

6. Sinai and Palestine

The Sinai and Palestine theatres witnessed a style of modern warfare that was very different from that of the Western Front, one characterised by highly mobile mounted operations rather than static set piece offensives directed at trench lines, except for a period at Gaza. Three features in particular shaped the nature of warfare in the Sinai and Palestine. The first was that it was not the main theatre of war. No decision could be reached in the Middle East. The best that could be accomplished was to knock Turkey out of the war, which would be useful primarily in that it would free troops for the Western Front. Geographical considerations made a decisive result unlikely and for this reason, the British commitment to the theatre bobbed up and down, dependant on political circumstances and the needs of other theatres.

The second feature of the theatres was the transportation infrastructure. The Western Front was located in the heart of Western Europe with transportation infrastructure second to none in the world, one capable, when extended, of supplying the needs of armies of millions engaged in modern war. This infrastructure was non-existent in the Sinai region, which had no railways, no ports and few roads. Such infrastructure as was necessary to support modern military operations had to be constructed in the course of the campaign.

The third characteristic of the theatre was the geography. The northern Sinai is a sandy desert where water was a major concern. Open water was invariably undrinkable, wells were often filled in or fouled by the Turks and oases were few and far between. The presence of hods, depressions in the sand with date palms, frequently indicated that there was water under the surface.

In military terms, the effect of these factors in combination was to cause great dispersion of forces and hence the possibility of great mobility. Because the first and second features are far more common than the alternatives, the campaign in Sinai and Palestine would in many ways be rather more typical of later wars than the Western Front. However, the technology was the same.

On 13 January 1916, the Commander in Chief, Egyptian Expeditionary Force (EEF), General Sir Archibald Murray, ordered nine divisions to man the Suez Canal defences, based on an estimate that the Turks could push a force of 250,000 men across the Sinai during the winter of 1915-16. This estimate was excessive and at odds with the logistical

reality of supporting a force in the Sinai desert. This was eventually recognised and ten divisions were transferred to other theatres, all but one of them to the Western Front, including all the infantry divisions of the AIF.¹

On returning from Gallipoli, the light horsemen were reunited with their horses. The horses had now had over a year in Egypt in which to acclimatise, getting used to the diet, sand, water and climate of Egypt. The 1st, 2nd and 3rd Light Horse Brigades and New Zealand Mounted Rifles Brigade were consolidated to form an Anzac Mounted Division under the command of Major General H. G. Chauvel.² At first, this was only a paper grouping of the four brigades and their attached support units, and in fact not quite even that, since the 1st Light Horse Brigade had been sent to the Western Desert to take part in the campaign against the Senussi, Libyan Arabs who had been fighting against the Italians since before the war.³ There were no tables of organisation and equipment for a light horse division and it was not until June that some were drawn up, utilising Imperial cavalry tables as a model.⁴ Priority was given to getting the infantry divisions ready for the Western Front. In particular, the expansion of artillery precluded the provision of Australian batteries for the Anzac Mounted Division artillery, so artillery support was provided by four British 18 pounder horse artillery batteries. However, Australia and New Zealand supplied the other organic units of the division, including engineer, signals, ordnance, veterinary, pay and medical.

Murray realised that an alternative to holding the Suez Canal line would be to push out forces into the desert and adopt an active defence.⁵ Light horse patrols began patrolling the desert and destroying water sources while the hods around Romani were occupied, the Anzac Mounted Division forming part of the garrison. To operate in the area, drinking water was required. The equipment initially supplied for construction of wells was made of corrugated iron and timber. These wells took a long time to dig in the Sinai sand, required a lot of engineering material that had to be brought up on camels, and produced wells that were easily fouled. The Anzac Field Squadron, the newly activated engineer unit supporting

¹ MacMunn, George, Falls, Cyril., *Military operations, Egypt & Palestine, Volume I: From the Outbreak of War with Germany to June 1917*, London, H. M. Stationery Office, 1928, pp. 98, 155-157, 171

² Chauvel was a regular army officer who commanded the New Zealand and Australian Division from 19 September 1915 and then the 1st Division from 6 November 1915 at Gallipoli.

³ GOC 1st Light Horse Brigade, "Operations Order No. 5", 13 February 1916, AWM25 455/1

⁴ Major E.B.T. Nicholls, "Ordnance Work - A&NZ Mounted Division March 1916 - March 1919", AWM224 MSS506, p. 1

⁵ MacMunn and Falls, *Military Operations Egypt and Palestine*, Volume I, pp. 170-171

the Anzac Mounted Division, experimented with smaller versions of the same well but found that they were no better than the bigger ones.⁶

A decisive Australian innovation was the spearpoint pump. This was a simple device introduced by Lieutenant Colonel L.C. Wilson, of the 5th Light Horse Regiment, who had seen them used in Queensland before the war. A spearpoint pump was a 2.5-inch (6.35 cm) steel tube with a solid point at one end and a section with holes covered by wire gauze to keep out the sand. The spearpoint was driven into the ground with a sledgehammer or a makeshift pile driver. If the spearpoint was insufficiently long, adding additional lengths of tubing could extend it. Water could be extracted with the spearpoint up to 6 metres down. The spearpoint was particularly useful with wells that had silted up. It could be driven into the bottom and produce water in the few minutes it took to set up canvas troughing. A single horse could easily carry the whole apparatus. It could also be extracted from the sand and reused. Initially the British Army would not supply spearpoint pumps so the light horsemen had them manufactured in Cairo with their own regimental funds. Eventually, they were accepted and produced by the Royal Engineers.⁷

This allowed light horse patrols to operate in the deep desert in the region just east of the Suez Canal but it was clearly impractical to try to water the entire EEF in this manner. Brackish in character, the water so produced by boiling was unsuitable for boilers and radiators and would not be consumed by animals used to sweet water, although in time they could become accustomed to it. On the other hand, summer temperatures of up to 50C made consumption of ample water vital.

Another significant feature of the Sinai was its sand. Due to prevailing winds, the dunes run with their steep sides facing north. The steep face of a dune being too hard to climb, a patrol could only move northwards or southwards on a winding course. Moreover, unless there was plenty of moonlight, movement in the dark on horseback was dangerous, because the horse could not see the steep edge. The sand reduced the pace of horses to about 4 kilometres per hour. The habit acquired in this period of moving at walking speed on the march persisted in the light horse long after the Sinai was left behind for firmer ground.⁸

⁶ War Diary, 1st Field Squadron, Appendix November 1916, AWM4 14/36 Microfilm Roll 369

⁷ Gullett, H. S., *The Official History of Australia in the War of 1914-1918, Volume VII: The Australian Imperial Force in Sinai and Palestine*, Sydney, Angus and Robertson, 1923, p. 104; McNicoll, *Making and Breaking*, pp. 80-81

⁸ GS Australian and New Zealand Mounted Division, "Lessons Learned from Operations of the Australian and New Zealand Mounted Division - Sinai and Palestine", 23 February 1919, AWM25 455/43

To enable guns and wagons to negotiate the Sinai sands, short wooden planks called "pedrails" were attached to the wheels with chains. These distributed the weight over a great area and reduced sinking in the sand.⁹ This invention, which allowed the guns of the horse artillery to accompany the light horse, was brought to Chauvel's notice by Major H. J. Cox Taylor of the 2nd Division Ammunition Column.¹⁰ Sand tyres worked on a similar principle. These were 6-inch broad iron rims, originally bolted to the wheel, but because this destroyed the wheel for future use, a method was developed of pressing the tyre onto the wheel.¹¹

Water Requirements of Infantry and Mounted Divisions (1916)¹²

Mounted Division	8,000 men @ 9 litres per man	72,000
	10,000 horses @ 23 litres each	230,000
	TOTAL	302,000
Infantry Division	20,000 men @ 9 litres per man	180,000
	8,000 horses @ 23 litres each	184,000
	TOTAL	364,000

The AIF was fortunate in that the 32 stretcher-bearers of a light horse field ambulance, unlike those of the British cavalry, were fully mounted. Thanks to this foresight, the stretcher-bearers were able to keep up with the light horsemen. The unmounted tent subdivisions however had to stay behind. As on the Western Front, the field ambulance organisation proved unsuitable and had to be modified in the field and a number of different methods were used for transporting the wounded. Sand carts were two wheeled vehicles with wide metal treads.¹³ They proved very effective in the Sinai despite numerous defects in early models, resulting in broken wheels and axles. After the Battle of Beersheba in October 1917, 11 out of 27 sand carts in the Anzac Mounted Division had broken axles.¹⁴ Their main defect was that they had no driver's seat, so postilion driving (in which the driver rides the lead horse) was necessary. A second method of carrying the wounded was by camel, in devices known as cacolets. Unfortunately, as the camel moved, the cacolet would be bounced about, sometimes sufficiently to cause the passenger to vomit. For a man with broken bones, a trip in a cacolet was more like a form of torture. A better solution was

⁹ MacMunn and Falls, *Military Operations Egypt and Palestine*, Volume I, p. 180

¹⁰ General H.G. Chauvel, *General Sir H.G. Chauvel - Autobiography*, p. 71

¹¹ Major E.B.T. Nicholls, "Ordnance Work - AIF in Egypt", 15 October 1919, AWM224 MSS 507, p. 11

¹² E-in-C GHQ EEF, "Note on the Water Supply - Qattara, Romani, El Arish Line", 15 July 1916, AWM45 7/11

¹³ Butler, Volume I, *Gallipoli, Palestine and New Guinea*, pp. 561-562

¹⁴ War Diary, 1st Field Squadron, Appendix November 1916, AWM4 14/36 Microfilm Roll 369

the sand sledge. Drawn by two horses, these provided a comfortable means of transport for the seriously wounded.¹⁵

