

# ISLES OF SCILLY

## MILITARY DEFENCES, 1540-1951: EARTHWORK SITES AND MINOR FEATURES

Mark Bowden



*This report has been prepared for use on the internet and the images within it have been down-sampled to optimise downloading and printing speeds.*

*Please note that as a result of this down-sampling the images are not of the highest quality and some of the fine detail may be lost. Any person wishing to obtain a high resolution copy of this report should refer to the ordering information on the following page.*

## ISLES OF SCILLY

# MILITARY DEFENCES, 1540-1951: EARTHWORK SITES AND MINOR FEATURES

Mark Bowden

© English Heritage

ISSN 1749-8775

*The Research Department Report Series incorporates reports from all the specialist teams within the English Heritage Research Department: Archaeological Science; Archaeological Archives; Historic Interiors Research and Conservation; Archaeological Projects; Aerial Survey and Investigation; Archaeological Survey and Investigation; Architectural Investigation; Imaging, Graphics and Survey, and the Survey of London. It replaces the former Centre for Archaeology Reports Series, the Archaeological Investigation Report Series and the Architectural Investigation Report Series.*

*Many of these are interim reports which make available the results of specialist investigations in advance of full publication. They are not usually subject to external refereeing, and their conclusions may sometimes have to be modified in the light of information not available at the time of the investigation. Where no final project report is available, readers are advised to consult the author before citing these reports in any publication. Opinions expressed in Research Department reports are those of the author(s) and are not necessarily those of English Heritage.*

Requests for further hard copies, after the initial print run, can be made by emailing:

Res.reports@english-heritage.org.uk

or by writing to:

English Heritage, Fort Cumberland, Fort Cumberland Road, Eastney, Portsmouth PO4 9LD

Please note that a charge will be made to cover printing and postage.



*Martin Fletcher at Steval Point, the Garrison*

## **SUMMARY**

Many of the remains of military defence works on the Isles of Scilly are vulnerable to coastal erosion. These works date from the 16th to the 20th centuries and form a unique and comprehensive collection of forts, redoubts, batteries, breastworks and strong points as well as communications structures. Many of them are unfinished works, reflecting a succession of 'stop-go' policies for defending the islands. Comprehensive archaeological survey of these works on all the main islands was undertaken between 2008 and 2010, following more geographically restricted investigation and excavation of the Garrison, St Mary's in 2005-6. This report summarises the work on the earthworks and minor features, complementing work on the architectural remains of the Garrison reported in RDRS 39-2011.

## **CONTRIBUTORS**

The survey and investigation were undertaken by Allan Brodie and the author while aerial photography was undertaken by Damian Grady and ground photography by Mike Hesketh-Roberts (though several of the photographs in this report are by Allan Brodie and the author). Deborah Cunliffe prepared the drawings (except Fig 19 which is by the author) and designed this report.

## **ACKNOWLEDGEMENTS**

The author and his colleagues are very grateful to all those on the islands who made the task so enjoyable and who helped in so many ways. In particular we would like to thank: Amanda Martin (Curator, Isles of Scilly Museum); David Mawer (Senior Conservation Warden, Isles of Scilly Wildlife Trust); Craig Dryden (Chief Planning and Development Officer, Council of the Isles of Scilly); Trevor Kirk (Isles of Scilly AONB); Eleanor Breen (Conservation Officer, Council of the Isles of Scilly); Julie Love (Education Manager, Isles of Scilly Wildlife Trust); Katharine Sawyer (independent archaeologist); Richard McCarthy (independent historian); Chris Gregory (Land Steward, Duchy of Cornwall).

## **ARCHIVE LOCATION**

National Monuments Record, The Engine House, Firefly Avenue, Swindon SN2 2GZ

## **DATE OF INVESTIGATION**

2008-2010

## **CONTACT DETAILS**

English Heritage, NMRC, The Engine House, Firefly Avenue, Swindon SN2 2GZ

# CONTENTS

INTRODUCTION	I
DESCRIPTION	3
St Agnes	3
Samson and Bryher	3
Tresco	5
St Martin's	13
St Mary's	14
DISCUSSION	41
The 16th century	41
The Civil Wars	43
The First World War	50
The Second World War	53
Future work	58
METHODOLOGY	59
REFERENCES	60
APPENDIX 1: Civil War chronology	62
APPENDIX 2: Civil War personnel	66
APPENDIX 3: First World War chronology	70
APPENDIX 4: Second World War chronology	71
APPENDIX 5: Second World War pillboxes on St Mary's	73

## LIST OF ILLUSTRATIONS

Fig 1a Location map of out islands	1
Fig 1b Location map of St Mary's	2
Fig 2: Carn of Works redoubt, St Agnes	3
Fig 3: Works Point battery, Bryher	4
Fig 4: Possible remains of the 'Old Redoubt', Southward, Bryher	5
Fig 5: The 'Old Lookout', Beacon Hill, Tresco	5
Fig 6: King Charles's Castle, Tresco	6
Fig 7: The Old Blockhouse or Dover Fort, Old Grimsby, Tresco	7
Fig 8: The bastioned trace on Castle Down, Tresco	8
Fig 9: Simplified plan of RNAS Tresco	11
Fig 10: Oliver's Battery, Carn Near, Tresco	12
Fig 11: Earthworks and other features near Woolpack Battery	20
Fig 12: Church Point battery, St Mary's	22
Fig 13: Harry's Walls, St Mary's	25
Fig 14: Carn Morval battery, St Mary's	28
Fig 15: Bar Point battery, St Mary's	29
Fig 16: Helvear Hill battery, St Mary's	31
Fig 17: Pellew's Redoubt, Toll's Island, St Mary's	33
Fig 18: Mount Todden, St Mary's	34
Fig 19: Harry's Walls, St Mary's	43

## LIST OF PLATES

Front cover: Aerial photograph showing St Mary's from the south-west with the Garrison in the foreground (EH NMR 23896/I6)

Frontispiece: Martin Fletcher at Steval Point, the Garrison

Pl 1: The bastioned trace on Castle Down, Tresco: the curtain	9
Pl 2: The bastioned trace on Castle Down, Tresco: the central bastion	9
Pl 3: The Blockhouse, Old Grimsby, Tresco	10
Pl 4: Admiralty signal station, Chapel Down, St Martin's	13
Pl 5: 17th-century breastwork on the Garrison: excavation in 2006	15
Pl 6: Star Castle	18
Pl 7: Central bracket for a collapsible mast, the Garrison	19
Pl 8: Point for attaching guy ropes or wires for the mast	19
Pl 9: Earthworks in a paddock to the east of Star Castle	21
Pl 10: Eroding section of the possible battery rampart at Church Point, St Mary's	23
Pl 11: Earthworks of a probable battery at Carn Leh, Old Town Bay, St Mary's	23
Pl 12: Stone building adjacent to Giant's Castle	26
Pl 13: The former Coastguard lookout on Giant's Castle	26
Pl 14: The supposed 'upper battery' at Carn Morval, St Mary's	29
Pl 15: Helvear Hill battery, St Mary's: the ditch	31
Pl 16: Toll's Hill or Trenear's Rock battery, St Mary's	32
Pl 17: Mount Todden, St Mary's	35
Pl 18: The temporary grave of Sir Cloudesley Shovel, Porth Hellick, St Mary's	36
Pl 19: Rotor installation, Normandy Down, St Mary's	39
Pl 20: Direction arrow, Normandy Down, St Mary's	39
Pl 21: Star Castle: the ditch	41
Pl 22: Survey of the Hugh, 1742	42
Pl 23: The sea mark, Harry's Walls, St Mary's	44
Pl 24: Earthwork defences on the northern side of King Charles's Castle, Tresco	45
Pl 25: Toll's Island, showing Pellew's Redoubt	46



PI 26: Helvear Hill battery, St Mary's: interior	47
PI 27: Mount Todden redoubt, St Mary's: interior	48
PI 28: 19th-century gatepost, Steval Point battery, the Garrison	50
PI 29: New Grimsby, Tresco	52
PI 30: Iron rails, New Grimsby slipway	52
PI 31: Plaque commemorating the secret naval flotilla, New Grimsby Sound, Tresco	54
PI 32: Second World War gravestone, the churchyard, Old Town, St Mary's	55
PI 33: Pillbox overlooking Porth Hellick, St Mary's	55
PI 34: Newly discovered earthwork, the Garrison	57
PI 35: Erosion undercutting the cliffs on the Garrison	57
PI 36: Allan Brodie, Helvear Hill, St Mary's	58

.

# INTRODUCTION

Recent work on the military archaeology of Scilly has been prompted by concern over the vulnerability of many of the coastal installations in the face of increasing coastal erosion. Martin Fletcher, at that time Senior Investigator in Archaeological Survey & Investigation based at Exeter, carried out a survey of the earthworks and masonry structures around the Garrison, St Mary's, in 2005-6 (Fletcher 2007; Johns and Fletcher 2010). This was followed up by selective excavation in May 2006, directed by Dave Fellows of the Archaeological Projects team based at Fort Cumberland (2007). In the course of this work Allan Brodie, who had been co-opted to report on the standing buildings of the Garrison, conceived the idea of a wider project to look at the military

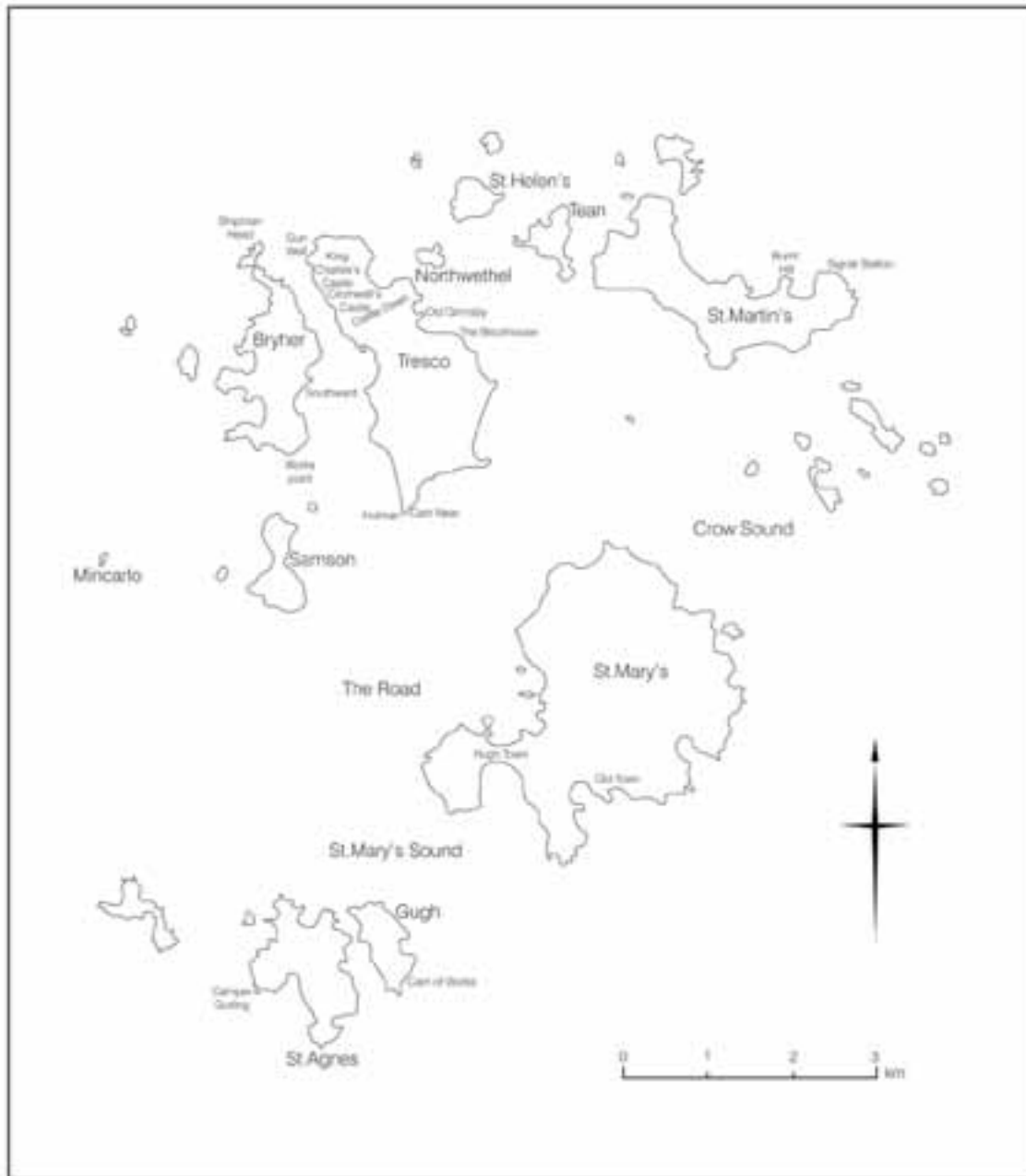


Fig 1a: Location map of out islands, sites and areas mentioned in this report.

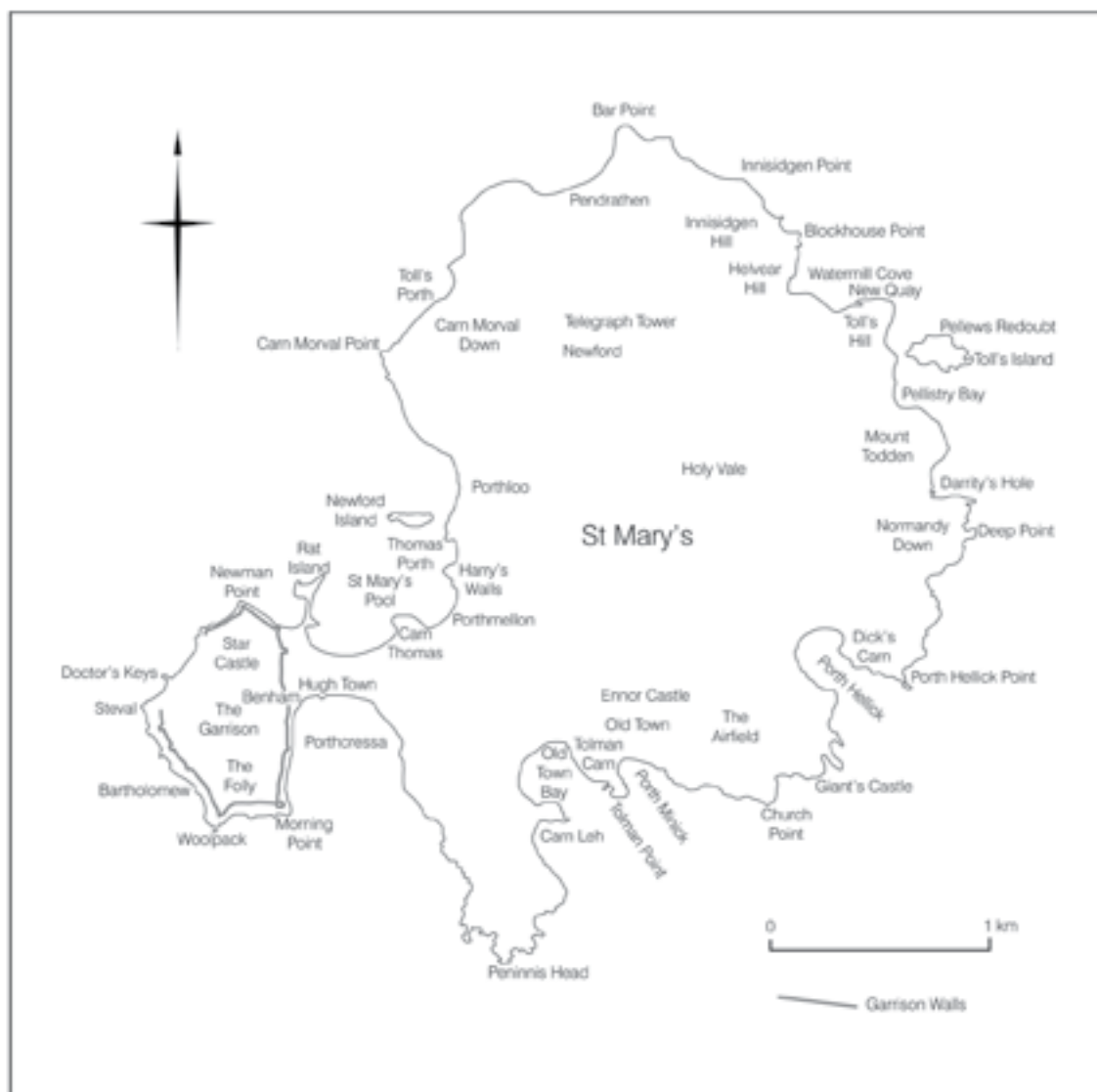


Fig 1b: Location map of St Mary's with sites and areas mentioned in this report.

remains of the islands generally, as many of them were as much threatened by erosion as the remains on the Garrison; this idea was articulated in a Project Design (Brodie 2008) and carried out during three field visits in September-October 2008, June 2009 and March 2010 (Fig 1a and b).

The result was published as *Defending Scilly* (Bowden and Brodie 2011), a title in the 'Informed Conservation' series (and the first one co-authored by an Archaeological Investigator and an Architectural Investigator). Several aspects of the project have given rise to spin-off publications (e.g. Brodie 2011a; in press; forthcoming). An RDRS report on the Garrison has been prepared by Allan Brodie (2011b) and this report presents the earthwork evidence in more detail than was possible in the 'Informed Conservation' book.

Although this report is mainly concerned with earthwork sites it includes brief notes on some minor features and the Second World War pillboxes (Appendix 5).

## DESCRIPTION

The sites are described under the separate islands but within each island in NMR number order.

### St Agnes

#### Carn of Works, The Gugh, St Agnes

NMR SV 80 NE 11 (Uid 303200)

SV 8915 0800

This stone and earthwork redoubt is as described by the Ordnance Survey Field Investigator in 1978 and depicted on the Antiquity Model (Fig 2); no further survey work was undertaken. In form, general scale and location it resembles Pellew's Redoubt (SV 91 SW 72; see below).

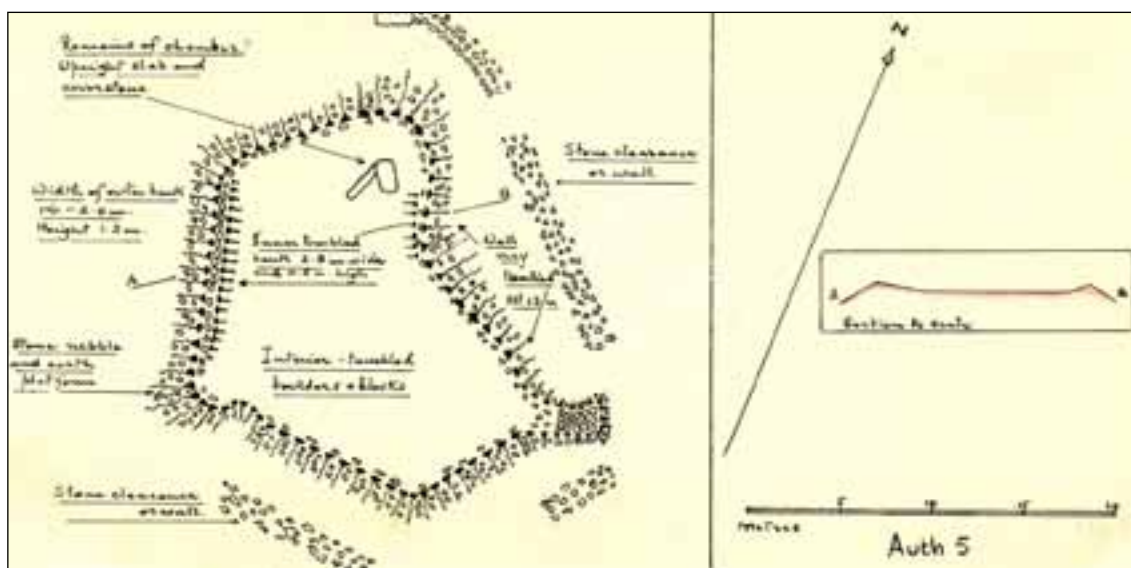


Fig 2: Ordnance Survey Antiquity Model for the Carn of Works redoubt, St Agnes, 1978: original scale 1:250. Antiquity Models were the field drawings from which the depiction of antiquities on basic scale mapping was derived; in practice diligent Field Investigators often recorded far more detail than was required for this purpose, making them extremely useful records.

#### Camper Gurling battery, St Agnes

NMR SV 80 NE 37 (Uid 303270)

SV 8749 0786

If this battery ever existed it has fallen into the sea; the alleged 'breastwork' to its south is a very low, slight earthwork, no more than 0.1m high, and is probably part of the Castella Down prehistoric field system (SV 80 NE 114).

### Samson and Bryher

#### Shipman Head 'promontory fort', Bryher

NMR SV 81 NE 12 (Uid 303354)

SV 876 160

A stone built rampart, as depicted on the Antiquity Model, cuts off Badplace Hill and Shipman Head; no survey action. This is not in any real sense a military site.

### Works Point battery, Bryher

NMR SV 81 SE 8 (Uid 303523)

SV 8787 1403

There is a very slight earthwork, less than 0.3m high, but it is hard to tell what might be artificial and what is natural; it is densely overgrown. It is not very convincing as a battery, partly because it is so slight and partly because the shape is somewhat amorphous (Fig 3). It is well located, on the other hand, covering the passage between Bryher and Samson, and Tresco Flats. It also seems to be named in Troutbeck's survey (1796, 142); no survey action.

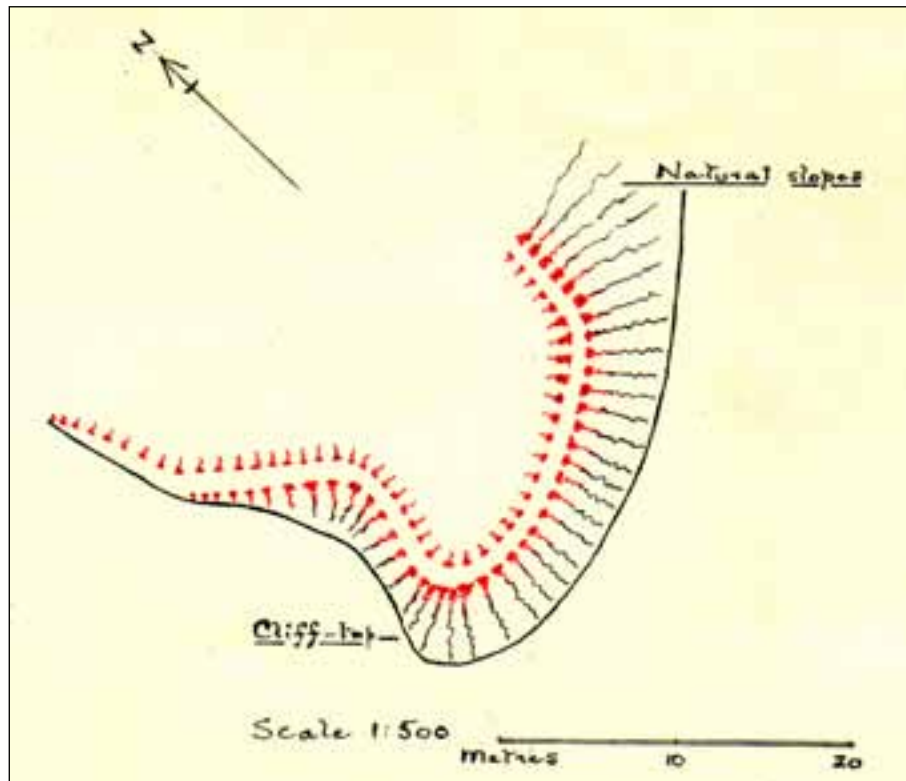


Fig 3: Works Point battery, Bryher; OS Antiquity Model 1978: original scale 1:100.

