# **DEFENCE AREA 12**

# **DORKING GAP**

## 1. Area details:

The defence area is 1½ miles N of Dorking. County: Surrey. Parish: Dorking. NGR: centre of area, TQ 170512.

1.1 Area Description: [see Map 1].

The River Mole cuts through the chalk hills of the North Downs north of the market town of Dorking creating a broad-bottomed valley some three-quarters of a mile across known as the Dorking Gap. To the west rise the heights of the Downs at Ranmore and to the east the massive rampart of Box Hill, the chalk slopes of which fall precipitously to the river below. The valley is traversed from north to south by the main A24 road that runs here as a dual-carriageway, and on its west side by the Horsham - London railway line. The river, flowing from the east side of the valley to the west, is crossed by the road at Burford Bridge where there is a hotel and an area of car parks, the latter being used, in particular, by day trippers for whom Box Hill has long provided an access to the countryside from the suburbs of South London.

Much of Box Hill is managed by the National Trust, and there is a visitor centre and car park on the top of the hill close to the Fort [see 2.1 below]. West and south of Box Hill is open farmland that stretches to the northern suburbs of Dorking. Filling much of the floor of the valley west of the main road is a large vineyard.



Fig. 1 - The dualcarriageway A24 road running through the Dorking Gap. In 1944, the left-hand carriageway was used for the temporary storage of vehicles, guns, and ammunition ahead of the D-Day landings. [See Fig. 4].

To the south, the defence area is bounded by the Dorking suburbs, to the west and east by the enclosing hills, and, to the north, by an arbitrary line that crosses the valley north of Burford Bridge. The various viewsheds within which the surviving defence works lie are all dominated by the mass of Box Hill.



#### 2. Assessment.

#### 2.1 **Defences:** [see Map 2]

#### Defence overview -

From late-June 1940, and throughout July and August of that year, GHQ Line 'B' was constructed from Farnham, running largely below the southern slopes of the North Downs as far as Reigate and eventually joining the GHQ Newhaven-Hoo Line at Penshurst in Kent. As with other sections of the GHQ Line, the prime intention was to form an anti-tank barrier protecting London and the industrial heart of England, behind which the GHQ Mobile Reserve could be placed. The Line was defended by a series of 'defended localities', often at the crossings of communications routes which were generally protected by road and rail blocks at which infantry pillboxes and anti-tank gun emplacements were positioned. Many bridges at these crossing points were prepared for demolition should an invasion take place. Where there was no suitable waterway to form the front-edge anti-tank obstacle, a machine-dug ditch was usually excavated.

Dorking was a Class 'A' nodal point with all-round defences occupying the southern end of the gap through the North Downs, which was a vital communication route towards London. It lay within its own Sub-Area of the military Home Counties Area, part of the defence responsibility of XII Corps. Other nodal points lay to west and east, at Shere, Betchworth, Redhill and Reigate. Reigate was also to become the headquarters of South East Command. The Wealden countryside south of the GHQ Line was further defended by a series of grid lines or 'fences'. These used the natural topography wherever possible to break up an advance by enemy armoured vehicles, and were defended at their crossing points by blocks and section posts manned by the Home Guard. Nodal points were also incorporated into the system.<sup>1</sup> The unit in August 1940 positioned to man the GHQ Line defences at the Dorking Gap was the 3rd Canadian Infantry Brigade, part of the mobile reserve of VII Corps.<sup>2</sup>

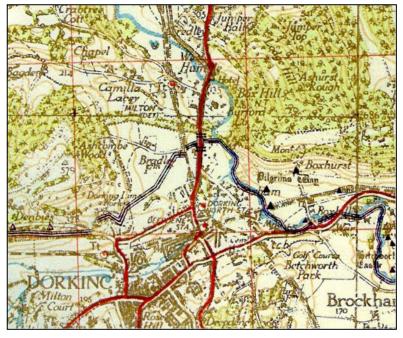


Fig. 2 - Portion of a German map (using an Ordnance Survey base) overprinted with defence works plotted from aerial reconnaissance. The line of the machine-dug anti-tank ditch to the west of the A24 road can be seen. To the east, the River Mole formed the principal anti-tank obstacle.<sup>3</sup>

<sup>&</sup>lt;sup>3</sup> Sheet 124: Befestigungskarte Grossbritannien 1:50,000 (BLML).