To supply the troops in the Sinai, a standard gauge rail line was begun from Kantara, Egypt on 10 March 1916 and reached Romani on 19 May that year. Five trains were run daily from Kantara to Romani, the trip taking two hours.¹⁶ A 6 inch (15cm) pipeline was laid alongside the rail line to bring sweet water from the Nile, but it did not advance as fast as the railway.¹⁷ Water was hauled the rest of the way by camel in fantasses, 45 to 70 litre iron tanks, each camel carrying two. Looking at the problem and the requirements of maintaining a force of one mounted and two infantry divisions across the Sinai, the Engineer in Chief ordered 96 km of 12 inch (30cm) pipeline and 48 km of 10 inch (25cm) pipeline, almost enough to stretch across the Sinai.¹⁸ The first shipment of 5,000 tons of 12-inch pipe arrived from the United States on 24 September 1916. Egyptian labourers rolled the half pipe segments from slow moving trains to the point where they were assembled. Where the pipeline deviated from the railway, they were dragged into place by Holt tractors.¹⁹

Due to the impracticality of wheeled transport in the desert, the light horse brigade trains were disbanded, leaving only the supply sections attached to the brigades and camels carried out transport tasks in the forward zone. Although slow, they could traverse heavy sand or mud that could not be negotiated by wheeled transport whether mechanical or horse drawn. Camel Transport Corps (CTC) companies consisted of four sections each of 500 camels under the command of an Australian or Imperial NCO and native *Bash Reis*, the equivalent of a sergeant.²⁰ A shortage of Imperial NCOs had led to drawing NCOs from the AIF and the Cairo District issued a call for volunteers for the CTC on 16 January 1916. The CTC initially consisted of three companies, of which two were Australian.²¹ Each native camel driver led 3 camels. Methods were devised of loading the camels so that loads were evenly balanced. Most items were secured with rope while nets had to be used with some items. Rapid loading of the entire column was accomplished by laying out the supplies in long rows and having the camels knelt beside them, so that the entire company could be

¹⁵ Butler, Volume I, *Gallipoli, Palestine and New Guinea*, pp. 562-565

¹⁶ Major E.B.T. Nicholls, "Ordnance Work - AIF in Egypt", 15 October 1919, AWM224 MSS 507, p. 10

¹⁷ MacMunn and Falls, *Military Operations Egypt and Palestine*, Volume I, pp. 160, 170

¹⁸ E-in-C GHQ EEF, "Note on the Water Supply - Qattara, Romani, El Arish Line", 15 July 1916, AWM45 7/11

¹⁹ MacMunn and Falls, *Military Operations Egypt and Palestine*, Volume I, pp. 242-243

²⁰ Badcock, G. E., *A History of the Transport Services of the Egyptian Expeditionary Force 1916-1918*, London, Hugh Rees, 1925, pp. 27, 29, 30;

Lieutenant Colonel W. Stansfield, "Anzac Mounted Division Train", undated, AWM224 MSS 214, pp. 4-5

²¹ DAA&QMG, Cairo District, 16 January 1916, AWM25 157/5

loaded simultaneously. With practice, it eventually became possible to load 2,000 camels in an hour.²² Two companies of the CTC were attached to the Anzac Mounted Division.²³ The job of running the depots became a burden on the CTC, and on 2 September 1916 the 26th and 27th Depot Units of Supply were formed to take over this duty.²⁴

Feed for the horses and other animals was always a problem in Egypt. Australian horses were normally fed on a mixture of grain and fodder; a convenient mixture for military purposes as it minimises transport. Shortly after arriving in Egypt in 1914, the AIF had made its own arrangements for the local purchase of Egyptian maize and barley.²⁵ English oats were available only for a brief time in 1916, although it was much appreciated by both men and beasts. Gram was a split pea grown in Egypt and therefore available in quantity but it was found to heat the animals' blood, so its use was restricted to the cold winter months. Berseem was a kind of Egyptian alfalfa used as a green supplement. The main type of fodder was tibben, a composition of barley straw chopped up into coarse chaff by a horse or oxen driving a set of cutters in a circle. The tibben was separated from the barley by throwing it up in the air, collected, and compressed into bales but due to the process, it also collected a bit of dirt along the way. Egyptian bran, the husks of grain left over after it had been made into flour, was found to be of poor quality. There was also dries, which were dried berseem, and sucrapaille, which was tibben mixed with treacle. Canadian hay was sometimes available and found to be of good quality, but Indian hay was so bad that the horses would not eat it.²⁶ The normal ration for horses and camels was about 4.5 kilograms of grain and 6.8 kilograms of tibben per day.

With all the men and horses congregating in the Romani area, a repeat of the fly situation at Gallipoli seemed likely. Fortunately, the newly formed 7th Sanitary Section arrived to coordinate the disposal of refuse, bringing special equipment for its incineration.²⁷ The burial of manure was pointless in the sand, which did not have the bacteria to break it down. Desiccation by exposure to the sun was fatal to flies' eggs while flies are not attracted to dry manure so by raking it thin and drying it out it was possible to deny it to flies. This method was then used for making litter roads.²⁸

²² Lieutenant Colonel W. Stansfield, "Anzac Mounted Division Train", undated, AWM224 MSS 214, p. 5

²³ AA&QMG, No. 3 Section, 11 November 1916, AWM25 157/6

²⁴ Lieutenant Colonel W. Stansfield, "Anzac Mounted Division Train", undated, AWM224 MSS 214, pp. 7, 18

²⁵ Lieutenant Colonel W. Stansfield, "Anzac Mounted Division Train", undated, AWM224 MSS 214, p. 3

²⁶ Lieutenant Colonel W. Stansfield, "War History of the AASC in Egypt", undated, AWM224 MSS 210, p. 6

²⁷ Major E.B.T. Nicholls, "Ordnance Work - AIF in Egypt", 15 October 1919, AWM224 MSS 507, p. 14

²⁸ AA&QMG Desert Column, "Litter Roads", 10 March 1917, AWM25 863/4

In July 1916 machine gun squadrons were formed from the regimental machine gun sections. Each machine gun squadron consisted of 12 Maxim and Vickers machine guns organised as 6 sections of two guns each, and had a strength of 226 men and 304 horses.²⁹ The intention was to replace the Maxims with Vickers guns, but these were not immediately available, and none of the light horse brigades had more than six Vickers machine guns.³⁰ The Maxim guns were old and most had seen service at Gallipoli.³¹ As part of the reorganisation, the light horse regiments were equipped with three Lewis guns, one being issued to each light horse squadron.³²

The first major test of the machine guns came at the Battle of Romani in August, which confirmed that the heavy Maxim was unsuited to light horse work, while the Vickers proved extremely reliable, firing thousands of rounds without changing barrels. The coolant water often boiled quickly in the heat, but condensers were able to cope with the situation. The machine guns were successful at providing both overhead cover and enfilading fire, and due to the good observation available in desert warfare targets were engaged at ranges far greater than that possible on the Western Front. The light horsemen, who positioned them well forward, sweeping dead ground and firing in enfilade where possible, handled the Lewis guns with characteristic boldness.³³

At Romani, the Turks attempted to turn the Australian flank by making a wide sweep through the dunes beyond it. Their approach was detected by the RFC,³⁴ but the Turks were aided by the overly regular patrolling habits of the light horse. Knowing the time at which the Australians would retire, the Turks followed them home.³⁵ The battle became a fight for the sand ridges that formed the allied line. The Turks were unable to capture the ridges and, running out of potable water, were forced to retreat, pursued by the light horse.³⁶

The battle was controversial. Command of the force was divided between Chauvel and Major General H.A. Lawrence, the British commander of No. 3 Section of the Suez Canal Defences. The British infantry commanders would not take orders from Chauvel, and

²⁹ BM 3rd Light Horse Brigade, 6 September 1917, AWM25 721/60

³⁰ Major E.B.T. Nicholls, "Ordnance Work - A&NZ Mounted Division March 1916 - March 1919", AWM224 MSS 506, p. 13

³¹ Major E.B.T. Nicholls, "Ordnance Work - AIF in Egypt", 15 October 1919, AWM224 MSS 507, p. 38

³² GOC Australian and New Zealand Mounted Division, 9 July 1916, AWM25 721/60

³³ GS Australian and New Zealand Mounted Division, "Battle Actions in Egypt. Machine Guns. Mounted Troops", 17 November 1916, AWM25 923/27

³⁴ Air support at this stage was by the British 14th Flying Squadron, to which a number of Australian pilots of the 1st Flying Squadron were attached.

³⁵ BGS No. 3 Section, 22 August 1916, AWM45 7/12

³⁶ GOC No. 3 Section, "Report on Operations from 19/7/16 to 12/8/16", undated, AWM45 7/13

Lawrence was too far away to control the battle. Lawrence's dispositions were faulty, with the British infantry located too far away to support the mounted troops and this resulted in the burden of defence falling on the mounted troops and in turn prevented them from counterattacking. The British infantry found the deep sand too heavy going and could not match the speed of the Turk.³⁷

Curiously, entrenchments were an impediment to the defence. Theoretically, these should have allowed the British 52nd Division to hold its sector with fewer troops. In practice, extra troops were wasted garrisoning them, and the troops so disposed were reluctant to leave their trenches. It was noted that:

There is undoubtedly a danger that the lessons of the present war may lead commanders into exactly this error, more especially commanders who have had experience of the campaigns in France and Belgium.³⁸

This constitutes an extreme example of a meme that we have encountered a couple of times already: the one that holds that certain things are constant and unchanging and therefore true under all circumstances. In this case, this meme led men to construct shelters from non-existent shellfire.

