



In this exercise, infantry forces are about to advance toward the enemy positions. The soldiers in the first line are the shock elements. The rest are common infantry soldiers. The shock troops are armed with carbines, while the rest are using rifles. The element of surprise was paramount. In fact, no bayonets were fixed before the assault, so the enemy could not see them from their trenches and suspect that an attack was about to take place (Bundesarchiv / Bild 183-R 52851).

In the case of the German Army, this process was clearly influenced by the shock and assault troops, units specialized in offensive actions whose closest precedent were the sappers of the fortress battalions (*), the only forces that had been trained during peacetime for fixed-position warfare.

The emergence of the shock troops was unplanned. Their origins can be traced back to the initial stages of the conflict, when some infantry units began to organize, by their own initiative, small groupings of soldiers to attack enemy positions using weapons and equipment that were commonly used only by sappers.

Those groupings evolved and spread rapidly, especially from late 1915, when courses started to be organized to teach new combat methods. From that point, they extended throughout all of the infantry with the support of the Supreme Command of the Army (Oberste Heeresleitung / OHL), and even though they never became part of the organizational structure of any unit, they existed until the end of the war. They were temporary tactical formations that were created

to carry out a specific mission and then dissolved, not being created again until it was necessary. These groupings received different names depending on the nature of the mission (**), the unit that was in charge of forming them, or the unit they fought for, while the men that were part of them were called *Stosstruppen* (shock troops).¹

Right. An NCO from a sapper battalion. He is armed with two stick grenades. The one on the right is a Model 1916 grenade, while the other one is a Model 1915. It featured a pull fuse ball at the end of the stick instead of a security cap like the other models. (Author's archive)

(*) Before the war, the Germans had created specialized units to attack and defend strongholds and fortified positions. These specially equipped units (hand and rifle grenades, wire cutters, protective shields, mine launchers, etc.) were the fortress battalion sappers (called *Festungs-Pionier-Bataillon*), transformed into regiments when the mobilization started (see page 83).

(**) For example: *Handgranatentrupp* (hand grenade detachment), *Greifzug* (Intervention platoon), *Patrouillenkommando* (patrol detachment), *Jagdkommando* (hunt detachment), *Spähtrupp* (observation patrol), and *Lauerpatrouille* (lurk patrol).





During the war, the squad became the smallest fire and combat unit. Each squad was formed by a small number of men, advancing in depth while providing mutual support. (Author's archive)

Assault troops

In early 1916, the OHL created an experimental detachment to test weapons and equipment and to develop tactics that would bring back the maneuver warfare (*Bewegungskrieg*) to the battlefield. This detachment (initially called *Sturmabteilung Calsow* and later *Sturmabteilung Rohr*) formed the basis on which the assault battalions (*Sturmabteilungen*) were organized starting in the spring of 1916. These battalions were permanent formations whose main mission was to

spread their combat methods to the rest of the army. To achieve that goal, officers and NCOs of the infantry divisions remained embedded in their ranks for a short period of time to learn new tactics and then were sent back to their units to teach their recently learned skills¹¹

The *Sturmabteilungen* were not the only assault formations of the German Army. There were also squads, companies, detachments, and battalions that were not officially recognized as such that did not form permanent units, although they were less temporary than the groupings formed by the shock troops. The origin of these forces dates back to May 16, 1916, when General Falkenhayn, at that time head of the OHL, ordered a group of military men from several armies to follow a course in Beuville (a French town north of Longuyon) to learn the tactics developed by the *Sturmabteilung Rohr*.¹²

Left. Infantry shock troops during a live fire exercise. By the war's end, the equipment of the German infantry soldier was composed of the following basic elements: belt, ammo pouches, backpack, extending tool, bayonet, gas mask, bread bag, canteen, mess tin, and shelter quarter. The mess tin and shelter quarter were rolled around the back pack. In the absence of the backpack, the shelter quarter (sometimes with the overcoat wrapped inside) was rolled around the mess tin and tightly fixed by two leather straps, forming the "assault pack," as shown in the photograph. (Bundesarchiv / Bild 183-R36772)

Steel helmet with camouflage paint scheme ("Mimikry Stahlhelm")

The polished outer surface of the steel helmet reflected sunlight. Different solutions were tried in order to prevent the reflection that gave away the position of the wearer, such as soiling the helmet or covering it with a protective cloth similar to the one used to manufacture grenade bags. Another solution, adopted in 1918, was to paint the helmets in a camouflage scheme with geometric shapes painted in brown, green, and dark yellow, outlined by thick lines of black paint to simulate shadows. This paint, applied by hand without a fixed pattern, was also used on field guns, mine launchers, machine guns, and vehicles. (Overford 1944 collection)



The high-powered artillery was formed by large-caliber guns and howitzers. In the photo, a group of artillerymen is about to load a 38 cm "SKL/45" gun, the largest caliber railroad artillery gun of the German Army. (Author's archive)

Preparatory artillery fire in the German Army tended to be shorter as the war progressed. As a matter of fact, none of the ones that preceded the five successive attacks of the 1918 great offensive lasted more than five hours, favored by the use of chemical shells, the use of heavy rapid-fire artillery pieces, and by the fact that each of the attacks included a large number of artillery pieces, in some cases more than thirty pieces per kilometer in those sectors selected for the breakthrough. The gathering of atmospheric, topographic, and ballistic data to calculate the trajectory of shells and set up firing charts in the build-up for the attack was also an important feature of these methods. This scientific preparatory fire could be made without observation and fire correction, which contributed to reducing the duration of the preparatory barrage and increasing the element of surprise.¹⁰⁰

Such detailed planning required a centralized command and thorough directions for the combined actions of all arms. Each unit had to know exactly what its job was, and every aspect of the operation was programmed into timetables, missions, acting zones, and ammunition usage, in order to make the artillery as efficient as possible. Furthermore, close coordination with the infantry was important, because the action of the artillery was destined to prepare and support the infantry's attack. In this area, the importance of the forward observers and liaison squad was paramount,

to obtain the most detailed information possible on the progression of the attack as well as the sector where artillery's concentrated fire was most needed.¹⁰¹

According to the Bruchmüller methods, preparatory fire was achieved in three phases, in which the artillery was organized into specialized groups (see chart on page 126), according to the power and characteristics of each piece.

During the first phase which lasted half an hour, all the artillery concentrated its fire on crucial sectors of the enemy positions. The aim was to disrupt the action of the enemy artillery, something that could only be attained by numerical superiority and using all available pieces. The adequate proportion was calculated to be three batteries against one.¹⁰²

Once the enemy artillery was neutralized, the next phase consisted of keeping it like that. The second phase could not last more than two-and-a-half hours. Counter-artillery groups (AKA) together with artillery destined to neutralize enemy infantry (IKA) would continue harassing enemy artillery, while the long-range (FEKA) and heavy-long-range artillery pieces (SCHWEFLA) launched a deep barrage to strike enemy command centers, communication hubs and ammunition and equipment depots located at the rear enemy lines.