

Van Arty Association and RUSI Van Members News Dec 29, 2020

Newsletters normally are emailed on Monday evenings. If you don't get a future newsletter on time, check the websites below to see if there is a notice about the current newsletter or to see if the current edition is posted there. If the newsletter is posted, please contact me at bob.mugford@gmail.com to let me know you didn't get your copy.

Newsletter on line. This newsletter and previous editions are available on the Vancouver Artillery Association website at: www.vancouvergunners.ca and the RUSI Vancouver website at: <http://www.rusivancouver.ca/newsletter.html>. Both groups are also on Facebook at: <https://www.facebook.com/search/top/?q=vancouver%20artillery%20association> and <https://www.facebook.com/search/top/?q=rusi%20vancouver>

Wednesday Lunches - Lunches suspended until further notice. Everyone stay safe!!

The 2021 BC Military Gala is CANCELLED. The Sheraton Wall Ctr is booked for Apr 23, 2022

Upcoming events – Mark your calendars (see Poster section at end for details)

- Dec 30** Wednesday 'Zoom' Lunch meeting
- Jan 01** Virtual New Year's Levée – 1000hrs to 1300hrs via Zoom at the Wed Lunch site
- Jan 06** Wednesday 'Zoom' Lunch meeting

Brits, Fritz & Yanks – Allied & German WW2 Infantry Tactics

What were the main differences between British and American war tactics in WWII?

Greg Allwood 24 February 2020



One pop culture moment that may, for many, represent the working relationship between British and American Second World War soldiers is an exchange in the HBO series 'Band of Brothers'. In it, an American paratrooper tries to persuade a British tank commander to fire his gun through a building at a German tank lurking on the other side. The Brit tells his ally he'd like to oblige but can't – because he is under orders not to cause

any unnecessary destruction of property. "I'm telling you, he's right there." The Paratrooper exclaims in exasperation. To which the Brit responds: "I believe you, but if I can't see the b****, I can't b**** well shoot him, can I?" As well as being somewhat amusing, the scene is interesting for a couple of reasons.

Firstly, it echoes former episodes of British history. In the book ‘Mud, Blood and Poppycock’, *Gordon Corrigan* explains that the British Army was strictly regulated in its interactions with civilians and their property when it fought in France during the First World War. Also that protecting both was one rationale for the ‘harsh’ discipline of the British Army in that conflict. And as far back as *Henry V’s Normandy campaign in 1415*, the king was prepared to hang his own men if they stole anything from the local population. The other reason the scene is interesting is that it represents a stereotypical difference between British and American forces during the Second World War: namely, that the British were (sometimes overly) plodding and cautious, and the Americans more inclined to open fire, and to use a lot more ammunition when they did. These disagreements weren’t always amusing either. During the *Battle of Normandy*, the Germans engaged in what, for them, had become a doctrinal and national stereotype – attacking, or counterattacking, invading Allied forces particularly swiftly and aggressively. In other words, ‘*blitzkrieging*’ and punching deep into their lines, if you will. (While ‘Blitzkrieg’ was a Second World War term, responding to Allied thrusts into their lines with large, swiftly delivered counterattacks had been a prominent feature of German military conduct in the First World War. See ‘*Eingreif divisions*’ for more). Yet, on this occasion, they overextended and soon found themselves encircled in what came to be called ‘the Falaise pocket’. With the British closing in from the north, and the Americans from the south, the race was on to escape through the rapidly-closing ‘Falaise gap’. When the British moved more slowly – and cautiously – than the Americans, leading more Germans to escape before the gap closed than otherwise would have been the case, relations between the two allies became somewhat acrimonious.



The Germans, in red, pushing into the Allies, and beginning to form the Falaise pocket
 (image from ‘Normandy 1944: Allied Landings and Breakout’ by Stephen Badsey © Osprey Publishing, part of Bloomsbury Publishing)

The British, of course, had the *mass trauma of the First World War* still fresh in their cultural memory. This, and their having fought the war for more than two years longer than the Americans, was bound to make them behave more carefully. Not only that, but, if Stephen Bull and Gordon L Rottman, authors of ‘Infantry Tactics of the

Second World War’, are to be believed, these stereotypical realities actually filtered down into how they prepared their soldiers to fight. In other words, when looking at how the tactics of British and American (and German) soldiers compared in World War 2, it’s worth remembering that there were good reasons for the stereotypical differences. The comparative truth of the ‘plodding, cautious Brits’, ‘trigger happy Americans’, and, for that matter, ‘efficient, skilful Germans’ wasn’t down to nationality. Rather, it was the result of differences in training. This shouldn’t mask the similarities though. In the end, Bull and Rottman also point out that the armies of all three nations were broadly similar. All of their military actions were the result of two principle aims: advancing over contested ground (ie, while firing) on the one hand, and removing the enemy from his defensive positions in the process. As well as the subtle influence of culture

and history, the differences came down to the varied weapons the soldiers of different nations used, and in how these weapons and the soldiers using them were organised.

When one considers the soldier's standard-issue weapon - his rifle - it's easy to see how and why British, American and German tactics varied in the way they did. The British rifle was the Lee-Enfield, a variant of the gun used in the First World War. Compared to the five-round German K98k (short for Karabiner 98 kurz), its 10-round magazine was relatively plentiful. Both were bolt-action weapons, meaning that the bolt which locked around the chamber had to be opened and closed after each shot to empty the used shell casing. But, as James Holland points out in the book 'Normandy '44', this recycling of the chamber was a lot more convenient in the British Lee Enfield than it was in its German equivalent: "In terms of rifles, the German Mauser-breech K.98 was the least effective (of all three nations' armies.) "It could take only five bullets at a time and the bolt came back so far that anyone aiming it had to move their face away and re-aim each time he fired." The British Lee-Enfield, on the other hand, could be cocked, or recycled, without the firer having to move his face out of the way and thus didn't need to be re-aimed each time.

