

DEFENCE AREA 6

STUDLAND BAY

1. **Area details:**

The defence area is 3½ miles N of Swanage and 5 miles E of Corfe Castle.

County: Dorset.

Parish: Studland

NGR: centre of area, SZ 032834.

1.1 **Area Description:** [see Map 1].

The defence area consists principally of the coastline north of the village of Studland. The focus of the area is Redend Point where high cliffs give way to a flatter landscape of sandy beaches and dunes, backed by woodland and heathland to the west. There is thus a considerable variety in the landscape within a relatively small compass.

As Studland Bay curves away to the north with the sand dunes becoming ever more extensive, the northern border of the area is provided by the inland stretch of water known as Little Sea. To the west are the expanses of Studland Heath, and at the south the houses of Studland village. A road crosses the area taking traffic north to the ferry crossing to Poole. Much of the area is National Trust land, and Studland and Godlingston Heaths are also part of a National Nature Reserve.

The principal viewshed is that from Redend Point, looking north at the curve of Studland Bay with its continuous sandy beach backed by dunes and woods. A further visual envelope, quite separate from the rest of the area, is provided by the barren expanses of Studland Heath.



Fig. 1 - The sweep of Studland Bay seen from Redend Point.



Fig. 2 - The main focus of the defence area - Redend Point is to the left, and the sandy beach of Studland Bay continuing to the right. This oblique air photograph was taken in August 1941. Tubular scaffolding lines the beach, and a side valley is blocked by anti-tank cubes. Fort Henry on Redend Point has yet to be built.

2. **Assessment.**

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

Defence overview -

In 1940, the defence of the Dorset coast was the responsibility of V Corps. Its 50th Division had its headquarters at Blandford Forum, with three infantry brigades forward to defend the coastline. Anti-tank islands were established at Blandford itself, as well as at Dorchester, Maiden Newton, Yeovil, Bournemouth, Weymouth, Poole, Wimborne Minster, and Wareham.¹ A number of stop lines were constructed, including one from Weymouth to Dorchester, and another from Dorchester to Wareham, thereby sealing off the Isle of Purbeck from the Dorset hinterland.²

During the critical months of invasion danger from June 1940, first the 150th Infantry Brigade and later, from October, the 210th Infantry Brigade defended the Studland Sub-Sector.³ Apart from the defence of the beaches, a principal task was to protect the crossing of the River Frome east of the anti-tank island of Wareham. The aim was to keep any invading German forces bottled up on the Isle of Purbeck until reinforcements arrived to drive them back into the sea. Patrols were also mounted to

¹ TNA: PRO WO 166/605 and TNA: PRO WO 166/4677.

² TNA: PRO WO 166/249.

³ TNA: PRO WO 166/1018 and TNA: PRO WO 166/1063.



combat possible airborne landings to the rear. In October 1940, the infantry battalion in the Studland Sub-Sector was the 7th Bn. Suffolk Regiment. By April 1941, it had been replaced by the 1st Bn. Coldstream Guards.⁴ The Dorset Home Guard unit also manning defences at Studland was No.2 (East Purbeck) Company, 7th (Wareham) Battalion.

Forward defended localities (FDLs) were established on the line of the beach, and pillboxes constructed there.⁵ Anti-tank cubes blocked possible exits from the beach at three locations in the study defence area, and minefields were also situated amongst the sand dunes. Most of these defences were in place by early August 1940. From mid-1941 a double line of anti-tank scaffolding was erected along the entire length of the beach: it was even positioned below the cliffs of Redend Point. This scaffolding was supplemented by barbed wire entanglements.



Fig. 3 - An oblique air photograph taken in August 1941 shows anti-tank scaffolding tight against Redend Point on its north side. Later the scaffolding was extended to the south.

⁴ TNA: PRO WO 166/4710 and TNA: PRO WO 166/4091.

⁵ TNA: PRO WO 166/4710.





Fig. 4 - Towards the left rear of this aerial view is Knowl Hill House. Of the anti-tank cubes blocking the road from the beach, only one single block survives [UORN 16326 - see Fig. 11]. The Knoll Beach National Trust visitor centre and car park occupies the area to the right of the road on the beach side of the blocks

At Redend Point, a 6pdr. gun was positioned in a concrete emplacement, with the task of combating enemy tanks landing on the beach beneath. Nearby was a 4in gun intended to fire against infantry landing craft. Other 6pdr. gun positions lay on the coast to the north and the south.⁶

Studland Bay was also the scene of a major experiment to test the effectiveness of burning oil as a defence against a German seaborne invasion. This was known as Project Fougasse, and involved piping oil to the sea and firing it by explosive charges. Three sites connected with this form of petroleum warfare survive within the defence area - two in the vicinity of The Warren Wood at the south-east of the area, and the other at Knoll House Hotel.

The anti-invasion preparations at Studland Bay were observed by Luftwaffe reconnaissance missions, and the resulting detail of defence works was shown on Sheet 141a (dated 15.9.1940) of the 1:50,000 series 'Befestigungskarte Grossbritannien'. Unfortunately, that sheet does not appear to survive in a British archive, and the only known copy is at the German military archives in Freiburg where it has not been possible to consult it.

