

Chapter 1 : Life in the Trenches of World War I - HISTORY

Both In One Trench may help the reader decide if the war was worth it. Ray Robison is a former US Army officer and member of the Iraqi Survey Group. He is a contributor to the American Thinker website.

On the German western front, German forward detachments guarding the entrance to a trench line in front of Arras Trenches of the 11th Cheshire Regiment at Ovillers-la-Boisselle, on the Somme, July. One sentry keeps watch while the others sleep. Photo by Ernest Brooks. Although technology had drastically changed the nature of warfare by 1914, the armies of the major combatants had not correctly anticipated the implications. The French and German armies adopted dramatically different tactical doctrines. The French relied on the attack with speed and surprise. The Germans relied on firepower, investing heavily in howitzers and machine guns. The British lacked a coherent tactical doctrine, with an officer corps that rejected theory in favour of pragmatism. To attack frontally was to court crippling losses, so an outflanking operation was the preferred method of attack against an entrenched enemy. After the Battle of the Aisne in September, an extended series of attempted flanking moves, and matching extensions to the fortified defensive lines, soon saw the celebrated "race to the sea"; German and Allied armies produced a matched pair of trench lines from the Swiss border in the south to the North Sea coast of Belgium. Trench warfare prevailed on the Western Front from 16 September [citation needed] until the Germans launched their Spring Offensive on 21 March. After the buildup of forces in 1915, the Western Front became a stalemated struggle between equals, to be decided by attrition. Frontal assaults, and their associated casualties, became inevitable because the continuous trench lines had no open flanks. There were periods in which rigid trench warfare broke down, such as during the battle of the Somme, but the lines never moved very far. The war would be won by the side that was able to commit the last reserves to the Western Front. They lacked traverses, and according to pre-war doctrine were to be packed with men fighting shoulder to shoulder, leading to heavy casualties from artillery fire. This, and the length of the front to be defended, soon led to front line trenches being held by fewer men. In addition to the trenches themselves, barbed wire was strung up to impede movement, and wiring parties went out every night to improve these forward defences. They resisted both artillery bombardments and mass infantry assaults. Shell-proof dugouts became a high priority. After the German withdrawal to the Hindenburg line in March, it stretched to over a kilometre in places. On the Eastern Front and in the Middle East, the areas to be covered were so vast, and the distances from the factories supplying shells, bullets, concrete and barbed wire so great, trench warfare in the West European style often did not occur. The Ortler had an artillery position on its summit near the front line. The trench-line management and trench profiles had to be adapted to the rough terrain, hard rock, and harsh weather conditions. Many trench systems were constructed within glaciers like the Adamello-Presanella group or the famous city below the ice on the Marmolada in the Dolomites. Trench defensive systems Edit Very early in the war, British defensive doctrine suggested a main trench system of three parallel lines, interconnected by communications trenches. The point at which a communications trench intersected the front trench was of critical importance, and it was usually heavily fortified. The front trench was lightly garrisoned and typically only occupied in force during "stand to" at dawn and dusk. Between 70 and 91 yards (64-91 m) behind the front trench was located the support or "travel" trench, to which the garrison would retreat when the front trench was bombarded. This defensive layout was soon rendered obsolete as the power of artillery grew; however, in certain sectors of the front, the support trench was maintained as a decoy to attract the enemy bombardment away from the front and reserve lines. Fires were lit in the support line to make it appear inhabited and any damage done immediately repaired. Aerial view of opposing trench lines between Loos and Hulluch, July. German trenches at the right and bottom, British at the top-left. Temporary trenches were also built. When a major attack was planned, assembly trenches would be dug near the front trench. These were used to provide a sheltered place for the waves of attacking troops who would follow the first waves leaving from the front trench. They fulfilled a variety of purposes, such as connecting the front trench to a listening post close to the enemy wire or providing an advance "jumping-off" line for a surprise attack. The concave trench line facing the salient was called a "re-entrant. Behind the front system of trenches

there were usually at least two more partially prepared trench systems, kilometres to the rear, ready to be occupied in the event of a retreat. The Germans often prepared multiple redundant trench systems; in their Somme front featured two complete trench systems, one kilometre apart, with a third partially completed system a further kilometre behind. This duplication made a decisive breakthrough virtually impossible. In the event that a section of the first trench system was captured, a "switch" trench would be dug to connect the second trench system to the still-held section of the first. The Germans, who had based their knowledge on studies of the Russo-Japanese War , [26] made something of a science out of designing and constructing defensive works. They used reinforced concrete to construct deep, shell-proof, ventilated dugouts, as well as strategic strongpoints. They were more willing than their opponents to make a strategic withdrawal to a superior prepared defensive position. They were also the first to apply the concept of "defence in depth", where the front-line zone was hundreds of yards deep and contained a series of redoubts rather than a continuous trench. Each redoubt could provide supporting fire to its neighbours, and while the attackers had freedom of movement between the redoubts, they would be subjected to withering enfilade fire. The British eventually adopted a similar approach, but it was incompletely implemented when the Germans launched the Spring Offensive and proved disastrously ineffective. France, by contrast, relied on artillery and reserves, not entrenchment. Trenches were never straight but were dug in a zigzagging or stepped pattern. Later fighting trenches broke the line into firebays connected by traverses. Consequently, the entire trench could not be enfiladed if the enemy gained access at one point; or if a bomb or shell landed in the trench, the blast could not travel far. The banked earth on the lip of the trench facing the enemy was called the parapet and had a fire step. The embanked rear lip of the trench was called the parados. The sides of the trench were often revetted with sandbags, wooden frames and wire mesh. The floor of the trench was usually covered by wooden duckboards. In later designs the floor might be raised on a wooden frame to provide a drainage channel underneath. Dugouts of varying degrees of luxury would be built in the rear of the support trench. British dugouts were usually 8 to 16 feet 2. Australian light horseman using a periscope rifle , Gallipoli To allow a soldier to see out of the trench without exposing his head, a loophole could be built into the parapet. A loophole might simply be a gap in the sandbags, or it might be fitted with a steel plate. German snipers used armour-piercing bullets that allowed them to penetrate loopholes. Another means to see over the parapet was the trench periscope – in its simplest form, just a stick with two angled pieces of mirror at the top and bottom. In the Anzac trenches at Gallipoli, where the Turks held the high ground, the periscope rifle was developed to enable the Australians and New Zealanders to snipe at the enemy without exposing themselves over the parapet. There were three standard ways to dig a trench: Entrenching, where a man would stand on the surface and dig downwards, was most efficient, as it allowed a large digging party to dig the full length of the trench simultaneously. However, entrenching left the diggers exposed above ground and hence could only be carried out when free of observation, such as in a rear area or at night. Sapping involved extending the trench by digging away at the end face. The diggers were not exposed, but only one or two men could work on the trench at a time. Tunneling was like sapping except that a "roof" of soil was left in place while the trench line was established and then removed when the trench was ready to be occupied. Thereafter, the trench would require constant maintenance to prevent deterioration caused by weather or shelling. Heavy shelling quickly destroyed the network of ditches and water channels which had previously drained this low-lying area of Belgium. In most places, the water table was only a metre or so below the surface, meaning that any trench dug in the ground would quickly flood. Consequently, many "trenches" in Flanders were actually above ground and constructed from massive breastworks of sandbags filled with clay. Initially, both the parapet and parados of the trench were built in this way, but a later technique was to dispense with the parados for much of the trench line, thus exposing the rear of the trench to fire from the reserve line in case the front was breached. Trench geography in World War I Edit The confined, static, and subterranean nature of trench warfare resulted in it developing its own peculiar form of geography. In the forward zone, the conventional transport infrastructure of roads and rail were replaced by the network of trenches and light tramways. The critical advantage that could be gained by holding the high ground meant that minor hills and ridges gained enormous significance. Many slight hills and valleys were so subtle as to have been nameless until the front line

