

A GUIDE TO SECOND WORLD WAR ARCHAEOLOGY IN SUFFOLK

Guide 2: Walberswick to Aldeburgh



Robert Liddiard and David Sims

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Suffolk Square pillbox against the backdrop of Sizewell power station.

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Introduction

Walberswick to Aldeburgh is one of four guides to Second World War archaeology in Suffolk, published in the same format. We hope that together they will help readers to discover, appreciate and enjoy the physical remains of that conflict that still lie in the countryside. Three guides examine the anti-invasion coastal defences (principally built 1940-41), while the fourth looks at the interior defence lines constructed during the same period. Although the Second World War is a conflict rapidly fading from human memory, its physical legacy is more permanent. In places it is still possible to gain some impression of how militarisation drastically altered the countryside. We hope that you enjoy visiting some of the places described in the series and that the guides give an idea of the historical background to the remains.

Walberswick to Aldeburgh

Introduction

The stretch of coastline between Walberswick and Aldeburgh is widely held to be some of the finest in East Anglia. It is also home to some of the best-preserved Second World War archaeology in Suffolk. Although it seems unlikely now, seventy years ago this idyllic part of the countryside was in Britain's front line in the defence against Nazi Germany. The events of wartime have left large numbers of pillboxes, anti-tank blocks and, more unusually, earthworks, which stand as a reminder that the area was one of the places thought most likely to witness a German invasion. (Figure 1)

The existence of well-preserved archaeological monuments is also connected with post-war management. Since 1945 sympathetic land use, particularly at the RSPB nature reserves at Minsmere and North Warren, by the National Trust at Dunwich Heath and by Natural England in the area around Walberswick, has ensured that these places now boast excellent examples of wartime archaeology.

This guide is divided into two parts. The first gives a brief history of the Second World War anti-invasion coastal defences between Walberswick and Aldeburgh in order to provide a background to the archaeological remains. The second part offers a guide to those monuments that are easily accessible or can be viewed from public footpaths. (Figure 2)



Figure 1. A posed wartime photograph taken from one of the gun houses at Minsmere Emergency Coastal Defence Battery, 1941. Today, the area is used for recreation and the management of biodiversity, but during the war was very much on the front line. (Imperial War Museum H 4335)

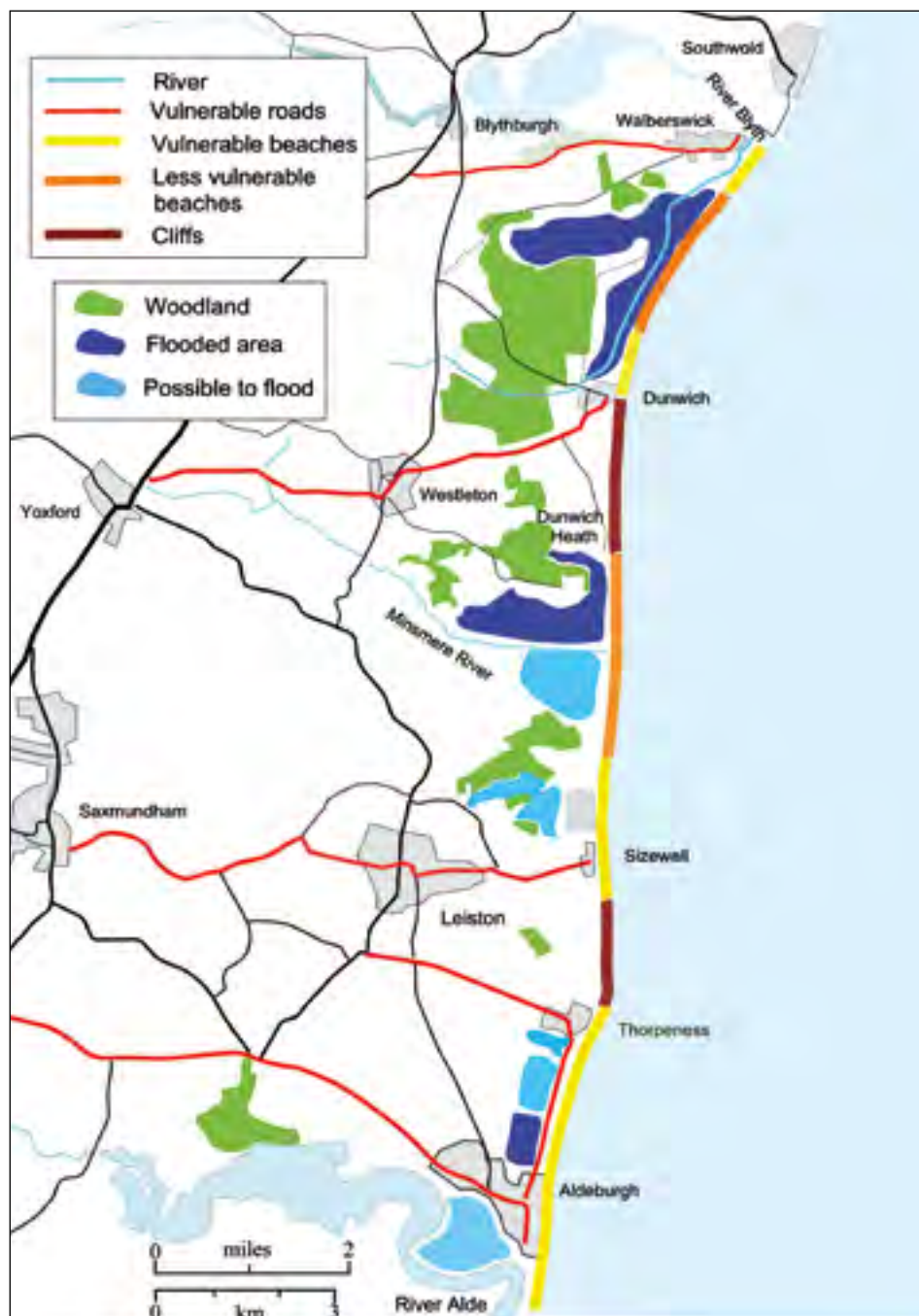


Figure 2. Map of area covered by this guide and principal places mentioned in the text.

Walberswick to Aldeburgh

The twenty five kilometre stretch of countryside between Walberswick and Aldeburgh is a relatively self-contained landscape bounded by the rivers Blyth to the north and Alde to the south. These natural boundaries were readily utilised by the military during the Second World War and for much of the conflict the area between the two rivers was designated a 'sub-sector', with an infantry brigade plus supporting arms - in total approximately 5000 men - charged with its defence.

Topographically, much of the coastal landscape is made up of relatively flat land, frequently managed as heath, which is cut by a series of sluggish watercourses making their way to the sea. Along the bottom of these valleys waterlogging has tended to block the estuaries, with the result that much of the low-lying land is managed as marsh and fen. Villages and farms tend to be restricted to the slightly higher ground between the rivers and it is also on these interfluvies that the main roads from the coast lead inland. This topographic situation was, unsurprisingly, well understood by military planners who during the war described the area as comprising:

Certain well-defined spurs [Aldeburgh, Thorpness, Sizewell, Dunwich and Walberswick] along which run the main approaches inland and are divided from one another by marshy areas [and cliffs] where the streams run into the sea. This formation will necessitate the capture of the spurs by an invader before ingress inland on a large scale can be made. It therefore lends itself to defence by strong locations on the spurs, the intervening marshes being made as impassable as possible. (Figures 3 and 4)

In addition, the muted terrain that characterises much of the area inland from the possible invasion beaches was a perfect landing ground for paratroopers and troop-carrying gliders as well as being ideally suited for armoured vehicles. This part of Suffolk was also in easy reach of the German-occupied ports in the Netherlands and Belgium and well within flying range of Luftwaffe airfields in the Low Countries. When taken together, the ease of access to the continent, the good landing beaches and the inviting hinterland all made for an area that was described by a senior officer in 1940 as 'a very dangerous locality'.

But, in essence, the way in which the military chose to defend this region throughout the Second World War was relatively simple. Low-lying areas were to be made impassable by flooding and by the erection of artificial obstacles. The 'active' defence - the boots on the ground - was



Figure 3. View from Dunwich, one of the 'spurs' identified by the military as key to the defence of the area during the Second World War. The view is to the south and shows another spur – Sizewell – separated from Dunwich by the Minsmere levels. In 1940 the fear was that German armoured columns would use such spurs to move inland before advancing on London.

Figure 4. Typical heathland at Walberswick. The large, flat expanses of heathland in the Sandlings provided an excellent area for the landing of paratroops and gliders and for the movement of armoured vehicles.



to be concentrated on the beaches and up on the spurs. The rear areas were also to be blocked by a variety of obstacles, intended to stop both tanks breaking through from the beaches and troops landed by aircraft or parachute.

Within this broad scheme there were places that were deemed particularly vulnerable and so were marked out for special attention. These tended to be beaches that were suitable for landings or areas where ships could be brought close into the shore, such as at Walberswick, Dunwich, Sizewell, Thorpeness and Aldeburgh. As these places were also holiday resorts and fishing villages they had roads leading inland, which further increased their perceived vulnerability. At Dunwich the presence of substantial cliffs ensured a degree of natural protection against sea-borne landings, but here the elevated location had lent itself to the establishment of a radar station, which made Dunwich Heath a particular target throughout the war; as a consequence, it was given increased protection.

The Invasion Crisis of 1940

Systematic thought began to be given to Britain's anti-invasion measures in November 1939, but the few defences that were built at this stage were on a limited scale and have not survived. According to one junior officer stationed near Dunwich, his orders were to defend a beach until outnumbered and then withdraw to a prepared strong point inland that consisted of 'a hole in the ground with a couple of sandbags'. All this changed on 10 May 1940, when Germany opened up the war in the west, subsequently over-running the Low Countries and France. The strategic situation altered entirely and, for the first time since the Napoleonic wars, Britain faced a credible invasion threat. In order to meet this threat, vulnerable parts of the coastline were provisioned with what were known as Emergency Coastal Defence Batteries (described below) and those places where landings were possible put into a state of defence.

Following the defeat of the British Expeditionary Force in France the situation facing the Commander in Chief of British Home Forces, General Edmund Ironside, was precarious. With an exhausted army and little modern equipment, Ironside enacted a strategy based on linear defence. The German invader would be held up on landing by a fortified coastal 'crust' that stretched from Cornwall to Scotland. Potential landing grounds were to be obstructed up to eight kilometres back from the coast; the exits

from beaches were to be protected by pillboxes and mines; vulnerable beaches were to receive concrete pillboxes and barbed wire. These defences were not intended to throw the invader back into the sea; rather, they were to hold up the German advance for as long as possible. Once inland, German columns would find themselves consistently delayed by fortified nodal points and by a series of anti-tank stop lines (described in a separate guide). Once the intentions of the main German army were known, what was left of Britain's mobile reserves would meet the invaders and defeat them decisively in a pitched battle.

During the summer of 1940, during which the threat of invasion was at its highest, two infantry battalions (of about 800 men each) from 164 Infantry Brigade, itself part of 55 Division, were responsible for the coastline between Walberswick and Aldeburgh; these men were from the 2nd/4th South Lancashire Regiment and the 9th King's Regiment. They had only been in Suffolk for only three weeks and were not front-line troops; rather, they were newly mobilised and had been sent to the coast principally for coast-watching and training. From May, they suddenly found themselves in the front line of Britain's defence and, with the help of military engineers and civilian contractors, frantically began to build obstacles, dig trenches and construct concrete fortifications. As a result of their efforts, by September 1940 Ironside's coastal 'crust' had become a reality.

