

THE BRITISH ARMY
1939-45 (I)
NORTH-WEST EUROPE



MARTIN BRAYLEY MIKE CHAPPELL

SERIES EDITOR: MARTIN WINDROW

MEN-AT-ARMS 354

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(1) NORTH-WEST EUROPE



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OSPREY
MILITARY

First published in 2001 by Osprey Publishing, Elms Court,
Chapel Way, Botley, Oxford OX2 9LP United Kingdom

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ISBN 1 84176 052 8

Editor: Martin Windrow

Design: Alan Hamp

Index: Alan Rutter

Originated by Colourpath, London, UK

Printed in China through World Print Ltd

01 02 03 04 05 10 9 8 7 6 5 4 3 2 1

FOR A CATALOGUE OF ALL TITLES PUBLISHED BY OSPREY
MILITARY AND AVIATION PLEASE WRITE TO:

**The Marketing Manager, Osprey Publishing Ltd, PO Box 140,
Wellingborough, Northants NN8 4ZA, United Kingdom**

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www.ospreypublishing.com

Author's Note

This first of three Men-at-Arms titles on the British Army of World War II covers the North-West European theatre of operations; the second will be devoted to the Mediterranean and Middle East, and the third to the Far East. Within the limitations imposed by available space each title will include a brief summary of the campaigns, and uniforms and equipment specific to those theatres. General subjects such as organisation, weapons, heavy equipment and communications will be divided between the three titles more or less arbitrarily; collectively the three volumes are planned as a concise reference to the subject.

The ATS and Army nursing services are to be covered separately in other planned titles and therefore have only been touched upon here in passing. Only basic information on specialist units such as Army Commandos and Airborne Forces is included here, since they are covered in greater depth in other Osprey Military titles, e.g. *Elite 1: The Paras – British Airborne Forces 1940–1984*, and *Elite 64: Army Commandos 1940–45*. See also the inside back cover for other related titles; those covering *Battle Insignia* (MAA 187) and *Infantry Equipment* (MAA 108 Revised) will be found particularly relevant.

Acknowledgements

The author would like to thank the following individuals and institutions for their assistance: Martin Windrow, Brian Schultz & estate of TSgt.V.P.Schultz, Janice I.Mullin, Imperial War Museum. The author's modified line drawings from official publications are Crown Copyright/MOD, and reproduced with the permission of HMSO. Images credited IWM are reproduced with the permission of the trustees of the Imperial War Museum; all other images are from the author's archive or private collections.

TITLE PAGE A Bren gunner from 44th Inf Bde, 15th (Scottish)
Div in autumn 1944. Note the Shovel, General Service thrust
under his belt. (IWM B11563)

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A 'Jock' of 7th Bn Argyll & Sutherland Highlanders from 154th Bde of Gen Victor Fortune's 51st (Highland) Div, photographed at Millebosche on 7 June 1940, wearing Battledress, Serge, and an Mk II helmet. The 51st seems to have been the only BEF formation to display a systematic scheme of 'battle insignia' in varying brigade colours. Veterans believe that the St Andrew's cross divisional sign was worn in purple and green by Div HQ, red by 152nd Bde and brown by 154th; the colour of 153rd is uncertain. Beneath the saltire battalions within brigades wore differing numbers and arrangements of bars in matching colours; 7 A&SH wore a single brown horizontal bar, and 8 A&SH a vertical bar. In 152nd Bde the junior battalion, 4th Cameron Highlanders, wore three thin horizontal bars below the saltire, all in red. (IWM F4736)

INTRODUCTION

THE INTERWAR YEARS were a relatively peaceful time for Britain. Apparent world-wide moves towards peace among nations, and economic depression, left little interest in and even less cash for the small British Army which policed the Empire. But though often considered a period of stagnation, the late 1920s and 1930s were in reality a time when the Army was looking forward to the future. Despite a very restrictive budget it was nonetheless developing not only innovative new weapons and equipment, but also new uniforms for the modern soldier. Much of this work was undoubtedly prompted by the lack of funds available and the consequent need to reorganise assets to gain maximum effectiveness from both men and matériel.

At the outbreak of war in September 1939 the greatest shortcoming for the British infantryman was quantity rather than quality of available equipment. When the Munich accords had been signed in 1938 Prime Minister Neville Chamberlain had perhaps not been as misled as his critics would claim. In reality the treaty allowed the Allies many months in which to increase their preparedness for a second conflict with Germany – time that was put to good use in mass-producing weapons and equipment for the new army, including items which had been developed but not produced in any quantity due to financial constraints. Unfortunately much of this equipment was to be abandoned in France and Belgium as the British Expeditionary Force and the French armies fell back before the advancing Germans in May/June 1940.

Despite these defeats at the hands of the tactically innovative German high command, any fair assessment shows that the British soldier of 1940 – though not many of his senior commanders – could stand comparison with his German foe. The enemy's 'vast numerical superiority' was actually a product of the excellent Nazi propaganda machine and the gullibility of the Allied hierarchy. The huge French army was alone able to outnumber the Wehrmacht in tanks and artillery. The Germans' remarkable victories were won by concentration of effort and by imaginative, aggressive ground/air tactics, achieving local superiority and multiple break-throughs. The Allied Supreme Commander, the French Gen Gamelin, was unequal to these *Blitzkrieg* tactics; the Allied armies were doomed by unimaginative defensive tactics, and once their fronts were pierced by the fast-moving German thrusts they quickly became disorientated and, in some cases, disheartened. The German armoured spearheads took considerable risks, and occasionally paid dearly – their commanders recorded the highest opinion of some of the British troops who faced them; but their speed and confidence generally



In a trench near Roches men of D Coy, 2nd Bn Sherwood Foresters from 3rd Bde, 1st Div, BEF 'pull through' their SMLEs. They wear the recently issued Battledress, Serge, leather jerkins, and the broad-brimmed Mk I* steel helmet. The reliance on prepared positions such as this was reminiscent of the Great War, and perhaps indicates the way in which the high command believed that this war would also be fought. (IWM F3505)

dazzled the Allies, and under skies ruled by German tactical air power the collapse was contagious.

The British Army paid a terrible price for its education in modern mobile warfare, but learned the lessons. When it returned to the Continent in June 1944 – hardened by years of fighting in the African desert, Sicily and Italy, and benefiting from the industrial might of its American ally – it was a very different army, able to face the Wehrmacht on equal terms. The human cost of the last eleven months of the war was inevitably very high, since Germany was fighting on the defensive. Historians have understandably made much of the fighting quality of the best of the SS and army units, which fought on almost to the last man, and of the huge contribution of Allied air power; but this should not blind us to other perspectives.

Most strikingly, infantry veterans of that last campaign have gone on record to the effect that most German troops they encountered showed less aggression and initiative than the Tommies. The privately published memoir by Lt Sydney

Jary, a young platoon commander who served with the hard-fighting 43rd (Wessex) Inf Div from the Normandy *bocage* to VE-Day (which has become a recognised teaching aid at the Royal Military Academy, Sandhurst) includes the following significant passages:

'My 18 Platoon were better soldiers than any we fought. So was D Company and the whole 4th Bn, The Somerset Light Infantry... In many attacks the prisoners we took outnumbered our attacking force, and German units who would continue to resist at close quarters were few indeed. Unlike us, they rarely fought at night, when they were excessively nervous and unsure of themselves. Where we patrolled extensively, they avoided it ... (German soldiers) encourage the theory and myth that, although superior as fighting men, they were beaten only by numerically superior forces and firepower. In my experience this was not so.'

CAMPAIGN SUMMARY

'The Phoney War'

Following the declaration of war on 3 September 1939 the British hastily despatched the British Expeditionary Force (BEF) to northern France. This initially consisted of 160,000 men in two corps each of two infantry divisions: I Corps (Gen Barker) – 1st Div (Gen Alexander), 2nd Div (Gen Lloyd); II Corps (Gen Brooke) – 3rd Div (Gen Montgomery), 4th Div (Gen Johnson) – plus supporting troops. The reader may note that three among these generals were later to rise to the highest commands. The BEF was reinforced by 5th Div in December 1939. 'First line' Territorial divisions, formed mostly from volunteer units of the part-time Territorial Army with one Regular battalion per brigade, were soon added, with the

48th (South Midlands), 50th (Northumbrian) and 51st (Highland) Divs reaching France from January 1940. The 51st were sent to the Maginot Line in the Saar district under French command, the rest of the BEF being deployed along the Belgian border as part of the 1st French Army Group under Gen Gaston Billotte, C-in-C North-East Front. In April 1940 the 42nd, 44th and 46th 'first line' and the 12th and part of the 23rd 'second line' Territorial divisions arrived; and in May the 1st Armoured Div – though this formation was incomplete and chronically ill-prepared for battle.



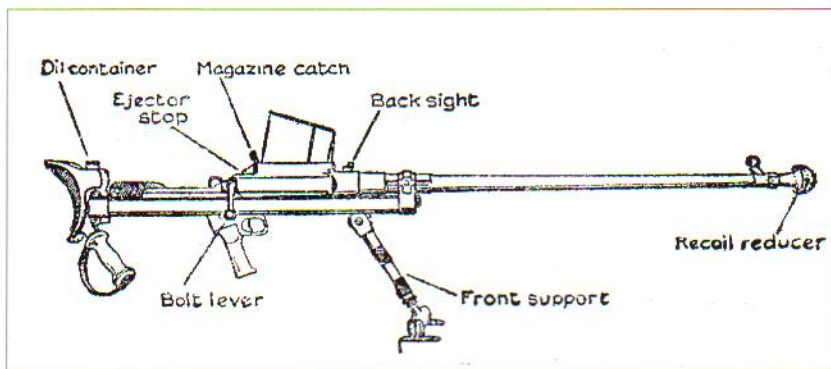
Despite the vulnerability of their small nation and the obvious strategic importance of holding any enemy assault in the Low Countries, the Belgians steadfastly remained neutral and refused to allow French and British troops to cross their borders, though it was accepted that in the event of invasion by Germany the Allies would immediately do so. The winter of 1939/40 passed quietly for the BEF, now numbering more than 394,000 troops. Morale was relatively good despite some inadequacies of equipment and the lack of support and training, particularly noticeable in the case of the hastily mobilised TA units. The time was spent training, patrolling and digging defences. Neither the Allies nor, apparently, the Germans seemed keen to aggravate the situation any further, and both avoided provocative moves on land and in the air; but Germany was merely waiting for the right moment, while her U-boats began to take a mounting toll of Allied shipping in the Atlantic.

Blitzkrieg

It had been believed that the massively fortified Maginot Line and the wooded hills of the Ardennes were impenetrable and that any attack would have to come through the Low Countries. This belief seemed to be confirmed when, on 10 May 1940, German armies spearheaded by airborne units and supported by strong tactical air forces swept through Holland, Belgium and Luxembourg. Coming as the Norwegian expedition also faced failure (see below), this prompted the House of Commons to withdraw its support from Neville Chamberlain, who was replaced as Britain's prime minister by Winston Churchill.

Gavrelle, October 1939; men of the 1st Bn Royal Irish Fusiliers with a .55in Boys anti-tank rifle in the two-man carry position. These Irish soldiers are typical of the early-war Tommy, with respirators worn at the 'alert', anti-gas capes on top of the small pack, and neat hessian helmet covers with horizontal foliage loops. Under magnification they can be seen to wear the battalion flash of a green triangle, point down, butted up against the shoulder seam. See also Plate B1; other known BEF sleeve flashes include a dark blue 'grenade' – 2nd Royal Fusiliers, 4th Div; and a large black diamond – 2nd N.Staffords, 1st Division. (IWM 0758)

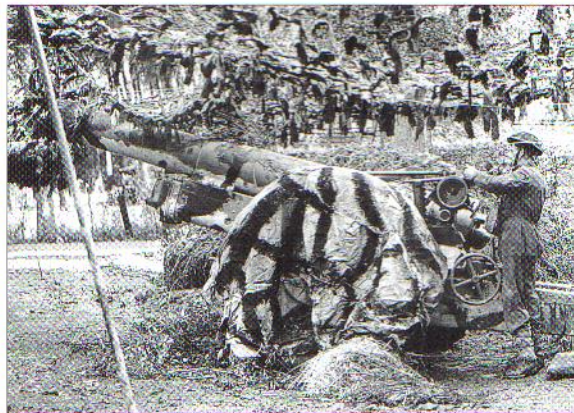
The .55in Boys A/T rifle, intended as an easily portable infantry section weapon, was designed in the early 1930s and first contracts were placed in 1936. When first introduced it could penetrate the armour or damage vulnerable points of all the lighter tanks then in service; but although production continued until August 1943, rapid advances in tank design made it obsolete after 1940. The Boys weighed 36lbs (16kg), and had a useful range of about 500 yards; feed was by five-round magazines, and the recoil was robust. The BEF's other anti-tank weapons were the British 2-pdr gun, which fared reasonably well against the lighter German tanks, and large numbers of the Mle 1934 French 25mm Hotchkiss, which did not.



The offensive prompted the Supreme Commander Allied Land Forces, Gen Gamelin, to order the 1st, 7th and 9th French Armies and the BEF to immediately push north into Belgium in an effort to hold the Germans. This predictable response condemned the BEF to severe logistical problems in a fluid situation, and opened the way for the Wehrmacht's real main push through the weakly defended Ardennes to the south – which proved far from impenetrable. A massive 'left hook' north and west through the open plains of northern France took German armour careering towards the Channel ports, dividing the Allied armies by 20 May and trapping the BEF and French 1st Army east of the thrust.

Despite several gallant actions by British and French troops a lack of co-ordination, mistrust between the Allies, and the stolid ineptitude of many commanders led to the BEF and French being pushed back or overrun on all sides of the German penetration. General Gort, C-in-C of the encircled BEF, disregarded orders from Gen Gamelin's replacement, Gen Weygand, to attack south and instead began the withdrawal of his troops into a small pocket around Dunkirk on the Channel coast. Between 26 May and 3 June, 338,226 British, French and Belgian troops were evacuated from the pocket by the Royal Navy and civilian volunteers manning every kind of light craft (Operation 'Dynamo'); some 28,000 had been evacuated previously. Roughly 70 per cent of the total were British; although the consequences of defeat were disastrous, this still represented something of a miracle, as service chiefs had anticipated a vastly greater loss of personnel. A major factor was the gallant defence of the perimeter by French 1st Army.

Field Marshal von Runstedt did not immediately press home the attack on Dunkirk, believing that the British were already beaten and that his by now weakened and over-extended Panzer units were best deployed elsewhere; attacks on the pocket were left to the infantry and Luftwaffe. (This decision was approved by Hitler the next day, 24 May; there is a suggestion that this was due to the Führer's undoubted hope of persuading Britain to conclude a peace, though how this aim would have been threatened by Germany capturing 330,000 more British prisoners is unclear.) Several other ports also provided evacuation routes; a number of men moving out through Le Havre were redirected to Cherbourg to join fresh troops in the form of the 1st Canadian and the British 52nd (Lowland) Divs, which were sent to France as late as the second week of June in the belief that a 'fortress' could be established in Brittany. The attempt was fruitless as the French were already considering an armistice. Other troops sent across to French ports at the last minute included 20 Guards Bde, to Boulogne, and the Riflemen of 30 Bde, who conducted a heroic but doomed defence of Calais. On 12 June, 51st (Highland) Div was forced to surrender at St Valéry. The last British troops were ordered out of France on 16 June, with the withdrawal completed two days later. Total troop losses were over 68,111 killed, wounded or taken prisoner. By comparison the French armies had suffered 92,000 killed and over 40,000 taken prisoner; and German killed and missing totalled about 45,000 men.



A well-camouflaged British howitzer awaits the German onslaught in France. Hundreds of these medium and heavy guns, many of them survivors from the 1914–18 War, were abandoned during the retreat and evacuation from Dunkirk.

OPPOSITE A German soldier examines a burnt-out Bedford MW lorry, one of many new vehicles that littered the Grand Place, promenade and beaches of Dunkirk. More than 60,000 vehicles were left in France by the departing BEF, along with over 2,000 artillery pieces, 76,000 tons of ammunition and 6 million tons of other stores.



Operation 'Dynamo', June 1940: men of the BEF return home. Contrary to popular misconception, while the great majority of heavy equipment was left behind most soldiers retained their weapons and personal kit (and some even hung on to souvenirs, like the French sabre carried by the man in the right foreground). Those who neglected to do so were frequently fined, £5.00 being the going rate for a lost SMLE.

therefore very unlikely that either the British or the Germans would respect Norway's neutrality for long.

A preliminary spark was provided by the *Altmark* incident of February 1940; this German merchant vessel, holding British prisoners taken from ships sunk by the *Graf Spee*, was captured in Norwegian waters by HMS *Cossack*. The possibility of the Allies gaining the upper hand in the region was forestalled when on 9 April 1940 Germany invaded both Norway and Denmark, ostensibly to protect their neutrality. Denmark capitulated immediately, and the assault on Norway was aided by internal support from Nazi sympathisers. In the war's first airborne operation hundreds of troops were flown into captured airfields, while others arrived in coastal ports. British, French and refugee Polish troops were quickly deployed to Namsos and Andalsnes, though without adequate artillery or air cover. Despite initial successes, particularly

around Narvik, events in France and the Low Countries prompted an Allied withdrawal in early June. British Army casualties of 4,400 were of less consequence than heavy naval losses, although these were balanced by the sinking of roughly equal numbers of German ships.

