

# Case Name: Okehampton Artillery Range: H1 Battalion Anti-Tank Range and Medium Anti-Tank Range

**Case Number: 1424865**

## Background

Historic England is undertaking a project to consider the military buildings on Okehampton Training Camp, Devon for addition to the National Heritage List for England. The project was initiated by a request from the Defence Infrastructure Organisation (DIO) of the Ministry of Defence (MoD) for confirmation of whether the buildings have special architectural or historic interest. At this same time the Okehampton Military Training range to the south of the camp was identified, due to its historic and operational relationship to the camp, as an area which also required assessment. Research carried out in 2002 identified a number of remains associated with the military activity on the Range. An inspection of these remains was carried out by Historic England (formerly English Heritage) on 23 and 24 June 2014, as a result of which 6 sites have been carried forward as part of this project, including the former H1 Battalion Anti-Tank Range and Medium Anti-Tank Range to the south of Rowtor.

## Asset(s) under Assessment

Facts about the asset(s) can be found in the Annex(es) to this report.

Annex	List Entry Number	Name	Heritage Category	HE Recommendation
1	N/A	Okehampton Artillery Range: H1 Battalion Anti-Tank Range and Medium Anti-Tank Range	Scheduling	Do not add to Schedule

## Visits

Date	Visit Type
23 June 2014	Full inspection

## Context

The assessment of C19 and C20 military features on Okehampton Range is taking place directly after the Camp phase of the project in order to give due consideration to the two distinct sets of structures. The Range and its structures are historically related to the Camp and its buildings.

Okehampton Range is not in a conservation area or adjacent to any listed buildings. There are several Scheduled Monuments of various dates within the area of assessment. It is within Dartmoor National Park. Many of the range features lie within a Site of Special Scientific Interest.

## Assessment

The owner, the occupier/leaseholder, the local authority, the Historic Environment Record, and colleagues in the National Planning and Conservation Department and Heritage Protection Department were invited to comment on the factual details of the case as part of the consultation process.

The Defence Infrastructure Organisation (DIO) has responded on behalf of the occupier, the Ministry of Defence (MOD). They have made a single representation relating to all of the features that are under

consideration for designation, which was a full and considered response to the consultation reports. They have recognised that some of the features have historic significance, although they have raised objections to the designation of certain features. They have noted that all of the features are in good condition, are well managed, under no threat and lie within a SSSI and that the land-management regime has been designed to satisfy environmental requirements which are also generally favourable to the historic environment. The specific comments they have made in relation to this set of features are addressed below. A representative has responded on behalf of the landowner, the Duchy of Cornwall. They have also made specific comments about this site and these are also addressed below.

COMMENT: the DIO have noted that the dates given in the consultation report for the earliest phase of the range are not specific enough to assign significance. They note that this is critical given that inter-war and Second World War ranges are more common than earlier examples. The factual content of this proposal is therefore not precise enough to allow comment, particularly regarding significance, and further research is required. Subject to further clarification of the date, the DIO recognises the potential significance of the first phase, comprising a V shaped layout of two track beds aligned N-S and E-W, of this site, subject to further research and clarification of dating.

RESPONSE: it is acknowledged that a more precise date is desirable when dealing with military sites of this type. The earliest phase of the anti-tank range is shown on the 1947 aerial photographs. The V-shaped range appears to conform to other anti-tank moving targets found on other artillery ranges, including the Second World War railways at Lydd. Upon reviewing the available information it appears most appropriate to assign a date in the mid-C20.

