

THE STATE OF THE FORTIFICATIONS IN HAMPSHIRE AND THE ISLE OF WIGHT IN 1623

By JOHN R KENYON

This is the third paper examining the findings of the survey made in 1623 of the south coast defences of England (BL Harley 1326), and completes the section on Hampshire and the Isle of Wight. The two previous publications were on the blockhouse of St Andrew's (Kenyon 1978) and Southsea Castle and Portsmouth (Kenyon 1981). It is intended to devote the fourth paper to the fortifications in the west of England, and this will appear in another journal. The background to the survey has already been outlined (Kenyon 1981, 13).

The entries in the manuscript for the Isle of Wight are placed between those for the forts of Calshot and Hurst. The findings will be given in the order in which they were originally written, namely, ordnance and munitions, the garrison, and the state of the defences with repairs needed. Information about the cannon in the forts will be found in the ordnance table (Table 1).

CALSHOT CASTLE (ff. 54^v-57^r)

The fort was built by Henry VIII in 1539-40, and consists of a circular tower with an octagonal base surrounded by a 16-sided curtain wall. It was positioned so as to control the entrance to Southampton Water. Its ordnance in 1623 totalled fourteen guns, the minimum number which was considered for a fort of this size (*APC 1613-14*, 610), and consisted of a brass culverin and demi-culverin, with twelve iron guns, culverin (1), demi-culverins (5), sakers (5), and a falcon. There were no guns listed as unserviceable. All the cannon had ladles for charging them with powder, together with two spare ladle staves. Round shot amounted to 884, incorrectly given as 784 in the manuscript, comprising 206 for the culverins, 248 for demi-culverins, 108 for sakers, 280 for falcons, as well

as 42 crossbarred shot for the demi-culverins. The remaining serviceable munitions comprised powder (100 lb), match (4 skeins), muskets (20), long and short pikes (13), bills (16), crowbars (2), cresset lights (4 cwt), cressets (4), a gin, gin ropes, trunks for wildfire, an incendiary device (5), formers (2), pulleys (10 pairs), pickaxes (4) and sheets of lead (40 lb).

The unserviceable stores were made up of sponges (12), bandoleers (31), moulds (4), calivers (2), long pikes (15), shovels and spades (6), musket rests (2), lanterns (2), stone shot (210), balls with firework (2), sheepskins (18) and various field carriages for cannon including one for a basilisk. A caliver was a light musket, but was not considered an effective weapon by the seventeenth century. In 1618 it was stated that 'the moderne use doth alltogether exclude the caliver as unserviceable and not to be allowed upon any musters of armes' (*APC 1617-19*, 118). Sheepskins were used for sponges which themselves were used to clean out the guns after firing.

Richard Smith was captain of the fort with a daily wage of 20*d*, and under him was a lieutenant and porter at 8*d* a day, together with thirteen soldiers and gunners each with a daily wage of 6*d*.

The cost of repairs to Calshot was reckoned at £1029 2*s*, and they were itemised under six sections. The parapets of the keep were reported to be in good repair, although there were some leaks in the lead roof. New boards covered with pitch and 'shell sand' were recommended. The plaster ceiling under the roof was also 'much decayd'. The cost of repairs was given as £16 4*s* which included some minor works that had to be undertaken on the windows, glass and casements.

The ceilings, beams and joists of the two floors on which the ordnance was mounted were rotten. The ordnance platform was to be

Type	Loading	Calibre	Weight	Weight Shot	Weight Powder	Range Point blank	Range Random
Cannon	ML	8	6000	60	27	340	2000
Demi-cannon	ML	6¾	4000	30½	18	340	1700
Cannon perier	ML/BL	6	3000	24½	14	320	1600
Culverin	ML	5½	4500	17½	12	400	2500
Basilisk	ML	5	4000	15½	10	400	3000
Demi-culverin	ML	4½	3400	9½	8	400	2500
Saker	ML	3½	1400	5½	5½	340	1700
Minion	ML	3¼	1000	4	4	320	1600
Falcon	ML	2½	660	2¼	2¼	300	1500
Falconet	ML	2	500	1½	1½	300	1500
Robinet	ML	1	300	½	⅓	240	1000
Port piece	BL	5½					
Fowler	BL	¾					

