

**The Titterstone Cleve Hill Radar Station,
Shropshire**

Watching Brief Report



**September 2007
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1.0 INTRODUCTION

SLR Consulting was commissioned by National Air Traffic Systems (NATS)¹ to conduct an archaeological watching brief within the confines of Clee Hill Air Traffic Control Station (NGR SO 59480 77979). A representative from NATS, Mr John Quill provided necessary information relating to the site and its history including detailed CAD plans of existing and proposed development. The archaeological watching brief was undertaken in conjunction with the excavation of a trench that will support a replacement radar mast (figure 1).

The watching brief is incorporated into criteria set within the non-statutory guidelines of Planning Policy Guidance 16 (PPG 16) issued by DCMS. This sets out guidance regarding development-prompted archaeological issues in relation to Local Planning Authority (LPA) and government agency procedure.

The purpose of the watching brief was to assess the nature of archaeological remains and to indicate any mitigation requirements.

It was initially considered by English Heritage that possible historic and prehistoric remains existed within the footprint of the development. The radar station lies within the eastern rampart of an Iron Age hillfort that has been designated a Scheduled Monument (Monument no. 19139).

Strict on-site procedures complied with health and safety standards set by the Health and Safety Executive (HSE). An audited risk assessment was produced and submitted to the ground works contractor for approval prior to archaeological staff entering the site area.

A copy of the report will be submitted to National Air Traffic Systems and English Heritage. Further copies will be deposited with Shropshire County Council's Historic Environment Record (HER).

The watching brief commenced 13th August and was completed on 21st August 2007. The monitoring body was English Heritage (contact: Bill Klemperer). A project design in the form of a letter was submitted and approved by English Heritage prior to any ground-works.

¹ Formally the Civil Aviation Authority.

2.0 BRIEF HISTORICAL AND ARCHAEOLOGICAL BACKGROUND

Clee Hill, standing to a maximum height of 533.59m has within its boundary is evidence for an intensive late prehistoric, medieval and post-medieval activity.

The radar station was constructed in 1962 and the mast for renewal erected in 1968. During this early period up to 25 people were employed. The station is located on the eastern side of Clee Hill, adjacent to the ramparts of a univallate Iron Age hillfort. This contoured monument, extending 28 hectares has been designated a Scheduled Monument (Monument No. 19139) and as such is protected from damage and changes to its setting.

During the time of construction and based on historic mapping, the footprint of the station would have impacted upon possible hut circles that lie close within the walls of the hillfort. Further impact to the inside section of the rampart appears to have occurred as well.