COMMENT: DIO and the Duchy note that the range underwent refurbishment in 2002, just after the Francis survey was carried out. Pre-refurbishment correspondence suggests that demand was not expected to be high, but a MOD memo dated December 2002 notes that the range 'has been refurbished and is available for use'. The works comprised a reconfiguration of the target plates and bank, although the general layout was unaltered. The original steel target for the High Explosive Anti-Tank range was moved onto site in the late C20 from F Range. It is currently buried at the base of the current target which was installed recently. Engineering drawings are available and a field visit in February 2015 confirmed that the refurbishment was carried out largely as proposed. The firing points have been extensively remodelled according to continuing operational requirements. Evidence of small-scale use on the range was noted in February. Although the post 1959 and 1969 infrastructure remains in very good condition, MOD does not agree that its significance justifies scheduling, and therefore does not support its inclusion in the proposal.

RESPONSE: the relative significance of the 1959 and 1969 target infrastructure is addressed in the Discussion below.

COMMENT: the Duchy notes that the engine shed relates to the 1959 railway. The Wickham trolley located within the engine shed is a "cut and shut" restoration using the original running gear and JAP engine from a Wickham trolley sourced from Lydd Ranges, Kent.

RESPONSE: this information largely accords with the consultation report; the further information about the Wickham trolley will be added to the factual details.

There were no responses from any other consultees, although colleagues in both Designation and Investigation departments provided further information regarding comparable sites elsewhere.

## DISCUSSION

The 1979 Ancient Monuments and Archaeological Areas Act (1979 Act) sets out the legal requirements for the scheduling of archaeological sites and monuments. It notes that sites may be scheduled by reason of their archaeological, historic, architectural, artistic or traditional national importance. Scheduled Monuments and Nationally Important but Non-Scheduled Monuments (DCMS October 2013) sets out the particular considerations used by the Secretary of State when determining whether sites of all types are suitable for statutory designation through scheduling; the key considerations are period, rarity, documentation, group value, survival and potential. Only the most relevant criteria will be applicable to an individual site. They should not be regarded as definitive, but as indicators which contribute to a wider judgement based on the individual circumstances of a case. Archaeological sites are assessed for their national importance, which is the key indicator of their significance. Those which are identified as of national importance may then be scheduled, if this is considered to be the most appropriate tool for their future management. Sites may be considered to be of national importance, but the Secretary of State may still use his discretion not to add the site to the Schedule.

Our Scheduling Selection Guide for Military Sites Post-1500 (April 2011) provides more specific guidance on the qualities to be looked for when considering the designation of these structures. It states while rarity can contribute national importance, it is important that the schedule is representative of more common types too, so as to capture an exemplary selection. A range of military site types should be considered for scheduling if they rate highly in terms of survival and/or potential: in the case of mass-produced or frequently encountered sites, a selection of the best and most representative examples is the approach to follow. All periods are eligible for consideration, but with more recent sites, due allowance must be made for numbers of survivals. Being strongly representative of a phase or activity, or where a site contributes eloquently to an understanding of defence policy, or technological developments of the day, is likely to be an important claim to national importance. For the period 1914-45 there was inevitably a massive increase in the construction of sites of great variety. For post-1945 sites, as with earlier sites, those which include reminders of earlier phases of military or other activity may warrant particular consideration.

#### PERIOD

The establishment of Okehampton Artillery Training Range in the 1870s was a key period in the development of British military tactics and techniques. The First Boer War of 1880-1 had exposed the ill-preparedness of the Royal Artillery for combat against a mobile enemy that was highly-skilled in stealth tactics and marksmanship. This fact, along with technological improvements in weaponry, led to the increased use of the training areas on Dartmoor, and more diverse training methods were employed such as an embryonic form of trench warfare. In order to train effectively, the artillery was required to engage in rapid firing exercises and these had become increasingly hard to achieve at the Royal Artillery School at Shoeburyness, due to the disruption it caused to shipping in the Thames estuary.

Following the development of the tank during the First World War, the nature of land warfare was revolutionised. First used by the British and French forces, the adoption of the machines by German forces saw the need within Britain to develop new tactics to counter tank assaults. These included training gunners to fire at fast moving targets approaching at differing angles and speeds. H1 anti-tank range, first established as a v-shaped range in the mid-C20 and later adapted in the late-C20, was built as part of the development of anti-tank training.