Table 1. Ordnance table, largely based on information in Oppenheim (1913, 36–42). ML = muzzleloader, BL = breechloader. The calibre is in inches, and the weights in pounds. The ranges are in paces, a pace being five feet.

renewed with the lead mended and the beams to be supported on 'stone cartowes' or corbels in order to prevent continual running repairs to the timbers. Not surprisingly these works were to be the most expensive, totalling £336 18s.

Minor repairs were required to the lower glass windows, shutters were to be added to the 'portholes', possibly the gunports, the bridge was to be mended, the 'court of guard' was full of leaks, and a new portcullis was to be added, all at a cost of £34.

The force of the sea had damaged the counter-scarp wall, and seven of its sides had to be taken up and rebuilt using freestone, brick and 'Tarras' or rubble. £312 was estimated as being sufficient for these repairs. The 'Breach Causey', a passage leading to the fort, had collapsed for a length of 40 rods and was under several feet of water. It all had to be restored with walls ten feet high with the passageway three rods broad, costing £230, and further works to secure the passage from a similar occurrence were estimated at £100.

In an appendix to the report the commissioners made a suggestion which was intended to lessen the cost of the works. The removal of the upper storey of the tower would save the expense of repairs there as well as

providing a source of lead worth £288. The guns could be mounted elsewhere in the tower or outside on a platform which could have been built for £100. Some of the saving might also have helped towards improving the lodgings of the gunners.

COWES CASTLE (ff. 57^v–58)

Two blockhouses were built at Cowes in 1539–40, but by the end of the reign of Henry VIII only the one at West Cowes was still in service. It consisted of a circular main tower or keep fronted by a rounded gun platform, with wing batteries on either side of the keep (Kenyon 1979, 67–8).

In 1623 West Cowes mounted a brass demi-culverin and falconet, with culverins (3), demi-culverins (8) and sakers (2) of iron. There were 17 ladles, and the shot amounted to 137, not 127 as totalled in the survey, including 14 cross-barred shot for the demi-culverins. The stores consisted of powder (200 lb), match (3 skeins), lead for shot (50 lb), musket bullets (300), muskets (25), bandoleers (25), long pikes (18), black bills (24), crowbars (3), halberds (19), heads and rammers (14 pairs), a bell for the watch and a flag, ladle staves (4), pickaxes (10),

axle-trees (4) and a gin. Three field carriages together with some sponges, spades and shovels were unserviceable.

The garrison was small, consisting of a captain and four men.

Only a small amount of work was needed on the fort, costing £23. The lead in places required repairing, and it was suggested that the main platform for the guns should be lifted up, the various leaks mended, and then to be 'new layde'. The outer ditch was to be widened and deepened, and a crack running down the wall on the left as one entered the fort had to be seen to. A final comment was that five houses which stood too near the fort were '(vpon occation) to be remooved', the 'occation' meaning in the likely event of an enemy landing and attack. It was obviously considered that the fort would not have proved tenable once the enemy had gained a foothold within the houses as they would provide excellent cover for the attackers.

SANDOWN CASTLE (ff. 59-61r)

Sandown was one of the later forts of Henry VIII (Kenyon 1979, 61; 65-7), and was replaced due to its deteriorating condition by a bastioned fort in 1632-36 (Jones 1968). It was poorly armed in 1623, and in fact never seems to have received the full complement of artillery that might be expected in a fort of some size (Kenyon 1979, 66). There was a demi-culverin and falcon of brass along with five iron demi-culverins and some ladles (7). The amount of shot came to 603 including ten crossbarred shot for culverin and demi-culverin; the round shot for cannon (1) and culverin (67) was described as 'of noe use here' presumably because there were no such guns in the fort.