Almost unnoticed against the furious rush of events in mainland Europe, the British occupied Iceland in May 1940. A sovereign state under the king of Denmark, neutral Iceland declared inde-



pendence from Denmark following the latter's invasion by Germany. Despite initial Icelandic refusal, British forces (49th Inf Div) occupied the island to prevent it falling into German hands – Iceland was an important strategic location and the key to any defence of the North Atlantic. The island was taken under the protection of the neutral USA in July 1941, releasing the British troops for operations elsewhere.

Britain alone

In the immediate aftermath of Dunkirk the British resolved themselves to the prospect of German invasion, an expectation which was carefully nurtured by the nation's leaders (even though some of them believed that it would not actually happen). The Local Defence Volunteers had been formed on 17 May, their title changing to Home Guard from 31 July; under the control of the War Office, these were local units of unpaid civilian volunteers who could be called upon to augment the armed forces in the defence of Great Britain. By the end of 1940 nearly one and a half million volunteers were serving in the Home Guard, though initially with very inadequate equipment.

Hitler had hoped that Britain would accept peace terms, roughly on the basis of a free hand for Germany in Europe in exchange for the unthreatened continuation of Britain's overseas empire. Despite some powerful voices urging negotiation, Churchill remained resolute; his sense of history showed him all too clearly the ugly road down which surrender would inevitably send his country – a suspicion fully confirmed by the subsequent fate of France. Without the hoped-for peace Hitler was left with no option but to consider invasion. Operation 'Sealion' was to be preceded by the destruction of the RAF, giving the Luftwaffe air superiority and the army a Channel crossing unhindered by aerial attack. The Kriegsmarine, particularly the U-boat arm, were to enforce a sea blockade and defend the invasion fleet (although, unlike the army and air force commanders, the German admirals were far from optimistic about their chances of defeating their British counterparts). Offensive operations by the Luftwaffe began to escalate in July 1940, although the formal operation to destroy the RAF, *Adlerangriff* ('eagle attack'), actually began on 13 August. By the middle of September British preparedness for repelling an invasion was at its peak, and the Germans' windows of opportunity for invasion before winter weather set in were diminishing. The ultimate failure of the Luftwaffe to defeat the RAF in the Battle of Britain led to the cancellation of 'Sealion' on 12 October 1940.

During this period the British Army prepared defences both along the south coast and in fortified lines further inland – 'stop lines', where the enemy might be held if a successful landing were made. By summer 1941 the concentration of German effort in Russia had made invasion very unlikely; 'Barbarossa' had made the USSR an ally (and Finland an enemy). The building of defences in Britain had ceased by September 1941 other than for special purposes, and by February 1942 construction of 'pillboxes' had stopped altogether.

Means were sought to keep the land war alive despite Britain's expulsion from the Continent. April–June 1940 saw the formation of 'Independent Companies' numbered 1 to 11; these amphibious raiding units were later expanded into the Commandos. These small, lightly

OPPOSITE Normandy, 6 June 1944: men of 4 Troop, 6 Commando of the 1st Special Service Bde meet up with glider infantry of 6th Airborne Div's Air-Landing Bde near Benouville. The glider men (left & right) wear Denison smocks with 'Trousers, Parachutist's' and third pattern airborne steel helmets; both are armed with the Mk V Sten, for which the soldier at left carries the seven-pocket bandolier. The Commando lance-corporal carries considerably more kit than the airborne troops, a benefit of his seaborne assault. The GS 'Bergen' rucksack could accommodate more than the haversack and large pack of the 37 web set combined, and with greater comfort. The Commando is carrying a Colt .45in M1911A1 pistol.

Between the evacuation from Dunkirk in 1940 and the assault on Normandy four years later the activities of the Commandos and paratroops were of great importance to British civilian and military morale. They were the only means of striking at the Germans on the mainland of Europe; initially at a time when German invasion was still possible, and later when the return to France was inevitable but wearisomely distant, they helped maintain the belief in British military prowess and the eventual defeat of the Nazis. (IWM B5058)

equipped, but highly trained and aggressive units of hand-picked volunteers carried out a number of raids against occupied Europe. Initially disorganised and achieving little, tactics were soon developed that enabled the Commandos to record some remarkable successes. The Vaagso raid of December 1941 against the Norwegian fish oil factories and fishing fleet in the Lofoten Islands was mounted by over 500 Commandos supported by Royal Engineers and 52 Norwegian volunteers; 800,000 gallons of fuel and oil were destroyed along with 18 factories, eleven small ships and a number of German military installations. The propaganda value of this success served to boost morale in Britain and the Army, particularly as the Commandos took nearly half of their own strength in prisoners, with only one casualty (an officer who accidentally shot himself in the foot.).

During July 1940 the first recruits for the new Parachute Commandos, as the Airborne Forces were initially called, were accepted for training. Created to undertake similar operations to amphibious Commandos, these units were to be inserted by parachute or glider. On 27 February 1942 the paratroops successfully undertook a mission to capture components and prisoners from a German radar station on the French coast at Bruneval; apart from the military dividend, this operation provided another fillip for morale on the home front. The raid also proved that paratroops inserted by air could be extracted, in this instance by sea. Steady development would see the Airborne Forces mature from raiders into a major strategic asset; enlarged to two full divisions by 1944, they would be used to great effect during the liberation of Europe.

For Britain the great turning-point of the war came with the Japanese attack on Pearl Harbor on 7 December 1941. The impossible drain on resources occasioned by a new front in the Far East also brought with it the greatest possible consolation – alliance with the United States. While remaining neutral America had already been providing facilities for aircrew training in the USA, as well as supplying tanks, warships and a wealth of other war matériel under the Lend-Lease scheme, by which payment was postponed or off-set against the transfer of other British assets. This aid would be completely overshadowed by the massive reserve of





Normandy, June 1944: British troops move through the *bocage* country south-west of Caen towards Villers-Bocage; typified by its small fields and deep-banked hedgerows, the terrain was well suited to defence and made for slow going in the attack. Here two Universal Carriers from a Vickers MMG detachment are followed by a Sherman 'Flail' mine-clearing tank and infantry on foot. Armed with a Bren LMG or Boys A/TK rifle, the carriers were originally intended as recon and intervention vehicles for the infantry battalion; by 1944 they were being used as all-purpose 'off-road vehicles' in a wide range of roles, e.g. bringing up ammunition and rations, casualty evacuation, etc. The white '64' on a black square was the serial number of the MG battalions and companies within infantry and armoured divisions respectively.

manpower and industrial strength which now became available to the Allies. On 8 December 1941 the USA, Great Britain, Australia, New Zealand, South Africa and Canada (as well as Costa Rica, Salvador, Haiti and the Dominican Republic) declared war on Japan. Three days later Nazi Germany declared war on the USA. While Britain's war continued at great cost in Africa and Asia, she could now turn – at last with real hope – to planning and training for the assault on Hitler's 'Fortress Europe'.

Within days of Pearl Harbor a Washington conference confirmed the policy of 'Germany first'; and on 26 January 1942 the first American units arrived in Britain.

The year 1942 saw two major raids on mainland Europe by the forces of the Combined Operations staff. The port of St Nazaire, six miles up river from the mouth of the Loire, had the only dry dock on the German-held Atlantic coast capable of taking capital ships of the size of the *Tirpitz*; in order to deny an Atlantic base to these battleships it was essential that the dock was put out of action. This was achieved during Operation 'Chariot' on 27/28 March when the Lend-Lease destroyer HMS *Campbelltown* was rammed into the dock gate, a timed charge later destroying the gate (and some 400 German sightseers). Although killed and captured amounted to well over 60 per cent of the naval and Commando force committed, the raid was a success; the use of the dock was denied to the Germans for the rest of the war.

The achievements of the Commandos were exploited to great effect by the propagandists; but a 'large scale reconnaissance' at Dieppe on 19 August 1942 was to have a grimmer outcome. The 'Second Front' long urged by the USSR could not be opened without seizing harbour facilities; the Dieppe raid was an attempt to capture a functioning port, hold it for a day, and destroy its defences. Predominantly a Canadian 2nd Division operation, 'Jubilee' was supported by a Canadian tank regiment and four British Commando units (including a handful of American Rangers). The element of surprise was lost early on, and the landings were successful only on the right flank, covered by No.4 Commando and two Canadian battalions. Elsewhere losses were exceptionally heavy; the main assault beach was covered by heavy enfilading fire from strong and fully manned positions. Of some 6,000 troops committed more than 4,000 became casualties; the Royal Navy lost some 500 more, a destroyer and many light craft, and the RAF lost more than 100 aircraft. Dieppe was a disaster, but an educational one; much was learned that would be put to good use during future amphibious assaults.

D-Day and the battle for Normandy

Hitler's *Atlantikwall* was a formidable obstacle to any invasion of mainland Europe, with over 12,000 fortified emplacements and thousands more machine gun and infantry positions. Its construction was started only a few months after America's entry into the war, the Germans undoubtedly realising that the combined Allied strength would eventually pose a serious threat to the security of the Channel coast. The Allies built up and trained a massive force for the planned invasion; by spring 1944 more than a million and a half US servicemen and women were stationed in Britain, and the British commitment matched these numbers. Allied intentions were masked by Operation 'Fortitude', a deception plan to make the Germans think that the assault was to be in the Pas-de-Calais or even in Norway. The Pas-de-Calais was in reality an option considered by the Allies; closest to the English coast, it offered a quick turn-around of ships, the maximum 'loiter time' for air support, and the shortest route to Germany. Its drawback was that it was, therefore, the most heavily defended part of the Atlantic Wall.

The real assault, Operation 'Overlord', was launched against five beaches on the Normandy coast between the base of the Cotentin peninsula in the west and the Orne estuary in the east. Under the supreme command of the American Gen Dwight D. Eisenhower, a force of over 5,000 ships and landing craft, 11,000 aircraft (the Luftwaffe had only 319 aircraft available for operations in the area on D-Day), 175,000 men, 1,500 tanks, 20,000 other vehicles and 3,000 artillery pieces crossed the Channel and began landing during the early morning of 6 June 1944.

The ground force was 21st Army Group – 2nd British (Gen Dempsey) and 1st US (Gen Bradley) Armies – under command of Gen Montgomery. The Eastern Task Force of 1,796 ships carried the British and Canadian assault units to three beaches spread over some 24 miles between Arromanches in the west and Ouistreham in the east: 'Gold' (British 50th Inf Div, supported by the tanks of 8th Armd Bde and by 7 Royal Marine Commando); 'Juno' (Canadian 3rd Inf Div & 2nd Armd Bde, 48 RM Cdo); and 'Sword' (British 3rd Inf Div & 27th Armd Bde, and Commandos of 41 RM Cdo & 1st Special Service Brigade). Inland the 6,250 British and Canadian paratroopers and glider men of British 6th Airborne Div began dropping by night to seize vital bridges and guard approach routes against German reinforcements. The specialised obstacle-breaching AFVs from British 79th Armd Div supported all these landings effectively.

The British suffered about 3,000 casualties, the Canadians 1,000 – far fewer than anticipated – and by nightfall the bulk of the invasion force was ashore. The German defences had been formidable, but thin; once the static crust was pierced the low-priority German garrison



Normandy, July 1944; British infantry awaiting orders during the advance on Cagny following the capture of Caen. Note that nearly all carry full size GS shovels or picks tucked into the back of their webbing, the issue entrenching tool being inadequate for serious digging-in. In Normandy the scourge of German artillery and mortar fire made it imperative to get underground if infantry were to stay in one place for more than an hour or two. See also Plates E1 & E2.

Across the Seine, August 1944: a heavily laden British jeep and trailer. A British infantry battalion would have 13 of these indispensable 4x4 utility vehicles, which were almost unmatched in their versatility. Infantry battalions often used them alongside the Carrier Platoon for reconnaissance. (IWM BU212)



**British Troop
Losses
6 June 1944 –
7 May 1945**

Killed & died of wounds	30,276
Wounded	96,672
POW & missing	14,698
Total losses	141,646

Note: Within an infantry division the great majority of casualties were suffered by the nine infantry battalions, with a total establishment of just over 7,000 men. The figures for e.g.

51st (Highland) Div were typical for this period: 1,702 killed, 7,487 wounded, 577 missing = total 9,758. The highest losses in one battalion of 51st HD were suffered by 5th Bn Black Watch: 225 killed, 932 wounded, 103 missing = total 1,260, or 160 per cent. Within this total, officer casualties were 224 per cent. These figures make clear why VE-Day found most units with only a handful of officers and men who had landed in Normandy still in the ranks.

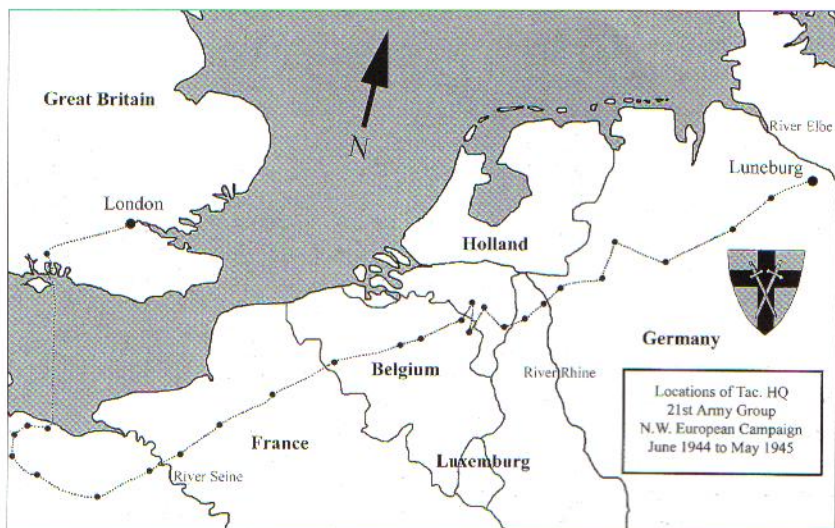
divisions lacked the firepower and mobility to counter-attack. The German naval and air forces played virtually no part in the fighting. Crucially, the reserve of Panzer divisions was held back – by a combination of a muddled chain of command, Hitler’s indecision, and luck – for just long enough to allow the Allies to establish their beachheads.

Many of the objectives for the first day had been far too ambitious, however. The British assault divisions were followed ashore from D+1 by 51st (Highland) and 7th Armd Divs; the build-up in the crowded beachhead continued, with 49th (West Riding), 43rd (Wessex), 53rd (Welsh) and 59th (Staffordshire) Inf and 11th and Guards Armd Divs in Normandy before the end of June, together with a large number of corps and army units. The Germans made the Allies pay a high price for every yard of the constricting *bocage* countryside, which favoured the defence and denied the attackers the advantage of their superior mobility. While the US Army slugged it out in the Cotentin and around St Lô, the British and Canadians made repeated and costly attempts (e.g. Operations ‘Epsom’, ‘Charnwood’, ‘Goodwood’) to take or bypass the vital eastern anchor of Caen, which did not finally fall until 19 July. In the face of stubborn resistance by some of Germany’s finest SS and Panzer divisions, battles for features such as the Odon valley, Hill 112, Mont Pincon and Bourgebus Ridge took a murderous toll in British lives and tanks.

‘Goodwood’ did tie down the bulk of the German armour on the British front, however; and on 25 July Gen Bradley’s US 1st Army launched Operation ‘Cobra’, bursting out of southern Normandy through Coutances and Avranches. On the 30th the British Operation ‘Bluecoat’ struck south from Caumont towards Vire. With the commitment of Gen Patton’s fresh US 3rd Army, at first into Brittany and then wheeling east across northern France, August saw the Wehrmacht’s last counter-attack at Mortain defeated and 60,000 men of the 7th Army killed or captured in the ‘Falaise pocket’. German resistance in France collapsed; by the end of August the British were crossing the Somme and the US 3rd Army were across the Meuse.

**The choices of
autumn 1944**

For the assault phase of the invasion Gen Montgomery had been in overall command of Allied land forces, but on 1 September, with his Supreme Headquarters Allied Expeditionary Forces (SHAEF) established in France, Gen Eisenhower took over. Montgomery, promoted field marshal, reverted to responsibility for the British/Canadian 21st Army Group – British 2nd Army and Canadian



Locations of Tac. HQ
21st Army Group
N.W. European Campaign
June 1944 to May 1945

1st (Gen Crerar) – on the northern flank of the Allied advance to the Low Countries and into Germany.

