

This Monument has been scheduled under the Ancient Monuments & Archaeological Areas Act 1979**Scheduled Ancient Monument (SAM): Report for SAMs and Archaeological Items (AIs)**

Reference Number :	PE534	Name :	Linney Tobruk Shelters
Status :	Scheduled	Number of Archaeological Items :	9
In Guardianship :	No	Date of Designation :	18 Sep 2008

Location

Unitary Authority :	Pembrokeshire	Community :	Castlemartin
----------------------------	---------------	--------------------	--------------

Landscape Designation :	Landscape Designation Name :
--------------------------------	-------------------------------------

National Grid Ref. :	SR889973
-----------------------------	----------

Easting :	188940	Northing :	197316
------------------	--------	-------------------	--------

Description

Broadclass :	Defence	Site type :	Coastal battery	Period :	Post Medieval/Modern
---------------------	---------	--------------------	-----------------	-----------------	----------------------

Summary Description and Reason for Designation

The following provides a general description of the Scheduled Ancient Monument.

The monument comprises the remains of substantial mock-German defences built in 1943 for the British 79th Armoured Division to undertake beach landing and assault exercises in preparation for D-Day. The defences are located in the sand dunes and on low sea cliffs at the W end of Castlemartin Range. They consist of a variety of gun positions located to maximise their fire effect and to blend in with the surrounding terrain, thus providing realistic training simulation conditions. The defences were established as a series of defended areas along the coastal edge and were designed to provide a strong defensive perimeter with interlocking fields of fire against the beach assault from the W. The defences included the construction of many Tobruk 58c machine gun posts, small concrete fortifications that lay completely underground with an exposed neck-like opening flush with the ground.

The monument is a rare surviving example of a Second World War defended area associated with beach landing and assault exercises. The Tobruk shelters were only built at Castlemartin and are a unique survival in the United Kingdom. The monument is of national importance for its potential to enhance and illustrate our knowledge of military training techniques and facilities. The monument forms an important element within the wider regional military context and the site itself may be expected to contain archaeological information in regard to building techniques and functional detail. It is well preserved and possesses important group value.

The nine areas to be scheduled comprise the remains described and areas around within which related

evidence may be expected to survive. Area 'A', incorporating Item A, is rectangular and measures 40m N-S by 25m transversely. It is centred on NGR SR 8917 9757. Area 'B', incorporating Item B, is an irregular polygon and measures 30m E-W by 20m transversely. It is centred on NGR SR 8906 9759. Areas 'C', 'D' and 'E' incorporating Items C, D and E respectively are circular and measure 25m in diameter. They are centred on NGR SR 8890 9749, NGR SR 8886 9747 and NGR SR 8894 9731 respectively. Area 'F', incorporating Item F, is circular and measures 30m in diameter. It is centred on NGR SR 8929 9721. Areas 'G', 'H' and 'I' incorporating Items G, H and I respectively are circular and measure 25m in diameter. They are centred on NGR SR 8878 9707, NGR SR 8876 9701 and NGR SR 8871 9700 respectively.

Archaeological Items (AI)

AI Reference Number :	PE534A	AI Name :	Tobruk Shelter / 88-mm gun position
AI Broadclass :	Defence	AI Site Type :	
AI Period :	Post Medieval/Modern	Date :	
AI Reference Number :	PE534B	AI Name :	Dual 50-mm anti-tank gun position
AI Broadclass :	Defence	AI Site Type :	
AI Period :	Post Medieval/Modern	Date :	
AI Reference Number :	PE534C	AI Name :	Tobruk shelter
AI Broadclass :	Defence	AI Site Type :	
AI Period :	Post Medieval/Modern	Date :	
AI Reference Number :	PE534D	AI Name :	Tobruk shelter
AI Broadclass :	Defence	AI Site Type :	
AI Period :	Post Medieval/Modern	Date :	
AI Reference Number :	PE534E	AI Name :	Tobruk shelter
AI Broadclass :	Defence	AI Site Type :	
AI Period :	Post Medieval/Modern	Date :	
AI Reference Number :	PE534F	AI Name :	Tobruk shelter
AI Broadclass :	Defence	AI Site Type :	
AI Period :	Post Medieval/Modern	Date :	
AI Reference Number :	PE534G	AI Name :	Tobruk shelter

