

Musketry: The Anglo Boer War experience

*JOHAN ELLIS**

The heaviness of the British casualties in 1881 was due partly to the excellence of the Boer shooting ... and partly to the close formations and wretched shooting of the British. ... It was considered sufficient to dismiss the actions of 1881 as skirmishes whose methods could never be applied to battles on a large scale.¹

Introduction

The tension between the Zuid-Afrikaanische Republiek (Z.A.R.) and the United Kingdom which erupted into a full scale war extending from 1899 to 1902 and embraced most of British Southern Africa, was not the first experience the British had of Boer tactics and musketry. British experience of Southern Africa was based both on co-operation and during the latter part of the 19th century, on confrontation. The British had the opportunity to study the military system and approach to warfare as practised by the Boers on the eastern frontier of the Cape colony during the last seven of the nine Frontier Wars against the Xhosa.² With the possible exception of the latter one or two of these wars, the very ancestors of the Boers and quite often that of the British opposing each other during the Anglo-Boer War fought in these wars. These and other

• Lieutenant Colonel Johan Ellis is a lecturer at the University of Stellenbosch, Faculty of Military Science (Military Academy), Military History Department. He is a line officer in the South African National Defence Force, SA Army, South African Infantry Corps, currently seconded to the Military Academy. He presents the modules on South African Military History and Internal War. His field of interest on which research is focussed is Africa's Military History to 1945 with specific interest on the period before European intervention. Johan can be contacted at johane@ma2.sun.ac.za.

1. L.S. Amery, *The Times History of The War in South Africa 1899-1902: Volume II*, Sampson Low, Marston and Co Ltd, London, 1902, p.64.
2. Anon, "A Short chronicle of warfare in South Africa", *Militaria*, Official Professional Journal of the SADF, 1986, Volume 16/3.

wars against the indigenous black peoples were fought, more often than not in co-operation with, or while under British rule.³ Both Boer and Brit thus had ample opportunity to study their respective military systems and approaches to warfare.

Only eighteen years prior to the commencement of the Anglo-Boer War the Boers gave Britain an excellent demonstration of their musketry and tactical skills. A comparison of the casualties suffered during the battles of Bronkhorstspuit, Laingsnek, Schuinshoogte and Majuba fought during the Anglo-Transvaal War (1880-1881) indicated 697 British dead or wounded compared to the mere 71 Boers killed or wounded.⁴ Surely this should have raised a few eyebrows among British officers and politicians alike.

In spite of this, the British suffered severe losses against a "lesser" enemy on confronting them during the Anglo-Boer War.

In order to understand the imbalance in the effectiveness of British and Boer firepower the background of both the British and Boer soldiers opposing each other on the battlefields of Southern Africa will be illustrated. The techniques used and developments in musketry as employed by both the Boers and the British will be demonstrated through an analysis of some of the major battles and other confrontations during the initial phase of the war. Although examples of different techniques used by specifically the Boers during the guerrilla phase (e.g. shooting from the saddle during the battle at Rooiwal on 10 April 1902⁵) is available, the scope of this paper will be restricted to the initial phases of the war. This is necessary since once the Boers started their retreat ahead of Roberts's "steamroller", their ability to effectively oppose the British on equal terms was severely restricted.

The British Forces

Britain experienced the most important changes of the industrial revolution between 1750 and 1850. By the latter half of the 19th century, it had already entered the second phase of the industrial revolution. Because of this, Britain's population more than doubled over the period

3. Ibid.

4. F.A. van Jaarsveld, A.P.J. van Rensburg, W.A. Stals, (red), *Die Eerste Vryheidsoorlog*, HAUM, Pretoria, 1980. Figures taken from the different chapters where the respective battles are discussed.

5. Compare L.S. Amery, *The Times History of The War in South Africa 1899-1902*, Volume V, Sampson Low, Marston and Co Ltd, London, 1907, pp.532-533 and T. Pakenham, *The Boer War*, Jonathan Ball Publishers, Goodwood, Cape, Copyright 1979, p.558.

from 1811 to 1891, with the majority of the population living in Britain's cities and bigger towns.⁶ With the British Army as a welcome alternative to working in a 19th century factory, many of Britain's urbanised males who could not secure a comfortable job joined the British Army voluntarily.⁷ The ordinary British soldier thus came from an industrialised, urban population. With the majority of the countryside in the possession of big landlords, the urban population had little or no opportunity to hunt or to fire a rifle. More often than not, the soldiers joining the Army had their first experience with firearms after their enlistment.

The overwhelming number of recruits had been recruited from the lower ranks of unskilled labour.⁸ Good training was essential in order to convert this below-average human resource into an asset. The military system of the British Army, however, did not allow for sufficient training to acquire the musketry skills essential in combat. Regimental duties, parade ground drill and keeping his uniform clean consumed most of the soldier's time. Acquiring knowledge by learning passages from the textbooks by heart was the usual method of instruction, while field training at home in Britain was restricted to only three weeks per year. Musketry training consisted of shooting on a rifle range at known distances with each soldier only allowed two hundred rounds per year.⁹ Joining the army increased the general quality of the volunteer by moulding a disciplined soldier, but the skills essential to ensure the individual's contribution on the battlefield were neglected.

The British soldier's first real opportunity to test his ability in estimating the distance to his target in order to set the sights of his rifle correctly was on the battlefield itself. Although limited training in estimating distance was provided, this also had the nature of a parade ground exercise.¹⁰ In addition to this, musketry training over shorter distances consisted of shooting at target two feet wide and six feet high (a man standing upright) with several of these targets being placed side by side as the distance increased. At a distance of 820 metres (900 yards), the maximum distance marked on the sights of the Enfield rifle at the time, the target

6. Ibid., p.168-169.

7. This line of thinking is confirmed by R. Pope, *War and Society in Britain: 1899-1948*, Fifth impression, Longman, London and New York, 1996, p.58.

8. L.S. Amery, *The Times History of The War in South Africa 1899-1902*, Volume II, Sampson Low, Marston and Co Ltd, London, 1902, p.33.

9. Ibid., p.33-34.

10. Anon, 'Pickets' vs Bullets. *Chambers's Journal*, 29 January 1859, [<http://www.btinternet.com/~rrnotes/target/pickets.htm>]

composed of eight of these smaller targets.¹¹ This implied a target of 5,5 by 1,8 metres, acceptable against an opponent in Europe given the close order formations and tactics at the time. Against the Boers however, he had to shoot at a target usually in the open order and on the move, or hiding behind a rock. A target that the average soldier could not see at distances over 500 metres, because he had not been trained on how to observe over longer distances.¹² A skill that was essential, because of the increased ranges possible with modern firearms.