The mounted troops failure to rout and destroy the Turks also rankled. Chauvel twice attempted to sweep around the Turkish flank as recommended by the Field Service Regulations,³⁹ but wound up making frontal attacks on the Turkish rearguard. This was not as risky as it looked because the light horse could and did easily break off the attack when the going got too heavy. It was not successful either, though, and Chauvel was beaten off both times.⁴⁰ However, for the Anzac horsemen, Romani was a clear-cut victory, their first decisive victory, and the turning point of the Sinai campaign.⁴¹

In the wake of the victory at Romani, the Chief of the Imperial General Staff in London, General Sir W.R. Robertson,⁴² sanctioned an advance across the Sinai as far as El Arish, while affirmed the War Office's strictly defensive policy for Egypt.⁴³ On 23 October 1916, Murray created a new headquarters, Eastern Force, to control the troops in the Sinai and

³⁷ Lieutenant General Sir P. W. Chetwode, "Tactical Comments on the Action at Romani 4/5th August", 24 August 1916, AWM45 7/12

³⁸ Lieutenant General Sir P. W. Chetwode, "Tactical Comments on the Action at Romani 4/5th August", 24 August 1916, AWM45 7/12

³⁹ *Field Service Regulations*, p. 132

⁴⁰ Lieutenant General Sir P. W. Chetwode, "Tactical Comments on the Action at Romani 4/5th August", 24 August 1916, AWM45 7/12

⁴¹ Letter, General H.G. Chauvel to H.S. Gullett, 18 December 1920, AWM40 97

⁴² Robertson was promoted to field marshal in March 1920.

⁴³ CIGS to GOC-in-C EEF, 4 October 1916, AWM45 7/1

appointed Lieutenant General Sir C.M. Dobell to command it.⁴⁴ Dobell had broad experience in fighting natives, most recently in the Cameroons and Western Desert,⁴⁵ and the war in the Sinai was viewed by some as a colonial war against a non-European enemy. Coupled with a universal tactical meme, the conclusion was that the British Army had an advantage over the enemy so great that a battle could be won under almost any conditions. Such an outcome was unlikely, in fact, in the absence of a significant technological or tactical disparity.

In addition to those forming part of the Anzac Mounted Division, there were other units in Egypt. Each corps maintained its own training units. The Australian Headquarters, Cairo, handled the administrative work and controlled Pay, Postal, Ordnance, Provost, Records and Remounts units. The longevity and effectiveness of the Australian Waler in the Middle East was a tribute to the work of the remount units who trained all incoming remounts until they were ready for issue. These units contained a large number of outstanding horsemen. Two hospitals were based in Egypt, the 2nd Stationary Hospital, which formed part of the lines of communication in the Sinai until it returned to Moascar in 1917 to serve as the camp hospital for the Australian Training Centre there and the 14th General Hospital, which was based at the Abassia Barracks in Cairo. Australian nurses also served with the British hospitals in Egypt and Salonika. Eight dental units served in the theatre, one each for the five field ambulances, two hospitals and the training centre. An outbreak of cholera led to the formation of the Anzac Field Laboratory. This unit kept a watch on some of the Sinai Desert's smallest and least savoury inhabitants, and was eventually attached to the Anzac Mounted Division from June 1917.⁴⁶

There were other combat units in the theatre as well. The 11th and 12th Light Horse Regiments had been reformed as divisional light horse regiments for the 4th and 5th Divisions before the establishment was changed and they became surplus. Part of the 4th Light Horse Regiment had also been left behind in Egypt. From April 1916, these regiments were attached for administrative purposes to the 1st, 2nd and 3rd Light Horse Brigades. The need for mounted troops being acute, three double squadrons were formed at Tel El Kebir on 23 May 1916.⁴⁷ For training purposes they were attached to the 3rd Light

⁴⁴ CGS EEF, "Force Order No. 22", 18 October 1916, AWM45 12/4

⁴⁵ MacMunn and Falls, *Military Operations Egypt and Palestine*, Volume I, p. 244

⁴⁶ Butler, Volume I, *Gallipoli, Palestine and New Guinea*, pp. 603-604, 652-654, 659

⁴⁷ HQ A&NZ Training Centre Tel El Kebir 24 May 1916

Horse Brigade, as its commander, Brigadier General J.M. Antill was rated highly by the EEF staff.⁴⁸

In December 1915 the British Commander in Egypt, Lieutenant General Sir J.G. Maxwell, decided to form a force mounted on camels for the defence of Egypt against the Senussi, and obtained permission from the Australian Government for a call for volunteers from the Australian units in Egypt.⁴⁹ Four companies were formed in January 1916 from the eight infantry brigades then in Egypt.⁵⁰ Although many of the men thus obtained had never even seen a camel before, a surprisingly large number of men with camel experience came forward, the Western Australian 28th Infantry Battalion providing two dozen men with camel experience, two of whom could even speak Arabic.⁵¹ On 21 June 1916 the EEF requested more Australians for the Camel Corps and five more companies were supplied from light horse reinforcements and the Anzac Mounted Division.⁵² Due to a shortage of saddlery and trained camels, only one company per month could be equipped. A camel company consisted of four sections with an officer and 40 other ranks, plus a machine gun section equipped with three Lewis Guns, one being a spare.⁵³ Supply was fairly simple as each camel could carry five days supply of food and water for itself and its rider.⁵⁴ Initially camel companies were deployed in the Western Desert against the Senussi but they were sent to the Sinai in August 1916.

Lieutenant General Birdwood had never been enthusiastic about the camels, and the formation of the ICC had been undertaken before he became GOC AIF.⁵⁵ When Birdwood found out about the new units, his reaction was immediate:

11th and 12th Light Horse Regiments all dismounted double squadrons light horse all members AIF with Camel Corps Companies and all excess reinforcements... should be sent to England as soon as possible to meet requirements for infantry reinforcements for four divisions in France.⁵⁶

Murray would not hear of it, cabling that:

Troops referred to are fully employed in defence of Egypt and... Australian and New Zealand Army Corps troops are the keystone of that defence.⁵⁷

⁴⁸ MGGS EEF to GOC No. 2 Section, 17 June 1916, AWM45 7/10

⁴⁹ GOC BTE to DOD, 9 December 1915 and DOD to GOC BTE 15 December 1915, AWM25 157/8

⁵⁰ AIF Order No. 52, 6 January 1916

⁵¹ "28th Infantry Battalion volunteers for Camel Corps", January 1916, AWM25 157/2

⁵² CGS EEF, 9 June 1916, AWM25 157/5

⁵³ "Report on Organisation and Formation of the Imperial Camel Corps", 31 December 1916, AWM45 12/36

⁵⁴ "Employment of the Camel Corps", 11 January 1918, AWM25 157/1

⁵⁵ GOC Anzac to GOC BTE, 20 and 24 February 1916, AWM25 157/8

⁵⁶ GOC AIF to DOD, 22 August 1916, Australian Archives CRS B539 AIF112/5/611

⁵⁷ War Office to DOD, 28 August 1916, Australian Archives CRS B539 AIF112/5/611

Experience in the Sinai soon showed that the camels were best organised in large units and the camel companies were formed into battalions, each of four companies, in October 1916.⁵⁸ The battalions were formed into the 1st Imperial Camel Brigade, which also included a British machine gun squadron of eight Vickers machine guns and, by remounting the British 1st Mountain Battery (Hong Kong and Singapore Battery) on camels, a camel battery of six 2.75 inch mountain guns.⁵⁹ The AIF also supplied the brigade with medical support in the form of the Camel Field Ambulance that arrived from Australia on 20 June 1916.⁶⁰ With the Anzac Mounted Division and the other advanced troops of the Eastern Force, the camels became part of the Desert Column, formed on 22 November 1916.⁶¹ From 7 December 1916 the Desert Column came under the command of Lieutenant General Sir P. W. Chetwode,⁶² a noted British cavalryman and tactician whom Murray has specifically requested for the post.⁶³

In September it was decided to form still more camel units.⁶⁴ The 11th, 12th and 4th Light Horse Regiments were redesignated the 1st, 2nd and 3rd Camel Regiments respectively. The 4th Camel Regiment was formed from the 1st and 2nd Light Horse Double Squadrons. The 3rd Light Horse Double Squadron was disbanded and its personnel transferred to the 3rd Camel Regiment and the Training Centre.⁶⁵ The project foundered, however, on the shortage of trained camels and on 15 January 1917 the commander of the 4th Camel Regiment reported that the unit had only 467 camels out of an establishment of 650.⁶⁶

Another form of mobility was provided by armoured cars. These were a new idea when the 1st Armoured Car Section was formed. The Australian Army had no armoured cars, so the unit built them themselves from three donated chassis at the Vulcan Engineering Works in South Melbourne. Armour plating was fitted to a 50 horsepower Daimler, a 60 horsepower Mercedes and a 50 horsepower Minerva. The former two had one Colt machine gun mounted on a revolving turret with a 360° arc of fire.⁶⁷ On arrival in Egypt, the section was committed to the campaign in the Western Desert, where their role was long-range patrol and reconnaissance. Running armoured cars across the desert took its toll on both men and machines, and spare parts for the unusual Australian vehicles were hard to obtain. On 3

⁵⁸ AIF Cairo to DOD, 2 October 1916, Australian Archives CRS B539 AIF264/1/238

⁵⁹ Wavell, Archibald, *The Palestine Campaigns*, London, Constable, 1928, pp. 64, 94

⁶⁰ Butler, Volume I, *Gallipoli, Palestine and New Guinea*, p. 629

⁶¹ BGGs Eastern Force, "Eastern Force Order No. 3", 19 November 1916, AWM45 12/4

⁶² War Diary, HQ Eastern Force, 7 December 1916, AWM45 12/4

⁶³ C-in-C EEF to CIGS, 21 October 1916, AWM45 7/45

⁶⁴ AIF Cairo to DOD, 6 September 1916, Australian Archives CRS B539 AIF264/1/229

⁶⁵ GOC AIF Egypt, Routine Order No. 5, 27 September 1916, AWM25 157/8

⁶⁶ OC 4th Camel Regiment, 15 January 1917, AWM25 157/7

⁶⁷ OC 1st Armoured Car Section, 16 August 1916, AWM25 49/10

December 1916 the section was re-equipped with six unarmoured T Model Ford Light Cars, each armed with a Lewis Gun, and became the 1st Light Car Patrol.⁶⁸ On 22 May 1917 it too joined the Desert Column.⁶⁹