<sup>&</sup>lt;sup>1</sup> TNA: PRO WO 166/1214.

<sup>&</sup>lt;sup>2</sup> Alexander, *Ironside's Line*, p65.

The Second World War defences were not the first to be built in the Dorking Gap. The route here through the North Downs had long been considered of strategic importance, and, when an entrenched defence line to protect London was planned in the 1890s, one of the Mobilisation Centres where troops would assemble, and where arms and ammunition were stored, was constructed on Box Hill. This is known as Box Hill Fort, and is now a scheduled monument. An attack on the North Downs at Dorking by invading German troops was also the scenario of a fictional work published in 1871 that did much to alert the Government of the day to the deficiencies in England's land defences against possible aggression from across the Channel.<sup>4</sup>



Fig. 3 - Box Hill Fort, built as a 'Mobilisation Centre', c.1890. It has been a scheduled monument since 1973, but was only opened up for public viewing of the exterior in recent years. It lies on land managed by the National Trust.

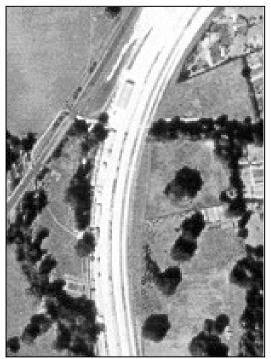


Fig. 4 - Vehicles and temporary shelters for stores still occupy the north-bound carriageway of the A24 road in the Dorking Gap, seen in this detail from an aerial photograph taken on 7 August 1944, two months after the D-Day landings.

<sup>4</sup> G.T. Chesney, *The Battle of Dorking* (Blackwood's Magazine, 1871).



#### The defence works -

The principal feature of the GHQ Line as it crossed the Dorking Gap was the machinedug anti-tank ditch, infilled by 1947. This approached from the Ranmore area to the south-west, crossed the railway line and the A24 road, where it was protected by roadblocks to its north and south, and ran through the gardens of houses to join the River Mole.



Fig. 5 - RAF air photograph taken in March 1942 showing the course of the anti-tank ditch as it crosses the railway and the road before joining the River Mole to the east. Two roadblocks protected this crossing of the GHQ Line, one on the line of the ditch and the other further to the north.



Fig. 6 - The site of the roadblock where the anti-tank ditch crossed the A24 road. The ditch ran towards the River Mole through the woodland to the right of the house.





Fig. 7 - The anti-tank ditch can be seen at the north edge of this 1942 air photograph, with the course of the River Mole, strengthened with concrete anti-tank obstacles and protected by pillboxes, flowing around the northeast suburbs of Dorking.

Principal amongst the surviving defence works in the Dorking Gap is the 6pdr. antitank gun emplacement dug into the south-west facing slopes of Box Hill above the river [UORN 9423]. This powerful structure has a brick and concrete revetment at the rear to protect it from land slip.

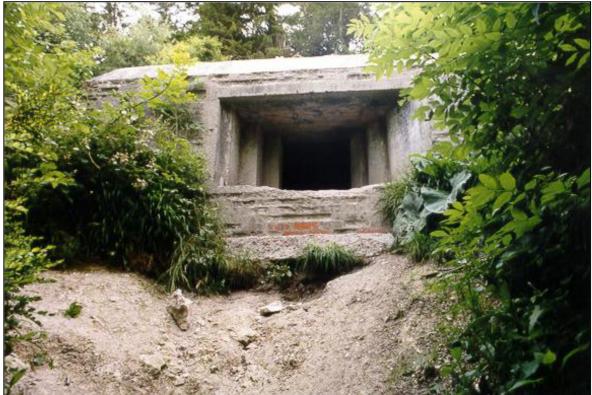


Fig. 8 -UORN 9423: the main embrasure of the 6pdr. anti-tank gun emplacement dug into the lower slopes of Box Hill. This is an evocative structure, away from the regular visitor paths, which currently can only be approached with difficulty.