### 'Old Redoubt', Southward, Bryher

NMR SV 81 SE 9 (Uid 303526)

SV 8789 1460

This site was inspected briefly; it is as depicted on the Antiquity Model (Fig 4) and no further survey was undertaken. It was mentioned by Borlase (1756, 61-2) and Troutbeck (1796, 142) and marked as 'Old Redoubt' on Spence's 1792 Map of Scilly (Hydrographic Office, Taunton) but there is nothing about the earthworks (which could represent almost any rectangular structure) to support the appellation; if anything, the earthworks are rather slight, less than 0.3m in elevation (though this may not be significant).

Nevertheless, the map evidence should be accorded some respect. The location is rather questionable, tucked into Green Bay with a slightly limited outlook (though it does command much of Tresco Sound) and also somewhat overlooked by Timmy's Hill.

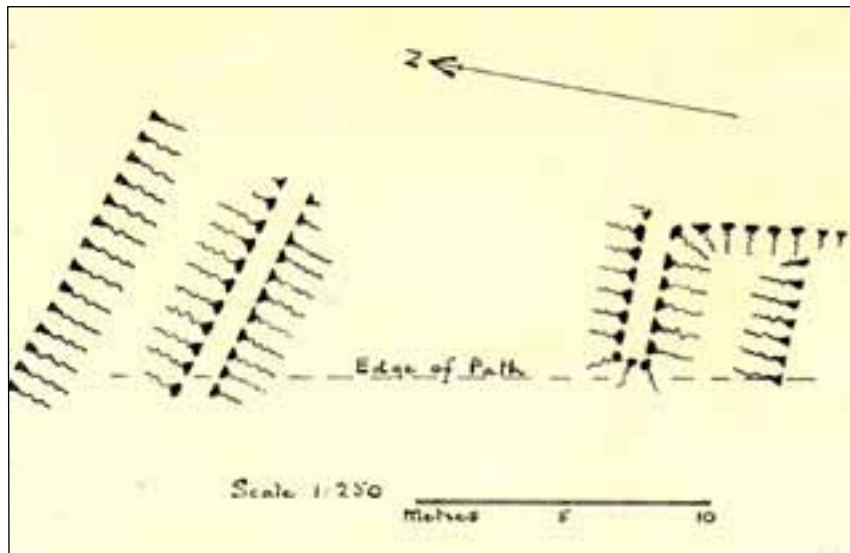


Fig 4: Possible remains of the 'Old Redoubt', Southward, Bryher; OS Antiquity Model 1978: original scale 1:100.

**'Walled platform (possible site of gun battery)', Samson**  
 NMR SV 81 SE 59 (Uid 303656) SV 8790 1221

This is a doubtful site in an area of restricted access; not visited.

## Tresco

**'Bivouac platforms' near Cromwell's Castle, Tresco**  
 SV 81 NE 18 (Uid 303370)  
 SV 8827 1599

Not examined.

**'Old Lookout', Beacon Hill, Castle Down, Tresco**  
 NMR SV 81 NE 22 (Uid 303382)  
 SV 8878 1575

This structure was examined briefly; it is heavily overgrown but seems to be as described by previous authorities. It might be analogous to the stone structure within the Mount Todden earthwork on St Mary's (see below SV 91 SW 73). The plan on the Antiquity Model (Fig 5), however, perhaps suggests something more recent than the Napoleonic Wars.

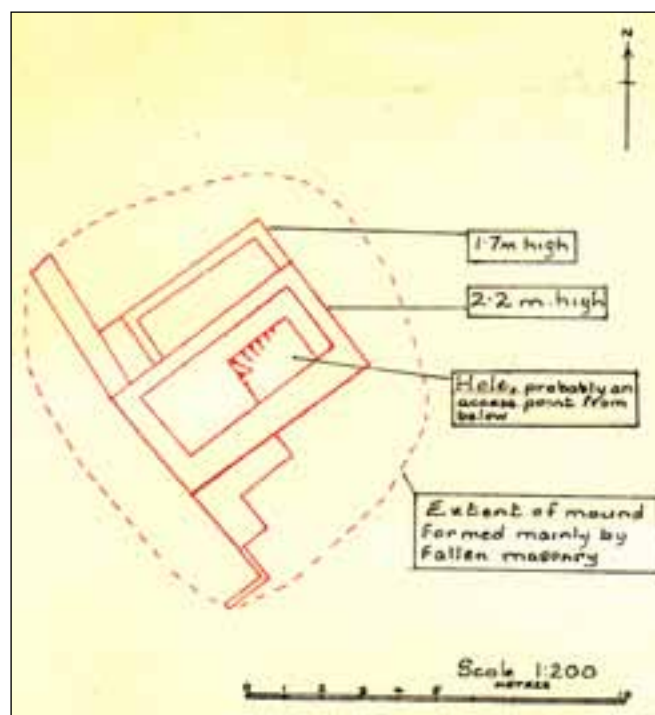


Fig 5: The 'Old Lookout', Beacon Hill, Tresco; OS Antiquity Model 1978: original scale 1:200. This detail was obscured by vegetation at the time of the current project.

**Cromwell's Castle, Tresco**

**NMR SV 81 NE 23 (Uid 303385)**

**SV 8816 1595**

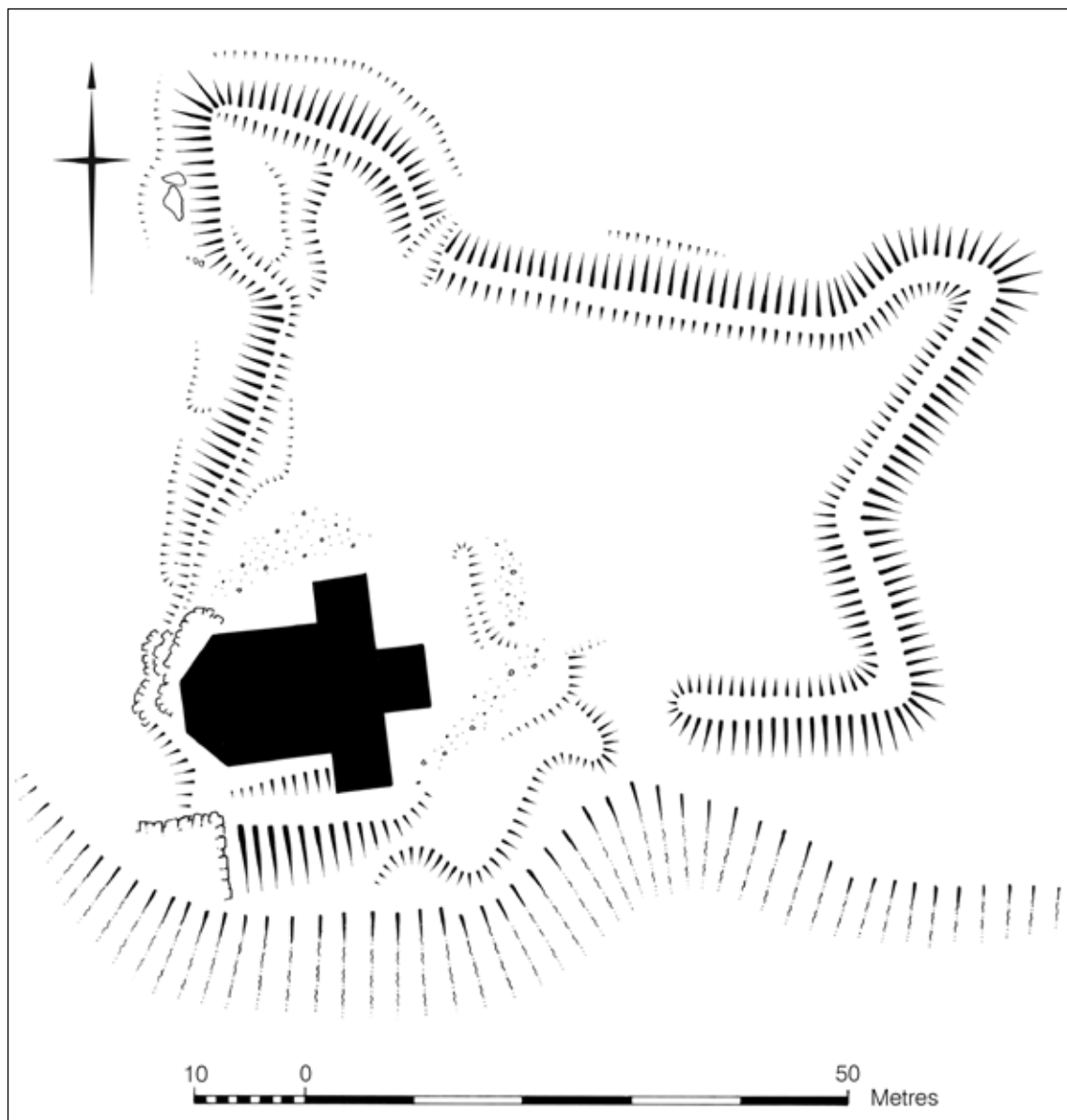
This enigmatic gun tower with attached platform, covering New Grimsby harbour, is of mid 16th-century form but documentary evidence suggests that it was built in 1651-2 (see Bowden and Brodie 2011, 27-9); this issue still requires resolution.

**King Charles's Castle, Tresco**

**NMR SV 81 NE 25 (Uid 303391)**

**SV 8826 1613**

The existing 1:500 survey (Ratcliffe 1993 103-18, fig 26) was amended and detail added (Fig 6); the rampart is up to 0.5m high internally, 1.3m externally and the ditch is less than 0.2m deep. The earthworks to the south and south-east of the building have an unfinished look (but may only be damaged) but otherwise the bastioned trace is neat



*Fig 6: King Charles's Castle, Tresco: survey plan, after Ratcliffe 1993, with additions by the author, 2009.*

and deliberate – not obviously thrown up in a hurry – and therefore need not date to the Civil War as has often been presumed; it could be of the late 16th century rather than the 17th but might be the work referred to in a document of 1627 (Bowden and Brodie 2011, 10). On the other hand it is slightly irregular in plan (in contrast with the extremely regular plan of the Castle itself), at an angle to the Castle and has acute-angled bastions with no orillons. There is no obvious reason for the north-eastern corner to comprise a demi-bastion rather than a full bastion.

#### **Castle Down Brow battery and breastwork, Tresco**

**NMR SV 81 NE 26 (Uid 303394)**

**SV 8881 1637**

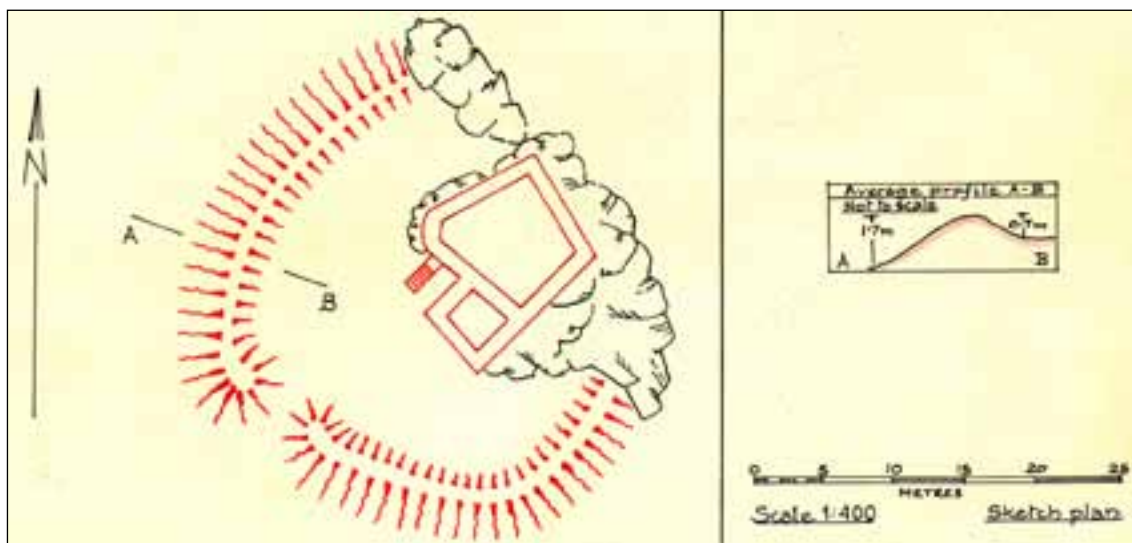
This area was briefly examined – no sign of a battery was seen, though there are traces of a field system (see SV 81 NE 33 and 34); the 'breastwork' consists of a row of medium-sized stones set up on end with no sign of an earthwork behind – this could be a field wall.

#### **The Blockhouse or Dover Fort, Tresco**

**NMR SV 81 NE 28 (Uid 303400)**

**SV 8973 1546**

The Blockhouse (see Pl 3) is described in Bowden and Brodie 2011 (6-7, figs 3-5). It occupies an isolated knoll and natural slopes continue on all sides (except to the north-east where there are cliffs, as depicted, Fig 7).



*Fig 7: The Old Blockhouse or Dover Fort, Old Grimsby, Tresco; OS Antiquity Model 1978: original scale 1:400. The earth bank is damaged in several places but its general outline is as shown here.*

#### **Earthwork around the Blockhouse, Tresco**

**NMR SV 81 NE 29 (Uid 303403)**

**SV 8973 1546**

The slight earthwork bank, less than 0.5m high, surrounding the Blockhouse is not as smooth and neat as depicted on the Antiquity Model for SV 81 NE 28 (Fig 7) but the general impression is correct; no survey action. There are some slight earthworks on the lower ground on the landward side of the blockhouse but these are not necessarily of military origin (see below, SV 81 NE 114).



**Bastioned trace, Castle Down, Tresco**  
**NMR SV 81 NE 53 (Uid 303465)**

**SV 8857 1605**

As depicted by its discoverer, Norman V Quinnell, on the Antiquity Model (Fig 8); this is a very slight earthwork, the bank up to 0.5m high at most but generally not more than 0.3m high, the ditch (where it exists) no more than 0.2m deep. This is not a finished fortification but possibly a preliminary lay-out (Plates 1 and 2). It is (presumably deliberately) placed below a crest in a reverse-slope position to surprise and skyline any attackers approaching from the south, though if built to full height its relationship to the crest would have been less noticeable and this aspect of defence would have been compromised. Probably a 16th-century work – it has obtuse-angled bastions with orillons – it might be contemporary with King Charles's Castle or slightly later (Quinnell 1978).

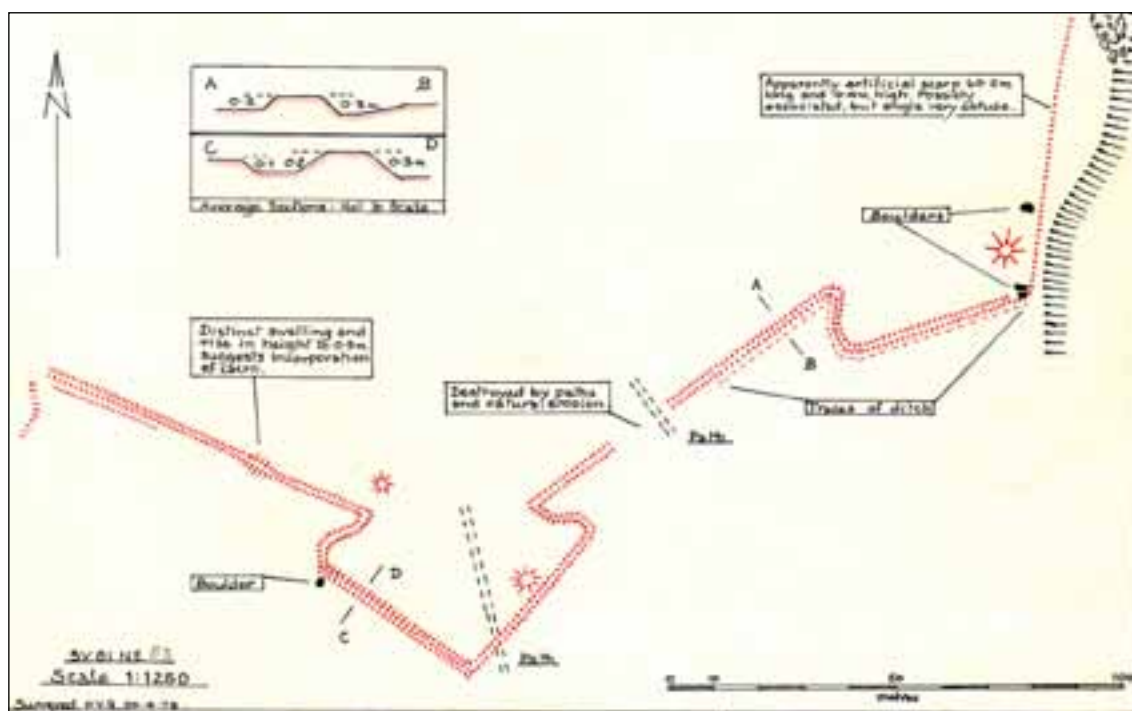


Fig 8: Original survey drawing of the bastioned trace which crosses Castle Down, Tresco, by NV Quinnell, OS Field Investigator, 1978: original scale 1:2500.

**Gun Well battery, Tresco**

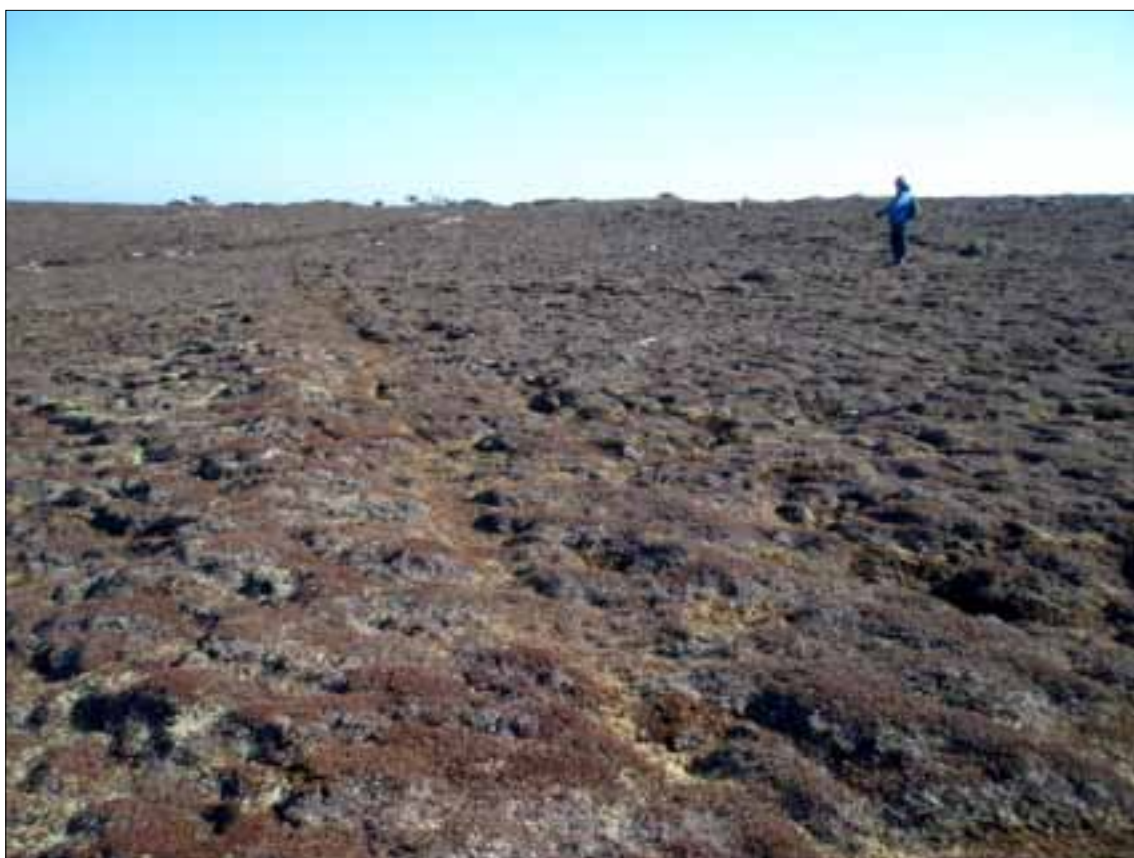
**NMR SV 81 NE 56 (Uid 303474)**

**SV 8823 1635**

This alleged battery could not be found; there are numerous cairns but also tin workings in this area. It was described in 1978 by NJ Attrill, OS Archaeology Division Investigator, as a crescentic mound of stone with a rock cut hole on its landward side, mutilated by Second World War activity (NMR AMIE record, Authority 3). The plan of this feature, and its alignment with other tin workings, suggests that this is an extraction pit.



*Pl 1: The bastioned trace on Castle Down, Tresco, in 2010; Allan Brodie walking along the bank of the curtain with the ditch to the right.*



*Pl 2; The bastioned trace on Castle Down, Tresco, in 2010; the curtain bank and ditch are in the left foreground. Allan Brodie is standing in the near, western, angle of the central bastion; the boulder shown on the survey plan (Fig 8) can be seen behind him. The path cutting through the bastion can also be seen top left.*

### **RNAS Tresco, New Grimsby**

**NMR SV 81 NE 109 (Uid 1486451)**

**SV 890 150**

Remains of the First World War flying boat and seaplane base (Fig 9), established in 1917 for anti-submarine patrols and convoy escort duties in the Western Approaches (Bowden and Brodie 2011, 63-5). Very little survives: iron rails from the original wooden slipway for launching and recovering seaplanes, but now re-set in the modern slipway at an incorrect gauge (Katharine Sawyer, pers comm); some surviving buildings from Abbey Farm that were used by the RNAS/RAF; and concrete bases for buildings at the southern end of the base.

