Turk counter attack was defeated by concentrated fire at close range. Opening fire at greater range would have caused the Turks to go to ground from where they could continue to fire at the defenders. Craven's tactic was a good one for it allowed the attackers to get closer and therefore become more vulnerable. Unfortunately, Craven was to die of wounds received later in the battle. The account above highlights the role of the officer in siting machineguns and controlling their fire thus achieving the maximum effect.

An officer would be left in overall charge of the led horses. This was no easy job, especially if there was little cover available, as the horses became easy and valuable targets for Turk aircraft and artillery. The officer in charge of the Machine Gun Squadron's led horses is typical of the situation generally experienced, where he:

had a very anxious time with the horses. The country was devoid of cover, and the only way of protecting them was to divide them up into small groups, well apart, and hope for the best. The aircraft and 5.9's paid them particular attention all day, but, fortunately, only a dozen or so were hit.¹³

The Turks counterattacked the WMR right flank. The attack was held by concentrating all ten field guns onto it. The Turks were also pressing seriously

¹² Luxford, pp. 202-203.

¹³ *Ibid.*, p. 203. 5.9s are Turk artillery pieces.

against all other Allied sectors, so a general withdrawal was decided upon. The force withdrew after dark.

WMR's total casualties for the day were one soldier killed and twenty three wounded. This action provides a good example of a combined arms attack, for whilst the attack did not ultimately seize its objective, it came close and fought vastly superior numbers, for few casualties. Concentrated machine gun and artillery fire proved very effective at defeating determined counter attacks. Sound leadership was also a feature of the WMR attack. Once the decision to withdraw had been made, one of the Squadron Commanders indicated that he was in a position to capture the redoubt. However, the CO refused him permission to attack on the basis that capturing the objective would cause needless casualties when it would have to be abandoned anyhow.¹⁴

CO WMR preceded his attack with a personal reconnaissance of the objective. This was consistent with FSR instructions to commanders in this matter, that:

Time spent in reconnaissance is seldom wasted: and unless the situation demands instant action, a commander of a division or of a smaller unit should never commit his troops to an engagement until he has made a personal survey of the ground before him.¹⁵

Despite the need to get on with the attack, time taken to survey the ground, identify the enemy and formulate a plan was essential. CO WMR allocated a standard battle grouping of a squadron in assault, a squadron in support and a squadron in reserve.

Occupation of Wadi Ghuzze Line: 20 April 1917

Following their second defeat at Gaza, the Allies paused and established defensive positions along the Wadi Ghuzze. The NZMR Brigade, along with the ANZAC Mounted Division and infantry divisions dug trench lines and constructed strong points. During this defensive phase, the mounted troops undertook extensive patrolling towards the Turk defences and into no mans land.

¹⁴ Wilkie, p. 146.

¹⁵ General Staff, War Office, *Field Service Regulations Part I, Operations 1909*, reprinted 1912 with amendments, His Majesty's Stationery Office, 1912, p. 117 Bold type in the original.

While the Allies undertook defensive operations, they also took the opportunity to reorganise some of their forces. The Desert Mounted Corps was formed, consisting of the ANZAC Mounted Division, the Imperial Mounted Division and the Yeomanry Mounted Division. Major General Chauvel was appointed to command the Desert Mounted Corps. Brigadier General Chaytor was appointed GOC ANZAC Mounted Division. Lieutenant Colonel Meldrum, CO CMR, who it will be recalled planned and executed a successful regimental attack onto Sausage Ridge, became GOC NZMR Brigade. The appointment of Chaytor as Division Commander, particularly as the Division was predominantly Australian, says a lot for the high regard in which Chaytor was held.¹⁶

The NZMR Brigade undertook extensive patrolling, some of it by night, as is indicated in the extract from Brigade Special Order Number 24, shown in Appendix 2.¹⁷ The purpose of this patrolling was to locate and destroy Turk patrols operating forward of Beersheba, in no mans land. A night action is designed to dominate no mans land and thus reduce the threat posed by enemy reconnaissance elements. The patrol mentioned above had been established as an anvil and hammer operation. CMR was to establish a blocking position (the anvil) near Kh Khasif, while the rest of the brigade would advance (the hammer) towards the CMR block. If patrols were encountered in the dark, they were to be killed quietly, if possible, using the bayonet, so as not to compromise the overall operation. The night occupation, blocking and movement in order to surround the objective before dawn, are reminiscent of Boer War operations undertaken by the New Zealanders.

There is no record of how this patrol fared. The Official History only records that 'July found the brigade back in the front line at Tel el Fara, patrolling, reconnoitring and stirring up the Turk'.¹⁸ Other patrols were on a much smaller scale and were directed at reconnoitring the enemy defences along the Gaza Beersheba line,

A small patrol under an officer would go out at night to test or examine some portion of the Turks line. The party would ride on a compass bearing close up to the objective. Then a selected few would dismount and spend a few hours

¹⁶ Hill, p. 173. Chaytor was General Chauvel's choice to succeed him as Divisional Commander, when he himself was appointed Corps Commander.

¹⁷ 2001.660, WMR Regimental Orders, Book #2, 30 May 1917- 14 July 1917, NZMR Brigade Special Order No 24 of 9 July 1917, Kippenberger Military Archive and Research Library (Army Museum, Waiouru), no page number.

¹⁸ Powles, *The New Zealanders in Sinai and Palestine*, p. 122.

on foot in among the Turk patrols, examining, listening and noting down tracks, movement, trenches and above all water.¹⁹

The actions of Second Lieutenant William Hollis (of WMR) during reconnaissance of the enemy lines at night illustrate a little of what 'close reconnaissance' work entailed:

This officer volunteered for and led a small patrol which crawled forward and reconnoitred SANA redoubt from KHIRBIT ERK. Although the Garrison was alert he accomplished the mission. The only weapon carried by him was a knife and although he was followed by a small party of enemy while carrying out the reconnaissance he eluded them and brought back valuable information. On the night of 14th/ 15th August this Officer again led a small patrol in the direction of SANA and brought back valuable information. His courage and devotion to duty is a fine example to the men.²⁰

That Hollis had abandoned his rifle whilst undertaking the close reconnaissance on his own shows the risks that were undertaken when operating extremely close to the enemy, in order to minimise the chance of compromise. On at least one occasion Hollis was detected but managed to escape. For his actions, Hollis was awarded the Military Cross.

Corporal McMillan's comments show that patrol members rode ready for instant action:

advance and flank guards carry their rifles unslung from the back with a cartridge in the breech and the safety catch applied. The weapon was then carried in the hand, pointing diagonally to the front and ready for firing immediately the safety catch was released.²¹

In June 1917, General Sir Archibald Murray was recalled to England and replaced by General Sir Edmund 'Bull' Allenby. The British War Cabinet had already decided to reinforce the Egyptian Expeditionary Force in order that Palestine could be conquered and the Turkish forces drawn from other theatres. On his arrival, Allenby

¹⁹ *Ibid.*, p. 122.

²⁰ NZMR Recommendation dated 12th September 1917 WA 40/4/11ii (National Archives Head Office, Wellington).

²¹ 1997.503 Memoirs of Corporal McMillan (*'Forty Thousand Horsemen'*), Kippenberger Military Archive and Research Library (Army Museum, Waiouru), p. 167

completed a thorough inspection of his command. Allenby's strength of character and purpose energised the Allies. Following briefings from his staff, Allenby determined that the only reasonable course of action was to turn the Turk flank near Beersheba, but that this would require additional forces, a significant amount of preparation and could only work if the Turks believed the attack was still directed at Gaza. He requested two additional infantry divisions, more field and heavy artillery, five squadrons of aircraft and additional engineer and medical units from Great Britain.

During the build up, mounted forces undertook a significant number of patrols and operations, designed to gather information, deny the Turks knowledge of Allied plans and, most of all, for the Turks to become accustomed to seeing large Allied mounted formations in the direction of Beersheba.

Between operations, the NZMR Brigade undertook training. Entries within WMR's Regimental Orders indicate the type of training undertaken within the Brigade. They reveal that members of NZMR Brigade undertook musketry and bombing training during this time, although the 'training' value in the musketry was limited to a grouping practice with five rounds only per man. A grouping practice is essentially target practice, the firer aims at one point on the target and attempts to land his shots with the smallest spread (group) on the target possible. The extracts, below, from WMR's Regimental Orders book indicate that grouping practices were fired from both 100 and 300 yards:

Order 808 Musketry 13-6-17

9th Squadron will carry out firing on Range tomorrow at 0800.
Practice. Grouping 100 yards 5 rounds

Order 833 Bombing 13-6-17

2nd Squadron will parade at O.R. tomorrow 1315 for instruction in live throwing

Order 919 Musketry 29-6-17

The Regiment will fire the following practices on the range tomorrow-application 5 rounds 300 yards. 6th Sqdn will start at 0500. The 9th Sqdn at 0930. The 2nd Sqdn at 1400. ²²

It is not recorded whether the musketry training was undertaken as a matter of course during 'quiet' periods, whether it was due to poor shooting on previous

²² 2001.660, WMR Regimental Orders, Book #2, 30 May 1917- 14 July 1917, Kippenberger Military Archive and Research Library (Army Museum, Waiouru), Orders 832, 833 and 919, no page numbers.

operations or whether it was as a result of the men receiving new rifles on 1 June 1917. Nevertheless, shooting was an important skill, for the risks whilst rushing forward under enemy fire were greatly reduced if the supporting fire was reasonably accurate, causing the enemy to become casualties or at least keep their heads down. 'Reasonably' accurate implies the weight of fire generally falling in the target area has the effect needed, rather than lots of highly trained marksman, especially when so little of the enemy is actually visible to act as a target.

Corporal J.K. Hull of CMR wrote a number of letters during the campaign, mostly to his parents. His letter of 26 September 1917 was different to previous ones as he had just learned that his brother, Burton, was in training in New Zealand prior to being sent to the Middle East as a mounted rifles reinforcement. So Hull wrote a long letter to his parents, to be passed to Burton. The letter contained advice based on his combat experience to date. The extracts below have particular relevance to marksmanship and to the difficulty of actually seeing the enemy,

keep low in a scrap... do not delay in firing because you think you cannot hit the mark. It is only a very small majority of chaps who are hit by shots aimed directly at them. Put your shots if possible a foot or two over the spot you think the enemy's front line is. Anyone just behind the front line is as a rule not so well down as the foremost and so gets it.

You will perhaps hear chaps talking of the Turks they have shot- as a rule you don't know. The only ones I am sure of were about fifty yards off when there was no mistaking. I am sure that more than one Turk thought he had me- on several occasions when the bullets are coming too persistently to be chance shots I have shammed dead and then made a bolt for it. You will think I have given you a terribly long sermon but that is how I have found things.²³

Beersheba: 29 October – 4 November 1917

Allenby's general plan was to use the mounted divisions to outflank the Turk line at Beersheba, then roll the enemy up from the east, back towards Gaza. To achieve this he had to convince the enemy that his intended point of attack was still Gaza,

²³ 1993.1039 Letters by John Hull, Letter to Father and Mother dated 26 September 1917, Kippenberger Military Archive and Research Library (Army Museum, Waiouru), pp 4-6. The brothers met up during the campaign, they even took leave together at one point. They both survived the war.

from the south. The deception was supported by retaining all troops in the west until the last possible moment and by regular patrols east towards Beersheba that amounted to nothing in the Turks eyes. A deception plan, executed by Colonel Richard Meinertzhagen of Allenby's Intelligence staff, supported the plan and upgraded air forces kept Turk aircraft from allied airspace and thus from detecting troop concentrations and moves.²⁴

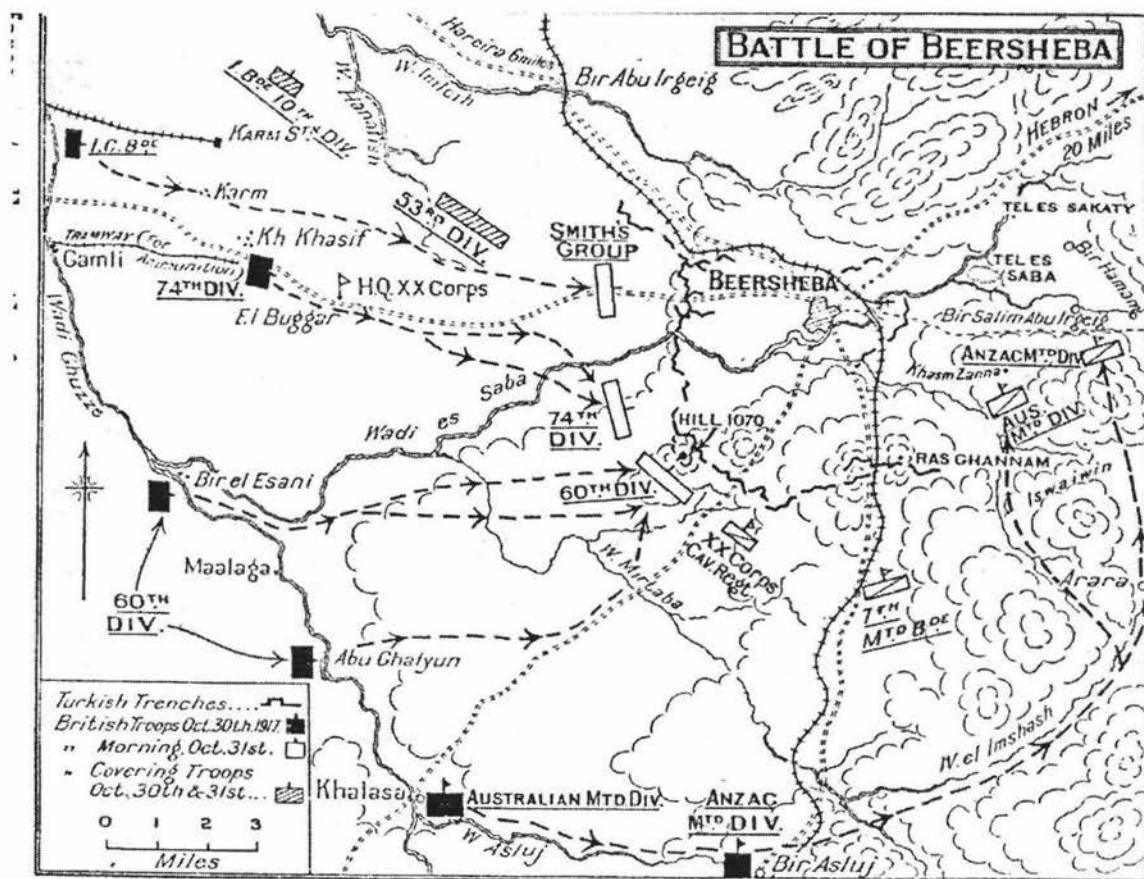
By 29 October 1917, the NZMR Brigade was located in Esani, ready for the start of the third attempt on Gaza. At this time the brigade's fighting strength was 1973 All Ranks, of a theoretical strength of 2260, as given in Chapter Three. The NZMR Brigade's Operations Order for the attack details the overall Army, Corps and Division plans. The Desert Mounted Corps task makes the overall concept plain which was 'To attack BEERSHEBA from the EAST so as to envelop the enemy's left rear' and 'To seize as much of the water supply as possible in order to form a base for future operations NORTHWARDS.'²⁵ The Division commenced movement at 1800 hours the night before the attack. WMR formed part of the Advance Guard for the move, but upon reaching a certain cross roads was to detach an act as Advance Guard or Left Flank Guard to the Australian Mounted Division.

NZMR travelled within the Division's Main Body.²⁶ The NZMR Brigade's order of march, noting that WMR was detached, was: Brigade Headquarters, Signal Troop, CMR, Machine Gun Squadron, AMR, Mounted Ambulance, then 'A' Echelon. Upon nearing the attack point, the NZMR Brigade was to assume the role of Advance Guard. This would better position them for their key task which was, as part of the ANZAC Mounted Division, to 'make good' (secure/ capture) the high ground of Tel Es Saba and Tel es Sakaty. Meanwhile, the Australian Mounted Division would be held to the rear of the ANZACs, prepared to advance 'WESTWARDS on BEERSHEBA or NORTHWARDS to assist the ANZAC Mounted Division.'

