

DEFENCE AREA 29

BAWDSEY POINT

1. Area details:

Bawdsey Point is 2 miles SW of the village of Bawdsey and 3 miles NE of Felixstowe.

County: Suffolk.

Parish: Bawdsey.

NGR: centre of area, TM 334377.

1.1 Area Description: [see Map 1].

The defence area lies on the Suffolk coast at the southernmost point of the Bawdsey peninsula, bordered to the west by the River Deben and by the open sea to the south. It consists of marshland to the north, and of sandy and shingle beaches to the west and south. The central part is taken up by the estate of Bawdsey Manor, a mansion built in a highly ornate style in the late nineteenth century for the Quilter family. This property was purchased by the Air Ministry in the mid-1930s and used as an Air Ministry Experimental Station (AMES 24) for the development of radar.

At Bawdsey Quay a small ferry carries travellers to the west (Felixstowe) bank of the Deben. The area is a popular holiday location, and a Suffolk Coastal District Council picnic site, with car parking, is provided. Money has recently been granted to Suffolk County Council by the East of England Development Agency to regenerate the Bawdsey Quay area.

The focal points of the area are the river and sea shores, and the looming pile of Bawdsey Manor when viewed from the southern beach. The principal viewsheds are the shorelines on which many of the surviving defence works are situated, which merge to the north with Bawdsey Marshes. Bawdsey Manor and its grounds were until recently occupied by Alexanders International School, and there is no admission without permission. However, several of its defence works can be seen from the road to the north and from the seashore to the south.



Fig. 1 - The River Deben at Bawdsey Point. The Quay is in the left background, and on the far bank of the Deben can be seen a Martello tower: the base of another forms a sunken garden in the grounds of Bawdsey Manor.





Fig. 2 - Bawdsey Manor from the southern beach. The cliffs conceal several defence works.

2. Assessment.

2.1 Defences: [see Map 2]

Defence overview -

This stretch of Suffolk coast has long been considered vulnerable to enemy attack. In the Napoleonic Wars, a Martello tower was built at Bawdsey, and others are positioned to the north and south. In the First World War Bawdsey Manor was requisitioned, and troops from the Devonshire Regiment stationed there.

In the Second World War, there was a dual need to protect both the coastline at Bawdsey itself and to provide a defence for the top secret radar establishment at Bawdsey Manor, which had become Britain's Radio Direction Finding (RDF) training school and the first Chain Home Radar Station, classified as a Vulnerable Point (VP) with the XI Corps serial number of 'S.5'.¹ Bawdsey formed a Sub-Area within No.4 Sub-Sector, the defence of which in 1940/41 was the immediate responsibility of 46th Infantry Brigade.² The Bawdsey Sub-Area was held from April 1941 by the right forward company (D Coy) of the 11th Bn. Highland Light Infantry, which also manned other Sub-Areas at Alderton and Hollesley.³

An XI Corps Stop Line followed the course of the River Deben to Woodbridge, and then ran via Wickham Market and Framlingham to Harleston in Norfolk.⁴ Nodal points were established at Ipswich, Grundisburgh, and Wickham Market to

¹ TNA: PRO WO 166/1207.

² The Brigade formed part of the Left Forward Division of 11 Corps - TNA: PRO WO 166/958 and TNA: PRO WO 166/6700.

³ TNA: PRO WO 166/4346. A precise Defence Scheme for Bawdsey RDF Station is likely to survive at The National Archives, but has not yet been located.

⁴ TNA: PRO WO 166/1207.



provide a defence in depth⁵, and the coastal Sub-Sector was backed by a further stop line (the 'Back Line') that formed a continuous obstacle belt along the road and railway between Ipswich and Wickham Market.⁶

Anti-tank armament consisted of 2pdr. and 6pdr. guns, and tank obstacles were dug around each Company Sub-Area. Supporting arms were one platoon of medium machine guns (from 1/7 Bn. Middlesex Regiment), one battery of field artillery, one troop of medium artillery, one battery of heavy artillery, and a section of super-heavy artillery. Mobile anti-paratroop columns were formed. All defended localities were protected by triple-wire obstacles, and the defence of the beaches was carried out through artillery and machine gun flanking fire and the use of obstacles - 'dragon's teeth' (pointed steel rails), tubular scaffolding, and concrete blocks. Roadblocks were set up, and minefields and individual cratering charges laid. All bridges over water obstacles on the defensive lines were prepared for demolition. To the north of the defence area lay Bawdsey Emergency Coast Defence Battery (TM 358401). The intensity of the defence is indicated by the work of the Suffolk Coast and Intertidal Zone National Mapping Project which has recorded from aerial photographs concentrations of slit trenches and barbed wire entanglements too detailed to show on Map 2 [see Suffolk Sites and Monuments Record].

