Artillery at the Battle of Hamel, 4 July 1918

By Dr. Meleah Hampton

The Battle of Hamel, conducted by battalions of the Australian Corps on 4 July 1918, is remembered as one of the startling successes of the First World War. The first time Australian and American infantry fought together on the Western Front, the meticulously planned operation was scheduled to take 90 minutes and famously took 93. The man who orchestrated the battle, Lieutenant General Sir John Monash said from the outset that 'the operation [at Hamel] will be primarily a tank operation.'¹ Since then, Hamel has been considered as though it was just that, an infantry battle with attendant tanks. But the British offensive method of 1918 was heavily dependent on a systematic application of fire-power to support advancing infantry. And Hamel was no exception.

The infantry attack –and the famous 90 minutes – began at 3.10am. The initial barrage lasted for four minutes, following which it moved at a rate of 100 yards every three minutes until it reached a line that bisected the village of Hamel and was roughly three quarters of the way to the final objective line. At this point the barrage paused, and a thick smoke screen was built up to protect the infantry. Each assaulting company had more or less moved straight ahead behind the barrage up to this point, but during the pause began consolidating and mopping up as the next wave from the following battalion leapfrogged through.² After ten minutes standing barrage on this intermediate halt line, the artillery fire lifted away a little more slowly, crossing the remaining distance to the final objective in four lifts of 100 yards each, one every four minutes. After this, the artillery provided a standing barrage for 30 minutes as the captured village was cleared and made secure.

This was a heavy barrage, fired by sixteen brigades of the field and horse artillery. They were organised into four groups with each brigade working under its own commander as a subgroup. Artillery preparation for most of these brigades was very swift, with 49 of the 61 batteries having to move into position and range their guns in the days before the operation. They were issued with "the usual daily expenditure in harassing and observed fire", plus an additional 600 rounds per gun and 500 rounds per howitzer. This meant that the creeping barrage supporting the operation at Hamel used a total of 132,000 rounds in 90 minutes.³ With the exception of the left group of artillery, which were not directly behind the infantry attack, the 18 and 13 pounder guns were given around 23 yards of start line each, a distribution which extended to around 30 yards during the final protective barrage.

The barrage was reported to have worked exceptionally well. Its beginning was reported to be "well synchronised, distributed and consistent" ⁴ all along the artillery start line, and although the planned smoke barrages interfered with artillery observation, it was believed that for the

¹ Monash, *The Australian Victories in France in 1918* (Lothian, 1923), p.50.

² 43rd Battalion Report on Operations of 4th July, 1918, AWM 4/23/60/23 Pt. 1.

³ 4th Australian Divisional Artillery General Report, 8 July 1918, AWM 4/13/13/26 Pt. 1.

⁴ 4th Australian Divisional Artillery General Report, 8 July 1918, AWM 4/13/13/26 Pt. 1.

most part it appeared "regular and fairly consistent" all along the line and through the depth of the firing pattern.

But the creeping barrage was only one part of the task ascribed to the artillery at Hamel. Further to the rear, 161 guns from heavy artillery brigades of the field and horse artillery engaged in counter battery work.⁵ It was devastatingly accurate, with the Germans almost completely incapable of directing any significant fire against either the Allied guns or the attacking Australian infantry. One or two German guns, probably sited beyond Sailly-Laurette, fired on tanks operating in directly beyond the village near the final objective, but nowhere was the success of the operation threatened by German artillery fire at all.

Neither the guns firing the creeping barrage nor those involved in counter-battery work during the battle had needed to fire ranging shots before the battle began, one of the more startling technological developments of the war. Pre-war expectations had been that the artillery would operate in line, or very close to, the infantry with a clear view of their targets. With mutual destruction of each other's artillery assured by such an approach, both sides quickly removed their artillery from view and inadvertently caused one of the greatest difficulties faced by the artillery – how to hit something they could not see? Beyond that, early artillery activity was seriously hampered by poor quality ammunition, and calibration and wear difficulties of the guns that were little understood. Constant work had gone into improving all aspects of the artillery - ranging and calibration of the guns, production and consistency of munitions, mapping, observation and battery location had all been revolutionised over the preceding months and years. The Battle of Cambrai in late November 1917 demonstrated that it was now possible to begin an operation without having to fire a series of shots to accurately range each gun onto its target, and the success achieved both in the accuracy of the creeping barrage and the counter battery work at Hamel is testimony to this development.