²⁴ Two of these ruses included the deliberate 'loss' of a staff officer's blood-stained satchel containing fictitious notes and maps and the spreading of rumours about an Allied plan to conduct an amphibious landing behind Gaza. General information about the measures used and an account by Meinertzhagen are to be found in Anthony Bruce, *The Last Crusade. The Palestine Campaign in the First World War*, John Murray (Publishers), London, 2002, paperback edition 2003, pp. 119- 120.

²⁵ NZMR Brigade Order No 35 dated 27th October 1917 WA 40/3/2 (National Archives Head Office, Wellington).

²⁶ The Main Body in the advance consists of the bulk of the force, essentially all those not detailed for security duties as part of the Advance Guard, Flank Guards or Rear Guard. The force generally moves in a more administrative fashion as its front and flanks are protected by Guards.



Map 7: Beersheba
Wavell, p.114.

The ANZAC Mounted Division reached its first objective, largely unopposed by 0800 hours on 31 October. Movement towards the next objective began at 0900 hours, and the advancing ANZACs soon came under intense enemy shell fire. 2 LH Brigade attacked and secured Tel es Sakaty. The NZMR Brigade's objective was the key terrain of Tel es Saba (Hill of Sheba), which dominated the rear of Beersheba.

The NZMR Brigade, with 3rd ALH Regiment attached, commenced its attack at 0910 hours. AMR attacked direct towards the Tel while CMR was directed to move to the AMR's right flank and envelop the Tel from the north. 3rd ALH Regiment was retained as Brigade Reserve. The Somerset Battery supported the Brigade attack from a range of 3000 meters. AMR's history describes the attack. The first stage was to close with the enemy and establish a firing line:

At 1,800 yards from the enemy position the 11th Squadron dismounted, and continued to advance on foot; the other two squadrons... rode on under cover

of the north bank of the wadi to a point 800 yards from the objective. From this point the 3rd and 4th Squadrons moved on foot into a position on the left front of the 11th. The advances were made a troop at a time, the machine-guns being pushed on to give covering fire.... At 2 p.m. when the Regiment was in line, orders were issued for a general attack ten minutes later. Promptly to the second the line moved forward in short rushes, the covering fire of our artillery and machine-guns being excellent.¹²⁷

During the AMR attack, accurate artillery fire was directed onto the enemy's machine gun positions through the expedient of having the Battery Commander accompany the Commanding Officer (CO). The CO's requirements were then passed directly to the gun line by flag signals.

Again the New Zealand Machine Gun Squadron played a significant part in the action, with the actions of the guns in support of AMR described in the Squadron's official history:

2nd Lieut. Picot took his two guns forward with the leading Squadron, coming into action on the right flank of the enemy position at ranges of 1000 yards to 1400 yards. As the troopers advanced, Picot pushed his guns within 500 yards of the enemy position, which enabled him to bring oblique fire to bear right along the Turkish line.²⁸

As the troopers closed with the enemy, Picot took one gun forward, leaving the other to continue providing covering fire, which he then called forward when the first gun was in a position to continue firing. Picot charged in with the final assault, single handedly capturing an enemy machine gun and its crew.

The attack cost AMR six killed and twenty two wounded.²⁹ One of those killed was a Squadron Commander, Captain Ashton, illustrating the real risks for a leader caused by exposing oneself during the assault when determining enemy locations and passing orders. Sixty prisoners and three machine guns were taken.³⁰ The NZMR Brigade then held the Tel, which received the attention Turkish artillery. From there

²⁷ Nicol, pp. 156- 157

²⁸ Luxford, p. 206.

²⁹ Nicol, p. 158. 'The A.M.R. suffered practically the whole of the brigade's casualties ...'

³⁰ *Ibid.*, p. 157

they were able to observe the now famous 4th LH Brigade charge which over ran the defences of Beersheba and led ultimately to the collapse of that portion of the line.

In his thesis on the evolution of tactical manoeuvre of Australian Light Horse during the campaign, Major Edwin Kennedy asserts that the ALH charge at Beersheba was a major turning point for Australian mounted forces. From that point, Australian tactics changed and the mounted charge, of which Kennedy states there were 'upwards of thirty' in the final twelve months of the war, became the norm. The lack of barbed wire obstacles at Beersheba, and in Turkish defensive positions during subsequent attacks, he believes, 'set off a series of cavalry actions not seen before in the Eastern theatre or the Western Front.' The complete change in tactics did not occur within the ANZAC Mounted Division, although some minor mounted charges did occur on occasion. Kennedy notes that despite the Australian Mounted Division re-arming with swords, reflecting a change to mounted tactics, General Chaytor declined to do this preferring to fight his division as mounted rifles.³¹

Attacks undertaken at Gaza II (at Sausage ridge) and onto Tel es Saba, demonstrated sound tactics, in keeping with the guidelines within YMRT. For the attack onto Sausage Ridge, Lieutenant Colonel Meldrum conducted a reconnaissance first and then mounted an attack that was well coordinated with artillery and machine guns. He employed a squadron sized reserve, which he was later able to commit because he had retained it out of contact. The machine gun officers employed their weapons wisely and their concentrated fire, both enfilade and inter-locking, proved to be deadly. Patrol actions before Beersheba saw the emergence of small group reconnaissance specialists, who would get close to or even behind Turk lines, in order to gain information. Finally, the NZMR Brigade attack on Tel es Saba, with Meldrum now Brigade Commander, was a model attack. While one regiment attacked direct, a second attempted to envelop the enemy, whilst the third regiment was maintained as the reserve.

Action at Ayun Kara: 14 November 1917

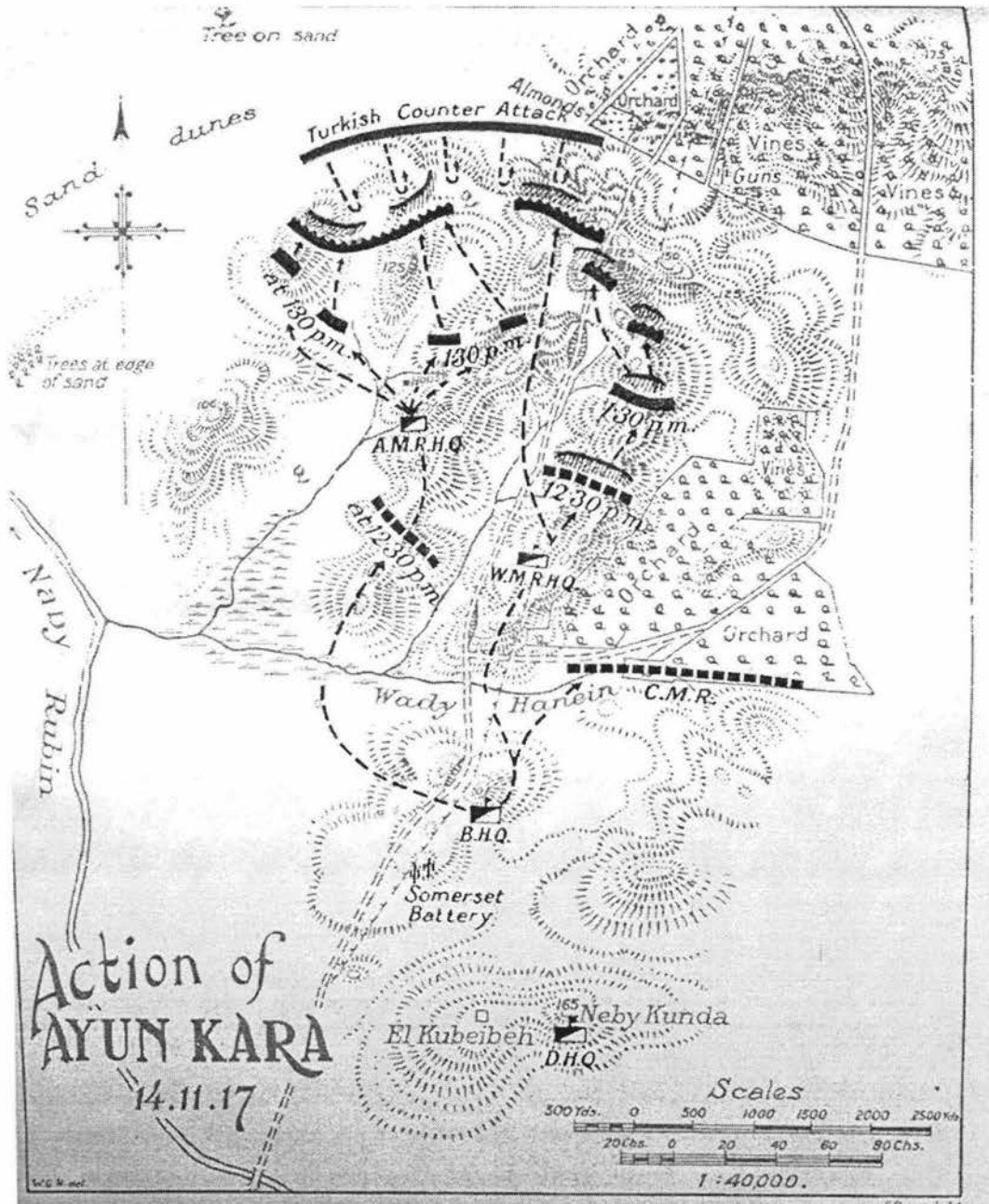
Having broken the Turkish line at Beersheba, Allenby's plan was to aggressively pursue the Turks. This did not occur. Not only was there insufficient water available

³¹ Kennedy, pp. 132-133.

to support a pursuit, but Turkish rearguards supported by artillery and aircraft, mounted strong resistance. By 7 November, however, the Turkish forces had been effectively cut in two, with the Turkish VII Army retiring north along the coast towards Jaffa whilst the Eighth Army withdrew towards Jerusalem. The ANZAC Mounted Division was transferred to the coast, which required the NZMR Brigade to undertake a forced march of 83 kilometres, and then take part in the follow up of the Turkish VII Army.

During the advance, the NZMR Brigade conducted a quick attack onto an enemy position near Ayun Kara. CMR, moving as Brigade Advance Guard, had been skirmishing with Turk security elements from 1100 hours, but by 1200 hours CMR was held up at the Orange Orchard. The Turks had established an entrenched delay position on a series of hills to the north of Wadi Hanein. General Meldrum issued verbal orders for a brigade attack at 1230 hours. The allocation of tasks was, 'The W.M.R. (dismounted) along the main ridge (on which there were several entrenched positions), The A.M.R. (mounted initially) on the projecting ridge to the left, the Somerset Battery and the Machine-gun Squadron to support the attack'.³² Two squadrons from CMR were detailed to be the brigade's reserve and were instructed to remain at the south end of the main ridge. Essentially, WMR was directed at the main enemy positions on the high ground whilst AMR was protecting the WMR left flank and looking for an opportunity to envelop the enemy from the west. AMR was supported in this by the allocation of six machine guns from the Machine Gun Squadron.

³² Wilkie, p. 167



Map 8: Ayun Kara
Powles, *Sinai and Palestine*, p. 144

The attack started with the regiments advancing in line of troop columns under long range enemy machine gun fire. 'In *line of troop columns*, the squadrons, themselves all *in line of troop columns*, are side by side at such an interval that when troops are

formed the regiment is in line.³³ Such a formation allowed a rapid transition of the regiments into line, although afforded no depth.

WMR closed quickly towards their objective, its advance covered by artillery fire. The first objective, entrenchments on a knoll, was captured by 9th Squadron, supported by a troop from 6th Squadron. The troopers advanced under their own covering fire until close enough to charge in with the bayonet. Once this position was secured, 9th Squadron continued on towards the regiment's second objective. This position was also captured by a bayonet charge. The regiment then proceeded towards its third objective, a line of trenches on a ridge line across their front, all the while drawing ahead of AMR and thus becoming exposed on their left flank.

On AMR's axis of approach, there was high ground which 3rd Squadron was sent to secure while the remaining squadrons sought cover from direct enemy fire in dead ground. Lieutenant Colonel McCarroll, CO AMR, moved forward to 3rd Squadron in order to get a better view of the enemy and the ground to his front. WMR proceeded onwards, the situation at this stage is reflected by the 12.30 p.m. lines on Map 8.

As WMR continued to advance, an enemy cavalry force, possibly a counterattack element aiming to strike WMR's exposed left flank, was detected by CO AMR. He immediately instructed 11th Squadron to direct their advance towards this emerging threat. 11th Squadron's approach (the two western-most tracks from the A.M.R. H.Q. location on the map) was held up by fire so CO AMR despatched two troops of 4th Squadron galloping directly at the cavalry threat. (Shown by the two right hand tracks at 1.30 p.m.) 3rd Squadron provided sufficient covering fire to allow the 4th Squadron troops to reach ground from which they could dismount and fire on the enemy.

A forward and isolated troop was attacked by Turkish cavalry, and was in danger of being overrun. Colonel McCarroll sent in all available troopers, including signallers, gallopers and batmen, while he urgently ordered 3rd Squadron to leave their high ground to the rear, and come forward.³⁴ As a result the enemy were held. By 1415 hours a hasty line of defence was established by AMR.

³³ YMRT, p. 106.

³⁴ A galloper is a mounted trooper who accompanies the CO and delivers messages, by hand, from the CO to the Squadron Commanders or to the Brigade Commander. Squadrons would provide a trooper as Galloper, it would be a 24 hour duty, then another member of the squadron would be detailed for the task.

At 1445 hours the enemy made a strong attack against AMR, supported by artillery and machine guns. Fortunately WMR had pressed forward, and whilst there was a small gap between WMR and AMR, there was a reasonable line to defend along. Machine guns on both sides now played crucial roles. Turk machine guns prevented further movement or adjustment of positions within the AMR- WMR line, while NZMR machine guns took a high toll on the attackers.

A second counter attack force, estimated to be 600 infantry, came close to penetrating the line. This force was held off largely by the machine guns and by Captain A. Herrick and two troops of 2nd Squadron, WMR, who were called forward from depth. Under heavy fire, they dismounted two hundred yards short of the Red Knoll, charged forward and captured it in hand to hand fighting. They then delivered enfilade fire against the enemy counter attack force. This enfilade fire caused the enemy attack to falter, the Turks then withdrew hastily into the cover of an orchard.³⁵ The counter attack was over.

This excerpt from the Machine Guns' history highlights the benefits of brigading machine guns: Picot, Armstrong and Kelly were the three subalterns who were each in charge of a machine gun section of two guns, making up the six guns supporting AMR:

Up to this time, most of the opposition had come from the Wellington front, but, almost without warning, a strong enemy attack was launched from concealed positions straight at the Auckland front. Picot immediately switched his guns around, being now on the right of the line attacked. Armstrong rushed his guns further out to the left, and this enabled him to crossfire with Picot over the Auckland front, and they both poured enfilade fire into the lines of charging enemy. Lieut Kelly had in the meantime brought his guns to the centre of the line between Picot and Armstrong, and met the enemy with point blank frontal fire. The fire of the six guns ably supported by the Hotchkiss and Rifles, beat back the enemy when about 25 yards from the guns. Several gunners were knocked out by hand grenades and four guns were eventually put out of action. The gunners had to revert to rifles and revolvers at the last; but the attack was broken.³⁶

³⁵ Nicol, pp. 162- 165.

³⁶ Luxford, pp. 209- 210.

Massed machine gun fire had proved decisive. Interlocking arcs of fire between the sections of Picot and Armstrong was especially effective. Armstrong clearly recognised the effect that could be produced and so displaced further out to the left (into less secure ground, so at some risk) so that he could achieve that. At such close range, artillery would not have been able to provide the close in covering fire, both in the speed with which it would have to react and in the proximity to own troops, therefore the attack had to be defeated by infantry weapons.

Having defeated the counterattack and being able to progress no further that night, the Brigade established a defence in situ, ready to resume the attack next day. In the morning, the Ayun Kara position was found abandoned.