British soldiers in the First World War *were trained to achieve rates of fire of 15 aimed shots a minute* (or more), which you wouldn't think was possible with only a 10-round magazine. But the skilful use of stripper clips, which were small metal bars holding five bullets, allowed for reloading mid-way through a 'mad minute' firing session. (See the video in *this article* for an example). With rates of fire like this, it's little wonder the British authorities saw no need to update the Tommy's standard weapon just yet. Yet, for ease of use, particularly when firing on the run, the top prize must surely have gone to the M1 Garand, the standard issue weapon of the American soldier. This only had a magazine capacity of eight rounds, and, unlike the Lee-Enfield, could not be topped up (that is, filled with single bullets) halfway through a magazine. All bullets had to be fired before the magazine ejected itself (apparently, with a loud 'ting', which wasn't good when in earshot of the enemy) and a new one could be inserted. Not only that, but 'Garand thumb' might result if a hapless GI jammed the magazine in and then didn't get his fingers out of the way before the bolt slid back. And yet, any American soldier doing his bit to blanket an enemy target or target area with rounds, especially if firing from the hip while charging at it, would have been greatly aided by his rifle's best feature. M1 Garands, unlike the Lee-Enfields, or German K98ks, were semi-automatic – they could be fired as quickly as the user could pull the trigger, requiring no recycling of the chamber (ie, unlike bolt actions.) Bull and Rottman point out that while the Americans did, in fact, start out using the M1903 bolt-action Springfield rifle for sniping, many of their sharpshooters preferred to upgrade to a Garand with a telescopic sight if they could. The increased rate of fire was the reason. For their part, British sharpshooters would go through a similar transition, starting out with the P14, but later switching to the standard-issue Number 4, Mark I (T) Lee-Enfield.

As for the calibre (size) of the bullets each rifle fired, the governments of all three nations had to balance the need for something big enough to have good stopping power with a bullet small enough not to cause excessive recoil. This would have caused the rifle to have to be re-aimed each time it was fired. And in all three cases, they converged on more or less the same point: a bullet that was .30 of an inch for the Americans (7.62mm), .303 of an inch (or 7.696mm) for the

British, and 7.92mm for the Germans. Bull and Rottman point out that, for some reason, the British round was more liable to cause the guns to jam if it wasn't loaded into them gently enough. The measurement of a bullet refers to the diameter of its base, not its length. Rifle rounds were long and pointed, increasing their range and accuracy. Handgun rounds, however, were comparatively shorter and more rounded. They would have been impossible to fit into a magazine that one could get their hand around if they weren't – an important point, since most automatic handgun ammunition clips are in the handles.



A Colt 1911, which, like most automatic handguns, has its ammunition clip in the handle (image: Gerald R Ford Presidential Museum)

Here too, American weaponry fit the stereotype for greater firepower. The standard American pistol was the Colt 1911, which fired a .45 calibre bullet (or one that was 11.43mm in diameter.) Though, in actual fact, it often found its way into British hands as well. Colts aside, the standard-issue British sidearm was the .38 (9.65mm) Webley revolver, though the 9mm Browning automatic pistol was also used by special forces – ie, the *SAS* or *SBS*. This, like the Colt 1911, carried its bullets in a magazine in the handle and could also be reloaded in one go, as opposed to one bullet at a time for a revolver, unless a speed loader was used. The Germans, meanwhile, used the Luger P08 or Walter P38, both of which were 9mm, and Luftwaffe or panzer personnel might have other pistols, such as the Walther PPK (the gun used by *James Bond* for most of the films in that series.) Holland explains that, of all the handguns, the Colt 1911 had the most stopping power. Pistols had relatively short ranges and at that distance it was important to knock down and kill an enemy before he did the same to you. So high calibre (ie, wide diameter) bullets with low velocity (speed) were best. Those that travelled too quickly through a target were liable to pass right out the other side without having stopped them in time – a factor that was also important in anti-tank ammunition (see below.) Submachine guns tended to be broadly compatible with a given country's pistol rounds – which makes sense, since the definition of a submachine gun is one that is short ranged and fires pistol bullets.

The Americans had their .45-calibre Thompsons, or 'Tommy Guns', though with a 30-round stick instead of the drum magazine seen in gangster movies. They also had M3 'grease guns', which were short ranged, inaccurate and so unpopular that Bull and Rottman say GIs thought they might have been useful if they ever found a German hiding in a closet. The British also used American-made Thompsons, as well as their own 9mm Stens, which carried 32 rounds in a side-mounted magazine. They were mechanically simple and easy to use, but, early on in the war, prone to jamming – something the authors note was largely improved come *D-Day* in 1944. The Sten's side-mounted magazine also gave them an advantage over their German counterparts. The MP 38s and 40s had their 9mm 32-rounds loaded in downward-facing magazines, making them comparatively harder to fire from a prone (ie, belly-down) position. As well as their Thompsons, the Americans also had the M1918A2 Browning Automatic Rifle, or BAR. Though the operative word here is 'rifle', because it fired the standard 7.62mm rifle round and, therefore, wasn't a submachine gun. Holland describes it as halfway between a light machine gun and a rifle and, like the later German StG 44, it can perhaps be thought of as a forerunner for the assault rifles*

used by *today's armed forces*. The StG was the inspiration for the post-war *AK-47*. (*Assault rifles can usually fire rifle rounds in precisely aimed single shots, or several rounds on automatic fire settings. The Bar was capable of both single, or semi-automatic, firing like the M1 Garand, as well as automatic fire, emptying the magazine after the trigger was held down, or spraying a few rounds – a burst – when the trigger was pulled once).

And then there were the actual machine guns. The Germans packed a serious punch with their MG34 and 42s, which fired their 7.92mm rounds at the rapid rate of 900 and 1,200 a minute (or 15 and 20 bullets a second.) The British had their *Vickers machine guns*, which, like the Lee-Enfield, were a carryover from the First World War, as well as the lighter and more modern Bren gun. Brens, like the German MG 34s and 42s, were light machine guns that could be carried fairly easily into battle. They could be fitted with a 200-round drum, but usually had their .303 rounds in a 30-round box on top, which, at a rate of fire of 600 rounds per minute – or 10 a second – would be empty in three seconds of continuous firing. Though in practice, short bursts rather than continuous fire were the norm. Likewise, the Americans, as well as having their BARs, were often also supported by .30 calibre Browning M1919 machine guns, and, at higher levels of command, some .50 calibre heavy machine guns (as in, guns that fired bullets 12.52mm in diameter). These, like the British Vickers, gave good support, but were considerably less portable than the BARs or Bren guns. The trailer for the film 'A Bridge Too Far' shows various guns in action, including the British Bren and anti-tank PIATs, which are covered below.