encroached upon them. Some hills were named for their height in metres, such as Hill A farmhouse, windmill, quarry, or copse of trees would become the focus of a determined struggle simply because it was the largest identifiable feature. However, it would not take the artillery long to obliterate it, so that thereafter it became just a name on a map. There were numerous trench networks named "The Chessboard" or "The Gridiron" because of the pattern they described. For the Australians at Mouquet Farm, the advances were so short and the terrain so featureless that they were reduced to naming their objectives as "points" on the map, such as "Point 81" and "Point The British gave an alcoholic flavour to the German trenches in front of Ginchy: Some sections of the British trench system read like a Monopoly board, with names such as "Park Lane" and "Bond Street". The 31st Australian Battalion once spent 53 days in the line at Villers-Bretonneux, but such a duration was a rare exception. The 10th Battalion, CEF, averaged front line tours of six days in and With this rate of casualties and no reinforcements forthcoming most of the men were denied leave and had to serve long periods in the trenches with some units spending up to six consecutive months in the front line with little to no leave during that time.

Chapter 2 : Amazing Engineering - Trench Design and Layout in World War One

Note: Among other evidence, Both In One Trench contains the document with Saddam's actual order to Zawahiri's Egyptian Islamic Jihad, and Hekmatyar's Hizb-i-Islami, to target American forces in Somalia.

While trenches had played a part in previous conflicts, never before had they been so crucial. For four long years, the two sides faced each other in a two-way siege the length of the Western Front. These trenches were more than crude holes in the ground. By the end of the war, many had become sophisticated feats of military engineering. French soldiers in Argonne trenches. At the start of the fighting, both sides expected a war of movement. But their attempts to outmaneuver each other failed, forcing troops to hold their ground. Soldiers started digging in, creating improvised defensive positions that most expected to be temporary. As maneuvers ground to a halt, men found themselves in one place for a long time, under fire from an ever-present enemy. They started digging deeper, more solid trenches. Sentry of the Worcestershire Regiment looking through a loop-hole in a trench, Somme, France. Trench Layouts A typical defensive system was made up of three lines of trenches about yards apart. These ran parallel with the front line, providing protection from fire from the opposite trenches and letting men hold their ground. This was where soldiers regularly saw combat, whether the low-intensity warfare of sniping and pot shots or the higher intensity work of fighting off raids and frontal assaults. Behind this came the support trench, offering supporting fire to the front line, and then the reserve trench, holding more men ready to be flung in against a direct assault. German trenches in Garua during the Kamerun Campaign. These trenches were not straight lines. Instead, they zigzagged or had protruding firebays. This reduced the number of casualties. The main trenches were connected by communication trenches running off them at right angles. These connected the trenches to each other and to other forces to their rear. Both sorts of trenches were shored up with wood to stop the sides collapsing. Sandbags added extra protection and duckboards on the ground helped with drainage. Dugouts were created in the sides of the trenches or deeper underground. The Germans became particularly sophisticated in creating these, producing deep, concrete-lined rooms. These gave men more shelter in which to live their everyday lives. More importantly, they offered greater protection from artillery bombardments. The trenches themselves had shelters and overhead covers in some places, but these offered protection against the weather, not falling shells. Latrines, kitchens, and dressing stations all had their places in the trench systems. Kitchen and medical stations might be shelters toward the rear of the rows of trenches. Latrines needed to be available near the very front. They were often built in smaller trenches running off the others, to isolate the stinking and unhygienic space. Maintaining the trenches involved a lot of work. The dugouts in particular had to be constantly shored up and re-dug. Interior of a dugout occupied by officers of the Australian th Howitzer Battery of the 4th Brigade. Three officers are looking at papers in the light of two candles on an upturned box. Local Variations The design of trenches varied with the local terrain. In some areas, trenches were built above the ground rather than dug out of it. This happened for two reasons. One was that the bedrock might be near the surface, making digging too difficult because of its solidity. The other was that the water table might be near the surface, as happened in Belgium, at the northern end of the Western Front. Here, sunken trenches quickly flooded, making them useless as shelters. Men of the Royal Naval Division leaving the trenches in Gallipoli to attack the Turk with cold steel. In other areas, the mountainous terrain got in the way. This made it harder to dig trench lines, but also less necessary, as the terrain itself contributed to defenses. This happened on the Italian Front, where mountain-top strong-points offered the combatants mutual defense across craggy valleys. Trenches formed part of the defenses but not complete lines running across the landscape. Defense in Depth From onwards, the Germans adopted a more sophisticated approach to their trenches, based around defense in depth. The trench line facing the enemy was no longer designed to hold out against a full Allied assault. Instead, it consisted of relatively modest strongpoints built around concrete pillboxes and large shell-holes, connected by trenches. This was designed not to stop a focused attack but to delay it and channel the attackers into exposed kill zones. German soldiers of the 11th Reserve Hussar Regiment fighting from a trench, on the Western Front, Up to a mile behind this was the main front line. This was a tougher network of