We Shall Fight Them on the Beaches

One of the first defensive measures undertaken was the utilisation of the landscape itself. An obvious action was the rendering of existing marshland impassable and to that end bridges over small creeks and rivers were either blown up or dismantled and sluices were opened so that sea water flooded the low-lying areas behind the coastline. While the most valuable areas of grazing were to be flooded only when invasion was imminent, large quantities of marsh were inundated and remained so for several years (Figure 5).

On the beaches one of the easiest methods of slowing up an invader was to cover the ground with barbed wire. Wire was one of the few commodities in relatively plentiful supply in 1940 and could easily turn an open beach into an altogether more daunting prospect to negotiate. The placing of wire was carried out with care. Long lines were usually positioned parallel to the sea just above high water mark, with entanglements at right angles to create bottlenecks. The impression given by aerial photography is that, by the end of the summer, almost the whole coastline across the study area was heavily wired (Figure 6).



Figure 5. Photograph taken in 2006 showing the area around Dunwich after tidal flooding. The wartime landscape would probably have looked very similar. (www.mike-page.co.uk).

Figure 6. Barbed wire in northern France in the winter of 1939-40. Wire of this kind was placed on Suffolk's beaches as soon as the invasion crisis of 1940 began. (Imperial War Museum O 0878)



The second principal beach obstacle was minefields. Both anti-personnel and anti-tank mines were laid in considerable numbers, with their maintenance and security a constant issue. In 1940 alone approximately 7500 mines were laid across the whole of the Suffolk coastline. Some minefields were extremely large; that at Walberswick was some 400 yards in length.

In an additional effort to prevent movement by vehicles inland, the most vulnerable beach exists were provided with specific anti-tank obstacles. The most common of these were anti-tank blocks (sometimes known as anti-tank cubes or tank traps) that consisted of concrete blocks usually three feet six inches square placed in lines approximately five feet apart.

Anti-tank blocks were used in two main ways. First, short lengths provided a barrier across a specific area and were integrated with other anti-invasion defences. Short lines could also be placed at right angles to the sea in order to stop movement up and down the long beaches typical of this part of the Suffolk coastline. Second, more extensive use provided protection in places where the topography left large natural gaps. At Aldeburgh, the area to the south of the town was given a row of blocks that created an obstacle between the Emergency Coastal Battery and the Martello tower, while at Minsmere several hundred metres of cubes were laid on the beach (Figure 7).

The final part of the beach defences were ‘Dragon’s Teeth’, which comprised sharpened steel spike set in concrete and placed in lines in the inter-tidal zone. Their purpose was to rip the bottom out of landing barges as they attempted to beach. A series of teeth was laid along the coast; but all have since been removed, but their rather sinister appearance is still apparent from post-war photographs (Figure 8).

The transformation of the beaches had a profound effect on civilians resident in the area, who now found themselves living in a heavily militarised landscape. At Aldeburgh, the seaside economy had been brought to a close; an observer from the Mass Observation Survey who visited the town in 1940 commented that

‘the economic basis of Aldeburgh life is the summer holiday season, and this has been wiped out. Even the local Golf Club is shut down. No one is allowed near the beach, which is covered with obstructions, the cause of much unfavourable comment from the civilians who wonder whether it will ever be possible to make the beach look nice again’.



Figure 7. Anti-tank blocks at Aldeburgh. They originally formed an obstacle running from the Emergency Coastal Defence Battery to the marshes to the south of the town.

Figure 8. Photo c.1946 of Dunwich beach, showing it largely devoid of the wartime defences but with Dragon's Teeth still intact. (Courtesy of Dunwich Museum)



Infantry Defences

Such built obstacles were effective, however, only if there were troops to man and defend them, and the brunt of the defence of the coastal crust fell to the infantry. Defensive positions were constructed on the beaches themselves, in houses that fronted onto the sea, on areas of ground that overlooked the coastline and sometimes a little way inland in order to counter any enemy airborne assault. The vast majority of these positions have since disappeared, but wartime plans give an idea of how many once existed. For Walberswick and Dunwich, for example, there are plans showing the dispositions of the 2nd/4th South Lancashire regiment down to the location of each ten-man section of the battalion and their arcs of fire (Figure 9). Both the 2nd/4th South Lancashire Regiment and the 9th King's arranged themselves in a 'three up-one back' arrangement, with three rifle companies (of approximately 120 men each) right on the coastline itself and one company a little way behind the lines both to act as a reserve and to deal with any German troops that had landed by parachute or glider.



Figure 9. Map from the 2nd/4th South Lancashire Regiment showing dispositions in August 1940. The position of each infantry section of ten men is shown, along with their arcs of fire. (The National Archives)

Today, a rough guide to the location of many former positions is the existence of concrete pillboxes, the vast majority of which were built during the summer of 1940 (Figure 10). In the area covered by this



Figure 10. Map of pillbox distribution in the study area. The clustering on the beaches at the end of the 'spurs' can clearly be seen, with only a scatter inland from the coastline itself.



Figure 10 Distribution of pillboxes in southern part of study area.

guide nearly all the pillboxes are of a particular type, known to modern observers as the ‘Suffolk Square’ – owing to their distinctive shape and the fact they are found only in Suffolk. (Figure 11) Their restricted distribution and idiosyncratic appearance are almost certainly results of the fact they were built by one particular unit – 558 Field Company, Royal Engineers – who were attached to 55 Division during 1940 and were based at Theberton Hall, near Saxmundham. The pillboxes were either built directly by the engineers themselves or by contractors working under military supervision.



Figure 11. Typical ‘Suffolk Square’ pillbox at Knodishall, inland from Aldeburgh.

It is important to note that many of these pillboxes, especially on the coastline, were originally accompanied by earthwork trenches. In the majority of cases the trench has been filled in and there is now no obvious trace of its existence, but the pillbox remains intact. As we see them today, pillboxes thus give a somewhat false impression of what was originally put in place – what needs to be imagined are considerable trench systems, often with dugouts and surrounded by barbed wire. In a small number of cases, these trenches survive as earthworks. A particularly good example can be seen at Hoist Covert, near Walberswick, where a complete section position with fire trench, pillbox and connecting communication trench can be seen within regenerating woodland.

In those areas on the ‘spurs’ where roads ran inland, more effort was made at defence in depth. At Knodishall Whin, four and a half kilometres inland

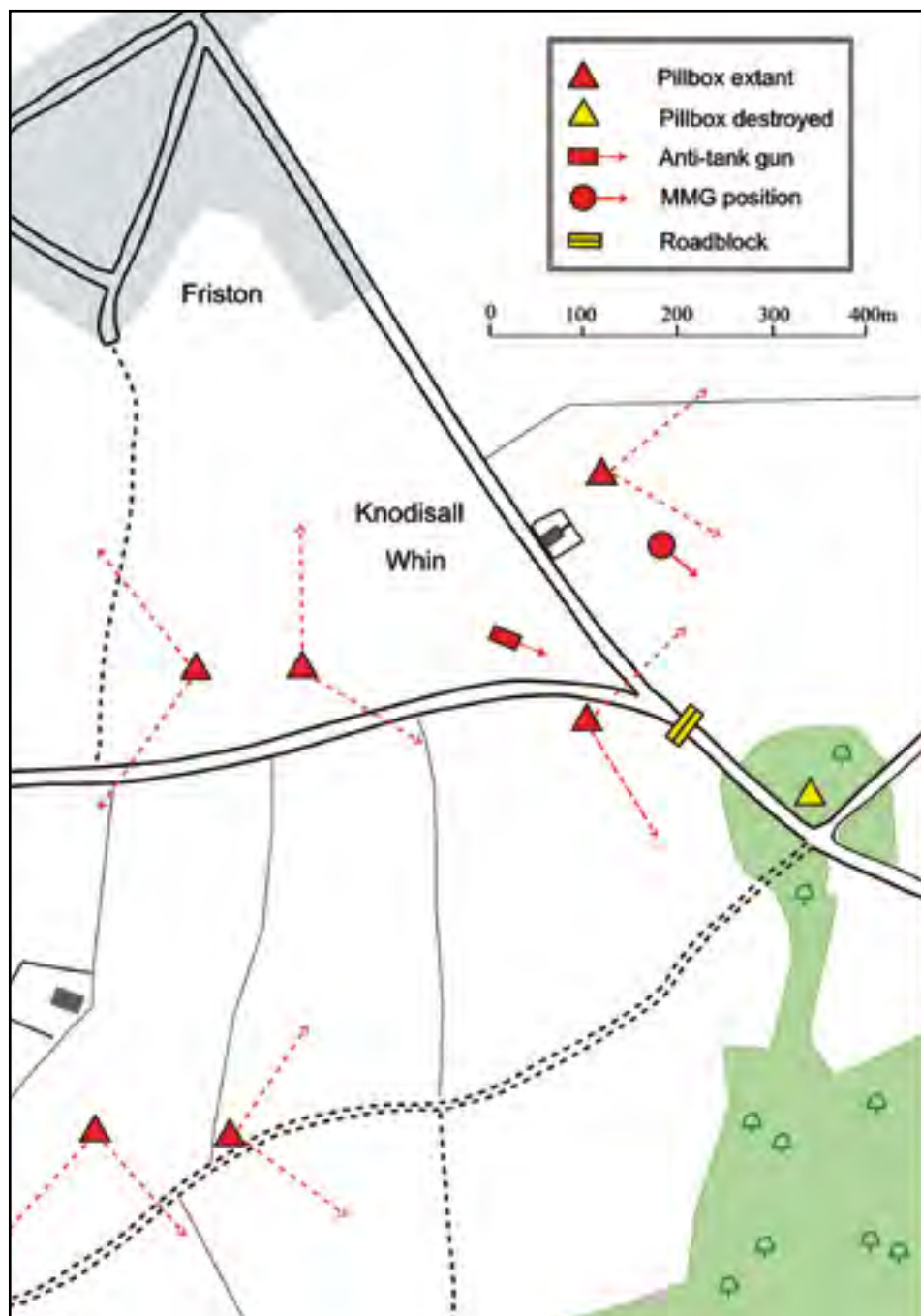


Figure 12. Knodishall Whin. The group of pillboxes in this area were part of a company-strong (about 120 men) defensive position in the area inland from Aldeburgh.

from Aldeburgh, a surviving group of pillboxes marks the location where a reserve company of the 9th King's Regiment was intended to slow down the advance of an enemy column inland after it had broken through from the beach (Figure 12). At Walberswick a pair of strengthened pillboxes for heavy machine guns was sited some four kilometres back from the beach in order to allow heavy fire to be put down both on the road along the 'spur' and along the valley of the Blyth itself (Figure 13)

But what is immediately obvious from both surviving pillboxes and wartime defence plans is that the coastal crust was, in places, extremely thin. Given the length of each battalion front, in some places often the only thing that stopped an invading German soldier from breaking through the coastal crust was a defensive line one position deep. For the men who manned the defences the mission was simple. In the event of invasion they were to hold their position until they were killed or captured. There were no plans for any kind of retreat; rather, the operational orders were very clear: 'there is to be NO WITHDRAWAL'.



Figure 13. Heavy machine gun pillboxes at Blythborough. These positions represented the final element of the 'coastal crust' and were intended to block the path of enemy forces moving inland along the road from Walberswick or attempting to navigate up the river Blyth.

The Artillery Landscape

A less well-known aspect of the coastal crust is that a vital component was field artillery: batteries of field guns placed behind the invasion beaches whose task in the event of attack was to shell the invaders as they landed. Over the summer of 1940 there was piecemeal build-up of artillery and by September 1940 it was possible for field guns to sweep the whole coastline with defensive fire. Target acquisition was determined by forward observers in observation posts who could relay information back to their guns by field telephone and, in the small number of cases where the equipment was available, by radio.