Finally, there were mortars, which fired 60mm and 81mm explosive shells in the American case, 2-inch, 3-inch and 4.2-inch shells (or 50.8mm, 76.2mm and 106.68 mm) for the British, and 5, 6, 8 and 12cm mortars (or 50, 60, 80 and 120mm) for the Germans. Some of the American weapons can be seen on display in the clip below of American war film 'Saving Private Ryan'. Captain Miller, portrayed by actor Tom Hanks, carries a Thompson submachine gun – it was common practice for officers and some NCOs (Non-commissioned officers) acting as section leaders to have submachine guns. His second-in-command, Sergeant Hovarth portrayed by Tom Sizemore, carries an M1 Carbine, which was a shortened version of the M1 Garand rifle issued to some NCOs. (In fact, both the Hanks and Sizemore characters also carry sidearms – the Colt 1911 – which they use later in the film.) The other men in the film's squad of eight Army Rangers (who were modelled on British commandos) carry the Garand rifle. That is, except for Private Reiben, played by Edward Burns, who is the squad BAR man, and Private Jackson (Barry Pepper), who is a sniper equipped with an M1903 Springfield rifle. Much about the scene is accurate, in that it recreates brilliantly what must have been the terror and frustration of being pinned down by a German sniper. Bull and Rottman point out that snipers were tasked with hunting for high-value targets like officers (who learned to conceal their rank markings for this reason.) They also served as scouts and hunters of enemy snipers – which is precisely what Private Jackson does in this scene. Having said that, Nick Hodges illustrates very nicely in 'History Buffs' that, in reality, Jackson's 450-yard shot would have had to be angled upwards to compensate for a drop in the bullet near the end of its maximum firing range. Naturally, though, a direct kill shot through the German sniper's scope looks more effective on film, which is probably why this inaccuracy was allowed into the scene.

Differences in weapon capabilities helped inform unit tactics, and the smallest battlefield unit was essentially the section. For the Americans, a standard section consisted of 12 men: a sergeant (armed with a Thompson or M1 Carbine) in charge, backed up by a corporal who carried the unit's anti-tank weapon. The support element was a BAR (Browning Automatic Rifle) team, which had the man carrying the BAR, his ammo carrier and an assistant. Lastly, there were the seven riflemen, two of whom were scouts and might also be snipers, armed with M1 Garands. As time went on, an additional BAR might have been added to the section. Standard movement – until the enemy was encountered – was to advance in single file, with the section leader and BAR man in front. (This is the way it is done in *Saving Private Ryan*** , with Tom Hanks' Captain Miller and Edward Burns' BAR man Private Reiben at the head of the squad as they move through the Normandy countryside). They would have been followed by the other 10 men in the section over a distance of about 60 paces. (**The unit in *Saving Private Ryan* is actually smaller than the usual US Army section and may have been referred to as a squad. Sometimes the term 'squad' is used interchangeably with 'section' and sometimes to refer to a sub-section, or a specific weapons team). When fired upon, sections were to creep, crawl or advance in short rushes – using fire and movement (ie, breaking into two sub-groups, with the firing element covering the one that moves and then switching places). A skirmish line of the same 60 paces in width would be formed to maximise the amount of fire that could be poured on the enemy (ie, the section would go from advancing one behind the other to lining up alongside each other, perpendicular to their axis of advance.)

A 'squad wedge' might also be formed if they were aware of an enemy's presence or suspected danger but were at that point out of range. This involved forming three four-man diamonds, themselves forming into a triangle formation – an arrangement that obviously would have allowed for turning and facing an enemy if attacked from either flank as they advanced. Smaller-than-normal eight-man units were also trained to advance in four sets of pairs. They would cover each other, with one scanning for ground-level targets, while the other looked-for snipers in trees. The section leader would be in front, accompanied by one of the section's scouts, and the second-in-command would keep an eye on the rear while his 'wingman' covered his flank. When a contact flared up, the Americans had trained their soldiers to fire at an entire enemy area, and to then split up and give covering fire to each other to facilitate advancing onto it. (Their material advantage in the Second World War, of course, enabled them to expend vast quantities of ammunition – more than other nations). They were also taught to make good use of cover.

As Bull and Rottman explain, the 1944 manual 'Scouting, Patrolling and Sniping' advised soldiers to look for cover and concealment, and that it was best to observe through or around cover that conceals, rather than over it. Shooting from cover on one's left gave more protection than doing so from the right (ie, since most people are right-handed). It also gave advice on face and hand painting so as to help soldiers with camouflage and promoted the idea of blending into the background. (*Saving Private Ryan* mentions 'defilade positions' a couple of times, which essentially meant making use of effective natural cover from which one could fire on the enemy). When going into an assault, American sections might also subdivide into Able, Baker and Charlie teams. 'Team Able' consisted of the two scouts who'd locate the enemy; 'Team Baker' the BAR man with three rifles in support (meant to give supporting fire for the assaulting element); and

‘Team Charlie’ contained the section leader and five riflemen who would all then make the assault on the enemy position. Since the section leader would be busy leading the assault team and liaising with his men as well as the platoon commander, the assistant section leader would also be needed to perform some of these duties. In terms of how this might have played out, one must refer back to the various weapons used by American soldiers.

The section’s one (or later, two) BARs (Browning Automatic Rifles) would fire on the target area, preferably from a flank so that they wouldn’t have to interrupt fire until their comrades in Team Charlie reached the target. BARs were capable of firing more than 10 rounds a second, but there were two problems with this: they only carried 20 rounds in their magazines and would have to be constantly reloaded if this were done; also, they didn’t have a quick-change barrel. One mechanical problem faced by all nations manufacturing and then fielding machine guns was that their barrels tended to overheat, requiring a change over to a new one. These limitations tended, in reality, Bull and Rottman say, to suppress the rate of fire of the BARs to about 60 rounds a minute – though one round a second on a given target was presumably still effective at making the enemy keep their heads down. Their comrades would move, or rather, fire and move (alternating firing their guns with advancing in spurts) up to the target, keeping up as much fire from their Garands as they could along the way. It’s worth noting here that while Garands had an effective range of several hundred yards, the Thompson submachine guns the section leaders carried did not. These were better used to spray the target area with bullets right as they approached or assaulted it, and one can see the logic of equipping the section leader with the unit submachine gun in this way. Since much of his work would have involved directing and coordinating the actions of other men, he was less likely to fire himself unless or until he got up close to the enemy or was caught in an ambush by them. At this point, spraying several rounds with a Thompson would have been needed to increase the odds of killing the enemy before they killed him.