interconnected strongpoints, all supporting each other. Again, the German command accepted that this line might fall. As a result, the strongpoints were designed to be tough at the front but vulnerable to the rear, in case the Germans had to retake them in a counter-attack. German stormtroopers training, Behind the front line was the battle zone, an area of numerous strongpoints and short trenches. Over a mile wide, it was designed to hold up the enemy and provide really tough fighting terrain, giving the Germans time and space in which to launch a counter-attack against an increasingly exhausted enemy. Opposing trenches between Loos and Hulluch in British trenches are at the top left and German at the right and bottom. Finally, there was the reserve zone, containing the artillery, troop reserves, and more defensive trenches. Saps German trench in front of Arras. They were a laborious way of progressing an advance, but of potentially huge benefit to attackers. The trench lines were a formidable defensive network. They were one of the reasons why the war remained so static until early It is why they are now remembered as a defining feature of the war.

Chapter 3 : Is this a rain coat, a trench coat, or both? | WordReference Forums

Robison was one of the amateur researchers behind getting the "Operation Iraqi Freedom Documents" posted online - supposedly so an army of right wing bloggers would pore through them and find evidence that Saddam really was working with al Qaeda, or building nukes, or something.

Sponsored Links Undoubtedly, it was entirely unexpected for those eager thousands who signed up for war in August A War of Movement? Indeed, the Great War - a phrase coined even before it had begun - was expected to be a relatively short affair and, as with most wars, one of great movement. The First World War was typified however by its lack of movement, the years of stalemate exemplified on the Western Front from autumn until spring Click here to view brief film footage of German soldiers preparing trenches in France in So what was life actually like for the men serving tours of duty in the line, be they front line, support or reserve trenches? Daily Death in the Trenches Death was a constant companion to those serving in the line, even when no raid or attack was launched or defended against. In busy sectors the constant shellfire directed by the enemy brought random death, whether their victims were lounging in a trench or lying in a dugout many men were buried as a consequence of such large shell-bursts. It has been estimated that up to one third of Allied casualties on the Western Front were actually sustained in the trenches. Aside from enemy injuries, disease wrought a heavy toll. Rat Infestation Rats in their millions infested trenches. There were two main types, the brown and the black rat. Both were despised but the brown rat was especially feared. Gorging themselves on human remains grotesquely disfiguring them by eating their eyes and liver they could grow to the size of a cat. Men, exasperated and afraid of these rats which would even scamper across their faces in the dark , would attempt to rid the trenches of them by various methods: It was futile however: The rat problem remained for the duration of the war although many veteran soldiers swore that rats sensed impending heavy enemy shellfire and consequently disappeared from view. Frogs, Lice and Worse Rats were by no means the only source of infection and nuisance. Lice were a never-ending problem, breeding in the seams of filthy clothing and causing men to itch unceasingly. Even when clothing was periodically washed and deloused, lice eggs invariably remained hidden in the seams; within a few hours of the clothes being re-worn the body heat generated would cause the eggs to hatch. Lice caused Trench Fever , a particularly painful disease that began suddenly with severe pain followed by high fever. Recovery - away from the trenches - took up to twelve weeks. Lice were not actually identified as the culprit of Trench Fever until Frogs by the score were found in shell holes covered in water; they were also found in the base of trenches. Slugs and horned beetles crowded the sides of the trench. Many men chose to shave their heads entirely to avoid another prevalent scourge: Trench Foot was another medical condition peculiar to trench life. It was a fungal infection of the feet caused by cold, wet and unsanitary trench conditions. It could turn gangrenous and result in amputation. Trench Foot was more of a problem at the start of trench warfare; as conditions improved in it rapidly faded, although a trickle of cases continued throughout the war. The Trench Cycle Typically, a battalion would be expected to serve a spell in the front line. This would be followed by a stint spent in support, and then in reserve lines. A period of rest would follow - generally short in duration - before the whole cycle of trench duty would start afresh. In reality the cycle was determined by the necessities of the situation. Even while at rest men might find themselves tasked with duties that placed them in the line of fire. As an example - and the numbers varied widely - a man might expect in a year to spend some 70 days in the front line, with another 30 in nearby support trenches. A further might be spent in reserve. Only 70 days might be spent at rest. The amount of leave varied, with perhaps two weeks being granted during the year. An hour before dawn everyone was roused from slumber by the company orderly officer and sergeant and ordered to climb up on the fire step to guard against a dawn raid by the enemy, bayonets fixed. This policy of stand to was adopted by both sides, and despite the knowledge that each side prepared itself for raids or attacks timed at dawn, many were actually carried out at this time. Both sides would often relieve the tension of the early hours with machine gun fire, shelling and small arms fire, directed into the mist to their front: Rum, Rifles and the Breakfast Truce With stand to over, in some areas rum might then be issued to the men. They would then attend to the cleaning of

their rifle equipment, which was followed by its inspection by officers. Breakfast would next be served. In essentially every area of the line at some time or other each side would adopt an unofficial truce while breakfast was served and eaten. This truce often extended to the wagons which delivered such sustenance. Truces such as these seldom lasted long; invariably a senior officer would hear of its existence and quickly stamp it out. Nevertheless it persisted throughout the war, and was more prevalent in quieter sectors of the line.

Inspection and Chores With breakfast over the men would be inspected by either the company or platoon commander. Once this had been completed NCOs would assign daily chores to each man except those who had been excused duty for a variety of reasons. Example - and necessary - daily chores included the refilling of sandbags, the repair of the duckboards on the floor of the trench and the draining of trenches. Particularly following heavy rainfall, trenches could quickly accumulate muddy water, making life ever more miserable for its occupants as the walls of the trench rapidly became misshapen and were prone to collapse. Pumping equipment was available for the draining of trenches; men would also be assigned to the repair of the trench itself [click here to view brief film footage of British troops pumping water from trenches in](#) Still others would be assigned to the preparation of latrines. Thus, once men had concluded their assigned tasks they were free to attend to more personal matters, such as the reading and writing of letters home. Meals were also prepared. Sleep was snatched wherever possible - although it was seldom that men were allowed sufficient time to grab more than a few minutes rest before they were detailed to another task.