### **Earthworks behind the Old Blockhouse, Old Grimsby, Tresco**

**NMR SV 81 NE 114 (Uid 1538874)**

**SV 8969 1542**

Some very slight, amorphous earthworks lie on the ridge behind the Old Blockhouse (PI 3); some could be rectangular building platforms but their date and purpose is unclear (see also SV 81 NE 29).



*PI 3: The Blockhouse, Old Grimsby, Tresco, (north to left) with earthworks to the south: in the bottom right corner is a spread bank, its position emphasised by the pale erosion patch in the main path; beyond the path is a series of very spread and indistinct ridges, which are possible building platforms; in the angle between the path and the uncut bracken at the foot of the slope up to the Blockhouse is another possible rectangular platform. (EH NMR 26577/046: 11 February 2010)*

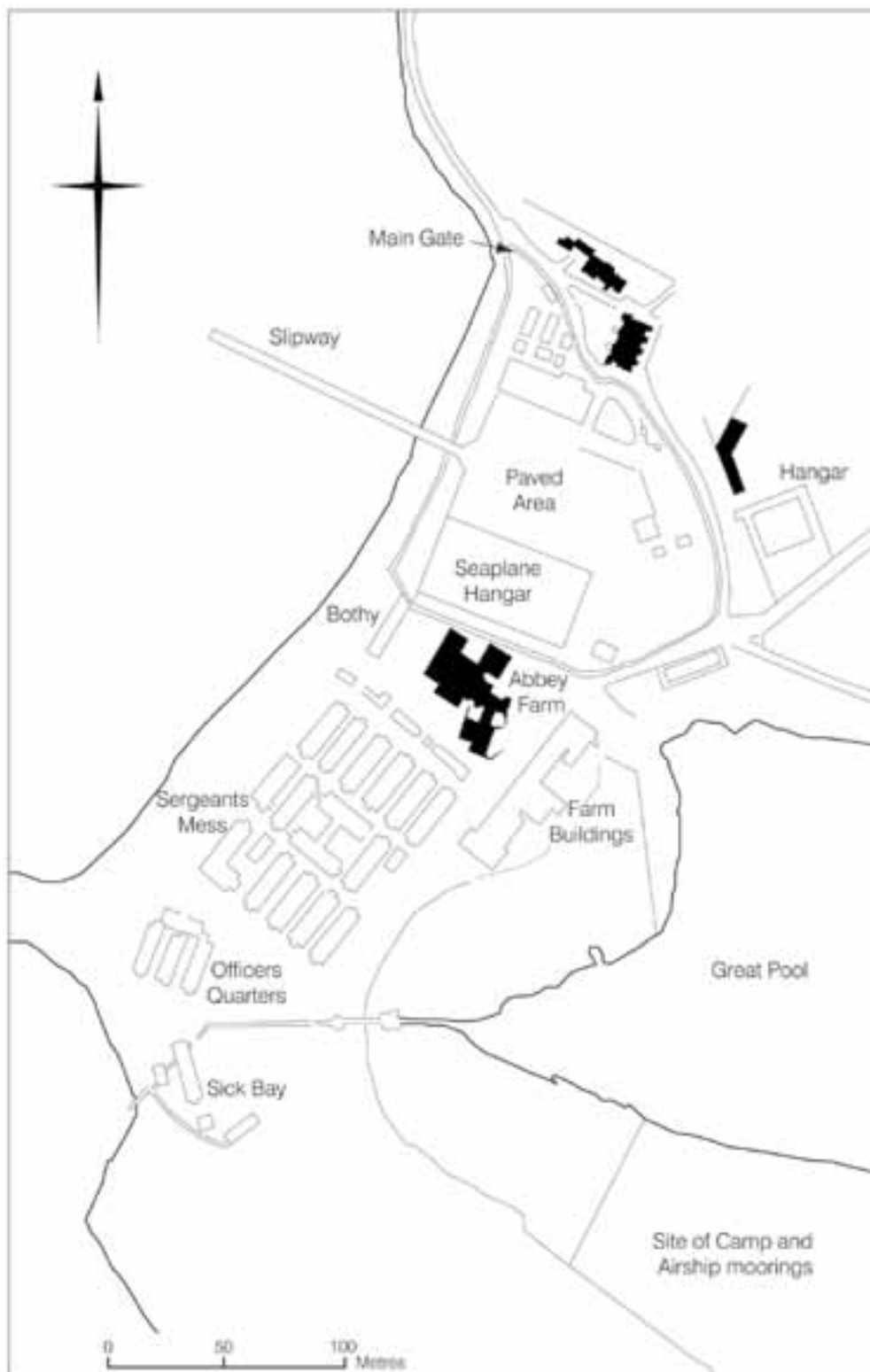


Fig 9: Simplified plan of RNAS Tresco, after NJ Plevin in JP Osborne Scillonian War Diary 1914-18, Isles of Scilly Museum.

The existing 1:500 survey (Ratcliffe and Sharp 1991, 35-46, fig 13; Ratcliffe 1993, 95-8) was amended and detail was added (Fig 10). The battery consists of massive ramparts, with external ditches to west and south, enclosing an approximately triangular area on the south side of the Carn Near outcrop. The ditch is up to 1.0m deep externally, the rampart 2.0m high externally and 1.0m high internally at most. There is an entrance gap in the north-western face and the footings of a small rectangular building at the northern extremity, right against the outcrop; this building foundation is slight – less than 0.3m high and with a very small footprint – appropriate for a temporary storehouse, shelter or magazine but probably not for a permanent magazine. There are plausible gun positions at the south end of the battery. There is no reason to doubt that this is

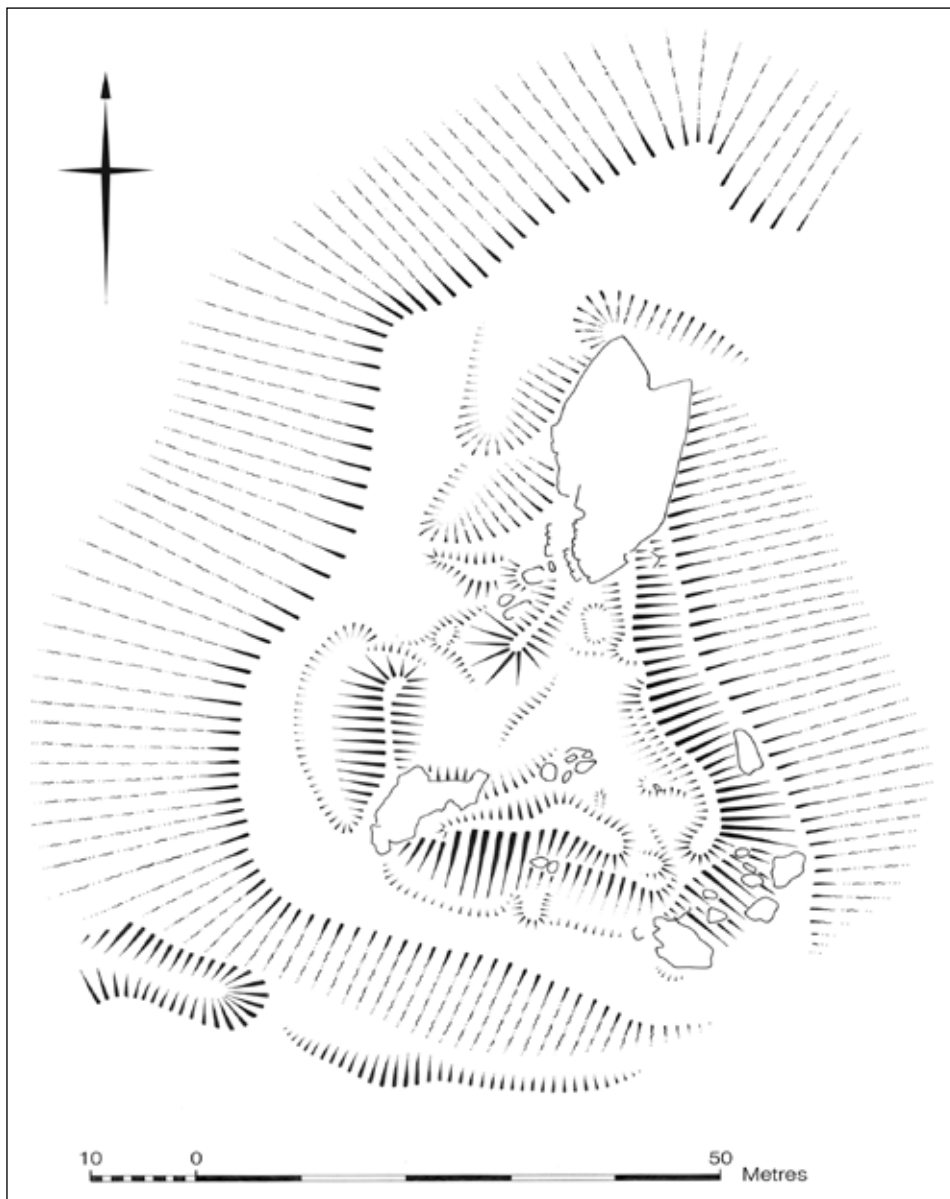


Fig 10: Oliver's Battery, Carn Near, Tresco; survey plan, after Ratcliffe and Sharp 1991, with additions by the author, 2009.



the battery constructed on Carn Near by Blake in 1651; the earthworks are substantial but relatively crude and could have been made quickly (between 19th April and 4th May). Suggestions that the battery is on the site of earlier fortifications are unconvincing; surrounding earthworks look like hollow ways and sand pits (see below). The battery has possibly disturbed a prehistoric burial cairn (as suggested by Charles Thomas, noted in NMR record) though the evidence is not strong (Katharine Sawyer, pers comm). The name is possibly a Victorian invention and the term 'Carn Near Battery' should perhaps be preferred.

#### **'Royalist battery', Carn Near, Tresco**

**NMR SV 81 SE 15 (Uid 303544)**

**SV 8930 1350**

A supposed royalist battery pre-dating Oliver's battery, but the earthworks are unconvincing – they appear to be the remains of hollow ways and sand pits – and there is no particular reason for the royalists to have built a battery here (and no suggestion in the literature that they did).

#### **St Martin's**

##### **Admiralty signal station enclosure, St Martin's**

**NMR SV 91 NW 58 (UId 303862)**

**SV 9421 1606**



*Pl 4: Admiralty signal station, Chapel Down, St Martin's; earthwork banks can be seen adjacent to the upper right hand side of the ruinous masonry enclosure; the banks apparently form a triangular enclosure but they differ in form, one of them is parallel to the modern path and their point of intersection is obscured by a patch of erosion, so whether they form one entity or are two separate features is uncertain. (EH NMR 26575/048: 11 February 2010)*

This ruinous stone structure is as mapped previously (Ratcliffe and Sharp 1991, 11-16); no further survey was undertaken, though banks and ditches, possibly forming a sharply angled enclosure adjacent to the west side of the masonry enclosure, were noted (see aerial photographs NMR 26575/045, 047 and 048 – PI 4).

**Post-medieval watch house, St Martin's**

**NMR SV 91 NW 66 (Uid 303884)**

**SV 942 160**

This watch house was probably near the site of the day mark and signal station, and destroyed in making them.

**Burnt Hill 'promontory fort', St Martin's**

**NMR SV 91 NW 7 (Uid 303719)**

**SV 936 159**

An alleged promontory fort; brief investigation confirmed the view of recent authorities that the boulder wall across the neck does not constitute a rampart, though there is other evidence of prehistoric activity.

**St Mary's**

**The Garrison, St Mary's**

**'Parent' record NMR SV 81 SE 30 (Uid 303589)**

See under individual sites. Much has been written about the Garrison; attention is drawn particularly to: Bowden and Brodie (2011, esp 14-19, 30-53, 55-62, 98); Brodie (2011b); Fellows (2007); Johns and Fletcher (2010); Parkes (1990); and Thomas (1989).

Note: sites on The Garrison annotated 'MJF' were recorded and field checked by Martin Fletcher in 2005-6 and were not necessarily investigated during the current project; many of these have been levelled or destroyed by later activity or coastal erosion but some survive at least partly as earthworks with some signs of stone structure. References to site numbers in the Gazetteer of Johns and Fletcher's report (2010) are given here because NMR numbers are omitted from that report, making cross referencing laborious.

**Woolpack Platform battery, The Garrison, St Mary's**

**NMR SV 80 NE 116 (Uid 1445248) SV 8977 0987**

MJF; there is some earth and stone survival of this battery (Johns and Fletcher 2010, site 31). This site, which underlies the 1890s Defence Electric Light installation, was investigated in 1990 (Parkes 1990, 25-8).

**Redan 3, The Garrison, St Mary's**

**NMR SV 80 NE 119 (Uid 1445611)**

**SV 8992 0990**

MJF; slight traces noted in the cliff edge in 1990 (Johns and Fletcher 2010, site 23) but the site has probably been destroyed by erosion and gardening.

**Redan 4, The Garrison, St Mary's**  
**NMR SV 80 NE 120 (Uid 1445622) SV 8984 0990**

MJF; no trace (Johns and Fletcher 2010, site 25).

**Redan 5, The Garrison, St Mary's**  
**NMR SV 80 NE 123 (Uid 1445817) SV 8974 0992**

MJF; no trace (Johns and Fletcher 2010, site 32).

**'The Folly' or 'Old Barracks', The Garrison, St Mary's**  
**NMR SV 81 SE 42 (Uid 303617) SV 8989 1015**

This record for 'The Folly' is based on a conjectural position which is apparently too far north; see new record SV 81 SE 542 for earthworks which may be the remains of 'The Folly'.

**Steal Point Civil War battery, The Garrison, St Mary's**  
**NMR SV 81 SE 60 (Uid 303659) SV 8945 1036**

MJF; there is some slight earthwork survival (Johns and Fletcher 2010, site 56); this site was investigated in 1990, suggesting two phases of development, the earlier of which can be dated to the 17th century and the latter possibly to the late 18th century (in the absence of a stone-built battery here) (Parkes 1990, 5-15).

**Breastwork, The Garrison, St Mary's**  
**NMR SV 81 SE 372 (Uid 1169823)**

MJF; 17th century breastwork, partly surviving as a substantial earthwork, the better preserved section on the north-west side of The Garrison possibly having been re-



*Pl 5: 17th-century breastwork on the Garrison under excavation in May 2006, Trench 3.*



built in the early 18th century (Johns and Fletcher 2010, site 9); however, sections were excavated across the breastwork in 2006 (PI 5) which revealed no more than one phase of building activity (Fellows 2007, Trenches 1 and 3).

**Nine Civil War batteries, The Garrison, St Mary's**  
**NMR SV 81 SE 373 (Uid 1169848) SV 895 101**

MJF; this record was compiled from the Scheduled Monument Notification of 19th March 1998; these batteries also have individual records (see below).

**Resolution Battery, The Garrison, St Mary's**  
**NMR SV 81 SE 377 (Uid 1170315) SV 8975 1070**

MJF; destroyed by the construction of the King Charles' Battery or by coastal erosion (Johns and Fletcher 2010, site 66).

**Newman Platform battery, The Garrison, St Mary's**  
**NMR SV 81 SE 378 (Uid 1170339) SV 8990 1080**

MJF; destroyed by the construction of the Store House Battery or by coastal erosion (Johns and Fletcher 2010, site 73).

**Bartlomew Platform battery, The Garrison, St Mary's**  
**NMR SV 81 SE 503 (Uid 1445534) SV 8954 1016**

MJF; some slight earthworks and stone structures, possibly remains of this battery, survive. This is situated in front of Col George Boscawen's Battery, not near the 18th-century Bartholomew Battery, the name having been transferred (Johns and Fletcher 2010, site 46; see also Thomas 1989, 255, 258). This site was investigated in 1990, and two phases of building were suggested (Parkes 1990, 18-23).

**Barn Platform battery, The Garrison, St Mary's**  
**NMR SV 81 SE 504 (Uid 1445597) SV 8998 1075**

MJF; no trace in 2005 (Johns and Fletcher 2010, site 76).

**Quadrilateral battery, The Garrison, St Mary's**  
**NMR SV 81 SE 505 (Uid 1445598) SV 8963 1007**

MJF; no trace; probably destroyed by coastal erosion (Johns and Fletcher 2010, site 38).

**Redan 6, The Garrison, St Mary's**  
**NMR SV 81 SE 508 (Uid 1445653) SV 8970 1000**

MJF; possible remains noted in 1990 (Johns and Fletcher 2010, site 36) but the site was covered in vegetation in 2005.

**Redan, The Garrison, St Mary's**  
**NMR SV 81 SE 509 (Uid 1445654) SV 8982 1075**

MJF; lying between King Charles's Battery and Newman Point, this has been destroyed by coastal erosion (no entry in Johns and Fletcher 2010).

**Gun battery, The Garrison, St Mary's**  
**NMR SV 81 SE 510 (Uid 1445659) SV 8948 1025**

MJF; this battery, in front of the northernmost complete redan of the 18th-century walls, is described as 'a relatively well preserved earthwork' (Johns and Fletcher 2010, site 51) though the tip has been lost to erosion. It was investigated in 1990 (Parkes 1990, 15-17).

**Redan 8, Doctor's Keys, The Garrison, St Mary's**  
**NMR SV 81 SE 511 (Uid 1445662) SV 8957 1047**

MJF; this redan partly survives as an earthwork (Johns and Fletcher 2010, site 61).

**Redan 9, The Garrison, St Mary's**  
**NMR SV 81 SE 512 (Uid 1445665) SV 8966 1057**

MJF; this gun platform partly survives as an earthwork (Johns and Fletcher 2010, site 62) and was excavated in 2006; the results suggested the possibility of secondary refurbishment of the front wall but no dating evidence was recovered (Fellows 2007, Trench 2).

**Redan 10, The Garrison, St Mary's**  
**NMR SV 81 SE 513 (Uid 1445679) SV 8970 1065**

MJF; this redan partly survives as an earthwork (Johns and Fletcher 2010, site 63).

**Building platform, The Garrison, St Mary's**  
**NMR SV 81 SE 516 (Uid 1445857) SV 8967 1058**

MJF; possible building platform adjoining the north side of Redan 9 survives as a slight earthwork (listed in Johns and Fletcher 2010, under site 62); this was partly excavated in 2006 and found to have been disturbed recently (Fellows 2007, Trench 2).

**Star Castle, The Garrison, St Mary's**  
**NMR SV 81 SE 530 (Uid 1482605) SV 8991 1064**

The Castle was built in the 1590s and is described in detail by Brodie (2011b; in press). Earthworks immediately around the Castle consist of a substantial ditch, up to about 1.5m deep; no apparent counterscarp survives but construction of the current track has modified the north and north-west sides and much of the remainder of the circuit is covered in dense vegetation; in a paddock to the east are some further earthworks (see below, SV 81 SW 540) but these were not surveyed. The ground to the south is disturbed



*Pl 6: Star Castle: the ditch is largely choked by vegetation, disguising any counterscarp; a pair of slight parallel banks can be seen running diagonally between the hotel building and the current track in the lower right corner – these are probably the remains of a former track. (EH NMR 26574/004: 10 February 2010)*

by modern development but slight earthworks of a possible track survive (Pl 6), though these were not surveyed; the slopes to the west were heavily overgrown until clearance in 2009-10 revealed the remains of a field system and possible settlement enclosures but no further military remains, except for some possible slit trenches uncovered by further scrub clearance in 2010-11. The steeper slopes to the north remain heavily overgrown but there seem to be some quarries here. There is no sign of the outworks suggested by a historic plan (Cal State Pap D 1598-1601, 429-30, April 1600).

**Mast bracket and guy pegs, The Garrison, St Mary's**  
**NMR SV 81 SE 538 (Uid 1538846) SV 8985 1005**

An array of metal fixings to the south-east of the 1890s Woolpack Battery, probably for a collapsible radio mast of Second World War date. The array consists of a central bracket, in which the base of the mast could swivel, and three pegs for guy ropes or wires; a fourth peg is probably concealed in dense gorse to the south: surveyed at 1:500 (Fig 11; Pls 7 and 8).



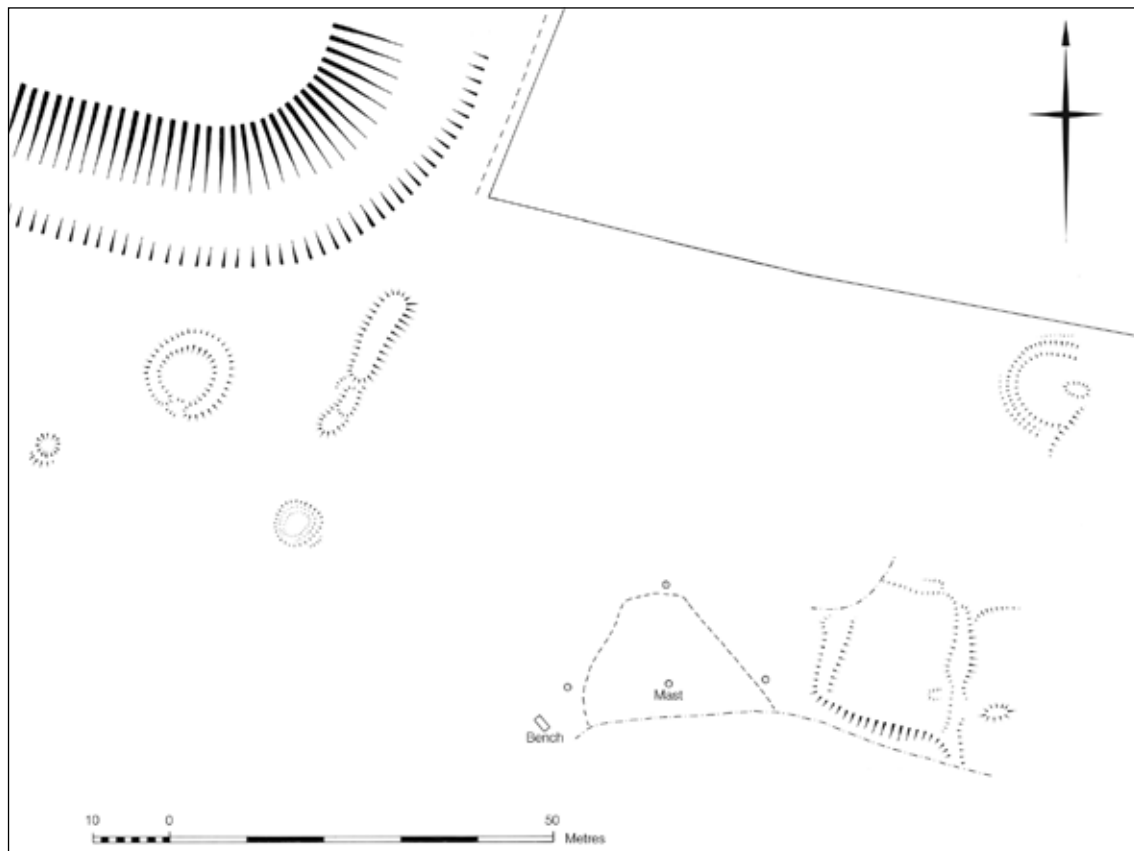
*PI 7: Central bracket interpreted as the step for a collapsible mast on the Garrison, possibly of Second World War date, 2010.*



*PI 8: One of the points for attaching guy ropes or wires for the mast, 2010.*

**Amorphous earthworks, The Garrison, St Mary's**  
**NMR SV 81 SE 539 (Uid 1538855) SV 8980 1007**

A number of amorphous earthworks lie to the south and south-east of the 1890s Woolpack Battery; some of these are known to be of recent origin but some, such as those immediately to the south of the Battery, have the appearance of military works of 20th-century date; none is more than 0.4m in elevation: surveyed at 1:500 (see Fig 11).