Grenades would also have been flung at the enemy when close enough, right before the assault party rushed in. The final phase of an assault might result in close-quarters battle – something for which officers’ or NCO’s Colt 1911s would have been useful. For those without that option, both British and American manuals taught unarmed combat and knife fighting (something that became particularly important for special forces raids.) While the British emphasised that the ordinarily ‘beastly’ manoeuvres of kicking or gouging somebody’s eyes would be frowned on, they were ‘most useful’ in close-quarters warfare. They also emphasized the usefulness of the steel helmet for headbutting and – when held in one’s hand - for parrying an attack. The Americans, meanwhile, tried to teach recruits to become armed if they found themselves without a weapon – either by grabbing a discarded one or by disarming an opponent: “ ... in the process the soldier was encouraged to kick, jab at the eyes or throat, elbow, punch or throw things, as opportunity allowed.”

There also seems to have been a mickey-taking aspect to all of this too, because it seems that training promoting ‘beastly head butting’ and the like was amusing to British Tommies at the time. Or, at least, some features seen as over-the-top were. Bull and Rottman explain that the British, early on in the war, developed two types of training centres: battle schools and hate

training. The former provided knowledge in weapons, camouflage, scouting, patrolling, German tactics, guerrilla warfare and street tactics (ie, for urban warfare.) The latter, which were quickly lampooned by the squaddies, were meant to get them worked up with stories of German atrocities, chants of “Hate. Hate” and “Kill. Kill.”, and, sometimes, animal blood during bayonet drills meant to simulate battle conditions. These centres were closed in 1942, though later re-emerged, such as during SAS training. British sections themselves were 10-men strong, with a corporal in charge, though it was normal in practice to field only seven men so that three of them could be kept as a local reserve. Bull and Rottman view this as smarter than the American policy of plugging unfamiliar ‘green’ troops from further back into holes left in units by casualties. This, after all, made the learning curve steeper and the assimilation process harder.

Initially, the corporals were armed with Thompsons, though this was later switched to Stens. There was also a two-man Bren gun team, the second man carrying ammunition for his comrade firing the section’s main machine gun. As well as extra equipment and weapons, such as wire cutters and a sniper rifle for the section scout (each section had one in the British Army, with additional sniper-observer teams allocated as needed from company HQ), there were extra magazines for the Bren gun carried by men throughout the section. Recall that Brens had a rate of fire of 10 rounds a second, and only had 30 round clips. Even if they fired in shorter bursts, they’d require a lot of reloading. (Fortunately, they also had quick-change barrels, so it was easy to keep them in action if they overheated after being fired a lot). Other men in the section were initially segregated into being either bombers (ie, those with smoke or regular grenades) and riflemen. Though they all carried the Lee-Enfield rifle, some men were designated the task of throwing their grenades at the enemy once they were close enough. Later though, these two roles were merged, so that soldiers could perform either role as required.

In fact, by 1944, all personnel were used to bring the combat size of the section up to its full complement of 10. Again, the section leader would carry a Sten, leading a six-man rifle/bomber team (including him); and there were eventually two two-man Bren gun teams. (Just as the American sections often later ended up with two BARs). While part of the reason for similarities between British and American sections must have been down to their struggling against and fighting in similar circumstances, there was also another reason: both were imitating the Germans. For their part, they had 10-man sections led by NCOs carrying MP 38 or 40 submachine guns, three-man MG 34 or 42 machine-gun teams and several riflemen. German machine guns had rates of fire ranging from 900 to 1,200 rounds per minute, though frequently had to fire at lower rates to stop their barrels overheating. Having said that, it seems that the British in particular learned their lessons well, something no doubt influenced by their being involved in the war well before the Americans.

Sir Winston Churchill, for instance, pushed for the formation of the SOE (Special Operations Executive) to carry out guerrilla attacks in German-occupied countries, *and of the commandos*, that were soon engaging in coastal raiding. They, in turn, gave rise to modern special forces like the SAS, as well as being the model for their later US equivalent – *the Rangers*. This quick adaptation to the new realities of war was also reflected in the training of regular British infantry units. During training, trainers would fire their rifles over the heads of soldiers, so they learned to

perceive the difference between the thump of a rifle being fired, and the crack of the bullet as it whistled close to them. Pyrotechnics were also utilised to simulate battle conditions, and new infantry had to learn to stay calm as tanks drove over trenches, they were hiding in. (Counter-intuitively, it was better to get close to a tank than to run away from it – more below). There were also social factors that accounted for and influenced some of the differences in training and organisation. It would be naïve to conclude that the British did not have attitudes that might be perceived as racist today. Their *hasty withdrawal from Malaya*, for instance, seems to have betrayed a racial hierarchy, or at the very least, a bias in favour of evacuating their ‘own’ British colonial subjects first. Though, the capture of huge numbers of Indian troops in this disaster was a result of those troops being used simply because they were in the region, not because they were deliberately given the dangerous job of fighting the Japanese. (ANZAC troops, after all, were also captured in large numbers after having been used in Malaya for the same reason).

Having said that, the Forces Network contacted the National Army Museum and they said that, as far as units raised in Britain were concerned, it isn’t clear what proportion of soldiers were racial minorities. The reason for this is that the authorities did not keep track of race – they were, in other words, colour blind. So in this sense, even though people of, say, African descent were a much smaller minority within Britain than they were in the US, they did serve as any other white Briton would, with no segregation or colour bar. Bull and Rottman point out that it was the Americans who had, and suffered from, an explicit policy of racial segregation within their regular home ranks. Quite apart from the fact this must have hindered effectiveness by preventing talented soldiers of different races from working together, it “could also have bizarre consequences, as when German prisoners were allowed into ‘white’ mess halls from which black GIs were excluded”. But racism wasn’t the only social factor that influenced the makeup and conduct of armies. A British training film from the war that illustrates well the, albeit friendly, paternalistic nature of relationships between men and their officers. The harsh classism of Britain’s past, for instance, appears to have still cast a shadow, even if it now took the form of a certain paternalism. That is if one considers the comparison between the relative importance of British and US (as well as German) section leaders.

Bull and Rottman say of the American squad (or section) leader: “The junior NCO who led the squad or section was of central importance. The 1942 US ‘Infantry Field Manual: Rifle Company, Rifle Regiment’ gave one of the most demanding squad leader job specifications. “He was to be responsible for ‘discipline, appearance, training, control, and conduct’ of the squad, enforcing proper standards of hygiene, sanitation and weapon cleaning, and leading from the front in combat. “Ideally, he would control fire, although it cannot always have been practicable to ‘shift the fire of all or part of the squad from one target to another’ as the manuals hoped.” Gruppe leaders, the German equivalents, had a similar weight-of-the-world on their shoulders, being expected to set an example for their men, and even to die for them if necessary. These contrast with the British military, within which the role of section leader wasn’t given the same level of importance. Instead, junior officers (ie, lieutenants and captains) were the ones who had much of the responsibility. The national stereotypes, though clearly derived from evidence, must also be taken with a certain amount of salt.