Montgomery favoured a single major offensive across the Rhine north of the Ruhr and deep into the heart of industrial Germany. Eisenhower, on the other hand, believed in and implemented a 'broad front' plan, with troops advancing on all sectors and eventually linking up with the US and Free French armies advancing from the mid-August landings in the south of France (Operation 'Anvil'). However, Allied lines of supply were becoming overstretched due to the failure to capture major Channel ports, whose German garrisons were still holding out stubbornly; and a logistic bottleneck now developed. The commanders of the Allied armies competed for the available supplies; with every shell and jerrycan having to be trucked across France from Cherbourg – since the Allied pre-invasion bombing campaign had virtually destroyed the northern French rail network – even such basics as fuel and ammunition were running short.

Montgomery had been criticised for his slowness in taking Caen and closing the Falaise pocket, but his advance from the Seine and into Belgium was exceedingly swift. British XXX and XII Corps advanced from their bridgeheads on 29 and 30 August respectively; Dieppe was soon taken and its port was handling shipping shortly afterwards (6,000 tons a day by the end of September); Brussels was occupied on 3 September, with 11th Armd Div reaching Antwerp the next day. However, this strategically vital port could not be used since the Germans still held both banks of the Scheldt down river. To overcome the resupply difficulties all of VIII Corps' second line and half of its first line transport was used to maintain the advance of the two other corps. Montgomery was determined to cross the Rhine before the enemy could reorganise, and well before winter set in.

To achieve this he proposed that XXX Corps should now advance north towards an area between Arnhem and the Zuider Zee (Operation 'Garden'), while an airborne corps of two US and one British division were to secure the bridges at Grave, Nijmegen and Arnhem (Operation 'Market') following parachute drops beginning on 17 September. Meanwhile VIII and XII Corps were to exploit and widen the corridor opened by XXX Corps. Eindhoven was captured on the 18th, allowing a link-up with US troops at Grave the following day. The airborne troops met stiffer resistance than anticipated, however, and a combination of bad luck and weaknesses in the operation planning (which have become notorious) prevented 1st Airborne Div reaching the vital Arnhem bridge in sufficient strength. To the south XXX Corps' narrow axis of advance to link up with them was cut twice by SS Gen Harmel's formidable armoured troops. Deteriorating weather hampered reinforcement and resupply drops to the beleaguered paratroopers. Eventually, on 25 September, those who could break out towards XXX Corps' spearhead were ordered to do so – only some 2,000 of more than 9,000 men who had been

Low Countries, October 1944: an infantry platoon HQ's 2in mortar is brought into action to help dislodge a German sniper. Weighing just under 19lbs (8.5kg) and with a range of 500 yards, this handy little weapon – aimed by eye, and firing as fast as an experienced crew could feed it with HE, smoke or illuminating rounds – was so useful for close-quarter combat that an only slightly up-dated version is still in use by today's British Army, fifty years later. A rarity by 1944 is the black-on-khaki cloth slip-on regimental shoulder title; in this case 'Monmouthshire' and the charging bull insignia identify 3rd Bn Monmouthshire Regt, from 159th Inf Bde of 11th Armoured Division. (IWM BU1233)



dropped around Arnhem. Although a costly failure, it can certainly be argued that strategically this gamble had been justified.

While the US armies pushed forwards to Germany's West Wall between the Moselle in the south and Aachen in the north, 21st Army Group faced a wretched battle to clear the Scheldt estuary, struggling through the mud under heavy autumn rains to capture the flooded fields, intricate inlets and islands of the Dutch coast. Eventually, on 26 November, the first cargo ship was able to enter Antwerp; 10,000 tons of stores were being unloaded daily by 1 December, and nearly twice that figure two weeks later.

Casualties in 1944 had been very heavy; some units were exhausted, and one division – the 59th – had been broken up in October to reinforce other formations. During the worst winter weather for generations the Allies postponed any major push into Germany while they built up their strength and stock-piled supplies. It was then, on 16 December 1944, that Hitler launched his final counter-offensive against the Americans in the Ardennes. Eisenhower briefly gave Montgomery command of US 1st and 9th Armies on the northern flank of the 'Bulge', and British XXX Corps were rushed south to guard the Meuse bridges, but the defeat of the German offensive was achieved by US troops alone. It is estimated that the enemy lost over a quarter of a million men in November and December.

To the Rhine and the Elbe

On 16 January 1945 British 2nd Army began Operation 'Blackcock' to clear the Roermond salient. In the bitter cold of February, Canadian 1st Army took British XXX Corps under command for Operation 'Veritable', the elimination of German resistance between the Meuse and Rhine rivers. Between 8 February and 10 March bitter fighting took place in the Reichswald Forest, and across much of the Rhineland (Operation 'Blockbuster'). The 21st Army Group's assault across the Rhine around Wesel (Operation 'Plunder') commenced on 23/24 March, supported by a large and successful airborne element (Operation 'Varsity', 6th Airborne Division).

On 28 March the British 2nd Army advanced from its bridgehead; and although bitter local battles with die-hard German units would continue to cost lives, the end was now in sight. While the Canadians liberated northern Holland the British pushed east on the northern flank of the general Allied advance across Germany. The 2nd Army reached Osnabrück on 4 April, crossing the Weser the next day, and on 15 April men of 11th Armd Div liberated Bergen-Belsen concentration camp – the Tommies thus discovering for the first time exactly what they had been fighting against for nearly six years. On 19 April British VIII Corps reached the Elbe, where the Western Allies had agreed to halt to meet the Red Army advancing from the east. The British turned north towards the Baltic coast, ensuring that they liberated Schleswig-Holstein and Denmark. On 2 May Berlin fell to the Russians. The next day British



April 1945 saw the liberation of many Allied POWs. These mistreated and emaciated Tommies, released from Gettingen camp by US 1st Army troops, foreshadow what was to be found in the Far East some months later. Against the popular image of bored but relatively comfortable POWs planning daring escapes, we should recall that these men were not prisoners of the Japanese or inmates of an SS death-camp, but ordinary British soldiers captured by the German Wehrmacht four or five years earlier.

OPPOSITE In 3rd, 15th, 43rd and 51st Inf Divs, battalions of the Middlesex Regt provided fire support for the infantry at divisional level. They were equipped with the .303in Vickers MMG and the 4.2in mortar (in each case, four weapons per platoon). Here mortarmen of D Coy, 2nd Middlesex from 3rd Div wear a mix of Mk II (left & right) and Mk III (centre) helmets. The 4.2in mortar weighed 1,320lbs (599kg) and fired a 20lb (9kg) bomb out to ranges of up to 4,100 yards (3,750m) – more than two miles. The large dump of boxes and cardboard packing tubes under camouflage netting behind the pit is a reminder that all support weapons used up ammunition at a ferocious rate. (IWM BU2745)



ABOVE August 1944: infantry of 43rd (Wessex) Div advance through a recently liberated French town. Beyond the marching Bren section the vehicles are headed by a Universal Carrier marked with the divisional sign and the white '61' serial on a green square, identifying the intermediate battalion of the intermediate brigade - in 43rd Div, the 5th Dorsets from 130th Brigade. The halftrack's serial, '41' on green-over-blue, identifies 43rd Recce Regt, RAC. (IWM BU193)

2nd Army took the surrender of Hamburg, and met Russian troops south of Wismar. On 4 May, at Field Marshal Montgomery's HQ caravan on Lüneberg Heath, Adml Friedeburg signed the unconditional surrender, from 0800 on the 5th, of all German forces in north-west Germany, Holland and Denmark. At 0240hrs on 7 May, at Gen Eisenhower's SHAEF at Rheims, Field Marshal Jodl signed the unconditional surrender of all German forces from 2301hrs the next day. The Western Allies declared 8 May 1945 as 'VE-Day' - at long last, Victory in Europe.

ORGANISATION & STRENGTH

Higher command

In 1939 the British Army was made up of the Regular Army and the Territorial Army, with additional manpower available in the form of ex-service Reservists. In April that year the Regulars counted 224,000 men, the Territorials 325,000 (plus 96,000 in TA anti-aircraft units) - a total of 645,000 men under arms. From June registration for conscription commenced, and the following month the first civilians were called up. These new and untrained men, destined for all three services, were known as the Militia, and yielded some 34,000 more men by the outbreak of war. The Territorial Army increased by 36,000 men; and the Army Reserve and Supplementary Reserve brought in 150,000. Immediately following the outbreak of war in September the National Service Act merged all the land forces (Regular Army, TA and Militia), which then had a total strength of 897,000 men; and declared all fit males between the ages of 18 and 41 liable for conscription.

The War Cabinet, formed by Prime Minister Chamberlain on 1 September 1939, was the ultimate governing body for the nation and for the three armed services. Responsible directly to the prime minister were the three armed service ministers, for Admiralty, War and Air, and a defence co-ordination minister. On the appointment of Winston Churchill as prime minister on 10 May 1940 he immediately formed an inner war cabinet, appointing himself Minister of Defence and dealing directly with the heads of the armed forces to the exclusion of the other War Cabinet ministers. Individual ministers nonetheless remained responsible for the running of their own ministries - the Admiralty, War Office and Air Ministry. Responsibility for the British Army fell to the War Office, accountable for the Army Council, who in turn directed the Army Departments, Districts and Commands. The districts were London and Northern Ireland, with Scottish, Northern, Western, Eastern, Southern,



South-Eastern and Anti-Aircraft being the commands under the control of C-in-C Home Forces and which were further sub-divided into areas; Northern Ireland District was under the control of GOC British Troops NI. Overseas commands operational at the outbreak of war or formed later were Middle East, Malta, West Africa, East Africa, Persia and Iraq, India Supreme HQ, Eastern (India), Northern (India), Central (India), Ceylon and Malaya.

For the liberation of Europe in 1944 the command entity was the Supreme Headquarters Allied Expeditionary Forces (SHAEF) under Gen Dwight D. Eisenhower, responsible for all armed services of all national contingents. The Commander of Land Forces was Gen Bernard Montgomery, who directed the operations of **21st Army Group**, then consisting of 2nd British and 1st US Armies. Troops attached at army group level included the oddities such as officers' clothing shops, mobile laundry and bath units, etc, which were deployed to lower echelons under army group control. (As already noted, upon the activation of 3rd US Army in France, 1st US Army was transferred to the all-American 12th Army Group, its place in 21st Army Group being taken by 1st Canadian Army.)

During World War II seven British armies were formed, numbered 1st, 2nd, 8th, 9th, 10th, 12th and 14th; of these only the 2nd Army operated in NW Europe. The **2nd Army** was formed in the UK during June 1943 in preparation for the liberation of Europe; it adopted as its insignia a blue cross upon a white shield with a gold crusader sword, hilt uppermost, superimposed upon the cross. Commanded by LtGen Sir Miles Dempsey, the 2nd Army in Normandy comprised I, VIII, XII and XXX Corps.

At 1944 strengths a typical British army embodied four **corps**, each corps having two infantry divisions, one armoured division, and attached corps troops. This theoretical strength was often changed at short notice depending upon operational requirements. For instance, for its task in Normandy in July/August 1944, VIII Corps was 'armour heavy', with 11th and Guards Armoured Divs, 6th Guards Tank Bde and only one infantry division – 15th (Scottish).

At each higher level of command (army and corps) the attached troops might include independent brigades of infantry and armour; units of field, medium, heavy, anti-aircraft and anti-tank artillery; Royal Engineers, Royal Signals, Royal Army Ordnance Corps, Royal Army Service Corps, Royal Corps of Signals, Royal Electrical & Mechanical Engineers and Royal Army Medical Corps personnel – all of which were deployed to support the lower formations and units as needed.



Anti-tank gunners of a battalion of the Argyll & Sutherland Highlanders man a 6-pdr during exercises in the UK, 1943. With a calibre of 2.245in, a rate of fire of up to ten rounds per minute, and a range of 5,500 yards, the 6-pdr was also accepted by the US Army as the M1 57mm anti-tank gun; but by 1944 it was inadequate against the German Panther and Tiger tanks at normal battle ranges. Although it was gradually replaced by the much more powerful 17-pdr – towed or self-propelled – as it became available, the 6-pdr would soldier on with many British infantry divisional anti-tank regiments; the armoured divisions enjoyed priority for 17-pdrs and SP guns.

Manpower levels of the British Army 1939-45

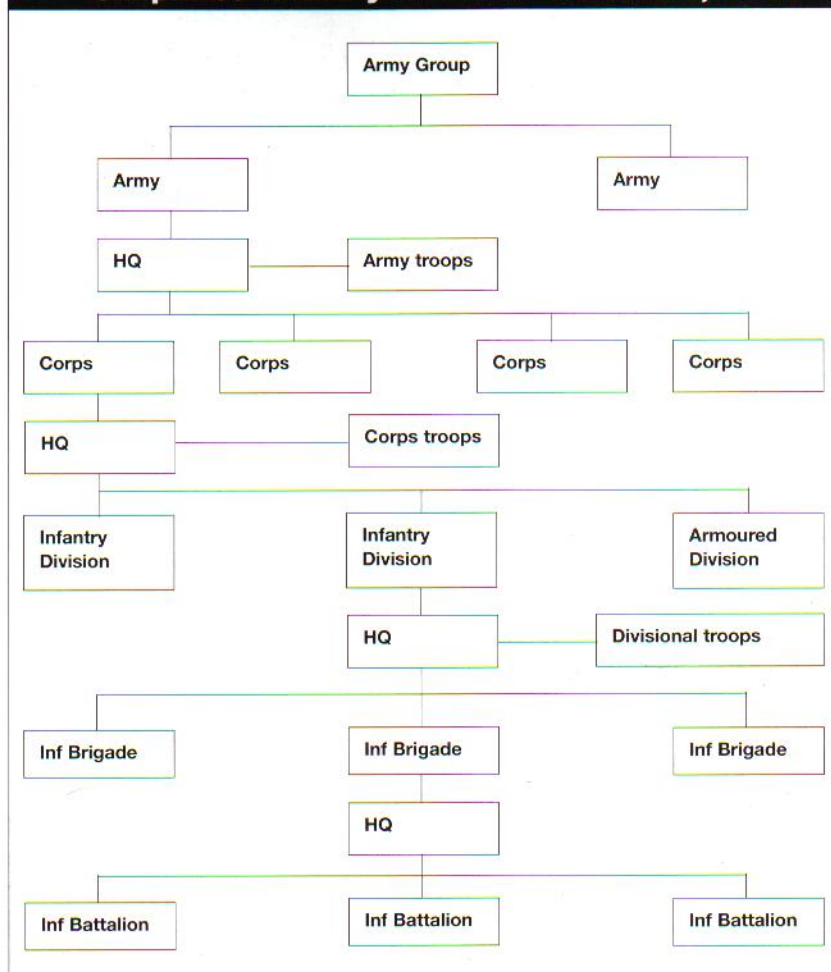
	Army	Home Guard
1939	897,000	not formed
1940	1,888,000	1,456,000
1941	2,292,000	1,603,000
1942	2,494,000	1,565,000
1943	2,697,000	1,784,000
1944	2,741,000	1,727,000
1945	2,920,000	stood down

Notes: All figures are from postwar sources; those often quoted from prewar or wartime sources are often much higher. Levels for the Home Guard are included for comparison since, from Aug. 1940, HG units were affiliated to county regiments. It is noteworthy that by 1943 the average age of HG men was under 30 years, dispelling the image of a 'Dad's Army' of the old and infirm. In reality the HG provided valuable pre-conscription training for youths of 17 and 18 prior to their being called to the colours.

Normandy, 1944: a British armoured column, probably from 7th Armd Div, including Cromwell and Sherman Firefly tanks. The 17-pdr gun mounted in the Firefly conversion was the only Allied weapon then capable of taking on the German Panther and Tiger tanks on equal terms. They were deployed one per four-tank troop as they became available; by the end of the war increased production allowed two Fireflies in most troops.



Simplified infantry formation structure, 1944



The infantry division

The numbered infantry division – sometimes further identified by a territorial designation, though some of these came to have limited practical meaning – was the main fighting formation at the disposal of the corps commander. In 1939 its establishment was 13,863 all ranks; by 1944 this had risen to 18,347. The division typically fielded three numbered infantry brigades, each of three battalions.

Attached to the divisional HQ would be the divisional troops, operating much the same as corps troops; these included various sub-units such as Military Police provost companies, Royal Engineer postal services, etc. Also under direct divisional command, although normally tactically dispersed between the infantry brigades, was either a medium machine gun battalion, or a support battalion providing both machine gun and heavy mortar support. For example, in 15th (Scottish) Div the 1st Bn, Middlesex Regt

provided the support battalion from October 1943 to March 1944 and was thereafter designated the machine gun battalion.

The divisional reconnaissance unit went through various changes of title; it started the war as the divisional cavalry regiment, but from January 1944 it was designated a reconnaissance regiment of the Royal Armoured Corps bearing the divisional number: e.g., in 15th (Scottish) Div, the 15th Recce Regt, RAC. (Overseas readers are reminded that in the British Army the term 'regiment' is used with at least three distinct meanings. In the cavalry/armoured and artillery arms of service it means a unit of equivalent size to an infantry battalion, i.e. a lieutenant-colonel's command with between 700 and 800 all ranks in three or four numbered or lettered sub-units – 'squadrons' or 'batteries' – further divided into numbered 'troops'.)