A unit of a completely different sort set sail from Melbourne on 16 March 1916, the 1st Flying Squadron. This unit of the Australian Flying Corps (AFC) was formed at Laverton, Victoria on 6 January 1916 from pilots and observers who had completed courses at the flying school at Point Cook, Victoria. Organised as a 12 plane squadron, with three flights plus a wireless section, it set out for Egypt without any equipment except for two cars and seven motorcycles. For the first six weeks the squadron was involved in individual training before it was upgraded on 4 June to an 18 plane squadron, equipped with Be2Cs and commenced operations. For the next six months the three flights fought separately, operating from widely separated aerodromes, with A Flight flying against the Senussi and the others over the Sinai. Gradually the flights were brought together until, on 18 December the entire squadron was finally concentrated at the one aerodrome in support of the Desert Column.⁷⁰

The advance across the Sinai Desert was done by the book,⁷¹ with aircraft scouting ahead and the mounted troops forming advance and flank guards. The infantry marched up on wire netting tracks, an innovation used in Australia to make sandy riverbeds passable in the dry season. These were pegged into place and allowed infantry and light motor traffic to pass.⁷² The infantry and artillery moved forward in bounds, constructing defensive positions lest the Turks counterattack. The pace of the whole advance was geared to that of the railway and pipeline, which proceeded at a slow pace of about 24 km per month. A feature of the campaign in the Sinai and Palestine was the use of all arms in combination, and the cooperation between them was of a high standard.

On 20 December 1916, the 1st Flying Squadron reported that the Turks had pulled out of El Arish.⁷³ The Desert Column surrounded and occupied the town the next day. The aviators established that the Turks had fallen back on Maghdaba and Rafa and The Desert Column set out at once to attack Maghdaba, some 37 km to the south east of El Arish. Chauvel made a night approach and encircled the Turkish position. As the light horsemen and

⁶⁸ "History of the 1st Armoured Car Section", AWM224 MSS 209, pp. 1-3

⁶⁹ War Diary, GS Desert Mounted Corps, 22 May 1917, AWM4 1/64/4 Microfilm Roll 864

⁷⁰ Report on Activities of 1st Flying Squadron, 16 March 1916 to 31 December 1917, AWM224 MSS 515, pp. 1,2,10

⁷¹ *Field Service Regulations*, pp. 76-81

⁷² Gullett, VII: *The AIF in Sinai and Palestine*, p. 195

⁷³ Report on Activities of 1st Flying Squadron, 16 March 1916 to 31 December 1917, AWM224 MSS 515, pp. 10-11

cameleers closed in on the strong and well-sited Turkish positions, they came under heavy fire and the advance slowed. Despite the enemy fire, the 1st Light Horse Brigade was able to approach across the open on horseback at the gallop with slight loss.⁷⁴ They then advanced under the cover of machine guns and the fire of the Hong Kong and Singapore Battery.⁷⁵ Faced with the prospect of running out of water if Maghdaba was not taken, Chauvel reluctantly ordered a withdrawal. Fortunately, the order was ignored by his brigade commanders who pressed on, capturing the Turkish redoubts with rifles and bayonets, bringing the battle to a successful conclusion. At a cost of 22 men killed and 124 wounded, Chauvel's men took 1,282 prisoners.⁷⁶

The victory at Maghdaba was followed up with an attack on Rafa. Exactly the same tactics were used. The 1st Flying Squadron covered the assembly on 8 January 1917. Rafa was approached by a night march and encircled. The light horsemen and cameleers advanced on Turkish positions that were even stronger than those at Maghdaba under the cover of the guns of the horse artillery batteries and Lewis and Vickers machine guns. For the first time in the campaign, radio was used by the 1st Flying Squadron to direct the artillery fire.⁷⁷ No sort of fire superiority was established over the Turks and ammunition started to run low. With the advance stalled everywhere and Turkish reinforcements on the march, Chetwode reluctantly called off the attack. But, as at Maghdaba, at that very moment the Turks started to fold. Rafa was taken at a cost of 71 killed and 415 wounded, and 1,602 Turks were captured.⁷⁸

These actions showed what experienced, well-led horsemen could do. They also demonstrated that the light horsemen urgently needed more firepower. The artillery, too, had not been effective enough and the need for something heavier than 18 pounders was keenly felt. Finally, there was the understandable order to withdraw. Communications had not been good enough and while the initiative of the brigadiers at the front was commendable, relying on it was unwise.

The capture of Rafa virtually completed the British reoccupation of the Sinai. The remaining Turks in the southern Sinai were mopped up in February by the camels of the 11th Light Horse Regiment. Now, the AIF entered Palestine. Just across the border, for the

⁷⁴ GS Desert Column, "A Note on Recent Cavalry Fighting", 6 April 1917, AWM25 923/27

⁷⁵ GOC 1st Light Horse Brigade, "Report on Operations of 1st Light Horse Brigade at Maghdaba", 24 December 1916, AWM25 455/1

⁷⁶ War Diary, HQ Eastern Force, 24 December 1916, AWM45 12/4

⁷⁷ Report on Activities of 1st Flying Squadron, 16 March 1916 to 31 December 1917, AWM224 MSS 515, p. 11

⁷⁸ War Diary, HQ Eastern Force, 9 January 1917, AWM45 12/4

first time since leaving Australia, the men of the Anzac Mounted Division found fresh grass, and allowed their horses to graze. Sand tyres and pedrails were handed in to the Ordnance depot at Khan Yunis in March 1917.⁷⁹ However, it was as hard to find water and fodder in Palestine as in the Sinai, so the advance again halted while the railway was pushed through to Rafa.

Three British mounted brigades were now available and Chetwode proposed that they be grouped with the New Zealand Mounted Rifles Brigade to form a new mounted division, the New Zealanders' place in the Anzac Mounted Division being taken by the 4th Light Horse Brigade.⁸⁰ This brigade was reformed from the 4th, 11th and 12th Light Horse Regiments, which were re-horsed on 21 February 1917. The 4th Light Horse Regiment was brought up to strength by disbanding the 4th Camel Regiment. A 4th Machine Gun Squadron was formed from the machine gun sections of the 4th, 11th and 12th Light Horse Regiments while the 4th Signal Troop, 4th Light Horse Field Ambulance and 9th Mobile Veterinary Section were formed from reinforcements.⁸¹ For some reason, Murray decided instead to form the new division, the Imperial Mounted Division, from the 3rd and 4th Light Horse Brigades and two British mounted brigades, while a British mounted brigade took the place of the 3rd Light Horse Brigade in the Anzac Mounted Division.⁸² A British regular army officer, Major General Sir H. W. Hodgson was appointed to command, with an all-British staff. The deliberate mixing of Australian and Imperial troops was contrary to the policy of the Australian Government, which soon registered its displeasure.⁸³

Air support of the Desert Column was by a wing consisting of only two squadrons, the 1st Flying Squadron and a British squadron. Officially, the 1st Flying Squadron was an "army" squadron, responsible for long range reconnaissance, fighting, bombing and mapping while artillery observation, contact patrols and tactical photography was the job of the "corps" squadron. In practice, there being only two squadrons, they shared all assignments between them. Gradually, the 1st Flying Squadron was re-equipped with better aircraft. Six Be2Es began arriving in December; 6 Martinsydes were delivered in March; and in May, 6 Be12As arrived. However, the Germans still deployed superior aircraft against them but fortunately did so timidly, since replacement pilots and parts were harder for them to obtain.⁸⁴

⁷⁹ Major E.B.T. Nicholls, "Ordnance Work - AIF in Egypt", 15 October 1919, AWM224 MSS 507, p. 40

⁸⁰ GOC Desert Column to GOC Eastern Force, "A Note on Recent Cavalry Fighting", 6 April 1917, AWM25 923/27

⁸¹ "History of the 4th Light Horse Brigade", AWM25 455/67

⁸² CGS EEF, "Force Order No. 31", 12 February 1917, AWM45 12/4

⁸³ Secretary DOD to AHQ AIF London, 21 April 1917, AWM22 236/2/2000

⁸⁴ Report on Activities of 1st Squadron, 16 March 1916 to 31 December 1917, AWM224 MSS 515, pp. 10,17

The British mounted brigades had priority for new equipment over the veteran light horse brigades. All were fully equipped with Vickers machine guns,⁸⁵ and on 29 December the British mounted brigades were the first to be issued with the new Hotchkiss machine guns.⁸⁶ The light horsemen naturally resented the fact that the inexperienced British brigades were receiving equipment in preference to the veteran light horse brigades, but the British cannot be blamed for favouring their own army. Chauvel was given reassurances that Hotchkiss guns for the light horsemen were on the way and he was able to arrange for nine Hotchkiss guns to be withdrawn from two British brigades so that each brigade would have three for training.⁸⁷ In April they were finally issued to the light horse regiments on a scale of one per troop and the Lewis guns were returned to Ordnance. Training in the use of the new weapon was carried out at Zeitoun, Egypt. The training course lasted ten days and concentrated on the mechanical aspects of the weapon rather than its tactical handling. Men who passed through the course came back and instructed the rest.⁸⁸

The Hotchkiss was a strip fed, French-designed automatic rifle developed for and adopted by the British cavalry before the war, chambered to British .303 calibre ammunition and manufactured by Enfield.⁸⁹ The gun section consisted of only four men, two carrying 6 strips of 10 rounds each in special bandoliers, and two equipped with ordinary rifles and equipment. The small section size was made possible by the use of horses; a half-draught packhorse with a special saddle carried the gun, a spare barrel and 900 rounds. Each squadron also had two packhorses as ammunition horses, each carrying 2,400 rounds. It was found possible for a gun horse to advance at the trot over rough ground without hurting its back. With practice, the Hotchkiss gunners found that they could dismount and fire very quickly. It also proved possible to sling the Hotchkiss from the shoulder like an ordinary rifle.⁹⁰