With the acquisition of improved rifles, and eventually the Lee-Metford with sights marked up to 1 600 yards, the quality of musketry training improved. The forces in Umballa, India under the overall command of Maj.-Gen. Penn Symons (shortly before his redeployment to South Africa), for example participated in musketry courses extending over a period of four to five weeks. In addition to this, regimental and brigade field firing exercises which "... seemed very realistic",¹³ and integrating the arms of service were held. The same level of training was however not conducted in Britain.

During the fifty years prior to the Anglo-Boer War, Britain was involved in no less than thirty-four campaigns or military expeditions against the indigenous peoples of the numerous British colonies.¹⁴ The forces participating in these campaigns consisted primarily of the regular battalions of the various regiments of the Army. However, with the exception of a few regiments that were from time to time deployed from one theatre of operations to the next, campaigning, and more specifically actual combat, was far and in-between.¹⁵ The nature of the battles was also in essence drastically different from what they were to encounter in South Africa. The "...*fanatic* [mass which] *streamed across the open regardless of cover...*" were to be replaced by invisible Boers "... *and it was our men* [the British] *who were* [to become] *the victims*".¹⁶ On arrival in Southern Africa, attempts were made to improve the musketry

11. Ibid.

12. The Historical Section of the Great General Staff, Berlin (Translated by H. du Cane), *The War in South Africa*, John Murray, London, 1906, p.331.

13. A.D. Greenhill Gardyne, *The Life of a Regiment: The History of the Gordon Highlanders*, Vol. III, 2nd Impression, Leo Cooper, London, 1972, p.1-3.

14. J.H. Breytenbach, *Die Geskiedenis van die Tweede Vryheidsoorlog in Suid-Afrika, 1899-1902*, Deel 1, The Government Press, Pretoria, 1969, p.26.

15. A.D. Greenhill Gardyne, *The Life of a Regiment: The History of the Gordon Highlanders*, Vol. III, 2nd Impression, Leo Cooper, London, 1972, p.1.

16. H. Strachan, *European Armies and the Conduct of War*, 3rd Impression, George Allen & Unwin, London, 1985, p.77.

skills of the soldiers by means of shooting exercises.¹⁷ However, with the majority of units deployed directly from Britain, the necessity to get the forces to the front as quickly as possible and logistical restraints were of cardinal importance.

The British military system further neglected the development of the soldier to think as an individual. Some officers, experienced in modern warfare, favoured the open order and individual fire in battle. Attempts to introduce these concepts into British doctrine were successful and in 1896, a new drill book advocating the open order and the end of the Aldershot set-piece battle was adopted.¹⁸ Still, the majority of officers fell into the trap of tradition being "... *in favour of the solid line formation, mechanical precision, strict fire discipline, and bayonet charges...*".¹⁹ Training in the majority of units still focused on manoeuvring the phalanx of a British square both on the parade ground and during practical training;²⁰ a tactical approach successful during most of Britain's colonial campaigns against a poorly armed indigenous peoples. It implied however that the soldier was not expected to think for himself during combat. He was a pawn, whom had to shoot on command (in volleys), irrespective of whether there actually was a specific identified target in his sights.

The Boer Forces

The burghers, as the Boer soldiers were called, originated from a community in which acquiring the skills of survival were paramount. In the absence of cities and with only a few bigger towns, the majority of the Boer population lived in the countryside. Surviving in the relative isolation of the Southern African interior, with the constant threat of a possible attack by a wild animal or warriors from one of the indigenous polities during a period of conflict necessitated preparedness.

The Boer military system favoured a thinking individual. The burgher fighting as part of the Boer forces did not regard himself as a soldier, and openly opposed the notion that he was.²¹ He was a free man participating in a war against the British as a private citizen. As such, irrespective of

17. A.W.A. Pollock, *With Seven Generals in The Boer War*, Skeffington & Son, London, 1900, p.22.

18. A.D. Greenhill Gardyne, *The Life of a Regiment: The History of the Gordon Highlanders*, Vol. III, 2nd Impression, Leo Cooper, London, 1972, p.1.

19. L.S. Amery, *The Times History of The War in South Africa 1899-1902*, Volume II, Sampson Low, Marston and Co Ltd, London, 1902, p.32.

20. Ibid.

21. H.C. Hillegas, *With the Boer Forces*, Methuen & Co, London, 1900, p.61-62.

laws to the contrary, he did not regard himself bound by the same rules as soldiers. The majority of burghers were men living in relative isolation on farms far from town. There he had to ensure the survival of his family and ruled as patriarch making his own decisions, not allowing others to meddle with his way of live. Many of these men spontaneously left for the frontiers to guard against any British attempt to enter his country weeks before Kruger sent the ultimatum.²²

The burghers were organised in commandos based on the geographical area they lived in, with officers elected from own ranks.²³ This often resulted in burghers with an attitude that the field-cornet or commandant elected by him owed him a favour. The burgher further reserved the right to disobey when and if the instructions of the officer did not suite him. This is not to say that no discipline existed among the Boers. The techniques of enforcing discipline, however, were different from that of European armies and in this, the sjambok (horsewhip) played a major role.²⁴ Parade ground drill and shooting in volleys on command did not exist in the mind of the burgher. He was a free citizen organised in a loose, flexible military system that expected of him to shoot at the enemy on command, but allowed him to pull the trigger when he was willing and ready, thereby ensuring the opportunity for accurate fire aimed at a specific target.

The open country and availability of game further resulted in a nation of hunters. The majority of the population, including the older children, male and female alike, were exposed to and experienced in the use of firearms.²⁵ The need for formal musketry training for the burghers was rather restricted and higher musketry skills, like shooting at a moving target from a hidden position or even from horseback, came naturally. However, it will be untrue to suggest that the Boers went without formal musketry practice.

The two republics actively opted for a process of modernisation supplemented with training. In accordance with its policy of maintaining "fire-power" in the hand of the white population within Southern Africa, the Z.A.R. monopolised the sale of firearms and ammunition by establishing the government as sole provider thereof. The monopoly was slightly reduced during the first few years of the 1890's by issuing trading

22. Ibid., p.71.

23. Ibid., p.89.

24. J.C.K. van der Merwe, *Met God, Sambok en Mauser; Die Taktiese Waardering van die Slag van Nooitgedagt: 13 Desember 1900*, SADF, Pretoria, 1986.