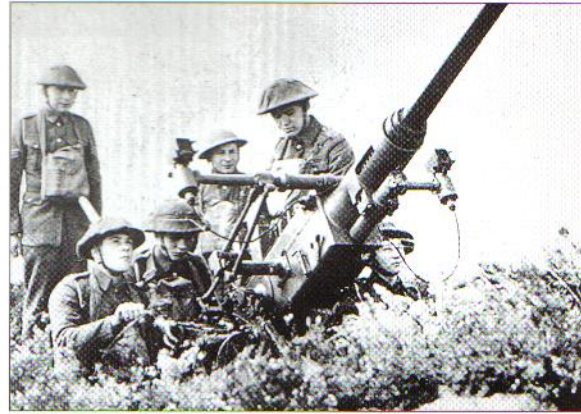
Divisional artillery normally consisted of three Royal Artillery field regiments (18 x 25-pdrs), an anti-tank regiment (48 x 6-pdrs or 17-pdrs), and a light anti-aircraft regiment (54 x 40mm). For instance, the artillery regiments of 15th (Scottish) Div in 1944 were 131st, 181st and 190th Field, 97th A/Tk and 119th LAA Regiments RA.

Although the infantry brigade numbers were originally consecutive, the fortunes of war led to transfers between divisions; e.g. in 1944 the 15th (Scottish) Inf Div comprised the 44th, 46th and 227th Infantry Brigades. The brigade structure was based on three infantry battalions, with an MMG company, anti-tank battery, RA field regiment, RE field company, RASC transport company, RAMC field ambulance, and a REME field workshop deployed by divisional HQ in support of the brigade. During major offensives independent tank brigades were attached to infantry divisions, with each of a tank regiment's three squadrons being attached to one infantry battalion.

The infantry battalion

The British infantry regiment – e.g., The King's Own Scottish Borderers – had a 'tribal' but not a 'tactical' identity. It had a continuous history, usually stretching back at least 250 years; an administrative depot which supplied men and services for the numbered battalions; and a set of uniform distinctions common to all battalions. Its individual numbered battalions served – usually separately – alongside battalions of other regiments within the tactical brigades. For example, in 1944, 44th Inf Bde of 15th (Scottish) Div consisted of 8th Bn Royal Scots, 6th Bn King's Own Scottish Borderers, and 6th Bn Royal Scots Fusiliers. An individual battalion might also display a special flash, or an arrangement of insignia, peculiar to itself. (See also 'Infantry' under 'Arms & Services' below; for detail of insignia practices, see also MAA 187, *British Battle Insignia (2): 1939–45*.)

The battalion was the smallest tactical unit, and was made up of battalion HQ, an HQ company, support company and four rifle companies. HQ Company included the HQ, a signals platoon and an administration platoon. Support Company contained support HQ, a 3in mortar platoon, carrier platoon, anti-tank platoon and pioneer platoon.



Somewhere on the Western Front in 1939/40, a 40mm Bofors anti-aircraft gun team await the Luftwaffe. The Royal Artillery had second priority to infantry units for new clothing and equipment, but the SD uniform worn here would soon be replaced by Battledress. The excellent automatic Bofors, which fired four-round clips of 2lb (.9kg) shells at 120 rounds per minute out to ranges of 10,800 yards, was issued to the light anti-aircraft regiments of infantry and armoured divisions on a lavish scale – nine troops each of six guns.

OPPOSITE Although the 25-pdr was mounted on a tank chassis to produce the Sexton SP gun, issued to one of the two field artillery regiments in each armoured division, the British also acquired the similar American M7 Priest SP 105mm howitzer. Photographed at Lion-sur-Mer just inland from Sword Beach on D-Day, 6 June 1944, a camouflaged Priest awaits a fire order in support of 3rd Div; under magnification its chalked loading notice for LCT 281 can still be seen. These US guns were supplied with full accessories – a US tanker's helmet can be seen on the track guard. The gunner wears the standard issue collarless wool shirt, BD trousers and white braces. (IWM 3502)



Training in the UK, a troop of 25-pdr guns and limbers of 52nd (Lowland) Div, hauled by Morris Quad artillery tractors. The white serial '43' on red-over-blue identifies the divisional artillery's second (intermediate) field regiment – in 52nd Div this was 79th Field Regt RA until June 1942 and 80th thereafter. The excellent 25-pdr, with a calibre of 3.45in (87.6mm) and a range of at least 11,000 yards (10,000m) – more than six miles – was the workhorse of the RA field regiments, and served in all theatres of war. It took less than two minutes to get into action and could fire at least five rounds per minute. In 1944–45 the Royal Artillery completely outclassed their German counterparts, and played an outstanding role in the destruction of the Wehrmacht in the West.

The armoured division

In 1940 most armies were experimenting with the composition of their new armoured formations, and most fielded 'tank heavy' divisions which suffered from the relative weakness of their integral infantry and artillery. The fledgling British 1st Armoured Div was supposed to have two armoured brigades each of three armoured regiments and one motorised infantry battalion, plus a support group with one infantry battalion and one each field, anti-tank and anti-aircraft artillery regiments. (It was in fact sent out to the BEF missing one of its tank regiments, all its infantry and field artillery, and with a single anti-tank/anti-aircraft regiment to support its very mixed complement of mostly light tanks.)

There was much change during the war to discover the most effective balance of arms within the division. The 1944 armoured division had a single armoured brigade of three regiments (each regiment having 78 tanks in an HQ and three sabre squadrons), and one mechanised ('motor') infantry battalion, usually from a Rifle regiment and equipped with US halftracks; a lorried infantry brigade of three battalions; an armoured recce regiment, using 'cruiser' tanks rather than armoured cars; an independent MMG company; and divisional artillery with two RA or RHA field regiments and one each anti-tank and light anti-aircraft regiments. Divisional troops also included the usual engineer, signals, medical, service and provost units.

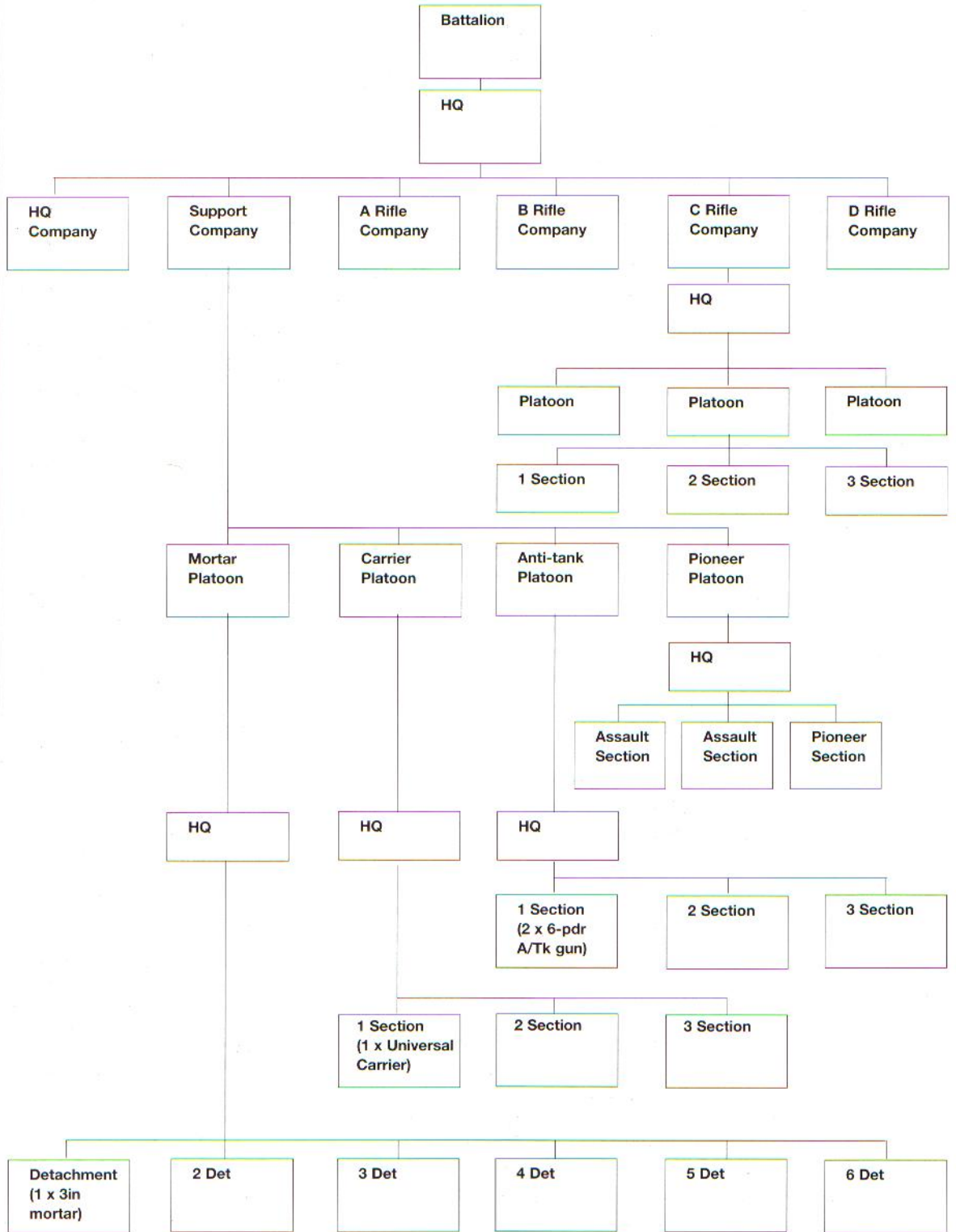
Within the armoured regiment each squadron had an HQ and administration troop plus five troops of three tanks each or, in some units, four troops of four tanks. Including tanks attached at HQ levels (Div HQ ten, Bde HQ 18) the total number of tanks available to the division was about 343.

ARMS & SERVICES

'Arms of the Service' was the collective title for all branches of the British Army, with the combatant branches being termed Arms and the administrative and supporting branches being the Services.



Simplified infantry unit structure, 1944



The Arms:

Household Cavalry The Life Guards and the Royal Horse Guards (the Blues), the two senior regiments of the British Army, were both mechanised early in the war, the last horses of the training regiment being withdrawn in 1941. The two regiments were merged to form two tactical armoured units – 1st and 2nd Household Cavalry Regiments. Although individual identities were nominally lost until just after the war, the 1st HCR was manned and staffed by the Life Guards and 2nd HCR by the Royal Horse Guards.

Royal Armoured Corps Formed in 1939 by amalgamation of the Royal Tank Corps and the armoured cavalry regiments of the line. The RTC's title was simultaneously changed to Royal Tank Regiment; confusingly, the 23 numbered battalion-sized units of the RTR (1st–12th and 40th–51st) were also termed 'regiments'. The RAC was supplemented during the war by the raising of six new armoured cavalry regiments, and by conversion of 56 infantry battalions to the armoured role; these latter were numbered as the 107th–163rd Regiments RAC (many retaining their infantry regimental cap badges on the black RAC beret). During the war 'armoured brigades' were assigned to armoured divisions; '(army) tank brigades' served independently under higher headquarters.

Royal Regiment of Artillery Also collectively retaining its historic title as a 'regiment', the RA was the largest of all the British Army's wartime organisations, providing numbered tactical regiments of field, medium, heavy, coastal, anti-tank and anti-aircraft artillery. 'Gunnery' also manned searchlights, provided survey regiments, and piloted light observation aircraft. During the war the RA's manning figures were boosted by the conversion of a number of former Yeomanry (TA cavalry) regiments and infantry battalions to the artillery role, as well as the secondment of 118,649 Home Guard and 57,000 ATS women. The Royal Horse Artillery were a component part of the RA, but retained their own title and insignia.

Corps of Royal Engineers Provided technical engineering support to the Army in the form of construction, demolition and other engineering tasks, employing skilled tradesmen; prewar officers were graduates of Cambridge University. The basic RE unit was the company, of which there were three basic types:

(1) Field and fortress – field companies being the engineer units of fighting formations, and fortress units serving in overseas garrisons.

(2) Lines of communication (L of C) – providing a wide range of technical services in the lines of communication and base areas.

(2) Transportation – providing personnel and equipment for the construction, maintenance and manning of railways, docks and waterways.

Royal Corps of Signals Responsible for all communications within the Army down to infantry battalion, tank regiment and artillery battery; below this level company signallers – additionally trained and qualified members of the unit – provided communications. Equipment included



Germany, December 1944:
gunners of 107th Medium Regt RA – formed from a Yeomanry unit, the South Nottinghamshire Hussars – ram home a 5.5in projectile. They wear GS caps and denim overalls; the soldier at right has acquired an American M4 knife, a useful item that had no equivalent in British service. The 5.5in (140mm) gun fired a 100lb (45kg) shell out to 16,200 yards (14,600m) – over nine miles.

In 1944 medium and heavy artillery was concentrated at army level. British 2nd Army had under command a number of Army Groups Royal Artillery (AGRAs), each normally consisting of one field regiment (25-pdrs), four medium regiments (5.5in guns) and one heavy regiment (7.2in howitzers and US 155mm guns). AGRAs were normally attached one per corps, but could be concentrated – with devastating effect. The 107th Medium Regt was part of 9 AGRA, which was a GHQ asset unattached to a particular corps. The 3rd Super-Heavy Regt RA also served with 9 AGRA, equipped with a mixture of US 8in guns and 240mm howitzers with ranges of 20 and 14 miles respectively; a second similarly equipped unit, 61 Field Regt RA, joined 21st Army Group at the end of 1944. (IWM B12913)

wireless, telephone, teleprinter and telegraph machines. The RCS were also responsible for communications between Allied armies and formations, as well as for supporting RAF units and air formation signals.

Infantry The infantry of the British Army consisted of five regiments of Foot Guards and 64 line regiments. The peacetime complement of a regiment was two Regular battalions (one home service and one foreign service), and between two and five Territorial Army battalions (see also under 'The infantry battalion' above). No new infantry regiments were formed during the war, but for most the number of battalions rose dramatically with the embodiment of TA battalions and the formation of new battalions. The Royal Fusiliers, for example, had 18 non-sequentially numbered battalions; while the Hertfordshire Regiment only held two battalions on its strength. The 'regimental system' instilled camaraderie and a sense of belonging; the soldier was taught a competitive pride in his own regiment's historic traditions, and this reinforced the loyalty felt towards his immediate comrades in forming the Tommy's fighting spirit.

Reconnaissance Corps Created in January 1941 to provide the reconnaissance regiments of infantry divisions, such regiments normally bearing the divisional number – exceptions being 51st (Highland) Div, whose recon regiment was the 2nd Derbyshire Yeomanry, and 50th Div, with the 61st Recon Regiment. The Recon Corps was the eyes and ears of the commanders, operating as mechanised units normally using armoured and scout cars at corps or infantry division level or light tanks if attached to an armoured unit; airborne recon units had armed jeeps. The Corps was absorbed into the RAC in January 1944.

Army Air Corps Formed in 1942, this was an administrative organisation responsible for the Glider Pilot Regiment, Parachute Regiment and, from 1944, the Special Air Service. The Corps did not have their own aircraft; their gliders, although flown by soldiers, were on charge to the RAF (even the light aircraft of the artillery Air Observation Posts were flown by Royal Artillery officers but maintained by a mix of Army and RAF personnel).

The Services:

Royal Army Chaplains Department

Royal Army Service Corps The RASC was responsible for the storage, transportation and issue of supplies as well as the vehicles used. The Director of Supplies & Transport was responsible for the two branches of the RASC, Supplies providing food, fuel, lubricants and other necessities, and Transport responsible for the supply of MT spares and the vehicles used by the Corps. Vehicles were maintained jointly by the RASC and REME.



Germany, January 1945: men of C Coy, 4/5th Royal Scots Fusiliers from 156th Bde, 52nd Div, advance past a Sherman and a Churchill tank, both of which have received a coat of whitewash as camouflage. The slow, heavily armoured Churchill was used by non-divisional independent tank brigades for infantry support work. It also provided the basis for various specialist AFVs of 79th Arm Div, including the fearsome Crocodile flamethrower tank. (IWM B13788)





Once the infantry had established a secure foothold on the far bank of a water obstacle the Royal Engineers would bridge the obstruction, allowing a rapid build-up of supporting units and heavy vehicles. This prefabricated steel girder Bailey bridge at Drierwalde, Germany, in early April 1945 is being used by a Humber scout car and a Bedford QL lorry. The bridge classification plate, to the right of the Humber, shows black '40' on a yellow disc, indicating the bridge's weight limit – the Bailey could take anything up to and including the 38.5 ton Churchill tank. The scout car is marked with the 2nd Army sign and white '179' over a bar on red-over-blue; this identifies 59th Heavy Regt RA of 3rd AGRA. The commander is wearing a khaki beret and the tan 'pixie suit' – cf Plate G2. (IWM BU3335)

OPPOSITE Germany, April 1945: an infantry section of the 7th Cameronians from 156th Bde, 52nd Div, use semi-rigid folding assault boats to cross the canal into the town of Rheine. These wood-and-canvas boats, which folded flat for transportation and storage, were provided and maintained by the Royal Engineers but generally operated by the infantry. By the final winter of the war the windproof camouflage smock was much in evidence among line infantry, worn over the wool BD uniform for added insulation – cf Plate G1. (IWM BU4135)

Royal Army Medical Corps Responsible for all of the medical services, including the Queen Alexandra's Imperial Military Nursing Service and attached Red Cross and Voluntary Aid Detachments.