From the autumn of 1943, Studland Bay became an amphibious assault training area as part of the preparations for D-Day. Sections of the anti-tank scaffolding were removed so that exercises could take place, although some were left in place in order

⁶ TNA: PRO WO 166/1063, TNA: PRO WO 166/4710, and TNA: PRO WO 166/10955.



that assault techniques could be practised against it.⁷ Battle training was also carried out using the anti-invasion period pillboxes.⁸ Further inland, Studland Heath, which was a training area from 1942, was set with range observation bunkers.⁹



Fig. 5 - Range observation bunker [UORN 7708] on Studland Heath. The heathland is criss-crossed with slit trenches and other earthworks from the Second World War battle training area, most hidden by dense vegetation.

In 1943, a large reinforced concrete observation bunker, with a viewing slit facing the sea, was constructed on Redend Point, partly obscuring the earlier 6pdr. gun emplacement [UORN 7717]. This was called Fort Henry after the home base of the Canadian Royal Engineers who built it. Its purpose was to allow the observation of the amphibious assault training exercises that were being held with live ammunition under battle conditions. Many famous commanders, and dignitaries, came here, including Eisenhower, Montgomery, Churchill, and King George VI.

The defence works -

Alongside Fort Henry, the concrete emplacement for the 6pdr. gun [UORN 7717] makes a convenient shelter within which the National Trust has placed information boards on the Second World War history of the area. Below Redend Point to the north, the remains of anti-tank blocks and the roof of a pillbox lie on the shoreline where they are washed by the sea at high tide. Near here as well, a short line of anti-tank cubes in good condition [UORN 7719] can be seen still blocking a small side valley from the beach. South of Redend Point, built on rocks beneath the cliffs, is a type 25 circular pillbox raised on a 4½ feet thick concrete base. This is a striking sight at this location, and the pillbox has survived remarkably in good condition. However, because of its vulnerability to the action of the sea, which has already tilted

⁷ TNA: PRO ADM 179/341.

⁸ UORN 7716, for example, shows evidence of live firing.

⁹ This appears to be the purpose of these structures otherwise termed 'pillboxes' - UORNs 7705, 7706, 7708 (and possibly 7707 and 7711). They face south and seem very unlikely to have had an anti-invasion role.



its massive base, its longer term prospects of survival would appear uncertain. It is difficult to imagine what could be done to protect it.



Fig. 6 - Fort Henry [UORN 16328]. Although not an anti-invasion defence work as such, this is a most important structure in the Second World War heritage of Studland Bay.



Fig. 7 - UORN 7719: anti-tank cubes with pyramidal tops block a valley leading from the beach north of Redend Point. [See as well Fig. 2].



Fig. 8 - UORN 7718: type 25 corrugated-iron shuttered pillbox in a remarkably exposed position beneath the cliffs of Redend Point. It has survived for sixty years, but is unlikely to do so for a further sixty.

Further north along the beachfront from Redend Point are three surviving pillboxes of a particular shape, basically square, but with a three-sided front face containing a large embrasure for a medium machine gun.



Fig. 9 - UORN 7716: pillbox with a large embrasure for a medium machine gun. It shows damage probably caused during assault training in 1944.



Fig. 10 - UORN 7704: the blocked doorway of a pillbox standing within the National Trust car park at Knoll Beach. Unusually, the pillbox was constructed using vertical wooden shuttering.



Fig. 11 - UORN 16326: a single surviving anti- tank cube, with a pyramidal top, from a long line of these that once blocked an exit from the beach just north of the present National Trust visitor centre at Knoll Beach [see as well Fig. 4].

Landscape:

Other than for some minor housing development within Studland village, there has been remarkably little change over the past sixty years in the landscape of the Studland Bay defence area. The beachfront and the sand dunes, together with Studland Heath, are all National Trust land, large areas of which fall within a National Nature Reserve. The principal changes have been in response to the needs of tourism, but in this regard very little has been allowed of a commercial nature. Three separate car parks have been established by the National Trust to allow access to different points of the beaches. For the purpose of visiting the area around Redend Point, use should be made of the Middle Car Park, but, to see the pillboxes further north in the Knowl Hill area, the Knoll Beach Car Park, with its adjacent National Trust visitor centre, should be used.

Fort Henry is well presented by the National Trust, with information boards on its history. This would be a highly suitable location for further information to be displayed on the anti-invasion defences of the area.



Fig. 12 - UORN 7717: 6pdr. gun emplacement by Fort Henry, with National Trust information boards.

Access to most of the defence sites is possible through a variety of footpaths and tracks, and by walking on the beach itself. The sites on Studland Heath are more remote and hard to locate, and care has to be exercised while seeking them out not to fall into one of the many pits and trenches (probably of Second World War origin) that are hidden beneath gorse and bracken.