The casualties sustained by the NZMR Brigade in this action were particularly heavy when compared against those from any previous engagement. AMR had 15 killed and 74 wounded, reflecting their key role in defeating the strong enemy counter attack. WMR sustained eight killed and 44 wounded, CMR one killed and six wounded and the Machine Gun Squadron eight killed and 18 wounded. In all, 32 men were killed and 142 wounded. One hundred and sixty Turks were killed and many more wounded.³⁷

The NZMR official history describes the action as a:

brilliant battle, in which the Brigade had attacked and captured a strong natural position held by an enemy in superior numbers, and this force was backed by a well-concealed battery and held trenches with the aid of numerous machine guns ... there was the advance mounted under the cover of artillery fire to successive fire positions; the rapid seizure of small tactical features at the gallop; the outflanking of the enemy position by aid of the mounted man's mobility; and finally there was the magnificent mounted charge by which the red knoll was captured.³⁸

The New Zealand action was successful, but at some cost. It was certainly testament to magnificent leadership and to the fighting spirit and courage of the New

³⁷ Nicol, p. 165.

³⁸ Powles, *The New Zealanders in Sinai and Palestine*, p. 150. The 'mounted charge' is rather overstated, as the two troops were forced to dismount 200 yards short of the objective 'in the face of intense machine gun and rifle fire.' (Wilkie, p. 169.)

Zealanders, but, it was hardly a 'brilliant' battle.³⁹ By attacking with all three regiments forward, the Brigade Commander was unable to shift the point of his attack, and thus the Turk counter attack onto the left flank was only just held. CMR was pinned down early, on the right, and therefore unable to assist the attack other than by covering the right of WMR, yet CMR received so few casualties. Had a full regiment been retained in reserve, or in depth, kept out of action and then sent in to support AMR, the result may have been less costly. Mounted movement was undertaken to reposition troopers quickly to seize dominating ground, and two troops of 2nd Squadron WMR were able to gallop to within 200 yards of the Red Knoll before having to dismount under fire and continue to attack. The location of CO AMR is a good example of why a commander needs to be forward; so that he can sense the battle and make timely decisions.

On 16 November, the NZMR Brigade entered Jaffa. The brigade then established a defensive line on the outskirts of Jaffa, near the river Auja. From there, patrols undertook reconnaissance of the river to locate possible crossing points of which there were determined to be only three, all covered by the enemy. Meanwhile, the Allies advanced eastwards towards Jerusalem against firm opposition, leaving the ANZAC Mounted Division in the west at Jaffa.

A defence along the line of the River Auja was adopted while other Allied forces advanced towards Jerusalem. The Turks evacuated Jerusalem on 9 December, General Allenby entered it formally on 11 December.⁴⁰ The NZMR Brigade was then withdrawn back to the rail head at Ashdod where it conducted training until mid January 1918, before it moved up to a bivouac nearer the front at Ayun Kara. General Allenby commenced operations in February 1918 to capture Jericho and clear the Turks west of the Jordan, as a pre-cursor to operations east of the river.

³⁹ In particular, the actions of Lieutenant Colonel McCarrroll, Major Twistleton, Captain Herrick and the three machine gun subalterns undoubtedly saved the day. McCarrroll was wounded, but stayed on the field until the counter-attack was defeated and he had re-organised his regiment for defence against an enemy night attack. Twistleton died of wounds sustained in the battle. Herrick was wounded twice in the action, but stayed on directing his men and was then killed. For his actions that day he was recommended for the Victoria Cross (Wilkie, p. 171).

⁴⁰ von Kressenstein, p. 512. Jerusalem was evacuated because the Turkish commander ordered an evacuation due to a false report he received that his western defences had all failed. '... the moral effect of its [Jerusalem's] capture, after having been in Turkish hands for 700 years... was a severe blow to the prestige of the Caliphate and of Turkey.'

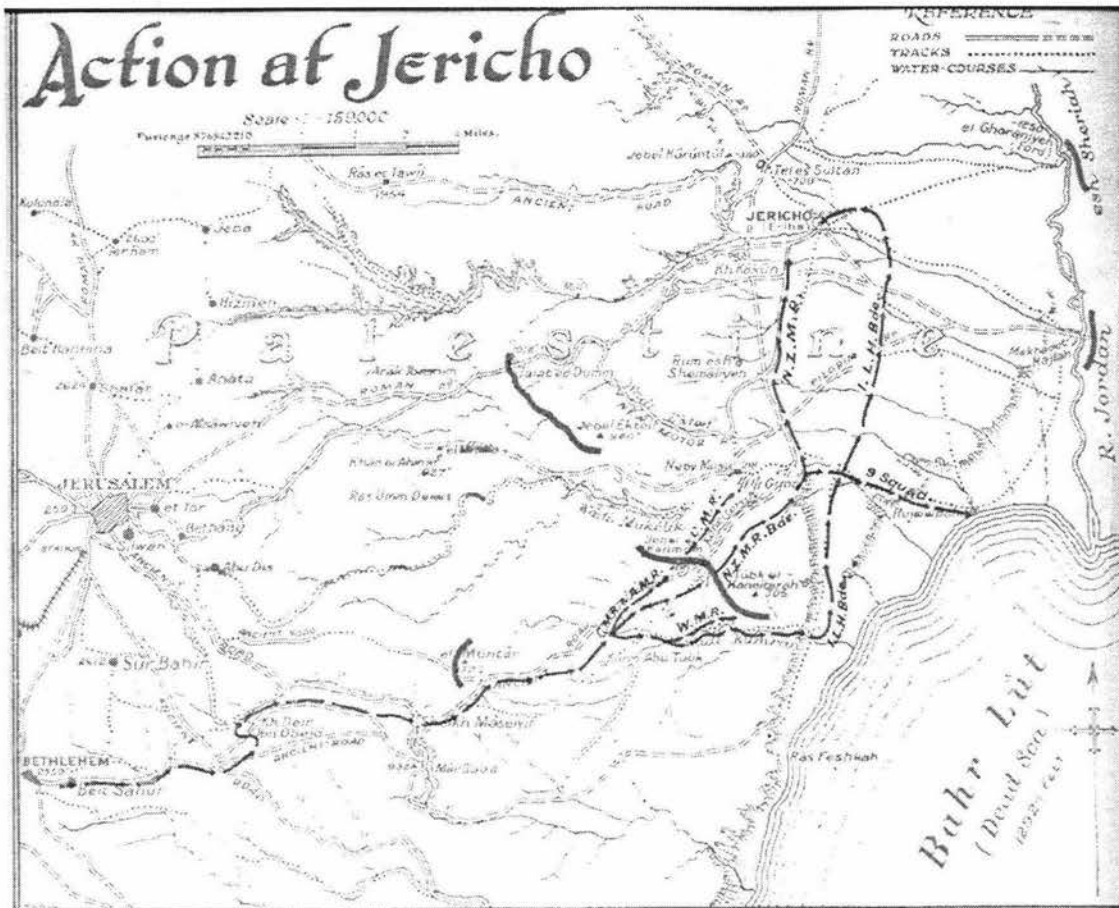
Action at Jericho: 19- 21 February 1918

By 17 February, the NZMR Brigade was located at Bethlehem, with WMR and a section of machine guns six miles further east along the Ancient Road leading to Jericho. From this point, WMR conducted reconnaissance towards Jericho and the Turk position of El Muntar. A typical reconnaissance is the one undertaken by two volunteers; Sergeant Fitzgerald and Corporal Patton, who on the night of 18 November, infiltrated behind enemy lines as far as Neby Musa. On re-joining the Brigade on the 20th, they were able to report enemy strengths and locations, including the location of three Turk guns.⁴¹

Orders for the advance towards Jericho were received on 18 February. Mounted forces would advance along the southern axis, while the infantry would take the more direct route of the Roman Road between Jerusalem and Jericho. The mounted troops, especially WMR, would be required to 'assist' infantry operations against the enemy near Talat ed Dumm and Jebel Ektief, from the southern axis. That afternoon, CO WMR and his squadron commanders undertook a reconnaissance east towards El Muntar so that they would be more familiar with the ground over which they would be advancing the following night. General Chaytor's intention for this operation was to use the mounted troops to assist the infantry attack onto Jebel Ektief by threatening the retreat of the enemy though Jericho and to cut off as many enemy as possible. He wanted the remainder driven over the Jordan, Jericho secured and any boats that could be used to assist future Allied crossings captured.⁴²

⁴¹ Wilkie, pp. 183- 184.

⁴² NZMR Brigade Order No 36 dated 18th February, 1918 1917 WA 40/3/2 (National Archives Head Office, Wellington).



Map 9: Action at Jericho
Powles, *Sinai and Palestine*, p. 176

In the event, it was well into the operation before the Division could advance on the broad front envisaged by the Division Commander, and cutting off the enemy would prove near impossible due to lack of suitable alternate routes to exploit.

W.M.R. moved at last light on the night of 18 February, leading their horses on foot, as Advance Guard. The axis of advance was a very narrow 'goat track', all wheeled transport, and all guns therefore were left behind as it would not have been possible for them to negotiate the track. The ANZAC Mounted Division (two brigades only) advanced in a single file, thirteen kilometres long. The effect of movement in single file was that it would take much longer than normal to assemble sufficient combat power to support an attack against determined opposition. Further, any attacks would have to be conducted without artillery support.

By dawn the following morning, W.M.R. had captured its first objective three kilometres east of Mar Saba. W.M.R. continued eastwards, under enemy fire, until it encountered stronger Turk resistance from positions astride the Ancient Road, on a line between

Tubk el Kaneiterah (Hill 308) and Jebel el Kalimum (Hill 306). This position was supported by five guns, which were able to dominate the flat open country immediately in front of the position, making a direct assault hazardous. This is the position that was reconnoitred by Sergeant Fitzgerald and Corporal Patton, so its strength and general disposition were known. An attempt was made by WMR and 1st LH Brigade to outflank the enemy position by using the Wadi Kumran, but this was found to be too well covered by fire.

Due to the strength of the position and it being late in the day, a brigade attack, dismounted, was planned for first light the following morning. WMR was to capture Hill 306, CMR Hill 288, with the Ancient Road being the inter-regiment boundary during the attack. AMR was to be retained as Brigade Reserve. Movement commenced at 0300 hours, on foot.

WMR had a squadron approach Hill 306 from the south, whilst another approached from the south west. At first light they were in heavy contact with a strong enemy position, containing machine guns, and dominating the open ground over which the assault was being conducted. Movement forward to close with the enemy was slowed by the absence of artillery support.

Meanwhile, CMR had strayed off its axis of assault, so AMR was committed to capture Hill 288. CMR was recalled. AMR's axis of assault was up a valley covered by enemy fire. Movement forward was achieved, troop at a time, galloping forward from cover to cover. Around 1200 hours, there was a lull in the enemy's firing; 11th Squadron of AMR exploited this by rushing the first Turk position, which they captured, the defenders withdrawing quickly. AMR's horses were called forward and an enemy position located further in depth was captured by a squadron in a mounted charge.⁴³ By nightfall, the Turks still held the higher ground of Neby Musa, but it was considered to be too late in the day to continue the attack. The NZMR Brigade established an Outpost Line on the newly captured positions.

The advance continued the following morning. CMR occupied Neby Musa, finding the position abandoned; 1st ALH Brigade troops entered Jericho at 0800 hours, it

⁴³ Nicol, p. 183. Powles, *The New Zealanders in Sinai and Palestine*, opposite p. 178, states that 'supported by a *mounted advance* of an Auckland Squadron, hill 288 was taken.'

also had been abandoned by the Turks.⁴⁴ The NZMR Brigade then established an Outpost Line facing the Jordan, while AMR occupied Jericho itself. The days immediately following the occupation of Jericho were spent in patrolling, trying to locate Turkish positions covering the Jordan.

The final advance towards Jericho demonstrated the high standard the NZMR Brigade had reached by the end of this phase of the campaign. The Brigade advanced by night over restricted terrain, against firm opposition, and without artillery support. The advance was preceded by a close reconnaissance by two soldiers, and the officers of WMR did a survey of the ground to be negotiated by their regiment that night. The brigade was able to launch a dismounted attack, recall a misguided regiment and immediately allocate the reserve regiment onto the missed objective. All of these indicate that the NZMR Brigade was, by mid 1917, an experienced and capable formation.

⁴⁴ 1st ALH Brigade of the ANZAC Mounted Division entered Jericho first. The map 'Action at Jericho' within the NZMR Official History shows 1st ALH's track, well to the east of the rest of the Division, with a final approach from the rear. Powles, *The New Zealanders in Sinai and Palestine*, opposite p. 176.

CHAPTER SIX- THE JORDAN VALLEY AND BEYOND

This phase of the campaign commenced in March 1918 with operations across the Jordan River and culminated in the capture of Amman and the surrender of the Turkish IV Army to Allied forces commanded by Major General Chaytor. This phase also included large scale raids, classic advance and attack operations and the activities of Chaytor's Force in support of General Allenby's attack at Megiddo.

Capture of Ghoraniyeh 23 March 1918

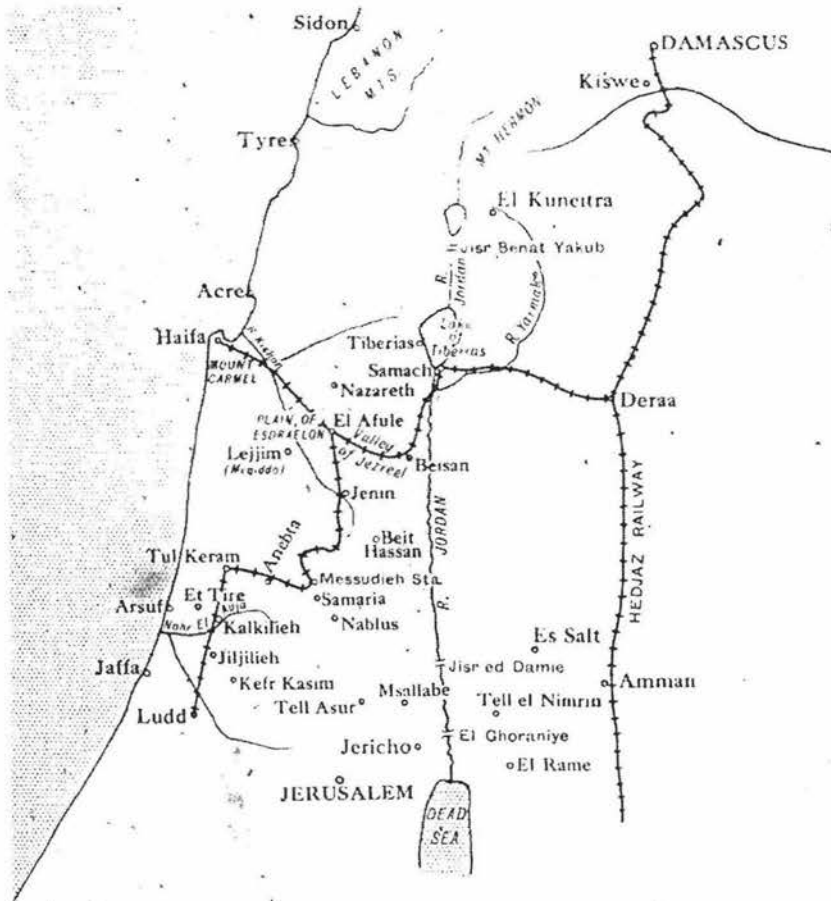
The overall Allied plan for this phase was for Es Salt to be isolated, Amman attacked and sections of the Hedjaz railway destroyed. This was to be a side show, intended to demonstrate support for the Arab forces operating further out on the east flank, rather than a desire to capture Amman. The tactical plan was to seize two crossing points, by night, then construct bridges to enable troops to cross. Only the Hajlah crossing point was seized. The contingency plan was for a regiment to cross at Hajlah in daylight, then seize Ghoraniyeh from the far bank.

At 0500 hours on 23 March 1918, AMR received orders to cross the Jordan River at the Hajlah pontoon bridge and clear to Ghoraniyeh. The regiment undertook the task with great haste, making good use of the generally flat ground, achieving surprise. All pack horses were behind, except those with the Hotchkiss guns. Two squadrons were tasked to 'dash' north to seize the far bank at Ghoraniyeh, attacking the defenders from the rear, whilst two troops of the third squadron were despatched to the east and one troop to the north-east.¹ This reduced the combat power of the regiment, but ensured more ground was cleared.