Royal Army Ordnance Corps The RAOC procured and issued ordnance stores (armament, ammunition, fighting vehicles, optical and electrical kit, clothing, and general stores not provided for by the RASC), and prior to the formation of the REME was responsible for the maintenance and recovery of all equipment. The Corps also provided mobile field laundry units and officers' clothing shops.

Royal Electrical & Mechanical Engineers Formed in 1942, the REME embodied the RAOC and RASC vehicle workshops, removing all responsibility for major vehicle maintenance from those Corps. It provided a new technical service which was responsible for the maintenance and repair of all of the Army's increasing array of technical equipment both mechanical and electrical, from small arms to radio equipment.

Royal Army Pay Corps

Royal Army Veterinary Corps

Army Educational Corps Conscription brought in men with a diverse range of educational abilities; the AEC provided further vocational and educational training. Further education was voluntary but soldiers were encouraged to attend instruction and to sit the Army Certificate of Education.

Army Dental Corps As well as providing dental care, specialist officers also undertook maxilo-facial injury operations, which included pioneering work in the field of reconstructive surgery.

Pioneer Corps Formed in 1939 as the Auxiliary Military Pioneer Corps and renamed Pioneer Corps in 1940, the Corps were considered a combatant arm. Essentially a pool of disciplined labour, the PC provided manpower for a multitude of manual tasks including graves registration, construction and ordnance disposal.

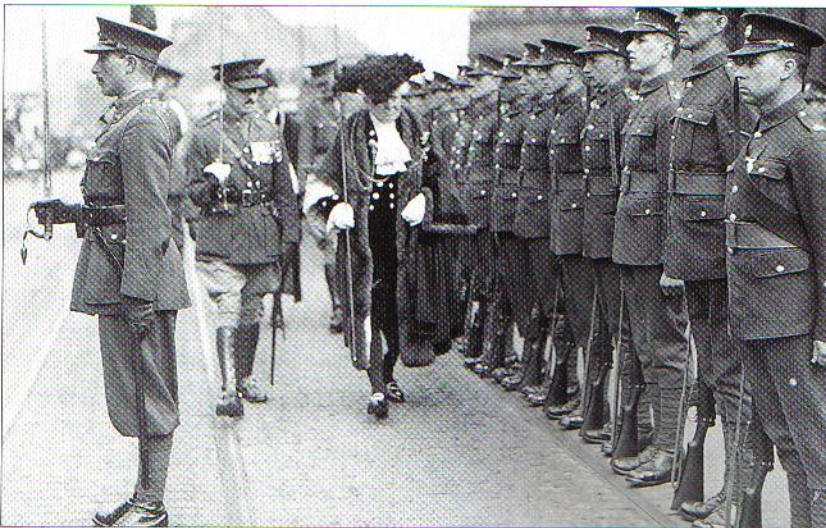
Intelligence Corps The CMP Field Intelligence Wing was absorbed into the new Corps upon its formation in 1940. The 'Int Corps' was responsible for all types of intelligence-gathering, collating and analysing information in co-operation with divisional and other intelligence staff, prisoner interrogation, security and psychological warfare.

Army Catering Corps Before the formation of the ACC in 1941 responsibility for provision of food had fallen to the RASC, the actual cooking being done by regimental personnel additionally trained as cooks; many of these trained ranks were transferred into the new Corps, which then became responsible for the provision of catering services and training.

Army Physical Training Corps Known as the Army Physical Training Staff before 1940. As well as providing for sporting activities and training the APTC ensured that the British Army was fit to fight. PTIs also gave specialist training for close combat and hand-to-hand fighting, as well as working in the rehabilitation of convalescents.

Corps of Military Police Day-to-day policing and maintenance of discipline was provided by the CMP, who additionally undertook other

The last of the peacetime army: civic dignitaries inspect a well-turned-out Territorial detachment of the Northumberland Fusiliers. The 1902 Service Dress, retailored after World War I, provided a smart, well-fitting uniform suited to ceremonial duties of Plate A3; it fell short of the soldier's needs on active service. The officer at left wears the popular Breeches, Knickerbocker, while the escorting officer wears riding breeches and knee boots; both would rapidly fall out of general use following the outbreak of war.



duties including traffic control, route reconnaissance, convoy escort, prisoner handling, and the protection of vulnerable points at home stations and other locations away from front line areas.

Military Provost Staff Corps Military prisons and corrective centres were manned by members of the MPSC.

Queen Alexandra's Imperial Military Nursing Service Under the direction of the RAMC the QAIMNS provided Army nurses in all home and overseas stations. Nurses had enjoyed officer status since 1904 but received full commissions only in 1941. In time of war the QAIMNS were supported by their reserves, the QAIMNS(R), and the Territorial Army Nursing Service.

Auxiliary Territorial Service Formed in 1938, with the intention of using women to fill non-combatant posts thus releasing otherwise fit men for combat, the Service grew to become an indispensable organisation. The ATS provided women in over 114 different specialisations, from cooks and clerks, through drivers of many types of transport, to AA 'height takers' serving with the RA – a combat arm.

General Service Corps Formed in 1942, the GSC was responsible for the reception and training of recruits prior to their posting to field units. Six weeks of elementary military training including foot drill, the use of small arms, anti-gas drills and plenty of physical training were given to all new entrants; numerous practical and physical tests were supervised prior to selection for specific arms or services. (The Royal Arms insignia of the GSC were also worn when in uniform by a number of personnel performing classified duties who required military status but a degree of anonymity.)

UNIFORMS & EQUIPMENT

Between 1902 and 1939 the standard uniform of the British Army was the khaki wool Service Dress, introduced by Army Orders 10, 40 and 251 of 1902. The SD uniform served the British soldier well; but by the early 1930s, with the increasing moves towards mechanisation

and modernisation, it was thought that a uniform better suited to field use rather than the parade ground could be developed. Trials of a new Field Service Dress uniform and webbing equipment took place in the early 1930s. The uniform did not differ radically from the current SD, but improvements included bag-type pockets, open collar facings, and darkened buttons that did not need polishing. A new set of web equipment

(continued on page 33)

1: Militiaman, United Kingdom, 1939

2: Corporal, Household Cavalry; UK, 1939

3: L/Cpl, 1st Bn, Royal Berkshire Regt; UK, 1939



1: Pte, 1st Bn, Royal West Kent Regt; France, spring 1940

2: Pte, 1st Bn, Green Howards; Norway, spring 1940

3: Trooper, 4th RTR; HQ BEF, France, 1939/40



1: Pte, No 3 Commando; Dieppe raid, August 1942

2: Pte, 2nd Bn, Parachute Regt; UK, 1942

3: Pte, 2nd Bn, Gloucestershire Regt;
'hospital blues', 1940



- 1: Sgt despatch rider, 43rd Div Signals; UK, 1943
2: Infantryman, 52nd Div; UK, 1943
3: Sgt, Traffic Control Wing, CMP; UK, 1943



1 & 2: Fusilier, 6th Bn, Royal Welch Fusiliers, 53rd Div; Normandy, June/August 1944
3: Gen Montgomery, C-in-C Allied Land Forces; Normandy, summer 1944



- 1: Sgt photographer, AFPU, 1st Abn Div; Holland, autumn 1944
2: Pte, 12th Bn, Devonshire Regt, 6th Abn Div; UK, May 1944
3: Sapper, 244 Fld Coy RE, 53rd Div; Normandy, July 1944



- 1: Piper, 4th Bn, KOSB, 52nd Div; Holland, December 1944
2: Tank crewman, 5th RTR, 7th Armd Div; Holland, December 1944
3: LtCol, 1st Bn, Royal Norfolk Regt, 3rd Div; Germany, early 1945



1: Capt, 5th Bn, Seaforth Highlanders, 51st Div; Belgium, January 1945

2: Gunner, Royal Artillery, I Corps; UK, VE-Day

3: Pte, 7th Bn, Seaforth Highlanders, 15th Div; Germany, spring 1945



was also produced for consideration. Initial trial reports were favourable, but due to tight budgetary constraints it was to be a few more years before any further serious consideration of uniform or equipment reforms.

In 1938, with war looming, the Field Service Dress re-appeared but tailored in a lighter denim fabric. At the same time an innovative pattern of field service 'overalls' also appeared, which had undergone some very limited provisional trials in 1937. The design of this latter owed much to outdoor leisurewear of the period, particularly the short blouse-style jacket and baggy trousers popular with skiers throughout Europe. This uniform included a Field Service 'sidecap' rather than the bush-type hat of the earlier trials uniform; this FS cap followed an old design which had first seen widespread issue to the British Army during the late Victorian period. A series of comparison trials showed in favour of the design of the 'overalls', considered to be more comfortable and allowing greater freedom of movement; but it was decided that the denim fabric used in both experimental uniforms was too light for prolonged field use and that a heavier, warmer and harder-wearing wool serge material should be considered.

Battledress, Serge & Overalls, Denim

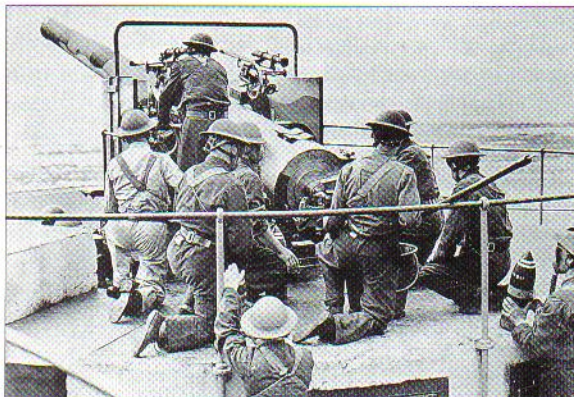
Careful consideration of the individual merits of the trials uniforms resulted in the adoption of the 'overalls' pattern, manufactured in khaki wool serge fabric, as the 'Battledress, Serge' (BD). The original denim suit was also retained, but only as a fatigue dress. The style of the BD made it easier to maintain; there were no brass buttons to polish, and its loose and comfortable fit offered greater ease of movement when crouching, crawling or negotiating obstacles than was always the case with the close-tailored SD of the 1930s. Any misgivings seem to have been limited to those old soldiers and NCOs who had grown up with the tradition of smart, well-turned-out men with shiny brasses, who could out-polish and out-drill any enemy they would ever encounter. At this same time the new web equipment was also accepted into service as the Pattern 37. Thus Battledress became the standard uniform of the British soldier of all arms, both Officer and Other Rank, during World War II.

While the original design of BD was acceptable it was expensive to make and used an unnecessary quantity of fabric. The outbreak of war in 1939 presented the Army with a logistical nightmare. Army manpower had reached 897,000 by September 1939, a good majority being clothed in Service Dress. It was projected that the size of the Army would more than double by the following year, with a need for nearly a million new uniforms for the influx of recruits, plus sufficient to re-equip those already in service. Priority for issue of BD went to the newly conscripted Militia and the Supplementary Reserve, who unlike the Regular Army and – to a lesser extent – the TA,



The .303in Bren light machine gun, introduced into service in August 1938, dramatically increased the firepower of the infantry section. On exercise with a Mk I Bren mounted on its 'tripod, ground', these Riflemen of the King's Royal Rifle Corps still wear wool SD and 1908 web equipment; this was in the process of being replaced by Battledress and 1937 webbing, since the 08 set provided no means of accommodating the 30-round Bren magazines which all members of the section now had to carry. (IWM 2/20)

On the eve of war the crew of a Royal Artillery 6in coastal gun prepare to deal with any enemy vessels that may slip through the Navy's defences. These gunners wear the service respirator, two-piece brown denim worksuit (see Plate A1), Mk I* helmet and rubber-soled canvas PT shoes, a precaution against sparks when handling the powder charges.





Off the Norwegian coast, 1940: Lt Lee Willson, the adjutant of the NWEF PR unit, wears the new Battledress, Serge – an issue OR's blouse, worn open at the neck over the officer's shirt and tie but not retailored. His Mk II steel helmet apparently has the AFPU badge painted on the front (cf. Plate F3); he wears a Mk VI respirator haversack and Pattern 37 webbing, with a second pattern long strap tanker's holster (with cartridge loops) and the officer's valise on the right hip. Officers were authorised brown ankle boots, but many used the issue black 'ammunition' type. (IWM N386)

had no kit at all. Typically the Regular units were among the last to be issued BD, with the exception of the units of the BEF, who were naturally considered a priority.

Development of Battledress

The need to reduce the amount of fabric and the time taken to produce a set of BD led to the progressive introduction of a number of modifications. The first noteworthy changes to the original Battledress, Serge, resulted in the 1940 pattern. Visually this differed little from the original design. The blouse was cut to a closer fit, as were the trousers, and the collar received an added liner of khaki drill material to reduce the chafing produced by the rough serge. A new toothed prong type replaced the old friction waist tab buckle, which was prone to slipping, although old stocks were to be used up.

The next major change of pattern occurred in 1942, and altered the appearance of BD quite noticeably. The pocket pleats and fly front to the blouse and the belt loops to the trousers were deleted (the trousers had already lost their buttoning ankle tabs in 1941). The trousers also received an added section of shirting material across the inside of the back section, giving added insulation to the kidney area.

Among collectors the pattern of BD introduced in 1942 is known as the 'utility' or 'austerity' pattern, but is commonly referred to as the '1940 pattern', while the original Battledress, Serge, and 1940 patterns are both called '37 pattern' BD. These terms have undoubtedly been adopted by collectors due to the wartime manufacturers' labelling system,

which failed to keep abreast of pattern changes: most post-1942 production utility garments bear '1940 pattern' labels, with only a very few manufacturers adding '1942 pattern' to their label designations. This apparent lack of consistency can easily be put into context. It was only the manufacturers who needed to be aware of pattern changes; once the BD arrived at the quartermaster's store only its size was of relevance. There was no requirement for manufacturers to provide specific pattern designations on the labels; regulations required only the broad arrow, garment type, size, manufacturer and date. The existing labels held in bulk by manufacturers at the time of pattern changes were therefore used up to avoid the unnecessary cost of producing new ones.

Widespread confusion can be caused by labels on British garments (for example, the infamous 'Coats, Sheepskin' labelled as kapok, and 'Coats, Kapok' labelled as sheepskin). The pattern dates only became important when the garments became collectors' pieces, and those who collected them searched for designations and relevant time-scales for

their issue and use. Wartime photographs show a total disregard for pattern variations, with a mix of trouser and blouse types worn within units (this often meant modifying the button arrangement on the rear of the trousers if a mismatched pattern of blouse was to be buttoned to them). If it fitted, it was issued – though needless to say it was often issued whether it fitted or not...

1940 pattern BD

Blouse Of a loose cut, it had a central back seam with no side seams, the rear left section continuing around to form the front left. The front had a fly flap to conceal the buttons which, together with a double hook-and-eye attachment at the collar, allowed the front to be fastened to the neck. A patch pocket on each breast had a central box pleat and a pocket flap with concealed button. At the right front waistband a small belt tab and new pattern toothed buckle allowed for fine adjustment of fit. At the rear an internal flap of khaki drill material had three concealed buttonholes, which married up with the buttons on the trouser rear. At each shoulder an epaulette was let into the seam and fastened at its point by a revolving shank button. The stand-and-fall collar could be worn open; to prevent chafing the previously exposed serge was covered by a band of softer drill fabric. Internally a hanging pocket of drill fabric was positioned on each breast; these could only be accessed by unbuttoning the front upper part of the blouse.

Trousers These were identical to the original BD, Serge, comfortably cut and with four belt loops at the waistband; these had a button at the top of each loop, enabling belt equipment to be worn without the need to remove items in order to thread the belt through the loops. The rear loops were set on asymmetrically to avoid the single pocket on the rear right. Three buttons on the rear waistband corresponded with the buttonholes inside the blouse and allowed the two garments to be fastened together. On the front left thigh there was a large map pocket, closed with a flap and concealed button. A smaller field-dressing pocket was positioned on the upper right side; this was the main feature that differentiated between the 1940 pattern and the prewar Serge trousers – on the 1940 pattern the pocket had a box pleat and was closed by a revolving shank button. The lower leg cuffs retained the gathering tabs and buttons for use when wearing web anklets (deleted in 1941).

1942 pattern 'austerity' BD

Blouse All buttons on the front, pockets and cuffs were now exposed, with no concealing fly. The pockets lost their central box pleat, and at the rear the internal drill flap was abandoned in favour of two buttonholes placed directly in the waistband. All buttons were of plastic four-hole type.