The location of the guns was arranged so that, in principle, all parts of the coastline could be covered by artillery fire; places thought especially vulnerable could be subjected to a bombardment by a multiplicity of guns firing from several locations at the same time. The particularly vital points that were critical to the defence were designated 'SOS' tasks, which were pre-arranged targets that the gunners could immediately fire upon in the event of receipt of a message from the observers or in the form of a rocket signal fired by the defending troops. Seven such tasks existed between the Blyth and the Alde and most were probable disembarkation points on the beaches or bottlenecks where invading troops would be constrained by topography (Figure 14).

The system relied heavily on the ability of the forward observers to spot for their guns further behind the lines and, as a result, the location of the observation posts (OPs) and the protection of their occupants were crucial to effectiveness. OPs required exceptionally wide fields of vision and, given the muted topography of this part of Suffolk, it is unsurprising that any tall buildings and elevated sites potentially marked themselves out as good locations. The water tower known as 'The House in the Clouds' at Thorpeness was used for this purpose almost immediately after the start of the invasion crisis, with the observers reporting the somewhat surreal experience of looking down on low-flying German aircraft as they passed beneath. The area's rich legacy of late medieval churches was another source of ready-made positions for observation; in defiance of the Geneva Convention's prohibition on the use of religious buildings for military purposes, the church towers of Thorpeness and Walberswick were both utilised as OPs during the invasion summer.

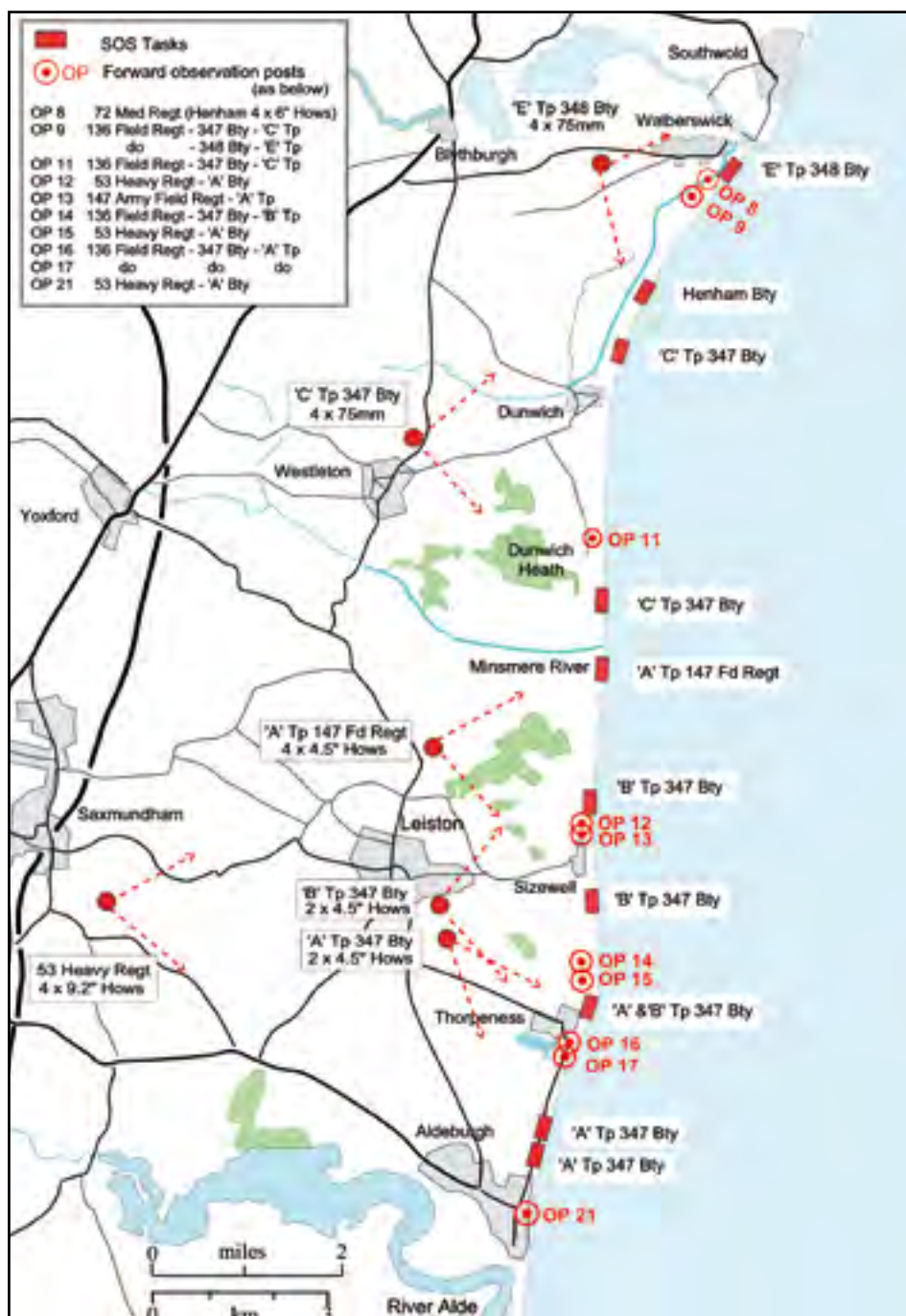


Figure 14. Artillery fireplan from 1940 showing location of guns, arcs of fire, observation posts and designated SOS tasks.

In addition, some OPs were sited either very close to, or sometimes right on, the beaches themselves. At Thorpeness one was sited at Haven House, immediately fronting onto the beach. Two such locations, which

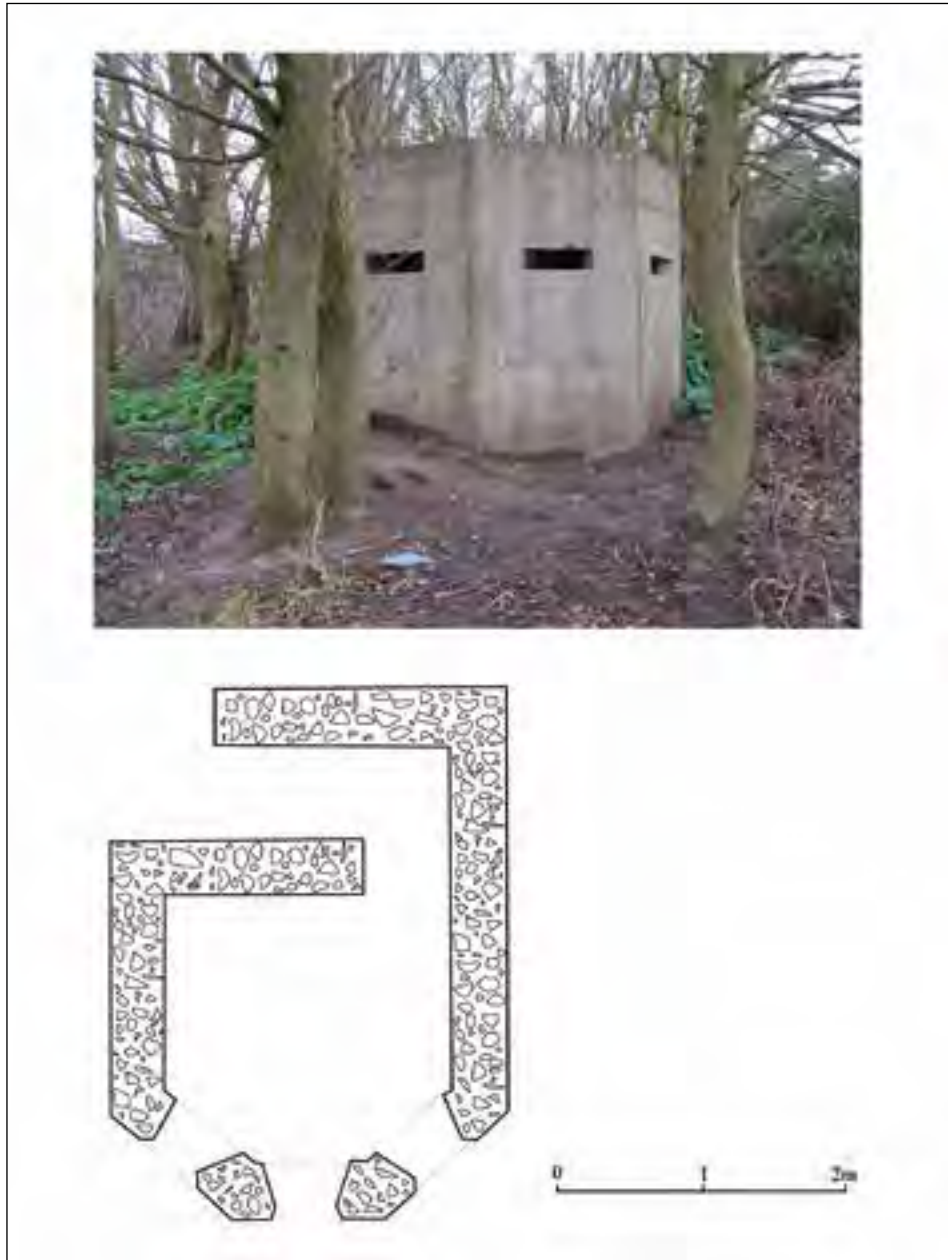


Figure 15. Artillery Observation Post at Walberswick. Although resembling an infantry pill-box, these structures were for artillerymen spotting for their guns further behind the lines.

commanded a view of the whole beach area, were also used at Sizewell, while those at Walberswick gave a clear view of the beach area and one of the designated SOS tasks (Figure 15). Together with the clear visual benefits of such a forward location, some positions may also have been chosen to facilitate the observers' ability to hear the approach of any invasion fleet, particularly at night, something mentioned in eye witness accounts. Although guiding the guns' fire was the purpose of the observers in action, during other periods the spotters were tasked with looking for suspicious debris, such as stray mines approaching the shore. All this ensured that, in places - perhaps surprisingly - it was men from the Royal Artillery who would have been closest to any invading Germans, rather than infantrymen.

Forward Defended Localities, Changes to the Defence Landscape, 1941

As early as late summer 1940, just as the anti-invasion defences were reaching completion, criticisms began to be made about their effectiveness. The reason behind many of the perceived weaknesses was not difficult to find; the speed with which the coastal crust had been completed was praiseworthy, but mistakes had been made. Pillboxes in particular were a cause for concern. The comments made by General Majendie, the commander of 55 Division, are particularly telling:

I am very much concerned that we are going pill-box mad, and losing all sense of proportion in the matter of siting defences. The lure of concrete is leading us away from first principles. The countryside is covered with pillboxes, many of which will never be occupied, many could never serve any useful purpose, and many face the wrong way. Much labour, money and material have been wasted. I realise that this is largely due to haste and the desire to get something done quickly ... I wish to emphasise that a concrete pill-box with the weapons at our disposal cannot be regarded as forming an adequate defensive post. It should form part of a small defensive locality. On occasions it may have to stand alone – naked and ashamed – but only when local conditions make this unavoidable.

In early November 1940 164 Infantry Brigade were relieved of their coastal defence duties and were replaced by 125 Brigade, veterans of the BEF and the fighting in France earlier that year. The incoming troops found that the defensive works they were taking over left much to be desired, and their assessment of their new areas was damning: 'The defences are linear all down the beaches, and they just "happened"... 55 Div[ision]

stuck pillboxes, gun pits, guns etc just where they wanted them.' Summary reports made at the time also reveal that much of the work of previous months was already starting to disintegrate:

'Mines have also been placed on the beaches, but the sea sucks them out to sea up to 50 yards out from the mine fields as marked on the maps. Anywhere near the sea side of the mine fields is dangerous. The mine fields are very well marked on the maps, but of course they are moved by the action of the sea ... when we get fixed up we shall have to re-organise these defences, but the General is of the opinion that nothing should be done until the Spring, if we did any digging now it would not be worth while'.