The remaining munitions were powder (150 lb), match (1 skein), muskets (6), bandoleers (6), moulds (4), brass shevers or pulleys (4), axle-trees (1), cressets without staves (2), and a watch bell. Sponges (8), field carriages (2), wheels for a demi-culverin (3 pairs), long pikes (6), balls with firework (3), and a gin were unserviceable.

The fort was manned by the same number of men as at Cowes.

The commissioners stated that 'This Castle is of importance for it is ye onely Guard of ye whole south syde of the Island, it much one of reparations, and by the Sea in great daunger . . .'. Various early seventeenth century surveys of Sandown are mentioned by Jones (1968, 169-71), all indicating the poor condition of the fort. It is surprising, in view of the general state of Sandown, that the cost of repairs, £830 15s 6d, was less than the sum suggested for Calshot. The top of the square tower was in good condition, although the platform itself was 'quite decayed', and the brass gun mounted on it 'were better removed to a place of more service'. The tower was too tall for a gun to be of any use in covering the immediate approaches, and apparently it was to be lowered and the whole structure reboarded, pitched and strewn with shell sand at a cost of £11 4s.

The angle bastion at the north-east corner was to be made solid by filling in the interior and covering it with lead. A coped parapet for ordnance with an inner face of brick and an outer one of stone was also to be built around the bastion. The total cost of these works was £23 4s. £12 was needed for a 'centenell house to be made on the toppe of the Tower', as well as repairs to the walls, glass, windows, doors, floors and plaster. The sentinel house may have been intended to stand at the salient end of the bastion in the manner of those to be seen on the bastions of eighteenth century Fort George, Inverness.

A 'Pallesado', a new bridge with chains fit for a draw-bridge and a portcullis were costed at £48 3s 6d; and the moat was to be both deepened and widened, with a counterscarp and firing step for musketeers, all for £42. Criticism of the depth of the moat had been made as far back as 1559 (Kenyon 1979, 66).

The walls on either side of the gun battery on the south or seaward side of the fort had been breached, with the sea therefore threatening to wash away the battery which was otherwise in a good condition. The cost of repairs to the walls with provision to keep the sea at bay was estimated at £394 4s, with a further £300 on sea defences to the front of the battery.

A final paragraph recommended that a wall

or counterscarp with a moat, gate and palisade be built to secure Sandown from attack on the landward side, with shelter and defences for 3–400 men who might be called out to give assistance in the event of an attack. If the idea was approved a plan and the calculation of the cost were to be drawn up later.

Little was done to the fort as a result of the survey in spite of repeated requests for assistance, and nine years later the new fort was begun.

CARISBROOKE CASTLE (ff. 61^v–63^r)

The castle's main function was to act as the arsenal for the Isle of Wight, and this is borne out by the amount of weaponry housed there in 1623. There were four brass guns, cannon, demi-cannon, culverin and demi-culverin, and four iron demi-culverins, and ladles for demi-cannon (4), culverin (4), demi-culverin (6), saker (10) and minion (10), as well as spare ladle staves (30). Sponges amounted to 39. The iron shot was divided amongst demi-cannon (389), culverin (327), demi-culverin (20), saker (410), minion (260) and robinet (770), with crossbarred shot for demi-cannon (54), culverin (66) and demi-culverin (83). A small amount of stone shot existed for cannon perier (3), port-piece (4) and fowler (8).

The other munitions in Carisbrooke were powder (200 lb), match (6 cwt), muskets (363), bandoleers (363), moulds (8 doz), rests for muskets (200), caliver shot (100 lb), lead for shot (3 sows of 400 lb), long pikes (312), black bills (8), cressets (47), pickaxes (6), staved wadhooks (2), heads and rammers (17 pairs), horn flasks for powder (16), copper plate for ladles (16 pieces at 2 cwt. each), rope (2 coils), gin rope (2), curriers (60), crowbars (2) and pitch (6 barrels). A wadhook was an implement for removing a wad or charge from a gun, whilst a currier was a type of musket. In the armoury were halberds (47), light horsemen's staves (80), corslets (190), black morions or helmets (300) and long pikes (270).