If the Germans had invaded this stretch of coast, it was considered they would have tried to capture the ports of Harwich and/or Lowestoft. The enemy's principal objective would have been London which they were likely to have approached via Ipswich or Bury St. Edmunds.⁷

As the immediate invasion danger period of 1940/41 passed, the main threat to Bawdsey was of a German raid on the radar station, and its defences, both against ground and air attack, were further strengthened: these included the digging of an anti-tank ditch to the north. After the war, the radar station was expanded, and became part of the Cold War ROTOR programme: it remained operational until 1972. A new site for Bloodhound Mk.II surface-to-air missiles was then developed to the north, opened in 1979 and remaining active until 1990.

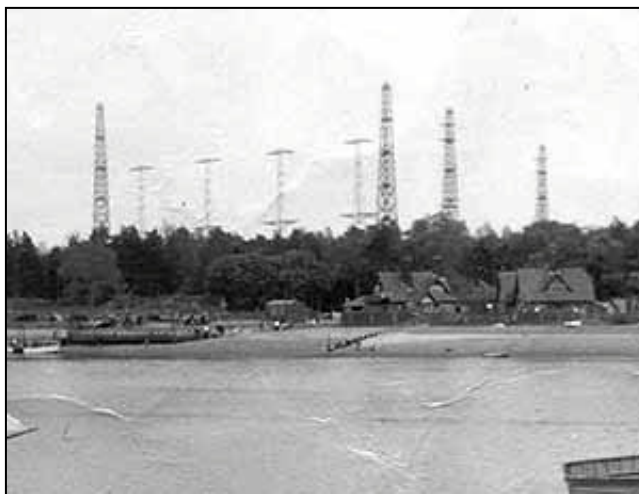


Fig. 3 - Photograph [date unknown] showing the eight transmitter and receiver masts of Bawdsey Chain Home Radar Station, with Bawdsey Quay in the foreground.

⁵ TNA: PRO WO 166/1200.

⁶ TNA: PRO WO 166/958.

⁷ TNA: PRO WO 166/958.



The defence works -

Aerial photographs show the shores of Bawdsey Point to be lined with both beach scaffolding and anti-tank blocks. By 1955 the only continuous length of blocks that remained lay north of the Quay, a small section of which survives today as UORN 16123. Most of these concrete cubes are now toppled on their sides and are badly cracked, but they serve as a vivid reminder of the once intensive shoreline defences. A further surviving length of some sixteen anti-tank blocks lies within the grounds of Bawdsey Manor above the sea beach [UORN 6064]. The base structure of considerable lengths of scaffolding was still visible on the beach north of Bawdsey Quay as late as 1992.



At some time, probably from late in 1941, an anti-tank ditch was dug north of Ferry Road, joining up various sections of pre-existing drains at the southern edge of Bawdsey Marshes and creating a barrier to an attack on RAF Bawdsey from the north. The course of the anti-tank ditch can still be partly seen on the ground.

Fig. 4 - UORN 16123: toppled anti-tank cubes on the Bawdsey foreshore



Fig. 5 - Aerial photograph taken late in 1941 showing the lines of tubular beach scaffolding and anti-tank cubes running around Bawdsey Point. Bawdsey Manor is at the centre of the photograph.





Fig. 6 - Portion of an aerial photograph (reduced) showing the line of the artificial anti-tank ditch joining up loops of the drains north of Bawdsey Manor.

Most of the surviving defence structures lie within the grounds of Bawdsey Manor, but several survive also close to the foreshore and have public access. A type 22 pillbox can be seen through the wire fence of Bawdsey Manor from the southern beach [UORN 7476], and another type 22 pillbox survives on the marshes north of Bawdsey Quay [UORN 6083].



Fig. 7 - UORN 7476: type 22 pillbox just within the grounds of Bawdsey Manor close to Bawdsey Point.