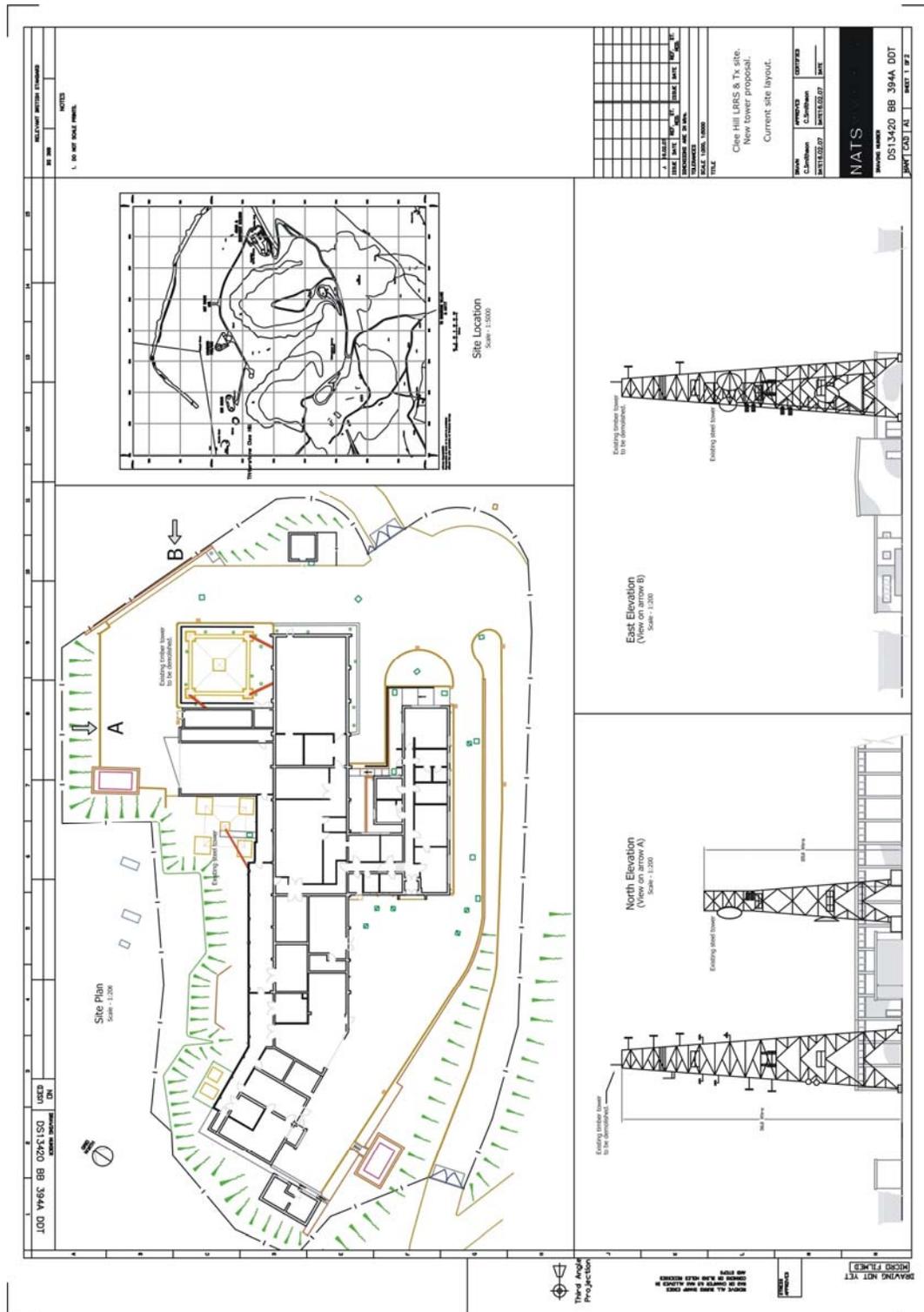


Figure 1

Existing and proposed plans for a replacement mast showing location of the site in relation to Clee Hill (Produce courtesy of NATS).

The footprint of the station comprises a NE-SW oriented rectangular prefabricated building with later annexes constructed on the NW and SE sides. This building supports two steel

and wooden radar communication towers. The northern mast, dating to 1968 is being dismantled and replaced.

During the construction of the facility, the current road leading to the station was laid. The route of the road at the summit of the hill would have inevitably cut through a rampart section of the hillfort. As part of the quality control criteria for the construction of the station a series of monochrome photographs were taken of the site prior to the erection of the station and the masts (Plate 1).



Figure 2

The site prior to the construction of the CAA radar station, looking SE (taken 12 September 1963)

The site for the mast constructed later in 1968 is to the right of the picture. Note probable cairn belonging to the rampart in the foreground (Courtesy of NATS).

The archaeology present on Clee Hill is not just confined to the Iron Age. Also present are two (or more) round burial cairns that date to the preceding Middle or Late Bronze Age (c. 1,800 – 700 cal. BC). Historical industrial features and structures are also present in form of two large quarries on the southern side of the hill. This extensive quarrying, occurring in 19th century has removed the majority of the southern section of the hillfort ramparts. However, two small sections of rampart at the extreme south of the hillfort survive, one section measuring 31m, the other 150m.

Based on late 19th century mapping, the ramparts were continuous (figures 3 & 4). At this time the site is referred to as a 'camp'. Incorporated within the ramparts, forming the hill's summit are a number of features including three stone circles and a series of named standing stones (Giant's Chair and the Gospel Stone). It is now clear that the stone circles are probably hut circles and the standing stones represent the cist section of the two Bronze

During the early to middle Iron Age, the focus changes from ritual to settlement. However, the Iron Age people using this monument appear to have acknowledged the ritualised elements of the two ring cairns. Prior to quarrying the ramparts were continuous. However, around the highest point of the hill, the western section of the rampart continues around the base of hill. Dispersed close to the inside sections ramparts, in particular on the NE and western sides are the remains of a series of hut circles. Small sections of the hillfort were excavated in 1934 by local archaeologist O'Neil. According to information supplied by English Heritage, the trench scars are still visible. The trenching concentrated around the rampart areas on the northern flank. The 1934 excavation recognised up to four phases of construction; the first of these being a timber-revetted earthen rampart with timber entrances. After a period of neglect, the ramparts were partly dismantled. The third phase witnessed the reconstruction of the ramparts using stone and timber guard chambers flanking either side of the SE entrance. The final phase according to O'Neil is represented by the disrepair of the ramparts, although this may be attributed to merely abandonment during the Roman period

Further archaeological investigations were undertaken in 1991 within an area that is currently occupied by one of two metrological radars units (at NGR SO 595 779). Results show that many features and structures within the internal space of the hillfort survive.

3.0 GEOLOGY

The solid geology of Clee Hill comprises two bedrocks. To the west of the hill's summit the solid geology is of Permo-Triassic red mudstones and till, whilst the eastern section of the hill and where the radar station is site, the solid geology is igneous basalt [granite]. The respective soils for both bedrock areas are also different. Overlying the mudstones is a 721b BROCKHURST 1 soil comprising of slowly permeable seasonally waterlogged reddish fine loamy soils over clayey sub-soils. Overlying the granite area is a 611a MALVERN soil comprising well drained thin stony loamy soils. In some areas, the bedrock forms localised rock outcropping (Soil Survey of England & Wales 1983).