AI Broadclass :	Defence	AI Site Type :
AI Period :	Post Medieval/Modern	Date :

AI Reference Number :	PE534H	AI Name :	Single 50-mm anti-tank gun position
------------------------------	--------	------------------	-------------------------------------

AI Broadclass :	Defence	AI Site Type :
AI Period :	Post Medieval/Modern	Date :

AI Reference Number :	PE534I	AI Name :	Tobruk shelter
AI Broadclass :	Defence	AI Site Type :	
AI Period :	Post Medieval/Modern	Date :	

Designation Actions

Event	Date Completed	Name	Completed?
Request for Scheduling			
Desk based Assessment			
Site Visit			
Proposal for Scheduling			
Proposal Endorsed			
Start of Consultation Period			
End of Consultation Period			
Start of Review			
End of Review			
Scheduling	18 Sep 2008	DAVIESNS	Yes
Rejection			
De-Scheduling			

Visits

Visit Date :	04 Apr 2015	Name :	Cliff J
Office :	FMW	Round No. :	
No. Routine Visits :	0		

Visit Description

Reason :	Routine	Reason (Additional) :
-----------------	---------	------------------------------

Visit Text - Description

Archaeological item # PE534A - Tobruk Shelter / 88-mm gun position

Archaeological item # PE534B - Dual 50-mm anti-tank gun position

Archaeological item # PE534C - Tobruk shelter

Archaeological item # PE534D - Tobruk shelter

Archaeological item # PE534E - Tobruk shelter

Archaeological item # PE534F - Tobruk shelter

Archaeological item # PE534G - Tobruk shelter

Archaeological item # PE534H - Single 50-mm anti-tank gun position

Archaeological item # PE534I - Tobruk shelter

Visit Text - Management

The scheduled parts of the Linney mock-German defences are in general in good condition. Two items however can be considered vulnerable. Firstly in contrast to the majority the remains of the 80mm gun position of item A as they stand constitute a very fragile structure likely to be subject to early natural decay, in addition it and its associated Tobruk shelter are located near to an infantry target and spent ammunition was noted to be widely distributed in the surrounding area. Together with bullet impacts to the shelter already noted at the time of scheduling the suggestion is there is a particular level of risk to these structures. Secondly the 50mm gun emplacement Item B is located very close to the eroding dune / cliff edge and in comparison with unscheduled parts of the defensive system nearby which have become partly lost or destroyed can be considered at high risk from coastal erosion. Also of note is that the two Tobruk shelters (items C & E) that have elements of the brick ring around the gun position aperture in place have seen loss or deterioration to these since last visited, in both cases the original bricks are probably still retrievable from nearby on or within the structure.

Recommendations made to the DIO archaeologist are: the recording of item A and in particular the 80mm gun emplacement, protective measures such as geojute or rock stabilization etc. to prevent further erosion of the dune to the west of the gun position as a precautionary measure and repair to the brick ring at the aperture of items C & E utilizing the original material where it still recoverable on site.

Condition: stable. Overall the monument is in a stable condition, with only minor loss to structures.

Vulnerability: medium. The majority of the items are not subject to immediate threats but two items have sufficient vulnerability to merit and the overall category of medium risk for the monument as a whole.

Outlook: favourable.

Overall risk level: medium

Archaeological item # PE534A - Tobruk Shelter / 88-mm gun position

The Tobruk shelter appears to be unchanged since the scheduling visit, the area of dune erosion around it has not altered significantly. The 88-mm gun position is in a fragile condition so that whilst it may not have altered a great deal since the scheduling visit it nevertheless remains vulnerable to both the elements and stray fire due to a nearby target. Much of the concrete walling is fragmented and iron trusses and wires are corroding significantly. There is in addition a small dune blow-out immediately to the south which has the potential to destabilize this side of the site if it were to worsen.

Archaeological item # PE534B - Dual 50-mm anti-tank gun position

The monument itself remains in a generally stable condition at present, however a path or sheep track has

developed a metre away at the sea edge of the dunes and the ground is exposed the ground to wind erosion. In any case the nearby exposed dune edge is equally vulnerable. Other unscheduled examples of the Linney defences in the immediate vicinity have become lost to the sea and it might be expected that in time this gun position will do so also without protection.