25. J.H. Breytenbach, *Die Geskiedenis van die Tweede Vryheidsoorlog in Suid-Afrika, 1899-1902, Deel 1*, The Government Press, Pretoria, 1969, p.29-30.

permits to selected merchants. In spite of this alternative method of obtaining a rifle, the Government through the Commandant-General, still distributed 9 019 Martini Henri rifles to its citizens and 187 Martini Henri rifles to black men living inside its borders. Distribution implied that the burgher could buy a rifle at the reduced cost of £4, or a rifle could be issued if the burgher was unable to make payment.²⁶ The first Mauser rifles and ammunition (1000 rounds per burgher per year) were issued at the end of November 1896. This continued well into 1899.²⁷ As tension increased, large numbers of Martini Henri rifles were returned (and re-issued to the next willing burgher) in exchange for the modern Mauser rifle.²⁸

In order to ensure control *Wapenschouwingen* (Weapon Shows) were held in the different districts by the district commandants. These were necessary since, in some cases, burghers exported or sold their rifles obtained through the government to members of the black polities. Gen. P.J. Joubert, as Commandant-General, also held *Wapenschouwingen* with the intention to determine the level of armament of the burghers.²⁹ The poor attendance and in-frequency of the *Wapenschouwingen* however was a constant irritation to the Commandant-General. Still, he expressed his satisfaction with the level of armament during the years preceding the war.³⁰

Together with the *Wapenschouwingen*, the Z.A.R. held organised shooting competitions with prizes awarded by the government ranging

26. Transvaal Archives Depot forthwith TAD, List of Official Publications of the ZAR: 1849 1900, ICN 0 7970 1913 8, (Z.A.R.) 111, Finaal-Rapport van den Commandant-Generaal over het jaar 1892, p3-4 and KG 996, Register van Naturellen uitgereikte vuurwapenen.

27. TAD, Inventory of the Archive of the Commandant General: 1880-1900, ICN 0 7970 1573 6, (K.G.) 988, Register of the Kruitmagazijnen on the issuing of rifles and ammunition and TAD, Z.A.R. 111, Finaal-Rapport van den Commandant-Generaal over het jaar 1896, p.4.

28. TAD, K.G. 457, Lyst of terug ontvangen geweren en ammunitie sedert 9 Nov 1899 and TAD, K.G. 461, Approved notes from the respective Landrosts as well as the "Specificatie aangetonende het getal of de Krijgsbehoeften in het Magazijn te Rustenburg: September 1899" as an example. Small quantities of other types of rifles were also distributed.

29. TAD, Z.A.R. 111, Finaal-Rapport van den Commandant-Generaal over het jaar 1892, p.4.

30. See the respective reports on the *Wapenschouwingen* in TAD, Z.A.R. 111, Finaal-Rapport van den Commandant-Generaal for the years 1892 to 1898.

from cash to ammunition.³¹ It was expected of all burghers liable for military service to participate in these competitions and penalties in the form of a number of rounds were to be paid by those not attending. The burghers participated in age groups based on their likeliness of being called upon for military duty with the priority being to call on the 18-34 year age group first. Provision was also made for children younger than 16 years to participate.³²

Apart from the penalties to be paid by non-participants, burghers were also compelled to attend these exercises because of an administrative arrangement. Joubert's intention was clear, the 1000 rounds per year supplied by the Government to the burghers were to be issued during these exercises.³³ A selection of the reports on the shooting exercises from the field-cornets to Joubert, indicate that participation varied between 9% and 65% of the total number of burghers liable for service in the respective districts.³⁴

With the introduction of Mauser rifles, the Z.A.R. improved its musketry training. The number of shooting competitions doubled and the prize-money increased from £3000 to £6000 during 1897.³⁵ The size of targets was reduced during 1897 and during 1898 and the range increased to up to 1 000 yards. (See Figure 1.) The availability of rifle ranges however was a problem and in the majority of the cases, the results received from the respective field-cornets did not include exercises exceeding 500 yards. With the sights of the Mauser marked up to a distance of 2 000 yards, one can assume that some experimenting over longer distances must have occurred. The results also vary according to the respective age groups with the majority of the under 16's achieving extremely low marks.³⁶

-
31. TAD, K.G. 1041, Rapport from J.A. Joubert, Field-Cornet of Ward 2 in the Wakkerstroom district: February 1995. A total of 1000 Martini Henri rounds were issued during a competition as prizes.
 32. TAD, Z.A.R. 111, See the attached Circulaire dated 22 March 1897 to the Rapport van den Commandant-Generaal over het jaar 1896.
 33. Compare the respective reports on the Schijfschieterij in TAD, Z.A.R. 111, Finaal-Rapport van den Commandant-Generaal for the years 1892 to 1898 with specific reference to the 1897 report, p.2.
 34. TAD, K.G. 1040 and 1041, Reports from the respective districts and wards on shooting competitions held.
 35. Compare the respective reports on the Schijfschieterij in TAD, Z.A.R. 111, Finaal-Rapport van den Commandant-Generaal for the years 1892 to 1898.
 36. TAD, K.G. 1040 and 1041, Reports from the respective districts and wards on shooting competitions held.

<i>Name and allocated points</i>	<i>Dimensions</i>		
	<i>200 and 300 yards</i>	<i>400, 500 and 600 yards</i>	<i>700, 800, 900 and 1000 yards</i>
Bull (5)	8 in.	2 ft.	3 ft.
Inner (4)	16 in.	3 ft.	4 1/2 ft.
Magpie (3)	24 in.	4 ft.	6 ft.
Outer (2)	The rest of a 4-ft square.	The rest of a 6-ft square.	The rest of a 12 x 6 ft square.

*Figure 1*³⁷

There is no indication of organised field training or exercises held by the Z.A.R. during peacetime. This might not have seemed unnecessary based on the Z.A.R.'s warring experience. In the forty years preceding the Anglo-Boer War the burghers of the Z.A.R. had been involved in no less than eleven wars in which different portions of the population had been mobilised.³⁸ Based on the defensive policy that the first line of defence is that of the district closest to the conflict, and the mobilisation policy of first calling on the 18-34 year age group, most of the burghers over the years became experienced fighters.³⁹

The Free State started issuing rifles to burghers based on requirements received from the respective commando's during 1891.⁴⁰ *Wapenschouwingen* with the intended dual purpose of formal inspections of the arms and equipment of the commando's and secondly to conduct military exercises were introduced with limited success.⁴¹ As tension increased the issuing of rifles continued, culminating during 1897 as

37. TAD, Z.A.R. 111, Circulaire dated 22 March 1897, attached to the Rapport van den Commandant-Generaal over het jaar 1896 as well as the Concept-Regulaties voor Schietverenigingen.

38. Anon, 'A Short chronicle of warfare in South Africa', *Militaria*, Official Professional Journal of the SADF, 1986, Volume 16/3.