The unserviceable munitions were powder (1 last), calivers (333), flasks for the calivers (587), touchboxes, also for the calivers (473), shovels

and spades (289), small pulleys (13) and wheels for demi-culverins (2 pairs).

There was no garrison given for the castle, and the repairs proposed only amounted to a cost of £40. Carisbrooke was said to be in 'reasonable good repaire', with minor works needed to the 'Stone rampiers', and there was a crack in a wall by the main gate along with 'severall other small defects'. It is uncertain whether the 'Stone rampiers' refer to the older parts of the castle, which is the more likely, or to the artillery works carried out late in the reign of Elizabeth I. The final paragraph stated that the castle acted as the main magazine for the island's forts, being well positioned for this role. The commissioners suggested that various extra munitions should be sent according to what the Privy Council deemed expedient.

YARMOUTH CASTLE (ff. 63^v–65)

Yarmouth, like Sandown, was built towards the end of the reign of Henry VIII, probably under construction in the year of his death, 1547, but it was not considered finished in 1559 when it only had a garrison of one (Kenyon 1979, 68). The fort is square with an angle bastion projecting from the south-east corner, and the northern half was converted into a solid platform following the 1559 proposals. Rigold (1978) gives a history and description of the site, an important fort because it has the earliest surviving angle bastion in this country.

Yarmouth was poorly armed, with only a brass and four iron demi-culverins; there were ladles for the guns as well as one for a saker. Round shot was divided amongst demi-cannon (15), culverins (5), demi-culverins (15), sakers (93) and a minion (16), with crossbarred shot for culverin (2) and demi-culverin (11). Thus the fort was only capable of firing a total of 26 rounds as most of the shot was for the iron saker which was listed as unserviceable. Presumably at some time Yarmouth had cannon to match the other shot. The remaining stores were comprised of muskets (6), bandoleers (6), moulds (4) and halberds (6). There was therefore no supply of powder and match. Various field carriages were broken, and the garrison

consisted of John Burley, the captain, with four men.

£18 4s was to be spent on the rebuilding of the parapet of the middle tower, being a total of 13 rods in length and 3½ ft high. There was also to be a covering of earth, but whether this meant on top of the tower or platform itself or the parapet so as to absorb the enemy shot is not clear. The length of the parapet given must mean that the middle tower was the platform on the north side of the fort and not, as Rigold says (1978, 5), the fort as a whole.

Lodgings were required for four gunners, and these were to be located within the south area of the fort where there were rooms already allocated for use as the captain's kitchen and as a store for munitions. The kitchen floor was considered a hazard as it was covered with straw making it 'verie daungerous by reason of Sparks of Fyre that fly from ye Ordenaunce'. The rooms, which were in a poor condition, were to be arched or vaulted to support a platform as well as housing the gunners. The function of the new battery or platform was to scour the river on one side and then it would defend 'and dischargeth at pleasure towards ye Landside and alsoe towardes ye Sea. Besydes, this height is a defence for the Gonners from ye Landsyde by reason of a Hill lying neare which doeth overtopp yt, soe that they are not able vpon such occation to shoote parralell vpon ye Battery, for otherwyse noe man were able to abyde, or doe service in that place'. In other words, enemy fire from neighbouring high ground would make it difficult and unsafe for the Yarmouth garrison to man the main platform ordnance. The height of the proposed battery would therefore provide some measure of protection.

One of the walls of a room proposed for the gunners was 'decayde and thrust out' due to earth dumped against it to make the fort more solid; this may have been done soon after 1559. The wall had to be repaired therefore. A sluice for controlling the water in and out of the moat also required attention. A wall was to enclose the gunners' rooms, and positions for artillery were to be constructed on the new battery as well as enclosing it with a parapet. The cost for these works was estimated at £258 8s.

The top of the angle bastion was roofed to protect a magazine, a rather dangerous and vulnerable position for one, and it also detracted from the bastion's function as an artillery platform. A new storehouse to be built in a more convenient place would house the powder 'and the Bullwarke to be restored vnto its due forme and vse'. The cost of joists and lead together with the expense of taking down the 'powder house' amounted to £9.

