

## Fort Manoel - survival through time

[Room 01 and Room 02]

In the 250 years of history that Fort Manoel silently witnessed, Malta changed from a rural country ruled by the Knights of Malta to a 21<sup>st</sup> century republic. The Fort largely retained, notwithstanding the changes that happened over time, its Baroque monumentality.

Fort Manoel is seen as the perfect example of the 18<sup>th</sup> century French fortifications in Malta with its star shaped plan and its indestructible rock cut fortification walls.



Figure 1. A 17<sup>th</sup> century plan of Valletta and Manoel Island

### After Valletta was built

When the fortifications of the city of Valletta were constructed, the Knights realized the necessity of building additional fortifications for support and defence. The Marsamxett side of Valletta had always been seen as weaker than the other side, but no effort had been made to fortify it. In **1570**, however, the Cathedral Chapter bought the island (today's Manoel Island) and later in **1643** the Order acquired 'Bishop's Island', also referred to as *Ghзира*, at the time, later becoming known as the *Isolotto* and eventually Manoel Island. The earliest plan to fortify the Northwest coast appears to have been first proposed in **1569**, but it was not before **1723** that work was actually commenced on a fort; this was to become Fort Manoel.

### 1723, construction of Fort Manoel

By the end of the seventeenth century, reports of military engineers presented to the 'Consiglio di Guerra' pointed out that the *Isolotto* could represent a threat to the security of Valletta. Several proposals were made to fortify the *Isolotto*, and the urgent need for such a Fort was further highlighted by military engineer Charles-François de Mondion in **1715**.



Figure 2. An 18<sup>th</sup> century plan of Fort Manoel (courtesy NLM)

The decision to fortify the *Isolotto* was finally made in **1723** and a ceremony organized on the 14<sup>th</sup> September, of the same year. During this period, Grandmaster Manoel De Vilhena sponsored the construction of a fort on the *Isolotto*, later called Fort Manoel. The Fort was designed to prevent an enemy from taking the high ground at the tip of the island and firing out Valletta. Hence, the Fort, is primarily designed for defence on its landward side, while its main entrance is on the seaward side allowing for communication with Valletta across the Harbour. It took **eleven years** to complete the construction of the Fort.



Figure 3. Gharghar battery overlooking Fort Manoel (courtesy of Ian Bouskill)

### 1798-1800, the blockade

When the French occupied Malta, Fort Manoel offered little resistance against the enemy. Just after 3 months the Maltese rebelled against the French and Fort Manoel together with all the fortifications of the harbours held the French blockade. For two years the Fort was under the fire range of the Gharghar battery manned by the Maltese armada. In **1800** the French surrendered and in **1814** Malta came officially under the British crown.

### Fort Manoel under the British Empire

During the early British period, Fort Manoel was run by the British Army. From **1813** to **1865**, the Fort was used occasionally as a place of quarantine due to its proximity to the Lazzaretto, the latter being located to the south side of the Island. While serving as a quarantine establishment, the Fort gave hospitality to two famous personages of English literature: Sir Walter Scott (**1831**) and Sir William M. Thackeray (**1844**). According to his correspondence, Scott found Fort Manoel “*spacious and splendid, but not comfortable*”.



Figure 4. a 19<sup>th</sup> century photo of Fort Manoel (courtesy of SL Cassar)

During the second half of the nineteenth century, the British felt more and more the need to adapt the Maltese Fortresses, including Fort Manoel, to the increasing use of the new heavy guns. These artillery modifications affected the four bastions, but the Fort remained largely unchanged, except on its seaward flanks. In **1923**, Fort Manoel and the whole area of Manoel Island were transferred from the War Department to the Admiralty.

### WWII till 2000

During the siege of Malta between **1940** and **1942**, damage by aerial bombing was extensive, and by the end of the war no fewer than 400 hits were recorded. These direct hits demolished mainly a large part of the curtain wall adjoining the two cavaliers and the chapel. After World War II, the Fort was still used as a naval establishment, and was known as H.M.S. Phoenicia, together with the Lazzaretto (the latter, being known as H.M.S. Talbot) until 1949. Thereafter, its functions were gradually reduced. On 23rd February 1965, the Fort was officially handed over to the Maltese Government; Fort Manoel was subsequently abandoned and fell into a state of neglect.