The Turkish line in southern Palestine was anchored on the coast near the fortress town of Gaza and extended out into the desert around Beersheba. To capture it, Murray had new technologies on the way including heavy howitzers and tanks, but he felt that it was inadvisable to wait for them.⁹¹ Dobell proposed to capture Gaza using the tactics that had

⁸⁵ GOC Anzac Mounted Division to ADOS Desert Column, 2 March 1917, AWM45 7/21

⁸⁶ War Diary, HQ Eastern Force, 29 December 1916, AWM45 12/4

⁸⁷ ADOS Desert Column to BGGGS Desert Column, 5 March 1917, AWM45 7/21

⁸⁸ Captain H. Wetherell, "Report on the Work of the Hotchkiss Rifle with the Australian Mounted Troops in Palestine 1918", 20 May 1918, AWM25 385/3

⁸⁹ Hogg, *The Machine Gun*, p. 19

⁹⁰ Captain H. Wetherell, "Report on the Work of the Hotchkiss Rifle with the Australian Mounted Troops in Palestine 1917-1918", 20 May 1918, AWM25 385/3

⁹¹ C-in-C EEF to CIGS, 5 December 1916, AWM45 7/1

succeeded at Maghdaba and Rafa on a larger scale. Chetwode's Desert Column, with both mounted divisions, the 1st Imperial Camel Brigade and a British infantry division, would sweep about Gaza, surrounding it and screening it from Turkish reinforcements. A reinforced British Division directly under Dobell's command would assault Gaza.

On 26 March 1917 the mounted troops carried out their part exactly as planned but the British division assaulting Gaza was delayed. Accordingly, Chetwode ordered the mounted troops to attack Gaza from the north. Chauvel began the assault at 1600 and despite the barriers of high cactus hedges and strong enemy opposition, Brigadier General Granville Ryrie's 2nd Light Horse and Brigadier General E.W.C. Chaytor's New Zealand Mounted Rifles Brigades entered the town as the sun set. However, Dobell had resolved to call off the attack if it had not succeeded by dark and he ordered the mounted troops to withdraw. This came as something of a shock, but the orders were obeyed, although Ryrie refused to leave Gaza until every one of his men was accounted for, and his brigade did not depart the town until 2215.⁹² The reason that Ryrie and Chaytor did not disobey the order was simple: because the operation was so large, their view was necessarily restricted and they did not have the information to base such a decision on. As for the British infantry, First Gaza showed them notably deficient in training, initiative and leadership. Both command and communications were defective, and a lost battle was the result.

In his report, Dobell tried to look on the bright side:

This action has had the result of bringing the enemy to battle and he will now undoubtedly stand with all his available force in order to fight us when we are prepared to attack.⁹³

Dobell's philosophy was the pre-war British one of seeking to bring the enemy to battle; the culmination of a meme entrenched in the *Field Service Regulations* that the decisive battle was the object of the military campaign.

Murray ordered Dobell to make another attempt at Gaza. Encirclement having failed, Dobell decided on a frontal assault with three British infantry divisions. The Desert Column, now consisting entirely of the mounted troops, would cover the right flank. New technologies would be introduced to the Palestine theatre. The artillery was beefed up to 150 guns, including six 2.75 inch mountain guns, 104 18 pounders, 24 4.5 inch howitzers, twelve 60 pounders, two 6 inch howitzers and two 8 inch howitzers.⁹⁴ This still represented

⁹² Letter, Brigadier General G. de L. Ryrie to Mary Ryrie, 30 March 1917, Vincent, Phoebe, *My Darling Mick: The Life of Granville Ryrie 1865-1937*, Canberra, National Library of Australia, 1997, pp. 131-134

⁹³ Lieutenant General Sir C. M. Dobell, "Report on Operations 26-27 March 1917", undated, AWM45 12/5

⁹⁴ BGGs Eastern Force, "General Instructions - Artillery", 18 March 1917, AWM45 12/7

an artillery density of roughly 1 gun per 100 metres of front, only a tenth of the recommended density on the Western Front. Only 600 rounds were available per gun and 500 per howitzer, so the gunners were urged to conserve ammunition. Eight tanks were on hand and smoke and poison gas would be used. As the enemy would probably retaliate with poison gases of their own, all troops of the Desert Column had been issued with gas masks in March.⁹⁵

The operation was carried out on 19 April and was a complete failure. The artillery fire was spread over too wide a front to suppress the Turkish artillery or machine guns, despite firing off most of its ammunition. Instead of approaching in the dark, the tanks had to traverse 2000 to 2500 metres of open country in broad daylight, in full view of enemy artillery which the meagre counter battery fire was completely inadequate to suppress. Three tanks were disabled and one badly damaged. Only one broke down, which was not a bad achievement given that they had to travel 50 to 60 km. The tank officers believed that the frontage was far too wide for only eight tanks, and that they should have been grouped together in order to provide mutual support if the infantry were held up.⁹⁶ The gas had no noticeable effect. The infantry and mounted troops showed great gallantry but ultimately were unable to capture the position. Accordingly, the attack was called off.

On 21 April Dobell was relieved of his command and was succeeded by Chetwode.⁹⁷ In turn, Chauvel assumed command of the Desert Column and Chaytor, the Anzac Mounted Division. The same day, Murray reported back to the War Office in London that further progress was impossible without considerable reinforcements. As at Gallipoli, which the Gaza campaign was fast coming to resemble, the British government chose to reinforce failure, sending two more infantry divisions and two mounted brigades to Egypt from the Salonika Front.⁹⁸ With two more divisions recently raised in Egypt, this brought the EEF to seven infantry divisions.

The Australian government had sent Brigadier General R. M. McC Anderson from London to explain its policy regarding the organisation of the mounted troops to Murray, and an agreement was reached.⁹⁹ The extra two brigades from Salonika allowed the Desert Column to be increased to three divisions when it was reorganised on a three-brigade basis on 20

⁹⁵ Major E.B.T. Nicholls, "Ordnance Work - AIF in Egypt", 15 October 1919, AWM224 MSS 507, p. 40

⁹⁶ Major N. Nutt to GS Eastern Force, 24 April 1917, AWM224 MSS 507, p. 40

⁹⁷ War Diary, GS Desert Mounted Corps, 21 April 1917, AWM4 1/64/4 Roll 864

⁹⁸ MacMunn and Falls, *Military Operations Egypt and Palestine*, Volume I, pp. 354-357

⁹⁹ Brigadier General R. M. McC. Anderson to DOD, cable 7 June 1917, AWM22 236/2/2000

June. The British brigade was withdrawn from Anzac Mounted Division and one from the Imperial Mounted Division, now renamed the Australian Mounted Division as part of the agreement. Three British brigades were formed into a new third division, the Yeomanry Mounted Division.¹⁰⁰ New tables of organisation were published and the field squadrons and signal troops reorganised in accordance with it but the Australian and New Zealand governments ignored requests to alter the structure of their light horse and mounted rifle regiments.¹⁰¹ The artillery of each division was reduced to a single brigade of three batteries, each of 4 guns.

Starting in May, the light horse re-equipped with new Mark VII ammunition and the old rifles that were sighted for Mark VI ammunition were recalled. This simplified the ammunition situation in the Palestine theatre. The machine gun squadrons were at last supplied with Vickers machine guns to replace the aging and unsuitable Maxim guns.¹⁰²

In addition to sending reinforcements and equipment, the British government recalled Murray, replacing him with a British cavalry officer with a distinguished record in France, General E.H.H. Allenby, who took over command of the EEF on 28 June. He also decided to take command of the troops in the field himself and moved most of GHQ from the Savoy Hotel in Cairo to Khan Yunis, north of Rafa.¹⁰³ Allenby decided to regularise the command set up. Two new corps headquarters were created to control the six infantry divisions and the Desert Column became the Desert Mounted Corps, with the three mounted divisions assigned.¹⁰⁴ As a consequence, Chauvel became the first Australian to be promoted to the rank of lieutenant general. On 12 August Eastern Force ceased to exist and GHQ took direct command of the Palestine front.¹⁰⁵

The EEF also had some new tactical ideas courtesy of Chetwode, who wrote a paper analysing options for the capture of the Gaza position. Looking at a frontal attack on Gaza, Chetwode noted:

If we attack at Gaza, we should attack the enemy at his strongest point. The operation would be prolonged and expensive and we should have to reduce the defences by sheer weight of artillery The

¹⁰⁰ CGS EEF, "Force Order No. 44", 17 June 1917, AWM22 236/2/2000

¹⁰¹ Major E.B.T. Nicholls, "Ordnance Work - AIF in Egypt", 15 October 1919, AWM224 MSS 507, p. 52

¹⁰² Major E.B.T. Nicholls, "Ordnance Work - AIF in Egypt", 15 October 1919, AWM224 MSS 507, p. 51

¹⁰³ Falls, Cyril., *Military operations, Egypt & Palestine, Volume II: From June 1917 to the End of the War*, London, H. M. Stationery Office, 1930, pp. 7, 13

¹⁰⁴ War Diary, HQ Eastern Force, 3 August 1917, AWM45 12/6

¹⁰⁵ War Diary, HQ Eastern Force, 12 August 1917, AWM45 12/6

frontage of such an attack would not be less than 10-12,000 yards and we have not and probably never will have sufficient artillery...¹⁰⁶

He went back to the *Field Service Regulations'* recommendations that in these circumstances,

...it may then be more effective to act deliberately or to aim at manoeuvring an enemy out of a strong position with a view of forcing him to fight under conditions which admit of more decisive results.¹⁰⁷

He therefore recommended an attack at Beersheba, possession of which would force the enemy to face encirclement or withdraw. He noted the disadvantages of Beersheba, however:

We must also remember that a fight here must be a fight for water as well as for the enemy's position and that if we merely take the position we shall be tied down to another tedious advance, with the necessity for providing water mile by mile until we can attack his next position...¹⁰⁸