Stand To, Supply and Maintenance With the onset of dusk the morning ritual of stand to was repeated, again to guard against a surprise attack launched as light fell. This over, the trenches became a hive of activity. Supply and maintenance activities could be undertaken, although danger invariably accompanied these as the enemy would be alert for such movement. Men would be sent to the rear lines to fetch rations and water [click here to view film footage of British soldiers receiving rations in](#) Other men would be assigned sentry duty on the fire step. Generally men would be expected to provide sentry duty for up to two hours. Any longer and there was a real risk of men falling asleep on duty - for which the penalty was death by firing squad. Some men would be tasked with repairing or adding barbed wire to the front line. Others however would go out to assigned listening posts, hoping to pick up valuable information from the enemy lines. They were then faced with the option of hurrying on their separate ways or else engaging in hand to hand fighting.

Relieving Men at the Front Men were relieved front-line duty at night-time too. Relieving units would wind their weary way through numerous lines of communications trenches, weighed down with equipment and trench stores such as shovels, picks, corrugated iron, duckboards, etc. The process of relieving a line could take several frustrating hours. And the Smell Finally, no overview of trench life can avoid the aspect that instantly struck visitors to the lines: Rotting carcasses lay around in their thousands. For example, approximately 1,000,000 men were killed on the Somme battlefields, many of which lay in shallow graves. Overflowing latrines would similarly give off a most offensive stench. Men who had not been afforded the luxury of a bath in weeks or months would offer the pervading odour of dried sweat. The feet were generally accepted to give off the worst odour. Trenches would also smell of creosol or chloride of lime, used to stave off the constant threat of disease and infection. Add to this the smell of cordite, the lingering odour of poison gas, rotting sandbags, stagnant mud, cigarette smoke and cooking food

Sponsored Links Saturday, 22 August, Michael Duffy An Armlet was a cloth band worn around the arm to identify a particular duty or function.

Chapter 4 : world war one - Why bother to attack in trench warfare? - History Stack Exchange

Trench warfare, warfare in which opposing armed forces attack, counterattack, and defend from relatively permanent systems of trenches dug into the ground. The opposing systems of trenches are usually close to one another.

World War I Trench Warfare Trench warfare is a type of fighting where both sides build deep trenches as a defense against the enemy. These trenches can stretch for many miles and make it nearly impossible for one side to advance. During World War I, the western front in France was fought using trench warfare. By the end of , both sides had built a series of trenches that went from the North Sea and through Belgium and France. As a result, neither side gained much ground for three and a half years from October to March of . Soldiers fighting from a trench by Piotrus How were the trenches built? The trenches were dug by soldiers. Sometimes the soldiers just dug the trenches straight into the ground. This method was called entrenching. It was fast, but left the soldiers open to enemy fire while they were digging. Sometimes they would build the trenches by extending a trench on one end. This method was called sapping. It was safer, but took longer. The most secret way to build a trench was to make a tunnel and then remove the roof when the tunnel was complete. Tunneling was the safest method, but also the most difficult. The enemy trenches were generally around 50 to yards apart. The typical trench was dug around twelve feet deep into the ground. There was often an embankment at the top of the trench and a barbed wire fence. Some trenches were reinforced with wood beams or sandbags. The bottom of the trench was usually covered with wooden boards called duckboards. They were dug in a zigzag pattern and there were many levels of trenches along the lines with paths dug so soldiers could travel between the levels. Life in the Trenches Soldiers generally rotated through three stages of the front. They would spend some time in the front line trenches, some time in the support trenches, and some time resting. They almost always had some sort of job to do whether it was repairing the trenches, guard duty, moving supplies, undergoing inspections, or cleaning their weapons. German trenches like this were generally better built than those of the Allies Photo by Oscar Tellgmann Conditions in the Trenches The trenches were not nice, clean places. They were actually quite disgusting. There were all sorts of pests living in the trenches including rats, lice, and frogs. The lice were also a major problem. The weather also contributed to rough conditions in the trenches. Rain caused the trenches to flood and get muddy. Mud could clog up weapons and make it hard to move in battle. Cold weather was dangerous, too. Soldiers often lost fingers or toes to frostbite and some died from exposure in the cold. Interesting Facts about Trench Warfare It is estimated that if all the trenches built along the western front were laid end-to-end they would total over 25, miles long. The trenches needed constant repair or they would erode from the weather and from enemy bombs. The British said it took men 6 hours to build about meters of a trench system. Most of the raids took place at night when soldiers could sneak across the "No Mans Land" in the dark. Each morning the soldiers would all "stand to. The typical soldier in the trenches was armed with a rifle, bayonet, and a hand grenade. Activities Take a ten question quiz about this page. Learn More about World War I:

Chapter 5 : BBC Bitesize - What was life like in a World War One trench?

Both sorts of trenches were shored up with wood to stop the sides collapsing. Sandbags added extra protection and duckboards on the ground helped with drainage. Soldiers in trenches.