Fig. 8 - UORN 6083: good example of a type 22 pillbox dug into the sea bank on Bawdsey Marshes.

Another interesting survival that can be seen near Bawdsey Point is the concrete structure of a gun platform, now badly cracked and covered by vegetation [UORN 16110].



Fig. 9 - UORN 16110: gun platform used in 1941 for the quad. Lewis guns of 49th Light. AA Regiment, RA.⁸

⁸ TNA: PRO WO 166/958.

Within the Bawdsey Manor estate there are a number of excellent and unusual examples of pillboxes and other defence structures amongst the surviving architecture of the RDF Station. Many of the pillboxes here are type 24s which have been surrounded by a distinctive 'skirt' of brick and concreted sandbags.



Fig. 10 - UORN 7488: type 24 pillbox with distinctive 'skirt' at eastern end of Bawdsey Manor estate.



Fig. 11 - UORN 6061: detail of concreted sandbags forming a surrounding reinforcement to the pillbox.

Some of the pillboxes defending Bawdsey Manor are heavily overgrown [in particular, UORNs 6056, 6057, and 6060], and should ideally be freed of their cover of vegetation.

Outstanding are the defence works built into the cliffs overlooking the southern beach [UORNs 7483 and 7484]. Here artificial grottos built in the nineteenth century as part of the formal landscaping of the grounds of the Manor have been adapted to incorporate pillbox structures. These survive in excellent condition, and their commanding position can be viewed from the beach beneath.



Fig. 12 - UORN 7484: pillbox on Bawdsey cliffs, with observation post and AA mounting on the roof, seen from the beach below.

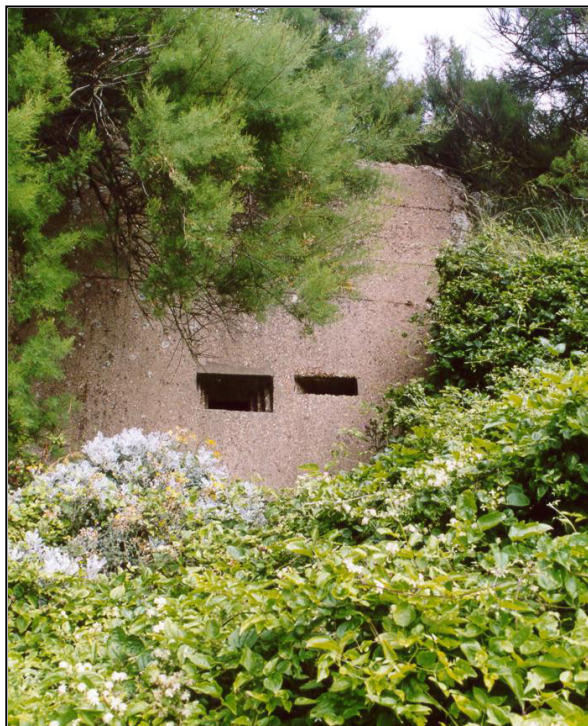


Fig. 13 - UORN 7483: strongpoint formed from the ornamental Victorian landscaping of Bawdsey cliffs, with a reinforced concrete face pierced with two loopholes for light machine-gun and rifle fire.

2.2 Landscape:

The modern landscape of Bawdsey Point differs very little from that of the Second World War period. The greatest change has come within the grounds of Bawdsey Manor itself where aerial photographs show the expansion of RAF Bawdsey, in particular in the immediate post-war period, with the subsequent reduction in the size of the establishment and its eventual abandonment and part-clearance. Since the end of the war, various sea defence structures have been erected around Bawdsey Point, and some of these now lie in a dangerous condition on the beach and should be cleared.

The needs of holidaymakers are catered for by the new Council picnic site and car park which is tucked away in woodland. The sandy beach front north of Bawdsey Quay is popular with visitors, as is the ferry service to the Felixstowe shore.

2.3 Statement of Significance:

This area provides a very good example of anti-invasion coastal defence, combined with the all-round defences of a most-important Vulnerable Point. Many excellent examples of unusual pillbox structures survive, together with anti-tank blocks and gun positions. The remaining defence architecture of RAF Bawdsey, with its immense concrete foundations for the transmitter and receiver masts, and its buildings, including the wartime transmitter and receiver blocks, with guard houses, barrack blocks, transport garages and storehouses, enable the defence works to be understood in their original context. The combination of the needs of coastal defence with that required for RAF Bawdsey itself makes the survival of examples from both defence strategies of particular significance. Within this defence landscape, defence priorities changed in the course of a couple of years from combating the threat of a full seaborne invasion to those of repelling a much smaller raiding force.