39. Compare the respective reports on the Krijgsoperatien in TAD, Z.A.R. 111, Finaal-Rapport van den Commandant-Generaal for the years 1892 to 1898.

40. Free State Archives Depot forthwith FSAD, Inventory of the Secretary of Government, 1839 - 1900, ICN 0 7970 1914 6, (G.S). 1424 (Old number), Returns and Summery of burghers to whom rifles were to be issued.

41. F. Maurice, *History of the War in South Africa: 1899-1902*, Volume I, Hurst and Blacket Ltd, London, 1906, p.80.

more Mauser rifles became available. The number of rifles of all types issued during the two years preceding the war came to 8628.⁴²

Training in the Free State can be described as consisting of range and field exercises. During Rifle Association meetings, which replaced the *Wapenschouwingen* in the Free State during 1893,⁴³ formal “range” exercises were conducted. Ammunition and prices (sometimes donated by individuals or other organisations) were provided from state funds for these exercises.⁴⁴ Distances ranged from 200 to 800 paces but the targets differed from that used by the British and the Z.A.R. in the sense that the size of the target used on the various distances did not differ.⁴⁵ Difficulty therefore increased with distance.

Field exercises were presented in the respective commando areas by the field-cornets assisted by the *Rijdende Diensmacht* (Mounted Guard) consisting of members of the Free State Artillery on detached duty to the respective districts.⁴⁶ These field exercises differed from district to district. Targets ranged from trees, anthills or even pieces of wooden board cut into the shape of a human body. The burghers also exercised “immediate action drills” like riding towards the target, dismounting, firing at the target, mounting their horses and riding off.⁴⁷ Compared to the British “textbook” approach, the burghers experimented with their new rifles, in the process developing musketry skills befitting the new technology.⁴⁸

-
42. Free State Archives Depot, List of Official Publications of the Republic of the Orange Free State, 1854 - 1899, ICN 0 7970 3534 6, (O.R.) 60, Item 9, Rapport van den Majoor der Artillerie aan ZHEd. den Staatspresident over het Dienstjaar 1897 and O.R. 61, Item 9, Rapport van den Majoor der Artillerie aan ZHEd. den Staatspresident over het Dienstjaar 1898.
 43. J.A. Steenekamp, *Die Verdedigingstelsel van die Vrystaatse Republiek, 1854 - 1899* (Unpublished MA: University of the Orange Free State, 1976), p.95-101.
 44. J.H. Breytenbach, *Die Geskiedenis van die Tweede Vryheidsoorlog in Suid-Afrika, 1899-1902, Deel 1*, The Government Press, Pretoria, 1969, p.32.
 45. J.A. Steenekamp, *Die Verdedigingstelsel van die Vrystaatse Republiek, 1854 - 1899* (Unpublished MA: University of the Orange Free State, 1976), p.102-107. No indication of the exact size of these targets could be traced.
 46. T.P.E. Swemmer, *Die Geskiedenis van die Vrystaatse Artillerie*, Chapter Five, (Unpublished MA: University of the Orange Free State, 1953).
 47. J.A. Steenekamp, *Die Verdedigingstelsel van die Vrystaatse Republiek, 1854 - 1899* (1976), p.102. Unpublished MA: University of the Orange Free State.
 48. This is confirmed by Strachan in his conclusion that “Tribes with little formal military structure, accustomed to taking the defensive against the raids of neighbours [a description befitting the Boers], more readily adapted their methods of fighting to the new weapons.”, H. Strachan, *European Armies and*

The practising of their musketry skills in both the Transvaal and the Free State implied that some system must have developed to prevent the burghers from simply firing away during battle. Amery identified three types of fire used by the Boers. The first of these was *individual fire*. This implied careful aiming at a specific target with each shot only fired if the burgher was sure that he would hit the target. *Individual fire* was used during the opening stages of an attack or defence from good cover in order not to disclose the position of the burgher. The second type of fire was *heavy continuous fire* used during the last period of an attack or defence in order to prevent the enemy from charging. This type of fire was directed at the enemy position in general, rather than aimed at a specific target. The closeness to the enemy position, however, resulted in relative accuracy and the enemy being forced to keep his head down. The third kind of fire was *snap fire*. Fired from the hip or shoulder at close quarters, *snap fire* was used to counter a bayonet charge, or at the conclusion of a successful attack.⁴⁹

In addition, Boer fire discipline also included the ability to refrain from opening of fire in order to entice the enemy to move into a position where escaping without heavy casualties would be extremely difficult.⁵⁰ The enforcing of this tactic, however, was not that simple. Ill-discipline amongst the burghers on numerous occasions led to premature shots being fired, often resulting in the general opening of fire from the Boer positions. In general, the withholding of fire until the trap had been sprung came natural because of the burgher's experience in stalking game. This quite often influenced the battle decisively.

Although it is difficult to confirm from the available sources that this tactical approach was a conscious effort by the Boers, there seems to be sufficient grounds to suspect as much. Gen. Joubert devised an operational strategy favouring the musketry skills and tactics of the burghers. Based on his experience against the numerically superior forces of the black polities and his belief that in modern warfare the attacker normally suffered higher casualties than the defender, he instructed the commando's to take up defensive positions when confronting the British. To further strengthen this, he added the guideline that the British must be enticed to attack, thereby creating a situation

the Conduct of War, 3rd Impression, George Allen & Unwin, London, 1985, p.76-77.

49. L.S. Amery, The Times History of The War in South Africa 1899-1902, Volume II, Sampson Low, Marston and Co Ltd, London, 1902, p.92.

50. Ibid.

where the burghers could fight from a defensive position.⁵¹ This instruction, in principle very similar to their experience of warfare must have suited the burghers. It not only limited the risk to the individual, but also enabled the burgher to exploit his musketry skills to the maximum.