Archaeological item # PE534C - Tobruk shelter

Whilst in a generally stable condition there has been some disturbance to the ring aperture of the firing position; the brick surround having become lost around the west and north arc. Loose bricks above the entrance door may be derived from this. The wooden shuttering preventing access to the interior has been replaced.

Archaeological item # PE534D - Tobruk shelter

In a stable condition built into the rock of the cliff edge and undisturbed though there is a small amount of plastic and wood waste in the interior.

Archaeological item # PE534E - Tobruk shelter

Generally in good condition, a small part of the well-preserved ring at the aperture has been broken on the south side and a brick dislodged. The small break on the north side his unchanged. The accessible interior contains a small amount of waste including a plastic crate.

Archaeological item # PE534F - Tobruk shelter

In a good stable condition within fixed grass-covered sand dunes. The interior is filled to within c 0.4m of the roof with windblown sand. The internal sheeting is rusted but not as such corroded. Some loose bricks lie on the sand surface below the firing position.

Archaeological item # PE534G - Tobruk shelter

In a good stable condition, protected by a concrete cap.

Archaeological item # PE534H - Single 50-mm anti-tank gun position

In a good stable condition, turf growing on the brickwork is slightly obscuring the monument but there is no damage.

Archaeological item # PE534I - Tobruk shelter

In a good stable condition protected by a concrete cap.

Visit Note :

Visit - At Risk Assessment

Condition Trend :	Stable	Condition Current :	Favourable
Monument at Risk Level :	Medium	Vulnerability :	Medium
Primary Threat :	Natural Erosion / Decay	Secondary Threat :	Other (See Visit Text)
Recommended Action :	Routine Management Advice	Remedial Action Status :	Advised (Written or Verbal)
Case Management Plan Drafted :	No		

Visit Date : 16 Aug 2007 **Name :** Berry J

Office : IAM **Round No. :**

No. Routine Visits : 0

Visit Description

Reason : Scheduling **Reason (Additional) :** g

Visit Text - Description

The monument comprises the remains of substantial mock-German defences built in 1943 especially for the British 79th Armoured Division, Royal Engineers to undertake beach landing and assault technique exercises in preparation for D-Day. The defences are located in the sand dunes and on low sea cliffs at the W end of Castlemartin Range. They consist of a variety of gun positions located to maximise their fire effect and to blend in with the surrounding terrain, thus providing realistic training simulation conditions. The defences were established as a series of defended areas along the coastal edge and were designed to provide a strong defensive perimeter with interlocking fields of fire against the beach assault from the W. The defences included the construction of many Tobruk 58c machine gun posts, small concrete fortifications that lay completely underground with an exposed neck-like opening flush with the ground.

The National Archives file WO/32/4384 covers discussions over the need for a tank range in the years preceeding the Second World War. The file suggests that Castlemartin / Linney Head was the preferred choice from as early as 1936; the pros and cons of a number of other sites, including the Preseli Hills and Pendine Sands were discussed before the final decision to acquire Castlemartin / Linney Head was taken on 25th January 1939. At that time the estimated cost of acquisition was £250,000, with construction costs of £40,000.

Although Castlemartin Range was reserved for the exclusive use of US Forces from July 1943, the British were active near-by. The 79th Armoured Division had a trials wing at Stackpole Court c. August 1943, with a firing range on Stackpole Head. Duplex-Drive tank experiments were also conducted at Barafundle Beach. The various Wings of the 79th Armoured Division were scattered across England until October 1943, when the entire Division combined to undertake beach landing and assault exercises in preparation for D-Day on the Linney Head Battle Training Area, where a variety of mock-German beach and inland defences were built especially for the assaults. The training, using live ammunition, enabled most of the problems associated with the assault training to be answered and procedures to be modified in the light of experience.

The National Archives file WO166/1199 contains schematic sketch maps showing rough positions of the defences constructed, together with annotations labelling what they were. At least two separate exercises were undertaken: 'Exercise Siegfried VII' took place on 4th October 1943 and 'Exercise Bullseye' was on 10th October 1943. The beach landings and assaults were undertaken under live firing conditions from the positions in order to achieve as realistic training conditions as possible.