The restoration of Fort Manoel and its environs formed part of the detailed objectives set out in the Manoel Island and Tigne' Point Development Brief issued by the Government of Malta in **1990**, and was eventually part of the lease obligations given to the developers, MIDI plc.



Figure 5. a 20<sup>th</sup> century aerial photo of Fort Manoel



Figure 6. Recent view of the restored St Anthony's Chapel and the adjacent Barrack Blocks.

### 2000 to date

MIDI plc took possession of Fort Manoel in **2000** and works relating to the restoration of the Fort were initiated by the restoration team at aoM Partnership, the Lead Consultants for the project; these consisted in the formulation of a strategy for restoration, commencement of the ongoing historical research, the preparation of an 'emergency works' package in an effort to save as much as possible of the historic fabric, followed by compilation of specific restoration works packages for all the different structures within the Fort, as part of Phase 1 of the works. The latter included all the structures within the Fort's enceinte. Phase 2 shall eventually consist of the restoration of the inner bastions, the ditch and outerworks of the Fort.

## The structure of Fort Manoel

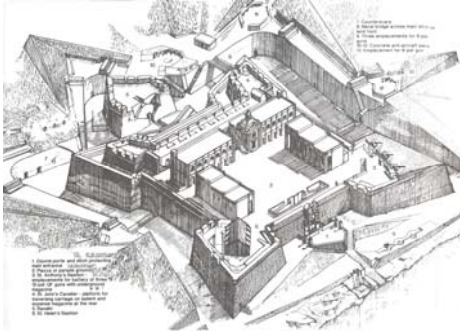


Figure 7. A sketch of Fort Manoel (courtesy of Stephen Spiteri)

### The plan of Fort Manoel

[Room 03]

The Fort used the system of bastions, curtains, and outerworks, and had a low profile which assured the widest use of crossfire that covered all the area around it. It was planned as a star-shaped Fort, which, although common elsewhere, especially in Europe (based on the models created by Vauban the creator of 17<sup>th</sup> century fortification system), was unique in Malta. This Fort is particularly significant because of its well-planned proportions and thoroughly thought-out interiors. Fort Manoel was designed in such a manner that it could defend itself by cannons and musketry fire, with each part designed to support another. It was built out of living rock, thus making it indestructible in its heyday.<sup>1</sup>

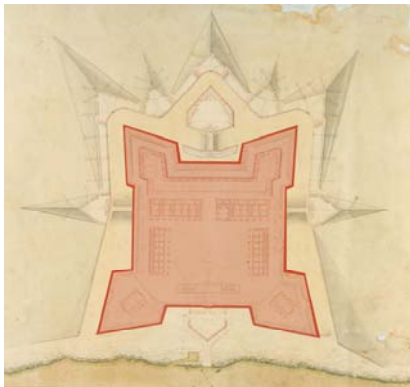


Figure 8. Plan indicating the enceinte

### The Enceinte (bastions & curtain walls)

[Room 03]

François de Mondion designed the plan of the Fort's immediate enceinte as square with four bastions, two facing the sea and two on the land front, the latter two being slightly less angular on plan than the former. The bastions are connected by curtain walls, with the seaward curtain wall (facing Valletta) accommodating the main gate and the other three for access to the Fort through 'sally-ports' (*concealed gates or underground passages connecting the fortress to the ditch*).

The design of the enceinte walls consisted of the conventional battlement profile found around most contemporary Maltese fortifications, which included an inclined wall topped by a vertical parapet, and divided by a cornice made up of a *golletta* and *cordona* (moulded stone elements in ramparts).