The Opening Battles in Natal

The battle for Talana, being the first major battle of the war, provides us with a good example of the different approaches to musketry and the effect thereof. After occupying Talana Hill, approximately three kilometres east of the town of Dundee, during the early hours of 21 October 1899 the Boers under Gen. Lucas Meyer made no effort to conceal their position. The Boer artillery opened the battle, but was soon answered and silenced by the British batteries. The bombardment of the Boer positions immediately forced the burghers to take cover. With the distance too great for effective rifle fire, small groups of burghers now closed the distance between themselves and the British by going down the front slope of Talana Hill.⁵²

Maj.-Gen. Penn Symons decided to remove the Boers from Talana by means of an artillery bombardment, followed by a frontal attack by the infantry, after which the cavalry was to attack the Boers as soon as they broke position and fled, a typical Aldershot set-piece battle. This in itself was contrary to the new tactics adopted in British doctrine since 1896. Penn Symons' own troops in India were taught the new more co-ordinated and open order approach to battle.⁵³ In addition to its primary task of destruction, the artillery bombardment had the secondary function of enabling the infantry to close distance towards the objective. The stage of individual firing by the small parties that had closed distance commenced early in the morning. "Well-aimed" shots at a distance of 1000 to 1800 metres from under cover resulted in the first British casualties from rifle fire being suffered as soon as the infantry stepped out of the riverbed enroute to the trees at the foot of Talana.⁵⁴ This, however, was a one-sided affair. While burghers were inflicting casualties, the

-
51. J.H. Breytenbach, *Die Geskiedenis van die Tweede Vryheidsoorlog in Suid-Afrika*, Deel 1, The Government Press, Pretoria, 1969, p.165-166.
 52. *Ibid.*, p.218-219.
 53. A.D. Greenhill Gardyne, *The Life of a Regiment: The History of the Gordon Highlanders*, Vol. III, 2nd Impression, Leo Cooper, London, 1972, p.1.
 54. T. Pakenham, *The Boer War*, Jonathan Ball Publishers, Goodwood, Cape, Copyright 1979, p.130.

British soldiers were doing as they were told by "... *breaking from quick-time into the double, and from that to a swift run upon the edge of the wood...*" not stopping to return fire on the invisible enemy.⁵⁵

Only on arrival at the trees and with the cover of a stone wall on the Boer side of the trees did two companies from the 1st Royal Irish Fusiliers detached specifically for the task of returning fire by sending "... *volleys against the enemy ... upon Talana*". The remainder of the infantry took cover, acting as reserve, not participating in combat.⁵⁶ The majority of these troops had no battlefield experience.⁵⁷ The lack of experience and the concentrated fire from the magazine rifles, combined with the uphill angle (50 to 100 metres up) and distance (400 to 500 metres) at which they had to shoot at a concealed enemy must have had a detrimental effect on the effectiveness of their fire.

In the mean time, Boer parties that had closed distance towards the attackers as well as the burghers on the front slope of Talana, had retreated before the advancing British infantry to the crest of Talana Hill. In spite of being delayed by the effectiveness of the Boer rifle fire, the advance up the hill continued. The only fluctuation in the rate of fire from the Boers during this climb occurred each time the British rushed over a wall or crossed a terrace in order to reach the dead ground beyond.⁵⁸ These increases in the rate of fire correlates with the second type of fire identified by Amery, namely *heavy continuous fire*. Though hampered by this heavy fire the British infantry did not waver and after almost six hours, the infantry eventually were in a position to concentrate behind the stone wall along the crest of Talana Hill.⁵⁹

By now Talana Hill had been vacated by the majority of the Boers and only a rear guard had been left behind to cover the retreat of Meyer's commando.⁶⁰ The British were now in a position to fix bayonets and a few moments later the command for the bayonet charge came from Col R.H. Gunning, Commanding Officer of the 60th Rifles. At this moment, the remaining burghers demonstrated their third type of fire by snapping

55. F. Maurice, *History of the War in South Africa: 1899-1902*, Volume I, Hurst and Blacket Ltd, London, 1906, p.131.

56. *Ibid.*, p.132.

57. T. Pakenham, *The Boer War*, Jonathan Ball Publishers, Goodwood, Cape, Copyright 1979, p.129.

58. L.S. Amery, *The Times History of The War in South Africa 1899-1902*, Volume II, Sampson Low, Marston and Co Ltd, London, 1902, p.162.

59. J.H. Breytenbach, *Die Geskiedenis van die Tweede Vryheidsoorlog in Suid-Afrika, 1899-1902*, Deel 1, The Government Press, Pretoria, 1969, p.224.

60. *Ibid.*, p.227.

their rifles to tremendous effect on the attacking British.⁶¹ Notwithstanding heavy casualties inflicted upon the British, the Boers were eventually driven from Talana Hill by sheer force of numbers.

From a comparison of the casualties suffered by the British (223) and the Boers (130), the following conclusions can be made.⁶² Given the short period of engagement and relative ineffectiveness of the Boer artillery, the majority of the 223 men lost by the British resulted from rifle fire. Furthermore, given the extended periods during which the Boers were subjected to the British artillery, some of burghers lost would have resulted from the artillery bombardment, in spite of the alleged ineffectiveness thereof. The Battle of Talana Hill thus proved Boer musketry skills to be superior to that of the British.

This general pattern (with a few innovations by the British) was also followed the next day during Gen. Kock's defence of the hills a kilometre and a half south-east of Elandslaagte Station. The Boer vanguard under Commandant A.F. Schiel and Field-Cornet J. Pienaar were involved in skirmishes over long distances since early morning, fighting a retreating battle back to the main Boer position. The stage of *individual fire* continued throughout the day.⁶³ The battle restarted in earnest after the arrival of the British reinforcements. Col. Ian Hamilton, responsible for the infantry attack on the Boer position, gave the order for the three infantry units to deploy in the extended order, leading to relatively few casualties during the initial advance.⁶⁴

Within the ranks however, nothing had changed as far as musketry was concerned. The effectiveness of the Boer rifle-fire started to severely affect the British advance as the 1st Devonshire Regiment (responsible for the frontal attack) approached to approximately 1100 metres. For the next 300 metres, the Devons continued to advance, acting on whistles and firing in volleys as if on a field exercise. Eventually the acting Officer

61. L.S. Amery, *The Times History of The War in South Africa 1899-1902*, Volume II, Sampson Low, Marston and Co Ltd, London, 1902, p.163-164.

62. The losses indicated is as provided by Maurice. From these figures had been deducted the losses obtained by the British because of the capture of Möller's cavalry as well as the POW taken by both sides. The figures shown are the number of men dead or wounded at Talana Hill.

63. L.S. Amery, *The Times History of The War in South Africa 1899-1902*, Volume II, Sampson Low, Marston and Co Ltd, London, 1902, p.179-180.