Allenby brought a number of ideas with him from the Western Front, most notably that of the conference. He adopted Chetwode's plan, but the details were thrashed out in a series of conferences. It would be up to Chauvel to find enough water to keep his troops in the field, and he personally reconnoitred the Beersheba area in a light car of the 1st Light Car Patrol.¹⁰⁹ As a result, enough water was discovered by Desert Mounted Corps patrols to provide the requirements for an advance to and attack on Beersheba.¹¹⁰

Chaytor of the Anzac Mounted Division requested that 13 pounders replace the 18 pounders of his division. The two weapons had about the same range and similar accuracy but the 13 pounder gun carriage and limber were 356 kilograms lighter, the ammunition wagon and limber 292 kilograms lighter and the load of ammunition itself 305 kilograms lighter. This of course affected the pace at which the guns could move. In order to keep up with the mounted troops, eight-horse teams had to be used, something which the establishments had never catered for.¹¹¹ Accordingly, on 9 and 18 September the brigades supporting the Anzac and Australian Mounted Divisions were re-equipped with 13 pounders.¹¹²

¹⁰⁶ GOC Eastern Force to CGS EEF, "Notes on the Palestine Operations", 21 June 1917, AWM45 12/7

¹⁰⁷ *Field Service Regulations*, p. 108

¹⁰⁸ GOC Eastern Force to CGS EEF, "Notes on the Palestine Operations", 21 June 1917, AWM45 12/7

¹⁰⁹ "History of the 1st Armoured Car Section", AWM224 MSS 209, p. 4

¹¹⁰ GOC Desert Mounted Corps to CGS EEF, 27 August 1917, AWM45 7/23

¹¹¹ GOC Anzac Mounted Division to GOC Desert Column, 8 August 1917, AWM25 383/10

¹¹² War Diary, British 18th Horse Artillery Brigade, 9 September 1917, AWM4 13/23/4 Microfilm Roll 218; War Diary, British 19th Horse Artillery Brigade, 18 September 1917, AWM45 12/46

The heavy artillery was dramatically reinforced. At the First Battle of Gaza, the only heavy artillery had been twelve 60 pounders. By October the EEF would have twenty eight 60 pounders, fifty 6 inch and twelve 8 inch howitzers and a couple of 6 inch guns.¹¹³ The arrival of new aircraft allowed the formation of two new flying squadrons.¹¹⁴ New aircraft were provided for all four squadrons, the Be2Es of the 1st Flying Squadron being replaced by RE8s.¹¹⁵

Chauvel formed three Australian signals units to support the Desert Mounted Corps, the Cable Section, the Pack Wireless Section and the 3rd Airline Section.¹¹⁶ He also formed a corps field engineer unit, D Field Troop. D Field Troop and the Anzac Field Squadron, who used caterpillar tractors to haul pairs of 7-ton wagons carrying pumping plant across the desert, developed the ancient wells at Khalasa and Asluj. In a few days the two wells at Khalasa were producing a total of 14,100 litres per hour and the three at Asluj 8,600 litres per hour.¹¹⁷

The horses were worked hard throughout this period. On 6 September the Anzac Mounted Division's Assistant Director of Veterinary Services (ADVS) put in a scathing report on the condition of the horses of the division:

These horses are all suffering from debility and at least 75% are eating sand and their own manure.

Chaytor believed that the sand eating was largely if not wholly due to the short ration, and in October obtained permission to increase it by 900 grams per day.¹¹⁸

The problem of transport was a difficult one. It was generally considered that camels would be too slow for the free wheeling campaign envisaged, and given the existence of roads and the shortage of mechanical transport, it was decided to provide the mounted divisions with horse transport, in spite of experience elsewhere that horse transport was too slow for mounted troops. Accordingly, seven Australian and one New Zealand Service Corps companies were formed at Moascar on 1 August 1917.¹¹⁹

A great deal of work was underway in preparation for the next offensive, part of which involved the provision of accurate and detailed maps and in this, three warrant officers of

¹¹³ CGS EEF to GOC Desert Mounted Corps, 16 August 1917, AWM45 7/23

¹¹⁴ "History of the RFC in Sinai and Palestine during 1917", AWM224 MSS 515, p. 1

¹¹⁵ Report on Activities of 1st Flying Squadron, 16 March 1916 to 31 December 1917, AWM224 MSS 515, p. 10

¹¹⁶ "History of the Signal Service AIF Egypt", 24 June 1919, AWM224 MSS 92, pp. C1, W1, £1

¹¹⁷ McNicoll, *Making and Breaking*, pp. 114-115

¹¹⁸ GOC Anzac Mounted Division, 23 September 1917, AWM25 353/3

¹¹⁹ War Diary, Australian Mounted Division Train, 1 August 1917, AWM4 25/20/1 Microfilm Roll 480

the Australian Survey Corps joined the British surveyors mapping the front line area around Gaza.¹²⁰ Another task was the construction of light railways. The Desert Column was asked to provide a company of 100 men with railway construction experience.¹²¹ Two months later, there was another call and a second company was sent.¹²²

The Desert Mounted Corps jumped off on its most famous campaign on the night of 30 October. The tactics were similar to those at Rafa and Maghdaba, with the mounted troops making a surprise night march, enveloping the left and rear of the enemy's position at Beersheba and attacking it from the east while the infantry attacked frontally from the south. The fight was a tough one. The Anzac Mounted Division was held up at Tel el Saba, the hill overlooking Beersheba, where the defenders held on until captured by the New Zealanders late in the day.¹²³

Once again time was running out and the operation depended on the quick capture of the wells at Beersheba. At his headquarters on a hill overlooking the battlefield, Chauvel discussed his next move with Hodgson and Brigadier General W. Grant of the 4th Light Horse Brigade. In view of the shortness of time, it was decided to attempt a mounted attack on Beersheba. The light horse did not carry swords but Hodgson had ordered their bayonet points sharpened some days before in anticipation of such a tactic.¹²⁴ The 4th and 12th Light Horse Regiments formed up with their squadrons in three lines, each line about 300 to 500 metres apart. Wielding their bayonets like swords, they moved forward at a trot.

The 13 pounders of the British Notts Battery suppressed Turkish machine guns. Three Turkish batteries opposed the light horsemen but they moved forward so swiftly that the Turks could not range on them. The light horsemen swarmed over the Turkish positions and swept on into the town, capturing all but two of the seventeen wells before they could be destroyed. By this time there was some 4,000 thirsty animals around Beersheba. The Anzac and Australian Field Squadrons moved in during the night to get the wells into full production. Fortunately a thunderstorm a few days before had created pools south of Beersheba and these were used to slake the thirst of the horses, whose performance in this action was extraordinary. Several light horse regiments went without water for 60 hours,

¹²⁰ McNicoll, *Making and Breaking*, pp. 112-113, 117

¹²¹ CE Desert Column, 7 June 1917, AWM25 813/1

¹²² GS Desert Column, 7 August 1917, AWM25 813/1

¹²³ GOC Desert Mounted Corps, 12 December 1917, "Narrative of Operations of Desert Mounted Corps 22 October to 18 November 1917", AWM45 11/7

¹²⁴ GOC Australian Mounted Division, "Preliminary Instructions No. 1", 26 October 1917, AWM25 455/6

the New Zealand Mounted Rifles for 72 hours and a wagon team of the Cable Section for 84 hours.¹²⁵

Mounted Actions of the Desert Mounted Corps
(October - November 1917)¹²⁶

Date	Locality	Units	Results	Casualties
31 October 1917	Beersheba	4th and 12th Light Horse Regiments	Beersheba captured; 700 POWs	64
7 November 1917	Ameidat	1st Light Horse Brigade	383 POWs	very few
8 November 1917	Huj	10 troops of British 5th Mounted Brigade	30 POWs	about 60
8 November 1917	Khuweilfeh	2 squadrons of British 8th Mounted Brigade	Objective gained	very few
13 November 1917	Yebnah	3 squadrons of British 8th Mounted Brigade	Objective gained	very few
13 November 1917	El Kughar	British 6th Mounted Brigade	1100 POWs	150
15 November 1917	Abu Shusheh	2 squadrons of British 6th Mounted Brigade	Counter-attack dispersed	very few
15 November 1917	Ludd	1st Light Horse Regiment	318 POWs	very few

Over the next weeks, the mounted troops carried out a number of mounted actions, with encouraging results. Inevitably, the question of swords came up. The reason for not arming the light horse with swords was that the weight of the weapon was not worth the remote prospects of its use. The sword and scabbard weighed some 2 kilograms and the rifle

¹²⁵ GOC Anzac Mounted Division to HQ Desert Mounted Corps, 31 January 1918 Powles, Charles Guy, *The New Zealanders in Sinai and Palestine*, Auckland, Whitcombe and Tombs, 1922, pp. 152-153

¹²⁶ BGGs Desert Mounted Corps, 24 January 1918, AWM25 923/27

bucket on the other side, needed to balance the load on the horse, another 1.4 kilograms not normally needed by the light horse, who slung their rifles on their backs.¹²⁷ Indeed, consideration had been given to taking the swords off the British cavalry brigades in order to save the weight. Because it took some time for men to become accustomed to carrying their rifles slung, and because of the prospect that swords might be useful, Chetwode had urged that the swords be retained.¹²⁸ Now the value of mounted action was dramatically demonstrated and the doctrine was questioned. In July 1918 the Australian Mounted Division was re-equipped with swords, becoming true cavalry, but the Anzac Mounted Division remained mounted infantry to the end.¹²⁹