Such comments reflect a broader process of change in Britain's anti-invasion landscapes. General Ironside had been replaced as Commander in Chief Home Forces in July by Alan Brooke, who advocated a more active form of defence. The new mantra was one of 'all round defence': rather than being strung out in a thin line, the coastal crust would comprise a series of 'forward defended localities', self-contained islands that could expect to hold out in the event of invasion until relieving forces, which now existed in greater numbers, could move up to deal with the invader.

During 1941 beach defences were strengthened by additional wire, minefields and anti-tank blocks in those places that had not received them the previous summer. New defences in the form of anti-landing ditches, scaffolding and anti-tank ditches were to be constructed. Perhaps the most important policy change concerned the infantry positions. Forward defences would have to be organised in adequate depth, the order stating: 'it will be necessary to substitute for the present linear defence a system of strong localities capable of all round defence and protected by a tank obstacle'. The system of defended localities would work subtly differently from the more linear coastal crust. While the front-line troops were still expected to hold on to the bitter end in order to disorganise and delay the enemy for as long as possible, they would continue to defend their positions even if they were bypassed by the invading forces.

In accordance with these instructions, 125 Brigade set about implementing the new defensive scheme. While some of the areas chosen for the new localities were already fortified and the existing defences were simply adapted, in other places, whole sections of the 1940 line were abandoned and fresh positions created. A very clear example of the new defence scheme can be seen at Walberswick, where defence in depth along the



Figures 16 and 17. The changing defence landscape at Walberswick. Here the linear system of defence put in place in 1940 changed to a system of defence in depth the following year, with 'Forward Defended Localities'.



'spur' running inland replaced the earlier arrangement (Figures 16 and 17). In those places where the 1940 positions could be incorporated into the new scheme pillboxes were retained, but where new trenches were dug they lacked concrete defences and were simply earthworks. (Figures 18 and 19).



Figures 18 and 19. Wartime photographs showing camouflaged trench positions near Thorpeness in 1941. (IWM H11461; H11462)



Scaffolding

The creation of the forward defended localities took place alongside the construction of additional defences, some of which have left a considerable mark on the landscape. Perhaps the greatest visual change to the beach defences in 1941 was the appearance of beach scaffolding: a linear framework of metal poles that stood three metres high. As a barrier scaffolding was simple and effective; it was difficult to destroy with tank fire and challenging for armoured vehicles to cross (Figure 20).



Figure 20. The coastline at Minsmere soon after the war. The dragon's teeth have been removed and are awaiting collection, while the beach scaffolding remains. (Eric Hosking Trust)

Scaffolding was intended to prevent the movement of craft close to the beach and to inhibit movement of tanks. On beaches that could be used for landing both infantry and tanks it was to be placed at the high water mark in order to act primarily as an obstacle for tanks. On those beaches suitable for infantry landings only scaffolding was to be placed at half tidemark, but this time as an obstruction against boats.

The erection of scaffolding was laborious, time consuming and was not popular with troops. Its construction entailed long hours working in the sea, which was not only tiring for those involved but also exposed them to German air attack. If this was not bad enough, on one occasion at Walberswick 'friendly fire' from British Hurricane fighters strafed the men working on scaffolding, leaving two wounded.



Figure 21. Map of anti-tank ditches in the area covered by this guide.

The erection of beach scaffolding started in March 1941 with the initial work being carried out by the Pioneer Corps. Progress was not fast enough, however, and over the next three months all units, including artillery and reserves, and all individuals at Headquarters were required to take part in the work. By the end of the year some 91 miles of scaffolding had been constructed by Eastern Command (out of a scheduled 110 miles) and, by that summer, the beaches at Walberswick, Dunwich, Sizewell, Thorpeness and Aldeburgh had all been transformed.

Anti-tank Ditches

The second major change to the defence landscape in 1941 was the construction of anti-tank ditches. By the end of the year, a continuous anti-tank obstacle ran unbroken between the Blyth and the Alde (Figure 21). This obstacle was far from uniform, however. Wherever possible existing obstacles were used or adapted in order to lessen the length of ditch that needed to be excavated from scratch. The Dunwich river provided a ready-made ditch and was wide enough not to need any additional work. The smaller drainage ditches found in areas of marshland could be widened with relatively little effort, which proved an equally effective method of creating obstacles. Where possible, railway lines, with their cuttings and embankments, were also pressed into use.

In other places, however, new ditches were needed and these comprised substantial cuts with accompanying earthwork banks. In contrast to the archaeological norm with earthwork defence, there was utility in having a bank *facing* the direction of enemy approach so that the incoming tank would be forced to rise up, exposing its weaker underside, before falling into the ditch and becoming immobilised (Figure 22).

Creating such a ditch was no small undertaking and so, where possible, short lengths between existing obstacles were preferred. The sections of anti-tank line were built piecemeal through 1941, with local commanders on the ground deciding where the exact line should be placed. In time, the various sections could be joined up to form one continuous obstacle. In practice, even along short stretches, the digging of the anti-tank ditches was a drawn-out process. The mechanical diggers used were prone to breaking down and there were complaints that they were frequently taken away for other duties.



Figure 22. Anti-tank ditch at Walberswick showing the distinctive 'V' profile.

Some additional anti-tank ditches were dug slightly inland in order to increase defence in depth along the spurs. This is best seen at Walberswick, where a bank and ditch ran close behind the final forward defended locality.

It took more than three months before all work in the sector was completed, but by the end of 1941 places such as Dunwich Heath and Aldeburgh were ringed by anti-tank obstacles. Analysis of the aerial photographs and the surviving remains shows that the chief concern was the prevention of tanks that had landed elsewhere from heading back towards the beaches and attacking the coastal crust from the rear.

Anti-Landing Ditches

In addition to the building of beach scaffolding and ditches, 1941 also saw the widespread construction of anti-landing ditches. Today such ditches are normally known as anti-glider ditches, but in reality gliders had such a short landing run that their use could never be prevented. Instead, ditches could discourage the use of flat open areas as grassy airstrips by troop-carrying aircraft. For that reason they were constructed widely across the



Figure 23. Extant anti-landing ditch, Sallow Walk Covert, Walberswick.

large expanses of heath that lay inland from the potential invasion beaches (Figure 23).

The siting of anti-landing ditches revealed the tension between the demands of the military on the one hand, and the need for food production on the other. The analysis of aerial photographs and field survey demonstrate that the majority of ditches are located either on heathland or grazing marsh, not on agricultural fields; in this particular case, food production carried the day.

By the end of 1941 the anti-invasion defences in this part of Suffolk were complete. The German invasion of Russia meant that no invasion of Britain was likely and, while the idea of some kind of German attack on Britain was maintained, in 1942 training started to take priority over coastal defence and no new defence works were to be started. Over this time various units rotated in and out of the line and coastal defence became dull routine. A year later, in the spring of 1943, the regular troops left their coastal defence duties and were not replaced. Coastal defence became the responsibility of the Home Guard, and coast watching, rather than coast defending, was now the norm.

Emergency Coastal Defence Batteries

As a result of the German advance across Europe in May 1940 additional batteries of coastal artillery were deemed necessary at certain locations outside the major ports. This 'Emergency Coastal Defence Battery' (ECDB) programme saw guns taken from ex-Royal Navy vessels scrapped



Figure 24. Distribution map of Emergency Coastal Defence Batteries in the area covered by this guide.

after the First World War and subsequently put into storage, brought back into service and placed in areas now thought to require additional defence. Aldeburgh, Sizewell and Dunwich were all provided with batteries and in 1941 an additional battery was built at Minsmere. (Figure 24)

The chief purpose of these batteries was to engage enemy shipping offshore, primarily to stop vessels from approaching harbours but also, should they get that close, to stop them from anchoring offshore and unloading their consignments. The guns were also tasked with firing on smaller boats attempting to gain access to ports, harbours and beaches and, to a lesser extent, could directly aid troops defending the invasion beaches.

Each battery was arranged in a similar manner. The guns (6-inch at Aldeburgh, Sizewell and Minsmere and 4-inch at Dunwich) were placed in pairs, with each gun in a separate concrete gun-house. Additional structures vital to the operation of the battery included a magazine, crew shelters, searchlight sites, electricity generators and a battery observation post. Supplementary features included cookhouses, latrines, accommodation for the personnel and also the battery's own defences, which usually comprised trenches and barbed wire. Throughout most of the war, the typical complement was just under eighty men (Figure 25).

The speed with which the batteries were established was impressive. That at Aldeburgh was one of the first to be declared ready for action on 6 June 1940, only fifteen days after the initial decision to install a battery, with that at Sizewell having guns ready to fire on 18 June and that at Dunwich completed soon after. The later battery at Minsmere became operational in May 1941. Initially, these batteries were rough and ready in nature. To begin with the gunhouses at Aldeburgh were covered by sandbags placed over a steel frame; the two concrete gun emplacements were only finally complete and given full overhead protection by late 1941. At Dunwich as late as October 1940 the troop accommodation comprised tents with an open cookhouse and the main magazine was only then being constructed. It took some time for the gun emplacements to receive concrete roofs and the ancillary structures to be upgraded. When finally finished, an ECDB could have fairly sophisticated arrangements; the Aldeburgh battery, for example, was connected to the town's water and sewerage system.

As is to be expected, considerable efforts were made to camouflage the battery positions. At Aldeburgh the site of a Victorian windmill was requisitioned as the site for a new battery observation post, not only because it lay in a practical location but also because of the concealment value