Source World War One Trench Warfare On the 28th of July, World War One began and soldiers from both sides of the battle began digging big holes in the ground where they would live, eat, sleep, fight and die together. The trenches became the battle ground of The Great War and they became the final resting place for millions of young men, some as young as seventeen years old. Most of the men who served in the trenches from until, were not really soldiers, they were either volunteers who gave up their everyday jobs to serve their country in its time of need or as the war progressed conscription was introduced and if your name was called then you had to enlist in the armed services. After six weeks of basic training, the young men were sent to war really unprepared for the unimaginable horrors that lay ahead of them. Trench Warfare Trench warfare meant a slow long drawn out war, a stalemate; Men would be shot down in their thousands as they tried to go over the top into the enemy trenches, most before they could even get 50 yards out of their own trenches, this made it almost impossible for either side to gain ground from the other, Holes in the ground were home to millions of soldiers throughout the war years and although many men died in battle just as many were killed by disease or infection brought on by the inhuman unsanitary conditions of life in the trenches. Source Smells In The Trenches WWI New recruits on their initial approach to the trenches would often be overcome by the putrid stench that hit them, often it would be too much for some men that they were physically sick even before they reached the Front Line. Rotting flesh from bodies in shallow graves, overflowing cesspits full of feces and urine, creosote and Chlorine used to cover up the cesspits and to try to stave off infections or disease. The smell of battle also filled the air stinging the nostrils of new recruits, Acrid cordite smells from the ever lasting heavy shell fire, the lingering odour of poison gasses that were sometimes used and of course the gunpowder smell from the soldiers firearms. The soldiers never really got used to the smell but became accustomed to living with it, some soldiers even claimed that the smell never left them even years after the war was over. World War I Trench Diagram A typical trench used during world war one, of course this diagram does not really show the difficulties soldiers faced every day. These creatures were to play a big factor in the health of the fighting soldiers as they were all carriers of disease and infections. Rats In The Trenches Rats thrived in the trenches almost everywhere you looked rats would be running around in their thousands, eating human remains, dead insects and anything else that would fit in their mouths. The rats were beyond human control because they were in their ideal breeding ground and for every 10 rats killed another would be born. It was a widespread belief amongst the soldiers in the trenches that the rats knew in advance when the enemy was going to attack with a heavy bombardment of shells because the rats always seemed to disappear minutes before an enemy attack. Lice In The Trenches Lice were ever present in the trenches and they caused a lot of problems for the poor men who lived in them, even although a lot of the men shaved off every bit of hair from their heads and bodies the lice lived in their clothes and fed on their human blood. Even when their clothes were washed and deloused some eggs still survived in the seams of the soldiers uniforms and would re-infect them. Lice were carriers of Trench fever, a particularly painful disease that began suddenly with severe pain followed by high fever which took up to 12 weeks to recover from. Frogs in The Trenches Millions of frogs were found in water holes made by shell fire and in the bases of the trenches, with the frogs slugs and horned beetles were lining the walls of the trench, nits were also a major problem with the men which again forced them to shave their head and body hair off. Flies And Maggots In the Trenches With so much rotting flesh around Flies and Maggots were a constant problem with the soldiers, they were everywhere and anywhere, most soldiers wrapped scarves or towels around their mouths to avoid swallowing them, the flies were responsible for the spread of many infections and diseases in the trenches. Trench Foot The Trenches were always waterlogged which meant that the soldiers living in them always had wet feet, this caused a major problem called trench foot especially if it was left untreated for a while. Trench Foot is a fungal infection of the feet which if not treated could get easily infected and turn gangrenous which in most cases would lead to

amputation of part of the foot or even the whole foot. Duck board were quickly introduced into the trenches above the common waterline as a prevention in and cases of trench foot saw a rapid decline although there were still a few sufferers throughout the duration of the war. Shell Shock Constant heavy artillery fire took its toll on many of the soldiers mental health. Source Shell Shock In WWI Two percent of the men serving in the trenches between , were the victims of Shell Shock around eighty thousand of the men who fought in the war. The early symptoms of Shell Shock included constant tiredness, irritability, dizziness, headaches and a lack of concentration. Eventually these men would suffer from a full mental breakdown making it an impossibility for them to remain on the front line. The constant barrage of shell fire from both sides it was concluded was to blame because they said that an exploding shell created a vacuum in the head and when the air rushed into that vacuum it disturbs the cerebro-spinal fluid upsetting the workings of the brain. World War One in Color: Slaughter in the Trenches Trench Warfare, Hell on Earth Trench warfare was often said to be Hell on Earth and for good reason, there was ne real living in a world surrounded by death and the soldiers who survived were haunted by nightmares of their time served fighting in them. They may have survived the bullets and diseases of the trenches and they may have gone on to live successful and happy lives but the memories of dead friends and family members who fought beside them never ever left their thoughts. They sacrificed everything for their country and for that we should always remember them. What weapon was used to force Allied troops out of trenches? In the early days of World War One, poison gas was used to force troops out of the trenches.

Chapter 6 : Twenty One Pilots' "Trench" Pacing For K US Sales, K Total US Units

Trench warfare is a type of fighting where both sides dig deep trenches in the ground as a defence against the enemy. The World War 1 trenches could stretch many miles and made it almost impossible for one side to advance on the other.