The two squadrons galloped north. The 4th Squadron, acting as Advance Guard was barely able to keep ahead of the Main Body squadron. While dashing for the intended crossing site, the Advance Guard rode down a 17 strong Turkish security element, capturing it without a shot being fired. AMR (less the third squadron) planned to secure the crossing point by simultaneously attacking Shunet Nimrin with one squadron, whilst the other captured high ground that dominated the Ghoraniyeh defences. Both attacks were to be conducted mounted. This was a risky venture as no reconnaissance was undertaken and because all three squadrons were

¹ Nicol, pp. 190- 191.

committed to separate tasks, they were unable to support each other, or be re-called by the CO.



PALESTINE AND SOUTHERN SYRIA.

To Illustrate the Operations of March—September 1918.

SCALE OF MILES
0 5 10 15 20 25 50

Map 10: Palestine and Southern Syria
Atkinson, facing p. 274.

Two enemy machine gun posts were located to the left of the first squadron objective. A single troop was despatched to clear them, ensuring the remainder of the squadron could continue with its task. The troop rode into a wadi that provided a covered approach, dismounting in shelter immediately below the machine guns. The Mounted² rushed the guns before they could be trained upon them, and captured

² The Kia Ora Coe-EE August 15th, 1918, official magazine of the Australian and New Zealand forces in Egypt, Palestine, Salonica and Mesopotamia, in David Kent, *The Kia ora Coe-ee The Magazine for the*

the post. It was then possible for remainder of the squadron to quickly occupy a suitable position covering the Turk defences and the intended bridging site. As a result, the Turks abandoned their position.

The attack onto Shunet Nimrin by 4th Squadron was held up by enemy artillery fire and thus, the position was not cut off. This extract from AMR's report describes the circumstances:

0900. The 4th Sqdn was ordered to attempt to seize SHUNET NIMRIN by a coup-de-main but was held up by heavy Artillery and Machine Gun fire...
1000. The 3rd Sqdn was withdrawn from GHORANIYEH to support the 4th Sqdn in an attempt to cut off the GHORANIYEH garrison, who were retreating in the direction of SHUNET NIMRIN. The position, however, was found to be too strongly held.³

As a result, the Ghoraniyeh defenders were able to reach Shunet Nimrin and then make good their escape. Having allocated the three squadrons to separate tasks, a single squadron was insufficient to cordon and clear Shunet Nimrin. It is fortunate that the defenders broke, as the single squadron was then not committed to a pitched battle, for which they would not have the combat power to sustain.

Before analysing the AMR action further, it is worth covering very briefly the activities of the third squadron, which was operating as a single troop and as a squadron (-) of two troops. Early on, the single troop (of twenty men) was charged by 60 Turkish cavalry. Without hesitation, the troop counter-charged, causing the Turks to break. The troop pursued the Turks, shooting 20 and capturing seven. Another troop intercepted a machine gun crew that was escaping from the river line and 'Using the fashionable tactics of the day, this troop swooped down upon the party and collected the lot, guns and all.'⁴ Whilst this squadron fulfilled a useful function in flushing out defenders from the river line and in protecting the flanks of the main force from Turk cavalry, they would have been a useful addition to the main force heading north, especially given that the defenders at Ghoraniyeh were ultimately able to escape, and there was no reserve available for the regimental attacks.

ANZACS in the Middle East, 1918, Angus & Robertson, Australia, 1981, p.16. 'Mounteds' was the nickname New Zealand mounted rifles were known by.

³ Report on work carried out by Auckland Mounted Rifles Regiment during period of attachment to 60th Division, 22/2/18- 24/3/18, WA/40/4/18i (National Archives Head Office, Wellington).

⁴ Nicol, p. 191.

The action here was more a classic of cavalry work rather than traditional mounted rifles tactics. It was a great success, for which AMR rightly received a lot of praise. Speed was clearly a requirement, and the regiment used it. The 'fashionable tactics of the day' quoted above, supports the fact that attacking opportunity objectives whilst mounted became more prevalent in the latter stage of the campaign. In this instance, the ground, enemy dispositions and the imperative to secure the second crossing point quickly, lent themselves to the use of mounted charges to capture unoccupied or weakly held key terrain. The inability of the second squadron to secure Shunet Nimrin demonstrates the vulnerability of mounted forces to well sited artillery, especially when they are the only target and they have no artillery of their own to use for counter-battery fire. Failure to maintain a reserve meant there was little the CO could do to alter the point of attack once all squadrons were committed to separate actions simultaneously.

Amman 27- 30 March 1918

The ANZAC Mounted Division crossed the Jordan and the brigades advanced towards Amman on separate routes through the mountains. The weather was atrocious and routes so bad that all 'wheels' were left behind. This included all artillery, less four portable howitzers that accompanied the Camel Brigade, who were on a different route to the New Zealanders. Some stages of the advance were conducted by night, with the men leading their horses on foot. This demonstrated a lot of persistence, it would have been easy for the Commander to order a halt each night due to the conditions.

The NZMR Brigade Headquarters was advised by radio that 2nd LH Brigade was delayed on another route by bad weather, so the NZMR Brigade bivouacked in place, and sent out patrols.⁵ These patrols managed to interdict two German patrols, although did not locate any enemy main forces. Capturing enemy patrols could only add to the surprise to be achieved and to the security of the New Zealanders. Eventually the Division concentrated on the plateau and prepared for operations against Amman.

The NZMR Brigade was to attack Amman from the south, the Camel Brigade from the west and 2nd LH Brigade from the north. Thus an attack on multiple axes was

⁵ Powles, *Canterbury Mounted Rifles*, p.206. No information is available about transmission range, reliability or whether the wireless provided either morse code or voice communications.

planned. Given the lack of artillery available, multiple axes would allow maximum small arms and machine gun fire to be brought to bear on the Turkish defenders.

The NZMR Brigade, less WMR, which was detailed for a demolition task and commenced movement towards its assigned attack point at first light on 27 March. AMR, with a section of machine guns attached, moved as the Advance Guard, with one of its squadrons forward again as the Van Guard. The grouping of the machine guns with the Advance Guard ensured that the extra weight of fire and range was available quickly and made up, in a small way, for the lack of artillery. The brigade came under artillery fire four kilometres out from Amman, signifying that any surprise that might have been achieved, had been lost.

The brigade deployed into a two up assault formation for a dismounted attack. CMR was on the left, linking up with the Camel Brigade, and AMR was deployed on the right. There was no reserve, and little depth other than within the regiments, but the lines provided maximum weight of fire to the front. Heavy Turkish artillery and machinegun fire caused the attack to stall. Turkish machineguns on Hill 3039 forward of 3rd Squadron AMR were especially effective. CO AMR deployed 4th Squadron forward from depth to assist 3rd Squadron, and sent 11th Squadron to occupy high ground to on the right hand side of the assault in order to protect that flank. CMR deployed with 8th Squadron forward. It was held up by enemy fire also. CO CMR deployed 1st Squadron to the right of 8th Squadron to seize and occupy high ground. The deployment of the squadrons demonstrates that both COs maintained depth within their regiments, to reinforce forward squadrons and to secure high ground.

Hill 3039 proved too great an obstacle for the brigade, so at nightfall, a defended line was established where they had reached that day. Overnight, the Turks reinforced Amman, and delivered a small counterattack against CMR's flank, which was driven off. During the night, patrols closed on enemy positions to gain information for use the next day.⁶

The attack continued the following afternoon once two infantry battalions and four portable howitzers had been assigned to the brigade, ensuring far more combat power was available to take on this formidable position. The attack gained a further

⁶ ibid, p.208.

500 metres, but was stopped short at the foot of Hill 3039. Enemy artillery and machine gun fire proved to be too effective and the attackers had insufficient artillery themselves to overcome it. Part of the Turk success was due to the placement of machine guns in depth, where they could not be reached by the New Zealanders machine gun or rifle fire. That night, the NZMR Brigade withdrew slightly, to more defensible ground.

As no progress could be made due to the intense enemy machine gun and artillery fire, it was decided to conduct a night attack instead, the decision being made at a conference of GOC NZMR Brigade and his COs. A night attack is a difficult undertaking, and had not been conducted before by the NZMR Brigade during the campaign. A night attack would offset the effect of the convex slope over which the daylight attacks had been made which meant the attackers were always skylined to the Turks and thus easier targets for direct fire from rifles and machine guns. A night attack would, however, be more complex requiring good preparation and coordination, and above all, a simple plan. A night attack would achieve surprise as the Turks would not be expecting it. The decision also highlights the confidence the New Zealanders had that they could undertake such a demanding action.

The attack was not conducted by the entire brigade. Instead, an assault party was assembled based on AMR complete, 100 members of CMR, a troop of WMR, and the 16th (New Zealand) Company of the 4th Camel Battalion. The attack was to be commanded by Lieutenant Colonel O'Carroll, CO AMR. Its scheme was:

very similar to that prepared for the opening of the Gallipoli offensive in August, but without the aid of a diversive (sic) bombardment and the glare of searchlights... the attack was to be pressed swiftly and silently, and the trenches carried with the bayonet alone. Magazines had to be empty because even an accidental shot might jeopardise the whole action.⁷

Smaller numbers of attackers would ease control considerably, although reduce available firepower and availability of local reserves. The remaining forces of the brigade would defend the current line, act as a firm base for the attack and protect the preparations for the attack that would be undertaken behind it. The whole machine gun squadron, less one gun, was withdrawn from the line in order to be able

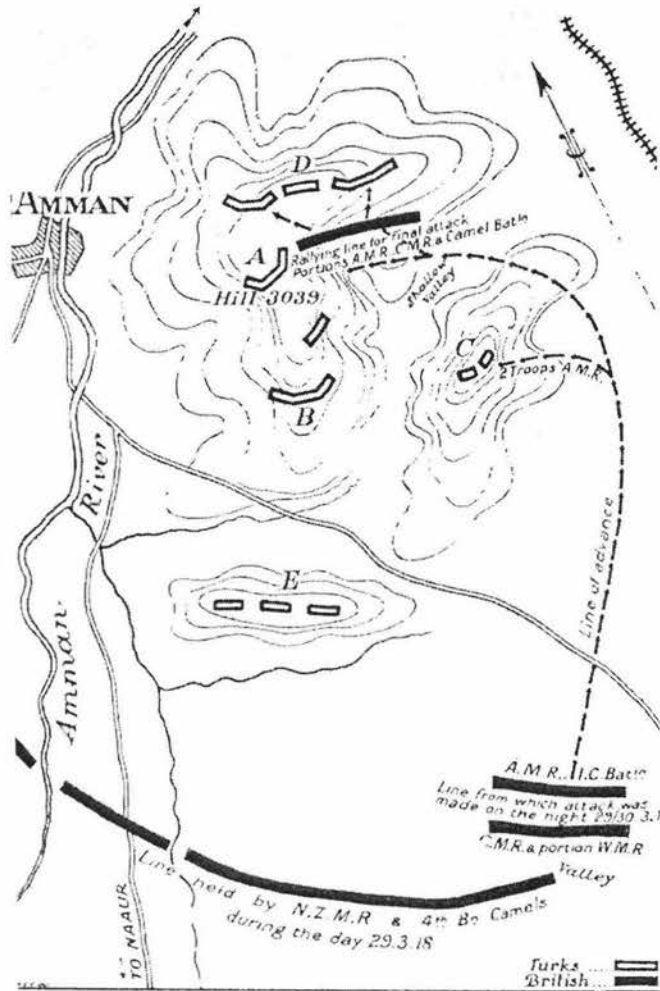
⁷ Nicol, pp. 202- 203.

to support the night attack. No artillery was available to support the attack. The attack would require a high standard of noise discipline by all ranks if surprise were to be achieved.

The approaches to Amman were dominated, controlled and guarded, by Hill 3039. The enemy positions on it were well-known to the New Zealanders, the result of previous attacks, that proved to be 'reconnaissance by fire'. The main enemy position was at 'A' as shown in Map 11 on page 108. It consisted of two lines of trenches, it was supported in turn by trenches at 'D'. Approaches to 'A', were protected by additional strong points at 'B' and 'C'. These separated positions were able to support each other by fire for they had good line of sight by day and were within rifle and machine gun fire of each other. The Mounteds had insufficient artillery to be able to mask all enemy positions so each attack was subjected to withering fire from these dominating locations. A night attack would enable 'B' and 'C' to be bypassed and would limit what supporting fire, if any, they could provide when 'A' was attacked.

The plan was to infiltrate between the two smaller forward positions (B and C) in order to capture the vital ground at A, using surprise rather than firepower to overcome the attackers. The attack would be 'silent', there would be no artillery or machine gun fire prior to first contact with the enemy.⁸ B and C were to be screened by two smaller parties to enable the main force to focus on capturing A. Rather than attack B and C subsequently, it was felt that the defenders of those positions would be compelled to withdraw once A was captured. The attack was to be delivered in

⁸ Attacks can be classified as 'silent' or 'noisy'. The latter is most common; the attack is preceded by artillery and small arms preparatory and covering fire. To a degree, the element of surprise is lost, however the benefit is outweighed by the effect of the fire on the enemy. In a silent attack, the exploit the dark and forsake preparatory fire, in order to get as close as possible to the enemy position before they are discovered by the defenders, thus achieving surprise and reducing the effects of enemy counter-fire. It helps if the terrain offers a route, or routes that can be negotiated quietly and if the enemy do not maintain listening posts forward in case of such an eventuality.



Map 11: Night Attack at Amman
Powles, Sinai and Palestine, p. 205

two files, as opposed to two waves. One line was to consist of AMR and the Camel Company, the other of the CMR and WMR troops. CO AMR, was instrumental in determining the sequence of the attack, he would command it and he would lead the first line.

At 0130 hours on 30 March 1918, the composite assault party concentrated behind the lines and prepared for the attack. At 0200 hours the attackers commenced movement on foot from their concentration area in a wadi below the defended line, towards Objective A, 1500 metres away. Two machine guns accompanied the attackers forward, while three machine guns were positioned in some ruins that provided concealment and from where covering fire could be provided if a retirement became necessary.⁹

On getting close to Objective A, a Turkish sentry fired a single shot, causing the AMR and New Zealand Camel Company line to dash forward with the bayonet.

The different units in line the line keeping touch in the dark wonderfully well, they got within a short distance of the Turkish sangars before they were observed, when a tornado of rifle and machine-gun fire opened on them, the roar of musketry and the fatal chatter of machine-guns making night hideous with their din. Fortunately a great deal of this fire went high, and the advance culminated in a determined bayonet charge and savage hand to hand fighting.¹⁰

Twenty three Turks and five machine guns were captured. All other occupants of Objective A were killed. Whilst the AMR and Camels established a hasty defence, the CMR and WMR line attacked trenches behind A, capturing fourteen Turks and a machine gun. On securing the objective, the machine guns were called forward to aid in the defence. As the ground was rocky, the men built stone sangars instead of trenches, knowing they would have to withstand the inevitable Turk artillery fire and counterattacks. The 16th (New Zealand) Camel Company and AMR line then attacked and cleared the trenches in rear of Objective A that were overlooking Amman itself.

The Turks in objectives B and C surrendered at first light as had been anticipated. The entire position then came under intense Turkish artillery fire and was subjected to repeated counterattacks. New Zealand machine guns were brought forward, and in conjunction with five captured Turkish machine guns converted to use by the New Zealanders, the counterattacks were held off. A miscommunication at one stage caused some defenders to withdraw slightly, allowing the Turks to make the crest, a critical development. The situation was restored by Adjutant CMR and two other officers who led a charge that regained the high ground, and who were then 'with difficulty prevented from continuing on after the routed Turks.'¹¹ In order to strengthen the CMR portion of the line, two troops from AMR were sent across as reinforcements. The machine guns provided interlocking fire across the front of the New Zealand line and were largely responsible for defeating what was the final Turk counterattack.

⁹ Luxford, p. 222.

¹⁰ Moore, p.110.

¹¹ Nicol, p 204.