UK, 1940: a downed Junkers Ju88 bomber is guarded by infantrymen wearing the double-breasted greatcoat. This was produced in both 1939 pattern, with a central rear vent at the bottom of the skirt, and 1940 pattern, which restored the long rear expansion pleat of the prewar model.

Table 1: Clothing production (in thousands)

	Sept-Dec				Jan-June	
	1939	1940	1941	1942	1943	1944
BD blouses & trousers	2,656	17,550	16,976	9,566	10,325	1,333
Greatcoats	1,005	3,681	3,056	1,004	1,791	312
Shirts & vests	2,887	16,558	8,953	7,582	9,387	3,979
Ammo boots (pairs)	1,693	11,593	8,032	6,993	5,281	514

Trousers Rear and map pocket buttonholes now passed straight through the flaps; and the dressing pocket lost its revolving shank button in favour of the universal four-hole plastic type. Ankle tabs were never fitted on this pattern. A section of shirting fabric was added across the rear upper interior. All belt loops were deleted.

Checklist of BD development:

- 1937 Pre-production trials of Battledress.
- 1938, *October* Conscripted Militiamen issued BD.
- 1939, *May* Blouse pockets raised 1/2in.
- 1939, *December* Authorisation for buttons to be sewn by hand or machine.
- 1940, *June* BD recut to reduce material usage. Button added to dressing pocket; drill fabric lining added to neck; toothed waist buckle introduced. Designation changed to '1940 pattern'.
- 1941, *June* Trouser cuff tabs deleted.
- 1942, *June* Revised pattern 'austerity BD' authorised. Pocket pleats deleted, all buttons exposed.
- 1942, *July* Four-hole plastic buttons authorised for all positions.
- 1943, *January* Right-hand internal breast pocket deleted.

* * *

While the BD uniform was the standard for all troops, much specialised clothing was also on issue. A whole range of cold weather clothing, garments modified or designed for paratroops and Commandos, as well as a range of windproof camouflage over-smocks and over-trousers were just some of the items available. The range is too great to cover comprehensively in this work, although representative examples appear in the photographs and colour plates; interested readers are referred to the works in the Bibliography.

A single-breasted **greatcoat** was in use at the beginning of the war; this had a bellows pleat to the rear enabling it to be worn over basic equipment. It was soon replaced by the double-breasted 1939 pattern without the rear pleat. The new design was unsatisfactory for wear over equipment or with additional clothing layers, and was soon replaced in turn by the 1940 pattern, which restored the bellows expansion pleat.

The collarless, half-fronted wool **shirt** was standard issue to Other Ranks; officers wore privately purchased shirts with collar and tie. From 1942 the American OD wool shirt was popular with any troops who could acquire it, being far superior to the British issue. By the end of 1944 a new shirt was being issued; similar in material and colour to the old type, this had an attached collar and could be worn with a green cotton tie, thus giving the Tommy a smarter appearance for walking-out.

The contrast between the 'hairy BD'-clad Tommy, and the smooth and exceptionally smart Class A uniform of the GI, was always a point of contention, leading to many a bar-room brawl when local ladies were found to prefer Class As. This situation was partially alleviated by the issue of collar-attached shirts and ties (and by the strictly unofficial private tailoring of sets of 'best BD' – open and faced collars and flared

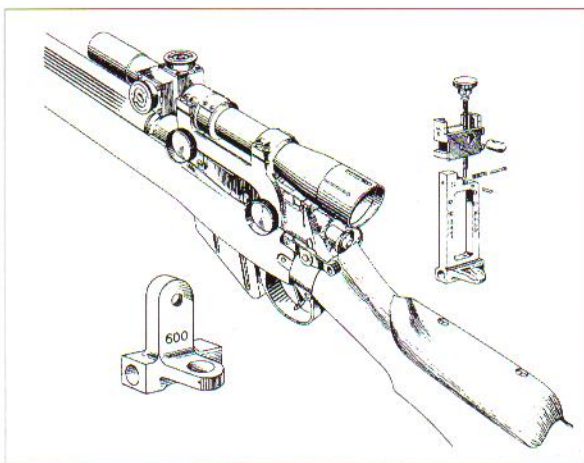


Normandy, June 1944: shirt-sleeved pioneers, wearing a mixture of FS and GS caps, manhandle cased 5.5in rounds over a conveyor on 'Mullberry B', the British prefabricated harbour established off Arromanches. The build-up of forces in France required a huge input of every kind of equipment and stores. By the end of August 60 per cent of the matériel in Normandy had come ashore straight across the beaches via LSTs and amphibious DUKWs, with another 20 per cent through the two Mulberry harbours and an equal amount through Cherbourg and smaller ports. (IWM BU703)

OPPOSITE 'Telescope, Sighting, No.32 Mk III'. Detail of No.4 rifle sights: the No.32 scope, and for comparison (right) exploded view of a standard backsight Mk I graduated from 200 to 13,000 yards (also produced in a stamped steel pattern designated the Mk II); and (left) the simplified Mk III flip-type 'battle sight' ranged at 300 and 600 yards – this was produced as a stopgap due to shortages of the Mks I and II sights.



In January 1945 men of the 6th Airborne Div were issued snow camouflage clothing for use in the Ardennes. This sniper wears no web equipment or steel helmet with his camouflage suit; his weapon is the No.4(T) with No.32 telescopic sight and the American 1907 pattern leather sling. (IWM B13676)



trousers were popular by 1945 – see Plate H2).

Headgear originally consisted of the universal pattern khaki Field Service cap; for off-duty wear this could later be supplemented by the private purchase of FS caps in Regimental and Corps colour combinations – often strikingly handsome. This could not be said of the beret-like Cap, General Service, which officially replaced the FS from September 1943. With a large bag-like crown set above a broad browband, this was not well received and was dubbed the ‘Cap, Ridiculous’. True berets (which could be made smart and dashing with a little care) were also issued to certain units. The best-known were the black of

the Royal Armoured Corps, the green of the Commandos, the maroon of Airborne Forces, and the khaki of the Recce Corps and Motor Battalions – the latter often being procured in preference to the GS cap by any who could get away with it, particularly junior officers.

When the Militia and the Territorial Army were called up in 1939 it was decided that they would be equipped, as far as possible, with the new BD uniform, 37 web equipment and the Mk II helmet. At this time some of the Regular units were still wearing SD, 08 web equipment and the Brodie-shelled Mk I* helmet – basically the World War I shell with the improved lining and strap of the Mk II. Although the BEF did receive the new BD and 37 web equipment, in general the Regular units retained the Mk I* helmet, which was deemed adequate at a time when all new production Mk II helmets were needed by the rapidly expanding Civil Defence services (ARP and Fire services) and the Militia, who would otherwise have had no protective headgear. Withdrawing the Mk I* from the Army for issue to the new services and replacing it with the Mk II would have been a huge undertaking.

It was realised that the lateral protection offered by the Mk II was limited, and a new ‘turtle-shaped’ Mk III pattern was designed, giving greater protection to the neck and sides of



Snipers frequently wore the three-tone windproof smock or the Denison, often lavishly adorned with net face veils and camouflage scrim material. The use of captured enemy clothing was frowned upon; this British sniper is taking a huge risk by wearing a Waffen-SS smock (a first pattern garment in 'summer oakleaf' camouflage). Snipers often received short shrift from the enemy if captured; this man presumably felt that the use of enemy clothing would make little difference – but he is in considerable danger of being shot in error by his own side.

the head. The Mk III was issued to assault troops for D-Day, but had by no means replaced the Mk II before the end of the war. The Mk III did not meet the needs of all the arms or services, and a number of other types were developed for specialist use. The Airborne Forces used a number of patterns culminating in the third model; the bowl-shaped, rimless steel shell of this type was also used with differing liner and strapping arrangements for RAC armoured vehicle crews and for motorcycle despatch riders.

The ankle-length black leather 'ammunition boot' was the standard **footwear**. It had leather heels and soles with steel hobnails and 'horseshoe' reinforcement plates. Highly polished in barracks, the boot was given a liberal coating of dubbin in the field; this greasy preparation served to waterproof the boot to some degree. For specialist troops and varied environments other footwear was available, ranging from rubber wellingtons and insulated cold weather ski-march boots to canvas and rubber PT shoes. Officers initially wore calf-length field boots with Service Dress, which were almost totally replaced by brown or black ankle boots worn with BD and web anklets after the outbreak of war.

EQUIPMENT

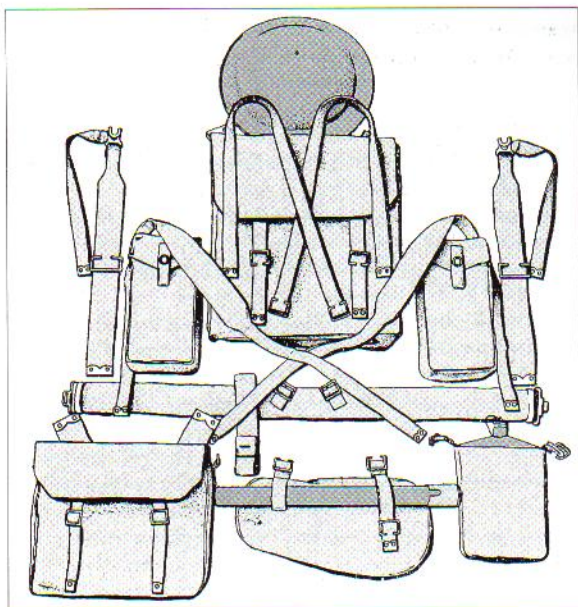
The weapons chosen during the 1930s were to have a fundamental effect on the design of the soldier's new kit, none more so than the Czech ZB30 light machine gun, a modification of which was eventually accepted into British service as the .303in 'Bren LMG'. The new LMG was eventually to be issued at the rate of one per infantry section, and – unlike its predecessor the Lewis – its use was to be taught to every member of the section. Provision had to be made for carrying sufficient ammunition to keep this 'thirsty' weapon in action, and this led to the development of a new set of web equipment. The concept was that a basic set of webbing and various interchangeable components – such as a choice of ammunition pouches or cartridge carriers – would allow for systematic adaptation to suit the needs of most arms and services; additional items such as holsters and compass pouches allowed for its use by officers. The emphasis was on adaptability at infantry section and platoon level, where it was essential that the set be able to carry ammunition for the new infantry weapons, including the LMG, Boyes 5.5in anti-tank rifle and 2in mortar.

Other factors taken into consideration included the planned mechanisation of the army, distribution of equipment contents and weight, and keeping to a minimum the number of items hanging below the waistbelt to cause hindrance, particularly for mechanised troops. The old 08 pattern large pack was retained as part of the new equipment; many of the other components were developed from interwar and experimental equipment such as the P19, P25, P28 and No.3 web equipment sets and the World War I officer's web set produced commercially by Mills. It was intended that the large pack be carried in unit transport except when in full marching order, when it replaced the small pack on the back, the latter being moved to the left hip. The new web set was sealed on 8 June 1938 (List of Changes B1623 Equipment, Web, 1937 Pattern), and began large-scale issue in 1939.

Table 2: Comparisons of wartime weapons production

	1940	1943
Tanks	1,397	7,476
Other AFVs	6,044	24,375
Artillery	968	2,962
Hvy AA arty	908	1,303
Lt AA arty	1,082	5,570
A/Tk arty	1,534	13,049
Tank MGs	2,907	19,475
Bren LMGs & Vickers MMGs	30,200	81,000
Mortars	6,500	14,600
A/Tk rifles & PIAT	14,000	107,900
.303in rifles	80,800	910,100
9mm SMGs	—	1,572,400

Note: These figures do not include production in the USA or Commonwealth countries. Infantry weapons figures include production for all three services. It should be borne in mind that while production of some items – e.g. the No.4 rifle – benefited from simplified techniques, others – e.g. tanks and AT guns – became heavier and more complex. A direct comparison of figures is thus difficult.



1937 Pattern Web Equipment Set, Marching Order: waistbelt, bayonet frog, two basic pouches, two braces, haversack, entrenching tool carrier, water bottle carrier, large pack, two shoulder straps (L-straps), two support straps for attaching helmet to the large pack.

As initially issued the new equipment had no entrenching tool; the old Implement, Intrenching, 1908 had been declared obsolete in 1923. A pattern not dissimilar to the types in use in France, Germany and many other nations was introduced as the Implement, Intrenching, 1939 Pattern. The new tool was not well liked as it hung down well below the waist and obstructed the legs, particularly of shorter soldiers. The problem was remedied in 1941 by reintroducing the 08 tool, in a redesigned carrier and newly listed as the Implement, Intrenching, Pattern 1937. (This is a good example of how pattern dates can cause confusion – a 1908 pattern tool reintroduced in 1941 and then designated Pattern 1937.) By the closing stages of the war a new helve was being issued with the entrenching tool; this had a fitting for the No.4 rifle's spike bayonet, allowing its use as a mine probe or offensive weapon.

SELECT BIBLIOGRAPHY

- Bellis, Malcolm, A., *Brigades of the British Army 1939–45* (private publication, 1986)
- Bellis, Malcolm A., *Divisions of the British Army 1939–45* (private publication, 1986)
- Bouchery, Jean, *The British Soldier, From D-Day to VE-Day, Vol.1* (1998); *Vol.2* (1999)
- Brayley, Martin J. & Ingram, Richard, *The World War II Tommy, British Army Uniforms European Theatre 1939–45 in Colour Photographs* (1998)
- Brayley, Martin J., *Militaria Magazine*, various articles
- Davis, Brian L., *British Army Uniforms & Insignia of World War II* (1983)
- Forty, George, *British Army Handbook* (1998)
- Hodges, Peter, *British Military Markings 1939–45* (1971)
- War Office military training pamphlets, various
- Ward, Arthur, 'The British Army, 1940', *Military Illustrated* No.28 (September 1990)

THE PLATES

A1: Militiaman, UK, 1939

A young Militiaman, recently called to the colours with the 2nd Battalion, Middlesex Regiment, receives instruction on the .303in SMLE 'Rifle No.1', as issued to his father's generation during 1914-18 and in this instance retaining a 1914 pattern leather sling. He wears the pre-war two-piece denim working dress fastened with small-size brass General Service buttons; this was to be replaced gradually by the new denim 'overalls' as old stocks were used up. This suit is straight off the QM's shelf, but after several washes the tobacco brown colour faded to a pinker shade. Since there was still some use of other older-manufacture suits made up from off-white cloth the variety of shades in a working party could be quite diverse.

The 2nd Middlesex moved to France in September 1939 as part of the BEF; after the retreat from Dunkirk they served with 3rd Infantry Division, and returned to France on D-Day as the divisional medium machine gun battalion, fighting through until the end of hostilities.

A2: Corporal, Household Cavalry; UK, 1939

The formation of the Royal Armoured Corps in 1939 saw the absorption of the cavalry into the new mechanised arm. The only cavalry officially retaining horses after this time in the UK were the two Household Cavalry regiments, and the Royal Scots Greys, although horsed cavalry still served in the Middle East and India. This corporal of the Blues wears mounted 1902 SD uniform with 1903 pattern bandolier equipment and Mk I* helmet; his long puttees are worn reversed, with the securing tapes at the ankle, in mounted troops' fashion. Regulation spurs are worn over the 'ammunition boots'. Gas was considered a real threat during the early stages of the war, hence both horse and rider undergo anti-gas drills. The Mk VI respirator haversack is worn at the 'alert', high on the chest, with the rolled anti-gas cape across the top of the back. Horse tack consists of the 1902 bridle with plain halter, 1912 saddle and 1908 cavalry sword in its leather frog.

Used operationally in Palestine, the regiments' horses were ultimately given up in 1941 when mechanisation was completed. As an armoured car regiment 2nd HCR initially served with the Guards Armoured Division in 1942; as VIII Corps troops the unit moved to France in June 1944, transferring in August to XXX Corps, with which they served until VE-Day.

A3: Lance-Corporal, 1st Bn, Royal Berkshire Regiment; UK, 1939

Sharply tailored, well pressed and with gleaming brasses, the Other Ranks' interwar Service Dress was surprisingly smart considering its origins in the shapeless and loose-fitting 1902 pattern SD worn in the trenches of World War I. Armed with an SMLE No.1 Mk III* rifle with whitened buff leather sling and 1907 Bayonet No.1, this Regular of the 1st Royal Berkshires wears a whitened Slade Wallace buff leather belt with polished brass fittings and P1907 bayonet scabbard in a buff frog. The good conduct badges (chevrons) on this lance-corporal's left forearm acknowledge twelve years' service - these badges were worn only by soldiers below the rank of corporal. The ribbon of the India General Service medal marks this battalion's recent return from that posting.

The battalion fought in France in 6th Inf Bde, 2nd Inf Div, and later returned to India in mid-1943, seeing long service in Burma.