Field works[edit] Lines of Torres Vedras Field works are as old as armies. Roman legions , when in the presence of an enemy, entrenched camps nightly when on the move. They played a pivotal role in manoeuvring that took place before the Battle of Blenheim The French captured these lines in and demolished them. By the Lines no longer existed, but the two central forts in the towns of Wissembourg and Altenstadt still possessed fortifications that proved useful defensive positions during the Battle of Wissembourg. In the campaign season the Duke of Marlborough breached them through "a magnificent piece of manoeuvring". But innovations in trench warfare became more prominent in the course of the 19th century. British casualty rates of up to 45 percent, such as at Gate Pa in and the Battle of Ohaeawai in , suggested that contemporary firepower was insufficient to dislodge defenders from a trench system. Trenches at the Siege of Vicksburg Fundamentally, as the range and rate of fire of rifled small-arms increased, a defender shielded from enemy fire in a trench, at a house window, behind a large rock, or behind other cover was often able to kill several approaching foes before they closed with his position. Attacks across open ground became even more dangerous after the introduction of rapid-firing artillery , exemplified by the "French 75" , and high explosive fragmentation rounds. The increases in firepower had outstripped the ability of infantry or even cavalry to cover the ground between firing lines, and the ability of armour to withstand fire. It would take a revolution in mobility to change that. Mass infantry assaults were futile in the face of artillery fire as well as rapid rifle and machine-gun fire. Both sides concentrated on breaking up enemy attacks and on protecting their own troops by digging deep into the ground. Symbol for the futility of war[edit] Trench warfare has become a powerful symbol of the futility of war. To the French, the equivalent is the attrition of the Battle of Verdun in which the French Army suffered , casualties. Many critics have argued that brave men went to their deaths because of incompetent and narrow-minded commanders who failed to adapt to the new conditions of trench warfare: There were failures such as Passchendaele, and Sir Douglas Haig has often been criticised for allowing his battles to continue long after they had lost any purpose other than attrition. These included improvements in artillery, infantry tactics, and the development of tanks. By , taking advantage of failing German morale, Allied attacks were generally more successful and suffered fewer casualties; in the Hundred Days Offensive , there was even a return to mobile warfare. Entrenchment[edit] Implementation[edit] German forward detachments guarding the entrance to a trench line in front of Arras in Trenches of the 11th Cheshire Regiment at Ovillers-la-Boisselle, on the Somme , July One sentry keeps watch while the others sleep. Photo by Ernest Brooks. Although technology had dramatically changed the nature of warfare by , the armies of the major combatants had not fully absorbed the implications. The French and German armies adopted different tactical doctrines: The British lacked an official tactical doctrine, with an officer corps that rejected theory in favour of pragmatism. To attack frontally was to court crippling losses, so an outflanking operation was the preferred method of attack against an entrenched enemy. After the Battle of the Aisne in September , an extended series of attempted flanking moves, and matching extensions to the fortified defensive lines, developed into the " race to the sea " , by the end of which German and Allied armies had produced a matched pair of trench lines from the Swiss border in the south to the North Sea coast of Belgium. Trench warfare prevailed on the Western Front from late until the Germans launched their Spring Offensive on 21 March After the buildup of forces in , the Western Front became a stalemated struggle between equals, to be decided by attrition. Frontal assaults, and their associated casualties, became inevitable because the continuous trench lines had no open flanks. There were periods in which rigid trench warfare broke down, such as during the Battle of the Somme , but the lines never moved very far. The war would be won by the side that was able to commit the last reserves to the Western Front. They lacked traverses , and according to pre-war doctrine were to be packed with men fighting shoulder to shoulder. This doctrine led to heavy casualties from artillery fire. This vulnerability, and the length of the front to be defended, soon led to front line trenches being held by fewer

men. The defenders augmented the trenches themselves with barbed wire strung in front to impede movement; wiring parties went out every night to repair and improve these forward defences. They resisted both artillery bombardment and mass infantry assault. Shell-proof dugouts became a high priority. On the Eastern Front and in the Middle East, the areas to be covered were so vast, and the distances from the factories supplying shells, bullets, concrete and barbed wire so great, trench warfare in the West European style often did not occur. The Ortler had an artillery position on its summit near the front line. The trench-line management and trench profiles had to be adapted to the rough terrain, hard rock, and harsh weather conditions. Many trench systems were constructed within glaciers such as the Adamello-Presanella group or the famous city below the ice on the Marmolada in the Dolomites. Trench defensive systems[edit] Very early in the war, British defensive doctrine suggested a main trench system of three parallel lines, interconnected by communications trenches. The point at which a communications trench intersected the front trench was of critical importance, and it was usually heavily fortified. The front trench was lightly garrisoned and typically only occupied in force during "stand to" at dawn and dusk. This defensive layout was soon rendered obsolete as the power of artillery grew; however, in certain sectors of the front, the support trench was maintained as a decoy to attract the enemy bombardment away from the front and reserve lines. Fires were lit in the support line to make it appear inhabited and any damage done immediately repaired. Aerial view of opposing trench lines between Loos and Hulluch, July German trenches at the right and bottom, British at the top-left. Temporary trenches were also built. When a major attack was planned, assembly trenches would be dug near the front trench. These were used to provide a sheltered place for the waves of attacking troops who would follow the first waves leaving from the front trench. They fulfilled a variety of purposes, such as connecting the front trench to a listening post close to the enemy wire or providing an advance "jumping-off" line for a surprise attack. The concave trench line facing the salient was called a "re-entrant. Behind the front system of trenches there were usually at least two more partially prepared trench systems, kilometres to the rear, ready to be occupied in the event of a retreat. The Germans often prepared multiple redundant trench systems; in their Somme front featured two complete trench systems, one kilometre apart, with a third partially completed system a further kilometre behind. This duplication made a decisive breakthrough virtually impossible. In the event that a section of the first trench system was captured, a "switch" trench would be dug to connect the second trench system to the still-held section of the first. The Germans, who had based their knowledge on studies of the Russo-Japanese War , [29] made something of a science out of designing and constructing defensive works. They used reinforced concrete to construct deep, shell-proof, ventilated dugouts, as well as strategic strongpoints. They were more willing than their opponents to make a strategic withdrawal to a superior prepared defensive position. They were also the first to apply the concept of "defence in depth", where the front-line zone was hundreds of metres deep and contained a series of redoubts rather than a continuous trench. Each redoubt could provide supporting fire to its neighbours, and while the attackers had freedom of movement between the redoubts, they would be subjected to withering enfilade fire. The British eventually adopted a similar approach, but it was incompletely implemented when the Germans launched the Spring Offensive and proved disastrously ineffective. France, by contrast, relied on artillery and reserves, not entrenchment. Trenches were never straight but were dug in a zigzagging or stepped pattern, with all straight sections generally kept less than a dozen meters yards. Later, this evolved to have the combat trenches broken into distinct fire bays connected by traverses. While this isolated the view of friendly soldiers along their own trench, this ensured the entire trench could not be enfiladed if the enemy gained access at any one point; or if a bomb, grenade, or shell landed in the trench, the blast could not travel far. The banked earth on the lip of the trench facing the enemy was called the parapet and had a fire step. The embanked rear lip of the trench was called the parados. The sides of the trench were often revetted with sandbags , wire mesh , wooden frames and sometimes roofs. The floor of the trench was usually covered by wooden duckboards. In later designs the floor might be raised on a wooden frame to provide a drainage channel underneath. Dugouts of varying degrees of comfort would be built in the rear of the support trench. British dugouts were usually 2. Australian light horseman using a periscope rifle , Gallipoli To allow a soldier to see out of the trench without exposing his head, a loophole could be built into the parapet. A loophole might simply be a gap in the sandbags, or it might be fitted with a