The following incident highlights the problem of clearing the enemy from *all* trenches during a night attack,

The gradually growing light revealed an isolated Turkish trench on the left flank that enfiladed the New Zealanders, this post having been missed in the dark. The Turks in it made it lively for our men on the left of the line until they found cover in a depression on top of a rocky knob. Then a hot fire fight raged between the two small groups, at a range of about three hundred yards. Eventually the accuracy of the New Zealander's Hotchkiss and machine-gun fire determined the issue, when the Turks hoisted four white flags.¹²

The example also reinforces the effect, or lack of it, when small groups fire rifles at each other at extended range. It was only a machine gun that was able to produce sufficient weight of fire, to achieve a result.

Despite the success of this attack, the overall situation around Amman resulted in the order for a withdrawal back across the Jordan, to be undertaken after last light. This difficult operation was undertaken well:

The Colonel issued orders to each unit, giving the exact time for moving back, so that the whole force would meet in one line for the final withdrawal..., the force moved back in silence. Care was taken by everyone to avoid even kicking a stone. The first 1,000 yards was covered without event, the Turks not having any suspicion of what was taking place.¹³

The withdrawal was undertaken successfully, although it was not without incident. During the withdrawal, the rear elements of WMR were ambushed along the withdrawal route by Circassian inhabitants of the village of Ain Es Sir, 11 kilometres west of Amman. This ambush resulted in fourteen WMR dead and eight wounded. The Amman 'raid', including the ambush at Ain Es Sir, cost the NZMR Brigade 38 killed, 13 missing and 102 wounded.¹⁴ The Jordan defensive line was re-occupied, and bridgeheads were maintained on the east bank of the river.

¹² Moore, p.112.

¹³ Nicol, p 207

¹⁴ Nicol, p 210.

The decision to mount a silent night attack indicates that the NZMR Brigade had reached a high level of expertise. A night attack is technically challenging. Specific groupings were established for the attack, each allocated pre-determined tasks. Reconnaissance had confirmed that no security elements were forward, and an axis of assault was selected that avoided contact before the vital ground was captured. Machine guns were allocated to provide covering fire should a withdrawal become necessary. A realistic assessment was made of the likely reaction at B and C once Objective A had been captured. The New Zealanders were prepared to fight, by night, at close quarters with the bayonet and without the benefit of artillery and machine gun support. The plan was good and it worked.

The night attack was well executed. Preparation was done behind the protection of the remainder of the Brigade, movement towards Objective A was so well done that the enemy were only alerted to the attack at the last minute. Trenches were cleared out with the bayonet and defences established, with machine guns being called forward and captured ones put to use, ready to defeat counterattacks. This was all achieved in the dark. Even when the position was almost lost due to a mistaken withdrawal, the situation was restored by spirited action. In the bigger picture, however, the entire Amman action was no more than a 'raid'. It had been successful, from a strategic perspective. The raid had supported actions by Arab Forces and, in preparation for Allenby's operations at Megiddo, had focused Turkish attention east of the Jordan.

The Jordan Valley April- September 1918

NZMR Brigade tasks in the months ahead included the inevitable patrolling with additional duties relating to defence of the bridgehead.¹⁵ Every morning the defenders 'stood to', then proceeded with the day's tasks. The Turks attacked the river line repeatedly, suffering heavy casualties in the process, before retiring to their former defensive lines in the foothills.

Mounted forces endured a summer in the Jordan Valley, with brigades alternating between time in the valley and breaks in cooler conditions towards Jerusalem. While in the valley, tasks included mounted patrolling and improving defences. Trench digging was undertaken by night as it was too hot during the day. There were a few

¹⁵ Wilkie, p.206.

minor actions with the enemy, patrol clashes, but the Es Salt raid was the last major offensive action until September.

General Allenby's plan was for a major attack to be made northwards along the coast, rather than inland across the Jordan Valley. To support this, and prevent IV Turkish Army moving additional forces into the zone he wanted to attack, Allenby had to achieve two things. First, he had to concentrate sufficient combat power opposite his point of attack, including almost all of the forces then in the Jordan Valley, without the Turks knowing it. Second, he had to leave sufficient forces in the Jordan Valley to convince the Turks that this is where the next major Allied thrust would be coming from. General Chaytor was allocated the task of deceiving the Turks, whilst the bulk of the Desert Mounted Corps was withdrawn, by night, to the west. It is not intended to examine how this movement was achieved, nor any other matters with regards the battle were prepared and executed. The focus will remain with 'Chaytor's Force' and the NZMR Brigade.

Chaytor's Force

Chaytor's Force, commanded by Major General Chaytor, consisted of the ANZAC Mounted Division, 20th Indian Brigade, two battalions of the British West Indies (BWI) Regiment, two battalions of Royal Fusiliers (Jewish Volunteers), four artillery batteries, a trench mortar battery and three anti-aircraft sections.¹⁶ In the defence sector manned by the NZMR Brigade, General Meldrum had two BWI battalions and two Jewish Volunteer battalions under command. To support Allenby's plan, Chaytor's Force undertook many deception tasks; dummy bridges, with roads leading to them, were constructed across the Jordan; new camps were constructed, with empty tent-lines and dummy horse-lines; fires were kept lit in campsites.¹⁷ All efforts were made to convey the impression that forces in the valley were getting larger. Patrolling continued and defence works were manned, there was still a real possibility that the Turks would attack across the Jordan themselves as a way of pre-empting any attack from there.

Allenby's major attack at Megiddo began on 19 September, 1918, achieving overwhelming surprise.

¹⁶ Powles, *The New Zealanders in Sinai and Palestine*, p. 236.

¹⁷ Moore, p. 147

The Turkish IV Army was too strong to be attacked by Chaytor's Force, they had to wait until the Turks started to leave their positions:

We had to wait for him to retire. To be sure that no time was lost, our patrolling by day was intensified while each night we junior officers took out our troops and lay as close as possible to the Turkish positions. We would unroll about five miles of telephone wire behind us in order to get a message back immediately we detected sounds of retreat. At last, on the night 21/22 September, we heard the unmistakable rattle of transport wheels and the chase was on.¹⁸

The NZMR brigade began its advance north, AMR leading, on the morning of 20 September. The remainder of the Brigade, with the BWI battalions and two artillery batteries followed them after last light. AMR's advance, by day, had cleared the brigade's route, ensuring its night move would be unmolested. The Brigade's task was to cut a road/ capture a crossing point that would have otherwise allowed some of the Turkish VII Army to escape Allenby's net.

Capture of the Damieh Crossing 21 September 1918

The follow up by Chaytor's Force was rapid. AMR crossed the Jordan advanced in a north easterly direction to attack the bridge at Damieh whilst WMR was directed to cut the enemy withdrawal route and capture El Makhruk, where the headquarters of Turkish 53rd Division was located. Speed was of the essence, 'It was essential to penetrate the enemy's positions silently under cover of darkness.'¹⁹ Had the NZMR Brigade attempted to clear the enemy on route to their objectives, they would have been unable to block the escape of Turkish VII Army. CMR was retained as Brigade Reserve.

In a tactic reminiscent of the Boer War, WMR, with 9th Squadron as its Advance Guard, approached El Makhruk by night, encircling it before first light. They captured 400 Turks, including the Commander of 53rd Division and his entire staff. Two squadrons remained to secure the area, whilst the third was pushed 2000 metres

¹⁸ Major General Ronald Hopkins, 'Chaytor's Force a personal account', in *Defence Force Journal*, No 13, Commonwealth of Australia, 1978, p. 30.

¹⁹ Powles, *The New Zealanders in Sinai and Palestine*, p. 247

further west in order to occupy high ground at Tel El Mazar. The deployment of this squadron showed an appreciation for securing key terrain.

AMR also utilised the dark, occupying ground astride the road and overlooking the bridge by first light.

At first light, three threats developed simultaneously. The Advance Guard of the Turkish VII Army, consisting of 500 men and two mountain guns appeared on the left of the WMR line. A counterattack force of 1200 Turks was gathering on AMR's right at the Damieh Crossing. To the right rear, Turks who had crossed the river were attacking the BWI battalion that had been left to secure the NZMR Brigade's lines of communications. 10th Squadron CMR (as part of the Reserve) was despatched to support WMR, the counterattack was defeated and the squadron returned to the Reserve. A second CMR squadron, and a company of BWI were sent to reinforce AMR. The Damieh Crossing was seized in a bayonet charge by the mixed AMR and BWI force. The position was consolidated before nightfall, the Turkish VII Army escape route through Damieh was sealed. The Brigade Commander dealt with the three threats effectively, the Reserve was well used. As the Reserve was composed of an entire regiment, more than one situation could be dealt with. Once each situation was stabilised, the squadron assisting returned to the Reserve.

To back-track slightly, AMR's position at the Damieh Crossing (bridge) was subject to a Turk counterattack. This attack forced the defending squadron off, the Turks then established a hasty defence. In order to prevent the defence becoming properly established, and to exploit the confusion and exhaustion experienced by attackers on capturing an objective, CO AMR conducted an immediate counter-attack. For the attack, CO AMR had additional support, as stated above, from a CMR Squadron and a BWI Company. The AMR, CMR, BWI line was 500 metres distant from the Turk position. On the left of the AMR line, and occupying ground that oversaw the enemy position was one and a half AMR squadrons, and a machine gun. This force was to remain in position and provide covering fire. The remainder of AMR, less two troops was next, with the BWI to their right and then the CMR Squadron to the right of them again. A troop of AMR was maintained as Reserve.

No weak spot being found in the enemy line it was decided that the whole line should advance, and so close in on the bridge... At the given time, the whole line advanced, the bayonets flashing in the morning sun. Splendid covering

fire was put over by the artillery, and the long-range overhead fire machine-gun fire was also most effectual. The Turk would not face the irresistible line of steel. Some surrendered as soon as they could, while others fled, only to be caught by the line on the right.²⁰

A CMR troop raced forward, still mounted, dashing down a wadi and rounding up prisoners. 350 Turks were captured. AMR lost three killed, one died of wounds and one wounded.²¹

The regimental attack by AMR was a good demonstration of a combined arms attack and employing fire and manoeuvre. A good proportion of the force, reinforced with machine guns, gave covering fire, ensuring sufficient weight was provided to suppress the Turks and allow the attackers to close rapidly. Machine gun and artillery fire was used effectively. A reserve was maintained, even if it was only a single troop. The quote above also suggests that the need to locate and exploit a weak point in the enemy defences in order to break into the enemy position had not been overlooked, but as one could not be identified, a linear assault was undertaken. New Zealand casualties had been minimal.

Dash to Es Salt

As it was evident next day that the Turkish IV Army was withdrawing, the NZMR Brigade moved quickly on Es Salt, with CMR leading. An enemy security position one and a half kilometres west of Es Salt was outflanked and 'rushed' by the Advance Guard, resulting in the capture of 159 Turks. Es Salt was enveloped and captured by last light. Over five hundred Turk prisoners were taken. A number of weapons and vast quantities of stores were captured also. This operation was undertaken quickly, exploiting enemy confusion. The Advance Guard dealt with security elements quickly so that the Main Body was not held up. The NZMR Brigade did not sustain any casualties in this operation.²²

The following day was spent concentrating the remainder of Chaytor's Force around Es Salt. Patrols were deployed east to make contact with the Turk rear guards, which they located on the road towards Amman.

²⁰ Nicol, pp. 224- 226.

²¹ *Ibid*, p. 226.

²² Wilkie, p. 227

Capture of Amman 25 September 1918

General Chaytor's orders for the attack on Amman were received in the evening of 24 September for an attack at 0600 hours the following morning. The Division's plan was for the NZMR Brigade to make a dismounted attack from the north west and the 2nd LH Brigade from the west. The 1st LH Brigade was to screen to the north, but to be prepared to support either of the attacking brigades as required. Artillery support was not available, less the Indian Mountain Battery that had accompanied the NZMR Brigade, as a broken bridge on the route meant the guns could not be brought forward in time. Infantry would not be available until later in the day, as they were still approaching, at a slower rate than the Mounted had been able to achieve.



Map 12: Amman 25 September 1918

Gullett, p. 722

H Hour for the attack was 0600 hours. WMR led the NZMR Brigade, with a section each of machine guns and the Indian Mountain Battery attached. This was a combined arms Advance Guard, able to deal with opposition swiftly. Assigning machine gun sections and artillery to WMR ensured they could be brought into action quickly enabling opposition to be overcome sooner. WMR came under Turkish

artillery and machine gun fire as it approached Amman. By 0900 hours, they had made contact with elements of 2nd LH Brigade to their right. The task at this point was to drive in the enemy outposts that were positioned forward of the main Turkish defences.

At 1030 hours, AMR was sent into the gap that had developed between WMR and 2nd LH Brigade. The development of gaps between squadrons and regiments was a recurring issue in this form of attack. As the attackers closed on the enemy, the circumference should become smaller and theoretically the likelihood of gaps opening should be less. However, as each Squadron Commander manoeuvred against enemy to his front, or used ground such as *wadis* or sand hills for cover, gaps would inevitably appear.

At 1200 hours, CMR was sent forward with 'a view to galloping through the town' however they were held up by machine gun fire.²³ This plan was abandoned, CMR continued to advance their line, dismounted. Well sited and mutually supporting enemy machine guns that were not being suppressed took a toll. As this example illustrates, mounted men were especially vulnerable:

During the engagement one squadron of New Zealanders galloped into action in troop waves, immediately coming under heavy cross fire from three machine guns. The squadron dismounted for action, the horseholders galloping back to the cover of a hill with the led horses. One or two men were shot in the saddle (as they guided the led horses back).²⁴

The tactics of remaining mounted, useful in covering distances quickly when approaching the enemy, such as in the capture of Damieh, were risky when in close contact with an enemy that was not effectively suppressed enemy, by artillery or machine guns, and where detailed reconnaissance had not been conducted. Detailed reconnaissance would help locate machine guns so that they could either be avoided or neutralised. Artillery fire would have provided area suppression and thus neutralise enemy rifle and machine gun fire, but it was not available in sufficient quantities to achieve the required effect.

²³ Powles, *The New Zealanders in Sinai and Palestine*, p. 251.

²⁴ Moore, p. 162.

Eventually a CMR troop was able to enfilade the citadel, allowing another squadron to capture it with a bayonet charge. The citadel was quickly captured; it contained more than one hundred Germans, who were taken prisoner. The capture of the citadel was a good example of fire and manoeuvre, where a single troop enabled a squadron to close on the citadel, simply by getting into a good position from which to provide fire support. The AMR and WMR lines then cleared the town of the remaining enemy, many of whom escaped into a wadi only to be attacked by elements of CMR. The two Australian brigades captured Hill 3039 and the railway station.

The NZMR official history had this to say about the attack, in relation to the conditions when Amman was attacked previously:

... the enemy had greatly improved his defences. He had built a series of redoubts in which were numerous machine guns. But the systematic method of our men combined with quick outflanking of the machine gun nests overcame every obstacle. The ground was hard and favoured rapid *movement* on horseback whereas in the previous attack in March all work had to be done on foot.²⁵

Armistice, Egypt and Repatriation September 1918- July 1919

The capture of Amman on 25 September 1918 was the final major combat action for the NZMR Brigade. The remnants of the Turkish IV Army were effectively cut off, they were invited to surrender. Having surrendered, Chaytor's Force then found themselves in the unusual situation of having to defend the Turkish soldiers from marauding Arabs intent on exacting revenge.²⁶ Chaytor's Force had captured 10, 332 prisoners, 57 artillery pieces of varying calibres, 147 machine guns, large numbers of small arms and vast quantities of ammunition since crossing the Jordan.²⁷ Only two wireless sets were amongst the equipment captured, indicating that the Turkish forces did not have significant radio communications either.

²⁵ Powles, *The New Zealanders in Sinai and Palestine*, p. 252. The italics mine, to make the point that the official history is not saying that the ground or tactical situation favoured mounted charges. The 'previous attack in March' where the ground dictated that action had to be conducted dismounted was Amman.

²⁶ Hopkins, p.32. 2nd LH Brigade provided the force, initially, but were later relieved by the NZMR Brigade. Powles, *The New Zealanders in Sinai and Palestine*, p. 255.

²⁷ Powles, *The New Zealanders in Sinai and Palestine*, p. 256.