*Fig 11: Plan of a group of earthworks and other features to the south-east of the 1890s Woolpack Battery, part of the massive earthwork covering of which is shown at top left. Some of the features are of recent origin but the embanked circle and straight bank immediately to the south of the Battery are probably of some significance; the fixings for a guyed mast may be of Second World War date; the footings of a square structure to the south-east could be the remains of 'The Folly'. Areas beyond the chain-and-dot lines were under gorse; survey at 1:500 by the author and Allan Brodie, 2008 and 2009.*

**Earthworks in a paddock to the east of Star Castle, The Garrison, St Mary's**  
**NMR SV 81 SE 540 (Uid 1538856) SV 8999 1060**

Earthworks in a paddock (PI 9) to the east of Star Castle include a very prominent semi-circular platform partly cut into the natural slope and partly built out from it. This sharply defined feature cuts a linear earthwork, possibly a former path or boundary, and there are a number of other minor features in the same area. No date or function can yet be ascribed to these features: not surveyed.





*PI 9: Earthworks in a paddock to the east of Star Castle; the prominent semi-circular platform is partly cut into the slope and partly built up; its scarps are crisply defined and it cuts through an earlier linear earthwork crossing the paddock from north-west to south-east; other slight earthworks can also be seen. (EH NMR 26571/019: 10 February 2010)*

**Concrete rangefinder post with surrounding ditch, The Garrison, St Mary's**  
**NMR SV 81 SE 541 (Uid 1538858) SV 8983 1001**

Downslope from the 1890s Woolpack Battery is a concrete bunker, apparently a range-finder post associated with the Defence Electric Lights (see SV 81 SE 118 and 500); it consists of a chamber measuring 2.8m east-west by 3.9m transversely; it has a wide aperture to the south overlooking the sea and is entered from the north via a passageway and stairs; to west, south and east the structure is surrounded by a steep-sided trench about 2.3m wide, newly cleared of gorse and bracken (2009); this was probably added when the post was re-used as a pillbox or observation post during the Second World War: measurements taken and noted but not surveyed.

**'The Folly' or 'Old Barracks', The Garrison, St Mary's**  
**NMR SV 81 SE 542 (Uid 1538864) SV 8986 1006**

Previously recorded as SV 81 SE 42 – but with an incorrect grid reference. Slight earthworks, less than 0.1m high, were noted on a cleared area of the hillside to the south-east of the 1890s Woolpack Battery. They seem to be the footings of a square building with external features at approximately the location of 'The Folly', though the orientation is not as shown on historic maps; surveyed at 1:500 (see Fig 11).

**Earthworks near Steval Point, The Garrison, St Mary's**  
**NMR SV 81 SE 543 (Uid 1538877) SV 8950 1031**

Scrub clearance in 2010-11 uncovered earthworks on The Garrison near Steval Point

and running towards Bartholomew Battery; these are in advance of the 18th-century walls but behind the earlier earthwork defences; they are probably mainly quarry pits associated with the 18th-century building works, though there is at least one possible building platform. Despite being covered in dense undergrowth these earthworks were previously noted by Parkes (1990, 31-2).

**Church Point battery, St Mary's**  
**NMR SV 90 NW 3 (Uid 303683)**

**SV 9213 0998**

There is an earthwork here, as shown on the Antiquity Model (Fig 12); no further survey was undertaken but the site was photographed (PI 10). There is a bank, eroding at the east end, with a slight platform behind; if it is a battery the rest has fallen in the sea; the signature is not dissimilar to one side of Carn Morval, for instance. However, there is a serious question regarding its siting – the rock stacks impede its lines of fire and any vessel could avoid it, though it is nearly equidistant to Old Town Bay and Porth Hellick.

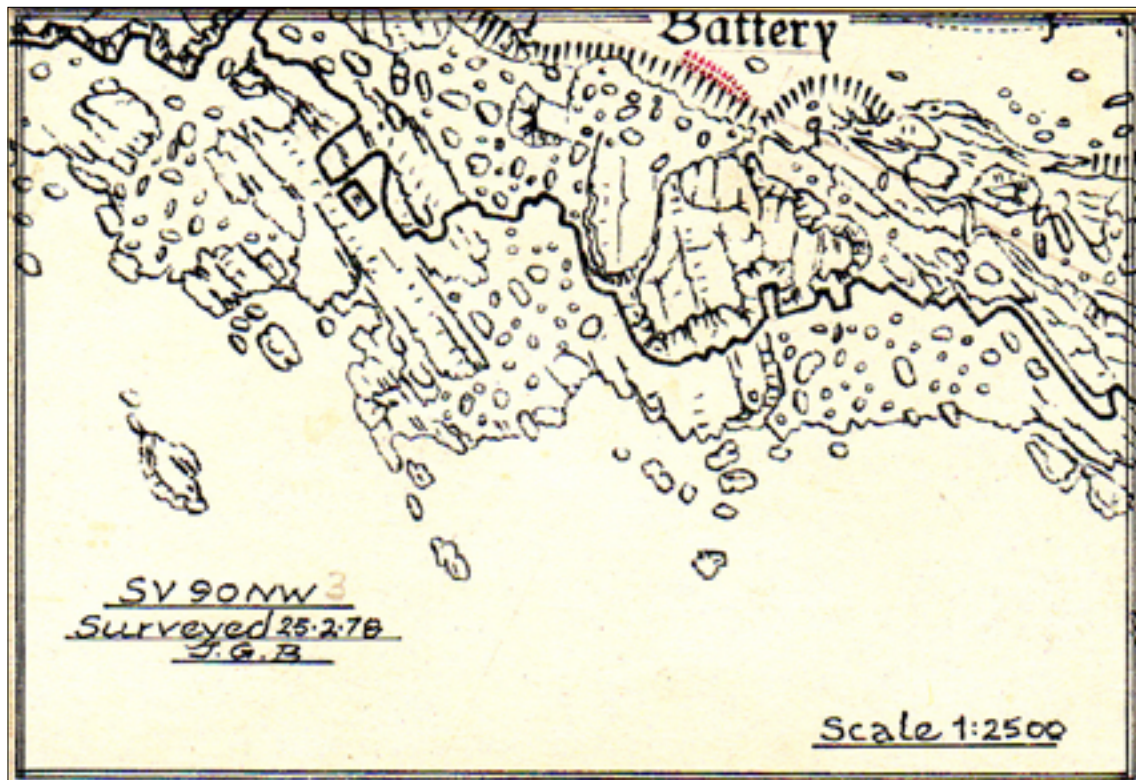


Fig 12: Church Point battery, St Mary's ; OS Antiquity Model surveyed by JG Barton 1978; original scale 1:2500.

**Carn Leh battery, St Mary's**  
**NMR SV 90 NW 4 (Uid 303686)**

**SV 9132 0987**

On the first field visit, in 2008, this site was seen and the earthwork photographed (PI 11); on subsequent visits, however, the earthwork was not visible, being obscured by dense and high vegetation. This battery is in a good position to command the entrance to Old Town Bay.



*Pl 10: Eroding section of the supposed battery rampart at Church Point, St Mary's, 2008.*



*Pl 11: Earthworks of a probable battery at Carn Leh, Old Town Bay, St Mary's, 2008.*



**Peninnis Inner Head battery, St Mary's**  
**NMR SV 90 NW 5 (Uid 303689)**

**SV 9096 0940**

An alleged Civil War battery; NJ Attrill surveyed it for the OS in 1978 and was convinced that it was genuine; a slight linear earthwork survives; not surveyed.

**Peninnis Head Lighthouse battery and bivouac platforms, St Mary's**  
**NMR SV 90 NW 8 (Uid 303698)**

**SV 9106 0941**

As depicted and described by the OS Field Investigator in 1978; not surveyed. The battery earthworks are similar to those at Carn Morval, for instance, but the battery does not seem well placed for firing out to sea – large rock stacks interrupt the field of fire – and there is nothing to force ships to come within range; the bivouac platform(s) here are behind the battery and more convincing than other examples; this battery was assigned to the reign of Queen Anne by Troutbeck (1796, 58) – though it is not clear why. (However, it is possible that Troutbeck was referring to SV 90 NW 5 or to a battery now under the lighthouse.)

**Mawnan Platform battery, The Garrison, St Mary's**  
**NMR SV 90 NW 21 (Uid 1169837)**

**SV 9006 0991**

MJF; there is no entry in Johns and Fletcher (2010) but from the grid reference it would have been destroyed by construction of the 18th-century Morning Point Battery. An earthwork bank at SV 9008 0992, outside the north-eastern face of the Battery, was excavated in 2006 and found to be the boundary of a garden plot (Fellows 2007, Trench 4).

**Redan 2, The Garrison, St Mary's**  
**NMR SV 90 NW 34 (Uid 1445608)**

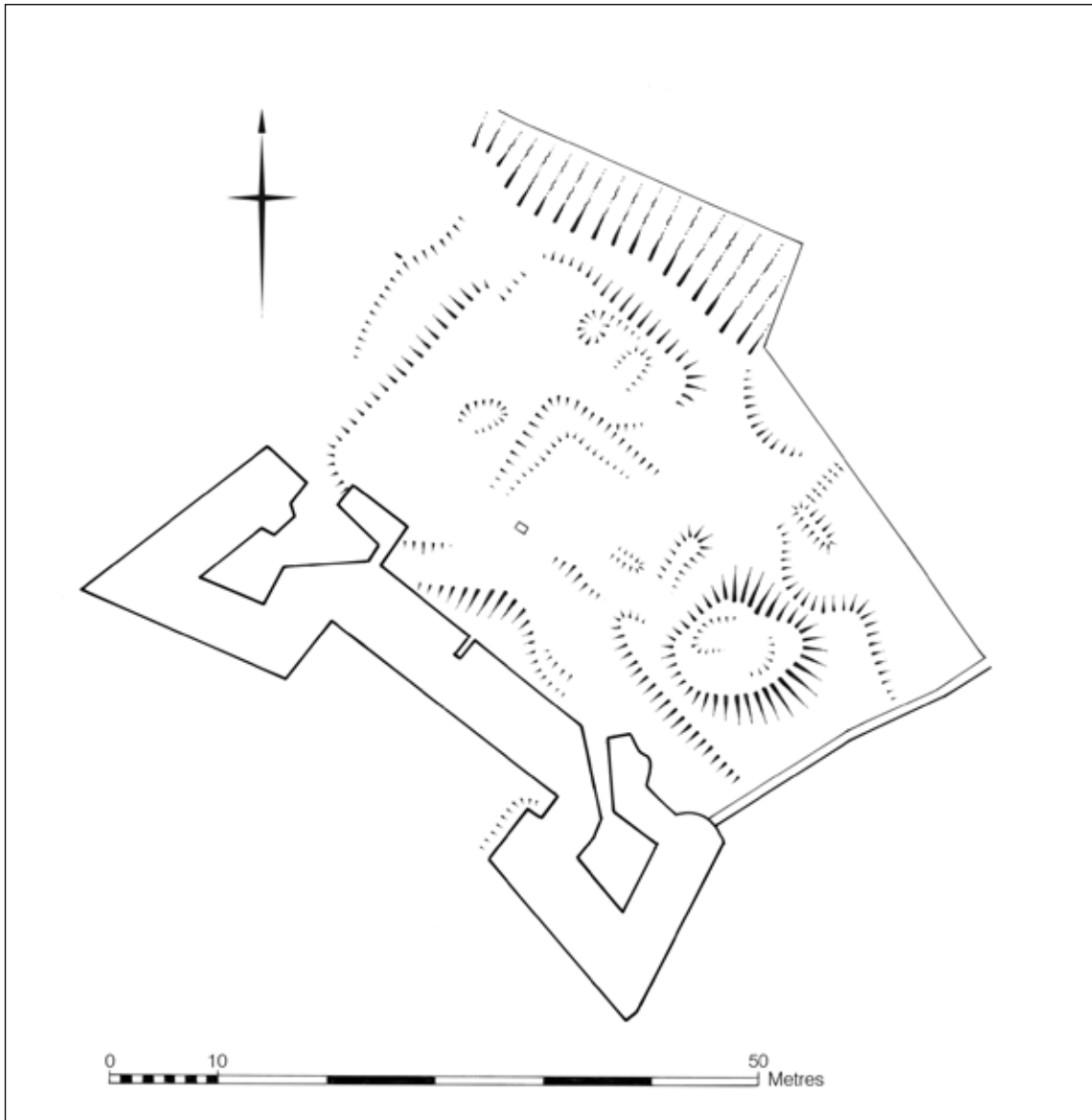
**SV 9002 0990**

MJF; possible remains of a bank forming the south-eastern face of this redan were noted in 1990 (Cornwall HER 7904.05); a slight protrusion of the cliff edge was surveyed in 2005 but no banks could be seen under dense vegetation (NMR record, Authority 2) and the site was recorded as partly or wholly destroyed (Johns and Fletcher 2010, site 20).

**Harry's Walls, Mount Flagon, St Mary's**  
**NMR SV 91 SW 25 (Uid 304019)**

**SV 9095 1089**

This fort, with its acute-angled bastions and orillons, was a state-of-the-art fortification for the early 1550s (Bowden and Brodie 2010, 10-13 et passim; Brodie in press). The slight earthworks in the interior show that construction proceeded further (though perhaps not much further) than the masonry remains suggest; part of a right-angled cut may be a wall footing and other earthworks possibly represent attempts to level the site. The site was surveyed at 1:500 (Fig 13).



*Fig 13: Harry's Walls, St Mary's, survey at 1:500 by the author and Allan Brodie, 2009.*

### **Giant's Castle, St Mary's**

**NMR SV 91 SW 41 (Uid 304067)**

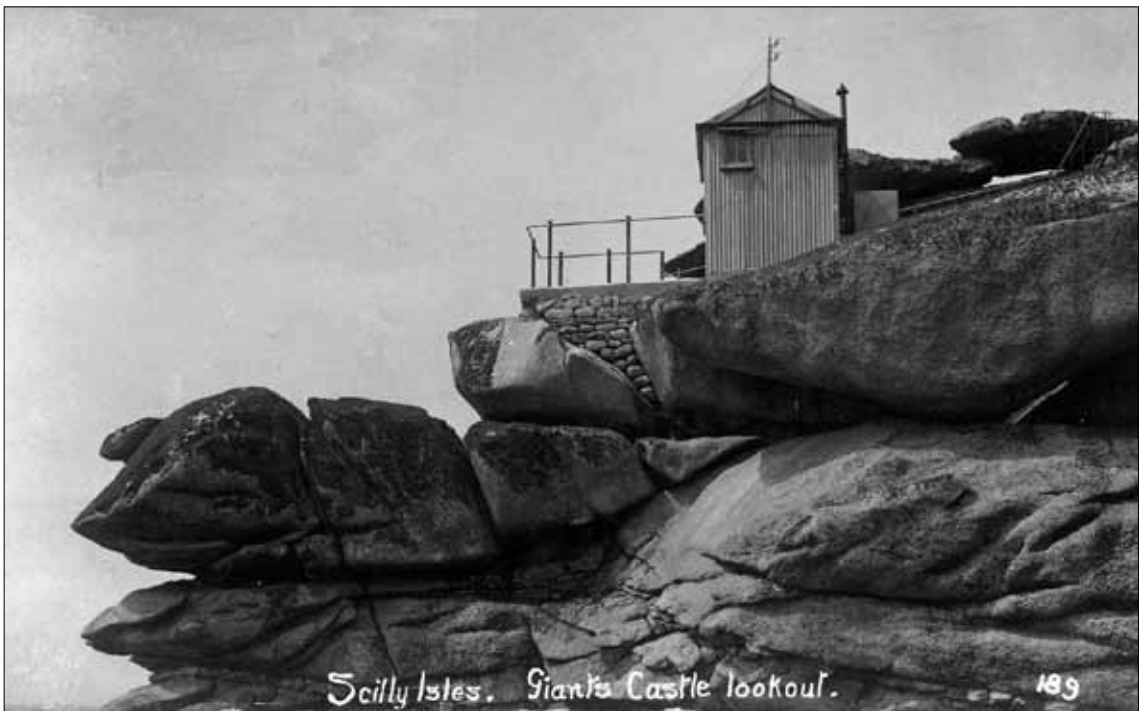
**SV 9245 1006**

This late prehistoric promontory fort is as depicted on the AM; no further survey was required or justified for this project; to what extent this should be considered a military site doubtful – like Shipman Head, it is an unlikely site for occupation and defence, more probably it was reserved for 'special' activities.

A rectangular ruin cut into the western ramparts is called a firing range blockhouse of 1939-45 by the Defence of Britain project (see below, SV 91 SW 330) and it may have functioned as that, but could also have started life as a domestic or agricultural building; it does not look like a military building (PI 12). The earthworks of the rifle range of Second World War date extending to the north are clear but have not been surveyed; there was also an aerial gunnery range here. The coastguard lookout shown on early OS maps was



PI 12: Stone building adjacent to Giant's Castle and interrupting the line of the outer ramparts, 2009.



PI 13: The Coastguard lookout on Giant's Castle (from a postcard in the Isles of Scilly Museum).

on the south-east side of the promontory (PI 13); the footings of this corrugated iron clad building survive as a slab of concrete and a rock-cut channel; there are also the remains of iron stanchions for the handrail and ladder, and slight grooves cut in the rock surface to improve grip on the footway.

**Ennor Castle, Old Town, St Mary's**  
**NMR SV 91 SW 46 (Uid 304082)**

**SV 9141 1034**

A small steep-sided natural mound with scarce remains of walling (un-mortared) and fallen stonework, it is heavily overgrown; there are no obviously relevant earthworks in pasture to the north, the only side on which other remains might survive. This is the traditional site of the medieval castle and this is probably the case but it is difficult to reconstruct how it might have been arranged.

**Mount Holles Fort, Hugh Town, St Mary's**  
**NMR SV 91 SW 59 (Uid 304119)**

**SV 901 106**

This early fortification, mentioned in several documents and shown on early plans of the Garrison (e.g. Bowden and Brodie 2011, figs 38 and 40), has been destroyed. It is difficult to visualise exactly where it stood, due to extensive later re-modelling and development of the area. Thomas describes its location as due east of King George's Battery, beyond the lane, surviving as 'a feature in a private garden' (1989, 258). However, it has subsequently been built over by dense modern housing.

**Carn Morval battery and 'bivouac' platform, St Mary's**  
**NMR SV 91 SW 62 (Uid 304128)**

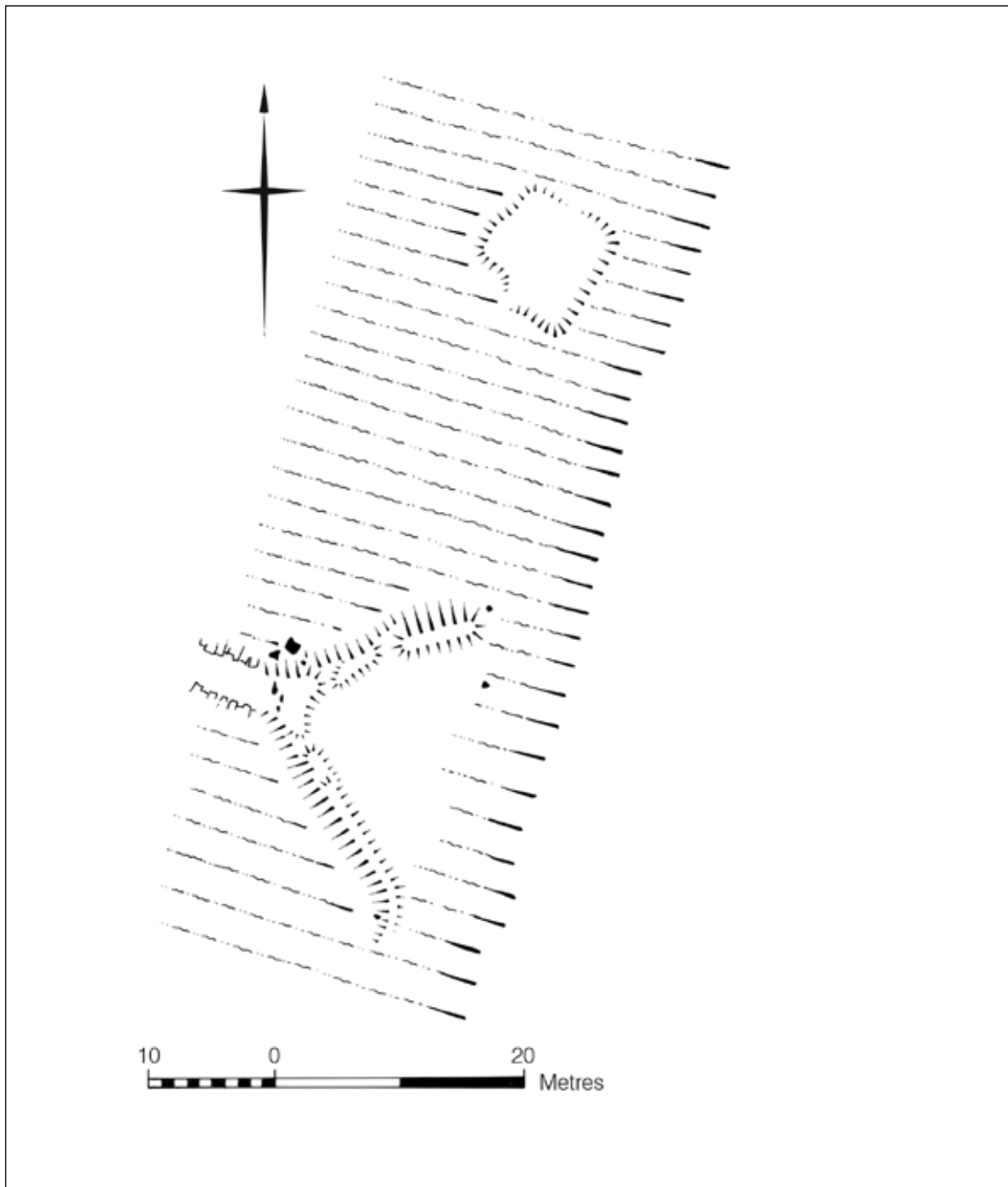
**SV 9059 1195**

The main (low level) battery and 'bivouac' platform were surveyed at 1:500 (Fig 14). The battery consists of a V-shaped rampart up to 1.8m high externally and 0.5m high internally, enclosing a level platform built up from the natural slope on top of a spine of rock which protrudes into the sea. The 'bivouac' platform is entirely unconvincing: a) it is a very sharp, recent-looking earthwork; b) it is in front of the battery – it is possibly a Second World War installation. (A map of the pillboxes shows one in approximately this position; the concrete base of another one immediately to the south (see below Appendix 5) survives.) The supposed upper battery (the 13th tee of the golf course) has been all but destroyed by the golf tee and is now seen only as a line of upstanding boulders (Pl 14); this is not entirely convincing, being little different to field walls in the immediate vicinity, but it could be a look out post connected with the battery (see Toll's Hill batteries (SV 91 SW 70) for a similar combination of features).