64. T. Pakenham, *The Boer War*, Jonathan Ball Publishers, Goodwood, Cape, Copyright 1979, p.136.

Commanding, Maj. C.W. Park, gave the order for individual fire, thereby increasing the effectiveness of the fire.⁶⁵

As the battle continued and the rest of the infantry closed distance towards the main Boer position, the rate of fire by the Boers from time to time increased to *continuous heavy fire*. One specific example serving to demonstrate this occurred during the afternoon when the Manchester's, threatening the Boer position from the south were confronted with a barbed-wire fence obstructing their advance. The Boer fire increased tremendously as the Manchester's approached the area, resulting in an initial fallback. With support from the artillery and firing from the Devonshire regiment preventing the burghers from delivering effective fire (and some assistance from a thunderstorm), the obstacle was eventually crossed with casualties.⁶⁶

Later, during the bayonet charge on the main Boer position, the British succeeded in dislocating the burghers from their position sending the majority of them fleeing on their horses. Small groups, including the Boers responsible for the controversial counter attack after the white flag had been shown, opposed the charging infantry with *snap firing* at distances as little as twenty paces, succeeded in forcing a temporary retreat.⁶⁷ Considering the small number of burghers, the technique of *snap firing* must have been devastating. A comparison of the total number of men lost, indicates that the British suffered 263 men killed or wounded compared to 175 burghers killed or wounded.⁶⁸ Taking into consideration that the British used 61,212 .303-rounds during the battle and that a large proportion of Boer casualties occurred as a result of the cavalry charge on the retreating Boers, the comparative effectiveness in musketry is obvious.

The remainder of the battles fought in Natal as part of the Boer offensive resulting in the siege of Ladysmith, was fought by Boer forces equal or larger in size than that of the British. During the initial stages of these battles, the British casualties resulting from the individual firing of the burghers were so severe that the British were unable to carry through the

65. F. Maurice, *History of the War in South Africa: 1899-1902*, Volume I, Hurst and Blacket Ltd, London, 1906, p.164-165.

66. J.H. Breytenbach, *Die Geskiedenis van die Tweede Vryheidsoorlog in Suid-Afrika, 1899-1902*, Deel 1, The Government Press, Pretoria, 1969, p.249-250.

67. *Ibid.*, p.252.

68. The losses indicated is as found in F. Maurice, *History of the War in South Africa: 1899-1902*, Volume I, Hurst and Blacket Ltd, London, 1906, p.464.

attack.⁶⁹ The best example in this regard must be the battle for Pepworth Hill (Lombardskop) where the British casualties, excluding prisoners of war, amounted to 319.⁷⁰ The capture of Lt. Col. F.R.C. Carleton's force of 1 140 men at Nicholsonsnek serves as further proof. After losing their artillery during the night, Carleton's force, on being attacked by the Heilbron Commando (approximately 300 burghers with Christiaan de Wet as Assistant Commandant), was forced to engage the burghers in a "musketry fight". Unable to resist, especially after Boer reinforcements arrived and converging fire were delivered on their position, the approximately 870 surviving British soldiers surrendered.⁷¹ The imbalance becomes even more alarming when the following statistics are considered:

<i>Battle</i>	<i>Boer casualties, excluding POW's</i>	<i>Number of rounds used by British⁷²</i>	<i>Number of rounds used per Boer loss</i>
Talana	130	82 000	631
Elandslaagte	175	61 212	350
Rietfontein	44	52 951	1 203
Pepworth Hill	91 ⁷³	433 247 ⁷⁴	4 761

*Figure 2*⁷⁵

-
69. Some of the attacks were mere demonstration and therefore not intended to be pushed home, but even during these, the casualties were unacceptably high.
70. The losses indicated is as found in F. Maurice, *History of the War in South Africa: 1899-1902, Volume I*, Hurst and Blacket Ltd, London, 1906, p.465.
71. C.R. de Wet, *The Three Years War*, Archibald Constable and Co Ltd, Westminster, 1902, p.22-24.
72. All these rounds had not necessarily been shot. It seem likely that the figures include ammunition not accounted for after the battle. This however does not nullify the argument.
73. J.H. Breytenbach, *Die Geskiedenis van die Tweede Vryheidsoorlog in Suid-Afrika, 1899-1902, Deel 1*, The Government Press, Pretoria, 1969, p.338.
74. This most probably include the ammunition taken by the Boers with the capture of Lt Col Carleton and his force.
75. F. Maurice, *History of the War in South Africa: 1899-1902, Volume I*, Hurst and Blacket Ltd, London, 1906, p.462-465. Unfortunately, comparative figures are not available to show the performance of the Boers in this regard.

The Western Front and the Battles of the Black Week

The initial battles fought on the western front against Lt-Gen. Lord Methuen's division were fought very much on the same lines. The most important difference, although not necessarily so intended, was that the Boer positions at Belmont and Graspan at the end emerged to be mere delaying positions. This implied that the battles did not progress through all the stages of the musketry fight. A few important aspects did however materialise. The Free State burghers on Gun Hill (during the Battle of Belmont) held their fire until the leading British troops were within 150 metres from the foot of the hill. The effectiveness of their fire however was not what could be expected. The leading British battalions were able to close distance to the foot of the hills on which the Boers were positioned with relative small loss. The reason was that they advanced in the open order and under the cover of darkness, denying the Boers the opportunity to inflict heavy casualties.⁷⁶ In addition, attempts were made to reduce the visibility of the officers and men by removing, painting khaki or smearing all shiny and conspicuous parts of their uniforms and equipment with mud. The officers were further instructed to be equipped like the men in order to reduce their conspicuousness.⁷⁷ Tactical solutions thus were to become the answer in rendering Boer rifle fire less effective.

The companies in depth supported the attack on the hill by delivering rifle fire on the Boer positions on Gun Hill from the rear. The poor musketry of the British soldiers, unsupported by artillery fire, however, rendered this sensible tactical solution ineffective.⁷⁸ The burghers were not forced to take better cover and were "...*leaning freely over their breastworks and picking off...*" the British soldiers with individual firing during their ascent towards the crest.⁷⁹ As the attack on the Boers was driven home, the burghers that could, withdrew to positions in depth. This constituted the nature of the remainder of the Battle of Belmont with the burghers delivering *individual fire* up to the stage that their positions were threatened, resulting in the eventual withdrawal. The British suffered 297 men compared to the 35 Boers dead or wounded.⁸⁰

76. Ibid., p.221-222.

77. J.H. Breytenbach, Die Geskiedenis van die Tweede Vryheidsoorlog in Suid-Afrika, 1899-1902, Deel II, The Government Press, Pretoria, 1971, p.24.

78. The artillery only supported the attack at a later stage, but not during the attack on Gun Hill since according to the plan, "surprise" was to deliver the success.

79. L.S. Amery, The Times History of The War in South Africa 1899-1902, Volume II, Sampson Low, Marston and Co Ltd, London, 1902, p.329.

80. J.H. Breytenbach, Die Geskiedenis van die Tweede Vryheidsoorlog in Suid-Afrika, 1899-1902, Deel II, The Government Press, Pretoria, 1971, p.32-33.

