

HIGH ANGLE FIRE

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Panoramic view of the Mark I HAF gun carriage emplacement. Photo by Hugh Corley.

Warning – this contains a lot about big guns and concrete.

A small part of my job with English Heritage is running occasional tours of Fort Cumberland in Portsmouth, the remarkable coastal fortification where our team is based. Up until 1974 it was occupied by the Royal Marines, and traces of their occupation and work remain everywhere around us. I've been here so long that I've absorbed some knowledge of the Fort, its history and development. Hence my role as a part-time guide.

We will shortly be running a tour for the Palmerston Forts Society, and in September we will be hosting Heritage Open Days, so in preparation for these events we thought we should add interest to the tours by clearing the long-abandoned High Angle Fire battery. This is a small battery located outside the main body of the Fort; the gun pits had become almost entirely engulfed by bramble growth, to the extent that nearly all of their details were hidden. This would be the first chance that we've ever had to see them

properly

exposed.



We know a lot about the battery thanks to the work of David Moore, an historian who runs the excellent Victorian Forts and Artillery website. He has uncovered the history of the battery, showing that it was built from 1890 to 1894, using older 9-inch rifled muzzle-loading guns (from the 1860s) on special high angle mountings. The theory was that shells fired from such guns could plunge onto the relatively lightly-armoured decks of attacking ships, which would have to anchor to bombard the Portsmouth Naval Dockyard effectively. A small number of trial carriages were built to test the idea, and two of these, the Mark I and Mark II, were then installed in the purpose-built concrete emplacements at Fort Cumberland. Only one of each carriage was ever made, so our emplacements are unique, and the differences in carriage designs is reflected in the differences between the two emplacements. An example of the Mark IV carriage, which was used in a small number of batteries, can be seen on the Victorian Forts and Artillery website.

Rapid advances in the design of naval ships and artillery during this period meant that the battery was obsolete by 1905, and disarmed by 1907.

Access to the battery was by means of a tunnel built under the counterscarp defences of the Fort. Built into the side of the tunnel were the magazines for powder and shells, and there was also storage space

for the larger pieces of cannon maintenance and cleaning equipment.



The eastern emplacement for the Mark 1 carriage retains one of the two derricks used to lift shells to the top of the emplacement, and rails for the trolley which was used to move the shells to the muzzle of the gun. The racer and pivot on which the gun sat had been removed as part of the construction of a later

building.



The western Mark II emplacement is simpler, as the shell-loading mechanism was built on to the carriage.



In the Mark II emplacement, the pivot and racer on which the gun sat survive, partially concealed by the floor and foundations of a later structure.



Common to both emplacements are recesses for storing the fuses used to fire the guns, and dial recesses, where information on direction, elevation and charge were displayed, having been transmitted by wire from a Fire Control point on the ramparts of the Fort. There was also a bunker-like telephone shelter built into the concrete wall between the emplacements, along with cartridge recesses, where small

quantities of gunpowder could be safely stored close to the guns.



Behind the guns was a brick building with a reinforced concrete roof, marked on the drawings as the artillery group store. The building is derelict but survives reasonably well.



There is plenty of evidence for later activity on the site; at some point after the removal of the guns, structures have been built into both emplacements, and other buildings were added to what had become, by the 1970s, a works compound for the Property Services Agency which maintained government and military buildings in the Portsmouth area. This continued into the 1980s, after which the site of the battery was locked and abandoned, although it is now home to birds, lizards and a large family of foxes.

By clearing a very small proportion of the rampant vegetation we have shown that the remains of the battery are relatively well-preserved, and their significance is enhanced by the documentary information provided by David Moore. We were lucky to have David visit us yesterday when I was giving a tour of the battery to my colleagues based at the Fort, and he was able to answer all the difficult questions that would have stumped me.

I've enjoyed showing colleagues around the last day or so, and look forward to showing this battery to visitors on Heritage Open Days. We can ensure that it is included in the new condition survey that is due to be carried out later this year. In the meantime, back to the day job and the overdue book chapters that really aren't writing themselves.