**Toll's Porth (Halangy) battery, St Mary's**  
**NMR SV 91 SW 63 (Uid 304131)**

**SV 9085 1235**

There is an earthwork platform here but it is amorphous and overgrown by scrub, so its identification as a battery could not be confirmed. The 'breastwork' to the S (SV 91 SW 129) is a wall with footpath erosion along the cliff top behind it; many alleged sections of breastwork appear to be the result of erosion where strips of soil and rock are breaking away from the cliff top – they are immediately behind, and parallel to, the current cliff edge.



*Fig 14: Carn Morval battery, St Mary's, surveyed at 1:500 by the author, 2009.*

**Bar Point or Little Porth battery, breastwork and bivouac platforms**  
**NMR SV 91 SW 64 (Uid 304134) SV 9181 1277**

This is a fairly high level battery, situated well back from the coast; NV Quinnell, the OS Field Investigator, provided a robust description and survey (Fig 15); however, it could not be found in 2008-9 in head-high bracken; at least one of the so-called 'bivouac' platforms, as at Carn Morval, is in front of the battery according to the OS survey.



Pl 14: The supposed 'upper battery' at Carn Morval is probably a length of field wall.

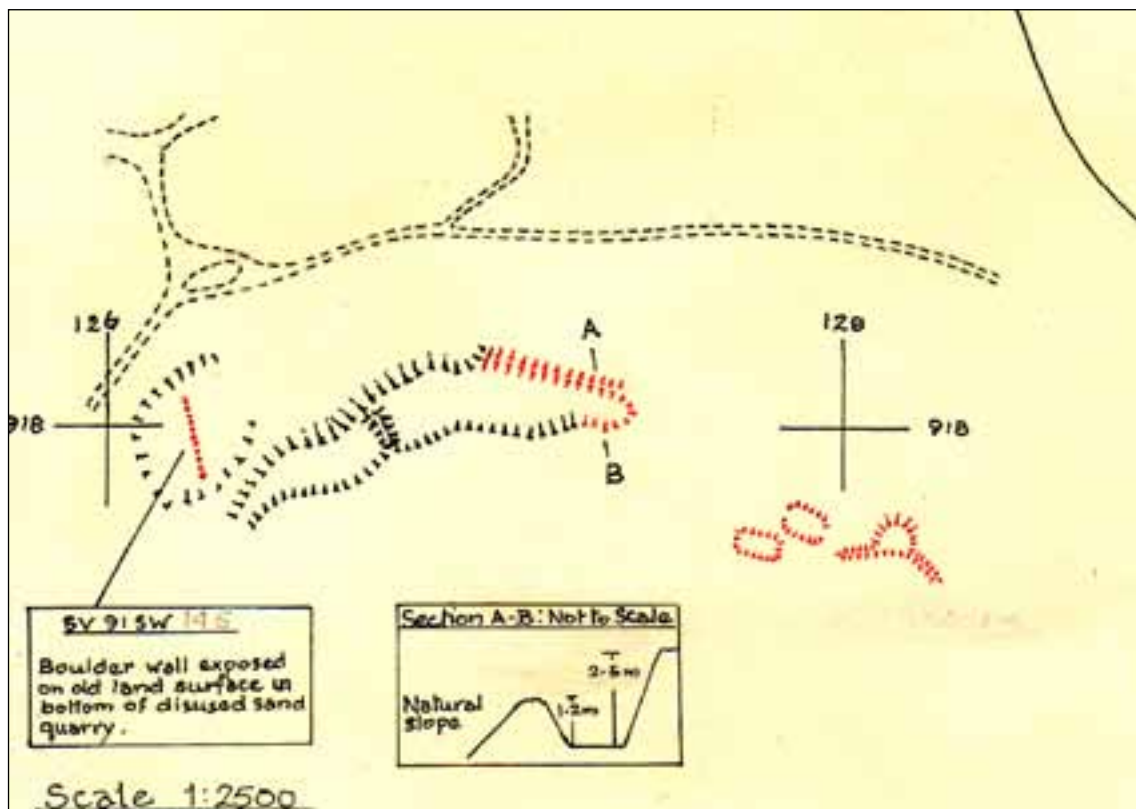


Fig 15: Bar Point battery, St Mary's, bivouac platforms and adjacent features; OS Antiquity Model 1978; original scale 1:2500. This area was obscured by vegetation at the time of the current project.

**Innisidgen, St Mary's****NMR SV 91 SW 65 (Uid 304137)****SV 9220 1259**

A length of breastwork is recorded. There are signs of an earthwork here amongst dense vegetation; it is not entirely convincing but a breastwork here would form a covered way to the blockhouse (SV 91 SW 66).

**Blockhouse, Helvear, St Mary's****NMR SV 91 SW 66 (Uid 304140)****SV 9239 1249**

This rectangular stone-built structure is heavily overgrown and could not be measured. In 1978 JG Barton, the OS Investigator, stated that it measured 11m by 13m overall, the walls being 1m thick and standing up to 0.9m high; he also said that it is constructed of large roughly dressed blocks similar to the Old Blockhouse on Tresco (NMR AMIE record, Authority 6). Three walls are still standing but the structure appears to be smaller than Barton's dimensions indicate. The position commands the entrance to Watermill Cove. If this small structure is a blockhouse it probably pre-dates the Civil War, though the documentary references are vague (Bowden and Brodie 2011, 17-18).

**Innisidgen Hill batteries, St Mary's****NMR SV 91 SW 67 (Uid 304141)****SV 922 126**

Three low level batteries, two of them incorporated in a breastwork (SV 91 SW 65), are recorded close to the shore. There are few convincing remains to be seen, except for one possible battery at SV 9223 1266. However, the vegetation was very high at the time of the field visits.

**Helvear Hill battery, St Mary's****NMR SV 91 SW 68 (Uid 304144)****SV 9233 1240**

This high level battery, crowning a steep hill above the coast, was surveyed at 1:500 (Fig 16; Pl 15; and see Pl 26). It faces west and north, covering Crow Sound and Watermill Cove. This is the most substantial earthwork of all the batteries recorded, comparable to Oliver's Battery on Tresco but perhaps intended to be more formally shaped; however, the earthwork is asymmetrical, fading abruptly at its eastern end – it is probably an unfinished work. The rampart is up to 0.5m high internally and 2.0m externally; the ditch is 0.3m deep externally and the outer face of the counterscarp survives to less than 0.2m high. A slight extension of the bank previously recorded to the west is now covered in vegetation and could not be seen (the battery itself was cleared in 2008 but the immediate surroundings remained under dense undergrowth).

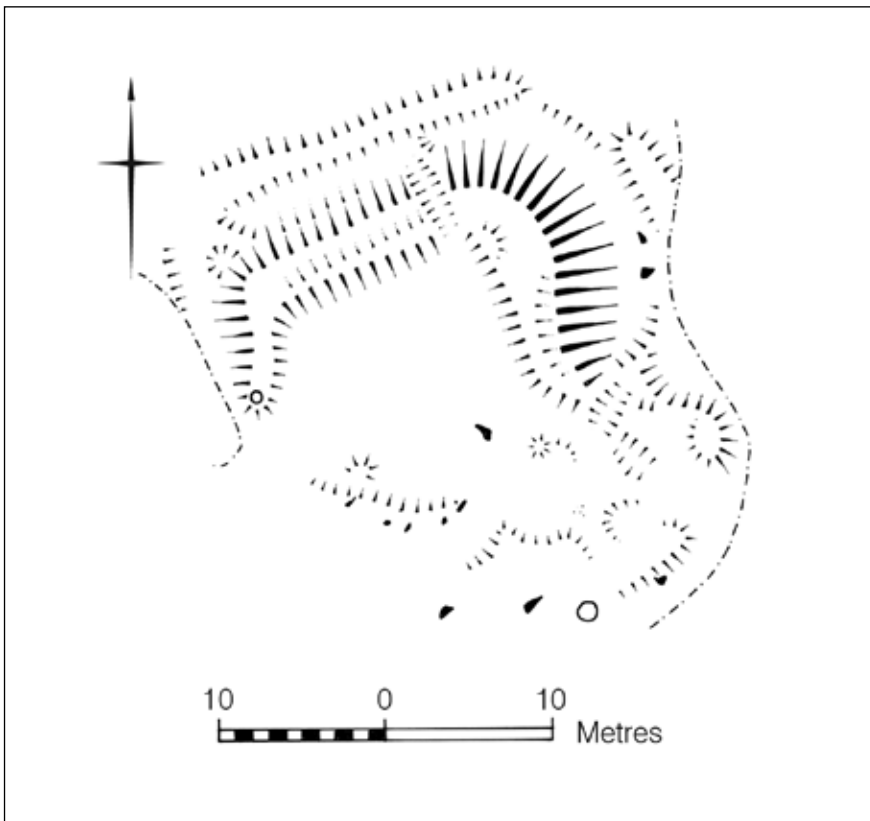
**Possible breastwork, Toll's Hill, St Mary's****NMR SV 91 SW 69 (Uid 304147)****SV 9282 1213**

Some earthworks are extant at this location – it could be a breastwork but might only be a combination of field walls, coastal erosion and a footpath. (The section behind New Quay has been re-numbered SV 91 SW 264).





*Pl 15: The ditch and rampart on the north-west side of Helvear Hill battery, St Mary's: October 2008.*



*Fig 16: Helvear Hill battery, St Mary's, surveyed at 1:500 by Allan Brodie and the author, 2008; the slight and amorphous earthworks at the south-eastern end seem to indicate that the battery was never finished. The prominent groove through the north-west rampart is a result of later erosion. Areas beyond the chain-and-dot lines were under dense vegetation at the time of survey.*



**Toll's Hill or Trenear's Rock batteries, St Mary's**  
**NMR SV 91 SW 70 (Uid 304150) SV 9280 1208**

There are two earthworks here. The lower one, on steeply sloping ground, was partly cleared of vegetation in 2009; it is similar in scale to the Carn Morval Battery but has a curved rampart up to 1.4m high internally and 1.6m externally, incorporating large blocks of stone (Pl 16); the interior has been levelled and there is a quarry-like face to the rear; there is no sign of an external ditch. The upper earthwork has been identified as a battery but could equally be a look out post or a later viewing platform (see similarity of upper and lower earthworks at Carn Morval – both upper works could be batteries or look out posts connected with the batteries, or this one could be a later 'tourist' viewing platform while that at Carn Morval could be a fortuitous combination of a field boundary and the golf tee).

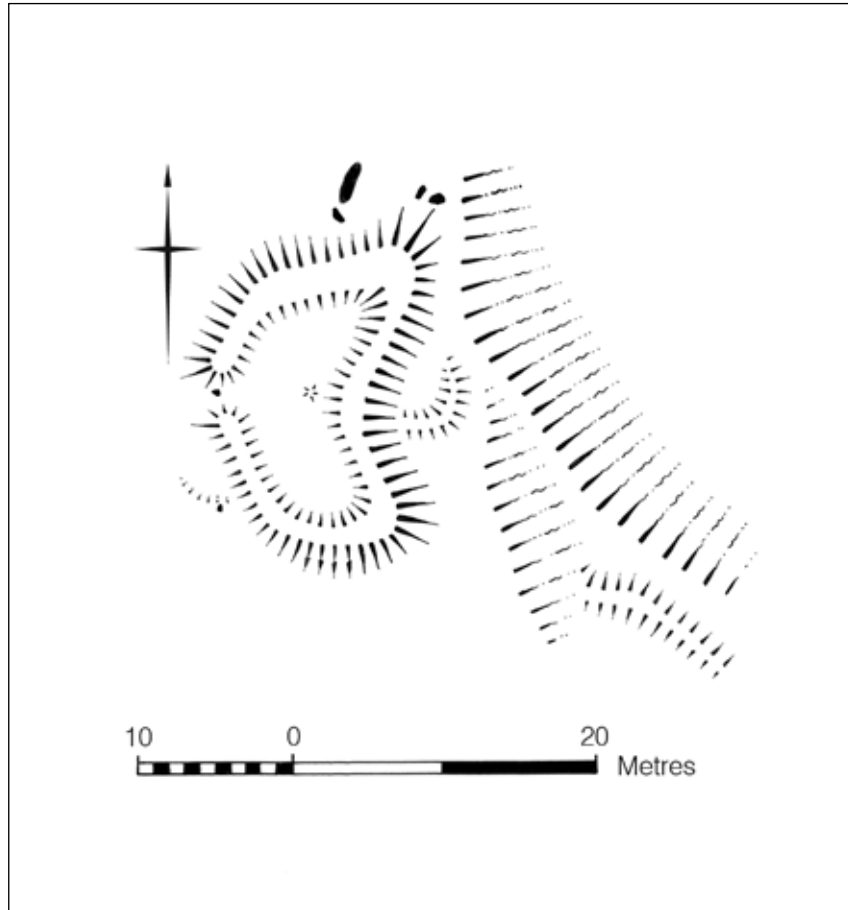


*Pl 16: Toll's Hill or Trenear's Rock battery, St Mary's, seen from the east; the back scarp of the platform can be seen as a shadow at extreme left and the front scarp to the right; some very large boulders are incorporated into the earthwork: 2010.*

**Pellew's Redoubt, Toll's Island, St Mary's**  
**NMR SV 91 SW 72 (Uid 304156) SV 9310 1200**

Surveyed at 1:500 (Fig 17; see Pl 25); this earthwork resembles the Carn of Works Redoubt on The Gugh (SV 80 NE 11) both in form and in location (on a tidal island). It consists of two bastion-like gun positions facing east, entirely enclosed by a substantial

bank, up to 2.0m high externally and 0.4m high internally, with a very narrow entrance to the rear. The interior is level. A breastwork extends along the cliff top from the southern end of the redoubt. It is tempting to see this as contemporary with the Carn of Works – this covers Crow Sound as Carn of Works covers St Mary's Sound; however, whether they can be attributed to the Civil War is uncertain.

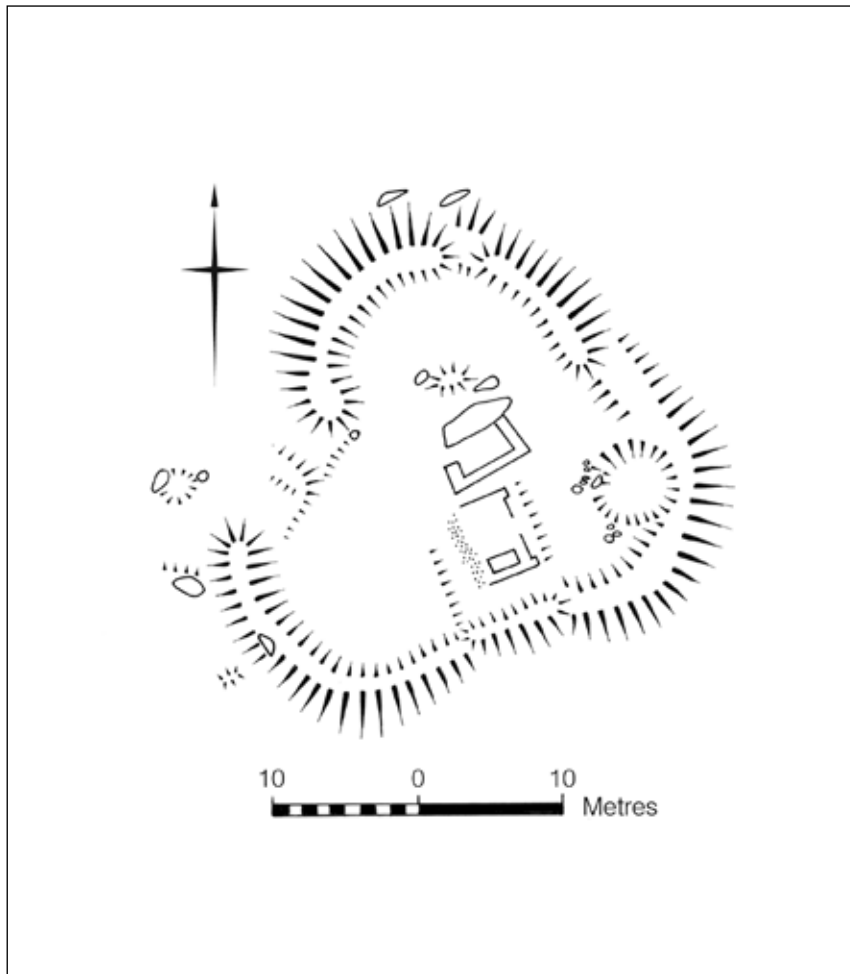


*Fig 17: Pellew's Redoubt, Toll's Island, surveyed at 1:500 by Allan Brodie and the author, 2009.*

### **Mount Todden, St Mary's NMR SV 91 SW 73 (Uid 304159)**

**SV 9297 1154**

The existing Cornwall Archaeology 1:500 survey (Ratcliffe 1993, 98-103, fig 21) was amended and detail was added (Fig 18). This is a very unusual site, apparently unique amongst Scilly earthworks, but it is certainly a redoubt (PI 17). There is a substantial surrounding bank, up to 0.5m high internally and 1.8m high externally, but no sign of a ditch. The internal structure, supposedly Napoleonic in origin, is of very unusual construction – partly dry-stone walling and partly megalithic (see PI 27); it is possible that a chambered cairn has been broken up to make it; there is evidence that a mast stood outside the north-east corner, so interpretation as an observation and signal station is plausible; the concrete bases to the south of this are the remains of a Second World War Final Responder Beacon, a blind flying aid for the airfield. The entrance to the enclosure



*Fig 18: Mount Todden, St Mary's, survey plan, after Ratcliffe 1993, fig 21, with additions by the author, 2009. Slight earthworks in the entrance suggest that it was originally narrower. Conservation grazing of the site since the survey was completed has revealed further details, indicating for instance that the late cut into the back of the rampart at the eastern extremity is more square in plan than shown here.*

is unusually wide but there are signs of damage and it is probable that it was widened in order to allow access for heavy vehicles during the installation and use of the Final Responder Beacon.

**Alleged breastwork, Darrity's Hole, Normandy Down, St Mary's**  
**NMR SV 91 SW 74 (Uid 304162) SV 9305 1128**

There is a ridge along the top of the cliff on the south side of Darrity's Hole, but whether it is a deliberately constructed breastwork seems doubtful – as in so many cases, the pattern of erosion seems to form a linear hollow and ridge along the cliff edge as a block of ground starts to break away; where a 'breastwork' is right on the cliff edge and parallel to it there must be a suspicion that natural forces are at work. The purpose of a breastwork at this location is also open to question; it is not covering a likely landing place.



*Pl 17: Mount Todden, aerial photograph from the east. (EH NMR 26582/001: 11 February 2010)*

**Battery and breastwork, Porth Hellick Point, St Mary's**  
**NMR SV 91 SW 75 (Uid 304165) SV 9273 1054**

These structures could not be found among vegetation, eroded footpath and rock outcrops.

**Breastwork and possible battery, Porth Minick, St Mary's**  
**NMR SV 91 SW 76 (Uid 304168) SV 9183 1007**

This could not be found; it lies in a badly eroded area.

**Sir Cloudesley Shovel's grave, Porth Hellick, St Mary's**  
**NMR SV 91 SW 102 (Uid 304226) SV 9257 1072**

A standing stone and inscription marks the position of the temporary grave of Sir Cloudesley Shovel, Admiral of the Fleet, at the point where his body was washed ashore on 22nd October 1707 (Pl 18); he was subsequently re-buried in Westminster Abbey.

**Breastwork, Toll's Island, St Mary's**  
**NMR SV 91 SW 119 (Uid 304275) SV 9310 1196**

Two recorded lengths of breastwork on Toll's Island were verified; one of them extends south from Pellew's Redoubt (SV 91 SW 72) and its northern end was surveyed (see Fig 17); the other was seen as an extant earthwork in 2008.



*Pl 18: Stone marking the temporary grave of Sir Cloudesley Shovel, Admiral of the Fleet, at Porth Hellick, St Mary's*

**Possible breastwork, Toll's Island, St Mary's**  
**NMR SV 91 SW 120 (Uid 304278)**

**SV 9301 1193**

Not seen.

**Battery, Porth Hellick Point, St Mary's**  
**NMR SV 91 SW 122 (Uid 304284)**

**SV 9281 1053**

This was not found among natural rock outcrops.

**Battery, Tolman Carn, St Mary's**  
**NMR SV 91 SW 126 (Uid 304296) SV 9153 1006**

This could not be found – there are only natural features in this area. Troutbeck's description (1796, 79) would suggest that this battery was further north and higher, in an area now occupied by modern buildings.

**Possible breastwork, Watermill Cove**  
**NMR SV 91 SW 128 (Uid 304302) SV 9237 1234**

An earth and stone wall, nearly 1m high, could be a breastwork or a field wall; a footpath running behind it has caused some erosion.

**Doubtful breastwork, Toll's Porth, St Mary's**  
**NMR SV 91 SW 129 (Uid 304305) SV 9084 1222**

There are slight remains of a wall with an eroded footpath along the cliff edge.

**Possible breastwork, Helvear Down, St Mary's**  
**NMR SV 91 SW 130 304308 SV 9191 1281**

According to Troutbeck's survey (1796, 99) there were breastworks in this area; there are some slight possible earthworks.

**Possible battery, Mount Todden, St Mary's**  
**NMR SV 91 SW 146 (Uid 304350) SV 9299 1163**

On the north side of Mount Todden; this area was covered in dense undergrowth at the time of survey; not seen.