#### SURVIVAL

The earthwork remains of the mid-C20 moving target are substantive enough to inform our understanding of the earliest phase of the range. The 1959 target railway and associated infrastructure also survive and form a legible group that demonstrates the function of this moving target. This includes the railway track loop, gears and protective banks. The trolley shed also survives at the end of the track although the mound has suffered from some subsidence in recent years.

The 1969 firing points to the north of have undergone a greater level of alteration. This has included rebuilding and the replacement of the timber plank revetments in 1998 as well as further remodelling in 2002. With their exposed position on the moor it is anticipated that the timber work would require replacement. However, due to the level of modifications that have occurred in recent years the firing points and the associated observation mound no longer demonstrate a sufficient good level of survival. The original metal plates taken from F range in 1969 are understood to be buried in front of the current target plate.

#### RARITY

H1 Range was likely first established in the mid-C20 as an anti-tank training structure. As identified above, it is one of a number of similar targets erected across Britain. The target railway at Okehampton illustrates a multi-phase anti-tank moving target. Its survival demonstrates the development of military techniques and equipment on Okehampton Range. However, while certain elements on this range do survive in a legible way, this site does not demonstrate the same level of rarity as the earlier moving targets found on Okehampton. Following the First World War several moving targets were erected for training as combat tank warfare developed. This includes an extensive network of Second World War railways found at Lydd Artillery range which used Wickham trolleys similar to one used on H1 range. Indeed, currently within the carrier shed at Okehampton is a Wickham trolley taken from Lydd. Other examples have been identified on Salisbury Plain, where an anti-tank range constructed in 1916 survives on the southern edge of Shrewton Folly. The tracks have been removed; however the extensive ditch and bank survives. In comparison to the other features recommended for scheduling on Okehampton Artillery Range, H1 range is a later example of artillery development and in a national context has does not have same level of rarity.

#### GROUP VALUE

H1 Range has clear local interest as a legible military structure which forms part of this nationally important artillery range. However, at present, there is not sufficient evidence about the date of the first phase of this

structure to be able to comprehensively assess its significance in relation to other contemporary surviving moving targets. Further information about the date of H1 range and the level of survival of mid- and late-C20 moving targets is required in order to be able to appropriately assign significance to this range feature. At present there is not enough evidence to demonstrate that these features have sufficient importance to merit scheduling at this time.

#### CONCLUSION

After examining all the records and other relevant information and having carefully considered the archaeological interest of this case, the criteria for scheduling are not fulfilled. The remains of H1 range are therefore not recommended for scheduling.

#### REASONS FOR DESIGNATION DECISION

The remains of H1 range are not recommended for scheduling for the following principal reasons:

- \* Period: while the mid-C20 and late-C20 moving target railways demonstrate the continued importance of the Okehampton Range for training and the changing nature of military tactics, particularly tank-warfare, there is not sufficient evidence at this time as to the relative significance of H1 range in relation to other contemporary moving anti-tank target railways that survive;
- \* Survival: the infrastructure of the mid-C20 and 1950s target railway survive to differing degrees; the 1969 firing range in particular has undergone a much greater level of alteration and reconstruction than other historic military features at Okehampton;
- \* Group value: although not identified as nationally important, these features do have strong local interest and are part of a group of related military training features including associated listed buildings in Okehampton Camp to the north.

#### Countersigning comments:

Agreed. The H1 range at Okehampton artillery range is of some interest as part of the evolution of the entire site, but on the basis of current understanding, falls short of the level of nation importance required to merit scheduling.

Amanda Hooper  
10-SEP-2015

#### Second Countersigning comments:

Agreed. Although the survival of this target railway as part of the provision for artillery training is of some interest, at present we lack sufficient contextual background to confirm their importance in a national context. They should not, therefore, be scheduled.