In the British case, for instance, when sections were enlarged from eight to their full complement of 10 fighting men, it wasn't unusual for them to subdivide into three three-man teams (with a free-floating section leader.) Within these subsections, which were formed as much as possible around existing friendships, leaders were chosen. These men were picked both because of their natural leadership abilities, and because the other two group members looked up to them. Furthermore, these group leaders could also be rotated within these sub-teams – in other words, men took turns being in charge. The important job of control of fire, outlined in the 1939 manual 'Application of Fire', was also given to junior NCOs (ie, corporals, lance corporals.) They were to guide and direct light machine guns (Brens), snipers and rifle teams in the location and shooting of targets. (See the illustration of a section assault below for an example of an NCO directing Bren gunfire). If SLA Marshall and 'Men Against Fire' are to be believed, it's likely junior NCOs would have also reminded their men to fire their weapons in the first place. Marshall's post-war studies documented widespread reluctance and, in many cases, a complete absence of weapons firing. This is a real phenomenon, though the introduction in the edition of the book published in the year 2000 explains that Marshall did falsify his data slightly, thus exaggerating the extent to which this is true. Bull and Ruttman also say that, by 1944, British section tactics were about the most sophisticated, with five main formations: blobs (of two to four concealed men); single file (for advancing behind, for example, a hedgerow); loose file (for quick movement); the irregular arrowhead (which was difficult to see from above by aircraft, and useful for quick dispersal to either flank of an enemy); and the extended line which was used for attacks but was vulnerable to enfilade fire and difficult to keep control of.



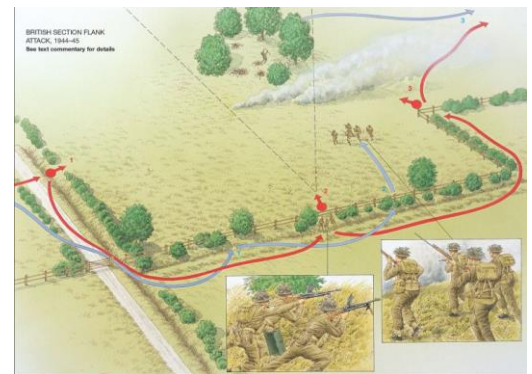
British soldiers attacking in extended line formations (which maximised firepower) in 1940 (image from 'Fall Gelb 1940 (2)' by Doug Dilby © Osprey Publishing, part of Bloomsbury Publishing)

These varying formations would be used depending upon the circumstances. Apart from blobs, five yards was about the standard distance between each soldier when arrayed in other formations. (The same as the Americans). When British sections attacked an enemy position, they too made use of their Bren gun teams as the main covering element, and the picture below depicts a standard template for how this was done. Sections began, in this case, by having the three-man Bren group (with two Brens and a section second-in-command finding targets and carrying ammo) put down covering fire. This is denoted by the first red arrow. The rifle group, led by and including the section commander, would then work its way around cover, leapfrogging to an attack position (denoted by the 1 and 2 positions next to the blue arrows.) Once in place to attack, the Bren gun team would then relocate closer to them, firing on the enemy from their new position (denoted by the second red arrow.) This attack assumes that a 2-inch mortar has been made available by platoon HQ and this three-man team (not seen on the picture) fires smoke shells from further back. This provides cover for the rifle team, who now rush the enemy position obliquely, swinging around the smoke then hit the enemy in the flank (ie, from the right side)

The rationale for flanking attacks is that it seems to trigger a collapse in enemy resistance that is disproportionate to the force brought to bear, and that wouldn't necessarily occur if the attack was frontal. For some reason, perhaps because of our frontal-facing vision, people in combat situations seem to be disoriented and overwhelmed when surprised from the side or rear. This point is illustrated by battlefield psychologist *Leo Murray in 'War Games'*, which focuses on the most intelligent application of force in order to trigger enemy surrender and achieve victory with the smallest number of casualties. Though awareness of this phenomenon obviously stretches back through history to well before the publication of Murray's book. Think, for instance, of General Joffre's textbook master move to rapidly ferry his troops through Paris in taxis and to then surprise the German army by striking its flank during the *Battle of the Marne*.

Though of course, in World War 2, men worked in small groups more often and, being within shouting distance of NCOs, and radio distance*** of officers, had an opportunity to put this idea into practice on a small, intimate scale. (***)British platoon HQs had Number 38 sets, which had a range of four miles; American company HQs had the SCR300 radio, which had a five-mile radius, and platoon commanders 'handie-talkies' – or 'walkie talkies' – that had a range of one mile). One of Murray's key points is that maximising force, from multiple places and weapon systems, can overload and as noted, disorient the enemy. Clearly this must be balanced against keeping things simple for one's own troops, so they in turn fight effectively. British doctrine promoted the idea that mission templates, like the one below, were to be thought of as servants rather than masters and adapted to terrain and circumstances as required. Presumably, officers and NCOs in the field would have applied this idea while being careful not to stray too far from the original template, so as not to overcomplicate things for their own men. Returning to the illustration below, once the rifle team have got within a certain distance of the enemy, it's no longer safe for the Bren guns to pour fire on them, in case they hit their own troops. So, at this point in this theoretical attack, the Bren team was to relocate around the back of the enemy position, and even more to the right than the rifle team (this new position marked by the third red arrow.) From here, they would be able to shoot at any enemy soldiers trying to escape (or, presumably, any more coming in to reinforce the position.)