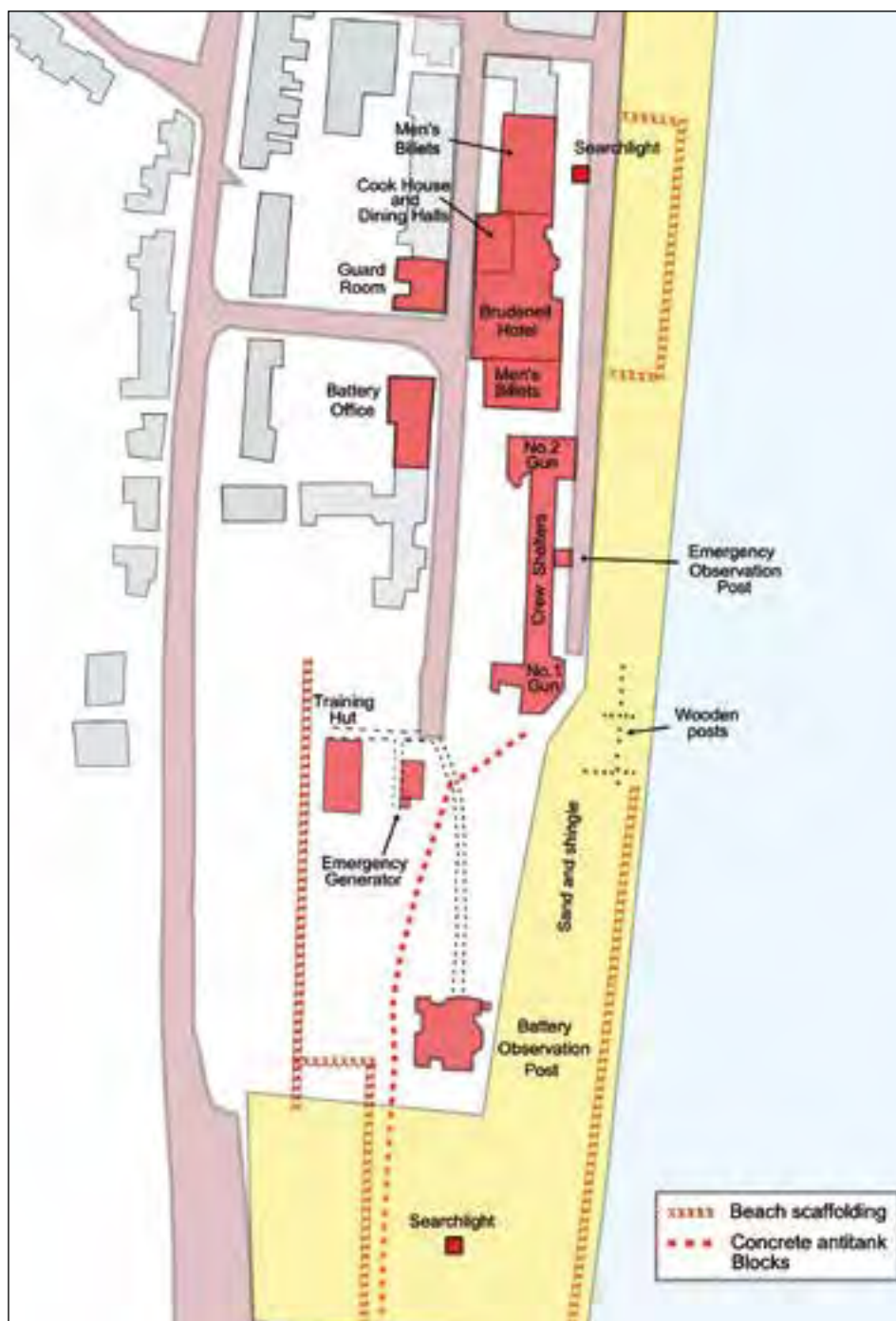


Figure 25. Plan of the Aldeburgh Emergency Coastal Defence Battery.

(Figure 26). At Minsmere the observation post was built onto pre-existing line of coastguard cottages, which still exists today. A more elaborate scheme unfolded at Dunwich, where the concrete battery



Figure 26. 1946 photograph of Aldeburgh showing the Battery Observation Post. (Ipswich Record Office)

position was covered with a fake Dutch barn, which photographs show was a highly effective disguise (Figure 27). To further confuse the enemy, dummy batteries were established. One such battery, established between Aldeburgh and Thorpness, had sandbagged emplacements and dummy guns.

Despite these precautions, it was impossible to disguise a large structure such as a battery from enemy observation and the ECDBs were regularly targeted. Up until 1943, when the Allies were largely able to restrict the activities of the Luftwaffe, there were numerous occasions when either small numbers of, or single, aircraft attacked the coast. The ECDB were favoured targets; that at Aldeburgh was attacked for three days running in the summer of 1940, and that at Sizewell was machine-gunned and bombed on 18 August, 27 October and 5 November 1940 and again in September 1942. The battery's Lewis guns returned fire on the planes but only the last of these incidents caused a single casualty. Test firing of the guns took place on a regular basis, but in the event none of the ECDBs discussed here ever fired their guns in anger.



Figure 27. Camouflaged Emergency Coastal Defence Battery, Dunwich. (IWM H11452)

By the middle of the war the need for the ECDBs had passed and they began to be downgraded. This initially took the form of giving the battery over to the care of the Home Guard, followed later by dismantling. At Minsmere by April 1943 there were only one sergeant and five men left at the battery to provide maintenance and in October the guns, searchlights and generators were moved to Landguard Fort. At Aldeburgh the battery became non-operational in November 1943 and was finally closed down in May 1944, although the guns themselves were not removed until 1946.

Dunwich Radar Station

Although practically nothing remains of it today, part of the importance of Dunwich lay in its location as a radar station, a vital part of Britain's air defence which in 1940 represented the cutting edge of technology.

Dunwich, a Chain Home Low (CHL) station, became operational on New Year's Day 1940. The CHL stations were an emergency measure used to augment the existing Chain Home (CH) defences and were used to detect enemy aircraft operating at a lower altitude. Dunwich, which had the specific purpose of giving early warning of low-flying aircraft approaching the coast, was the fourth CHL to become operational. (Figure 28)

This station would have been fairly rudimentary, comprising two twenty foot gantries (one receiver and one transmitter), with timber huts for equipment below. An aerial photograph taken in July 1940 shows the layout of the site and its defences, which at that time comprised pillboxes, barbed wire and trenches. In the event of attack, troops stationed in the area were to mount a defence; plans were in place for the evacuation of some of the highly skilled personnel if it looked like the radar station was going to be taken. Nothing remains above ground of this station today - it has all fallen into the sea or been removed - but occasionally erosion reveals parts of the former buildings.

Over the winter of 1940-41 a replacement CHL was built on the site, which became operational on 15 February 1941. This conformed to a standard design, with an operations building and a single twenty foot gantry and was powered by mains electricity. On at least one occasion in 1941, this station was machine-gunned by enemy aircraft.

Continual experiments were made with the CHL system throughout the year, particularly to improve the performance of the stations against the wave-skimming approaches used by German aircraft attempting to avoid the radar screen. One method that gave better results was the raising of the aerial on a tower 185 feet tall. Dunwich was one of only five places to become a CHL 'Tower' station and was chosen because it was in an area where low-flying raiders were common. The new station became fully operational with its new equipment, including a specially designed lattice tower 184 feet in height, in the spring of 1943. Although nothing remains of the tower today, it is clearly shown



Figure 28. Plan of wartime structures on Dunwich Heath. Today only a fraction of what was originally built remains to be seen.

in Edward Bawden's panorama of Exercise 'Kruschen'. (Figures 29 and 30)



Figure 29. Hopton CHL Radar Station in Norfolk. This photograph gives a good impression of what was in place at Dunwich. (IWM CH15183)



Figure 30. Aerial photograph c.1946 showing the radar station and other anti-invasion defences. (courtesy of National Trust and Stuart Bacon, Suffolk Underwater Studies). See also Figure 44, which shows the gantry of the radar station in the background.

Despite the development of more powerful radar technology Dunwich remained an operational station until after the end of the war, but at the end of 1945 it was due to be reduced to ‘Care and Maintenance’, and it was dismantled in the 1960s. As well as detecting aircraft, CHL stations could also give early warning of raids by fast-moving German E-boats and at the end of the war it was acknowledged that Dunwich had helped save many convoys by alerting Coastal Command to the presence of enemy raiders.

Training Landscapes

Alongside sometimes very busy periods when they were building and manning defences, troops stationed on the coastline also spent considerable time in training. Even during the invasion crisis of 1940 small groups of men were drawn off to undertake various forms of instruction, both because it was urgently required for those who had only recently been drafted into the army and also to improve unit cohesion and effectiveness.

By April 1940 a large training area had already been established around Dunwich and Aldeburgh which included fourteen kilometres of coastline and stretched for up to five kilometres inland (Figure 31). Within this

area are numerous examples of evidence for training activities. At North Warren, near Aldeburgh, a substantial earthwork which stretches over several hundred metres is almost certainly the result of a practice exercise, in which troops were required to construct a mock company position (Figure 32).



Figure 31. Map showing the bounds of the Dunwich training area. (The National Archives)



Figure 32. Suffolk Square pillbox placed within an earlier training earthwork at North Warren, Aldringham.

From 1942 onwards, for units stationed on the coast training took priority over coastal defence. Defences were still to be manned, but increasingly thought was being given to preparing troops for the opening of the second front against German-occupied Europe. A 'Battle-School' was established at Aldeburgh, with the purpose of preparing troops for the experience of front-line combat.

The training regime was characterised by hard physical exercise, route marches and a series of 'hardening up' exercises, where men practised while under live fire (Figure 33). The existing anti-invasion defences provided a ready-made source of obstacles that could be utilised for training purposes, chiefly as hazards that had to be negotiated (Figures 34 and 35).



Figure 33. Troops under fire during training at Aldeburgh Battle School. (IWM H 27338)



Figures 34 and 35. Aldeburgh Battle School 'then and now'. Below is shown obstacle crossing at Thorpeness. Troops are crossing a drainage ditch that had been widened in 1940 to create an anti-tank obstacle and was then re-used as a training feature. (IWM H 27347).



Exercise Kruschen

The Dunwich training area was also the setting for more elaborate exercises that involved large numbers of men and equipment. Of these, the most important was Exercise 'Kruschen' which took place in the first four months of 1943 and was one of the first military exercises to inform the planning of D-Day. Its objective was to establish the most effective methods of breaching the defences that were being built by the Germans in occupied Europe and which would have to be broken if any landing by Allied forces was to be successful. The problem had been brought into stark relief the previous August during the failed raid on Dieppe, in which the inability to destroy the German beach defences had been a significant factor in the Allied defeat.

Kruschen was officially ordered on 3 January 1943 and, although it was technically an exercise, it is best thought of as an extended trial during which on-going experiments took place with a variety of techniques and equipment.

In order to inform the process of experimentation, a mock-German fortification was constructed consisting of an anti-tank ditch, barbed wire, minefields, gun positions, concrete pillboxes and trench systems. The site was intended to replicate a German 'Strongpoint', or *Stunkputz*, which was a defensible position for about sixty men and their heavy weapons; to the German soldier such a position was known as a 'Hedgehog' because it bristled with spikes on all sides, so mimicking a hedgehog rolling up into a ball when threatened. The use of such training fortifications by the Allies became commonplace in the build-up to D-Day, but the Kruschen hedgehog was probably the first of its kind and the site is exceptionally well-preserved (Figure 36).

The boundary of the hedgehog was a large anti-tank ditch that stretched for several hundred metres along the site's northern and western sides (Figure 37). Along the northern edge it is heavily eroded, evidence for the number of armoured vehicles that crossed it during the exercise. On the eastern side the hedgehog boundary is a length of anti-tank ditch dug in 1941. To the south the escarpment forms a natural defence.

Within this defended area are a series of concrete structures. The majority are concrete pillboxes that were intended to represent German

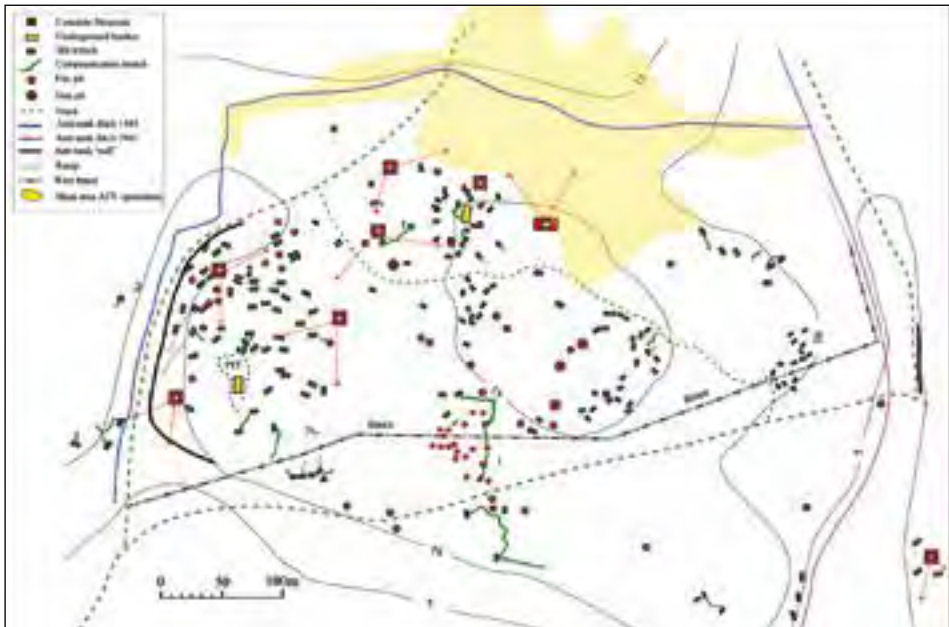


Figure 36. Plan of the 'Hedgehog' built for Exercise 'Kruschen' in 1943.