steel plate. German snipers used armour-piercing bullets that allowed them to penetrate loopholes. Another means to see over the parapet was the trench periscope – in its simplest form, just a stick with two angled pieces of mirror at the top and bottom. A number of armies made use of the periscope rifle, which enabled soldiers to snipe at the enemy without exposing themselves over the parapet, although at the cost of reduced shooting accuracy. The device is most associated with Australian and New Zealand troops at Gallipoli, where the Turks held the high ground. There were three standard ways to dig a trench: Entrenching, where a man would stand on the surface and dig downwards, was most efficient, as it allowed a large digging party to dig the full length of the trench simultaneously. However, entrenching left the diggers exposed above ground and hence could only be carried out when free of observation, such as in a rear area or at night. Sapping involved extending the trench by digging away at the end face. The diggers were not exposed, but only one or two men could work on the trench at a time. Tunnelling was like sapping except that a "roof" of soil was left in place while the trench line was established and then removed when the trench was ready to be occupied. Thereafter, the trench would require constant maintenance to prevent deterioration caused by weather or shelling. Heavy shelling quickly destroyed the network of ditches and water channels which had previously drained this low-lying area of Belgium. In most places, the water table was only a metre or so below the surface, meaning that any trench dug in the ground would quickly flood. Consequently, many "trenches" in Flanders were actually above ground and constructed from massive breastworks of sandbags filled with clay. Initially, both the parapet and parados of the trench were built in this way, but a later technique was to dispense with the parados for much of the trench line, thus exposing the rear of the trench to fire from the reserve line in case the front was breached.

Trench geography in World War I [edit] The confined, static, and subterranean nature of trench warfare resulted in it developing its own peculiar form of geography. In the forward zone, the conventional transport infrastructure of roads and rail were replaced by the network of trenches and trench railways. The critical advantage that could be gained by holding the high ground meant that minor hills and ridges gained enormous significance. Many slight hills and valleys were so subtle as to have been nameless until the front line encroached upon them. Some hills were named for their height in metres, such as Hill A farmhouse, windmill, quarry, or copse of trees would become the focus of a determined struggle simply because it was the largest identifiable feature.

Chapter 7 : First World calendrierdelascience.com - Feature Articles - Life in the Trenches

There were many lines of German trenches on one side and many lines of Allied trenches on the other. On Christmas Eve, soldiers from both sides put down their weapons and met in no man's land.

First thing is to realize that strategic trench warfare in the Great War was not planned. While trenches were used in individual battles prior, nothing like a deadlock on this scale had been seen nor even seriously considered before. Nor had the lethality of heavy machine guns, heavy artillery, and breech-loading magazine-fed rifles been accounted for. Prior to the Great War, warfare was about small, professionally trained armies marching around the countryside in an attempt to trick the other side from accepting battle at a place of your choosing. The prior Franco-Prussian War of was fought with , men on each side compared to the tens of millions in the Great War. Battles would last a day or two and be sharp, decisive conflicts with one side holding the field and the other retreating. The largest battle of the war at Gravelotte lasted just one day. Warfare was still mostly a matter of keeping your forces acting as a unit, answering commands, and not running away. Waiting for your enemy to attack you gave them the initiative which would mean defeat. The army leadership was not ready for a continent-spanning trench line bristling with machine guns and high explosives. They lacked the training and tactics to deal with it. A single, continuous, fully manned line is too costly and too brittle for the pace of modern warfare. The Great War taught the armies of the world how to assault a line, and it also taught defenders how to be flexible rather than be rigid lest they be outflanked and bypassed. If an attacker overruns any one position, they will take fire from multiple supporting positions. If multiple positions are overrun, the defenders fall back to another line. But the continuous line of trenches in the Great War made this tactical mobility impossible. At the beginning of the war they faced the nightmare scenario of being pulled into a two-front war with France on one side and Russia on the other, something which previous German leaders had sought to avoid. Their initial plan, the Schlieffen Plan , was to knock France out of the war before Russia could fully mobilize and threaten Germany; mobilization in those days took weeks or months. When the Russians attacked East Prussia and Galicia Germany still had the bulk of its armies fully engaged deep in French territory. At this point the Germans were sitting pretty on the Western Front. If they wanted, the Germans could have defended their captured French territory until they could negotiate beneficial terms with France. This would be the same basic plan, just reversed: Add to this that the Russians were now deep in German territory. And in many cases the Germans did. Germans on the Western Front generally considered themselves there to stay: German trenches were relatively lavish affairs. In contrast, the Allies always recognized that they could not simply defend. Of course this lead to poor sanitation, demoralization, bad food, disease, and death. This might have been a sound change in strategy, especially since the Eastern Front offered more options for traditional warfare focusing on mobility rather than attrition. But the Germans never fully adopted this strategy. A lack of strong leadership at the top can be blamed for this, Kaiser Wilhelm II was a mediocre leader at best. He had a strong bias against and rivalry with the British, wanting to challenge their world spanning empire. But also the belief that France was the "real enemy" and the Russians should be negotiated with. Rather than look at the military reality, they looked at it politically. Instead they fought on both fronts simultaneously, see-sawing between fronts, strategies, and crises. Once the Russians were ejected from Germany in August , the Germans focused on Russia in until they forced a great retreat. Rather than press their advantage, they went back to the "real enemy", France. His chief of staff Erich von Falkenhayn held the belief that France was the traditional enemy of Germany, and that Germany and Russia had no real quarrel. This was the Germany political strategy prior to Wilhelm: After the Western Front bogged down, Falkenhayn continued to believe they should defeat France militarily and negotiate with the Russians. In contrast Hindenburg and Ludendorff advocated attacking east. He originally pitched this not as a breakthrough attack, nor the battle of attrition it turned into, but as a way to force the French to counter attack against strong German positions. Falkenhayn intended to swiftly capture the strong positions at Verdun, then sit back as the French threw themselves at him. He figured Verdun was so important to the French they must attack, and that the Allies must make additional spoiling attacks to try to distract the Germans. This would

drain Allied reserves from the rest of the front, thinning the lines for a German attack elsewhere. So in that sense, he was attacking at Verdun to force the enemy to attack him. The Germans failed to take Verdun. The Allies failed to thin their lines to reinforce it. It turned into a meat grinder. Rather than realizing his strategy had failed and halting his attack, Falkenhayn now claimed Verdun was always a battle of attrition and continued attacking. Always with this hope that the Allies would be bled white. He was replaced as chief of staff by Hindenburg. Too little, too late Russia was eventually defeated in It did result in the Germans refocusing on France, though leaving far too many troops to garrison their conquered Russian territory. But by then it was too late. Germany and her allies had been bled white. US troops were arriving to bolster the Allies. When the German Spring Offensive hit the western front in they did so with new "stormtrooper" tactics. The Germans used fire-and-movement to break the stalemate and finally got their breakthrough. But they no longer had the manpower to exploit it.