The main Allied forces entered Damascus on 1st October. The NZMR Brigade returned to the Jordan Valley 5-7 October, and then on 8 October moved back through Jerusalem to Richon le Zion. Near Richon le Zion, the New Zealanders were involved with other Allies in a nasty incident that resulted in the deaths of Arab village men and the destruction of the village of Surafend. An armistice with the Turkish Armies took effect on 25 October 1918. CMR returned to Gallipoli on 27 October, and under command of 28 (UK) Division, assisted in monitoring the activities of the Turks in the Gallipoli Peninsular following the armistice. On 18 December 1918 the Brigade commenced its trek back to Egypt. In March 1919, the Brigade undertook patrolling to 'quell disturbances' during an Egyptian uprising.

The NZMR Brigade was disbanded on 30 June 1919, returning by ship to New Zealand. The final draft left Egypt on 23 July, 1919. Only one horse returned to New Zealand. This was Bess, Guy Powles' horse.²⁸

YMRT states that 'Surprise and rapidity of action can usually be best attained by a combination of frontal attack with rapid out-flanking movements...'²⁹ Frontal attacks in combination with flank manoeuvre were a feature of the latter stages of the campaign. Speed was achieved by leaving pack animals and heavy equipment behind, and by rapid movement, sacrificing security. Advance Guards ensured the Main Body could move relatively free of enemy threat. Advance Guards were grouped with machine guns, and artillery if available, so that they could overcome opposition more rapidly. This they often achieved by short enveloping manoeuvres.

The NZMR Brigade concluded the campaign as an accomplished fighting formation. They were able to fight mounted and dismounted, and proved equally capable of advancing over difficult terrain in atrocious weather conditions as they were at conducting a dismounted silent attack at night. Artillery and machine guns were incorporated into plans, although artillery was not always available for a variety of reasons.

²⁸ *Ibid.*, p. 120. Bess 'Died whilst on duty' in 1934. There is a memorial stone over her grave at Flock House, Marton. Jim Henderson, *Soldier Country*, pp. 20- 21.

²⁹ YMRT, p. 174.

CHAPTER SEVEN- COMMAND, LEADERSHIP AND TACTICS

Official histories and other accounts of the Sinai Palestine campaign contain numerous examples of leadership and of officers exercising command. YMRT makes it clear that commanders have a key role in executing mounted rifles operations and thus tactics.

Captain Jonathan House identified five elements by that needed to be present in for doctrine to be practiced and refined. One was the requirement for leaders that followed the doctrine.¹ The purpose of this chapter is to examine the role of command and leadership in influencing the tactics employed by the NZMR Brigade.

Command and Leadership

The terms leadership and command are often interchanged, without appreciating that they are actually different elements. The confusion is compounded when titles for the same or equivalent appointments have 'leader' or 'commander' in them, such as Squadron Commander or Squadron Leader.² Those in authority will be exercising command and leadership simultaneously, to varying degrees, depending on the tactical situation, irrespective of their appointment title.³

Within contemporary New Zealand military doctrine, command is defined as:

*The authority that a commander in a military service lawfully exercises over subordinates by virtue of their rank or assignment. Command includes the authority and responsibility for effectively using available resources and for planning the employment of, organising, directing, coordinating and controlling military forces for the accomplishment of assigned missions.*⁴

With respect to leadership, *New Zealand Military Doctrine* states that:

¹ House, p. 5.

² A commander is a military leader. They are one and the same, irrespective of the title. They both perform command **and** leadership. A Squadron Commander or Squadron Leader means same. This applies at Troop and Regimental level also.

³ The thesis has not considered the third function performed, to a degree, by commanders/ leaders; management. Management, command and leadership, these being the three 'elements' of command, are well described in Joel Hayward, 'Explaining Command', in Harper and Hayward, pp. 25-26. See also Army Doctrine Publication (ADP) *Command* paragraph 0101.

⁴ NZDDP- D, *Foundations of New Zealand Military Doctrine*, February 2004, p. G-3. Emphasis is mine.

Military leadership is *the projection of personality and character to get subordinates to do what is required of them* and to engender within them the confidence that breeds initiative and acceptance of risk and responsibility.

Without good leadership, morale will undoubtedly crumble in the face of adversity. All leaders must accept their responsibility for maintaining morale and the fighting spirit of those under their command.⁵

Command is the legitimate power of any commander (or leader) to order anyone junior in rank to take or refrain from action, irrespective of the risks to, or the views of, subordinates. New Zealand doctrine identifies two facets to command; authority and responsibility. Commanders must have a guaranteed degree of *authority* to ensure action is taken. They have the authority, the right to give orders, and to have them obeyed. Orders may result in casualties or at the very least put subordinates in significant peril, this does not make them illegal or wrong. Within the military, subordinates are automatically expected to obey the orders of their superiors in rank, even if the superior is outside the subordinate's usual chain of command.⁶

Responsibility means that irrespective of any delegation, a commander remains totally responsible for his command, for its performance, for success, and for any failures.

Current British doctrine includes a third aspect of command, that of *accountability*. Accountability is the 'obligation to answer to a superior for the proper use of delegated responsibility, authority and resources.'⁷ The resources of a mounted rifles commander included troopers, horses and ammunition.

It can be seen then that command encompasses more than just planning and issuing orders. Command, to be properly executed, includes the requirement to conduct coordination, to use resources wisely and to monitor the battle closely enough to adjust the plan as the situation changes.

Leadership, by contrast, is about the leader or commander motivating subordinates to take risks, and the use of the commander's character and personal example as a

⁵ *Ibid*, p. 7-7 Emphasis is mine.

⁶ With some notable exceptions. For example, the Captain of an aircraft or ship is still in command, even if any one of the passengers is more senior (as they often are). In a similar way, a doctor or veterinarian does not have command over a more junior rank in a combat situation.

⁷ ADP *Command*, paragraph 0105.

means of achieving that. The New Zealand definition makes a clear link between leadership, morale and maintenance of the 'fighting spirit.'

From this point on, the title 'commander' will be taken to mean commander and leader. The terms command and leadership, when used, reflect the separate characteristics of each as described in the New Zealand definitions and British definitions.

Throughout YMRT, command and leadership are used when describing the actions mounted rifles commanders are required to take to execute mounted rifles tactics. YMRT says this about the command and leading of mounted troops:

In the case of mounted troops the personality of the commander and a thorough understanding between him and his subordinates are of great importance. The rapidity of action... only allows the shortest time for consideration. In many cases it will be impossible for the commander to gauge, with any degree of accuracy, the strength of his adversary from the preliminary resistance he encounters. Orders, therefore, must be based on a general consideration of the circumstances, and will frequently no more than indicate what is required.⁸

YMRT does not define leadership or command. Instead, it details what commanders are required to *do* to exercise their command and leadership responsibilities. Three examples relevant to the mounted rifles attack are:

Commanders must endeavour to foster in their men an aggressive spirit, and they must teach them that a determined enemy will not be beaten or driven off his ground merely by long range fire.⁹

The commander of a unit dismounting, after giving the necessary orders regarding the position of the led horses, the protection of the flank, and the amount of ammunition to be taken from the horse holders, either leads the force forward himself or gives directions to his subordinates as to the positions he wishes them to take up.¹⁰

⁸ YMRT, p. 132.

⁹ *Ibid*, p.124.

¹⁰ *Ibid*, P 172.

And later, with respect to fire action during an attack, the Squadron Commander:

regulates the employment and cooperation of the several troops and exercises constant care in maintaining communication with them and with his immediate commander. He orders the opening fire... issues general instructions as to the targets and the distribution of fire, and observes the effect. In other respects he leaves fire control to the troop leaders and interferes only when he desires to combine the fire effect of several troops...¹¹

Leadership and command as we know them today were incorporated within YMRT instructions on what a commanders was to *do* at each stage of the battle. Acting on limited information and initiating flexible plans were recurring themes. Fulfilling the instructions within YMRT entailed the commander making decisions, taking risk and demonstrating personal example, although these were never listed or even identified as discrete activities. Further, mounted rifles command and leadership must be accomplished under conditions of 'uncertainty, risk, violence, fear and danger.'¹² The nature of the ground, being open, and the formations used within the mounted rifles, made the commander a highly visible individual. They did not have the screen provided by trenches or bunkers as in the Western Front. Commanders could see, and be seen, performance or lack thereof was easily identified by subordinates.

The Influence of General Chaytor

It is said that any military organisation reflects its commander. General Chaytor commanded the NZMR Brigade from its rebuilding after Gallipoli until assuming command of the ANZAC Mounted Division on 22 April 1917, a period of 28 months in command. A professional soldier, New Zealand's first ever graduate from the British Staff College at Camberley, and a Boer War veteran, Chaytor had the opportunity to train and fight his Brigade through the initial and formative stages of the campaign.

As a Boer War veteran and a staff college student, Chaytor had first class theoretical and practical experience in mounted warfare. Colin Richardson describes the effect this had on Chaytor's methods:

¹¹ *Ibid.*, p. 165.

¹² ADP *Command*, paragraph 0101.

Chaytor early developed the habit of being on the spot at what he considered to be the critical point, so that he could direct the fight, make changes, provide clear direction to his subordinates and timely information to his superiors. [The Brigade] practised scouting and patrolling, so that overall the brigade became a mobile, hard-hitting force capable of both independent action and of functioning within the division. Chaytor's training and strong leadership of the NZMR Brigade was to prove results in the Sinai.¹³

The battles of Maghaba and Rafa are good examples of what Richardson has described. Locating himself forward at both battles, Chaytor was able to plug gaps by committing reserves and to change the point of attack as necessary.¹⁴ Being forward at Rafa, Chaytor initiated the general assault that carried the position, just as the corps commander was passing the order from further back to abandon the attack. Thus, Chaytor practiced what today would be termed 'Forward Command.'

Even on the way to battle, General Chaytor was involved in the action, as the following example illustrates. At 0515 hours on 9 January 1917 as the ANZAC Mounted Division was moving forward to assemble for the attack on Rafa, General Chaytor:

... with Major BARLOW and a guide left to round up Bedouin encampments, about KHAN IBN MUSLEH, he arrived at SHOHK EL SUWI at 0545, and at 0605 a message was received from him to say that he had rounded up 30 Bedouins armed with swords and a few pistols, and, that there was a good place in the rear of KHAN IBN MUSLEH to assemble the Division.¹⁵

General Chaytor demonstrated early in the campaign a great deal of initiative and courage, and established an early record of success for the NZMR Brigade. Imagine the effect on the brigade if the attacks at Rafa and Maghaba had failed, and they might have, without his influence. Chaytor had an eye for detail. On one recorded occasion, he and Captain Rhodes, his Aide, rode around the brigade camp arranging

¹³ Richardson, in Harper and Hayward, p. 75.

¹⁴ Report dated 24 December, 1916 by GOC NZMR Brigade on Operations Carried out at Maghaba on 23rd December 1916. WA 40/3, Part 5, Operations Records. (National Archives Head Office, Wellington). See 1200 hours 3rd LH Brigade (-) committed to a flanking movement, 1230 hours gap between WMR and CMR filled, 1315 hours point of attack shifted to Redoubts.

¹⁵ ANZAC Mounted Division Report, Action at Rafa. WA 191/1 (National Archives Head Office, Wellington).

outpost positions.¹⁶ He oversaw the application of mounted rifles tactics within initial training and ensured they were applied on operations.

Memoirs from two of his men confirm the confidence in his leadership and competence:

Our Brigade c-in-c Major- General Chaytor was always to the fore whenever trouble loomed ahead. His horse was killed in a little skirmish outside Khan Yunis ... and the general had a miraculous escape from death or injury.¹⁷

A pleasing feature of the reorganisation, to the New Zealanders in particular, and little, if any less to the members of the 1st and 2nd Australian Light Horse Brigades, was the appointment of the unassuming and very capable leader of the New Zealand Brigade, General Chaytor, to the command of the ANZAC Mounted Division. Subsequent events proved how well he was fitted to carry out the job that was assigned to him.¹⁸

In addition to planning and executing operations, a commander has a duty to ensure his own subordinate commanders are competent. If Chaytor had doubts about an officer's suitability or performance, he would have the individual transferred or returned to New Zealand, especially if they were a Major, the rank of a Squadron Commander.¹⁹ Minimal movement of COs suggests that Chaytor had confidence in his key subordinates.

Longevity in Key Appointments

Appendix 3 lists the COs of the NZMR Brigade and its major units. It illustrates the remarkable stability and thus accumulation of combat experience by key

¹⁶ Rhodes AET, fl 1916- 1917: Diary kept while campaigning in the Sinai. Alexander Turnbull Library 76-123. This would normally be the job of the regimental commanders.

¹⁷ 1998.31 Memoirs of LCpl E.C. McKay, Kippenberger Military Archive and Research Library (Army Museum, Waiouru), p. 123.

¹⁸ 1997.503 Memoirs of Corporal McMillan ('*Forty Thousand Horsemen*'), Kippenberger Military Archive and Research Library (Army Museum, Waiouru), pp. 160- 161.

¹⁹ Letter from General Chaytor dated 19th January, 1917 WA 40/4/5 (National Archives Head Office, Wellington). In this letter alone, General Chaytor advised his intention of posting one Major that he deemed unable to command a Squadron, to the details (training unit) in Egypt and another Major to be returned to New Zealand. On the other hand, he had sympathy for those who could not perform their duties because they were wounded or ill.

appointments within the NZMR Brigade during the Sinai Palestine Campaign.²⁰ The brigade only had two commanders, Chaytor then Meldrum. CMR and WMR each had two COs, while AMR had one for the entire campaign. This ensured that the brigade and the regiments were led by commanders with growing levels of expertise and in whom subordinates could place their trust. Occasionally they might permit a mounted attack, or fail to employ a reserve, however, they generally applied the tried and true fire tactics, despite the obvious success of the Australian mounted charge at Beersheba.

Any disruption by posting in new commanders, either due to casualties or the need to fill staff appointments on headquarters might have caused considerably more command turbulence within the regiments. Mercifully, deaths and severe wounding of brigade, regimental and squadron commanders was light, especially when compared with World War II COs. As New Zealand only had a single brigade, the requirements to fill staff appointments were few. Thus there was little turbulence generated other than as officers filled vacancies of superiors who were temporarily absent for leave or due to illness, as Appendix 3 shows. At Brigade and Regimental levels, there were short periods where a CO or Squadron Commander was temporarily appointed to command the next higher organisation. This was required to cover short periods of illness, leave or where the superior was absent due to covering the absence of his higher commander. Temporary commanders came from within the unit, ensuring that extant procedures would be followed and that the bonds of trust with known commanders remained.

Longevity ensured strong bonds developed between commanders and their men, as this example from CMR illustrates:

Lieut- Colonel J. Findlay, the Regiment's Commanding Officer, re-joined on February 19th from the hospital. He had been seriously wounded at Anzac on the night of August 6th, when leading the Regiment against the Turkish machine guns at Walden Point. He was beloved by all ranks, and his arrival on the lines was heralded by much cheering. "Old John," as he was

²⁰ This is in stark contrast, with commanders of the nine infantry battalions within 2 NZ Div in WW2 for example. The battalions had between them 5-10 different Commanding Officers each, serving between one and twenty seven months. Roger McElwain, 'Commanding Officers of the Infantry Battalions of 2nd New Zealand Division', in Harper and Hayward, pp. 177- 197

affectionately known, was to carry the Regiment right through to the end of the War...²¹

Each squadron had its own allotted task and camp, and the rivalry between them to gain the approval of the C.O. tended to keep everyone in a high state of efficiency.²²

Lieutenant Colonel Findlay served for 40 months as CO CMR, interrupted at least three times when he was temporarily in command of the brigade.

Current British doctrine notes that '... in many circumstances the experienced commander will be able to apply his knowledge of the situation and eye for the ground to compress the combat estimate, making a series of *intuitive judgements* which lead to a quick and appropriate decision.'²³ Intuition, developed through experience, enabled commanders to make good tactical choices.

Initiative and Courage

NZMR battles and engagements, and their outcomes, were strongly influenced by the initiative and courage displayed by commanders at all levels, irrespective of their experience or intuition. General Chaytor's influence has already been noted. Three additional examples illustrate this point.