Figure 37. Anti-tank ditch forming the western boundary of the Kruschen 'Hedgehog'.



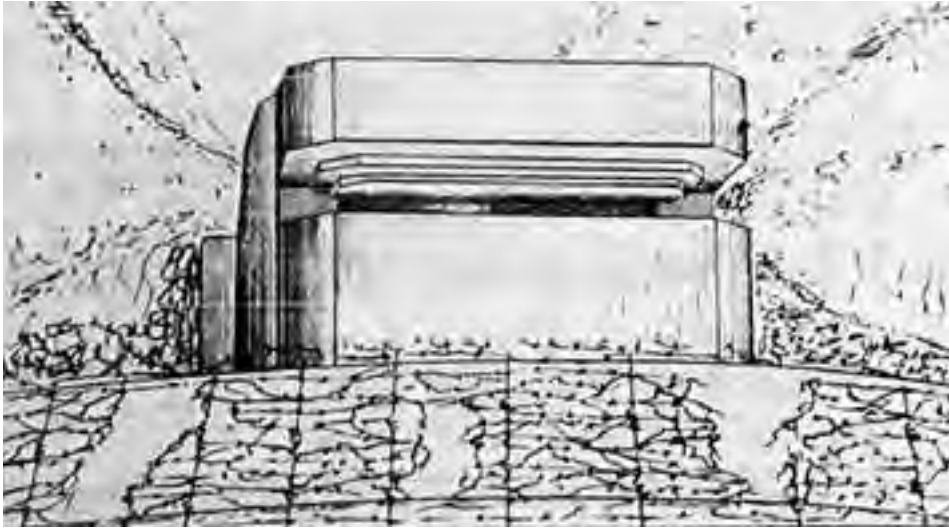


Figure 38. Illustration from a wartime British intelligence document concerning German fortifications on the Atlantic Wall, showing the kind of concrete emplacement then under construction.



Figure 39. Concrete pillbox built for Exercise Kruschen to replicate German fortifications. Its ruined state today is a result of its being blown up by engineers training for the D-Day landings in late 1943 or early 1944.

machine gun or anti-tank gun posts. (Figures 38 and 39) The design and the thickness of the concrete were based on British intelligence reports on the kinds of structures then being built along the Atlantic Wall in occupied Europe. There are also two subterranean concrete roofed structures that were intended to represent the group shelters for use during air raids or heavy shelling. Surrounding the concrete structures and spread out all over the Kruschen site are large numbers of earthworks, ranging from

slight sinuous ribbons of shallow trenches to larger pits and depressions. The majority take the form of shallow trenches that snake across the topography and often either follow ridgelines or lie on the forward slopes of the escarpment. These often interconnect with rectangular or circular pits the spoil from which is heaped up onto one side. A smaller number of pits are more 'keyhole' in shape. These earthworks are the remains of mock German trenches for infantrymen armed with rifles and machine guns. (Figure 40)



Figure 40. 'German' trench forming part of the 'Hedgehog' defences.

The hedgehog and the surrounding area were the scene for mock assaults that tested equipment and techniques. Various forms of flamethrower were trialled, as were different devices for crossing the anti-tank ditch, breaching the minefield and clearing the barbed wire. The dropping of a fascine (a bundle of wooden palings) by a tank into the anti-tank ditch was perfected, as was the vehicular use of the 'snake', a metal pipe full of explosives that could be used to blow a path through the minefield and barbed wire (Figures 41 and 42). Just as important, however, were the various battle drills that were pioneered, where the precise placement of men, vehicles and weapons was tested. During a 'live run' tanks, artillery, mortar fire and small arms were all used to practice breaching the hedgehog defences and then clearing the pillbox complexes. One veteran recalled that the vehicles churned up so much dust from the sandy soil that the heath resembled the desert in North Africa and that such an unusually high level of ammunition was provided for the exercise that men placed bets on whose vehicle fired off the most machine gun rounds during mock attacks.



Figure 41. Fascine-carrying tank, Exercise Kruschen. (IWM H 29035)

Figure 42. Senior officers watching a demonstration of the 'Snake', an explosive device used for clearing a passage through minefields and barbed wire. (IWM H 29057)





Figure 43. Illustration by war artist Edward Bawden of an infantryman using a flamethrower during Exercise Kruschen. (IWM ART LD 2890)

One very unusual source for Kruschen is a series of illustrations by the war artist Edward Bawden, who was attached to the exercise during March and April. A number of watercolours show tanks, practice assaults and flamethrowers, encapsulating the events mid-way through the exercise. One illustration, showing an infantryman with a flamethrower set against a background of smoke and on-looking spectators, probably captures the essence of what took place on a regular basis (Figure 43).

A more idiosyncratic record of the exercise comprised was panorama, two and a half metres in length, which was completed in the ten days between 26 March and 4 April and which shows a series of activities in some detail (Figure 44). Infantrymen are shown wrapping up steel scaffold poles with lengths of wooden paling to make fascines, while Churchill tanks, one of which is towing troops in a sledge, are scattered across the area. More dramatic are the Wasp flamethrowers two of which are firing across the anti-tank ditch while two others drive across. In a letter to his wife Bawden relates how the eventual



Figure 44. 'Exercise Kruschen' by Edward Bawden, showing the range of activities that took place during the exercise. IWM (IWM ART LD 2899)

composition was unplanned; he started with the middle scene and simply added more sheets to either side. This is perhaps the best contemporary record of what took place on a day-to-day basis during the exercise; the contrast between the scenes in the painting and the tranquil heath today could not be greater.

The final results of Kruschen were showcased in two demonstrations on 14 April and 8 May, both of which were attended by senior military and political figures. The exercise was deemed to be a success, as it had perfected the use of the Snake, proved the effectiveness of the fascine and also prototyped an all-arms drill that could be used as a basis for troops training for the D-Day landings. Kruschen was only the beginning, and the knowledge gained was refined over the next twelve months, but it kick-started the process that resulted in the success of Operation Overlord on 6 June 1944.

The training that took place after Kruschen is also responsible for the ruined state of the pillboxes that can be seen today. During Kruschen itself there was no point destroying the pillboxes as this would have meant re-building them after every practice attack, so a dummy explosive charge was used during each 'live run'. It was only in November 1943, months after Kruschen had finished, that permission was given for 79th Armoured Division (the formation developing specialised equipment to breach the Atlantic Wall) to blow up the concrete as part of their training. The ruined state of the pillboxes today is thus almost certainly the work of one of the Assault Squadrons of Royal Engineers who later landed on D-Day.



1942-1944: Maintenance, Abandonment and Operation Diver

The general standing down of the coastal defences was interrupted in July 1944 by Operation Diver, the British response to the German ‘V1’ flying rockets launched against southern England. This operation redeployed large numbers of anti-aircraft batteries along the coast.

As the Allied armies advanced across northern Europe the area of possible V1 launch sites became restricted and, increasingly, those that were used were those from which the flight path of the rockets took them over the east coast, something intensified by the launching of V1s from Luftwaffe aircraft flying over the North Sea.

In response, in September 1944 Anti-Aircraft Command established the ‘Diver Strip’, which stretched from Clacton to Great Yarmouth on the east coast. In the area covered by this guide there were approximately forty separate sites connected with Diver, including searchlight positions as well as gun batteries. For the majority of sites there are only traces left above ground, but aerial photographs give an idea of what was originally in place (Figure 45).

The Fate of the Coastal Defences

The end of the war in 1945 saw a great effort in places such as Aldeburgh to remove the military defences as quickly as possible. With the town desperate to revive the holiday trade in order to bring in much-needed revenue, the beaches needed to re-open in the quickest possible time. In general terms, the defences built in the towns and villages along the coast and on those beaches best suited for bathing, tended to be removed first. The elements that presented the most immediate danger to life and limb represented the priority and so the removal of minefields and barbed wire tended to be expedited. Many holiday-makers in the late 1940s took to the sea accompanied by the sound of mines being detonated close by and



Figure 45. Distribution map of Diver gun sites in the area covered by this guide; each symbol represents a battery of four 3.7inch heavy anti-aircraft guns.



Figure 46. Early post-war photograph of Dunwich Beach, showing wartime remains. Despite the presence of the defences, the beach was open for bathers. (Hand-tinted photograph by AR Fisk, courtesy of Dunwich Museum)

the sight of barbed wire being rolled up and taken away. Where possible, larger fortifications were dealt with on site; at Dunwich, for example, a Suffolk Square pillbox is known to remain beneath the beach in the spot where it was pushed into a hole excavated solely for the purpose of burying it. Early post-war illustrations depict life slowly getting back to normal, albeit against the backdrop of the remnants of the coastal crust (Figure 46).

Away from holiday resorts the removal of the former defences was more piecemeal. Dunwich Heath was acquired by the National Trust and here a heath fire during the 1960s exploded so much ordnance that the area was systematically cleared, including by Eastern Europeans from the post-war resettlement programme. (Figure 47) It was at this time that most of the concrete defences on the heath and probably the beach were removed. At neighbouring Minsmere an unwitting by-product of the deliberate flooding of the marshland was the creation of a perfect habitat for birds. This wartime environment became the core of the present-day bird reserve, which expanded in subsequent decades to include areas such as Westleton Walks, with the RSPB management chiefly responsible for the well-preserved 'Kruschen' landscape.



Figure 47. Eastern Europeans on ordnance clearance duty at Dunwich Heath, c.1960 (National Trust).

Figure 48. Dunwich beach, 1949. Children play alongside the remaining beach defences. (William Foreman)



Today, the remnants of the Second World War defences survive only in discrete pockets, but, with so much of this part of the coastline in stewardship, some significant remains still exist and careful management will ensure that these monuments will remain in existence long into the future. (Figure 48)

Gazetteer: A Guide to the Second World War Remains

The places listed in the gazetteer are publicly accessible or can be viewed from public footpaths. Please help preserve these important monuments.

Do not climb into pillboxes or other concrete structures.

In places close to the sea be aware of the dangers from cliffs and tides.

Keep dogs on leads.

Take your litter home.

Obey the strict rules of access to National Trust, Natural England and RSPB managed sites.

The 1940 Defences: A Round of Walberswick (Figure 49)



Figure 49. 'War Walk' at Walberswick, showing the principal 1940 defences.



Figure 50. Map of 'C' Company 2nd/4th South Lancashire Regiment's dispositions in the summer of 1940. (The National Archives)

Walberswick is one of the best places to appreciate Ironside's 'coastal crust' as it existed on the ground and the broader thinking behind the anti-invasion landscape in this part of Suffolk. Here it is possible to walk the length of the defensive line of 'C' Company, the 2nd/4th South Lancashire Regiment, who constructed the defences here in the summer of 1940. (Figure 50)

A convenient start and end point is the car park at Hoist Covert (TM 484745), point 'A'. Looking north from here, you can get a good sense of the 'spur' that so troubled the military and along which runs the modern road that terminates at Walberswick itself.

From the car park, cross the road and follow the public footpath that leads south-west following the edge of Hoist Covert itself. This takes you along the edge of the Walberswick 'spur' to the flat area of Corporation Marshes. Here the overall defensive strategy is easy to comprehend: it was areas such as these that were to be flooded and made impassable to enemy troops.