Figure 9. aerial photo indicating extents of the existing outerworks

### The Outerworks

[Room 03]

In the late 17<sup>th</sup> century the concept of 'defence in depth'<sup>2</sup> started to feature in fortress design; this involved the construction of various lines of advanced work to keep the enemy away from the main fortifications for as long as possible. By the 18<sup>th</sup> century the outerworks were essential. The outerworks had, four main functions, as follows:

1. To shield the main ramparts (*Ravelin* and *Tenaille*)
2. To obstruct the enemy (Ditch)
3. To facilitate the defenders' movement and enable counterattacks (Places-of-arms, Traverses, Covertway and Countermines).
4. To expose attackers (glacis and spurs).



Figure 10. Graphic reconstruction of the construction of a Parapet and Embrasure (Courtesy: Stephen Spiteri)

### Parapets

[Room 03]

The Parapet wall is the uppermost part of the bastion and it is the only reachable part of the bastion from the inner part of the Fort. The purpose of the parapet wall was to shelter the soldiers and cannons from enemy fire. It was typically 5 courses high (42cm each course), with the average parapet height being roughly an average person's height<sup>3</sup>. The parapet also served as a shock absorber for the cannon shots.

### Embrasures

[Room 03]

The embrasures are openings in the parapet wall, which allow cannons to fire through. In Fort Manoel the embrasures were built using interlocking blocks which date to the British period. Most of the embrasures of the harbour fortifications were rebuilt by the British<sup>4</sup>.



Figure 11. Typical Gun platforms of Fort Manoel

### Gun platforms

[Room 03]

The Gun platforms, as the name implies, were platforms from which the cannons were fired. The platform had to be specially designed to support the weight and forces generated by the cannons and their recoils, so the platforms were built using packed earthen material enclosed by a purposely built stone gabion and paved with hardstone<sup>5</sup>. In Fort Manoel some gun platforms were carved from bedrock and later they were paved with coralline limestone slabs.



Figure 12. A banquette in Fort Manoel

### Banquette

[Room 03]

The banquette was a firing step used by soldiers to fire the weapons over the parapet. The steps were built since the parapet wall was too high to reach, so by adding the banquette, the parapet became 3 courses high<sup>6</sup> and easier to fire from. The Firing step was built of either stone or earth, but more commonly carved out of bedrock as found in Fort Manoel. The banquette was usually reached by steps or a slope to the rear<sup>7</sup>.



Figure 13. The faussebraye

## Faussebraye

[Room 03]

The faussebraye was a narrow low lying embankment in front of the main fortifications. It was designed to keep the enemy at a distance and increase the fire range. The faussebraye went out of fashion in the early 18<sup>th</sup> century because it was prone to suffer from falling debris and splinters from the main rampart at the rear<sup>8</sup>. The one in Fort Manoel was the last one built in Malta.



Figure 14. 20<sup>th</sup> century view of the parade ground

## Parade ground

[Room 03]

The parade ground was built to define the surrounding buildings and reflected the baroque spatial composition of Fort Manoel<sup>9</sup>. The parade ground was used to perform routine military drills. The chapel and the barracks were centred on the parade ground.



Figure 15. View of the recently restored Main Gate elevation

## The Main Gate into Fort Manoel

[Room 04]

The original entrance to Fort Manoel was located on the seaward side, the Main Gate area, comprising of a number of different spaces and features as follows:

**The Couvre Porte** - Designed to be directly accessible from the seaward side, Fort Manoel was originally reached by a stairway that connects the foreshore to a platform above the small defence structure, called a demi-lune, or Couvre Porte, that protected the main gateway. Mondion's imposing gateway was the original entrance to Fort Manoel and consisted of a timber drawbridge spanning over a dry ditch, as is illustrated on a late 18<sup>th</sup>-century French plan. However, later in the mid 19<sup>th</sup> century the ditch was filled in, as can be seen in a contemporary photograph.

**The Gatehouse** - The interior of the gateway consists of a vaulted space which leads into a courtyard. Flanking this entrance space are two vaults, originally serving as guardrooms, and each having porticos overlooking the courtyard. These rooms were fitted with musketry loopholes guarding the Couvre Porte. Beyond the guardhouse was a courtyard that was originally smaller and accommodated a fountain. On either side of the courtyard is a staircase leading up to the Parade Ground of the Fort.