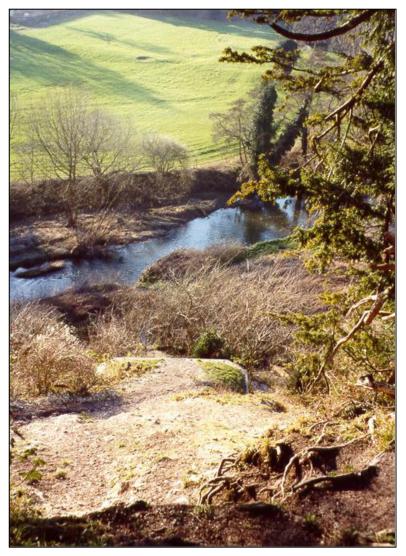


Fig. 9 - The roof of the antitank gun emplacement [UORN 9423] with, on the far side of the River Mole, the line of the infilled antitank ditch [the furthest of the two linear hollows running diagonally towards the river].

Further south, close to the east bank of the river, is an unusual type 24 pillbox, constructed using corrugated iron shuttering instead of the brick common to this area [UORN 6830]. Regrettably, there is no public access to this pillbox. Close by, and also with no access without permission, is a line of substantial concrete cylinders erected to strengthen the river bank as an anti-tank obstacle [UORN 9431].



Fig. 10 - UORN 6830: type 24 pillbox with an unusual appearance, having been constructed using corrugated iron for the exterior shuttering.



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Fig. 11 - UORN 9431: a line of concrete cylinders strengthens the bank of the River Mole as an anti-tank obstacle.



Fig. 12 - UORN 9431: the remarkable size of the cylinders (over 6ft. high), and the thickness of the base into which they are set, can be judged from this photograph.

To the north of Burford Bridge is another surviving pillbox that may have protected a further roadblock at this point [UORN 9436]. Other pillboxes have been destroyed, although it is possible that some plotted from German mapping in the Pixham area may survive: further fieldwork is needed. Close to the point where the anti-tank ditch meets the River Mole is a strange defence work consisting of two sets of concrete



piles, one on each bank of the river [UORN 9434]. These may relate to a barrier stretched across the river at this point to protect the end of the anti-tank ditch.



Fig. 13 - UORN 9436: brick-shuttered type 24 pillbox firing towards the A24 road at the extreme north of the defence area.



Fig. 14 - UORN 9434: one of two sets of concrete piles on the banks of the Mole which may be the remains of a barrier erected across the river.



#### 2.2 Landscape:

The northern suburbs of Dorking have spread in recent years close to the edge of the defence area by the A24 road, but otherwise there are few changes in the landscape from that of sixty years ago. To the west of the road, a large vineyard covers the land crossed by the anti-tank ditch obliterating any possible surviving evidence. The car parks at Burford Bridge do not impinge negatively upon the defence area, but are useful in providing access for visitors. The most convenient car park, however, to approach the anti-tank gun emplacement [UORN 9423], and to view from a distance the other defence works along the bank of the river, is that at the stepping stones on the line of the Pilgrims' Way (North Downs Way). A footbridge lies a short distance downstream from the stepping stones which are dangerous to cross in wet weather. The National Trust maintain a further car park, and a visitor centre, off the Zig Zag Road on the top of Box Hill. Close by is the Box Hill Fort. A steep descent can be made from here to the stepping stones and the site of the anti-tank gun emplacement. There is no public access to the river bank to inspect the anti-tank cylinders, UORN 9431, or the pillbox, UORN 6830.

#### 2.3 **Statement of Significance:**

The Dorking Gap was an important strategic point on the GHQ Line 'B' and was heavily defended in the Second World War against a possible enemy advance towards London via this pass through the North Downs. Enough of the defence works survive, with the complimentary documentary evidence, to enable the strategy of the defence here to be understood. The fact that defence planning from fifty years earlier, with similar strategic and topographical considerations, is still represented on the ground adds to the interest of the area.