Follow the public foot-path as it swings north and you soon begin to climb again, this time onto the southern edge of the Walberswick spur. Follow the path until you reach a pillbox at Hoist Covert (TM 487740), point 'B'.

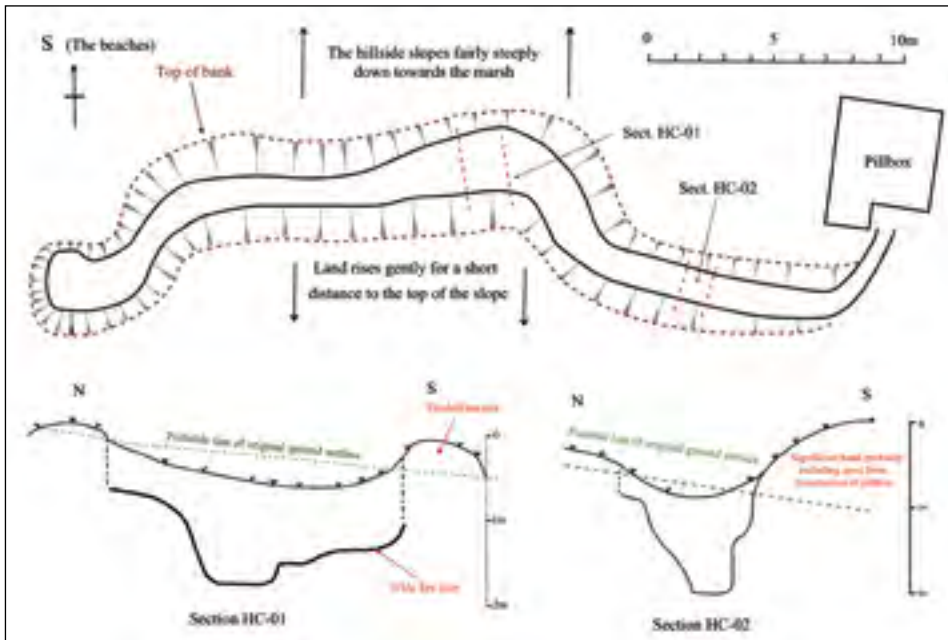


Figure 51. Plan of ten-man section position, Hoist Covert.

Figure 52. Computer reconstruction by the University of East Anglia of the Hoist Covert position as it may have looked in September 1940. (Virtual Past)



Here there is a unusual survival of a pillbox with the remains of its trench system intact. Today the site is heavily overgrown but this is the reason for its survival, as regenerating woodland since 1945 has preserved the earthworks of the former trench. Although partially filled in at some point after the war, enough remains to give some idea of the original size. (Figure 51 and Figure 52)

The pillbox is a 'Suffolk Square' typical of this part of Suffolk. A section of communication trench leads from the entrance and connects with a much larger earthwork that was a section of 'fire trench'. The position was for a ten-man section of infantrymen and its location marked the extreme right flank of 'C' Company, the 2nd/4th South Lancashire Regiment.

Part of the reason for its survival as an archaeological monument is that the position was abandoned in early 1941 as part of the general re-organisation of coastal defences (for which see above). The bullet marks on the eastern face of the pillbox is evidence that the position was re-used at some later point, probably in 1943 or early 1944 as part of training by troops practising for D-Day. The abandoned position would have provided a ready-made objective as part of a mock attack.

From here, follow the coast path as it leads north. This takes you past a ruined pillbox that originally stood in the neighbouring field, but was dragged to its present location in the 1960s. At TM 490741 there is a well-preserved artillery observation post, point 'C'. This was built in 1940 and was the position for spotters from 'E' Troop, 347 Battery 136 Regiment Royal Artillery, whose four 75mm guns were further inland at Sallow Walk Covert. (Figure 53)



Figure 53. Artillery Observation Post at Walberswick. The commanding location gave maximum visibility for the spotters, whose guns were located at Sallow Walk Covert, a little inland from Walberswick.

Follow the coast path to TM 496744. From the path another Suffolk Square pillbox can be seen, Point 'D'. Within the woodland are two pillboxes and another artillery observation post; this area was probably the command position for the whole company.

From here, follow the path down the hill towards Walberswick, cross the bridge over the Dunwich river at TM 499745 (Point 'E') and continue to the line of beach huts. Here the path follows a line of anti-tank cubes that can be traced into the modern car park.

Little remains of the defences in Walberswick itself, but the beach remains a good place to appreciate the fears of commanders in 1940. Although it is difficult to imagine now, the beach was covered with dragons teeth, barbed wire, a minefield and, from 1941, scaffolding. This area was the left hand boundary of 'C' Company.

From the beach, walk back to Walberswick village green and then up the main road. It is easy to visualise the military thinking here: this is the only road leading out of the village and making it impassable restricts any movement inland. (Figure 54)



Figure 54. Cameronians on the Green, Walberswick 1941. This rare photograph shows the village during the war, with the subject in this case being the band of the Scottish battalion stationed in the area at the time. (Michael Stannard)

At TM 492747, just before the fork in the road, is the site of a former roadblock and a pillbox originally stood in one of the gardens on the left-hand side, Point 'F'. The large private house on the right, called 'The Towers' in 1940, was requisitioned by the army and used as 'C' Company's Headquarters. A photograph of 'C' Company taken in 1941 shows the men who manned the defences the previous year. (Figure 55). From here, take the left-hand road and head back to the car park at Hoist Covert.



Figure 55. 'C' Company 2nd/4th South Lancashire Regiment taken in 1941, a year after their coastal defence duties in Suffolk. (Lancashire Infantry Museum)

East Sheep Walk (Figure 56)

The area of East Sheep Walk contains a series of military earthworks that date to different parts of the Second World War. Car parking exists at either end of the walk, at TM 471748 and TM 484745 (Hoist Covert Car Park). At the northern end is a large oval pit and a series of sinuous earthworks that are the remains of filled-in trenches. The pit is possibly the remains of a dugout for an artillery command post, as the Walk was the site of field gun positions in 1940 and 1941. This area was also the site of a Forward Defended Locality from 1941 and the trenches probably date from this time, as they correspond to the location given in documents and they lack concrete pillboxes.

The Walk also has a well-preserved anti-landing trench. Considerable numbers of these were constructed over the flat heath land back from the beaches, not so much to stop enemy gliders as to prevent aircraft using the area as a grassy runway. The example on the Walk was excavated by machine, as can be seen by the tell-tale 'tumps', small mounds of earth heaped up during construction.

More intriguing are the earthworks in the southern part of the walks. Although partly filled in, there are earthwork remains of trench systems with well-preserved firing positions and pickets for barbed wire still in



Figure 56. Plan of military archaeological remains, Sallow Walk Covert. This small area contains a variety of earthworks, some of which can be related to anti-invasion defences, while others are almost certainly training works.

place. These do not look like the kinds of trenches found in British military manuals and so it is possible that they are 'German' positions, built in the later part of the war for troop training and used during mock attacks.

Some support for this idea is provided by the existence of shallow rectangular pits littering this part of the Walk. These do resemble the kind of earthwork found in training manuals and are probably the remains of 'slit trenches', which were often dug by troops on exercise; when they were not intended to be occupied for any length of time they were not dug to any great depth. It is not inconceivable that in this part of the Walk we are looking at the remains of a training exercise where troops had to take a German position and then quickly 'dig in' afterwards, before moving on to their next task.

The 1940 Defences: Dunwich Road (Figure 57)

Survivals of 1940 defensive positions are rare, but one remains at Greyfriars Wood, near Dunwich. Here a series of weapon pits joined up by communication trenches represent a section post for ten men. More unusually, this post is also shown on a contemporary plan of the dispositions of the 2nd/4th South Lancashire Regiment. Its purpose was to guard the stretch of open ground to the west against glider-borne troops or paratroopers who might mount an attack from inland against the radar station on Dunwich Heath. The location on the woodline is typical, as it

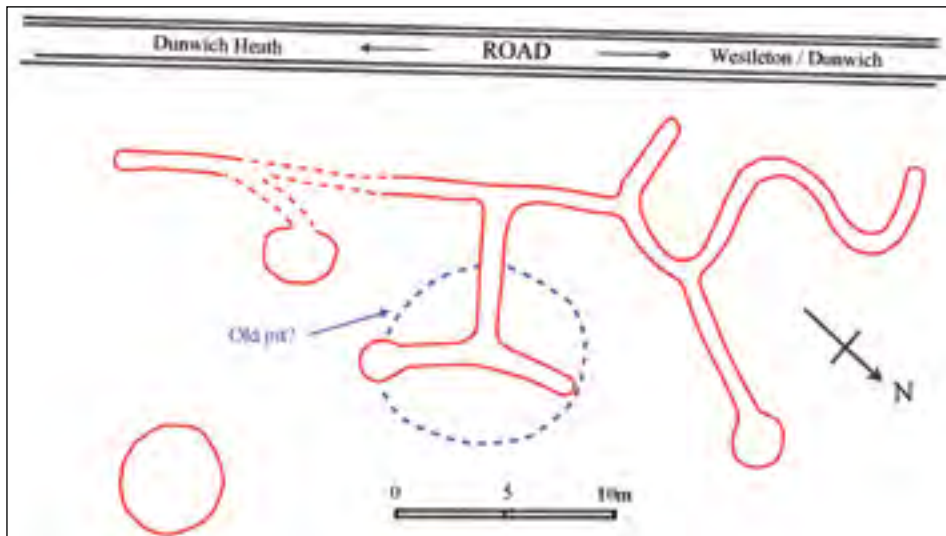


Figure 57. Plan of section position alongside Dunwich Road. This was a position for ten men and was primarily intended to protect the adjacent flat farmland from German troops landed by glider, aeroplane or parachute.

allowed a good field of fire while retaining camouflage. It is possible that this position also had a pillbox, but if it did it was removed soon after the end of the war.

Artillery Emplacements (Figures 58 and Figure 59)

Despite the importance of artillery in the defence of the coastline, archaeological survivals of gun emplacements are rare. One very unusual example of a concrete emplacement is to be found at Thorpeness (TM 476606). This is the position for an 18-pounder field gun which was placed here so that it could fire on Sizewell beach. The emplacement was built in May or early June 1940 when the gun itself was moved to Thorpeness from Kessingland, further north. This was one of five lone guns (either 18 pounders or 4-inch ex Naval guns) that were placed along vulnerable parts of the Suffolk coast and sited so they could fire directly onto the beaches. The one at Thorpeness was nick-named 'John', the others were 'Matthew', 'Mark', 'Luke' and 'St Peter'. The emplacement itself is of



Figure 58. Concrete emplacement for 18 pounder gun nicknamed 'John', built in 1940.