Documentary sources, consisting primarily of architectural drawings and photographs, show that

like the rest of Fort Manoel, much of the Main Gate area was largely unchanged from the Knights' period up to the mid 19th century.

By 1860 a structure was built inside the courtyard, possibly replacing the original fountain. Over the next couple of decades, modifications to the two vaults were carried out and included the widening of three of the four loop-holes over the *Couvre Porte*. The damage sustained by the Main Gate during the war appears to have been rather limited, however, in post-war years the former guardroom was replaced by a two storey building by excavating the lower floor, which, unlike its predecessor, abutted directly onto the courtyard wall.

A bust of Grand Master Vilhena was once mounted on the gate. This was removed by the government for safe-keeping in the late 1960s. It is presently found at the Manoel Theatre Museum.

### **Polverista**

[Room 05]



Figure 16. The Polverista

The Polverista was a store for gun powder, a very important component in military warfare. Fort Manoel originally included two Polveristas built on the seaward bastions. The Polverista that survives today is located on St. Helen's bastion. The Polverista also includes five counterforts on either of the longer sides to reinforce the building. Narrow openings, described as '*sfiatatori*', were required to allow air inside the magazine; the wall sections between the buttresses were supposedly opened by four such *vents*. One of the niches on the west facade contains a *slit* opening in its centre with convergent walls on each side, but this is apparently a recent addition recalling the former type. Alterations to these openings during the late 19<sup>th</sup> century resulted in the arched openings on the east facing facade. This can be concluded from 19<sup>th</sup> century plans. The Polverista is roofed over by a barrel vault. In order to prevent access to the magazine, a low wall with an entrance gate in the middle, starting at the intersection of the curtain and the bastion walls, was built. After World War II, according to British plans, the Polverista was initially used as a canteen. and thereafter as a church for both Roman Catholic and Church of England services. The Polverista was also scheduled for demolition but it did not occur for unknown reasons.



Figure 17. Barrack Block B

## The Barrack blocks

[Room 07]

The barrack blocks were built around the parade ground. They used to accommodate the soldiers in the side barracks, the Governor and high officials in the barracks facing Valletta. The chaplain also had a residence next to the chapel. The barracks of the soldiers were built to be bomb proof using double vaulted roofing and covered with *terreplein* (earth and stone packing). All the barracks feature a frontal arcade to create shade on the barracks and back-out buildings for the kitchen and toilets.



Figure 18. View of the Casemates

## The Casemates and Cavaliers

[Room 08a]

The casemates in Fort Manoel were built as a support to the main fortifications and to protect the barracks. The casemates consist of high masonry barrel vaults with a double vault type of construction forming chambers located next to each other. The area below the cavalier platforms and curtain wall was to serve as accommodation for more than 500 soldiers, in times of siege.

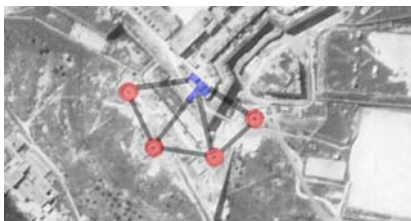


Figure 19. A photo indicating the HAA batteries and command post over St John's Bastion

## Heavy Anti-Aircraft Gun Positions

[Room 08a]

With an ever-increasing threat of war, the late 1930s saw a gradual boom in armaments development around Malta. The most extensive current interventions on Manoel Island was the construction of a Heavy Anti-Aircraft battery, which consisted of four gun positions each armed with a 3.7 inch gun, set around a command post, which was sited atop St. John's Cavalier in Fort Manoel. The four positions were located at equal distances on the outworks of the Fort. During the war Manoel Battery, manned largely by the 7<sup>th</sup> HAA Regiment (Royal Artillery) was to have a short but eventful operation. April 1942 saw the peak of bombing raids in Malta. Manoel H.A.A. Batteries were hit on the 22nd April and again on the 25<sup>th</sup> April 1942.<sup>10</sup>