B1: Private, 1st Bn, Royal West Kent Regiment; France, spring 1940

Initial issues of the new Battledress were given, as priority, to the BEF before its departure to France, although a small number of BEF service troops still wore the SD uniform. This Regular of the 1st Royal West Kents wears the new Battledress, Serge. The inverted dark blue triangle on both sleeves and the dark blue/light blue/dark blue helmet flash are one example of only very few unit insignia to be worn in the BEF, most BD being bare of anything other than rank badges. The 1937 equipment is finished with the lighter green shade of 'blanco' (No. 97 Khaki Green - No. 3 was



Like their fathers during the Great War, cheerful Tommies of the BEF once again meet up with the *poilus*. These bandsmen of the Essex Regt wear SD and O8 web equipment; note that they still sport brass collar badges and shoulder titles - cf Plate A3. With the change to Battledress the khaki SD cap was replaced by the FS cap for ranks below warrant officer; exceptions were the Guards and the Military Police.

darker); the anti-gas respirator is worn in the alert position on the chest; the anti-gas cape is rolled and placed on top of the small pack; and a 50-round bandolier of .303in ammunition is worn slung. Note the 1939 pattern entrenching tool. The helmet is the Mk I*, which was gradually being replaced by the Mk II. Typical for the period, the rifle is the SMLE Mk III*.

The 1st Royal West Kents fought in France with 10th Bde, 4th Div; the battalion were later to serve with 12th Bde of that division in North Africa, Italy and, finally, Greece.

B2: Private, 1st Bn, Green Howards; Norway, 1940

Troops embarking for Norway were issued 'Coats, Sheepskin', rubber boots, white naval-type heavy wool jerseys and sheepskin caps, as well as lightweight snow camouflage: in mid-April Norway was still bitterly cold and the landscape snowbound. This Bren 'No.1' observes the skies over Otta, alert to the return of German dive-bombers fronting the enemy's push north from Oslo (Otta was to be awarded to the Green Howards as a battle honour for a brief but spirited action on 28 April). The sheepskin coat was bulky and cumbersome; unsuited to mobile activities, it was nevertheless welcomed by those on static duties. The 'tripod, ground' issued with the Mk I Bren doubled up as an anti-aircraft mount, using a front leg extension normally stored inside the main tripod, which was added to the mounting pivot using a 'bayonet' catch; in emergencies an SMLE rifle could be used instead of the leg extension, fixed to the tripod using the bayonet boss. In the AA role the carrying handle was normally turned out at right angles to the barrel and the bipod swung forward.

This battalion was only in Norway for a few weeks as part of 15th Inf Bde, NWEF. As part of 5th Inf Div – the most travelled British formation of the whole war – the brigade would later see service in France, Madagascar, India, Iraq, Persia, Syria, Egypt, Sicily, and for many hard months in Italy.

B3: Trooper, 4th Royal Tank Regiment; HQ BEF, France, 1939

The SD uniform that had fulfilled the needs of the British

Tommy for both field and ceremonial duties fell far short of what was required by armoured troops. The two-piece Royal Tank Corps black working dress was introduced in 1935; of a very similar design to the BD uniform that was eventually to replace it, it was only issued to armoured vehicle crews. In November 1939 this regiment – stationed near Arras, and equipped with the flimsy little machine gun-armed Matilda Mk I – had yet to receive the new BD; this trooper wears the 1935 uniform, with a first pattern (long strap) tanker's holster, identified by its lack of cartridge loops, for his .38in Webley Revolver No.1 Mk VI. The long, easily-snagged thigh strap of the holster proved a life-threatening hazard during emergency evacuation of an AFV, and was eventually removed to provide a belt holster.

The 4th Royal Tanks, reinforced at the last moment by 7th RTR to form 1st Army Tank Bde, fought heroically against great odds in spring 1940. The regiment was later captured at Tobruk in June 1942 while operating Valentine tanks with 32nd Tank Bde in support of the South African garrison.

C1: Private, No.3 Commando; Dieppe raid, August 1942

Despite the nature of Commando operations, such 'irregular' units were frequently denied first priority for issue of new equipment, and little was produced specifically for their use. One of the few exceptions were the rubber-soled boots issued to Commandos; the leather upper was identical to the 'ammo boot' but it had a heavily cleated rubber 'Commando' sole screwed in place. This Bren gunner wears the Commando boots with wool serge BD blouse and denim trousers – an unusual combination. His dishevelled appearance bears testimony to the ferocity of the fighting around Dieppe during the 'reconnaissance in force', this man being one of the lucky survivors who returned to England. His main weapon is a Bren Mk I, modified by the addition of the adaptor for the 100-round anti-aircraft drum magazine for use with the Motley AA mounting.

A tired and harassed-looking Military Policeman attempts to sort out traffic congestion in the restricted confines of the Normandy beachhead; note the jeep rigged for casualty evacuation. By the end of the battle of Normandy on 31 August there would be 2,000,000 Allied troops, 500,000 vehicles and 3,000,000 tons of stores ashore in northern France. In the same period British 2nd Army would suffer some 64,000 men dead, wounded and missing.



C2: Private, 2nd Bn, Parachute Regiment; UK, 1942

Unlike the Commandos, some greater effort went into developing special uniform and equipment for the Airborne Forces. Oversmocks, the Denison smock, parachutist's trousers, helmets and even special respirator haversacks were produced, and airborne units were also among the first to receive the Sten SMG and the No.4 rifle. Over his Battledress, Serge, and his equipment this paratrooper wears the green denim 1940 pattern parachutist's oversmock, in widespread use by 1941; it was replaced by a similar sleeveless pattern (designated the 'Jacket, Parachutist's, 1942 pattern') in 1943. The oversmock served to prevent snagging of parachute shroud lines on web equipment, although since the MkII Sten was worn in this fashion during a drop – 'broken down' and tucked into the Mk X parachute harness – one imagines this tended to defeat the object of wearing the smock. The parachutist's helmet is the second pattern with a visible rim and black leather straps. The standard BD trousers worn here were to be replaced by the 'Trousers, Parachutist's' – see Plate F2.

The survivors of this unit were to be captured after furious resistance at Arnhem Bridge as part of 1st Airborne Div in September 1944 during Operation 'Market Garden'.

C3: Private, 2nd Bn, Gloucestershire Regiment; 'hospital blues', UK, 1940

During the Great War men at general hospitals and convalescent units had their khaki SD uniform replaced by the garishly bright 'hospital blue' uniform; with its white-faced lapels, white shirt and red tie it was not at all popular. Men convalescing at general hospitals of the BEF in 1940 once

again found themselves wearing hospital blues; although the Great War type had been superseded by a pattern without the white lapel trim, both styles were to be seen in France during the 'Phoney War' period. Throughout the war the shapeless, poorly fitting hospital blues continued to embarrass convalescents both at home and overseas, with this wool uniform even being considered as suitable for general hospitals in Egypt – although in the Middle East it was common to see a mixture of BD, KD and hospital blues being worn by convalescing veterans of the North African campaign.

This soldier, injured during the early stages of the fighting in France with 3rd Inf Div, has been lucky enough to have been evacuated to Britain before his comrades were captured. The 2nd Glosters were reformed in the UK in June 1940, and would later return to France as part of 56th Independent Inf Bde in June 1944; in August this replaced the mauled 70th Inf Bde in 49th Inf Div, with which they served until VE-Day.

D1: Sergeant despatch rider, Royal Corps of Signals, 43rd Infantry Division; UK, 1943

During the early stages of the war the waterproof clothing of the 'Don R' consisted of a three-quarter length double-breasted coat, and open-crotch leggings with button-closed ankle sections; both were made of heavy rubberised cotton canvas. A helmet made of a similar cloth but with a soft brushed cotton/fleece lining was issued with this set; resembling a flying helmet, it offered no crash protection, and was replaced by a rigid pulp fibre helmet from 1939 and by a steel helmet in 1942. The latter year also saw the introduction of a one-piece outer garment; this adaptable full-length coat could be buttoned around the legs or worn as a true coat, along with the motorcycle pantaloons and high leg boots both introduced in 1941. This sergeant, with rank chevrons fixed to a removable brassard, wears the 1942 coat, pulp helmet (with white-and-blue RCS flash), special three-strap motorcyclist's boots and leather motor transport gauntlets. The large waterproof breast pocket of the coat was ideal for keeping maps and route orders accessible but protected from the elements.

It was common practice that units attached at divisional level, e.g. signals squadrons, bore the divisional number. The 43rd (Wessex) had been a Territorial division before the outbreak of war; it was later to serve in NW Europe from June 1944 until August 1945, seeing particularly hard fighting in the Normandy *bocage*.

Normandy, June/July 1944: Sgt Davies checks over medical supplies at the Regimental Aid Post of the 4th Bn Royal Welch Fusiliers, in 158th Bde, 53rd (Welsh) Div – see discussion of sleeve insignia under Plate E. An infantry NCO additionally trained as a medical orderly, he is responsible to the battalion's RAMC medical officer for the running of the RAP and its stretcher bearers. Under prewar strengths SBs would have been drawn from regimental or battalion bands; they were not members of the RAMC and received only sufficient first aid training to enable them to recover a casualty to the Regimental Aid Post. (IWM B7571)





This photograph of men of the 2nd Bn Glasgow Highlanders from 46th Bde, 15th (Scottish) Div, advancing on Caumont in June 1944, offers a wealth of detail typical of the Tommy in Normandy. This battalion fought in the bloody attacks on Hill 112.

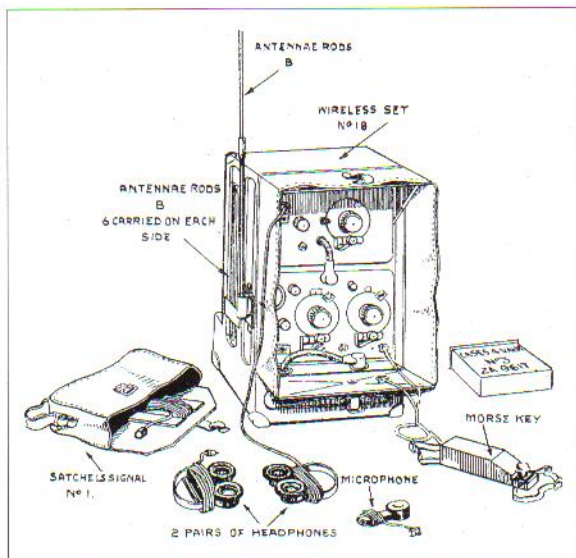
The private (right) carrying a No.18 wireless set probably serves with a company HQ. Clearly visible above his right cuff are four red service chevrons printed on khaki cloth, one for each year's service, as authorised in February 1944; it is sometimes stated that these were not worn in the front line. Photos show that 2nd Army men in NW Europe wore every possible variation of sleeve insignia from nothing at all, through regimental titles, divisional patches, single or multiple arm-of-service strips, to full sets complete with unauthorised unit flashes. Both these men wear full sleeve insignia – 15th Div patch, above two red brigade strips, above their battalion's diamond of Black Watch tartan, and service chevrons – although they are frayed and insecure.

The left-hand soldier, wearing the earphones, has a complete set of rifleman's webbing and a Sten gun – note the magazines, too long for his basic pouches. No badges of rank are visible, but the collar of his BD, Serge, seems to have been ironed open – could he be a junior officer or WO? Front line officers frequently wore ORs' equipment and some removed distinguishing marks of rank. (IWM B8203)

D2: Infantryman, 52nd (Lowland) Infantry Division; UK, 1943

Limited mountain and arctic warfare training was undertaken in early 1940 in preparation for a possible landing in Norway; however, the subsequent failure of the NWEF highlighted a need for specialist troops trained in ski and mountain warfare. The Scottish soldiers of 52nd (Lowland) Division began two years of exhaustive training in 1942, doggedly acquiring the skills of mountain climbing, skiing and arctic survival. No second assault on Norway was to materialise, however, and the 52nd were subsequently to retrain first as

Wireless set No.18 (Mk III). The components that made up a station for the 18 set consisted of the wireless set, 12 antenna rods (type B), and a signals satchel for storage of the ancillaries: two pairs of headphones, microphone, Morse key, spare valves and ground aerial. This manpack set was essentially infantry equipment, allowing short-range communication (one to five miles) between infantry companies and battalion HQs. Radios were not issued at infantry platoon level.



an amphibious and then as an air-mobile division before finally being committed – as standard infantry, fighting on the Scheldt and Rhine rivers in some of the lowest-lying terrain in NW Europe...

Much specialised equipment was issued to the division during its mountain training, including climbing breeches, climbing boots, ski-march boots, windproof smocks and trousers and cold weather caps. This 'Lowlander' abseiling down a rocky crag in the Highlands wears mountain breeches, climbing boots, and four-pocket camouflage windproof smock. This latter was issued in tan, white, green and three-tone camouflage patterns, offering a variety of colours for differing terrain. His ensemble is completed by the water-resistant ski cap, and the first pattern GS Bergen rucksack made of tan webbing fabric (later models were made of canvas). Both the 'Bergen' and ski cap were also manufactured in white, and a white cover was available for the tan rucksack for use in snow.

Full cold weather clothing issue consisted of: woollen drawers, woollen vest, string vest, neck square, wool shirt, heavy wool jersey, windproof smock and trousers, light-weight snow smock and trousers, battledress, ski cap, woollen balaclava, fur cap, heavy wool socks, ski march & (FP) boots with felt insoles, woollen gloves, leather shell (outer) gauntlets, woollen wristlets, snow goggles, duffel coat, leather moccasins, and Boucheron boots.

D3: Sergeant, Traffic Control Wing, Corps of Military Police; UK, 1943

At the outbreak of war the Military Provost consisted of the Military Provost Staff Corps, responsible for military prisons, and the Corps of Military Police. The CMP were sub-divided into 'wings': the Field Security Wing, which became part of the Intelligence Corps in 1940 and whose members wore a green cap cover (with a CMP cap badge but minus the name scroll); Vulnerable Points (blue cap cover), made up of older and less fit men and responsible for security of static locations and establishments; Traffic Control (white cap cover); and Military Police (with the infamous red cap cover). Although 'Redcaps' eventually replaced most of the other wings' manpower, traffic duties were initially performed by the TC Wing. Readily identifiable by their white cap covers and traffic sleeves, they also wore a red-on-blue 'TC' flash on the sleeve above the rank chevrons (a similar flash was worn by the Bluecaps of the VP Wing).



This TC policeman wears the recently introduced austerity pattern Battledress which first appeared in 1942 (see discussion of pattern labelling on page 34). The whitened 1937 web equipment pistol order has all brasses highly polished, in keeping with the immaculate turn-out expected of all CMP staff. The method of wearing the pistol lanyard around the neck was later discouraged, as it provided an obviously dangerous grip for an assailant during a struggle.

E1 & E2: Fusilier, 6th Bn, Royal Welch Fusiliers, 53rd (Welsh) Infantry Division; Normandy, June–August 1944

No.4911986 Fusilier Tom Payne of 11 Platoon, B Company, 6th Bn, Royal Welch Fusiliers was famously photographed by Sgt Bert Hardy of the AFPU in Normandy during summer 1944 while the 6th RWF were serving with 53rd (Welsh) Division. Payne, a 33-year-old Regular from Nottingham, had joined the Army in 1929. The series of photographs (Imperial War Museum B9005 to B90012) show front and rear views of his equipment and detail shots of his personal and small kit. He wore Battledress, Serge; 1937 web equipment in 'battle order'; Mk III helmet with net and scrim; and carried the No.4 rifle. His clasp knife was worn attached to the utility (trouser) belt with the issue loop and carbine hook fitting, next to the No.4 spike bayonet. A Very's No.1 Mk III* signal pistol, on its lanyard, was carried tucked behind his right-hand basic pouch.

High on Payne's back was worn the Pattern 37 small pack which contained spare socks, mess tins, knife, fork, spoon, face veil, cigarettes and chocolate, emergency rations, washing and shaving kit (with a self-sharpening 'Valet' razor), water-sterilising tablets, wool balaclava, spare laces, hairbrush and towel. Tucked under the flap was the anti-gas cape which, despite regulations to the contrary, was frequently used as a rain cape. Behind the pack, and providing additional neck protection, was thrust a GS shovel, vastly superior to the entrenching tool. The tool carrier also served as stowage for '4x2' rifle cleaning flannelette, gauze for cleaning bore fouling, pullthrough, oil bottle, rifle and boot brushes and dubbin. The Lightweight Respirator, introduced in 1943, was slung in its case on the left hip, with the waterbottle on the right hip. Carried on his person were, amongst other items, a small medical kit, first field dressings, AB64 paybook, invasion currency, family photographs, pen, pencils, pipe, 'Tommy' lighter, and a soldier's guidebook to France.