Deborah Williams  
11th September 2015

# Annex 1

## Factual Details

**Name:** Okehampton Artillery Range: H1 Battalion Anti-Tank Range and Medium Anti-Tank Range

**Location:** BAT target railway, circa 300m, and MAW H1 Range, circa 200m to the south of the summit of Rowtor, Dartmoor Forest, Okehampton, Devon

County	District	District Type	Parish
Devon	West Devon	District Authority	Okehampton Hamlets

## History

Dartmoor has been used as a defensive location since at least the Bronze Age. There is evidence of Iron Age, Roman, Medieval and Civil War military use in the Okehampton area, indicating the strategic significance of the area as the elevated gateway to the south west of England. Okehampton Artillery Training Range is on the northern edge of Dartmoor, to the south of the associated Camp that lies within the C13 Okehampton Deer Park. Medieval settlements were scattered through the park; the remains of one extends to the north of the range and others lie close by.

The modern military use of the moor dates back to the late C18 when it was used to train the Okehampton Militia. By the early C19, soldiers guarding Dartmoor Prison used the moor for training, and troops garrisoned in the Palmerston Forts in South Devon used Dartmoor by the mid-C19. The Militia also continued training, often on Hay Tor, and in large numbers. Later in the C19, due to improvements in the range and power of artillery weapons, the Royal Artillery School of Gunnery at Shoeburyness (est. 1859) became unsuitable for training, and Dartmoor was identified as a suitably barren and uninhabited area to become its summer headquarters. Training became formalised into regular summer manoeuvres for the Royal Artillery from 1873, with the permission of the landowner the Duchy of Cornwall. In 1875 a committee was set up under Major-General F Eardley-Wilmot FRS, whose purpose was to look at the problems of providing field artillery training under realistic service conditions, visited the northern part of Dartmoor and once again found it a suitable landscape for battlefield training. The recent provision of a railway station at Okehampton was also in its favour. In 1876, the first annual training event took place using the north moor, with a tented camp located at Okehampton.

By the early 1890s the War Office and Royal Artillery resolved to build a permanent camp at Okehampton to provide better protection against the harsh weather conditions. On 31st December 1892, the War Office secured a 999 year lease for the site of the camp: 94 acres of land on the Okehampton Park Estate. Other artillery training camps were set up at Lydd (1882), Golden Hill, Isle of Wight (1888) and Salisbury Plain (1899).

In 1895 an additional 10,000 acres of High Moorland were leased from the Duchy. From May to September each year, batteries from across England travelled by rail to Okehampton for two or three weeks training. In 1901 a battery consisted of 5 officers, 166 men, 6 guns and at least 89 horses. The camp could accommodate two brigades each containing four batteries.

In the late C19, probably in response to the tactics employed by the Boers during the wars in South Africa, trenches were dug, principally to determine methods of attacking these defensive positions. Further earthworks were created to facilitate training including earthen parapets and redoubts. An imaginative firing programme was also established with the addition of an extensive system of static, moving and disappearing targets. These were intended to represent advancing infantry, cavalry and guns. The targets were moved in a variety of ways including horses pulling targets on tracks, ropes, pulleys and sledges. Earth and granite covered concrete, splinter-proof shelters were also built to facilitate the observation of the artillery training and to instruct on the movement of targets. Some have subsequently been demolished, and those that survive remain in use as training features with the exception of Observation Post 22, at the corner of East Okement Farm, which is still used to observe manoeuvres.

Early communication was carried out by semaphore, with flag stations erected on high points across the moor. Later an extensive network of telephone cables was installed with concrete telephone points placed at strategic positions.