**Breastwork and battery, Newford Island, St Mary's**  
**NMR SV 91 SW 149 (Uid 304359) SV 9064 1120**

An alleged breastwork – a low bank, which could be of any date and various functions, e.g. a garden wall – was seen as an extant earthwork. The supposed battery on the south side was not seen, though the bank was perhaps larger on this side.

**Breastwork, Dick's Carn, Porth Hellick, St Mary's**  
**NMR SV 91 SW 151 (Uid 304365) SV 9264 1059**

A possible earthwork was seen in 2008; this could be a breastwork or footpath erosion. The area was under high vegetation in 2009.

**Site of battery, Old Quay, Hugh Town, St Mary's**  
**NMR SV 91 SW 152 (Uid 304368) SV 9011 1069**

A battery is shown in this location in an 1821 copy of a drawing dated 1669; no trace remains and doubt has been cast as to whether it ever existed.



**Platforms, Toll's Hill, St Mary's****NMR SV 91 SW 153 (Uid 304371)****SV 9280 1213**

This area is under heavy vegetation – the recorded platforms were not seen; these are supposed to be 'bivouac' platforms but again they are below and in front of the battery (if SV 91 SW 70 is a battery).

**Alleged breastwork, New Quay, St Mary's****NMR SV 91 SW 264 (Uid 1213379) SV 9268 1216**

A new number has been given to part of the 'breastwork' recorded under SV 91 SW 69; it is a slight earthwork, not convincing as a breastwork.

**Redan I, The Garrison, St Mary's****NMR SV 91 SW 323 (Uid 1445606) SV 9007 1000**

MJF; a redan or platform indicated on the 1655 map, probably destroyed by coastal erosion (Johns and Fletcher 2010, site 14).

**Rifle range and aerial gunnery range, Salakee Down, St Mary's****NMR SV 91 SW 330 (Uid 1416255) SV 924 100**

The rifle range is marked by a series of slight earthworks, overgrown with heather and gorse, across the Down, ending on butts which have disturbed the ramparts of Giant's Castle. The Defence of Britain Project claim that there is a 'blockhouse' at this point but no sign of this could be seen. There is, however, an apparently older building 40m to the west (see PI 12) which might have been used by the military during the Second World War.

**Rotor VHF Fixer Station, Deep Point, Normandy Down****NMR SV 91 SW 333 (Uid 1416252)****SV 9304 1118**

The concrete base of this structure, a navigation aid for fighter aircraft, built in 1951, lies just on the north side of the track on Normandy Down (PI 19): not surveyed.

**Rectangular pit, Carn Morval Down, St Mary's****NMR SV 91 SW 345 (Uid 1538872)****SV 908 121**

A rectangular pit, about 1.2m deep, with an elaborate covered entrance, was uncovered by scrub clearance on Carn Morval Down in 2009-10. Overall the feature measures 8.0m north-east to south-west and 5.5m transversely; the pit itself is approximately 2.3m square. The entrance passage on the south-west side consists of a trench, about 0.8m wide, with right-angled turns. Material from the cut has been thrown out on the downhill side forming a bank up to 0.5m high. This is probably a military installation of Second World War date, either an observation post or a machine gun position; it seems to fill a gap in the distribution of pillboxes on this side of St Mary's (between Nos 16 and 17).





*Pl 19: Remains of the Rotor installation, Normandy Down, St Mary's, cleared of undergrowth in 2010.*



*Pl 20: The direction arrow on Normandy Down. (EH NMR DP085425: 16 June 2009)*

**Direction arrow, Normandy Down, St Mary's**  
**NMR SV 91 SW 346 (Uid 1538974) SV 9305 118**

A concrete direction arrow on Normandy Down near the end of the track to the Rotor VHF Fixer Station (SV 91 SW 333) is probably a bombing range marker constructed in connection with a floating target moored in Crow Sound during the Second World War. It is still visible though the concrete is crumbling and in poor condition (PI 20).

## DISCUSSION

The Isles of Scilly occupy a location that has been of strategic significance in many periods. Whenever the country has been threatened, from the 16th century to the 20th, defensive works have been undertaken on the islands and when the threat has receded they have been abandoned. The result is a rich legacy of fortifications, many of them unfinished and most unused, illustrating nearly every phase of British military engineering in those centuries. The only major exception is the long period of conflict with revolutionary and Napoleonic France (1793-1815), which saw very little building activity on Scilly (Bowden and Brodie 2011, 52-4) other than the construction of signal stations (see PI 4).

### The 16th century

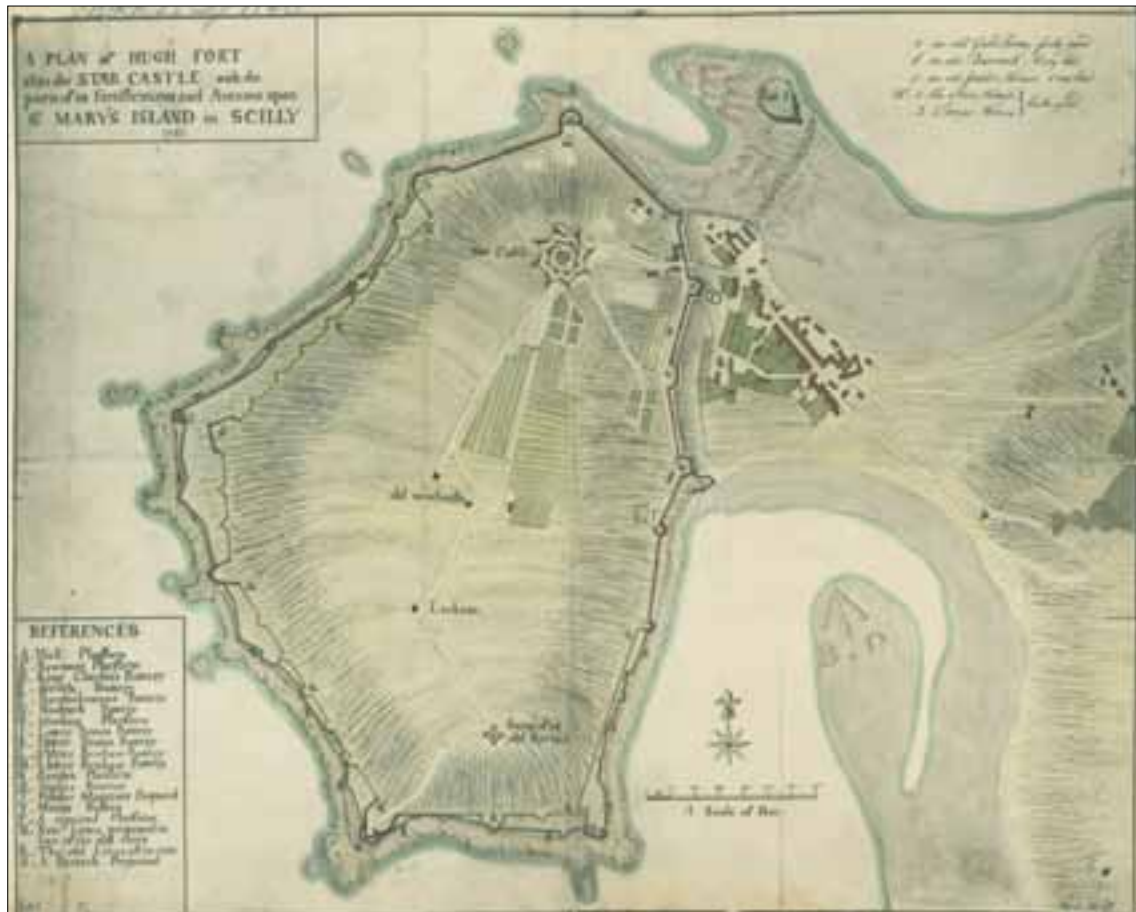
The only earthworks definitely attributable to the 16th century are the ditch of Star Castle (PI 21), those within Harry's Walls and the remarkable bastioned layout across the northern end of Treco, discovered by Norman Quinnell. Even those earthworks associated with King Charles' Castle and the Old Blockhouse on Treco could be of 17th-century date, as mentioned above. However, there is also the newly discovered footing of what may be the 'Folly' or 'Old Barracks' on the southern end of the Garrison (see Fig 11; PI 22); this is shown on the 1655 map (Bowden and Brodie 2011, fig 22), the earliest surviving survey of the Garrison, and could be of much earlier date. It has been postulated (Brodie in press) that the 'Folly' formed one of a pair of blockhouses, the other being where Star Castle now stands, which defended the Garrison prior to the construction of Harry's Walls.



PI 21: The ditch of Star Castle. (EH NMR DP085298: 8 June 2009)

## Harry's Walls

As mentioned above, slight earthwork remains in the interior suggest that work had begun on the internal arrangements of this fort before it was abandoned (see Fig 13; Bowden and Brodie 2011, 4, 10-14). The siting of this fort is not as poor as some previous authorities have suggested, in terms of cramped location and outlook – comparison of the site plan with the Hatfield plan (Fig 19) shows that the full site would have fitted comfortably onto Mount Flagon; a late 16th-century map in the British Library (BL Cotton MS. Augustus 1.\*\*\*.18) shows Mount Flagon almost surrounded by marsh and fresh water; the low ground to the east was frequently inundated in the early post-medieval period (Borlase 1752, 8), making Mount Flagon an easily defendable location. From this site the outer part of Old Town Bay and the whole of St Mary's Pool and The Road as far east as Carn Morval can be seen – it is no coincidence, perhaps, that there is a modern sea mark, and a predecessor in the form of a standing stone (Pl 23), by the north corner of the fort. Historic evidence shows that it was changing political and financial circumstances which led to the abandonment of the building (Bowden and Brodie 2011, 13).



Pl 22: Survey of the Hugh dated 1742, showing 'Ruins of an old Barrack' near the southern end of the Garrison; this appears on several maps from 1655 onwards and is variously described as old barracks or 'The Folly'. (EH NMR WORKS 31/1148)

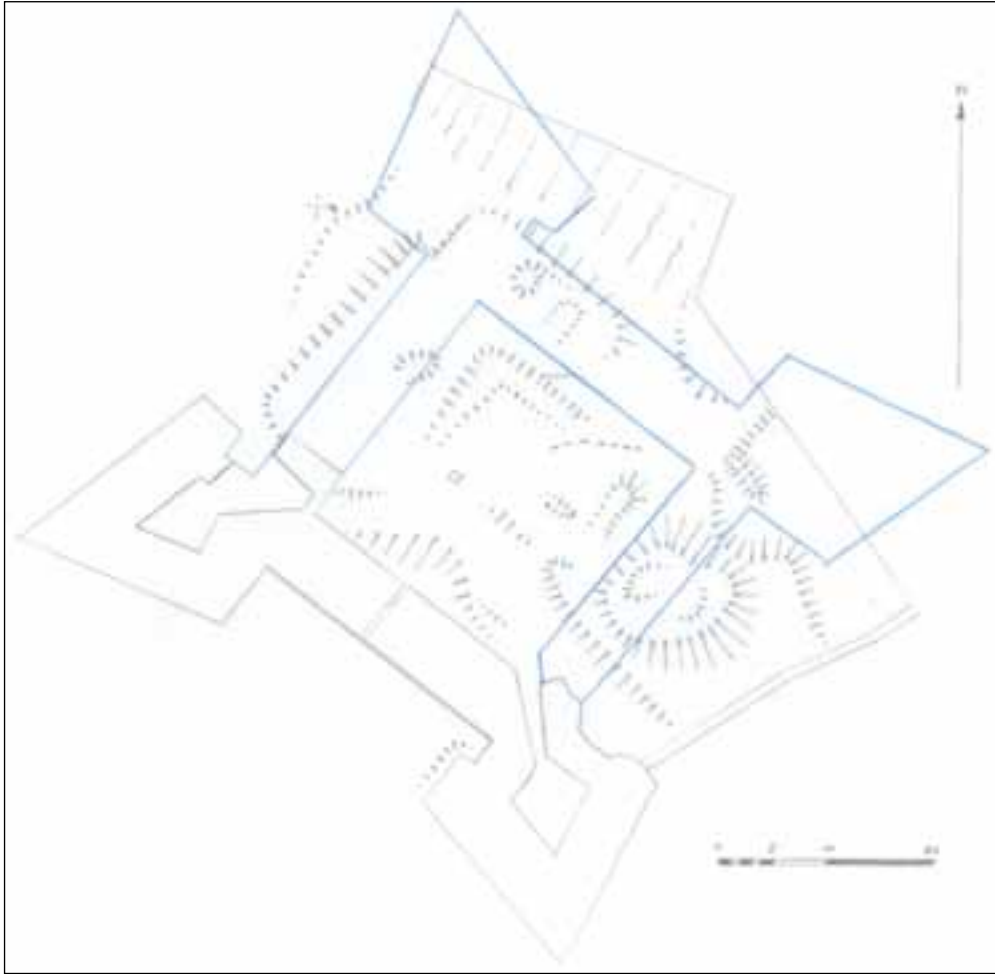


Fig 19: Harry's Walls; field plan of the fort as built, with the outline from the 'Hatfield plan' superimposed (in blue).

## The Civil Wars

Scilly occupies a location that has been of very high strategic significance, not least during the civil wars of the mid-17th century (1642-1651) when communications between the British mainland and Ireland were paramount and when one side in the conflict (the Royalists) were dependant upon privateering (or piracy, depending on ones point of view) for their survival. The Parliamentary assault on the islands in April 1651 was the only recorded occasion, until the 20th century, when the islands experienced military conflict.

For much of the early part of the war (1642-1646) the Isles of Scilly were held for the Royalists under their Governor, Sir Francis Godolphin, and already privateers were operating from the islands (see Appendices 1 and 2). During the spring of 1646 Charles, Prince of Wales, was a refugee in the islands following the defeat of the Royalist forces in south-west England at the Battle of Torrington. It was only after his departure for Jersey (and then the Continent) that Parliament's naval forces, under George Ayscue, blockaded the islands and forced the surrender of the garrison. Parliament retained hold of the islands until September 1648 when the garrison rebelled against the Governor,





*Pl 23: The current sea mark by the northern corner of Harry's Walls, with a predecessor standing behind it: 2006.*

Colonel John Buller (who was, possibly, supported by the islanders) and declared for the King. The young and combative Sir John Grenville arrived shortly after and it was under his command that Scilly became a major privateering base, 'a second Algiers' (Barratt 2006, 69). Scilly privateers preyed upon both British and Dutch vessels. Scilly was also, potentially, a stepping stone and base for Royalist Irish troops mounting an invasion of England. Parliament, with many more pressing matters demanding its attention, made little attempt to counter the Scilly privateers but by the end of 1650 the Dutch authorities were reacting to the attacks on their shipping and in March 1651 they sent a squadron under Maarten Tromp to obtain the release of ships and their crews, and reparations, from Grenville. The English Parliament feared a Dutch attempt to capture and hold the islands, and so immediately fitted out an expedition under General Robert Blake, with Ayscue as subordinate commander, to take the islands. Both Blake and Ayscue had other tasks in hand beyond the suppression of Scilly and were unwilling to risk their troops, and more particularly their sailors, unnecessarily; using Ayscue's local knowledge they planned an 'indirect approach', an assault on Tresco, which they could





*Pl 24: The earthwork defences on the northern side of King Charles's Castle; the demi-bastion in the left foreground, curtain in the centre and the bastion on the right). EH NMR DP085086: 9 June 2009)*

then use as a base to secure the surrender of St Mary's without further fighting. Blake's ships therefore anchored between St Helen's, Tean and Northwethel to launch an attack at Old Grimsby. After an initial assault was repulsed, Blake took Tresco and Bryher on 18th-20th April. By 5th May Blake's guns were bombarding St Mary's Pool and the Roads, and the Royalists were shortly afterwards forced to surrender. Other Royalist strongholds, of similar strategic value, the Isle of Man and the Channel Islands, fell soon after. (For further details of the Isles in the Civil Wars see Barratt 2006, 67-79; Powell 1931; and Putley 2003.)

Many of the earthworks of batteries and breastworks that survive on the islands have been attributed to this period and indeed most historians incline to the view that nearly all of them were built by the Royalist Governor Sir John Grenville between 1649 and 1651 (exceptions are Oliver's Battery on Carn Near, Tresco, which is known to have been built by Blake's forces in April-May 1651, and a battery on Peninnis, the construction of which is recorded in the early 18th century). This may be true. However, there are significant differences in style and scale amongst the earthworks and it is probable that the origins of these works are more various.

The successful Parliamentary assault, led by Lt-Colonels Clarke and Bawden, went ashore adjacent to the Blockhouse at Old Grimsby, which was defended by Colonel Wogan, and there was fierce fighting in this area. Colonel Clarke's troops are said to have captured 25 cannon here (Putley 2003, 23); there is not room within the blockhouse and its surrounding earthwork for so many guns – some of them were presumably deployed along the shore.

As discussed above, the earthworks on Tresco relating to King Charles' Castle (PI 24), are wholly or partly of 16th-century or early 17th-century date. What part they played, if any, in William Edgecumbe's brief defence of the Castle on 19th-20th April 1651 is not known.

There are records of a large number of earthwork batteries on St Mary's, many of them connected by breastworks, a redoubt on The Gugh, and batteries on Samson and Bryher. Our fieldwork has not confirmed the existence of all of these sites but some are undoubtedly concealed by the dense vegetation that is currently smothering parts of the islands following the decline of traditional grazing and some may already have been lost to the sea. Of those batteries and related sites that we have examined, some fall into distinct types while some appear to be unique.

### Batteries and redoubts

The most common type of battery is a V-shaped or crescentic earthwork, usually sited on the coast above low cliffs; typically they occupy spines of rock or coastal outcrops, whether for immediate reasons of defence or to make them proof against erosion is unclear. All the earthwork batteries on the Garrison are of this type and other examples can be seen at Morval Point, Church Point (only part surviving), Peninnis Head Lighthouse, Innisidgen (partly obscured by undergrowth) and Toll's Hill. Another battery above Bar Point could be of this type but is currently obscured by bracken and brambles. Of these, Church Point, Peninnis Head Lighthouse and Bar Point are in rather higher locations but in the case of the first two, on the southern coast, this reflects the nature of the topography. There are two visible batteries on Peninnis Head, the one



*PI 25: Toll's Island with Pellew's Redoubt, centre of image, occupying the highest point on the island. (EH NMR 26580/002: 11 February 2010)*



*PI 26: Interior of the Helvear Hill battery, looking east, 7 October 2008.*

near the Lighthouse being the better preserved; there is a record of a battery being built at Peninnis during the reign of Queen Anne (Troutbeck 1796, 58) but which of the two this refers to, or whether it was yet another battery that has been destroyed by the construction of the lighthouse, is uncertain. Morval Point is possibly the best preserved of these batteries and appears to have two embrasures surviving in each face. Several of these batteries are said to be associated with 'bivouac platforms', small terraced areas where the soldiers pitched their tents, or perhaps had wooden huts. The Peninnis Head Lighthouse battery has the best examples, immediately behind the battery itself. Others appear to be located in front of the batteries and must therefore be regarded as doubtful (if only because of the possibility of any tents on the platforms being hit by fragments of burning wad from the battery's own guns). In the case of Morval Point the 'bivouac platform' is not only in advance of the battery but is a crisp earthwork, much sharper than the battery itself and therefore appearing to be more recent; it is possibly the result of 20th-century military activity.

A different, larger, type of battery – or redoubt – is represented by Carn of Works on The Gugh, St Agnes, and Pellew's Redoubt, Toll's Island, St Mary's (PI 25). These comprise a full circuit of defence with two bastion-like gun positions to the front and a narrow entrance at the rear; both show slight traces of defensive outworks. The fact that both are on subsidiary islands cut off at high tide may be coincidental but the similarity of their positions, covering St Mary's Sound and Crow Sound respectively, is probably deliberate.

The battery on Helvear Hill is similar in some respects to these redoubts but is much more massively built (PI 26). Indeed it is the most massively built of all these earthworks, with the possible exception of Oliver's Battery, Tresco. Helvear Hill battery also has two



forward gun positions but it is less symmetrical than Pellew's Redoubt, for instance, has a less well-defined back and is almost certainly an unfinished work. Though the battery itself was cleared of undergrowth in 2008 its immediate surrounds remained overgrown and it is not clear whether there are accompanying outworks or breastwork; early OS plans show a ditch extending to the west.

## Mount Todden

To the south of Helvear and Toll's Island is Mount Todden. The battery or redoubt here is unlike anything else on the islands (and indeed it is difficult to find a parallel for it anywhere) but a documentary reference to 'Mean Teddon Fort' in 1652 (Pounds 1984, 143) suggests that it was in existence by that date. It comprises a massive stone-and-earth bank, roughly triangular or tri-lobate in plan, but lacks a ditch or any obvious quarry as a source of the building material. In the interior is a stone-built structure (PI 27), apparently a watch house or signal station (iron fixings to guy a mast are visible) of 18th- or 19th- century date; this is built partly of large megalithic blocks and it is tempting to suggest that this is the remnant of a chambered tomb (an idea previously put forward by Ashbee (1974, 96)). A hollow in the eastern angle has been described as a gun platform but it is clearly cutting into the back of the rampart and post-dates it; it could be the result of small-scale quarrying (of which there is other evidence in the vicinity) or more probably relates to the Second World War structure in the interior (see below).



*PI 27: The stone-built structure within Mount Todden redoubt; the concrete bases for the Second World War Final Responder Beacon can be seen to the right. (EH NMR DP085431: 16 June 2009)*

Whether the earthwork as it exists today is correctly assigned to the Civil War is very uncertain but it pre-dates the 1652 Parliamentary survey. It does not look like a prehistoric enclosure, as has been suggested (e.g. Ashbee 1974, 213). Slight banks can be seen, apparently emerging from under the external foot of the enclosure bank; these could be elements of a prehistoric field system recorded elsewhere on Mount Todden Down (NMR SV 91 SW 79, 148 and 263); if this is the case they prove the lack of an external ditch; this raises the question of where the bank material was obtained from but if the central structure is formed from a megalithic tomb, as tentatively suggested here, the rampart could have been constructed from its mound material.

## **Breastworks**

The breastworks around St Mary's are extensive, though perhaps not as extensive as some archaeologists have claimed. However, those on The Garrison have been well studied and authenticated and there are also believable stretches near the Block House on the north-eastern side of the island and possibly along the western side of Watermill Cove.