The EEF drove the Turks and the *German Asia Corps* back to Jaffa and then to Jerusalem. The mounted troops found the going rough and were dogged by supply problems, particularly of water, that sometimes brought the whole pursuit to a halt. On 3 November an emergency motor water convoy of 30 trucks with 1800 litre tanks was sent to Beersheba.¹³⁰ Initially, camels and caterpillars of a British mechanical transport company hauled supplies but the caterpillars experienced considerable trouble. They moved at a slow pace of 1.6 kilometres per hour and could only carry 6 tonnes per truck. Each truck required 8 hours of overhaul and the net result was they could only travel 19 km per day when the mounted troops were moving 24 to 32 km per day.¹³¹ On 7 November the caterpillars were exchanged for 60 trucks, bringing the total number assigned to the Desert Mounted Corps to 90. The road from Beersheba to Sheria was impassible for motor vehicles, however, and a camel convoy was used to bring up fresh food and water. On 10 November 1917, another 76 trucks joined the corps, bringing the total transport to 166 trucks, 3 Divisional Trains and 3 camel companies. Supplies were hauled from the railhead, which reached Gaza on 20 November 1917 and Deir Sineid on 27 November 1917, to the advanced supply dump by camel, from there to the division refilling points by trucks, and to the brigades by horse. The most difficult task was that of the truck drivers, who had to negotiate narrow camel and donkey tracks carrying 5 tonnes of supplies.¹³² The EEF was now using 8.2 million litres of petrol, 2.3 million litres of aviation fuel and 2.0 million litres of kerosene per month.¹³³

¹²⁷ BGGs Eastern Force, 23 November 1916, AWM45 11/18

¹²⁸ GOC Desert Column, 9 December 1916, AWM45 11/18

¹²⁹ Major E.B.T. Nicholls, "Ordnance Work - AIF in Egypt", 15 October 1919, AWM224 MSS 507, p. 100

¹³⁰ AA&QMG, Desert Mounted Corps, "Treatise on the Supply of Desert Mounted Corps During November 1917", undated, AWM45 11/8

¹³¹ Lieutenant Colonel W. Stansfield, "War History of the AASC in Egypt", undated, AWM224 MSS 210, Part II, pp. 1-2

¹³² AA&QMG, Desert Mounted Corps, "Treatise on the Supply of Desert Mounted Corps During November 1917", undated, AWM45 11/8

¹³³ Lieutenant Colonel W. Stansfield, "War History of the AASC in Egypt", undated, AWM224 MSS 210, Part IV, p. 4

Where possible, enemy positions were taken by manoeuvre. At Latron on 18 November the 3rd Light Horse Brigade enveloped a strong enemy position, forcing the Turks to withdraw. In this, the 13 pounders of a British battery ably supported them, pushing forward as far as the terrain would allow and suppressing the enemy artillery. On 9 December the 10th Light Horse Regiment entered Jerusalem.¹³⁴ From 31 October to 18 November the Desert Mounted Corps had captured 5,720 prisoners.¹³⁵ The victory was not cheap, the EEF reporting 10,361 casualties up to 10 November of which 966 were from the mounted troops.¹³⁶

With the fall of Jerusalem, the Desert Mounted Corps rested and refitted. After the exertions of the campaign, the horses of the Australian Mounted Division needed ten days rest to recover their form. Boots and clothing were in disrepair and the 13 pounders required overhauling.¹³⁷ A large consignment of Australian clothing arrived in December, and the Anzac Mounted Division was re-equipped in January 1918 and the Australian Mounted Division the following month.¹³⁸ The 1st Light Car Patrol swapped its beaten up old Fords for six new ones on 11 December 1917.¹³⁹ And on 29 December 1917, the 1st Flying Squadron began to re-equip with the Bristol F2B reconnaissance fighter.¹⁴⁰ One of the finest aircraft of the war, the Bristol Fighter was powered by a Rolls Royce Falcon engine that could achieve speeds of up to 200 kilometres per hour, had one forward firing fixed Vickers and two free Lewis guns and could carry twelve 9 kilogram bombs.¹⁴¹ Formerly the 1st Flying Squadron had held its own with inferior aircraft. Now it had the superior machine.

Allenby resolved to undertake a raid into Jordan to destroy the Turkish railway at Amman. In another of his lucid appreciations, Chetwode protested in vain that the Jordan River was in high flood and precluded the use of wheeled vehicles in the Jordan Valley, that the country was unknown and that the enemy, reported at 4,500 strong, would fight every inch of the way and that with only 6,000 men the odds in favour of a quick advance were not good.¹⁴² Allenby ordered the operation anyway.

¹³⁴ GOC 3rd Light Horse Brigade, 31 January 1918, AWM25 455/27

¹³⁵ GOC Desert Mounted Corps, "Report on Operations of Desert Mounted Corps 22 October 1917 to 18 November 1917", 11 December 1917, AWM45 11/7

¹³⁶ DAG GHQ EEF, "Memorandum on Casualties up to 10 November 1917, 12 November 1917, AWM45 7/26

¹³⁷ GOC Desert Mounted Corps to Advanced HQ EEF, "Readiness for Action", 16 December 1917, AWM45 7/27

¹³⁸ Major E.B.T. Nicholls, "Ordnance Work - AIF in Egypt", 15 October 1919, AWM224 MSS 507, p. 64

¹³⁹ "History of the 1st Armoured Car Section", AWM224 MSS 209, p. 22

¹⁴⁰ Report on Activities of 1st Flying Squadron, 16 March 1916 to 31 December 1917, AWM224 MSS 515, p. 10

¹⁴¹ Cutlack, F. M., *The Official History of Australia in the War of 1914-1918, Volume VIII: The Australian Flying Corps*, Sydney, Angus and Robertson, 1923, p. 406

¹⁴² GOC *British XX Corps* to CGS EEF, 18 March 1918, AWM45 7/31

Getting across the Jordan River required the construction of bridges. D Field Troop was alerted on 11 March 1918 for a crossing site selected from aerial photographs. Shortly after midnight on 22 March D Field Troop threw a line across the river and launched a canvas and timber raft to create a "flying bridge". A pontoon bridge was commenced at dawn and was ready for cavalry and vehicles at 0815.¹⁴³

The weather was wet and the ground very muddy. The 1st Light Car Patrol pushed rapidly along the road to Amman, capturing 30 German trucks it found bogged and abandoned but eventually its own advance was halted when the road became impassable.¹⁴⁴ The light horse and camels pressed on to Amman, entering the town on 30 March but they could not capture their objective, the viaduct and railway station, owing to enemy artillery and machine gun fire. The raid cost the Anzac Mounted Division 734 casualties and they captured 328 prisoners.¹⁴⁵

The next month another attempt was made, and once again the odds were long. The terrain was mountainous and muddy. Wheeled vehicles could not be used, horses were restricted to tracks and even camels could only move with difficulty. The enemy, although surprised, was not demoralised enough to withdraw from strong positions without a fight and the Desert Mounted Corps withdrew back across the Jordan again on 4 May.¹⁴⁶ This time the mounted troops lost 397 men and the whole force captured 942 prisoners.¹⁴⁷ Nothing could cover up the fact that the effort was a complete failure.

On 14 July, the Desert Mounted Corps was struck by a strong counterattack spearheaded by the *German 702nd, 703rd and 11th Reserve Jäger Battalions* of the *German Asia Corps*.¹⁴⁸ This was the first time and only time that German troops were employed as stormtroops in the Palestine campaign. The light horsemen had studied reports on the fighting by their infantry counterparts in France and employed the tactics that had been found effective there. They utilised all the firepower at their command, firing off 19,000 rounds of rifle, 20,000 rounds of Hotchkiss and 30,000 rounds of Vickers machine gun ammunition.

¹⁴³ GOC AIF Egypt to Secretary DOD, 13 September 1918, AWM22 739/4/103;
BGGs Desert Mounted Corps, "Narrative of Operations of Desert Mounted Corps 1 March 1918 to 2 April 1918", 17 April 1918, AWM45 11/8

¹⁴⁴ "History of the 1st Armoured Car Section", AWM224 MSS 209, p. 30

¹⁴⁵ BGGs Desert Mounted Corps, "Narrative of Operations of Desert Mounted Corps 1 March 1918 to 2 April 1918", 17 April 1918, AWM45 11/8

¹⁴⁶ GOC Desert Mounted Corps, "Narrative of Operations of Desert Mounted Corps East of Jordan April to May 1918", 10 May 1918, AWM25 455/69

¹⁴⁷ Gullett, VII: *The AIF in Sinai and Palestine*, p. 635

¹⁴⁸ Falls, II: *Military Operations in Egypt and Palestine*, pp. 437-438

Positions did not give up simply because they were surrounded and the line was restored by local counterattacks. Light horse casualties came to 69, while 425 prisoners were taken, including 358 Germans.¹⁴⁹

As a result of the German Offensive that began in France on 23 March, Allenby was ordered to send two infantry divisions to France while a third was readied. The Australian Mounted Division was ordered to embark for France on 4 July to be broken up for infantry reinforcements, but the order was cancelled on 21 June.¹⁵⁰ Two Indian divisions from Mesopotamia replaced the two British divisions that had departed. To economise on British manpower, the remaining four British infantry divisions not alerted for France were converted into Indian divisions, with three British battalions being withdrawn from each infantry brigade so that they now contained one British and three Indian infantry battalions. In all, the number of British infantry battalions with the EEF was reduced from 63 to 30 while the number of Indian battalions increased from 22 to 54. Of the 33 British infantry battalions withdrawn, 23 were sent to France and 10 broken up for reinforcements. After the Indian Mutiny of 1857, Indian infantry brigades consisted of three Indian and one British battalion to head off military insurrections. Thus, the affected British divisions were now identical to Indian divisions.¹⁵¹