It is unclear whether any formal training was provided at Okehampton for First World War recruits, as those who joined up typically received a short period of training before being sent to the front. We do know formal training did occur at sites such as Larkhill Camp, Salisbury Plain, which was established during the First World War. Artillery training did continue at Okehampton during the 1920s and 30s. Shortly after the outbreak of the Second World War, virtually the whole of Dartmoor was requisitioned for army training. The D-Day preparations of 1943/4 led to the replacement of British troops with the American 4th and 29th Divisions, who took part in the Normandy invasion. Subsequently, training took place at Okehampton for the campaigns in Korea (1950-53) and Suez (1956). Since the late C20 the Camp and Range have been used extensively by the Territorial Army, Commando Brigades and the Royal Marines.

The H1 Range was originally a V-shaped moving target network, which was likely built as an anti-tank range in the mid-C20. The use of tanks during the First World War was one of the most important developments in C20 land warfare. H1 Range appears on post-war aerial photographs (1947). It had two arms, one aligned north-west to south-east and the other east to west, converging at the south east. Each arm consisted of a 3ft wide track bed; the targets would move along a railway track. Where the arms met was a target-carrier shed built of limestone blocks. This was destroyed by gunfire before 1958; fragments of the building rubble survive. After 1959 the east-to-west track bed was widened and re-used as a Battalion Anti-tank (BAT) Range. The range was used to train first with BAT, later Motorized Offensive Battalion Anti-Tank (MOBAT) and finally Weapons of Magnesium Battalion Anti-Tank (WOMBAT) weapons, all of which are variations of the recoilless rifle (RCLR). The track bed was widened to 6ft and a new railway was laid. At either end of the straight section the track was diverted to form a 40ft radius loop to allow continuous operation. A set of points at the western end controlled the movement of a trolley and could be changed to direct into a trolley shed when not in use. The shed was originally planned to be built at the eastern end of the railway track, near to the old carrier shed, however, a change in design meant that a new one was built at the western end. The target carrier was a Wickham's trolley.

To the north of the railway target is a 1969 Medium Anti-Tank Weapon (MAW) H1 Range consisting of three earthen mounds with timber revetments; two firing emplacements and a rear conducting officer's position.

The remains of H1 BAT Range and MAW Range were identified and surveyed as part of a study of the military range by the Royal Commission for Ancient Monuments in 1993 and again by English Heritage in 2004 (Probert). They have been recorded as part of the National Mapping Programme for Dartmoor and also as part of a historical and photographic survey of the range carried out in 2002 (Frances).

## Details

**PRINCIPAL FEATURES:** the infrastructure of an abandoned, V-shaped multi-phase target railway, one arm of which was adapted in 1959 to form a Battalion Anti-Tank range, and an adjacent Medium Anti-Tank Weapon range, all of which lies on a plateau on the south side of Rowtor.

**DESCRIPTION:** the north-to-south arm of the original V-shaped target carrier survives as a straight ditch running 326m long from SX5931891352 to SX5948791067. This feature survives as a straight, flat-bottomed trench 1.2m wide and around 0.4m deep. A low bank, 2.5m wide and 0.3m high flanks the eastern edge of the trench. Both ends of this feature have been disturbed. This south-west end of the line has been severely disturbed by artillery fire and the remains of building material from the former carrier shed can still be seen.

The 1950s railway target has been built on the other arm, running east to west, and consists of a surviving railway track 112m long, between SX5930591089 and SX5947391003, with return loops at either end. A point at the end of the western loop gives access to a twin road engine shed. The straight track bed lies mostly at ground level and is protected from projectiles by a substantial bank on its northern edge 10m to 12m wide and up to 2m high.

The target shelter and western return loop are also protected by a bank. The walls of the target shelter were built to house two Wickham Trolley target carriers. The wall of the trolley shed is a mixture of reinforced concrete, concrete blocks, and brick piers supporting a reinforced concrete slab roof. There are two double-leaf timber doors, used to house the target carriers and under which the railway line continues into the shelter. The rear and side elevations are surrounded by a limestone block and earthen blast wall.