## **Oliver's Battery**

Oliver's Battery, Carn Near, Tresco, is the only battery that can be convincingly linked to a definite documented historical event – the capture of Tresco by Blake's forces and the subsequent bombardment of shipping in The Road and St Mary's Pool. In order to encourage the reluctant Grenville to come to terms, Blake started to build this battery in April 1651. Three guns were mounted in it and the first shot was fired on 4th May; unfortunately the gun exploded, killing two people. On the next day, however, the remaining guns started to fire in earnest and terms of surrender were agreed on the 23rd May (though the surrender was not actually signed until 3rd June). The earthwork, which is massive but irregular, conforming to the rock outcrop on which it stands, is documented as being built between 19th April and 4th May 1651 and is therefore perhaps the most closely dated earthwork site anywhere in Britain.

## **The Garrison**

One of the batteries on The Garrison and one length of adjacent breastwork have been examined by excavation. These are plausibly dated to the mid-17th century but are known to have been refurbished as a temporary measure in the early 18th century (Bowden and Brodie 2011, 31; Brodie forthcoming); evidence of refurbishment has been noted in some excavations (Parkes 1990, 5-15; Fellows 2007, Trench 2) but not in others (Fellows 2007, Trenches 1 and 3). Apart from these and Oliver's Battery, there is no dating evidence at all for any of the other works described above. The widely held view that they are all the work of Grenville during his two and a half years as Governor may be correct but it is important to stress that this is not proven. Some of them could be earlier – parliament had voted £1000 for the defence of Scilly when it controlled the islands in 1646-1648 – or later, during the Dutch Wars of the later 17th century or the War of the Spanish Succession in the reign of Queen Anne; as noted above, there is documentary evidence for the construction of at least one battery at that time (Troutbeck 1796, 58).

## The First World War

In the 1890s Scilly had been fortified as a 'defended port', involving the construction of several gun batteries and ancillary structures (Bowden and Brodie 2011, 55-63); this phase is not covered in the current report as the earthwork component (though massive) is not particularly suitable for analytical survey; the slight earthworks associated with the Steval Point and Woolpack Defence Electric Lights have been surveyed previously (Parkes 1990, 27, figs 2 and 17); the only other physical remains of this period are minor features such as fence and gate posts (PI 28). Following the change in the European political situation brought about by the Entente Cordiale of 1904 and the rise of German naval power, Scilly was no longer strategically well placed as a defended port. Attention turned to the North Sea and from about 1908 Scapa Flow became the Royal Navy's main home anchorage (Konstam 2009). However, Scilly developed a different strategic importance for an entirely new form of warfare during the First World War.

A naval sub-base was established at St Mary's with a flotilla of Admiralty tugs, armed trawlers and drifters for anti-submarine patrols but it was in aerial warfare that Scilly made its mark (see Appendix 3). The resumption of unrestricted submarine warfare



*PI 28: 19th-century concrete gatepost at the Steval Point quick-firing battery.*



by the Germans at the end of 1916 led to an expansion in the establishment of anti-submarine air bases around the coasts of Britain. Even before the War it had been discovered that aircraft and airships were of value in hunting submarines; a periscope wake could be seen from several miles away by an airborne observer and in clear conditions the hull of a submerged submarine at periscope depth could be visible from the air. In the event it proved difficult with the technology then available for aircraft or airships to attack submarines successfully. However, they could effectively guide and direct attacks by surface vessels; aircraft were therefore feared by submariners. Aircraft patrolling the sea lanes or escorting convoys would force submarines to dive deep and therefore severely limit their ability to attack shipping. The establishment of a flying boat and seaplane base on Scilly extended the operating range of the Royal Naval Air Service (and subsequently the RAF) far out into the Western Approaches. (General works on aerial anti-submarine warfare in the First World War include Abbatiello 2006 and London 1999; much of the following detail about Scilly operations comes from PJ Osborne's Scillonian War Diary: World War I vols 1 and 2 in the Isles of Scilly Museum.)

An attempt to construct an airship station at Holy Vale, St Mary's, was abandoned and Scilly was covered by airships based at Mullion, though they were sometimes moored temporarily in the islands. In January 1917 the flying boat and seaplane base was established at Porthmellon, despite the warnings of locals that the bay was too exposed. These warnings proved to be well founded and before it became operational the base had moved to a new home at New Grimsby, Tresco. This base comprised a slipway and hangars, offices, ratings' and officers' quarters and a sick bay. It was equipped initially with Curtis 'Large America' flying boats and Short 184 seaplanes, later with improved 'Felixstowe' flying boats and later versions of the Short seaplane. On 18th August 1918 the unit became 234 Squadron RAF.

The first patrol was flown on 28th February 1917 and in May 1917 a flying boat from Scilly flew the first aerial escort over a convoy, an inbound one from the Mediterranean. In the last two years of the War aircraft from Scilly made thirteen U-boat sightings and attacked on nine of those occasions. The most dramatic incident occurred on 27th May 1917 when the crew of a 'Large America' flying boat saw a U-boat on the surface off Bryher. Unusually, the U-boat fired at the flying boat before diving, holing the aircraft's starboard radiator. The flying boat dropped four bombs, scoring what they believed to be a direct hit. Observers on shore confirmed that the U-boat's stern rose out of the water at an angle of 60° before it sank. The flying boat's radiator was leaking badly and one of the crew, JF Tadman, climbed onto the wing to plug the hole with a handkerchief or some clothing. The 'kill' was confirmed at the time and the flying boat's crew were all awarded medals but subsequent historical research has suggested that the U-boat survived the attack.

About twenty aircraft from Scilly were damaged or lost but none as a result of enemy action and only three of those incidents resulted in the death of crew members. However, an accidental explosion at the base also claimed the lives of several men.

Nothing apparently survives of the abortive airship moorings at Holy Vale or of the first flying boat base at Porthmellon, with the exception of a concrete base, possibly



*PI 29: Aerial photograph of New Grimsby, Tresco, showing the modern slipway and the historic farm buildings that were used by the RNAS and RAF. The concrete bases of purpose-built huts can be seen to the south (right); before the huts were built, ratings lived in tents in the area beside the Great Pool at top right. (EH NMR 26581/028: 11 February 2010)*



*PI 30: The iron rails that carried the trolley for launching and recovering the seaplanes; they have been reset in the modern slipway but at the wrong gauge. (EH NMR DP085121: 11 June 2009)*

for a hangar, at the latter. Of the base at Tresco, which was very extensive, covering the whole southern part of New Grimsby Bay, little now remains (PI 29): one building parallel to the shoreline is extant and the Abbey Farm steam mill, which was used by the RNAS/RAF, survives; the iron rails on the slipway (PI 30) where the aircraft were launched and recovered on a trolley, and concrete standings of the officers' quarters between the Great Pool and the shore can still be seen. An iron stanchion on Hulman Rock at the south end of the New Grimsby Channel is said to be the remains of a gas light installation placed to assist aircraft landing in the dark (A Jenkins, quoted in Osborne WWI 2, appendix B).

## The Second World War

In military terms Scilly was under-prepared for the Second World War (see Appendix 4). Civilian preparations were well in hand; gas masks and stirrup pumps had been distributed, air raid sirens installed and shelters built in 1939. But in the summer of 1940 the islands were defended by just one Independent Company of troops, with their HQ at Star Castle, there were no anti-aircraft defences and no significant naval presence. (Much of the following detail about Scilly operations, except where otherwise specified, comes from PJ Osborne's *Scillonian War Diary: World War II vols 1 to 4 in the Isles of Scilly Museum*; *Flight magazine* is another useful source – see, for instance issues for 5 Sept 1940 (184) and 12 June 1941 (402).)

The islands first saw hostile action on 21st August 1940 when enemy aircraft bombed the Radio Direction Finding Station, a civil aviation installation, on Peninnis Head. This was followed by several more 'raids', though in fact many of these were probably German crews opportunistically jettisoning their bomb loads. The installation at Peninnis seems to have been a genuine target, however; it was attacked several times and eventually destroyed just over a year after the first attack. A raid on 29th August 1940 seems to have raised particular concern and the situation in Scilly was discussed by the War Cabinet on the following day. Winston Churchill declared that the islands must be held 'at all costs' (TNA CAB/65/8/50). The Chiefs of Staff were directed to make dispositions accordingly. Meanwhile two destroyers were anchored in St Mary's Pool to give some anti-aircraft cover. On 2nd September the Chiefs of Staff decided to double the garrison on the islands to two Independent Companies (approximately 1000 men) and to provide two Bofors anti-aircraft guns. They also noted that the Newford RDF station was being established but that the aerodrome was small and had been 'rendered useless' (TNA CAB/66/11/30) (though this does not seem to have been true, in fact). The Bofors guns were delivered and put in position on the following day.

Air raids continued through the early part of 1941, with Telegraph Tower and the adjacent RAF Newford, with Peninnis, being the main targets. Newford was a Ground Controlled Interception Station for guiding fighters to intercept enemy bombers and Air Sea Rescue flying boats to ditched aircraft; it had four radio masts and a 360° revolving radar dish on a gantry as well as several huts and a small Motor Transport section – nothing of this apparently survives. It was clearly necessary to improve the air defences of the islands. On 19th May 1941 a flight of six Hawker Hurricanes from 87 Squadron RAF, later designated 1449 Flight, landed at the aerodrome. Within an hour of their arrival a German seaplane was spotted, one of the Hurricanes scrambled and shot it down.

There were other developments in 1941; the beaches and military installations were wired and nearly 30 pillboxes were built around the coast of St Mary's (see Appendix 5). Some of the pillboxes, at least, were manned by the Home Guard. From May 1941 Naval MTBs were stationed in St Mary's Pool. St Mary's also became a base for RAF and Naval rescue launches and an emergency base for RAF Coastal Command flying boats, with moorings in the harbour and Porthcressa. Also in 1941 a secret experimental torpedo unit was established on St Martin's and a floating target was moored in Crow Sound (with a concrete direction arrow on Normandy Down (see below)). There was a rifle range and air gunnery range at Giant's Castle.

German air raids on the islands continued but increasingly they were intercepted by the islands' fighters and several bombers were shot down. By early 1942 the Luftwaffe had declared a 90 mile-radius zone around Scilly which was to be avoided in daylight; there were no more raids. The aerodrome runways were extended and a hangar was built in 1942 but all the buildings were of a temporary nature; the last surviving buildings were demolished in the 1990s.

In 1943 an experimental 'Racon' Beacon was established at the Woolpack Battery by a Canadian RAF unit. The beacon consisted of an antenna on an 8.5m high wooden mast and a transmitter powered by a generator (all duplicated in case of damage or malfunction). The generators were installed in one of the gun emplacements and the operators lived in the underground store. This equipment broadcast a continuous pattern of 'dots' which aircraft navigators used to fix their position. In April 1944



Pl 31: Plaque commemorating the secret naval flotilla that operated from New Grimsby Sound, 1942-3, Tresco





*PI 32: One of the sixteen Second World War gravestones in the churchyard at Old Town, St Mary's.*



*PI 33: The pillbox overlooking Porth Hellick, St Mary's. (EH NMR 26580/020: 11 February 2010)*

'technical' work was being undertaken at Mount Todden. In a letter to the Air Ministry the Duchy's Land Steward noted that the Mount Todden Battery 'is presumed to be an ancient monument' and expressed 'our desire that it should not be touched if at all possible' (Osborne 3, 36). A generator and other equipment for a Final Responder Beacon, a blind landing aid for aircraft, were established in the battery nonetheless (see PI 27 and Bowden and Brodie 2011, fig 76).

Though the air raids had stopped there were numerous other incidents in and around the islands: agents were run to and from occupied France in small boats from Tresco (PI 31); on 12th August 1943 one of the Hurricanes tragically crashed into the masts of the *Scillonian* and the pilot was killed; on 20th February 1944 HMS *Warwick* was sunk off the islands by U-413 (PI 32); on 23rd February 1944 a Liberator crash-landed near the aerodrome and all the crew were saved by the pilot's skill but the pilot himself was killed by a fragment of broken propeller which flew into the cockpit. After D-Day, however, any serious threat to the islands had receded; on 17th September 1944 the Hurricanes were withdrawn and in December Star Castle was de-commissioned. U-boats continued to operate around the islands with some success; a merchant ship was torpedoed off Scilly on 12th January 1945. However, they were under increasing pressure; the final incident of the War in Scilly was the sinking of U-681 by a Liberator off Mincarlo on 11th March 1945.

Much effort was expended after the War in clearing up the miles of barbed wire (see Fellows 2007, 6, 9) and other military paraphernalia, so very little now remains of the physical structures of the conflict. The rifle and air gunnery range at Giant's Castle survives as earthworks and there are concrete machine bases at Mount Todden Battery (see above). There is also the large concrete direction arrow, flush with the ground, near Deep Point (see PI 20). However, it is the pillboxes around St Mary's which survive best (Bowden and Brodie 2011, 67, 70-3; Appendix 5). Some of them were deliberately demolished and some have suffered severe damage from the sea, but about nine are well preserved and fragments of another seven can be seen. The best preserved are at: Morning Point, Woolpack, Upper Benham and Steval Point on the Garrison, the latter three being cunningly worked into pre-existing structures of 18th and 19th century date; Porthloo; Porth Hellick (PI 33); Tolman Point; and Old Town, where two well concealed examples still cover the harbour. Of the fragmentary pillbox remains the most evocative is that to the south-west of Bar Point, Pendrathen, which has slid down from its cliff-top position to lie broken on the beach (Bowden and Brodie 2011, fig 82). A series of slight remains at Woolpack, close to the site of 'The Folly', in the Garrison may also be partly of Second World War date though some of the features are more recent; an arrangement of metal ground anchors suggests the presence of a guyed collapsible radio mast (see Fig 11).





PI 34: A newly discovered earthwork, a curved bank defining a semi-circular area, can just be seen at bottom left, emerging from the gorse; it is positioned directly above Redan D in the 18th-century Garrison walls, centre right. Remains of fires from scrub clearance are also visible. (EH NMR 26571/016: 10 February 2010)



PI 35: Allan Brodie and the author measuring erosion undercutting the cliffs on the Garrison. (EH NMR DPI16017: 9 March 2010)

## **Future work**

Continued scrub clearance and conservation grazing is uncovering further archaeological remains. The most recent discoveries are slit trenches along the western side of the Garrison, a possible building platform and quarry pits at Steval and a bank defining a semi-circular platform (PI 34) on the southern side of the Garrison, midway between Morning Point and Woolpack. These will all need to be surveyed and investigated; the pace of coastal erosion gives urgency to work in vulnerable areas (PI 35).

## METHODOLOGY

The archaeological fieldwork for this project was undertaken over three brief seasons in 2008, 2009 and 2010. In order to avoid carrying bulky and delicate instruments all survey was undertaken by graphical methods, using tapes, ranging rods and an optical square; some sites were surveyed 'from scratch' but others used previous surveys (detailed above) as base documents for additional detail. Travel arrangements, rarely for such a survey project, involved aircraft, helicopters, boats and bicycles (PI 36).



*PI 36: Allan Brodie in the field, Helvear Hill, St Mary's, 2008.*

## REFERENCES

- Abbatiello, JJ 2006 *Anti-submarine Warfare in World War One: British naval aviation and the defeat of the U-boats* Routledge: London
- Ashbee, P 1974 *Ancient Scilly from the First Farmers to the Early Christians: an introduction and survey* David & Charles: Newton Abbot
- Barratt, J 2006 *Cromwell's Wars at Sea* Pen & Sword: Barnsley
- Borlase, W 1756 *Observations on the Islands of Scilly* (facsimile reprint 1966 Frank Graham: Newcastle upon Tyne)
- Bowden, MCB and Brodie A 2011 *Defending Scilly* EH: Swindon
- Brodie, AM 2008 'Defending the Isles of Scilly': 'Informed Conservation' EH Project Design
- Brodie, AM 2011a 'Abraham Tovey (1687-1759) – matross, master gunner and mastermind of Scilly's defences' *Georgian Group Journal* **19**. 50-65
- Brodie, AM 2011b *The Garrison, St Mary's, Isles of Scilly: the defences of the Garrison, 1500-1945* EH RDRS 39-2011
- Brodie, AM in press 'The Tudor defences of Scilly' *English Heritage Historical Review* **5** (2010)
- Brodie, AM forthcoming 'Christian Lilly and Scilly's defences 1715-17' *The Scillonian*
- Fellows, D 2007 *The Garrison, St Mary's, Isles of Scilly: archaeological evaluation report Project 4792* EH RDRS 69-2007
- Fletcher, MJ 2007 *Conservation Plan for St Mary's Garrison, St Mary's, Isles of Scilly* unpublished English Heritage report
- Johns, C and Fletcher, MJ 2010 *The Garrison, St Mary's, Isles of Scilly: conservation plan* Cornwall Council, Historic Environment: Truro
- Konstam, A 2009 *Scapa Flow: the defences of Britain's great fleet anchorage 1914-45* Osprey: Oxford
- London, P 1999 *U-Boat Hunters: Cornwall's air war 1916-1919* Dyllansow Truran: Truro
- Parkes, C 1990 *Archaeological Fieldwork in the Isles of Scilly, March 1990: early batteries on the Garrison, St Mary's* Cornwall Archaeol Unit: Truro

Pounds, NJ (ed) 1984 *The Parliamentary Survey of the Duchy of Cornwall* part 2 Devon and Cornwall Record Soc: Exeter

Quinnell, NV 1978 'A 16th-century outwork to King Charles' Castle, Tresco' *Cornish Archaeol* **17**. 142-3.

Ratcliffe, J 1993 *Fieldwork in Scilly, 1991 and 1992* Cornwall Archaeol Unit/Cornwall County Council: Truro

Ratcliffe, J and Sharp, A 1991 *Fieldwork in Scilly: autumn 1990* Cornwall Archaeol Unit/Cornwall County Council: Truro

Thomas, C 1989 'The names of the batteries on the Garrison, St Mary's, Isles of Scilly' in MCB Bowden, DA Mackay and P Topping (eds) *From Cornwall to Caithness: aspects of British field archaeology: papers presented to Norman V Quinnell* Brit Archaeol Rep **209**. 251-9.

Troutbeck, J 1796 *A Survey of the Ancient and Present State of the Scilly Isles* Goadby and Lerpiniere: Sherborne

## APPENDIX I

### Civil War chronology: principal events during the Civil Wars on Scilly

#### 1637

16 Sept	King Charles orders improvements to island fortifications; not carried out J Bastwick imprisoned in Star Castle
---------	--

#### 1640

Bastwick released

#### 1642

July	Navy defects to Parliament
September	First petition to Parliament against Scilly privateers

#### 1643-4

Duke of Hamilton imprisoned in Star Castle

#### 1646

16 Feb	Royalist defeat at Battle of Torrington
2 March	Prince Charles and retinue leave Pendennis for Scilly
4 March	Prince Charles arrives at St Mary's
6 March	Prince Charles' council of war
?	Batten's squadron sets out from Plymouth for Scilly
11 Apr	Lords Hopton and Capel arrive at St Mary's with Parliament's offer to Prince Charles
12 Apr	Batten's squadron off Scilly but driven away by poor weather
16 Apr	Prince Charles leaves Scilly for Jersey
17 Apr	Irish royalist troops arrive on Scilly but immediately follow Prince Charles
18 Apr	Sir Arthur Bassett and followers arrive at Scilly, having surrendered St Michael's Mount
August	Ayscue ordered to Scilly; blockades islands; garrison request terms Batten arrives and negotiations take place
24/25 Aug	Islands surrender to Batten Ayscue effectively Governor of Islands

#### 1647

Jan	Ayscue removed as Governor
June	John Buller appointed Governor of Islands



## 1648

June	Parliament votes £1000 for the defences of Scilly
11 June	Frigate <i>Elizabeth</i> , Captain Jonas Reeve, sent to Scilly
11 Sept	Parliament warned of a threat to Scilly
12 Sept	Parliament forwards warning to the Governor's brother(?), Francis Buller
13 Sept	Parliament informs senior commanders of possible defection of Scilly garrison
?	Ensign John Waight sent to Scilly to investigate
21 Sept	Three frigates ordered to patrol between Scilly and mainland
30 Sept	Outbreak of rebellion by Garrison on Scilly; opposed by Buller (and islanders?)
c10 Oct	News of rebellion reaches London; plans to retake the islands laid but postponed
?	News of rebellion reaches Jersey and Sir John Grenville sails for Scilly
?	Grenville takes command of Scilly garrison
November	Prince Charles appoints Grenville Governor of Scilly

## 1649

25 Jan	Prince Rupert's squadron anchored at St Mary's en route to Ireland
20 Feb	News of King's execution reaches Scilly
22 Feb	Grenville proclaims Prince Charles as King Charles I
March	A Scilly privateer captured by the navy
Apr	<i>Crowned Lion</i> case
May/June	Dutch attempt to negotiate with Grenville over privateers Dutch ambassador's ship captured by the navy
June	Grenville attempts to raid Swansea A Scilly privateer captured by the navy
September	Prisoners exchanged
November	Parliament orders a ship to lie off Scilly to protect merchant shipping
December	Parliament orders seizure of vessels supplying Scilly

## 1650

January	Warrant for the arrest of Bernard Sparke for trading with Scilly
Feb	Lord Hopton cruising off Scilly and Cornwall fomenting royalist uprising; 'Western Design' being plotted by royalist agitators
April	Plot by islanders and garrison to murder Grenville and seize control of Star Castle thwarted; Amsterdam merchants offer Prince Charles £50k for Scilly
May	Parliament orders ships to prevent landings on the mainland from Jersey or Scilly
June	Hopton on Scilly, planning invasion of mainland General Desborough counters by arresting Cornish royalists and strengthening forts

	Grenville releases Captain Hatsell on exchange for Thos Carter <i>Elizabeth case</i>
August	<i>Phillip case</i>
September	Prince Charles orders Grenville to gather troops and stores (February, according to some sources)
Oct	Prince Charles warns Grenville to be ready to send troops to mainland to support invasion by the Prince of Orange Amsterdam merchants send Bernardo Borgaro to Scilly to negotiate with Grenville
November	Twenty-four prisoners exchanged
Dec	Continuing protracted negotiations