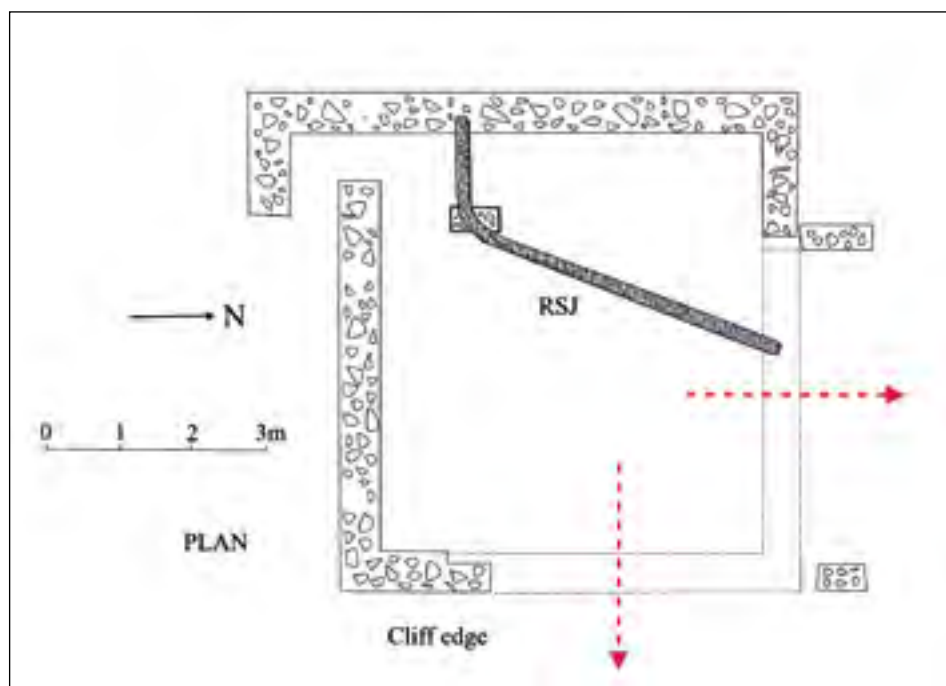


Figure 59. Plan of 'John' emplacement.

simple design, but the existence of an RSJ in the middle is a mystery. It sits at an unusual angle and it is not clear if this was part of the original design or an unsuccessful attempt at removal.

Anti-Tank Cubes

The best surviving length of anti-tank cubes in Suffolk is to be found on the Minsmere Levels at TM 478664. Here several lines of cubes run for hundreds of metres and some sense of how they transformed the landscape still remains.

On most surviving blocks the marks left by the wooden shuttering can still be seen and the sometimes haphazard placing of the planks suggests that the blocks were built with speed in mind. These blocks were built by the civilian contractor Wimpey, before and after the war a company chiefly associated with house building, and the words 'Wimpey Defence Line 1940' has been scratched on the top of one block.

The blocks were originally accompanied by other defences, including minefields, anti-tank scaffolding and an anti-tank ditch formed by a widened drainage ditch just inland from the beach. This part of the coast was also well-covered by artillery fire and had several designated 'SOS' tasks. For

this reason, during much of the war there were smaller numbers of troops on this part of the coast. The beach obstacles were deemed sufficient to hold up any invading Germans, who were in any event in range of machine guns placed at the southern end of Dunwich Heath. Originally the blocks ran in an uninterrupted line linking the southern end of Dunwich cliff to the area known as ‘The Sluice’. (Figure 60)



Figure 60. Anti-tank cubes, Minsmere Levels. Here the long run of blocks formed a continuous obstacle.

Smaller runs of anti-tank blocks can also be seen at Aldeburgh, Sizewell and Walberswick.

Emergency Coastal Defence Batteries

Today, only traces of the batteries can be seen, but enough remains to get some impression of what was originally in place. At Aldeburgh part of one of the concrete gunhouses is now part of the sea front, but the windmill is still something of a landmark. At Minsmere the site of the gunhouses and the majority of the ancillary structures have gone into the sea but the observation post is now part of the National Trust site and the commanding view to be obtained today cannot have changed much since the war. The

kinds of building that originally made up the Minsmere battery and others like can be seen by the sole survival at Minsmere of the former generator building, which is now a sea watch hut, and which retains its distinctive walls. A short distance away, buried in the heather, is a spigot mortar position, which was part of the battery defences and also served to protect the radar station. (Figure 61)



Figure 61. Battery Observation Post for Minsmere Emergency Coastal Defence Battery, built up against the row of cottages for camouflage.

Training Landscapes: Exercise Kruschen (Figure 62)

The well-preserved remains of Exercise ‘Kruschen’ can be seen from the public footpath that runs across RSPB and National Trust land at Westleton Walks and Dunwich Heath. A convenient starting point is TM 461673. From here follow the path north leading to TM 463680 The modern gate stands just outside the ‘hedgehog’ and broken remains of concrete pillboxes can be seen on the ground.

From here follow the path north, which runs through what would have been the hedgehog defences, Point ‘A’. On the left the anti-tank ditch survives particularly well; this stretch was built specifically for the exercise. On the

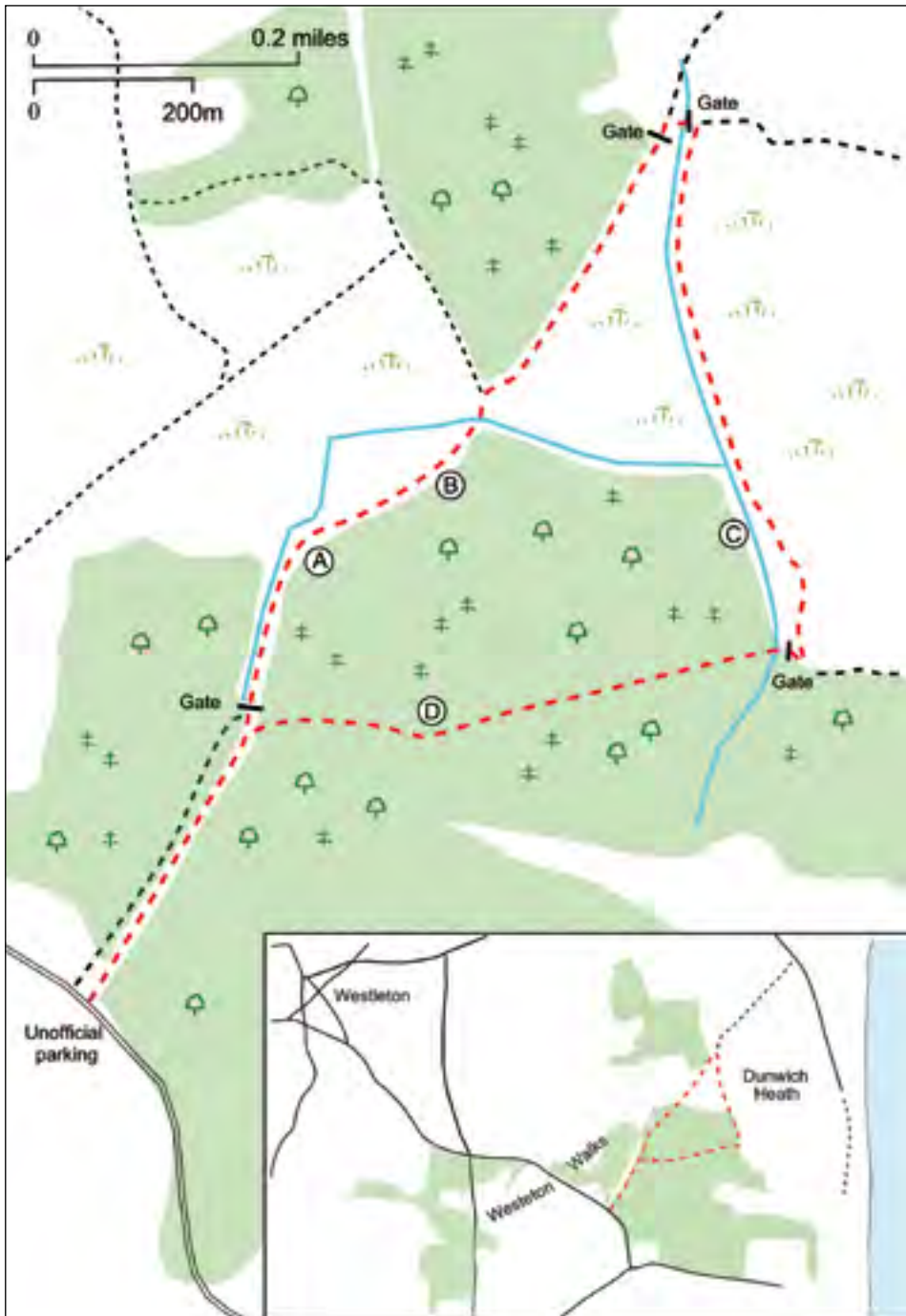


Figure 62. 'War Walk' at Westleton Walks, along the bounds of the 'Hedgehog' built for Exercise Kruschen, 1943.

right, the remodelling of the base of the escarpment can be clearly seen and on the ridgeline there are the remains of some of the ‘German’ concrete pillboxes. Some sense of the scale of the practice defences can still be appreciated (Figure 63).



Figure 63. Modern path through the Kruschen ‘Hedgehog’; here the path passes between the anti-tank ditch on one side and the concrete and earthwork defences on the higher ground.

A second group of pillboxes can be seen from the path at TM 465683. One close to the path is a good example of the effort put into its construction, but also the effects of its destruction in post-Kruschen training, Point ‘B’.

From here, continue along the path which leads away from the hedgehog. At TM 468688 cross via the gate onto Dunwich Heath, which is owned by the National Trust. Walking south soon takes you past a 1941 anti-tank ditch that was re-used in Kruschen in order to form the eastern side of the ‘hedgehog’, Point ‘C’. Today this is still known as the ‘tank trap’, and although it is degraded, it survives well in places (Figure 64). At TM 469681 the terracing that can be seen on the slope is also connected with ‘Kruschen’ and was part of an additional anti-tank obstacle.

At this point cross via the gate back onto the RSPB side. At TM 464699 (Point ‘D’) a pair of circular depressions that lie just off the path are the remains of mock German machine gun posts intended to replicate a ‘Tobruk’ shelter, a form of field fortification common in occupied Europe (Figure 65).



Figure 64. Anti-tank ditch between Westleton Walks and Dunwich Heath. This was excavated in 1941 for anti-invasion defence and protected Dunwich Heath from attack from the west. In 1943 it was re-used to form the eastern side of the Kruschen 'Hedgehog'.

Figure 65. Earthwork remains of keyhole 'Tobruk' stands, built to replicate German machine gun positions.



Further Reading

C. Dobinson, *Anti-Invasion Defences of WWII Twentieth-Century Fortifications in England vol.2* (CBA, York, 1996). An unpublished report by the Council for British Archaeology, but sometimes available from local libraries.

W. Foot, *Beaches, Fields, Streets, and Hills: The Anti-Invasion Landscapes of England, 1940* (CBA, Research Report 144, 2006).

P. Kent, *Fortifications of East Anglia* (Terence Dalton 1988).

B. Lowry (ed.), *20th Century Defences in Britain: An Introductory Guide* (CBA, 1995).

C. Hegarty and S. Newsome, *Suffolk's Defended Shore: Coastal Fortifications from the Air* (English Heritage, 2007).

M. Osborne, *Defending Britain: Twentieth-Century Military Structures in the Landscape* (Tempus, 2004).

M. Osborne, *Twentieth-Century Defences in Britain: Suffolk* (Concrete Publications, 2008)

More specialised works:

R. Liddiard and D. Sims, 'A Piece of Coastal Crust: The Origins of a Second World War Defence Landscape at Walberswick, Suffolk', *History* 97 (2012), 402-30.

R. Liddiard and D. Sims, 'A Hedgehog on the Heath: The Second World War Landscape of Exercise 'Kruschen', Dunwich, Suffolk', *The Archaeological Journal* 169 (2013), 519-49.

S. Newsome, 'The Coastal Landscapes of Suffolk during the Second World War', *Landscapes* 4 (2003), 42-58.

Useful websites

<http://www.walberswickww2.co.uk/>

<http://www.archaeologyuk.org/cba/projects/dob/>



Walberswick to Aldeburgh is one of four guides to Second World War archaeology in Suffolk, published in the same format. Together they will help readers to discover, appreciate and enjoy the physical remains of that conflict that still lie in the countryside. This guide describes the pillboxes, batteries and other defences that lie on this stretch of the Suffolk coastline.

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