Finally, both teams come back together again into a single section on the other side and then continue their advance. Note that when the British attacked, they, unlike the Americans, weren't aiming to cover the whole area in fire but to make the enemy keep their heads down enough that the assault could occur. It was critical that the gap between covering fire and assault (the bit right before the Brens stopped firing and moved from position 2 to 3) be small to non-existent, so as not to allow the enemy to re-emerge and fire on the attackers before they closed in for the kill. And closing for the kill was the operative term here, because, as Bull and Rottman explain, the stated aim of British military doctrine during the period was not just to take ground but to kill all the enemy in the way of it. The moment before the assault was particularly hair raising, as one quote they relate from a veteran makes clear: "If a German soldier appeared everybody fired at him. It was no bother; we didn't think of them as human beings...everybody is shouting and screaming and



suddenly you see this figure. "In the excitement, you fire at him ... a man at 100 or 150 yards is an awful big target ... Some Germans were trying to surrender but, in the excitement, we fired at them before they had any chance... "I don't think our lads were saying, 'Well, I don't care if that man wants to surrender' ... I don't think that was in anyone's mind. "I think it was the excitement of constantly stuffing fresh ammunition into the magazines and blazing away. "A lot of men were just firing from the hip as we walked forward... There was a lot of small arms fire, more than you would think."

The Brutalities of the war aside, there was still an appreciation of the other side's humour. Assault detachments were a common feature of German warfare and, in fact, had become so normalised that the British journal 'War' explained the following joke: "Assault parties, creeping forward with explosives and perhaps flame throwers, are a normal feature of infantry technique: so normal indeed, that a humorous article in a German paper gives the following advice to troops on leave ... "They must be careful to respect civilian habits almost forgotten at the front. If the front door is shut, the proper thing is not to blow it open with a charge in the normal way; for the custom of the country is to ring the bell." German tactics did, after all, promote the use of small groups, like wire-cutting teams, to work together to break into strongpoints. Illustration of a textbook assault by a British section (image from 'World War II Infantry Tactics: Squad and Platoon' by Stephen Bull © Osprey Publishing, part of Bloomsbury Publishing)

As for defensive measures, initially, American defence squad posture advised troops to go to ground, spacing themselves five yards apart, and then digging in and camouflaging themselves when time permitted. Firing was not to happen until the enemy were within 500 yards and then at the direction of the squad leader - "... fire, grenades, and the bayonet" were to be used if a position was overrun to eject the enemy. In all of this, the British were generally similar, with section commanders being expected to direct cover. The Brits too encouraged digging in where time and circumstances permitted, although their 1944 'Infantry Training' manual put emphasis on taking advantage of natural cover and improving it if they could. Bull and Rottman explain that: "Banks, hedges and ditches were to be used as a matter of course. Sunken roads and railway cuttings could also be useful, but had a tendency to become 'shell traps', so were best used with excavations dug into the bank nearest the enemy. "Walls and rocks were also possible cover but had the potential disadvantage of splintering or being obvious aiming points. "The shell hole could be regarded as an instant weapons pit, but overcrowding was to be avoided, and when possible, the shell holes were to be linked to provide communication." This had been *a technique utilised extensively by the Germans* during the First World War. In Flanders, the high-water table and constant shelling on that part of the line made trenches difficult to construct and maintain and shell holes plentiful.

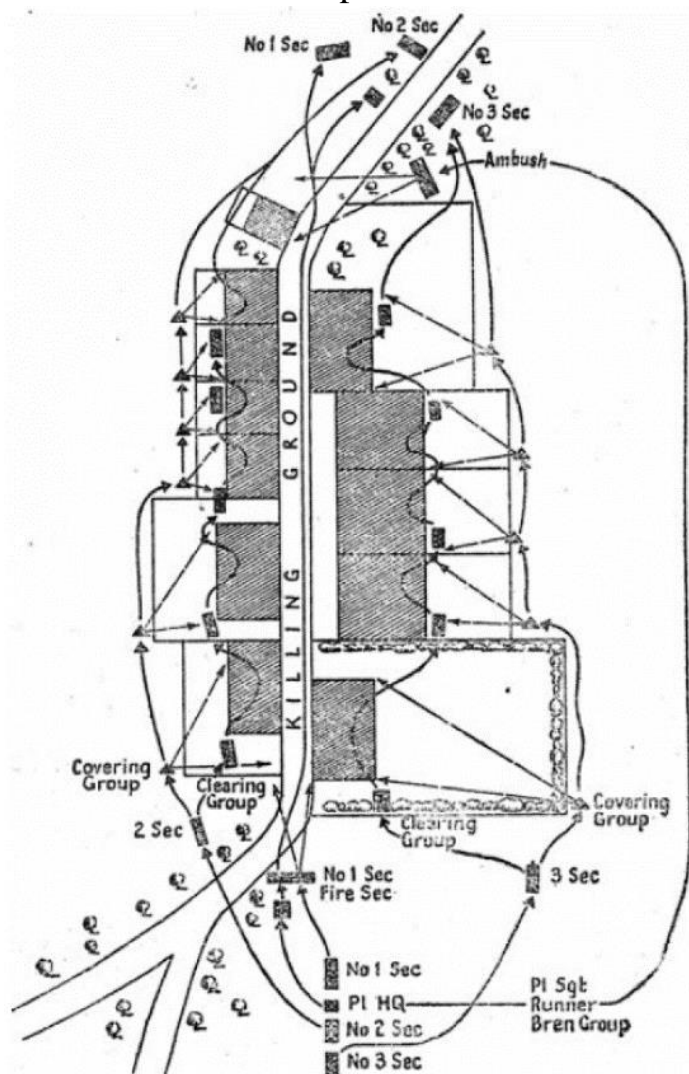
Of course, men were seldom arrayed in isolated sections – higher levels of command and larger groups often featured in an infantryman's existence. And given the extra support they provided; this was a good thing. Sections were subdivisions of platoons, platoons of companies, and companies of battalions. Much of this analysis deals with these units, largely because battalions (which tend to have been 500 to 1,000 men strong throughout history) were a major building block of any army. Soldiers were recruited to a particular battalion and remained within it as it

was moved around within higher formations as required. There was, though, variance from the battalion level up. That's because, for the British, battalions were essentially modular units, recruited by a particular regiment (ie, the 'Oxford and Bucks Light Infantry'), and then separated and sent out to postings as required. Thus, the 1 Oxford and Bucks Light Infantry and 2 Oxford and Bucks Light Infantry, the first two battalions recruited and maintained by that regiment, could end up in different higher formations and in different places. Despite this, different battalions managed to maintain a sense of connection and comradeship with their parent regiment and other battalions within it. And the 'esprit de corps' within battalions was also often strong, as a Lieutenant Alistair Borthwick of 5 Seaforth Highlanders, quoted by Bull and Rottman, put it: "The individuality of battalions is not, as might be imagined, a sentimental fiction: in war they can consume twice their weight in recruits and remain unmistakably themselves."