A 'pillbox walk' could be established to take visitors to the surviving defence structures that have public accessibility, as well as to viewing points where certain defence works within the Bawdsey Manor estate can be seen at a distance.

3. Recommendations:

1. That the surviving anti-invasion defence works on and adjacent to Bawdsey Point be considered of national importance. They enable the Second World War defence of the coastline 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 the surviving anti-invasion defence works within the grounds of Bawdsey Manor estate also be considered of national importance. They enable the all-round defence of a Vulnerable Point [RAF Bawdsey (AMES 24)] to be readily appreciated.



3. That consideration be given to the removal of the overgrowth on various of the pillboxes and other defence structures within the grounds of the Bawdsey Manor estate for the purpose of 2. above.
4. That 1. above be considered as part of a 'pillbox walk', in a possible initiative with Suffolk Coastal District Council. An existing information board at Bawdsey Quay on the history of RAF Bawdsey could be supplemented with further information on the Second World War anti-invasion defences. An information board might also be set up at the picnic site and car park.

4. **Supporting material.**

4.1 **Photographs:**

Figs. 1-2, 4 and 7-13 - taken (AWF) during field survey, 3.7.2002 and 25.7.2002.

Fig. 3 - Subterranea Britannica. Reproduced with permission.

Fig. 5 - 2B/BR168 fr.17 (18.12.1941) - NMR.

Fig. 6 - 106G/UK/832 fr.4082 (23.9.1945) - NMR.

4.2 **Documentary Sources:**

127th Infantry Brigade War Diary, November 1940 - TNA: PRO WO 166/977.

'Hertford Area Defence Scheme', 30.12.1940 (from Hertford Area HQ War Diary) - TNA: PRO WO 166/1200.

XI Corps HQ 'G' War Diary, 1940-1941 - TNA: PRO WO 166/329.

'Hertford Area Defence Scheme', 1941 (from Hertford Area HQ War Diary) - TNA: PRO WO 166/1207.

4th Bn. East Lancashire Regiment War Diary, February 1941 - TNA: PRO WO 166/4249.

'Operation Instruction No.14', 20.4.1941 (from 11th Bn. Highland Light Infantry War Diary) - TNA: PRO WO 166/4346.

'Operation Instruction No.16', 16.7.1941 (from 1/7th Bn. Middlesex Regiment War Diary) - TNA: PRO WO 166/4462.

'No. 4 Sector Defence Scheme', September 1941 (from 46th Infantry Brigade War Diary) - TNA: PRO WO 166/958.

'Essex and Suffolk Area Defence Scheme' (with map), 1942 (from Essex and Suffolk Area War Diary) - TNA: PRO WO 166/6700.

4.3 **Published Sources:**

Simon Purcell, 'The Defences of RAF Bawdsey' (from *Loopholes* No.19, pp2-8, June 1997).

RAF Bawdsey (AMES 24): Historic Building Report (RCHME, October 1995, revised 1999).

'Subterranea Britannica' web pages on Bawdsey -

http://www.subbrit.org.uk/sb-sites/sites/b/bawdsey_radar/

4.4 **Aerial Photographs:**

MSO 31219 fr.39 (23.7.1941) - NMR.

2B/BR168 frs.17 and 20 (18.12.1941) - NMR.



106G/LA/1 fr.4015 (18.4.1944) - NMR.
106G/UK/832 fr.4082 (23.9.1945) - NMR.
106G/UK/929 fr.4421 (16.10.1945) - NMR.
53/839 fr.5133 (11.3.1952) - NMR.
58/1006 fr.N2-0168 (4.2.1953) - NMR.

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

TM 3238-3338 (1968) - BLML.
TM 3438-3538 (1970) - BLML.

4.6 **Suffolk Sites and Monuments Record:**

Suffolk SMR records (from the Suffolk Coast and Intertidal Zone NMP project) checked and SMR references added to 4.7 below.

4.7 **Defence of Britain Project Database:**

[see 5. 'Annex'].