The moat was overgrown and largely filled up due to it having become a dump for rubbish. It was recommended that where necessary the counterscarp would be made up of brick or earth, the latter costing less. A firing step for musketeers was to be constructed at the same time behind the counterscarp, and the moat deepened by 5 ft, all at a cost of £38.

The final paragraph mentions a traverse at the seaward end of the moat, together with a sea wall 16 ft long; the repairs to these two items together with work on the bridge and the construction of a square palisade before it were costed at £35, making the total amount to be spent on Yarmouth £358 12s.

In spite of these suggestions and further comments in 1625 and 1629 (Rigold 1978, 5) no immediate work was carried out at the fort. In 1632 however, the gunners' lodgings were at last built along with other works including the Long Room over the lodgings rather than the battery proposed in 1623. It may well be no coincidence that the improvements made at Yarmouth in 1632 were undertaken in the same year as the new fort at Sandown was begun, because from the weathered appearance of some of the 1632 internal masonry material may have been taken from the old Sandown fort now made redundant (Rigold 1978, 6). A virtually free source of masonry was too good an opportunity to miss, and this may have stimulated action over the Yarmouth proposals. Surprisingly the outworks said to have been built in 1597–8 (Rigold 1978, 5) are not mentioned.

WORSLEY'S TOWER (f. 66r)

This was a simple octagonal structure on the north-west side of the island, probably in the

area where Fort Albert now stands. It was built some time before 1538 by Sir James Worsley, captain of the Isle of Wight. Some alterations may have been made to it at a later date due to criticisms levelled at it in 1539 (Kenyon 1979, 71). In 1623 it only had two iron demi-culverins 'serviceable but dismounted'. The comments of the commissioners were brief.

'This Tower is vtterlie abandoned by the force of the Sea. It hath belonging vnto yt ye lyke pay of Cowes Castle within this Isle of Wight, vizt: xxxix^{li} xs. xd. *per annum*.

This Tower is decayed split and Torne, and wholly ruyned, which to be taken downe and put to better use wil cost 3^{li}.

No garrison is mentioned other than the implication that it was down for having a captain and four men.

CAREY'S SCONCE (f. 66v)

Carey's Mount or Sconce was built to the west of Yarmouth in 1587 (Worsley 1781, xlv-xlvi) to replace the Henrician blockhouse known as Sharpnode, possibly near the present Fort Victoria. It was constructed of earth, turf and timber, and took its name from Sir George Carey, the captain of the island at that time. The commissioners reported that

'This is nothinge but a bare Modell of an old Ruynated Sconce which hath been many yeares vtterly abandoned. But this Plott of Ground was well chosen for defence of the river, and Assistance of ye fort of Yarmouth And Hurst Castle on ye other syde. The water along ye shore is of ye moste deph, so ye shipping are forced to come close by it. It is now wholly decayd, yf it be found fitt to be repayred a Plott with estimation of the charge must be drawne to that purpose

It was suggested that materials from the demolition of Worsley's Tower might be used in the construction of a new fort in this position.

HURST CASTLE (ff. 67-69)

The fort, built in 1539-44, consisted of a central keep surrounded by three rounded bastions, two of which are now defaced by later

artillery works. It was always well armed, and contained in 1623 brass guns (16) and iron demi-culverins (8). The types of brass ordnance were basilisk (1), cannon (1), demi-cannon (1), culverin (2), demi-culverin (4), saker (4), minion (1) and falconet (2). All the guns had gunpowder ladles of varying quantities. There was crossbarred shot for demi-cannon (10), culverin (1) and demi-culverin (21), and round shot for cannon (64), demi-cannon (118), culverin (233), demi-culverin (13) and falconet (152), thus reflecting the importance of this fort in the defence of the Solent.