Allenby had one spare British and one Indian cavalry brigade and formed a fourth cavalry division from them and the 1st Imperial Camel Brigade. Permission was sought from the Australian and New Zealand governments to convert their components of the brigade into horse mounted troops and was obtained on 25 May.¹⁵² At first, the formation of a 5th Light Horse Brigade looked fairly simple; the brigade required 98 officers and 1807 other ranks and there were 99 officers and 2,298 other ranks in the three Anzac battalions of the 1st Imperial Camel Brigade and the Camel Field Ambulance.¹⁵³ But this included New Zealanders, of whom there were enough to form a New Zealand mounted regiment with 104 men left over in addition to 589 New Zealand reinforcements available in the theatre. By contrast, the formation of two light horse regiments would leave only 892 Australian reinforcements for all AIF units in the Middle East.¹⁵⁴ This shortage of reinforcements led Chauvel, on 12 June, to request the return of the AIF personnel detached for railway

¹⁴⁹ Gullett, VII: *The AIF in Sinai and Palestine*, pp. 660-670

¹⁵⁰ WO to C-in-C EEF, 12 June 1918, AWM45 7/48; C-in-C EEF to WO, 19 June 1918, AWM45 7/48;

WO to C-in-C EEF, 21 June 1918, AWM45 7/48

¹⁵¹ CGS EEF, 3 May 1918, AWM45 7/47

¹⁵² WO to C-in-C EEF, 25 May 1918, AWM45 7/47

¹⁵³ C-in-C EEF to WO, 11 May 1918, AWM45 7/47

¹⁵⁴ C-in-C EEF to WO, 6 July 1918, AWM45 8/7

construction duties.¹⁵⁵ Despite the recommendations of Chauvel and Chaytor that New Zealand supply a regiment,¹⁵⁶ the New Zealand government would not consent to more than a squadron.¹⁵⁷

Thus, on 25 July the 5th Light Horse Brigade became the last formation of the AIF to be formed in the Great War, with the 14th and 15th Light Horse Regiments and the New Zealand 2nd Machine Gun Squadron assigned.¹⁵⁸ The new light horsemen drew swords, remounts and saddlery and traded in their Lewis guns for the Hotchkiss.¹⁵⁹ The Camel Field Ambulance became the 5th Light Horse Field Ambulance. Brigade headquarters, the 5th Signal Troop and the 10th Mobile Veterinary Section were formed from reinforcements. The French ultimately provided the third cavalry regiment of the brigade, the *1er Regiment Mixte de Marche Cavalerie du Levant*, consisting of two squadrons of *1er Regiment Spahis* and two of *4e Regiment de Marche Chasseurs d'Afrique*. On 8 July the field squadrons of the Anzac and Australian Mounted Divisions were renamed the 1st and 2nd Field Squadrons and the signal squadrons, the 1st and 2nd Signal Squadrons. The British components of the 2nd Signal Squadron were withdrawn and the squadron became wholly Australian by absorbing the Cable Section, Pack Wireless Section and 3rd Airline Section.¹⁶⁰

The two British cavalry divisions were also converted into Indian divisions and were renamed the Indian 4th and 5th Cavalry Divisions on 23 July. Each cavalry brigade contained one British cavalry regiment and two Indian. The British cavalry regiments thus released were sent to France as four machine gun battalions. Allenby also sent five and a half siege batteries, twenty-three infantry battalions and five machine gun companies. The net effect for the Desert Mounted Corps was that it now had four mounted divisions. Unlike the Indian infantry battalions, the new Indian cavalry regiments were veterans of the Western Front and the impact on efficiency was slight.¹⁶¹

The new campaign plan called for deception on a grand scale. The enemy would be deceived into thinking that the main attack would be made by the mounted troops from the

¹⁵⁵ War Diary, DQMG GHQ EEF, 12, 14, 29 June 1918, AWM45 12/8

¹⁵⁶ GOC NZEF Egypt to CGS EEF, 5 July 1918, AWM45 8/7;
GOC AIF Egypt to CGS EEF, 5 July 1918, AWM45 8/7

¹⁵⁷ C-in-C EEF to WO, 19 July 1918, AWM45 8/7

¹⁵⁸ GOC 1st Imperial Camel Brigade, "IC Brigade Reorganisation Order No. 8", 25 July 1918, AWM25 157/1

¹⁵⁹ Major E.B.T. Nicholls, "Ordnance Work - AIF in Egypt", 15 October 1919, AWM224 MSS 507, p. 93

¹⁶⁰ "History of the Signal Service AIF Egypt", 24 June 1919, AWM224 MSS 92, pp. C1, W13, £10, @1, e1

¹⁶¹ Falls, II: *Military Operations in Egypt and Palestine*, pp. 413-421. The Indian cavalry had last seen action on the Western Front at Cambrai in November 1917.

Jordan Valley. Instead, it was to be delivered by the infantry along the coast with the Desert Mounted Corps secretly redeploying to exploit any breakthrough. In essence, the plan was the exact opposite of Third Gaza. Allenby aimed to capture the Turkish communication centres and cut off and destroy the entire Turkish Army in Palestine. The ground ahead, the Plain of Sharon, was ideal terrain for cavalry. The elaborate deception plan included the construction of dummy horses in the Jordan Valley, and leaving a residual force built around the Anzac Mounted Division known as "Chaytor's Force".¹⁶²

The success of the plan was made possible by the air supremacy gained by the Royal Air Force (RAF) and AFC. During one week in June, hostile aircraft crossed the allied lines one hundred times. In the last week in August that number dropped to 18. During the three following weeks of September it dropped further to just four and for several days before the allied attack, there was none at all. Yet, during the two months prior to the attack all 15 enemy machines destroyed and 33 forced down on the Palestine front fell to the Bristol fighters of the 1st Flying Squadron. The squadron also dropped 21 tonnes of bombs and expended 241,000 rounds of ammunition.¹⁶³

Some 385 guns, including 70 heavy, supported the attack on 19 September a density of 1 per 50 metres.¹⁶⁴ Complete surprise was achieved, the Turks crumbled and the allies swept forward. The advance was one of the fastest sustained advances in history, the Desert Mounted Corps moving 167 km in just three days.¹⁶⁵ Pushing through the mountains around Nablus, the 1st Light Car Patrol had difficulty getting through because the 1st Flying Squadron had attacked a column of 200 vehicles and destroyed so many that the road had become blocked.¹⁶⁶ On 26 September Chauvel pronounced the *Turkish Seventh and Eighth Armies* destroyed and ordered the Desert Mounted Corps to advance on Damascus,¹⁶⁷ which the light horse captured on 30 September.¹⁶⁸ A flying column of armoured cars and light cars, including the 1st Light Car Patrol set out for Aleppo, which fell in turn on 26 October.¹⁶⁹ Meanwhile Chaytor's Force struck out on its own and captured Amman. In the

¹⁶² General H. G. Chauvel, *General Sir H.G. Chauvel - Autobiography*, pp. 111-122

¹⁶³ Cutlack, VIII: *The Australian Flying Corps*, pp. 133-134

¹⁶⁴ Wavell, *The Palestine Campaigns*, pp. 205-206

¹⁶⁵ Dupuy, *Understanding War*, pp. 150-153

¹⁶⁶ "History of the 1st Armoured Car Section", AWM224 MSS 209, p. 52; Cutlack, VIII: *The Australian Flying Corps*, pp. 155-156

¹⁶⁷ GOC Desert Mounted Corps, 26 September 1918,; Falls, II: *Military Operations in Egypt and Palestine*, p. 723

¹⁶⁸ Gullett, VII: *The AIF in Sinai and Palestine*, pp. 751-775

¹⁶⁹ "History of the 1st Armoured Car Section", AWM224 MSS 209, p. 56

final round up, the two mounted divisions captured 38,000 prisoners.¹⁷⁰ On 30 October Turkey surrendered.

Prisoners Captured by the AIF in Sinai, Palestine, Jordan and Syria
(1916-1918)¹⁷¹

Period	Prisoners
Sinai, April to June 1916	30
Romani, 19 July 1916 to 16 August 1916	4,870
Mozar and Reconnaissances, September to December 1916	80
Maghdaba	1,280
Rafa	1,600
First Battle of Gaza	800
Second Battle of Gaza	400
Reconnaissances before Beersheba	100
Beersheba-Jerusalem	3,600
East of the Jordan	2,500
Damascus (Australian Mounted Division)	28,000
Damascus (Anzac Mounted Division)	10,322
TOTAL	54,000

The Palestine campaign stands as an example of the role of manoeuvre and mobility and as such differs from of the popular perception of the Great War that is drawn from images of the Western Front. Both campaigns, however, illustrate that in modern warfare tactics are driven by logistics. They also show that the character of modern warfare is determined by a combination of factors, one of which is technology.

Because Palestine was a relative backwater, technological change came slower and certain memes survived longer than on the Western Front. One of these was the notion that a non-white enemy could be defeated under whatever circumstances. The desire to bring about a decisive battle with a frontal assault also survived longer. In trying to transcend the situation in which the EEF found itself, the *Field Service Regulations* provided advice but not the much-needed framework for analysis and decision making. After the war, soldiers

¹⁷⁰ CO No. 1 (EEF) Section, Australian War Records Section to Australian War Records Section, 3 March 1919, AWM25 779/3

¹⁷¹ CO No. 1 (EEF) Section, Australian War Records Section to Australian War Records Section, 3 March 1919, AWM25 779/3

like A. P. Wavell would draw on their experience in the Palestine campaign for the answers.

The lower casualties as compared with the Western Front allowed the light horse to achieve a high standard of training that in turn served to keep casualties down. The readoption of swords may have made them look technologically regressive but it is the integration of all logistically feasible technologies that is the true essence of tactics.

Some observers found it odd that mounted troops should play such a significant part at a time when the mounted arm was demonstrably unable to earn its keep on the Western Front and so clearly passing into obsolescence. The light horse did so by incorporating infantry tactics and firepower. In this, we have an example of a technological phenomenon:

It is not uncommon that as new technologies threaten to displace older ones, the latter in turn, are improved in some way so that the displacement is never complete or at least is delayed beyond what at first seems reasonable.¹⁷²

The true lesson was in the use of technology, not cavalry.

¹⁷² Pursell, *The Machine in America*, p.46