However, our understanding of Hamel is somewhat limited by looking at it as no more than a 90-minute operation. The artillery had been at work along the Hamel front for weeks, bombarding German positions, and firing habituating barrages to get the German defenders reacting in certain ways. Creeping barrages were started and stopped at unexpected intervals to stop German defenders responding to potential attacks. Famously, gas and smoke were fired together consistently, so that when smoke was fired on its own at Hamel, the Germans were caught with their gas masks on and their vision obscured. Eight minutes before the creeping barrage began to signal the start of the infantry operation, the artillery was hard at work firing along the front line to mask the noise of the tanks moving forward to the tapes. Similarly, batteries were hard at work long after the end of the 90-minute barrage pattern had been fired continuing its counter-battery work and seeking out areas of potential German resistance and massing infantry in the rear lines.

The artillery at Hamel provided the backbone of the plan of attack at Hamel. Not only was it required days before and after the 90 minutes of the attack, the artillery dictated the timing and movement of the entire infantry operation. By 1918 the artillery was well removed from

⁵ 43rd Battalion Report on Operations of 4th July, 1918, AWM 4/23/60/23 Pt. 1.

the infantry in that there was no longer any opportunity to call in SOS fire from the front line – once the artillery began its program, it and the infantry were more or less completely disconnected. The infantryman was, of course, heavily armed himself, with every man except stretcher bearers and Lewis gunners carrying a rifle and bayonet, and at least a hundred rounds of small arms ammunition. Platoons had a bombing section with extra grenades and a "P" bomb, and they also had a Lewis gun section. Compared to a 1916 infantryman sent in at Pozières, the Australian infantry fairly bristled with firepower on an individual level, but without the overarching power of the artillery to carry them across no man's land, they, nor their tanks, could be expected to last very long at all.

While hopes had been held for the tank to eventually replace the cavalry as a weapon of exploitation, in the meantime there had been a tendency to use them to replace the artillery, especially the creeping barrage. This had failed dismally in the past, notably at Bullecourt earlier in 1917. But it was demonstrated at Cambrai that tanks were more effective when used as an infantry weapon instead of an artillery replacement. At Hamel this was amplified. The tanks followed the barrage much more closely than had previously been thought possible.⁶ Monash insisted on this to ensure they were instantly available to the infantry— too often in the past the infantry had suffered heavy casualties dealing with strong-points while waiting for tanks to arrive.⁷ And so at Hamel the infantry could signal to one, either with a flag or by banging on the side of it, to come and deal with a problematic German strongpoint. This was particularly evident on the outskirts of Hamel village and Vaire Wood, where the Germans had strong-posts which were overcome through the dual action of tanks and infantry with a minimum of casualties.⁸ The tanks had become the bridge between the heavy but remote firepower of the artillery and the vulnerable infantryman in the field.

Despite the competence of the Australian infantry, and the smooth cooperation between men and tanks, success at Hamel was not primarily the result of either. Monash's meticulous plans for his men and his technology were firmly planted in a structured, heavy artillery plan using tens of thousands of rounds of ammunition from hundreds of guns. This was as much firepower as one corps could reasonably be expected to pull in for a limited objective attack – and then some. It was a thoroughly thought out and well executed plan that received the success it deserved.

⁶ John Terraine, "Monash: Australian Commander." *History Today*. Vol. 16, No. 1 (Jan., 1966),, pp.19-20.

⁷ R.A. Beaumont, "Hamel, 1918: A Study in Military-Political Interaction", *Military Affairs*, Vol.31, No.1, Spring, 1967, p.12.

⁸ "Summary of Operations 4 July 1918", AWM4-1/14/9.