From autumn 1943 until VE-Day the brigades of 53rd Inf Div were the 71st, 158th and 160th. Until August 1944 the 4th, 6th and 7th RWF formed 158th Bde; thereafter the 6th Bn transferred to 160th Brigade. In June–August the battalions of 158th Bde displayed on both upper sleeves

Elst, Germany, March 1945: a distinctly posed-looking 'fighting patrol' of the 1/4th Bn King's Own Yorkshire Light Infantry demonstrate available firepower – four No.4 rifles, two Stens, a Bren gun and a PIAT. The men wear the leather jerkin (hiding the white-on-red regimental shoulder titles) over wool BD, and the GS cap with the KOYLI's bugle badge. Four display the polar bear sign of the 49th (West Riding) Div – which provided the garrison for Iceland early in the war – with the single arm-of-service strip of 146th Bde below. Of note are the subdued, miniature rank chevrons worn on the sleeves by the two corporals at left: only the same width as the divisional patch, they are presumably in the KOYLI's traditional dark green. (IWM B15008)

one, two and three vertical red bars respectively, beneath the two red infantry arm-of-service strips which doubled as identification of the second senior of the division's three brigades; after transfer to 160th Bde the 6th RWF presumably wore only the three red strips of the junior brigade. At the top of the sleeves were worn the regimental title (the 'c' spelling of 'Welch' was adopted in 1920) in the line infantry's almost universal white-on-red, above the 53rd Div sign of a 'W' rising from a bar, in red on khaki (many examples were seen of this division's sign and brigade and unit strips and bars being printed together on a single khaki patch).

E3: Commander-in-Chief, Allied Land Forces; Normandy, summer 1944

The Commander-in-Chief of the Allied Land Forces for the assault phase of the invasion, and of the British-Canadian 21st Army Group until the end of the war, was Gen (later Field Marshal) Sir Bernard Law Montgomery, who had gained fame through his leadership of 3rd Div of the BEF, and 8th Army in North Africa and Sicily. Montgomery's immodesty and dogmatic manner tended to irritate his colleagues, particularly the Americans; although he was a brilliant staff officer, a sound tactician and an inspirational commander, his diplomatic skills were undoubtedly somewhat lacking. 'Monty' was well known for his casual approach to dress standards, preferring outfits suited to field conditions rather than that traditionally befitting his rank. His normal field attire in Europe tended to consist of grey pullover, fawn corduroy slacks, brown Oxford shoes, and his notorious black RAC beret with both RTR and general officer's badges. In colder weather he wore an Irvin flying jacket or, later, a tailored Denison smock – the Denison with a full-length zip which he habitually left unfastened, and held closed with a leather belt. For more formal wear a well-presented privately tailored BD uniform was kept in his caravan, while if rain clouds were to be seen Monty would always be in possession of his trusty umbrella.

F1: Sergeant Photographer, Army Film & Photographic Unit, attached 1st Airborne Division; Holland, autumn 1944

Under the control of the War Office's Director of Public Relations, the Army Film & Photographic Centre was located at Pinewood Studios, from where it provided stills and cine photographers for all theatres and commands. The centre formed a pool of material from which such well-known titles as 'Desert Victory', 'Tunisian Victory', 'The True Glory' and 'Burma Victory' were cut. The 1st Airborne Div's actions at Arnhem were filmed by Sgts Smith, Walker and Lewis, who were themselves photographed for publicity purposes after

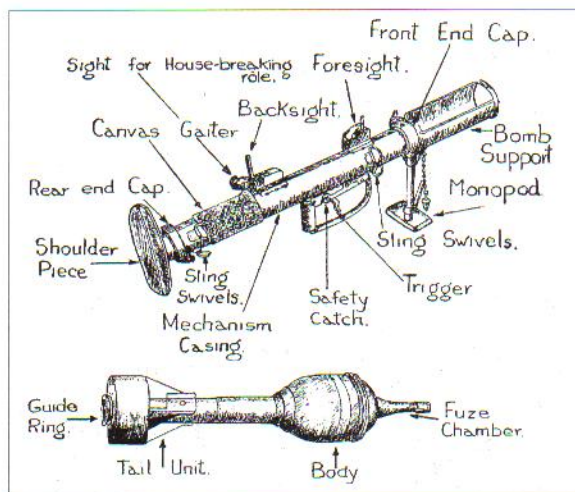
Production of the PIAT (Projector, Infantry, Anti-Tank) began in mid-1942. This short-range weapon, firing 2lb rocket-propelled shaped charge bombs, could be effective against even heavy tanks at ranges up to about 100 yards, or against defences (e.g. pillboxes or fortified houses) at up to 350 yards. Its main drawback was the power of the spigot spring used to initiate the propellant charge in the tail of the bomb. Cocking this for a first shot (or recocking, if the discharge shock failed to do so) took the whole strength of the body, with feet braced on the butt – particularly difficult when prone or trying to stay under cover. Using the PIAT effectively took muscle, skill and nerve.

their return to Pinewood. Looking older than his 28 years, Sgt Walker was typical of the trio; he wore ripped BD trousers and a Denison smock, but his maroon beret and boots were lost during his escape. A Pattern 37 web belt with two pistol ammunition pouches was also worn, along with a cut-down tanker's holster and .38in revolver, although his two ammo pouches contained film and photographic items. The AFPU camera badge was worn on the sleeve of the smock, as were Sgt Walker's parachute qualification wings. Walker, from the Scottish town of Bute, had served in the Royal Signals before transferring to the Parachute Regiment as a PR photographer in January 1944; he completed nine parachute drops, including Arnhem.

F2: Glider infantryman, 12th Bn, Devonshire Regiment, 6th Airborne Division; UK, May 1944

Body armour had been introduced into service in 1942; it was not popular due to its restrictive nature, but it did provide good protection from low-velocity projectiles, and was worn by some personnel of 1st Airborne Div during Operation 'Market' in Holland in September 1944. In the run-up to D-Day this private of the 12th Devons – a glider-borne unit of 6th Air-Landing Bde, 6th Airborne Div – tries on one of the 12,000 sets issued to the two British airborne divisions that spring and summer. The two frontal plates (inset, 2A) provided protection only to the most vulnerable points on the chest and abdomen. The rear plate provided protection for the kidneys and small of the back; any increase in protection would have made the set unnecessarily cumbersome. In shirtsleeve order, with sleeves rolled as per regulations, he wears the maroon Airborne Forces beret with the Devonshire Regiment's badge. For airborne troops the standard BD trousers were improved upon, resulting in the 'Trousers, Parachutist's'. These had two dressing pockets on the rear, a third dressing pocket on the front right, pockets at each side seam, a large expanding thigh pocket closed with a button and two press studs (and reinforced, like the side pockets, with chamois leather lining), and a small side seam pocket which held the F-S or 'Commando' fighting knife.

The 6th Airborne Div saw hard fighting from the early hours of 6 June until stood down on the Honfleur/Pont Audemer line on 27 August; casualties were 4,557 all ranks. In March 1945 the division formed half of the Allied airborne



force for Operation 'Varsity', the Rhine crossings, and thereafter fought their way 350 miles across Germany to Wismar on the Baltic coast by VE-Day.

F3: Sapper, 244 Field Company RE, 53rd (Welsh) Infantry Division; Caen, summer 1944

This private of the Royal Engineers wears the second or 'austerity' pattern of the two-piece denim overalls, manufactured only in green fabric, with removable buttons on the blouse and stitched buttons on the trousers. The first pattern had resembled the Battledress, Serge, having pleated pockets, ankle tabs and belt loops; it was manufactured in both green and brown denim, the latter readily fading to a pinkish shade. Changes in the field dressing pocket followed the modifications applied to wool BD, as did the deletion of ankle tabs, belt loops and pocket pleats which resulted in this utility version issued from 1942. Although the Mk III helmet had been issued to assault troops in Normandy many units continued to use the Mk II; this one has a net and scrim added, and in keeping with common practice at the time a shell dressing is carried beneath the net.

As with most units serving in NW Europe at this time the sapper carries a No.4 rifle. The 53rd Div saw hard fighting around Caen and Falaise in Normandy, and despite their specialised roles the RE often found themselves fighting alongside the infantry. His tool is the 'Prodder, Mine', fully extended – the central tubular section was optional.

G1: Piper, 4th Bn, King's Own Scottish Borderers, 52nd (Lowland) Infantry Division; Holland, December 1944

Highland regiments had loathed the loss of the kilt when it was withdrawn from clothing scales in 1939, so much so that officers continued to purchase their own. Such was the discontent that the War Office finally relented and from 1942 allowed the sale of Other Ranks' kilts to officers and warrant officers of previously kilted regiments. (Interestingly, the last use of the kilt by a unit in battle was probably during the St Nazaire raid in March 1942, when No.5 Troop (Liverpool Scottish) wore their kilts in an action to destroy the lock gates.) Kilts continued to be issued to regimental pipes and drums on home service but were 'officially' withdrawn when proceeding overseas. In an effort to retain some mark of the prized traditions which were felt important for unit morale, many units found ways of keeping at least some men in kilts.



During winter 1944/45 when the 4th KOSB were in Holland, C Company's Piper, G.J.Ford, was photographed sporting the Buccleuch tartan, his kilt partially hidden by a cover. Not unusually for infantrymen during this last winter of the war, the now more widely issued camouflage windproof smock is worn over a heavy wool jersey. The basic 1937 web equipment set is worn with brace attachments in lieu of pouches, pistol equipment (.38in Enfield No.2 revolver), waterbottle and small pack.

As part of 155th Inf Bde, 52nd (Lowland) Div, the 4th KOSB had recently been in action in the wretched, flooded terrain around the Scheldt estuary. By December they were training for the spring offensive, which would see them crossing the Rhine.

G2: Tank crewman, 5th Royal Tank Regiment, 7th Armoured Division; Holland, winter 1944

Upon its introduction BD was seen as a universal uniform for all arms and services, but it was to prove not particularly well suited to some specific requirements. Tank crews were among the first to highlight shortcomings in the BD and the cotton working coveralls then in use, and requested a one-piece heavy-duty coverall. 1942 saw the introduction of the first tank suit; in a heavy waterproof canvas, it had a thigh pocket, dressing pocket, two pockets at the front waist, an integral pocket for the revolver and an internal webbing harness that allowed for the easier handling of a casualty. The 1942 suit was not well received, however, and was replaced in 1943 by the Tank Oversuit. This 'pixie suit', as it soon became known, was made of a blanket-lined heavy cotton canvas with detachable hood; it had a total of nine pockets and a full-length front zipper fastening. The new suit was a vast improvement, with one exception: the integral harness of the 1942 suit was replaced by reinforced shoulder straps, which were supposed to serve the same purpose but were impractical in use. A similar summer-weight suit was produced in green denim fabric.

This trooper of a Cromwell tank crew wears the tan oversuit, Royal Armoured Corps rimless steel helmet, and Pattern 37 web belt with standard 'pistol case' and ammunition pouch (which gradually replaced the previous open-top tanker's holster). His regiment, forming part of 22nd Armd Bde of 7th Armd Div – the 'Desert Rats' – saw action throughout the war, from France in 1940 to North Africa, Italy and NW Europe.

G3: Lieutenant-Colonel, 1st Bn, Royal Norfolk Regiment, 3rd Infantry Division; Germany, early 1945

From a photograph of LtCol Peter Barclay, DSO, MC, commanding officer of the 1st Royal Norfolks. The last winter of the war saw the widespread issue of windproof smocks and trousers, both in three-tone camouflage and, for use in snow, in plain white. The white version was made of a heavier and thus warmer fabric than the camouflage suit, but

Issum, Germany, March 1945: a British lieutenant-colonel commanding a tank regiment, wearing the black RAC beret and tan tanker's oversuit, chats with a GI – apparently about a question of headroom? The crate of beer at their feet is intriguing. A trio of 'Don Rs' look on in some amusement; they wear 1942 pattern overcoats and Mk I despatch rider's helmets. The rider at left has chosen wellingtons in preference to the DR boots and wears improvised fur mittens. See Plates D1 & G2. (IWM B15232)

the design was the same. The trousers had a drawstring waist and a map pocket on the thigh; the smock had four pockets and a drawstring at the lower edge. There was no front opening, the smock being pulled on over the Battledress or heavy wool jersey; an integral hood with drawstring increased insulation but was restrictive and interfered with hearing. Colonel Barclay wears the khaki beret of infantry motor battalions, also used by the Reconnaissance Corps (until amalgamation with the RAC) and by many fashion-conscious officers who preferred it to the rather shapeless Cap GS. On his well-blancoed Pattern 37 web belt he wears a German pistol in its black leather holster; and around his neck, another example of the 'spoils of war' – a pair of the much-prized Voightlander binoculars, which were of unmatched optical quality.

While serving with the 2nd Royal Norfolks, Capt Peter Barclay had been the first British officer in the BEF to be decorated for gallantry, being awarded the Military Cross for a night action at Waldwisse on 3/4 January 1940. The 2nd Royal Norfolks were also the first British troops to suffer atrocity at the hands of the Waffen-SS, at Le Paradis on 27 May 1940, after a stubborn defence which caused heavy casualties to SS Totenkopf-Standarte 2. After surrendering, 99 prisoners were marched to Creton Farm and machine gunned against a wall; 97 died or were finished off by the SS. (Two badly wounded men escaped; Pte Pooley's testimony later sent SS-Hauptsturmführer Fritz Knöchlein to the gallows.)

As part of 185th Inf Bde of the 'Iron Division', 1st Royal Norfolks were to see heavy fighting between D-Day and VE-Day; they took in some 180 survivors of the virtually destroyed 7th Royal Norfolks when the 59th Inf Div was broken up in August 1944.

H1: Captain, 5th Bn, Seaforth Highlanders, 51st (Highland) Infantry Division; Belgium, January 1945

While the majority of British troops were generally fairly well provided for with regard to clothing and equipment, improvisation was sometimes necessary. A photograph of Capt Gordon Begg, commanding D Coy, 5th Seaforth, at the Belgian village of Mierchamps during the Battle of the Bulge 'scare' shows what is described as a sheepskin rug wrapped round his upper body over the wool BD and under the issue leather jerkin. More significant are the straw-packed sandbags tied around his feet; unlike the US Army the British made no real attempt to provide adequate winter footwear for general issue. The Mk II helmet, here with sparse camouflage scrim, would add to the discomfort in winter; the steel shell rapidly absorbed heat from the head unless the liner was well insulated with a Cap, Comforter. The 'HD' insignia of the 51st Div is worn on both sleeves; below it is the single arm-of-service strip of 152nd Bde, the senior brigade in the division; and below this the battalion flash, a square patch of 42nd Black Watch or 'Government' tartan – as the 5th were raised in Sutherland they did not wear the Mackenzie tartan sported by other battalions of the Seaforth.

The Highland Division had a long, hard war. After losing two brigades in France in 1940 the division was rebuilt from its 'duplicate', the 9th (Highland) Div, going on to earn a high reputation fighting in North Africa and Sicily before landing in Normandy on D+1, and advancing through France and the Low Countries, the Rhineland and into Germany.



On 3 May 1945 men of the 6th Airborne Div met up with Russian units at Wismar on the Baltic coast, enabling this airborne sapper to take a celebratory drink with a Russian tanker. Many British troops (with the exception of front line infantry) took to wearing captured German reversible winter jackets during the closing months of the war; these excellent padded garments had no equivalent in British service. (IWM BU5238)

H2: Gunner, Royal Artillery, I Corps; UK, VE-Day

On 8 May 1945 most of Europe celebrated the cessation of hostilities; a national holiday was declared in Great Britain and city streets were filled with revellers. This RA gunner from a I Corps artillery regiment, convalescing in Britain, wears austerity (1942) pattern BD which has been retailored as a best or 'walking out' uniform in a fashion not uncommon at that time, although more than frowned upon by officialdom. The collar has been tailored open, in the style adopted by officers, and is worn with the recently introduced collar-attached shirt and tie. The trouser cuffs have had a fabric gusset added, giving them a degree of 'flare'. The wool GS cap bears the brass RA flaming grenade badge. On each sleeve are the red-on-blue 'Royal Artillery' titles and RA arm-of-service strip; the patches bear the white spearhead of I Corps superimposed on a diamond in these RA colours, rather than the plain red corps patch. Note also the white Royal Artillery Lanyard; and the gold wound stripe on his left forearm. The celebratory red, white and blue rosette pinned to his chest is entirely unofficial.

H3: Private, 7th Bn, Seaforth Highlanders, 15th (Scottish) Infantry Division; Germany, 1945

In the summer of 1945 the occupation forces paraded through German cities to celebrate the end of the war; this Seaforth Highlander is dressed in a manner typical of the Scottish units which took part. He wears distinctive regimental items, recently supplied to Scottish troops on occupation duties, in the form of the black Glengarry bonnet and a kilt of Mackenzie tartan. A whitened Pattern 37 web belt with polished brasses, garter flashes and whitened tapes on his puttees add to his smart appearance. The BD blouse of the austerity (1942) pattern bears above the left breast pocket the ribbons of the 1939–45 Star, by this time awarded to all who had spent six months overseas in any operational theatre; and the France & Germany Star, for the 1944–45 campaign in NW Europe. On his sleeves he wears the rampant lion sign of 15th Inf Div, below the regimental flash – a patch of Mackenzie tartan. This formation fought in NW Europe from shortly after D-Day until VE-Day.

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