The first is the night attack on Amman. Recognising that a third attempt to capture Amman in daylight would be unsuccessful, it was decided to launch a night attack. The decision, given the risks, was a command decision. The plan itself was sophisticated, yet simple in execution. It was a total change in tactics, and therefore not anticipated by the Turks. Launched without fire support and with deliberately less than the full strength brigade, it worked.

The second is the courage shown by Adjutant of CMR and two other officers, in the immediate aftermath of the Amman night attack. In leading a counterattack to restore the situation following the mistaken withdrawal of part of the line, they 'by their inspiring example, each in his own part of the line, swept back their men in a

²¹ Powles, *Canterbury Mounted Rifles*, p. 84.

²² *Ibid.*, p. 88.

²³ *ADP Command*, p. 8-23.

magnificent charge.²⁴ The hasty counterattack is an acknowledged tactic to recover lost ground, it takes advantage of the initial confusion and exhaustion of the attackers. However, it takes leadership and personal example to get it started, most often it is led by junior officers and initiated on the spur of the moment.

The third example is the use of enfilade fire by machine gunners at Ayun Kara. Lieutenant Armstrong realised the fire of his machine gun would be more effective if he positioned the weapon out to the flank. This was insecure ground away from the close protection of his own troops, but he did it despite the risks. This example demonstrates that initiative can also be employed to improve the effect of weapons and lead to an improvement of, in this case, machine gun tactics.

Commanders at all levels can, as these three different examples illustrate, influence the tactics applied by the use of their initiative, and through the courage they display in combat. A greater understanding of what is happening in the confusion and noise of battle can be achieved as commanders gain combat experience. Previous combat experience, either the Boer War or Gallipoli counted also.

Effect on Tactics

Provided they know the tactics, commanders can either choose to follow them, or not. Successful tactics are more likely to be repeated, although repetition becomes predictable and may present opportunities to be exploited by an enemy. Likewise, tactics that fail should not ordinarily be repeated unless the commander judges that the conditions are different and the causes of the failure are not present in the current situation. Tactics have to be adjusted due to the ground, the enemy, a change in enemy tactics as the campaign progresses, and to account for new weapons, equipment and procedures. Tactics also evolve as enemy strengths and limitations become known, certain TTPs are shown to work and as officers and men gain in combat experience and confidence.

'Prior to the commencement of operations, a commander directs, trains and prepares his command, and ensures that sufficient resources are available.'²⁵ Evidence in the form of accounts from training confirm New Zealand commanders applied mounted rifles doctrine prior to Romani. During training, officers are recorded employing

²⁴ Powles, *History of the Canterbury Mounted Rifles*, p. 212.

mounted rifles tactics within their units. Fred Dill recounted training undertaken at Zeitoun Camp in Egypt. Officers would decide on the objective, determine the style of attack to be undertaken, usually against the flank of the 'enemy'. Dismounted attacks would be conducted.²⁶ Dill's account reinforces Lieutenant Colonel Bauchop's report of mounted rifles tactics practiced during training in New Zealand, at camp, immediately prior to the war.²⁷

The tactics applied at Magdhaba worked, they were repeated successfully at Rafa. The charge at Katia was unsuccessful, mounted charges were not repeated at brigade level again, and only once more (at the end of the campaign and a failure) at regimental level, despite the success of the Australian charge at Beersheba. General Chaytor was not convinced of the need to change the tactics to mounted operations and this accounts for his refusal to follow the Australian Mounted Division's decision to arm their regiments with swords.²⁸ The issue of swords would have been a clear signal of an intent to conduct mounted combat.²⁹ To what extent Chaytor's decision was based on his assessment of the enemy or his Boer War experience is not known.

Summary

Mounted rifles commanders had to exercise command and display leadership. What they had to do, was spelled out in YMRT. Their work was highly visible to their men. They had to make quick, flexible decisions, in implementing the tactics of the day, without undue risk. Longevity in key appointments ensured commanders became experienced and this led to strong bonds with their men. It was reflected in the exceptional performance of the Brigade and its regiments.

²⁵ ADP *Command*, p. 2-10.

²⁶ Frederick Gordon (Fred) Dill, interview by Jane Tolerton and Nicholas Boyack, 29 Sep 1988, World War I Oral History Archive, Alexander Turnbull Library, OHInt-0006/23. He also stated that all training in New Zealand was done as mounted rifles (as opposed to cavalry or infantry).

²⁷ Bauchop, pp. 95-96.

²⁸ Kennedy, pp. 132-133.

²⁹ Taylor, William L., p. 180.

CHAPTER EIGHT- CONCLUSIONS

This examination of the tactics employed by the NZMR Brigade and its regiments during the Sinai Palestine Campaign has sought to answer three key questions:

- How did the Boer War shape tactical doctrine and mounted rifles organisations up until the commencement of World War I?
- What tactics were employed by the NZMR Brigade during the Sinai Palestine Campaign?
- How did NZMR tactics evolve during the course of the campaign?

An analysis of the tactics employed during 15 engagements described in this study is at Appendix 4. It confirms that more often than not, the NZMR Brigade employed *fire tactics*, attacked dismounted and attempted to envelop the enemy where possible.

Some factors in the employment of mounted rifles can be partly attributed to the Boer War and to New Zealand's experience in that campaign. Despite vociferous debate within military circles over the continued utility of the cavalry and the applicability of lessons from the Boer War and mounted rifles generally to 'future' wars between major powers, fire tactics were developed from combat experience and enshrined within the YMRT. The YMRT went beyond tactics, it included a range of necessary skills learned in South Africa, such as the employment of night movement to aid in concealment and surprise, the care of horses, and the use of envelopment.

Whilst the effect of the rifle was acknowledged, a school of thought emerged which suggested that superior training and organisation, and a focus on moral qualities and aggression would be the deciding factors in combat, not firepower. This is reflected within the general assault, the charge and the use of the bayonet prescribed for infantry as well as in the YMRT for mounted rifles.

Having deployed ten contingents to the Boer War, New Zealand was convinced of the future utility of mounted rifles so chose to retain them within its defence force structure, albeit as Volunteers and militia, rather than regular (full time) units. It is difficult to establish a direct and ongoing transfer of combat experience from New Zealand Boer War veterans to members of the mounted rifles, particularly given the

'standard' of the mounted corps with respect to dismounted action reported in 1903. Nevertheless, 85 Boer War veterans served in the NZMR Brigade during the Sinai Palestine campaign, some in senior positions, and their combat experience was directly relevant, as the terrain and enemy encountered in the Middle East offered similar opportunities for manoeuvre and employment of the tactics they had experienced in South Africa. Some of this hard won experience from South Africa must have been transferred to the NZMR Brigade. How much will never be known.

Examination of NZMR Brigade tactics has been limited to patrolling and to offensive operations, primarily the advance and attack. This is because patrolling, advances and attacks were the main combat actions undertaken by the brigade during the campaign. The few defensive operations are not numerous enough, nor reported on in sufficient detail to provide an accurate determination of the tactics employed.

The initial stage of the campaign involved extensive patrolling and security operations. Patrols, varying in strength from two troopers through to an entire brigade were despatched on a variety of reconnaissance and security tasks. Whilst many patrols did not result in enemy contact, they ensured that the NZMR Brigade got to know the battlefield and learned to live, fight and survive in the desert. Looking after their horses, the 'maintenance of horse flesh', was a high priority for the New Zealanders. They were able to travel further and faster than the Turks anticipated, achieving surprise as a result. Patrols mainly operated by day, although Outpost Lines and Standing patrols were routine night security tasks.

Movement at night was an accepted activity. Often it was a necessity; to get into an attack position by dawn, or as a result of returning from an all day patrol or attack. Night movement offered the ability to move in the relative cool and aided in concealing intentions from the enemy. Continued use of the dark was facilitated by the limited Turkish night patrols and forward security. For whatever reason, the Turks conducted few night operations, apart from static security posts, and never seriously threatened Allied night movement.

Reconnaissance of an objective prior to an attack was standard. This was limited initially to binocular observation only, from forward of the enemy. This effected the detail that could be determined about enemy dispositions and the state of the ground and reinforced the need for flexible plans and the use of reserves. Commanders at division, brigade and regimental level are recorded undertaking reconnaissance on

sufficient occasions to establish that this was standard procedure at all levels. There were some notable failures to undertake reconnaissance, mostly immediately prior to mounted charges, which often then proved unsuccessful. As the campaign progressed, most noticeably between the Gaza II and Beersheba battles, the capacity for what would nowadays be termed 'close target reconnaissance' was developed. This detailed reconnaissance of an enemy position was undertaken by small groups of volunteers, usually Senior Non Commissioned Officers or subalterns. A discrete organisation specialising in reconnaissance was not established.

A key outcome of a reconnaissance should be the form of attack to be undertaken. One of the two types of attack, quick or deliberate, is selected based upon an assessment of the state of the enemy's defences. If the enemy is well prepared, (dug in, with obstacles, machine guns) a deliberate attack should be conducted. Such an attack should be preceded by further reconnaissance in order to determine the location of key enemy weapons systems and defensive layout, delivery of detailed orders and an amount of pre-attack artillery fire. Even though the enemy positions at Rafa and Magdhaba being well sited, they were subjected to quick attacks, presenting additional risks to the attackers. Lack of water, intense heat and the challenges of logistics had more to do with the decision to mount quick attacks than an assessment of the enemy. The initial attacks, being successful, established a pattern of night movement and envelopment that was repeated on a grander scale at Gaza I and II, and in later battles. Most NZMR attacks and brigade and regimental level were 'quick attacks', irrespective of the state of enemy defences.

Having determined that an attack was to be undertaken, the brigade would make its approach to the objective. While this might be direct towards the enemy, often the NZMR brigade would move to the flank or towards the enemy's rear, ensuring the enemy was cut off, and applying moral pressure. Envelopment was most often attempted by NZMR elements, unless part of a larger scale attack where the opportunities for enveloping the enemy were limited by the presence of flanking units. Movement would be in a wide arc to avoid enemy fire if possible, but movement would continue under artillery fire as well as sporadic rifle and machine gun fire until ordered to dismount by their commanders. The regiments would dismount 1000-2000 meters from the enemy, unless folds in the ground offered the opportunity to get closer without undue exposure to enemy fire. This was not usually possible by greater than squadron size elements. Horses would be led away by the horse

holders into cover or beyond enemy rifle range. At that point, the effective rifle strength of the NZMR force would immediately drop by 25 percent.

The brigade would attack with either two or all three of its regiments forward, depending on the extent of the ground and the need to achieve sufficient weight of fire. The attack would be undertaken by firing lines moving forward, closing on the enemy, under the cover of their own fire and of the supporting fire of machine guns and artillery. Movement forward was covered by the fire of firing lines as they alternated between moving and providing fire support. Progress forward was slow, resulting in high consumption of ammunition, and increasing the threat of enemy reinforcement and the risks associated running out of ammunition or water. Day time attacks could take all day, as the firing lines inched their way forward close enough, still under enemy fire, that a general assault could be launched. As the firing lines neared the enemy, the circumference required would theoretically get smaller, however gaps between squadrons, regiments and flanking brigades would appear, requiring that reserves be committed to fill them.

Reserves were not always designated. When they were, they were mostly deployed en mass to fill gaps in the firing line between squadrons and regiments, and certainly not piecemeal as replacements for casualties. Occasionally the reserve, if not already committed, would be deployed into the firing line immediately prior to the general assault being ordered. Employment of the reserve after the capture of the Damieh crossing provides a good example of how a reserve was used effectively to restore a situation. A reserve would ideally be employed to take advantage of an unforeseen opportunity or to exploit success. There were few opportunities for this, as often the entire enemy force capitulated, as occurred at Magdhaba and Rafa, or darkness or lack of water for men and horses prevented immediate follow up.

Having manoeuvred close enough to the enemy position, a general assault was ordered. This would take the form of a bayonet charge, with soldiers occasionally firing from the hip as they charged in, and supported where possible by machine gun fire. This tactic was used to good effect, usually resulting in immediate surrender of the Turks directly under attack and the collapse of the rest of the defence. To a degree, the bayonet charge had the same impact the cavalry school wanted to achieve by mounted action with the horse and the sword. Fire tactics, however, had the advantage of getting the attacking force much closer in without undue exposure to fire and because the enemy was assailed on a number of fronts, he could not

direct all his fire at the single point that a mounted charge provided. The general assault and bayonet charge were employed throughout the campaign.

Mounted charges were attempted on a few occasions only. After Katia they were never again attempted at brigade level. The most successful New Zealand charges were at troop level, such as the counter-charge delivered against Turkish cavalry. The failure of the CMR mounted charge at Amman demonstrates the vulnerability of attacking mounted when enemy machine guns are not suppressed. Mounted charges were most often successful tactics against employed against weak positions or those that could not be supported by fire from other locations. Very few of these opportunities presented themselves during the campaign. General Chaytor made a conscious choice *not* to employ mounted charges, despite a change in the Australian Mounted Division after Beersheba.

Suppression of the enemy was an essential element in the successful use of fire tactics. Machine guns played a key role in achieving this in all significant NZMR engagements. The decision early on in the campaign to brigade all NZMR machine guns into a single specialist squadron paid huge dividends and led to the development of innovative machine gun tactics. Machine guns were employed from the offset in providing covering fire from long range, and also as ground permitted, from within the firing line. Machine gunners learned to provide the more effective enfilade fire from a flank and commanders ensured that machine guns were forward to defeat Turkish counterattacks. The creation of a machine gun reserve enabled uncommitted guns to be moved into positions as the battle developed where they could achieve the greatest effect.

Artillery was not always available, and when it was, it was never on the scale achieved in the Western front. While control of artillery fire was rudimentary, NZMR commanders developed techniques to improve fire control; simply by including artillery commanders in reconnaissance and planning, and by having them alongside during the attack itself. On the few occasions artillery support was not available, the NZMR Brigade continued its assigned missions and made up for the shortfall with its own direct firepower. The only occasion when all firepower was deliberately forsaken was in the night attack at Amman. This is believed to be NZMR's only night attack of the campaign.

This NZMR night attack demonstrated a level of sophistication not generally associated with World War I tactics. In reducing the numbers of attackers and foregoing all firepower until first contact, the brigade accepted a lot of risk. The plan focused the attack directly to the vital ground and correctly anticipated the withdrawal of enemy from untenable positions at first light. Risk was minimised by withdrawing the assault force from the line and by spending the entire day in preparation. The risks paid off, as the attack successfully captured its objective and avoided a repetition of the failed attrition battles of the preceding two days. Even then, the objective was almost lost except for the preparations undertaken to withstand the anticipated Turkish artillery fire and counterattacks, and for an immediate counterattack led by some of the NZMR officers.

At all times, commanders were forward. The location of General Chaytor at Magdhaba and Rafa, and CO AMR at Ayun Kara are excellent examples of commanders being forward where they could accurately determine the state of the battle and exert their influence in a timely manner. Forward command and good leadership were consistent themes.

The NZMR Brigade employed *fire tactics* throughout the campaign. Variations such as mounted action and night attacks were few. Tactical techniques improved; reconnaissance, machine gun tactics and artillery coordination are three examples. There are no accounts of snipers being employed, nor of reconnaissance specialists being brigaded. Other than the night attack at Amman, the dark was not used to get firing lines close in to the enemy by first light. So, tactical techniques improved over the course of the campaign, but the tactics employed by the NZMR Brigade did not evolve radically.

This is attributable, in part, to the longevity in command appointments and the accumulation of battle experience associated with that and to the character of the enemy. NZMR commanders were comfortable with the fire tactics they were employing. While ponderous, fire tactics were not that risky. Small casualty lists, despite the time some battles took, confirm this. Slow movement forward, covered by fire, got sufficient numbers to a point where they could break into the enemy position at the point of the bayonet. Had Turkish positions been as extensive as those faced in the Western Front, had the Turks the numbers to have extensive positions in depth, or the artillery and barbed wire for large obstacle belts, then the tactics would

have had to change. As it was, fire tactics as employed by New Zealanders were as good a method as any of overcoming the Turks rifles and machine guns.