The defences were established as a series of strong points in depth along the seaward edge of the Linney Head Battle Training Area. 'Demon' was based at Brownslade Burrows and comprised of at least five Tobruk shelters, an observation post, two 88-mm gun emplacements, two mortars and two 50-mm anti-tank guns. 'Crab' was located at Linney Burrows and The Pole and comprised of eight Tobruk shelters (five survive as Items A, C-F), two mortars, a twin-machine gun, two 50-mm anti-tank gun positions (one survives as Item B), an observation post, two infantry guns and two 88-mm guns (both survive, but only one - Item A - is in good condition). 'Adolf' was focused on Linney Farm and comprised of two machine guns, two 50-mm anti-tank guns and two mortars. 'Benito' was established c. 500m to the W and comprised of two Tobruk shelters (Items G and I) and a 50-mm anti-tank gun emplacement (Item H) within a surrounding barbed wire apron.

The Tobruk shelter was probably an Italian idea (Pers. Comm. Roger J.C. Thomas), but the design was developed by the Germans during their North African campaigns to provide protection from artillery shelling. Subsequently, it developed into a defensive fieldwork. They were built in numbers along the Atlantikwall, an extensive system of coastal fortifications built along the western coast of Europe by the Germans between

1942 - 44 to defend against the anticipated Allied invasion of the continent. The Tobruk shelter designs were smuggled out of Occupied Europe by the Resistance (Pers. Comm. Roger J.C. Thomas).

The concrete Tobruk shelters built at Castlemartin were of the most common machine gun variety (designated 58c, but also called a Ringstand), although versions existed for 5-cm mortar and light tank turret fittings. It comprised of a small concrete fortification that lay completely underground with an exposed neck-like opening flush with the ground making it very difficult to detect from ground-level. The underground portion consisted of a small foxhole-type shelter, together with a magazine, which also served as an underground entrance. Most of the Tobruk shelters built at Castlemartin were built to the standard German design and possessed external dimensions of 8' 2" (2.48m) in height, 12' 2" (3.7m) in length and 7' 8" (2.33m) in width. The floor measured 7" (0.18m) in thickness, whilst the walls and ceiling measured 1' 3" (0.38m) in thickness. The entrance was located in a side wall at the opposite end to the open neck and provided access to the magazine. The firing position was accessed via a short flight of steps. The open neck measured 2' 8" (0.81m) in diameter. A rail (the ringstand) supporting the machine-gun mount ran around the inside of the neck, giving the gun a 360-degree traverse. No rails survive at Castlemartin. The examples at Castlemartin possess the words CONNELL and WARREN inscribed into the concrete, possibly indicating the name and location of the contractor who constructed them.

Please see Archaeological Item Descriptive Text for further details.

Archaeological Item # PE534A

Item A comprises the remains of two gun positions within the 'Crab' defensive area (together with Items B, C, D, E and F). The northernmost is a Tobruk shelter, built to the standard design described in the Visit Description text. It is located on the top of a mature sand dune and overlooks the beach some 130m to the W. The sand dune has eroded somewhat from around the perimeter of the Tobruk shelter and shows that the concrete was cast roughly against a wall of sand bags. It is aligned NNE-SSW. The aperture was built at the SSW end and the entrance at the middle of the ESE face.

Approximately 10m S of the Tobruk shelter is a large concrete platform with an incomplete retaining wall on all sides. It is aligned E-W and measures 14m E-W by 10m transversely. The retaining wall measures 1m in height. The site functioned as the firing position for an 88-mm gun. The retaining walls were constructed from sand-filled sandbags encased in concrete shuttered between steel trench sheeting held in place by steel picket posts. The corrugated steel has rotted away leaving a corrugated surface on the concrete. There is a wide entrance on the rear (E) wall.

A second 88-mm gun emplacement lies 230m S, but is in very poor condition and has not been proposed for scheduling.

Archaeological Item # PE534B

Item B consists of a dual-firing emplacement for a 50-mm anti-tank gun within the 'Crab' defensive area (together with Items A, C, D, E and F). The site is located on a gentle-to-moderate N-facing slope 100m E of Item A. It is aligned N-S and lies between the beach to the W and an access road to the E.