For the Americans (and Germans), regiments were more than just administrative or recruiting bodies, but battlefield formations as well. In the British Army, battalions were formed into brigades, brigades into divisions, divisions into corps and finally corps into armies. For the Americans (and Germans), battalions were organised into both brigades and/or regiments, and from there into divisions and the other higher formations. Returning to platoons (zugs to the Germans), the next formation up the chain from sections, there were, like sections, a few key differences. American platoons were 41-men strong at their basic size, with their three 12-man

rifle sections and a command element containing a lieutenant, platoon sergeant, guide sergeant (to help with keeping soldiers in formation from behind when moving together) and two messengers. Typically, though, this was often augmented by a three-man 60mm mortar crew, a three-man M1919 machine-gun crew and/or a two-man bazooka team (the Americans' main anti-tank weapon.)

The layout, or standard procedure, for clearing a village featured in the War Office's 1944 manual 'Infantry Training'



British platoons, by contrast, were smaller, with just 37 men. They had three ten-man sections, then an HQ with a commander (lieutenant), platoon sergeant, a 2-inch mortar team of three (also armed with rifles), a batman/orderly for the officer and a runner. The officer, platoon sergeant and section commanders all carried Stens, while the three sections had a Bren each; there were also 29 rifles and 36 grenades (so everyone but the Bren and Sten carriers had a rifle.) In reality though, platoons of all

nationalities were often reduced in strength by casualties when in the field. The diagram below gives an example of how a British platoon would have approached the task of clearing an urban street of enemy fighters. The first section, along with the platoon commander and his headquarters unit, establishes itself at one end of the main street – firing down it, especially with a Bren light machine gun, to create a killing zone. This is supplemented on the top end of the village by the platoon sergeant (the second in command), who also uses a Bren gun to spray bullets at any fleeing enemy. The remaining two sections then break off and separate into clearing and covering groups. The former would work their way through houses, firing and hurling grenades as they did so to flush the enemy into the killing zone that is the main street; the latter would cover them as they did so (ie, in case any enemy ran into a house from a flank and attempted to shoot them from the rear, or from an upstairs window of one of the houses.)

As well as forming up for larger attacks, platoons and other higher formations also frequently took on the task of allocating support weapons to their various sections in the field. In the standard battalion of the British Army, which was usually commanded by a lieutenant colonel, there were about 800-men (unit composition altered slightly over the course of the war). In 1943, they consisted of an HQ (headquarters), four rifle companies and an HQ company. Rifle companies, in turn, usually commanded by captains, had three platoons (commanded by lieutenants), and both had their own HQ elements; as noted, each rifle platoon had three sections. The headquarters company was where the support elements were housed and then designated as needed. Examples of these support elements included signals, pioneers (used for certain engineering and labour tasks), administrators, mortars and anti-tank weapons.

Early on in the war, the British used an extremely large rifle called the Boys as an anti-tank weapon – though it was cumbersome and quickly became rather obsolete. In fact, more generally, there was an arms race between those building and, over time, thickening the armour of tanks, and those designing weapons to punch through that armour. This, in turn, impacted the way in which tank formations were arrayed. The *'blitzkrieg' of Heinz Guderian's spectacular massed and rapid tank attacks during the 1940 Battle of France* did not remain the norm for the duration of the conflict. His rapid advance was shocking precisely because it was so iconoclastic, eschewing World War 1 lessons of the need for infantry and tanks to work together. But as tank defences increased and improved, this dynamic became less clear cut and things ebbed and flowed between large tank formations, and those interspersed with infantry. Again, the Germans essentially led the way, developing 'Panzergranadiers', a form of mechanised infantry that often rode into battle with tanks, ferried on halftracks (ie, hybrid vehicles consisting of two front wheels and tracks in the rear). In some cases, the tanks might assist the infantry (including, and often, acting as mobile artillery against other tanks), and in others the infantry would hold ground captured by the tanks, or protect them from enemy infantry.

This last point may seem counter-intuitive, but, as pointed out earlier, there were good reasons for training infantry to get close to tanks. They were most vulnerable up close because they had so many blind spots, and one weapon used against them were mines placed by hand. These were magnetic, though some readers may recall an improvised version – the 'sticky bomb' – made up of socks, axle grease (to make it stick) and dynamite used in Saving Private Ryan.

Artillery, both the type towed by trucks and self-propelled (ie, on tracks) was also employed to take on tanks, though it wasn't long before both sides were fielding anti-tank rocket launchers wielded by individual soldiers. For the British, this was the PIAT (which stood for Projector, Infantry, Anti Tank). A PIAT team can be spotted in the illustration below. It shows a British (or to be precise, Canadian) section being approached by an isolated German tank and its accompanying infantry. The Bren gun and mortar to its left are firing at the infantry, and, in the case of the Bren, possibly at the tanks vision slits to blind it. (A similar tactic was *used against French knights by English archers at Agincourt in 1415*). Meanwhile, visible inside the yellow circle on the left, a two-man PIAT team is sneaking around the side of the tank, using the foliage for cover. The plan is to fire the PIAT at the side of the tank, where its armour is weaker than on the front.



A Canadian section taking on a German tank with Bren gun, mortar, and PIAT

(image from 'The Bren Gun' by Neil Grant Badsey © Osprey Publishing, part of Bloomsbury Publishing)

In terms of organisation, the standard US Army battalion was similar to the British. There was an HQ and HQ company, three rifle companies (which in turn contained three rifle platoons and one heavy weapons platoon), a heavy weapons company, a medical section and service trains (ie, for transport). The battalion HQ contained an anti-tank platoon, pioneers, and a communication element (a platoon) with radio, signals a wire section and a message centre. The US Army placed its support weapons at the company and battalion levels, with each rifle company having a platoon of two light machine guns (the M1919 - which gave more support than a BAR, but was much heavier and more cumbersome), three bazookas (which were 2.36-inch rocket launchers) and three 60mm mortars; sometimes a heavy machine gun (of .50 calibre) was thrown into the mix, usually as an anti-aircraft weapon.