Combat operations by the NZMR Brigade in the Sinai Palestine campaign vindicated the proponents of mounted rifles units and the use of fire tactics. The tactics used would not have been appropriate at Gallipoli or at the Somme, however they suited the ground and the enemy faced by the NZMR Brigade.

NZMR BRIGADE WAR DIARY¹

1915	
20 December	Departed Gallipoli
1916	
4 March	Took over a portion of the Canal defences
20 June	Camped at Hill 70
4-5 August	Battle of Romani
6-12 August	Actions at Katia, Aogratina and Bir El Abd
20 December	Night march on El Arish
21 December	Occupation of El Arish
22 December	Night march to Magdhaba
23 December	Battle of Magdhaba
1917	
8 January	Night march on Rafa
9 January	Battle of Rafa
23 February	Reconnaissance of Khan Yunus
25 March	Night march to Deir el Belah
26 March	First Battle of Gaza
17- 19 April	Second Battle of Gaza
23 May	Destruction of Asluj Railway
29 October	Night march to Asluj
30 October	Advance on Beersheba by all night march
31 October	Action of Tel es Saba and capture of Beersheba
7- 10 November	Advance through Philistia
14 November	Action at Ayun Kara
16 November	Occupation of Jaffa
24 November	Action on River Auja
1918	
17 February	Marched to Bethlehem
19 February	Advance on Jericho
20 February	Action on el Muntar
21 February	Capture of Jericho
24 March	Crossed the Jordan
24 March	Action near Shunet Nimrin
27- 30 March	Battle of Amman
31 March- 1 April	Withdrawal from the mountains
1-6 May	Raid on Es Salt
21 September	Action at Jisr ed Damieh
23 September	Capture of Es Salt
24 September	Capture of Suweilah
25 September	Capture of Amman
27 September	Surrender of remainder of Turkish IV Army, at Ziza
22 December	Back at Rafa
1919	
23 July	Final draft departed Egypt for New Zealand

¹ Powles, C. Guy, Col., *The New Zealanders in Sinai and Palestine: Official History of New Zealand's Effort in the Great War*, Whitcombe and Tombs, Auckland, 1922, pp. 282- 283. Slightly modified.

Appendix 2**NZMR BRIGADE SPECIAL ORDER NO 24 OF 9 JULY 1917¹****I Information**

A. Enemy night patrols are in the habit of frequenting AL BUGAR-KH KHASIA area.

B. The CMR with 3 sections MG Sqdn will leave the east bank of WADI GHUZZE at 2400 on the 9th July and march to EL BASAL where they will leave their horses under a guard of two troops. They will then move east on foot so as to be in a position on the ridge north north east of KH KHASIF by 0330.

C. The Brigade less CMR. WMR (with) 3 sections MG Sqdn and 1 sqdn of 3 troops AMR will leave the east bank WADI GHUZZE at 0130 on 10th July and advance on KH KASIF along the TARA- BEERSHEBA road.

II Intention

The Brigade intends to surround this area during the night 9/10 July and to clear it up at dawn on the morning of 10th July. The WMR, one sqdn AMR will leave east bank of the WADI GHUZZE at 0100 on 10th July and it will be in the following positions before 0300 (then gives a series of locations)

Further extracts: The whole operation will be carried out in silence. If the enemy patrols are met only the bayonets should be used. As the operation will be carried out by moonlight all arms and equipment will be dulled to prevent glaring. All Ranks must be careful to prevent clinking of stirrups or bits. No men with coughs, or neighing horses, should be taken. Stony ground should be avoided. The skyline should be avoided. Hotchkiss guns will accompany troops but special care must be taken that all equipment is securely packed to prevent noise.

¹ 2001.660 Two Army Details Book(s) (WMR Regiment Regimental Orders Book), Book #2, Special Order No 24, no page number, Kippenberger Military Archive and Research Library (Army Museum, Waiouru)

Appendix 3**NZMR BRIGADE COMMANDING OFFICERS¹****NZMR Brigade**

Name	Date Appointed	Date Relinquished	Months in Command	Remarks
Brig Gen Chaytor	20 Dec 15	22 Apr 17	28	In Command
Lt Col Macksey	1 Jun 16	4 Jul 16		Temp Command
Lt Col Macksey	13 Aug 16	19 Dec 16		Temp Command
Lt Col Meldrum	23 Apr 17	30 Jun 19	26	In Command
Lt Col Findlay	2 Sep 17	1 Oct 17		Temp Command
Lt Col Findlay	16 May 18	28 Jun 18		Temp Command
Lt Col Findlay	2 Mar 19	10 Mar 19		Temp Command

AMR

Name	Date Appointed	Date Relinquished	Months in Command	Remarks
Lt Col Macksey	29 Dec 15	23 Apr 17	28	In Command
Lt Col McCarroll	9 Oct 15	27 Dec 15		Temp Command
Lt Col McCarroll	1 Jun 16	4 Jul 16		Temp Command
Lt Col McCarroll	13 Aug 16	19 Dec 16		Temp Command
Lt Col McCarroll	23 Apr 17	30 Jun 19	26	In Command
Maj Whitehorn	14 Nov 17	25 Nov 17		Temp Command
Maj Whitehorn	16 Dec 17	15 Jan 18		Temp Command
Maj Monro	25 Nov 17	16 Dec 17		Temp Command

WMR

Name	Date Appointed	Date Relinquished	Months in Command	Remarks
Lt Col Meldrum	20 Dec 15	23 Apr 17	28	In Command
Lt Col Whyte	4 Nov 16	8 Dec 16		Temp Command
Lt Col Whyte	23 Apr 17	29 Dec 18	20	In Command
Maj Batchelor	31 Oct 16	1 Nov 16		Temp Command
Maj Batchelor	2 Jul 18	9 Jul 18		Temp Command
Maj Batchelor	29 Dec 18	30 Jun 19	6	In Command
Maj Dick	23 Apr 17	12 Dec 17		Temp Command
Maj Dick	9 Jul 18	2 Aug 18		Temp Command
Maj Dick	11 Aug 18	28 Sep 18		Temp Command

1. Powles, *New Zealanders in Sinai and Palestine*, pp. 278- 279. Adapted.

CMR

Name	Date Appointed	Date Relinquished	Months in Command	Remarks
Lt Col Findlay	18 Feb 16	30 Jun 19	40	In Command
Maj Acton-Adams	26 Jun 16	17 Jul 16		Temp Command
Maj Acton-Adams	3 Oct 16	18 Nov 16		Temp Command
Maj Acton-Adams	2 Jun 17	8 Jun 17		Temp Command
Maj Acton-Adams	12 Sep 17	1 Oct 17		Temp Command
Maj Acton-Adams	22 Jan 18	4 Apr 18		Temp Command
Maj Acton-Adams	16 May 18	28 Jun 18		Temp Command
Maj Acton-Adams	7 Feb 19	12 Feb 19		Temp Command
Maj Acton-Adams	27 Feb 19	1 Mar 19		Temp Command
Maj Acton-Adams	26 Jun 19	30 Jun 19		Temp Command
Maj Hurst	20 Aug 17	27 Aug 17		Temp Command
Maj Hurst	7 Sep 17	12 Sep 17		Temp Command
Maj Hurst	7 Jul 18	21 Jul 18		Temp Command
Maj Hurst	19 Sep 18	9 Oct 18		Temp Command
Maj Hurst	10 Jan 19	19 Jan 19		Temp Command
Maj Hurst	2 Mar 19	10 Mar 19		Temp Command
Maj Murchison	2 Sep 17	7 Sep 17		Temp Command

1st Machine Gun Squadron

Name	Date Appointed	Date Relinquished	Months in Command	Remarks
Capt Harper	15 Jul 16	15 Feb 18	19	In Command
Capt Hinman	27 Dec 17	21 May 18		Temp Command
Capt Hinman	22 May 18	30 Jun 19	2	In Command
Capt McCarroll	9 Nov 18	27 Dec 18		Temp Command

ANALYSIS OF NZMR BRIGADE COMBAT TACTICS

Name	NZMR strength involved	Frontal (F)/ Envelopment (E)	Suppression	Reserve designated	Surprise achieved	Day/ Night approach	Dismounted	Mounted charge	Firing line (FL) adopted	Fire support employed	Fire and movement by FL	Dismounted charge	Bayonet used	Flank security employed	Reserves used	NZMR Brigade Casualties (KIA/ WIA)	Remarks.
Pre- Beersheba																	
Romani	Bde	F (1)	Yes	Yes	No	Day	Yes		Yes	Yes	Yes	Yes		No		(2)	MG support in attack Dismounted 500-1000 metres from enemy
Katia	Bde(4)	F	No	No		Day	(3)	Yes	Yes	No	No			No	No	(2)	Attack failed.
Magdhaba	Bde(4)	E	Yes	Yes	Yes	Ni	Yes		Yes	Yes	Yes	Yes	Yes	No	Yes(6)	8/ 36	Attack preceded by mounted screen. Main Body dismounted 1600 yards from enemy. MGs employed to front and flanks.
Rafa	Bde (4)(5)	E	Yes	Yes		Ni	Yes		Yes	Yes	Yes	Yes(8)	Yes	Yes	Yes(6)	17/ 93	Flank movement preceded by mounted patrols. Flank security elements deployed. Main Body dismounted 2000 yards from the enemy
Gaza I (4)	Bde	F	Ltd	Yes		Day	Yes		Yes	Ltd(9)	Yes	Yes	Yes	Yes		1/ 9	Limited (Ltd) fire support due to cactus. Many smaller skirmishes, junior leadership.
Gaza II (Sausage Ridge)	WMR	F	Yes	Yes	No	Day	Yes(10)		Yes	Yes					Yes(6)	1/ 23	Joint CO WMR and artillery BC reconnaissance, use of MGs
Beersheba																	
Tel es Saba	Bde	E	Yes	Yes (11)	No	Day	Yes		Yes	Yes	Yes	Yes				6/ 22	Artillery battery commander accompanied CO, use of MGs
Post- Beersheba																	
Ayun Kara	Bde	E	Yes (13)	Yes (12)	No	Day	Yes		Yes	Yes (13)		Some	Yes			15/ 74 (26)	Defeat of strong Turk counter attack by MGs, use of enfilade fire, massed MG fire and interlocking arcs
Jericho	Bde	F (17) (18)	(15)	Yes		Ni/ Day (14)	Yes	Yes (19)	Yes						Yes (16)		Close target recon by two SNCOs (Patton and Fitzgerald)
Ghoraniyeh	AMR	E	No	No	Yes	Day		Some	Yes	No				Yes		(2)	Speed
	AMR Troop	F						Yes								(2)	Counter-charged a larger Turk cavalry force
Amman/ Hill 3039	Bde	F	No (15)	No (20)	No	Day	Yes		Yes	Yes	Yes			Yes	(20)	(2)	Attack unsuccessful
Amman/ Hill 3039	Bde (+)	F	Yes		No	Day	Yes		Yes							(2)	Attack unsuccessful

Name	Strength	Frontal (F)/ Envelopment (E)	Suppression	Reserve	Surprise achieved	Day/ Night Approach	Dismounted	Mounted charge	Firing line (FL) adopted	Fire support employed	Fire and movement by FL	Dismounted charge	Bayonet used	Flank security employed	Reserves used	NZMR Brigade Casualties (KIA/ WIA)	Remarks.
Amman (Night Attack)	Bde(-)	E	No	No	Yes	Ni	Yes		Columns initially	No	Yes	Yes	Yes	No	No	(2)	Silent attack, by night. Use of MGs to defeat Turk counter attack
El Makhruk	WMR	(22)			Yes	Day	Yes		Yes							Nil	
Amman	Bde (24)	E	Ltd	Yes			Yes	Yes (25)	Yes	Yes	Yes	Yes	Yes	Yes (6)	Yes	(2)	

Notes:

- 1 Yeomanry Regt attached NZMR Bde attacked Turk open southern flank 10 One squadron AMR dismounted 1,800 yards from objective Two others, using wadi for cover, got to within 800 yards 19 Mounted charge by AMR squadron captures depth enemy position (forward position already captured)
- 2 Not known 11 3 ALH Regt 20 Depth elements deployed forward into FL
- 3 Force to dismount due to ground and enemy fire 12 Two squadrons 21 Brigade reinforced with two infantry battalions and four howitzers
- 4 As part of ANZAC Mounted Div 13 Although unlikely to be effective, as the extent of the Turk position was not fully realised 22 Encircled Turkish Divisional HQ before first light
- 5 NZMR and 3rd LH Bdes both under command Chaytor 14 Commenced movement at night 23 Fire support from one and a half AMR squadrons and a machine gun
- 6 To plug a gap in the FL 15 No artillery available 24 CMR Troop- was used to round up prisoners
- 7 Three regts forward in FL 16 AMR committed once CMR strayed off correct axis of assault 25 CMR charged towards Saman (town) but had to dismount due to enemy fire
- 8 In two 800 meter dashes 17 Envelopment/ bypass attempted along Wadi Kamran 26 These were AMR's casualty figures AMR 'suffered practically the whole brigade's casualties'
- 9 Cactus hedges made fire support difficult 18 WMR attack involved envelopment

ANALYSIS OF NZMR BRIGADE COMBAT TACTICS

Name	NZMR strength involved	Frontal (F)/ Envelopment (E)	Suppression	Reserve designated	Surprise achieved	Day/ Night approach	Dismounted	Mounted charge	Firing line (FL) adopted	Fire support employed	Fire and movement by FL	Dismounted charge	Bayonet used	Flank security employed	Reserves used	NZMR Brigade Casualties (KIA/ WIA)	Remarks.
Pre- Beersheba																	
Romani	Bde	F (1)	Yes	Yes	No	Day	Yes		Yes	Yes	Yes	Yes		No		(2)	MG support in attack Dismounted 500-1000 metres from enemy
Katia	Bde(4)	F	No	No		Day	(3)	Yes	Yes	No	No			No	No	(2)	Attack failed.
Magdhaba	Bde(4)	E	Yes	Yes	Yes	Ni	Yes		Yes	Yes	Yes	Yes	Yes	No	Yes(6)	8/ 36	Attack preceded by mounted screen. Main Body dismounted 1600 yards from enemy. MGs employed to front and flanks.
Rafa	Bde (4)(5)	E	Yes	Yes		Ni	Yes		Yes	Yes	Yes	Yes(8)	Yes	Yes	Yes(6)	17/ 93	Flank movement preceded by mounted patrols. Flank security elements deployed. Main Body dismounted 2000 yards from the enemy
Gaza I (4)	Bde	F	Ltd	Yes		Day	Yes		Yes	Ltd(9)	Yes	Yes	Yes	Yes		1/ 9	Limited (Ltd) fire support due to cactus. Many smaller skirmishes, junior leadership.
Gaza II (Sausage Ridge)	WMR	F	Yes	Yes	No	Day	Yes(10)		Yes	Yes					Yes(6)	1/ 23	Joint CO WMR and artillery BC reconnaissance, use of MGs
Beersheba																	
Tel es Saba	Bde	E	Yes	Yes (11)	No	Day	Yes		Yes	Yes	Yes	Yes				6/ 22	Artillery battery commander accompanied CO, use of MGs
Post- Beersheba																	
Ayun Kara	Bde	E	Yes (13)	Yes (12)	No	Day	Yes		Yes	Yes (13)		Some	Yes			15/ 74 (26)	Defeat of strong Turk counter attack by MGs, use of enfilade fire, massed MG fire and interlocking arcs
Jericho	Bde	F (17) (18)	(15)	Yes		Ni/ Day (14)	Yes	Yes (19)	Yes						Yes (16)		Close target recon by two SNCOs (Patton and Fitzgerald)
Ghoraniyeh	AMR Troop	E	No	No	Yes	Day		Some	Yes	No				Yes		(2)	Speed
	AMR Troop	F						Yes								(2)	Counter-charged a larger Turk cavalry force
Amman/ Hill 3039	Bde	F	No (15)	No (20)	No	Day	Yes		Yes	Yes	Yes			Yes	(20)	(2)	Attack unsuccessful
Amman/ Hill 3039	Bde (+)	F	Yes		No	Day	Yes		Yes							(2)	Attack unsuccessful

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