The position is of a unique design (Pers. Comm. Roger J.C. Thomas), incorporating upper and lower firing positions at the S and N ends respectively. Each firing position is oval in shape on plan and consists of a concrete platform surrounded by a low clay brick retaining wall. Both firing positions are linked by an access ramp that would enable the gun to be moved between positions, effectively increasing the weapons field of fire.

Archaeological Item # PE534C

Item C comprises of a Tobruk shelter built to the standard design within the 'Crab' defensive area (together with Items A, B, D, E and F). It is located on the edge of a shallow sea cliff above a rock promontory known as The Pole. The shelter overlooks Frainslake Beach to the N. It is located 190m SW of Item B. It is aligned E-W and remains completely buried with only the upper surface of the concrete roof exposed. The firing aperture is at the W end and the entrance in the middle of the S face. The aperture is unblocked, but the entrance is partly blocked. A rock-cut passage was excavated in order to access the entrance.

Archaeological Item # PE534D

Item D comprises a Tobruk shelter built to the standard design within the 'Crab' defensive area (together with

Items A, B, C, E and F). It is located 45m SW of Item C at the end of the low sea cliffs overlooking The Pole. The structure is aligned N-S with the firing aperture located at the S end overlooking the beach at Blucks Pool. The entrance, accessed via a rock-cut passage, is located in the middle of the E face. Both the firing aperture and the entrance are unblocked.

Archaeological Item # PE534E

Item E comprises a Tobruk shelter built to the standard design within the 'Crab' defensive area (together with Items A, B, C, D and F). It is located 175m SSE of Item D on the edge of a low sea cliff on the W side of Linney Burrows. The position overlooks Blucks Pool to the W and the beach to the S. The shelter is aligned NNW-SSE. The entrance is located on the ENE side and is accessed using a rock cut passage. Both the firing aperture and the entrance are unblocked. The firing aperture is notable as it retains its enclosing lip, which was built from clay brick with an outer concrete skim. The lip is missing at most of the other Tobruk shelters.

Archaeological Item # PE534F

Item F comprises a Tobruk shelter built to the standard design within the 'Crab' defensive area (together with Items A, B, C, D and E). It is located 400m SSE of Item A and 370m ESE of Item E. It is aligned NE-SW and features a door on the SE side. Both the entrance and the firing position are unblocked. This shelter is very similar to Item A in that it was built using sandbags for external shuttering into the top of a mature sand dune in an inland position at Linney Burrows. The position is located on the N flank of a valley and faces SW to cover it with enfilading fire. This item is notable for the fact that a system of trenches and firing positions has survived as shallow depressions on the E side of the Tobruk shelter.

Archaeological Item # PE534G

Item G consists of a Tobruk shelter within the 'Benito' defensive area (together with Items H and I). It is located on the N side of Linney Head above the edge of a sea cliff. The position looks N over the beach at Blucks Pool, but also guards the E side of a N-S aligned gully that provides access on to Linney Head itself. It is situated 530m WSW of Item F. Item H is located 60m to the SSW and Item I 100m to the SW.

The Tobruk shelter is aligned E-W and features an entrance on the S side. It is of an unusual design in that the crew / ammunition chamber is oriented at 90-degrees to the firing chamber. Unfortunately, the internal layout cannot be described, as the entrance and the firing aperture have both been capped with concrete.

Archaeological Item # PE534I

Item I consists of a Tobruk shelter within the 'Benito' defensive area (together with Items G and H). It is located on the N side of Linney Head above the edge of a sea cliff. The position looks N over the beach at Blucks Pool, but also guards the W side of a N-S aligned gully that provides access on to Linney Head itself. It is situated 50m W of Item H and 100m SW of Item G.

The Tobruk shelter is aligned E-W and features an entrance on the S side. It is of an unusual design in that the crew / ammunition chamber is oriented at 90-degrees to the firing chamber. Unfortunately, the internal layout cannot be described, as the entrance and the firing aperture have both been capped with concrete.

Archaeological Item # PE534H

Item H consists of an emplacement for a 50-mm anti-tank gun within the 'Benito' defensive area (together with Items G and I). It is located on the N side of Linney Head above the edge of a sea cliff. The position looks N over the beach at Blucks Pool, but also guards the entrance to a N-S aligned gully that provides access on to Linney Head itself.