The anti-tank gun emplacement dug into the side of Box Hill [UORN 9423] is an important structure, and adds significantly to the history of the Box Hill estate now managed by the National Trust. It would be advantageous for visitor access if a better path could be made from the area of the stepping stones to this site. Information on the emplacement might also be added to National Trust literature from which it is currently omitted.

Pillbox [UORN 6830] and anti-tank cylinders [UORN 9431] lying on private land are also important structures, and it would be desirable for public access to these to be arranged. As the only surviving pillbox at the north of the Dorking Gap, UORN 9436 is similarly important, but public access here would be more problematic.

Because of the problems for this survey of access to private land, further fieldwork of the defence structures along the east bank of the River Mole in the Pixham area might be carried out, perhaps by a local archaeological group, to determine whether pillboxes shown on German mapping and air photographs survive.

A 'pillbox walk', which would look as well at the late Victorian defence strategy of the Dorking Gap, could readily be drawn up.



## 3. **Recommendations:**

- 1. That the surviving anti-invasion defence works in the Dorking Gap area be considered of national importance. They enable this section of the defence of GHQ Line 'B' to be interpreted, and provide evidence of the articulation of the defence and the inter-relationship of its functionally different components. Such interpretation is assisted by the documentary evidence provided in this report of defence structures that were built as part of the overall strategy, but which have now been removed.
- 2. That consideration be given to carrying out further fieldwork, perhaps by a local archaeological group, that could obtain the requisite permission from landowners, to examine possible defence structures known from documentary evidence but not surveyed for this report, in particular those in the Pixham area.
- 3. That consideration be given, in collaboration with the National Trust, to providing easier access to the anti-tank gun emplacement, UORN 9423, and to negotiating public access to sites, UORNs 6830 and 9431.
- 4. That consideration be given by the National Trust, possibly in collaboration with the local authority, to providing information boards on the Second World War defence of the Dorking Gap. These might be sited in the various car parks in the Box Hill area. Information on the Second World War could also be incorporated in National Trust literature about the Box Hill estate. A 'pillbox walk' could be devised and included with the publicly-available information.

# 4. Supporting material.

#### 4.1 **Photographs:**

Figs. 1, 3, 6, 8, and 13-14 - taken (AWF) during field survey, 3.12.2003 and 9.12.2003.

Fig. 9 - copyright: Michael Shackel (Defence of Britain Project Archive, NMR).

Figs. 10-12 - copyright: Cyril Urquhart (Defence of Britain Project Archive, NMR).

Fig. 4 - 106G/LA/30 fr.3208 (7.8.1944) - NMR.

Fig. 5 - S/804 fr.6042 (13.3.1942) - NMR.

Fig. 7 - S/804 fr.6051 (13.3.1942) - NMR.

#### 4.2 **Documentary Sources:**

Home Counties Area 'G' War Diary, December 1940 - TNA: PRO WO 166/1214.

Befestigungskarte Grossbritannien: 1:50,000 (Sheet 124), 1.6.1941 - BLML 1305(13).

#### 4.3 **Published Source:**

Colin Alexander, Ironside's Line (Historic Military Press, 1999).

#### 4.4 Aerial Photographs:

26H/UK1452 frs.4348-4349 (16.4.1941) - NMR.



26H/UK1452 frs.4355-4356 (16.4.1941) - NMR. S/804 frs.6041-6042 (13.3.1942) - NMR. S/804 frs.6051 and 6054 (13.3.1942) - NMR. 106G/LA/30 frs.3208-3209 (7.8.1944) - NMR.

- 4.5 **Ordnance Survey 1: 2500 Plans:** TQ 1650-1750 (1970) - BLML. TQ 1651-1751 (1970) - BLML. TQ 1652-1752 (1970) - BLML.
- 4.6 **Defence of Britain Project Database:** [see 5. 'Annex'].