Chapter 8 : World War I for Kids: Trench Warfare

A typical trench system included a line of three or four trenches: the front line (also called the outpost or the fire line), the support trench, and the reserve trench, all built parallel to one another and anywhere from to yards apart.

What was life like in a World War One trench? On the Western Front, the war was fought by soldiers in trenches. Trenches were long, narrow ditches dug into the ground where soldiers lived. They were very muddy, uncomfortable and the toilets overflowed. These conditions caused some soldiers to develop medical problems such as trench foot. There were many lines of German trenches on one side and many lines of Allied trenches on the other. Soldiers were encouraged to wash their feet regularly and often had their feet inspected. What things were in a trench? Explore our interactive trench scene and click on different objects to find out more about them. Start activity There are ten different objects to find. You can use the question mark button to highlight them all. During rest time they wrote letters and played card games. Soldiers sleeping and writing letters. Watch our video to learn more about life in the trenches. What items did soldiers keep in the trenches? This and a shortage of fresh fruit and vegetables was responsible for many soldiers to suffer from upset stomachs! But most letters were read by an officer who checked they did not give away secrets or spoil morale. Men from both sides gave gifts to each other. The Germans gave sausages to the British and the British gave the Germans chocolates. A colour postcard possibly produced to send Christmas greetings from the front line. Illustration of a British army officer scoring a goal against a German officer, circa On Christmas Day, a British soldier kicked a football out of his trench and the Germans joined in. It was reported that Germany won the match The British High Command did not agree with the truce. They even suggested the Germans were planning an attack. They were ignored and no guns were fired on Christmas Day The truce lasted until the New Year in some parts of the Western Front.

Chapter 9 : Trench by twenty one pilots on Apple Music

In November, the continuous attempts to outmaneuver and outflank ended and both sides settled in for a long war based mostly on trench warfare (Michael Duffy November 4th). World War 1 was a war that was fought in the trenches.

In the American Civil War, field fortifications emerged as an essential of warfare, with both armies employing entrenchments to an extent never before seen. Troops learned to fortify newly won positions immediately; employing spades and axes carried in. A trench system may begin simply as a collection of foxholes hastily dug by troops using their entrenching tools. These holes may subsequently be deepened so that a soldier can safely stand up in one of them, and the individual foxholes may be connected by shallow crawl trenches. From this beginning a system of more permanent field fortifications may be constructed. In making a trench, soil from the excavation is used to create raised parapets running both in front of and behind the trench. Within the trench are firing positions along a raised forward step called a fire step, and duckboards are placed on the often muddy bottom of the trench to provide secure footing. Trenches remained merely a part of siegecraft until the increasing firepower of small arms and cannon compelled both sides to make use of trenches in the American Civil War. The trench lines of the Petersburg-Richmond theatre of operations in the final months of that war were the foremost example of trench warfare in the 19th century. Union soldiers in trenches, Petersburg, Virginia, Library of Congress, Washington, D. LC-B DLC Trench warfare reached its highest development on the Western Front during World War I 18 , when armies of millions of men faced each other in a line of trenches extending from the Belgian coast through northeastern France to Switzerland. The sheer quantity of bullets and shells flying through the air in the battle conditions of that war compelled soldiers to burrow into the soil to obtain shelter and survive. The typical trench system in World War I consisted of a series of two, three, four, or more trench lines running parallel to each other and being at least 1 mile 1. Each trench was dug in a type of zigzag so that no enemy, standing at one end, could fire for more than a few yards down its length. Each of the main lines of trenches was connected to each other and to the rear by a series of communications trenches that were dug roughly perpendicular to them. Food, ammunition, fresh troops, mail, and orders were delivered through these trenches. The intricate network of trenches contained command posts, forward supply dumps, first-aid stations, kitchens, and latrines. Most importantly, it had machine-gun emplacements to defend against an assault, and it had dugouts deep enough to shelter large numbers of defending troops during an enemy bombardment. LC-USZ The first, or front, line of trenches was known as the outpost line and was thinly held by scattered machine gunners distributed behind dense entanglements of barbed wire. The main line of resistance was a parallel series of two, three, or four lines of trenches containing the bulk of the defending troops. Each main line of trenches was fronted by fields of barbed wire intended to slow down and entangle attacking infantry. As World War I progressed, both sides, but particularly the Germans, developed trench systems of progressively greater depth and strength in order to ensure that the enemy could not achieve a breakthrough at any particular point. The Germans evolved an extremely elaborate defense system using pillboxes, i. Behind the pillboxes were more lines of barbed wire and more trenches and dugouts reinforced with concrete to withstand artillery bombardment. By the Germans had constructed some trench systems that had a depth of 14 miles 22 km. The crucial elements in attacking a trench system, surprise and overwhelming numbers of infantry, were thus almost impossible to attain. By contrast, the Japanese in the Pacific theatre, faced with overwhelming American artillery and airpower, heavily fortified many of their islands with chains of deeply dug caves and bunkers. Similar tactics were used by the North Korean and Chinese forces in the Korean War when confronted with American airpower. In the Battle of Dien Bien Phu March 13-May 8, , which resulted in the French expulsion from Indochina, the communist -led Viet Minh used classic 18th-century siege methods and drove forward an elaborate system of trenches to negate the effects of French artillery and airpower, preparatory to the battle. Classic trench warfare reappeared in the Iran-Iraq War 88 , a basically static war in which such mobile weapons as tanks and aircraft were in short supply. In the subsequent Persian Gulf War 91 , Iraq built an elaborate system of defensive trenches, ditches, and berms, but it was overwhelmed by airpower, innovative tactics, and the

demoralization of its frontline troops. Japanese soldier flushed from a cave by a smoke grenade surrendering to U. Marines on Okinawa,