In spite of the benefit of advancing under the cover of darkness so clearly illustrated at Belmont, the attack on the Boer positions at Graspan commenced in broad daylight and in full sight of the Boers in their defensive positions. Furthermore, surprise was now sacrificed in favour of an artillery bombardment commencing at 06:15 on 25 November 1899. After 07:00, the 18th Battery Field Artillery which was to support the main attack, took up position 1 300 metres from the Boers. In spite of being fired upon in this position by the burghers deployed on the Boer right, no casualties occurred,⁸¹ suggesting that hits at this distance probably was based on luck rather than skill.

During the next few hours the infantry units, under cover of the artillery bombardment and at a distance of 2 000 metres from the Boer positions, were manoeuvred into position for the attack. The Boers held their fire until the advancing soldiers were within 900 metres from their positions, which, on commencing firing, immediately resulted in British casualties. As the Naval Brigade converged on the Boer position, the distances between the soldiers decreased to four feet and less, resulting in an increase in casualties and forcing them to stop and return fire at a distance just under 600 metres. From here distance was closed to the foot of the hill occupied by the Boers by fire-and-movement, the men rushing forward for 50 to 80 metres at a time while firing at the Boers position from the prone position between rushes. On ascending the hill, the continuous heavy artillery fire which was delivered on the Boer position was halted and the position stormed with bayonets fixed, only to find the fleeing Boers, now out of range, riding off.⁸² The British lost 185 soldiers and the Boers 60 burghers (excluding prisoners of war).⁸³

The subsequent battles, that is the Battle of Modder River (28 November 1899) and the three battles of the Black Week namely Stormberg (10 December 1899), Magersfontein (11 December 1899) and Colenso (15 December 1899) were all characterised by mistakes made by the British during their advance to contact.⁸⁴ These include advancing in close

81. F. Maurice, *History of the War in South Africa: 1899-1902*, Volume I, Hurst and Blacket Ltd, London, 1906, p.234-235.

82. L.S. Amery, *The Times History of The War in South Africa 1899-1902*, Volume II, Sampson Low, Marston and Co Ltd, London, 1902, p.336-339.

83. J.H. Breytenbach, *Die Geskiedenis van die Tweede Vryheidsoorlog in Suid-Afrika, 1899-1902*, Deel II, The Government Press, Pretoria, 1971, p.52-53.

84. Compare L.S. Amery, *The Times History of The War in South Africa 1899-1902*, Volume II, Sampson Low, Marston and Co Ltd, London, 1902, p.320-459; J.H. Breytenbach, *Die Geskiedenis van die Tweede Vryheidsoorlog in Suid-Afrika, 1899-1902*, Deel II, The Government Press, Pretoria, 1971, p.57-93, 196-325, F. Maurice, *History of the War in South Africa: 1899-1902*,

columns within rifle range of the Boer positions, deploying into battle formations while under fire from the front, as well as cross fire from the sides. These battles further demonstrated the inflexibility of the British military system by persisting with frontal attacks while under devastating (*individual*) fire from the Boers.

During these battles, with the exception of the Battle of Stormberg, the Boers changed the nature of their defensive by deploying in trenches, allowing them to exploit their musketry skills at the cost of the unfortunate British soldiers. This, together with the tactical mistakes made by the British, contributed to the British defeats at Magersfontein and Colenso. Not denying the above-mentioned factors, a comparison of the casualties suffered by the opposing sides clearly indicates the Boer superiority in their ability to hit their targets. (See Figure 3.) When comparing these casualties (6,4 British soldiers for each Boer) with those before the introduction of well concealed trenches (3,3 : 1), the effect of the trenches becomes even clearer.⁸⁵

<i>Battle</i>	<i>British Casualties</i>	<i>Boer Casualties</i>
Modder River	460	±80
Magersfontein	902	236
Colenso	898	37

*Figure 3*⁸⁶

In analysing the casualties a few musketry related remarks need to be made. Firstly, the ability of the Boer commanders to enforce fire-discipline on their burghers did not come without a conscious effort from their side. During the Battle of Modder River the burghers under Cronje,

Volume I (1906), p.243-260, 285-303, 316-375 and T. Pakenham, *The Boer War*, Jonathan Ball Publishers, Goodwood, Cape, Copyright 1979, p.191-206, 214-215, 224-241.

85. The casualties "before" include Stormberg while those "after" is illustrated in Figure 6.

86. T. Pakenham, *The Boer War*, Jonathan Ball Publishers, Goodwood, Cape, Copyright 1979, p.198, 206 and 240 and J.H. Breytenbach, *Die Geskiedenis van die Tweede Vryheidsoorlog in Suid-Afrika, 1899-1902, Deel II, The Government Press, Pretoria, 1971, p.322 specifically for the Boer casualties at Colenso.*

deploying on the Boer left, opened fire on the advancing 1st Scots Guards when they were still more than 1 000 metres from the Boers positions.⁸⁷ This sacrificed surprise and reduced the number of casualties which could have resulted from the initial salvo.

During the Battle of Magersfontein this mistake was not repeated. The burghers only opened fire when the British were less than 400 metres from their position. This can be attributed to the combination of darkness, the sound of the marching soldiers and the orders to deploy. Better discipline among the burghers and even the possibility of a spy among the British signalling their presence.⁸⁸ This resulted in much heavier casualties from the initial salvo (although most of the shots were high) and the British troops being pinned down much closer to the Boer positions, which in turn resulted in higher casualties.

Louis Botha, in realising the importance of fire-discipline, took control over the fire of the burghers a step further. He understood that shots, both rifle and artillery, fired at long distances at the British only enabled the British to concentrate their artillery fire on the Boer positions before the infantry is within effective rifle-range.⁸⁹ He therefore, on 4 December 1899, gave the order that no one was to fire at the enemy unless he personally gave the signal by firing a cannon. To ensure that this was adhered to, he appointed additional "fighting corporals", one for every 25 burghers.⁹⁰ This enabled him to obtain almost complete surprise when, on the day of the Battle the burghers opened fire from their invisible positions on Hart's brigade, less than 300 metres from the Tugela.⁹¹

87. T. Pakenham, *The Boer War*, Jonathan Ball Publishers, Goodwood, Cape, Copyright 1979, p.195.

88. Compare J.H. Breytenbach, *Die Geskiedenis van die Tweede Vryheidsoorlog in Suid-Afrika, 1899-1902, Deel II*, The Government Press, Pretoria, 1971, p.137-140 and L.S. Amery, *The Times History of The War in South Africa 1899-1902, Volume II*, Sampson Low, Marston and Co Ltd, London, 1902, p.399-400.