## 1651

Jan	Evertson observes 6 frigates, 500 troops and 120 guns at Scilly and notes that Rotterdam merchants are trading with the islands
?	Grenville's privateers capture ship carrying NMA officers from Ireland
Feb	Evertson returns to Netherlands with Bishop Leslie on board Borgano held hostage for Leslie Leslie presents Grenville's counter-claims against the Dutch
March	Ayscue ordered to deal with Scilly before sailing for Barbados
11 March	Tromp sets sail
26 March	Desborough ordered to seize Grenville's relatives in Cornwall
28 March	Parliament receives Desborough's report of Tromp sailing from Weymouth
30 March	Tromp anchors at St Mary's and presents demands but driven off by storm
1 Apr	Tromp returns to St Mary's; 12 Dutch prisoners released Parliament asks ambassador in Holland to ascertain Tromp's intentions Parliament begins to assemble ships and troops under Blake to take Scilly
2 Apr	Tromp repeats demands; 22 more prisoners released but no ships released Borgaro reports arrival of 200 more soldiers for garrison Tromp leaves to cruise between Scilly and the main
10 Apr	English envoys question States General about Tromp's mission
11 Apr	States General give acceptable answer to envoys
12 Apr	Blake's and Ayscue's force sails from Plymouth
13 Apr	Leslie returns to Scilly in one of Dutch naval ships reinforcing Tromp? Blake speaks Tromp at sea (?probably, but there is no evidence)
15 Apr	Dutch and English fleets appear off Scilly, Blake to N of Tresco
16 Apr	Tromp sails for Holland Blake reconnoitres Tresco, attempting to force an entrance to New Grimsby; shots exchanged Blake anchors in St Helen's Pool, to the surprise of Grenville Grenville reinforces Tresco
14-16 Apr	Strong wind
17 Apr	First parliamentarian assault on Tresco fails; landings on Northwethel and Tean

	Grenville takes more men to Tresco (according to Lereck)
18 Apr	Second parliamentary assault on Tresco succeeds
19 Apr	Parliamentarian ships enter New Grimsby Channel from both ends New Grimsby taken; 2 royalist frigates taken Col Fleetwood approaches (and takes?) King Charles's Castle
19/20 Apr	Severe storm Blake begins to build battery on Carn Near
20 Apr	Grenville seeks exchange of prisoners; Blake in reply demands his surrender Ayscue's squadron sailed to Plymouth but returned to Scilly by 3-4 May
25 Apr	Blake sends summons of surrender to Grenville; Grenville refuses
27 Apr	Grenville seeks negotiations
30 Apr	Exchange of hostages (28 Apr according to other sources)
2 May	Talks begin on Samson
4 May	Talks break down; hostages re-exchanged (3 May according to other sources) Carn Near battery opens fire; culverin explodes
5 May	Carn Near battery and ships bombard St Mary's
9 May	Escaped prisoner informs Blake that royalist morale is low
10 May	Council of State urges Blake to reduce St Mary's as quickly as possible Severe storm, 2 royalist frigates wrecked on The Hugh (11 May according to other sources)
17 May	Talks on Samson renewed
23 May	Terms of surrender agreed
24 May	Inventory of royalist stores to be made by Blake and Clarke's officers
1-2 June	Surrender delayed by poor weather
2 June	Tromp's squadron returns and then departs towards the Channel Islands
3 June	Surrender
5 June	News of surrender reaches London
12 June	Grenville and followers at Plymouth
14 June	Quarrel in Plymouth between soldiers and sailors involved in the assaults on Tresco
27 June	Ayscue sails for Barbados
28 June	Terms of surrender ratified by Parliament Blake returns to Plymouth Grenville sails to Ireland
?	Remaining royalists leave Scilly
2 July	Hunkin receives commission as Governor of Scilly

## 1652-4

First Dutch War  
Scilly packet boat intercepted by the Dutch

## 1677

Third Dutch War  
12 Aug Some sheep stolen from an off-island by the Dutch

## APPENDIX 2

List of principal people mentioned in accounts of the Civil Wars on Scilly

Captain Thomas **Amy(e)**, royalist privateer captain; brought Sir J Grenville to Scilly 1648

Sir George **Ayscue**, parliamentary Vice-Admiral, sent to Scilly August 1646; effectively Governor of Islands Sept 1646-Jan 1647; on Scilly at time of rebellion 1648 (?), and again April 1651 under Blake; it was his plan, based on his local knowledge, to take Tresco and Bryher in order to reduce the islands

Colonel **Axtell**, parliamentarian officer captured by Grenville's privateers on his way back from Ireland and imprisoned in Star Castle

William **Balthazar**, Captain of Star Castle, appointed by Sir J Grenville 1649

Sir Arthur **Bassett**, Governor of St Michael's Mount; royalist; came to Scilly in Apr 1646 having surrendered the Mount to Parliament

Sir Thomas **Bassett**, Lieutenant Governor of the Islands until 1642; royalist; nephew of Sir Arthur

Dr John **Bastwick**, anti-Laud prisoner at Star Castle 1637-40

Captain William **Batten**, parliamentary Vice-Admiral, sent to Scilly Apr 1646; defected to Royalists 1648

Lt-Col John **Bawden**, parliamentary second-in-command of land forces for the reduction of Scilly 1651, active in the assaults on Tresco; possibly an officer in Bennett's Regiment of Foot; he was on his way to Barbados as part of Ayscue's force with 500 troops; a native of Truro, a Fifth Monarchist and later MP for Cornwall

Colonel Robert **Blake**, parliamentarian General-at-Sea, captured Scilly 1651

Bernardo **Borgano**, Amsterdam shipping agent sent to negotiate with Sir J Grenville, late 1650; held hostage by Grenville

Colonel John (Anthony) **Buller**, Governor of the Islands appointed by Parliament June 1646; arrived in islands August 1646; perhaps defected to the royalists in Sept 1648 (he had served in the royalist army); by an alternative account he and the islanders opposed the royalist rebels; he did however serve under Sir J Grenville and was one of the hostages handed over by Grenville in June 1651

Lord **Capel**, followed Prince Charles 1646; executed 1649

Thomas **Carter**, royalist held by Parliament and exchanged for Captain Hatsell 1650

**Charles**, Prince of Wales, fled to Scilly March 1646; proclaimed King Charles II by Grenville, Feb 1649

Lt-Col **Clarke**, parliamentarian commander of land forces for the reduction of Scilly 1651, with 1000 troops (in addition to Bawden's 500); active in the assaults on Tresco; a Baptist

Lord **Culpeper**, accompanied Prince Charles and was his envoy to France 1646

General John **Desborough**, parliamentary officer and brother-in-law of Oliver Cromwell; active in the south-west from 1649

Lord **Digby**, brought Irish troops to Scilly, Apr 1646, and took them on to Jersey

William **Edgcumbe**, royalist commander of King Charles' Castle on Tresco 1651

Captain Cornelis **Evertson**, Dutch officer sent to Scilly in advance of Tromp

Sir Richard and Lady **Fanshawe**, accompanied Prince Charles 1646

Colonel John **Fealan**, parliamentary officer twice rewarded for services in the recovery of Scilly 1651

Colonel George(?) **Fleetwood**, parliamentarian officer at reduction of Scilly 1651; captured King Charles's Castle

Sir Francis **Godolphin** MP, Sheriff of Cornwall and Governor of the Islands until 1646, royalist; accompanied Prince Charles 1646 (?); re-appointed Governor 1660

Bernard **Grenville**, arrived Scilly Oct 1648 to assist his brother Sir John

George **Grenville**, on Scilly with his brother Sir John 1651; hostage during surrender negotiations

Sir John **Grenville**, accompanied Prince Charles in 1646; sailed to Scilly Oct 1648 and took command of garrison; appointed Governor Nov 1648; fortified islands 1648-51(?); surrendered 1651

Sir Richard **Grenville**, uncle of the above

Major **G(r)osse**; leader of royalist revolts in Cornwall; sailed to Scilly Oct-Nov 1648

Captain Henry **Hatsell**, parliamentarian officer held prisoner on Scilly and exchanged 1650; commissioner charged with assembling vessels for the reduction of Scilly 1651; present at reduction of Scilly and rewarded by Parliament for his services with £100

Lord **Hopton**, defeated royalist commander; followed Prince Charles 1646 and later commanded a squadron of royalist ships off Scilly

Lt-Col Joseph **Hunkin**, parliamentarian Governor of Scilly from July 1651 until the Restoration

Colonel le **Hunt**, parliamentarian officer captured by Grenville's privateers on his way back from Ireland and imprisoned in Star Castle

Sir Edward **Hyde**, accompanied Prince Charles 1646 (later Earl of Clarendon)

Joseph **Jane**, possibly royalist Lieutenant Governor under Grenville; arrived Scilly February 1650

Ensign **Jeffries**, parliamentarian officer killed by the explosion of a culverin in Oliver's (Carn Near) battery 1651

Joshua **Lereck**, parliamentarian soldier at the assaults on Tresco, author of 'A True Accompt of the late reducement of the Isles of Scilly, published in regard of the many false and scandalous reports touching that service' 1651, Giles Calvert: London

Henry **Leslie**, Bishop of Down, Sir J Grenville's envoy to Charles II, 1649 and Jan 1651; present on Scilly later in 1651 and vocal in Grenville's council; returned to Ireland against his will after the surrender

Captain Lewis **Morris** (Morrice), part of Ayscue's force destined for Barbados, led a detachment of parliamentarian assault troops in successful attack on Tresco 1651; rewarded by Parliament

Captain **Pack**, Vice-Admiral, of the *Amity*, Ayscue's second-in-command; sent to Plymouth with dispatches announcing the fall of the Islands in May 1651 (in the course of which he captured one of Grenville's remaining privateers); responsible for spreading rumours about the poor behaviour of Clarke and his troops in the initial assault on Tresco

Corporal **Perry**, parliamentarian soldier killed in the successful assault on Tresco 1651, mentioned by Lereck

Colonel Edward **Roscarrock**, Reformado officer, part of Grenville's garrison

Colonel **Sadler**, parliamentarian officer captured by Grenville's privateers on his way back from Ireland and imprisoned in Star Castle

Captain **Smith**, parliamentarian officer at the reduction of Scilly 1651; rewarded by parliament with £100

Bernard **Sparke**, merchant trading with Scilly 1649-50



Admiral Maarten **Tromp**, Dutch commander off Scilly 1651, demanded the release of Dutch prisoners and ships from Sir J Grenville; took part in a show of strength with Blake before sailing for home

Ensign John **Waight**, parliamentarian officer in Bennett's Regiment of Foot; sent to Scilly by Colonel Bennett to investigate rumours of revolt on the islands 1648; imprisoned

Captain Baldwin **Walke**, ex-Navy royalist privateer commander; escorted Prince Charles to Scilly and carried him away in 1646

Colonel Edward **Wogan**, royalist commander at Dover Fort or the Blockhouse, Tresco 1651; a former NMA cavalry officer who had defected to the royalists in 1648

## APPENDIX 3

### First World War chronology

1915

20 March U-29 attacked ships on the surface off Scilly

1917

Jan Porth Mellon RNAS base started

Feb Base moved to Tresco

26 Feb First Curtis H12 'Large America' flying boat arrives

28 Feb Two more flying boats arrive and fly first operational patrol

25 Apr Transport *Balarat* sunk by a U-boat

9 May Short 184 seaplane and crew lost off Peninnis Head

27 May U-boat off Tresco bombed by flying boat – kill claimed

28 May First convoy escort flown

29 May U-boat attacked – oil observed

4 June U-boat sighted

10 June U-boat sighted

25 June U-boat attacked – possible kill

July explosion at bomb store

21 Aug U-boat attack – possible damage

14 Oct U-boat attack – possible damage

18 Oct U-boat attack – possible damage

16 Dec Gale destroys 3 flying boats

1918

Feb 'Felixstowe' F2A and F3 flying boats start to arrive

10 May U-103 attacked – no result

11 June U-boat sighted

14 June H12 crashed

July Considerable U-boat activity

6 July Short 184 seaplane and crew lost at sea

8 July U-boat sighted; F3 lost at sea

18 Aug Unit becomes 234 Squadron RAF

22 Aug F3 crashed

30 Aug Attack on U-boat – no result

7 Sept *Persic* attacked by a U-boat

11 Oct Attack on U-boat – possible kill

10 Nov Last convoy escort

1919

May 234 Squadron disbanded

1922

Aug Experimental flying boat flights

## APPENDIX 4

### Second World War chronology

1939	
May	Stirrup pumps distributed in Hugh Town
Aug	Gas masks distributed and air-raid sirens installed; air raid shelters built
1940	
July	Star Castle commandeered as military HQ
21 Aug	German air raid on Peninnis direction finding station
22 Aug	Bombs dropped on Tresco and Bryher
24 Aug	Bombs dropped on the Garrison, Telegraph and Porthcressa
25 Aug	Start of several German air raids on Peninnis direction finding station
26 Aug	Bombs dropped on Scilly
29 Aug	Air raid caused fires
30 Aug	War Cabinet declares Scilly to be held at all costs
31 Aug	Two destroyers anchored in Pool to give AA cover
2 Sept	Chiefs of Staff: garrison to be doubled and 2 AA guns provided; RDF station being established
3 Sept	First anti-aircraft guns put in position
1941	
13 Jan	Air raid
10 March	Air raid on Telegraph
4 April	Air raid on convoy and Peninnis lighthouse
May	MTBs stationed in Pool
12 May	Air raid on Porthloo
19 May	87 Squadron Hurricanes arrive; score first victory
24 May	EA shot down
June	Over 1000 troops on islands
3 June	Civil flight from St Mary's shot down
16 June	Hurricanes fitted with long range tanks
18 July	Two(?) EA shot down
16 Aug	EA shot down
26 Aug	Bombing raid destroys Peninnis direction finding station; EA shot down
27 Aug	Bombing raid on aerodrome
21? Oct	EA shot down
1942	
Jan	First 87 Sq casualty
16 Jan	Floating target moored in Crow Sound; huts at Innisidgen and Deep Point (connected to experimental torpedo unit based on St Martins)
March	German maps marking 90 mile air exclusion zone around Scilly captured
14 March	87 Sq flight re-named 1449 Flight
June	'Remy' picked up from French coast by N51

1 Nov	Aerodrome runways extended
25-26 Dec	Hurricane crashed off St Agnes; pilot saved First rescue by 63rd Flotilla RML
1943	
12 Aug	87 Sq Hurricane crashed into <i>Scillonian</i>
late Aug	Hangar built at aerodrome (on site of current car park)
winter 1943-4	RACON Beacon built at Woolpack Battery
1944	
20 Feb	HMS <i>Warwick</i> sunk off Scilly by U-413
23 Feb	Liberator crashed on airfield
18 April	'Technical' work being carried out at Mount Todden Battery
17 Sept	87 Squadron Hurricanes leave for Portreath
18 Dec	U-1209 grounded on Wolf Rock
Dec	Star Castle derequisitioned
1945	
12 Jan	<i>Jonas Lee</i> sunk off Scilly
3 March	U-681 ran aground and damaged on the Western Rocks
11 March	U-681 sunk by a Liberator off Mincarlo
1946	
9 Aug	Final Responder Beacon, Mount Todden Down, redundant; hut, mast and stays to be removed
3 Sept	Giant's Castle: 6 slit trenches and pits to be filled in

## APPENDIX 5

### Second World War pillboxes on St Mary's

A map stamped 'Garrison Engineer, Falmouth, 25 Mar 1946' shows the position of all the pillboxes erected on St Mary's in 1941; they have individual numbers from 1 to 27. A MS note indicates that the map was compiled by Intelligence Section, 14th Battalion, Royal Fusiliers. A copy is attached to the Scillonian War Diary in the Isles of Scilly Museum.

The pillboxes are listed here in NMR number order, as with the entries in the main body of this report. The numbers as shown on the Royal Fusiliers map are also given.

#### Woolpack Battery

##### SV 80 NE 106 (Uid 1169842)

Record includes pillbox which is now separately recorded under SV 80 NE 117.

#### Steval Point DEL Director Station; No 5

##### SV 80 NE 115 (Uid 1426670) SV 8946 1036

19th-century structure converted; well preserved.

#### Woolpack Battery; No 4

##### SV 80 NE 117 (Uid 1445298) SV 8978 0998

Pillbox built into the point of the 18th-century battery; well preserved (see Bowden and Brodie 2011, figs 54 and 79).

#### The Garrison

##### SV 81 SE 30 (Uid 303589)

General record for the Garrison includes all the pillboxes; they have subsequently been given individual records.

#### Steval Point

##### SV 81 SE 60 (Uid 303659)

Monument type 'pillbox' has been erroneously added to this record of the DEL.

#### Woolpack Battery

##### SV 81 SE 496 (Uid 1417981)

Duplicate record for SV 80 NE 117 (with incorrect Grid Reference).

#### Morning Point Battery

##### SV 90 NW 21 (Uid 1169837)

Pillbox mentioned; now separately recorded under SV 90 NW 31.

#### Morning Point Battery; No 3

##### SV 90 NW 31 (Uid 1426669) SV 9008 0991

Pillbox built into the east face of the 18th-century battery; well preserved.

**Garrison Gate**

**SV 9I SW 255 (Uid I170233)**

Pillbox mentioned; now recorded separately under SV 9I SW 284.

**Old Town West; No 25**

**SV 9I SW 268 (Uid I31552I)**

**SV 9I19 I018**

Facing the bay on the path towards the church; well preserved.

**Porthloo; No 14**

**SV 9I SW 269 (Uid I315530)**

**SV 9083 I118**

Concealed behind Newford Island, covering Porthloo to the north and Thomas Porth to the south; well preserved.

**Porth Hellick; No 22**

**SV 9I SW 270 (Uid I315537)**

**SV 9238 I062**

Built into the cliff on the west side of Porth Hellick; well preserved (see PI 33).

**Garrison Gate; No 1**

**SV 9I SW 284 (Uid I426660)**

**SV 9005 I062**

Documentary evidence only.

**Old Quay Wall; No 7**

**SV 9I SW 285 (Uid I426672)**

**SV 9017 I068**

Documentary evidence only.

**Harbour; No 8**

**SV 9I SW 286 (Uid I426673)**

**SV 9022 I061**

Documentary evidence only.

**Harbour; No 9**

**SV 9I SW 287 (Uid I426674)**

**SV 9030 I058**

Documentary evidence only.

**Carn Thomas West; No 10**

**SV 9I SW 288 (Uid I426675)**

**SV 9059 I072**

Documentary evidence; the Defence of Britain Project claimed to have found a concrete base – not confirmed.

**Carn Thomas East; No 11**

**SV 9I SW 289 (Uid I426676)**

**SV 9062 I075**

Documentary evidence; the Defence of Britain Project claimed to have found remains of a concrete raft – not confirmed.

**Porthmellon; No 12**

**SV 9I SW 290 (Uid I426677)**

**SV 9070 I070**

Documentary evidence only.



**Thomas Porth; No 13**  
**SV 91 SW 291 (Uid 1426678) SV 9090 1095**  
Documentary evidence only.

**Carn Morval; No 15**  
**SV 91 SW 292 (Uid 1426680) SV 9059 1187**  
The concrete base survives (see Bowden and Brodie 2011, fig 24).

**Carn Morval Point; No 16**  
**SV 91 SW 293 (Uid 1426681) SV 9057 1195**  
The Defence of Britain Project claimed to have found the concrete base of this pillbox immediately adjacent to the Carn Morval earthwork battery (according to their Grid Reference); no sign of it was seen during detailed survey of the battery (SV 91 SW 62), nor was it found by a search of the surrounding area following scrub clearance. It seems possible that this pillbox is represented by the 'bivouac platform' to the north of the battery.

**Pendrathen; No 17**  
**SV 91 SW 295 (Uid 1426682) SV 9154 1281**  
The remains of this pillbox lie on the beach (see Bowden and Brodie 2011, fig 82).

**Bar Point; No 18**  
**SV 91 SW 296 (Uid 1426683) SV 9163 1281**  
The Defence of Britain Project claimed to have found the remains of this pillbox in a quarry; not seen during the current project.

**Innisidgen Point; No 19**  
**SV 91 SW 297 (Uid 1426684) SV 9211 1271**  
Documentary evidence only; the Defence of Britain Project suggested that this might actually have been the Upper Innisidgen Chambered Tomb re-used as a gun position but the position indicated on the 1946 map seems to lie between the two Innisidgen Tombs.

**Toll's Hill; No 20**  
**SV 91 SW 298 (Uid 1426685) SV 9281 1218**  
Documentary evidence only.

**Porthcressa East; No 26**  
**SV 91 SW 299 (Uid 1426689) SV 9046 1042**  
Documentary evidence only.

**Porthcressa West; No 27**  
**SV 91 SW 300 (Uid 1426690) SV 9022 1042**  
Documentary evidence only.

**Tolman Point; No 23**  
**SV 91 SW 301 (Uid 1419219) SV 9159 0999**  
This pillbox occupies the point between Old Town Bay and Porth Minick and is

positioned to defend either bay; well preserved (see Bowden and Brodie 2011, figs 80 and 81).

**Upper Benham Battery; No 2**

**SV 91 SW 302 (Uid 1426661) SV 9012 1038**

Built into the 18th-century battery; well preserved.

**Rat Island; No 6**

**SV 91 SW 303 (Uid 1426671) SV 9017 1086**

Some possible fragmentary remains have been claimed.

**Porthloo**

**SV 91 SW 304 (Uid 1426679) SV 9085 1120**

Duplicate record for SV 91 SW 269.

**Cat's Coffin (Old Town East); No 24**

**SV 91 SW 305 (Uid 1426687) SV 9133 1022**

This pillbox, disguised as a garden wall, was designed to cover the bay with Nos 25 and probably 23; well preserved (see Bowden and Brodie 2011, fig 78).

**Pellistry Bay; No 21**

**SV 91 SW 328 (Uid 1426686) SV 9281 1182**

Documentary evidence; the Defence of Britain Project claimed that the site was marked by a levelled platform and concrete fragments; not seen during the current project.



## ENGLISH HERITAGE RESEARCH DEPARTMENT

English Heritage undertakes and commissions research into the historic environment, and the issues that affect its condition and survival, in order to provide the understanding necessary for informed policy and decision making, for sustainable management, and to promote the widest access, appreciation and enjoyment of our heritage.

The Research Department provides English Heritage with this capacity in the fields of buildings history, archaeology, and landscape history. It brings together seven teams with complementary investigative and analytical skills to provide integrated research expertise across the range of the historic environment. These are:

- \* Aerial Survey and Investigation
- \* Archaeological Projects (excavation)
- \* Archaeological Science
- \* Archaeological Survey and Investigation (landscape analysis)
- \* Architectural Investigation
- \* Imaging, Graphics and Survey (including measured and metric survey, and photography)
- \* Survey of London

The Research Department undertakes a wide range of investigative and analytical projects, and provides quality assurance and management support for externally-commissioned research. We aim for innovative work of the highest quality which will set agendas and standards for the historic environment sector. In support of this, and to build capacity and promote best practice in the sector, we also publish guidance and provide advice and training. We support outreach and education activities and build these in to our projects and programmes wherever possible.

We make the results of our work available through the Research Department Report Series, and through journal publications and monographs. Our publication Research News, which appears three times a year, aims to keep our partners within and outside English Heritage up-to-date with our projects and activities. A full list of Research Department Reports, with abstracts and information on how to obtain copies, may be found on [www.english-heritage.org.uk/researchreports](http://www.english-heritage.org.uk/researchreports)

For further information visit [www.english-heritage.org.uk](http://www.english-heritage.org.uk)