## St Anthony's bastion

[Room 08a]



Figure 20. Aerial photo of the gun emplacements on St Anthony's Bastion

St Anthony's bastion is situated at the back of Fort Manoel and it was built mainly to guard its adjoining curtains, including the Main Gate. The design was very similar to St Helen's bastion, with a Vauban-style Polverista and a blast wall enclosing the bastion. At the tip of the bastion was a vedette. In the beginning of the 19<sup>th</sup> century the British formed a retired battery protecting the entrance to the Fort. Later, the polverista on St Anthony's bastion was demolished and a new emplacement built to take a 9-inch 12-ton RML gun, which was mounted in 1872. In 1903, three emplacements mounting 12-pdr QF guns supplied with an underground magazine and ammunition hoist replaced the single 9-inch gun on St-Anthony's bastion; this battery overlooked the entrance of Marsamxett harbour. Indeed, it was designed to deal with inter-harbour engagements against motor torpedo boats and other vessels that would have managed to slip inside the harbour to attack ships lying at the anchor.

## The chapel of St. Anthony of Padua

[Room 09]



Figure 21. The chapel prior restoration

The most prominent building in Fort Manoel is undoubtedly the chapel, dedicated to the Grand Master's namesake St Anthony of Padua, himself also of Portuguese origin. As with the rest of the fort itself, it is clear from the building's intricate design that Vilhena wanted to spare no expense. The Chapel was completed in 1727 and consecrated in June of the same year<sup>11</sup>. By special decree of Pope Benedict (1724-30) it was raised to the status of Parish Church<sup>12</sup> the following year. A chaplain took on the responsibility of celebrating Holy Mass and administering the Sacraments to the garrison. The priest was given the house adjacent with the Chapel (in Block D). It appears that the first person to be interred in the small crypt below the Chapel was Mondion himself who died on Christmas Day 1733. St Anthony's served the spiritual needs of those inhabiting Fort Manoel till the Knights left Malta in 1798. Its use during the brief French occupation and subsequent British period is unknown although it is recorded that at one point the chapel doubled as a school. Physically, the chapel remained largely unchanged until the spring of 1942, when for Malta the Second World War was at its peak. An intense raid on Fort Manoel resulted in the almost complete destruction of the Chapel after it received a direct hit.

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### *References*

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<sup>1</sup> Spiteri Stephen; *The Art of Fortress Building in Hospitaller Malta*; p 78-79

<sup>2</sup> Spiteri Stephen; *The Art of Fortress Building in Hospitaller Malta*; p 306

<sup>3</sup> Spiteri Stephen; *The Art of Fortress Building in Hospitaller Malta*; p 222

<sup>4</sup> Spiteri Stephen; *The Art of Fortress Building in Hospitaller Malta*; p 229

<sup>5</sup> Spiteri Stephen; *The Art of Fortress Building in Hospitaller Malta*; p 233

<sup>6</sup> Spiteri Stephen; *The Art of Fortress Building in Hospitaller Malta*; p 222

<sup>7</sup> Spiteri Stephen; *The Art of Fortress Building in Hospitaller Malta*; p 217

<sup>8</sup> Spiteri Stephen; *The Art of Fortress Building in Hospitaller Malta*; p 217

<sup>9</sup> Spiteri Stephen; *The Art of Fortress Building in Hospitaller Malta*; p 305

<sup>10</sup> Rollo, D. (1999), *The Guns and Gunners of Malta*. Malta: Mondial Publishers; p. 248

<sup>11</sup> Costantino, J. in Schembri, M., (2002) *Restoration of the Chapel of St. Anthony of Padua, Fort Manoel*.

Unpublished B.E.&A. (Hons.) dissertation, Faculty of Architecture and Civil Engineering, University of Malta, p. 15

<sup>12</sup> Cooper, N. T. P., (1952). *The Story of Manoel Island*. Malta, pp. 18