4.0 METHODOLOGY

The aim of the programme of archaeological work was to locate and record any archaeological remains revealed during the ground works phase of the development. No archaeological brief was issued however, correspondence between SLR and English Heritage in the form of a letter (Appendix 1).

All spoil was scanned for artefacts.

The depth and complexity of deposits across the whole trench was assessed. Written and photographic records of all machine-excavated areas were made in accordance with best archaeological practice (using bylaws of the IFA [Standards and Guidance for an archaeological watching brief; revised edition 1999]).

5.0 THE WATCHING BRIEF

The proposed development included the excavation of a large trench located within the NW section of the Radar station site. The ground works phase was undertaken in two stages and comprised the excavation of a trench measuring 9m x 9m, located immediately NW of the present wooden mast (Plate 2). The depth of excavation was 2.5m below the present ground level of the rear parking space.

The current level of the rear parking area, immediately NW of the radio mast stands approximately 3m below the ground level of the summit of the hill. During construction of the station in 1962 significant quantities of soil and rock were removed from this side of the hill and it is more than probable that any archaeology within the immediate area of the car park and proposed erection of a new mast was destroyed then.

The watching brief in section recorded three contexts: a tarmac surface measuring approximately 0.05m in thickness (Plate 2). Underlying this was a sub-base material measuring a further 0.05m. Both contexts extended into all sections of the trench. Recorded within the SW and NE trench section and running across the trench was a ceramic drain pipe. This pipe, laid into the sub-base material carried a copper earth strip across this section of the station. Immediately underlying the sub-base material and extending into all sections of the trench was igneous bedrock.

Located within the SE section of trench were two large concrete block stanchions that provided the stability and rigidity of the current mast (Plates 3 & 4). The concrete stanchions, extending to a depth of 2.5m below the present ground level were constructed in 1968. The construction trench for these stanchions was recorded within the SW and NE corners of the trench.



Figure 5

The extent of the trench prior to excavation, looking SW.



Figure 6
Image showing the stratigraphy of the trench, looking SW.



Figure 7
Southern section of the trench revealing the stanchion base of the mast, looking east.



Figure 8

Final excavation phase showing trench proximity to the current mast base, looking NE.

6.0 SUMMARY

The excavation of a trench on the south-eastern side of the Titterstone Clew Hill hillfort and within the confines of the NATS Clew Hill radar station revealed no archaeological deposits, features or structures. Much of the original stratigraphy containing potential archaeological remains within the area of the radar station was severely impacted upon during construction of the buildings in 1962-3. Within the immediate area of the trench up to 2.5m of soil and bedrock was removed during this time (see Plate 5).

7.0 BIBLIOGRAPHY

English Heritage. Summary of the Titterstone Clew Hill fort.

Soil Survey of England & Wales 1983. Silsoe.

Watson, M. 2002. Shropshire: An Archaeological Guide. Shropshire Books.

Letter of Appointment

13th August 2007

Dr Bill Klemperer
Inspector of Ancient Monuments
English Heritage
112 Colmore Row
Birmingham
B3 3AG

Our Ref: Clee Hill, Shropshire
Your Ref:

Dear Dr Klemperer,

RE: Clee Hill, Shropshire

Following our discussion on the telephone this afternoon, I can confirm that SLR Consulting have been appointed by National Air Traffic Services (NATS) to provide an archaeologist to undertake a watching brief within the SM area of Clee Hill hillfort (SM No. 19139). Based on the information provided and the requirements desired by English Heritage, the archaeologist will adhere to standards and guidance set within the bylaws of the IFA (Standards and Guidance for an archaeological watching brief; revised edition 1999).

In addition to these guidelines and adhering to request made by English Heritage, SLR's archaeologist will be given sufficient time to record archaeological deposits, features and structures that may be revealed during ground works. The Client has intimated that approximately 10 days of ground working will be required, excavating an area 9m x 9m and 2.5m in depth.

Whilst ground-works are in progress the archaeologist will monitor and inform the contractor of limiting rutting that can be potentially caused by plant machinery within the bounds of the hillfort.

Any artefacts recovered from this excavation will be retrieved, archived, indexed and conserved using general guidance set within MAP 2 (1991). The archive will comply with the United Kingdom Institute for Conservation (Archaeology Section) *Guidelines for the Preparation of Excavation Archives for Long-Term Storage* (1990) and the Society of Museum Archaeologists *Towards an Accessible Archive* (1995).

In addition to the fieldwork, and adhering to IFA Standards and Guidelines, sufficient reporting time will be given in order that a report can be issued to English Heritage and the LPA.

Yours sincerely

SLR Consulting Limited

Dr George Nash

Associate Archaeologist