2.3 Statement of Significance:

The Studland Bay defence area played an important role during the Second World War, and all aspects of that role are represented by the surviving material evidence. Studland Bay was one of the two stretches of Dorset coastline where a German invasion was considered most likely. Although it lay to the east of the Lyme Bay area



actually targeted by the German 6th Army under the Operation Sea Lion plans, the defence works there must be seen as protecting a coastline so suited to assault that it was used by Allied troops to rehearse for the 1944 D-Day invasion.

Very many of the defence works have long since been cleared away, but enough survive, with the excellent documentary and air photographic evidence, for the intensity of the defence of this stretch of coastline to be appreciated. The sites around Redend Point make a significant group, with the type 25 pillbox on the rocks beneath an outstanding survival. The sites associated with petroleum warfare are also important as there are very few such sites surviving in England. The structures on Studland Heath, thought to be range observation bunkers, have been included as there is some debate regarding their purpose, and they add to the overall Second World War interest of the area. Finally, Fort Henry is a most important structure that should be included in any Second World War heritage trail.

The defence area is set within attractive and varied scenery, and a 'pillbox walk' could be readily established to view the surviving defence works.

3. **Recommendations:**

1. That the surviving anti-invasion defence works in the defined Studland Bay area be considered of national importance. They enable the defence of this section of the Dorset coast 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 and air photographic evidence of defence structures that were built as part of the overall strategy, but which have now been removed.
2. That further fieldwork be carried out, perhaps by a local archaeological group, to identify further surviving defence works, in particular around Little Sea and on Studland Heath.
3. That consideration be given, in a possible initiative with Dorset County Council and the National Trust, to establishing a 'pillbox walk' to view the defence works in the area. An information board on the anti-invasion defences might be added to those already available at Fort Henry, and might also be set up at the Knoll Beach car park.

4. **Supporting material.**

4.1 **Photographs:**

- Figs. 1 and 5-12 - taken (AWF) during field survey, 19.1.2003.
- Fig. 2 - SZ 0382/3 fr.046 (16.8.1941) - NMR.
- Fig. 3 - SZ 0382/4 fr.047 (16.8.1941) - NMR.
- Fig. 4 - SZ 0383/4 fr.051 (16.8.1941) - NMR.

4.2 **Documentary Sources:**

- 50 Division 'G' War Diary, 1940 - TNA: PRO WO 166/605.



'Defence Instruction No.1', 9.7.1940 (from 150th Infantry Brigade War Diary) - TNA: PRO WO 166/1018.
 'Operation Instruction No.41', 5.9.1940 (from V Corps War Diary) - TNA: PRO WO 166/249.
 'Operation Order No.2', 8.9.1940 (from 1st Bn. South Lancashire Regiment War Diary) - TNA: PRO WO 166/4677.
 'Operation Order No.1', 21.10.1940 (from 7th Bn. Suffolk Regiment War Diary) - TNA: PRO WO 166/4710.
 '210th Infantry Brigade Defence Scheme', 6.3.1941 (from 210th Infantry Brigade War Diary) - TNA: PRO WO 166/1063.
 '1 Coldstream Guards Defence Scheme', 14.4.1941 (from 1st Bn. Coldstream Guards War Diary) - TNA: PRO WO 166/4091.
 'Standing Operation Instruction', 1943 (from Dorset Sub-District War Diary) - TNA: PRO WO 166/10955.
 Amphibious assault training areas, Studland: correspondence, 1943-1944 - TNA: PRO ADM 179/341.

4.3 **Published Sources:**

John Murphy, *Dorset at War!* (Dorset Publishing Company, 1979).
 Robin T. Pearce, *Dorset Attacked, Dorset Defended* (Hamblin Books, 1999).
 Colin A. Pomeroy, *Military Dorset Today* (Silver Link Publishing, 1995).
 Lawrence Popplewell, 'Fort Henry' (from *Dorset: The County Magazine*, No.35, pp44-47, n.d).

4.4 **Aerial Photographs:**

225B/BR222 fr.3 (1.8.1940) - NMR.
 SZ 0382/1 fr.044 (16.8.1941) - NMR.
 SZ 0382/2 fr.045 (16.8.1941) - NMR.
 SZ 0382/3 fr.046 (16.8.1941) - NMR.
 SZ 0382/4 fr.047 (16.8.1941) - NMR.
 SZ 0383/3 fr.050 (16.8.1941) - NMR.
 SZ 0383/4 fr.051 (16.8.1941) - NMR.
 SZ 0383/5 fr.052 (16.8.41) - NMR.
 SZ 0384/4 fr.055 (16.8.1941) - NMR.
 HLA/531 fr.6003 (7.5.1942) - NMR.
 106G/UK/842 frs.5042-5043 (25.9.1945) - NMR.
 CPE/UK/1893 fr.3307 (12.12.1946) - NMR.
 SZ 0382/7 fr.0145 (15.3.1950) - NMR.

4.5 **Ordnance Survey 1: 2500 Plans:**

SZ 0382 (1955) - BLML.
 SZ 0383 (1955) - BLML.

4.6 **Defence of Britain Project Database:**

[see 5. 'Annex'].