The emplacement comprises of a small pad of concrete that measures c. 3m in diameter. It is oval in shape on plan. The perimeter of the pad possesses a low clay brick retaining wall that measures 0.3m in height.

Visit Text - Management

Although there are many examples of anti-tank walls, trenches, pimples, mock pillboxes etc. built in the UK for army training purposes during the Second World War, the building of Tobruk shelters at Castlemartin is unique. In fact the establishment of a fully defended area like this is also very rare; the only known equivalent is the former US Army Assault Training Centre (ATC) at Braunton Sands, Devon. Numerous training areas were built in the UK for a variety of assault training roles, but the training was against component parts by small units even down to individual tanks. It is the scale and complexity at Frainslake, Castlemartin that sets it apart.

This site is located within an active military range managed by the Army Training Estate / Defence Estates to provide training in realistic conditions. Castlemartin provides one of the UK's major live-fire training and manoeuvre facilities for armoured fighting vehicles.

Range staff have requested that all Cadw visits be arranged in advance with the Commandant, so that supervision and liaison can be arranged.

See individual Archaeological Item Management Text entries for further information.

Archaeological Item # PE534A

The Tobruk shelter survives in good condition, except for the NNE face that has been used as a shooting target for modern weapons. This face has been chipped and scored, but survives intact. Both the original firing aperture and the entrance remain unblocked. The sand dune has eroded on the ESE side revealing up to 1m of the Tobruk shelter's external face. The shelter has not rotated, split or disintegrated. The shelter is surrounded by short grass and other marine vegetation.

The 88-mm gun emplacement is in a more fragile condition. The retaining walls are incomplete, with sections missing on the N, S and E sides. Other areas are fragmented and eroding, particularly the remaining sections of the N side, which have also been utilised for modern target practice. The site stands in an area of short grass, with some bare patches of earth within. Mr Martin Brown, Defence Estates Archaeologist, confirmed that the site would be made out of bounds for training exercises.

Archaeological Item # PE534B

Item B is located in an area of long grass between an access road to the E and the beach to the W. The structure survives completely intact, although there is some grass and weed growth within, which should ideally be cleared.

Archaeological Item # PE534C

The Tobruk shelter survives complete, intact and in good condition. The site does not appear to have been used by troops.

Archaeological Item # PE534D

The Tobruk shelter survives in good condition with no obvious visible damage to the fabric. There is a small dump of concrete and rubble adhered to the N end of the shelter. It would appear to be of the same make-up as the rubble-cement mix used to cap Items G and I.

Archaeological Item # PE534E

Item E is complete and survives in good condition. It is located in an area of established marine grassland.

Archaeological Item # PE534F

Item F survives in good condition, although the sand dune around it has eroded a little to expose the sides of the shelter. The shelter is located on a mature sand dune that is covered with short grass and other marine species.

Archaeological Item # PE534I

The Tobruk shelter appears to survive in good condition, despite being capped. It is located in an area of marine grassland.

Archaeological Item # PE534G

Item G survives intact and in good condition, despite being capped. It is located within an area of marine grassland.

Archaeological Item # PE534H

The emplacement survives intact and in good condition. It is surrounded by marine grassland and some scrub on the W side. There is a slight build up of soil within the emplacement, but it remains well defined on the ground.

Visit Note :

Visit - At Risk Assessment**Condition Trend :** Stable**Condition Current :****Monument at Risk Level :****Vulnerability :****Primary Threat :****Secondary Threat :****Recommended Action :****Remedial Action Status :****Case Management Plan Drafted :** No**Case Management**

No Case Managment Recorded

History

Event	Name	Date
Field observation	Defence of Britain project	1994

Sources

Author	Date of Publication	Title	Volume
Berry J	Nov 6 2007		
Berry J	Nov 6 2007		
Thomas R J C	Nov 7 2007	Database entry	
Thomas R J C	Nov 7 2007	Survey of C19 and C20 Military Buildings of Pembrokeshire	
Cliff J	04/04/2015	Twenty nine photographs relating to FMW visit of 04/04/2015	