To the north of the railway target are the Medium Anti-Tank positions, centred on SX5932591433, that consist of two firing positions and a conducting-officer emplacement, all just under 2m high. There are open-type emplacements constructed of horizontal thick-section balk of timber held in place by vertical posts. The firing emplacements also have angled sections of timber for additional protection. Earthen banks

surround the emplacements on three sides. The target, circa 300m to the south, is an angled steel plate supported by an earth embankment that also protects the BAT ranger target carried and shed behind.

## **Selected Sources**

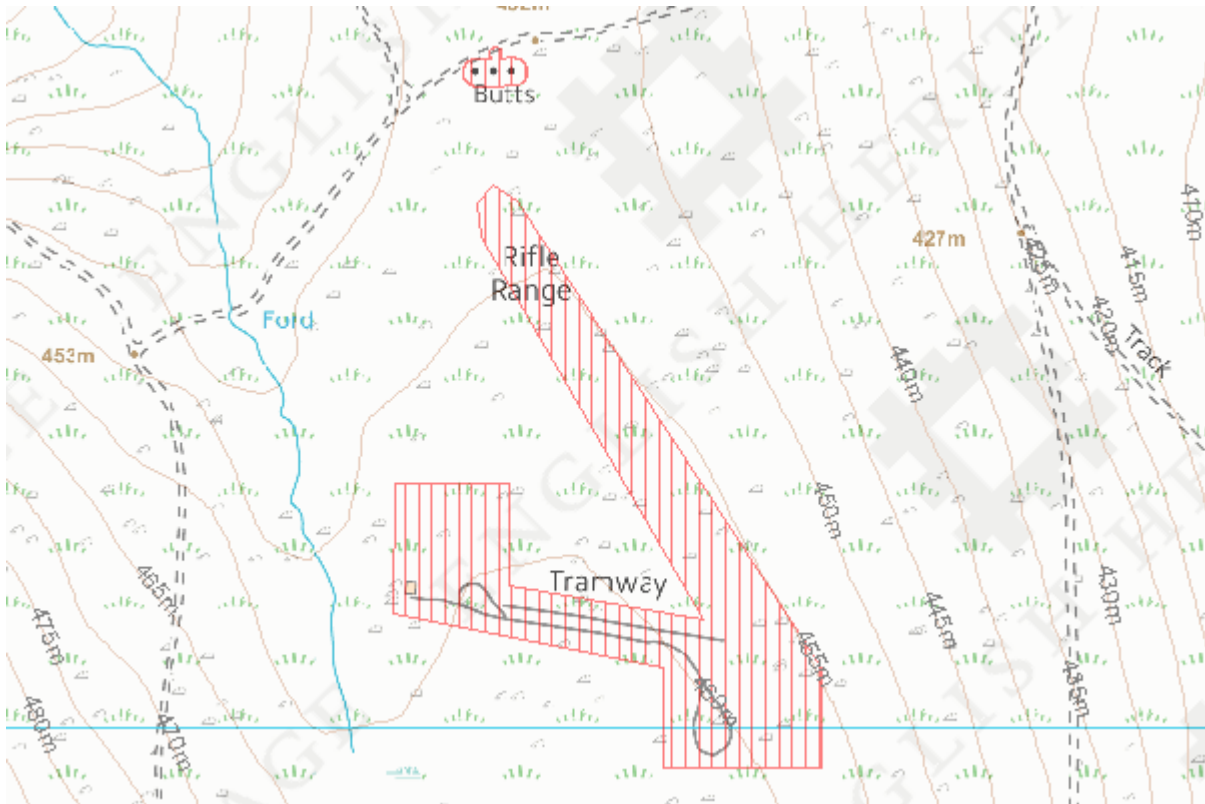
### **Websites**

English Heritage Pastscape Monument No. 1396711, accessed 22 January 2015 from <http://www.pastscape.org.uk>

English Heritage Pastscape Monument No. 1397720, accessed 22 January 2015 from <http://www.pastscape.org.uk>

**Map**

**National Grid Reference:** SX5939991167



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