The various munitions in store were powder (8 cwt), match (3 cwt), long pikes (23), black bills (48), muskets (10), a chest for muskets, lead for shot (1 cwt), lead shot (1½ cwt), pick-axes (4), heads and rammers (50 pairs), copper plate (3 pieces of 20 lb), axle-trees (4), gins (2), gin rope (1), unstaved cressets (2). The unserviceable stores were made up of field carriages (4), iron sakers (2), wheels (5 pairs), round shot for the basilisk too large to fit the gun (100), unpolished stone shot (83), a ladle, bows (12), arrows (100 sheaves), long pikes (32), calivers (8), muskets (12), sheepskins (4), shovels and spades (4) and a flag. In 1628 a new flag along with wheels and field carriages were ordered to the fort (*APC 1628-29*, 17).

The fort was well manned, at least on paper, and captained by Edward, Lord Gorges. Besides a lieutenant, master gunner and porter twenty-two others were on the pay list, the annual wages bill coming to £234 4s 2d besides Lord Gorges 'entertainment' which was not given.

Hurst was considered 'very conveniently scituated and is to ye Forraine shipping esteemed aboue ye other Castles ye greatest Terror'. The lead on the keep was in good condition but needed to be covered with boards to prevent any deterioration. Some of the stonework in the parapet and about the main building was in a poor condition. An unfinished platform is mentioned as having been abandoned by Nicholas Gibbon who was the master carpenter at Portsmouth as well as the master gunner at Hurst. The walls of the south and north bastions had to be coped with freestone to prevent the rain soaking in, and the porch by the

steps into the keep needed covering with lead. A portcullis along with a pump in the cellar were also suggested. These works together with minor repairs were costed at £101 15s 8d.

The 'greatest defect' of the fort was the moat which had been allowed to silt up, thus endangering the defences. The moat had to be recut to a depth of 5 ft, the soil being used to form the counterscarp bank which would also act as a barrier against the sea, behind which there was to be a foot bank or firing step for musketeers. The counterscarp was to be 'wrought sloping downwards towards ye outesyde' thus forming a glacis, and the outer face to be secured against undermining by the sea with timber and 'Bavins' or fascines. A sluice cut into a trench was also required to control the water into the moat as the three that used to operate were 'decayd and overwhelmed'. The cost for these proposals was £276.

A final comment was that 'The Leiutenaunt and Mr Gonner of this place are reported by

them (whome we found there) to be for ye most part absent, not cominge scarce one in halfe a yeare'.

Robert Keys, the lieutenant, may have been dismissed or transferred later as a result of this, for in 1629 a Captain Barnes was lieutenant of Hurst and he also was in some kind of trouble with the authorities (*APC 1629-30*, 89, 91, 98, 106).

The ordnance in the forts in 1623 was all of the culverin class; the iron breechloaders such as slings and bases so often to be found in defences during the Tudor period were no longer used. The survey also confirms that the Isle of Wight defences were certainly the poor relation as far as the Solent forts were concerned, an impression which is also to be gained from the 1559 survey (Kenyon 1979).

Acknowledgements

I am indebted to the British Library for making this study possible.

REFERENCES

Abbreviations (see also p4)

APC Acts of the Privy Council of England NS, HMSO London, 1890-1964.

Source from BL

Harley 1326, survey of the south coast fortifications in 1623.

Other References

Jones, J. D 1968 The building of a fort at Sandown, IOW, 1632-1636, *Proc IOW, Nat Hist Arch Soc* **6.3** 166-88.

Kenyon, J R 1978 St Andrew's Castle, Hampshire, in 1623, *Fort* **6** 24-5. (A photocopy of this is in

the Cope Collection, Southampton U Library).

----- 1979 An aspect of the 1559 survey of the IOW: The State of all the Quenes Maties Fortresses and Castelles, *Post-Med Arch* **13** 61-77.

----- 1981 The defences of Southsea Castle and Portsmouth in 1623, *Proc* **37** 13-21.

Oppenheim, M (ed) 1913 *The Naval Tracts of Sir William Monson* **4**, Navy Records Soc **45**.

Rigold, S E 1978 *Yarmouth Castle, IOW*, 2nd edn, HMSO.

Worsley, R 1781 *The History of the IOW*, Hamilton.

Author: J R Kenyon, The Library, National Museum of Wales, Cardiff CF1 3NP.