Weapons teams, as noted earlier, were known as squads (as opposed to sections). Though two light machine guns would form a section, where possible, as they would often be directed, by a section leader, to fire on the same target. The guns were, however, separated by 50 yards when carried into action so that both would not be destroyed by the same enemy artillery blast. Sometimes, weapons might be given over directly to a particular rifle platoon or controlled directly by a company commander as required. Their normal assignments were the support of their own or neighbouring companies (which normally involved firing at a given objective to make enemy defenders keep their heads down), repelling enemy counterattacks, or protecting flanks from attack. The battalion's main support element was a heavy weapons company which had two .50-inch 'heavy' machine guns on tripods. Heavy machine guns from reserve battalions were often moved forward to support attacking battalions - often, this involved firing at a specific

target, sometimes over the heads of infantry who were moving forward to attack it. Bazookas first saw action in 1942, the year before the debut of the PIAT. Although they had some limitations in comparison (the back blast, for instance, prevented them being fired from inside an enclosed space, something that didn't apply to the PIAT), early issues were corrected, and they became very effective.

They fired HEAT (High Explosive Anti-Tank) rockets at tanks, and 29 were allocated to each infantry battalion. The Marines, fighting against far fewer tanks in the Pacific, would end up with fewer than they started with, whereas the Army got more as the war went on. HEAT ammunition was fired not only from rocket launchers like bazookas but also from rifles (as special grenades), artillery and anti-tank guns and existed in a grenade and anti-tank mine form. Like pistol rounds, its stopping power came from its relatively low velocity (speed), so that it was less likely to punch through a tank's armour and pass straight out the other side doing minimal damage. Instead, HEAT ammo was made to explode inside the tank after passing through the first wall it penetrated. Period footage that features American tanks being used as mobile artillery to support an infantry attack. Like other weapons such as the Thompson, the Americans gave bazookas to the British, who, rather myopically Bull and Rottman say, dismissed them as being useless. At the time, they were contemplating using the relatively short-ranged bazookas against German tanks in the vast expanse of the North African desert. What they do not seem to have considered is that the bazookas had the potential for defence against tanks, and not just in an attack role.

The Germans, meanwhile, immediately recognised the weapon's potential. After the Americans gave them to the Russians, and then one fell into German hands, they developed their own version – the 'PanzerSchreck' (which translated as 'armour terror'). The bazooka, as well as various other weapon systems, are again used in Saving Private Ryan. The action in this final battle of the film is unusual in that two different units – the Rangers led by Tom Hanks' Captain Miller, and men of the 101 Airborne Division they have come to find – have teamed up to take on a German mechanised unit. Early on in the scene, a German half-track is visible from Jackson's vantage point in the bell tower. Meanwhile, Captain Miller, Private Ryan portrayed by actor Matt Damon and Private Reiben take on troops on the ground using their Thompson submachine gun, M1 Garand and BAR, respectively. Unfortunately for the Americans, they have failed to take out one of the tanks, which uses its gun to blow up the bell tower, killing Jackson, the unit sniper, and the M1919 machine gunner. In the end, beyond that shown in the clip, air support shows up to help drive off the Germans. Allied soldiers in real life weren't always that lucky, of course.

From the 'Punitary'

What is a New Year's resolution? Something that goes in one year and out the other.

Quotable Quotes

Sometimes a year has been so disastrous and so terrible that entering a new year will automatically mean entering a wonderful year! *Mehmet Murat ildan*

Dues 2021

As of Jan 1, memberships dues are payable for, Vancouver Artillery Association, the Royal United Services Institute - Vancouver Society and 15 Fd Regt Officers Mess Associate Members. Details below.

VAA

Dues for the **Vancouver Artillery Association** are \$25, payable to the Vancouver Artillery Association.

VAA dues can be paid by etransfer (preferred method):- by sending payments to:- president.vcrgunners@gmail.com

Dues cheques can be mailed to:

Vancouver Artillery Association
27048 35B Avenue, Langley BC V4W 0C3

RUSI Vancouver

Dues for **RUSI Vancouver** are \$50 (\$25 for students), payable to RUSI Vancouver.

By eTransfer (preferred method):- richmark@telus.net

By mail:-

Treasurer, RUSI Vancouver
1998 Ogden Avenue, Vancouver BC V6J 1A2

15 Fd Officers' Mess

Dues for **15 Fd Officers' Mess Associate Members** are \$60, payable to 15 RCA Officers Mess. Send to:

Treasurer, 15 Fd Regt Officers Mess
2025 West 11th Avenue, Vancouver, BC V6J 2C7

Wednesday Digital Video Lunch

No need to worry about COVID-19 when you go digital. Pop into our video lunch **at noon** on Wednesdays and say hi. All you need is a laptop, tablet or smartphone. These sessions are being hosted by the Vancouver Artillery Association and are **open to all – especially those who attended our Wednesday lunches.**

Join us to check up on your old lunch buddies.

<https://zoom.us/j/710845848>

Password:- Ubique



Zoom is the leader in modern enterprise video communications, with an easy, reliable cloud platform for video and audio conferencing, chat, and webinars across mobile, desktop, and room systems. Zoom Rooms is the original software-based conference room solution used around the world in board, conference, huddle, and training rooms, as well as executive offices and classrooms. Founded in 2011, Zoom helps businesses and organizations bring their teams together in a frictionless environment to get more

done. Zoom is a publicly traded company headquartered in San Jose, CA.

[Join our Cloud HD Video Meeting now](#)

Use the link above on your computer Zoom program or dial in on your phone
778 907 2071 Meeting ID: 710 845 848

Invite 2 friends! We have room for 100! See you on Wednesdays at noon. Bring your own lunch and beverage of choice.

Join us on the VAA Zoom site for a virtual New Years Day Levée!

– 1000hrs to 1300hrs. Bring your own Eggnog

UBIQUE 150 “Good Shooting” Video Contest



UBIQUE 150 “Good Shooting” Video Contest

In conjunction with the commemoration of 150th Anniversary of A & B Batteries, The Royal Regiment of Canadian Artillery is pleased to announce a video production contest.

Prizes will be awarded to 3 winners: 1st place winner receives \$2,000; 2nd place winning entry receives \$1000; 3rd place prize is \$500.

Important dates

Submissions accepted between	1 January – 30 April 2021
Judging starts	1 May 2021
Winners announced	26 May 2021

Eligibility

Submissions are open to **teams** consisting of **current and/or retired members of The Royal Regiment of Canadian Artillery**. Each team can submit more than one entry but only one prize will be awarded to any unit.

*If you missed it, the **Free webinar** recording and accompanying resources are available on our website.*

Learn about:

- Part 1: Pre-Production (Planning for Your Shoot)
- Part 2: Production (Getting the Shot You Need)
- Part 3: Post-Production (Bringing Your Vision Together)

All details on the contest and the free Webinar are at

ubique150.org