89. This was actually advice give by Gen. Joubert after his injury and before his departure from Natal. See J.H. Breytenbach, *Die Geskiedenis van die Tweede Vryheidsoorlog in Suid-Afrika, 1899-1902, Deel II*, The Government Press, Pretoria, 1971, p.241.

90. *Ibid.*, p.243.

91. T. Pakenham, *The Boer War*, Jonathan Ball Publishers, Goodwood, Cape, Copyright 1979, p.227. There is suggestions that fire was opened moments before Botha's own signal, however the desired effect was achieved irrespective of this.

Secondly, the British experienced extreme difficulty in locating targets to shoot at.⁹² The Boers' knowledge of and skill in using terrain, together with the small, well concealed target he presented hidden in a trench combined with the use of smokeless powder, simply proved to much for the unpractised eye of the British soldier, even when using binoculars.⁹³ Compared to this, the field trained eyes of the Boers enabled them to deliver extremely accurate fire. "*A movement of a hand, the flash of a canteen tin, even the twitch of an ankle attacked by ants - the price was paid in Mauser bullets.*"⁹⁴

Pakenham, in describing the British attempts to save Long's guns during the Battle of Colenso, remarks that "Indeed, one of the things that struck some survivors most forcibly was how poor was Boer marksmanship. It was the sheer volume of rifle fire - the emptying of a thousand Mauser magazines - that had the effect of machine-guns...".⁹⁵ Taking into consideration that the distance between the guns and the Boer positions was approximately 1 600 metres (as Pakenham himself describes it) it becomes clear that the burghers compensated for the distance by increasing their rate of fire to heavy continuous fire. In doing this, the Boers inflicted sufficient casualties to prevent Gen. Sir R. Buller from recovering the guns. In general however, because of the advantages obtained on tactical level, these battles never really developed beyond the stage of individual fire.

Conclusion

The British Army with its institutionalised systems and procedures acquired modern rifles prior to the war, but was not able to fully realise the effect it was to have on the battlefield. This resulted in training simply not succeeding in providing the British soldier with the essential skills necessary to enable him to contribute optimally during combat. Musketry training of recruits unfamiliar with firearms was insufficient. The soldier was not sufficiently trained in judging distance and the setting of sights was dependent upon the command of his officer. He was not taught how to observe when acquiring a target and because of this could

-
92. Compare T. Pakenham, *The Boer War*, Jonathan Ball Publishers, Goodwood, Cape, Copyright 1979, p.195-196, 227 and F. Maurice, *History of the War in South Africa: 1899-1902*, Volume I (1906), p.249 and 355.
 93. A.D. Greenhill Gardyne, *The Life of a Regiment: The History of the Gordon Highlanders*, Vol. III, 2nd Impression, Leo Cooper, London, 1972, p.101.
 94. T. Pakenham, *The Boer War*, Jonathan Ball Publishers, Goodwood, Cape, Copyright 1979, p.205.
 95. *Ibid.*, p.230-231.

not see the enemy as distances increased. In addition to this, the soldier was a mere pawn with a rifle to react on command and to refrain from own initiative. All of this resulted in well controlled, but inaccurate fire.

The Boers on the other hand were familiar with firearms. The majority of burghers grew-up in the countryside and hunting, in which musketry and the use of terrain was essential, was an integral part of life. In addition, most of the mature males were experienced fighters having participated in the numerous wars against the indigenous black polities. The level of experience was such that peacetime training in the Z.A.R. focused purely on improving musketry skills. On acquiring modern rifles, the two Boer Republics increased the opportunities for formal musketry training. The Z.A.R. annually issued 1 000 rounds to each burgher and introduced a second annual shooting exercise in each district. Not being restricted by institutionalised doctrine and systems, the burghers succeeded in making the initial changes by adapting to the all-important technological development of the time: the smokeless, long-range magazine rifle. This materialised in different types of rifle-fire, ranging from highly accurate *individual fire* to *continuous heavy* and *snap firing*, a process of substituting accuracy with volume of fire. This the British did not anticipate and in spite of the apparent tactical victories, they suffered severe casualties during the initial battles in Natal. As hostilities continued, the Boers gained experience and the crucial connection was made between the destructive firepower possible with modern rifles in the hands of a good marksman and a good defensive position. This led to the British reverses of Modder River, Magersfontein and Colenso and an increase in British casualties in relation to that of the Boers from 3,3:1 to 6,4:1.

The variables contributing to the effective employment of firepower were the familiarity with firearms, experience, individuality, training, flexibility and discipline. In all of these, with the exception of discipline, the Boers outperformed the British during the opening stage of the Anglo-Boer War.

Musketry: The Anglo-Boer War experience

J.E. ELLIS

The conflict between the Zuid-Afrikaanse Republic (ZAR) and Great Britain was not the first experience the British had of Boer tactics and musketry. The British had the opportunity to study the military system and approach to warfare as practised by the Boers for almost a hundred years. Still, they suffered severe losses against a "lesser" enemy who understood better the employment of the new smokeless magazine rifles.

In order to understand the imbalance in the effectiveness of British and Boer firepower, the background of both the British and Boer soldiers opposing each other on the battlefields of southern Africa is illustrated. In doing this the paper draws a comparison between the British soldier and his Boer opponent. Musketry, with specific reference to the techniques used, as demonstrated through an analysis of some of the battles during the opening phases of the war up to and including the battles of the Black Week, is described. In this, the developments in musketry as employed by both the Boer and the British are demonstrated.

.....

SKIETKUNS: DIE ANGLO-BOEREOOLOG ERVARING

J.E. ELLIS

Die konflik tussen die Zuid-Afrikaanse Republiek (ZAR) en Groot Brittanje was nie die eerste ervaring wat die Britte van Boere taktiek en skietkuns gehad het nie. Die Britte het vir byna 'n honderd jaar lank, sedert hul eerste besetting van die Kaap, die geleentheid gehad om hulself met die Boere se militêre stelsel en benadering tot oorlogvoering vertrou te maak. Tog is hulle ernstige verliese toegedien deur 'n "minderwaardige" vyand wat die aanwending van die nuwe rooklose, magasynge vulde gewere beter verstaan het.

Ten einde die verskil in effektiwiteit tussen die Britse en Boere kleingeweervuur te verstaan word die agtergrond van die soldate wat mekaar op die slagvelde in suider Afrika sou opponeer op vergelykende wyse beskryf. Skietkuns, met spesifieke verwysing na tegnieke wat gebruik is, word gedemonstreer deur sommige van die veldslae gedurende die eerste fase van

die oorlog, tot en met die veldslae van die Swart Week, te analiseer. In die proses word die ontwikkeling wat in beide Britse en Boere skietkuns plaasgevind het, gedemonstreer.