

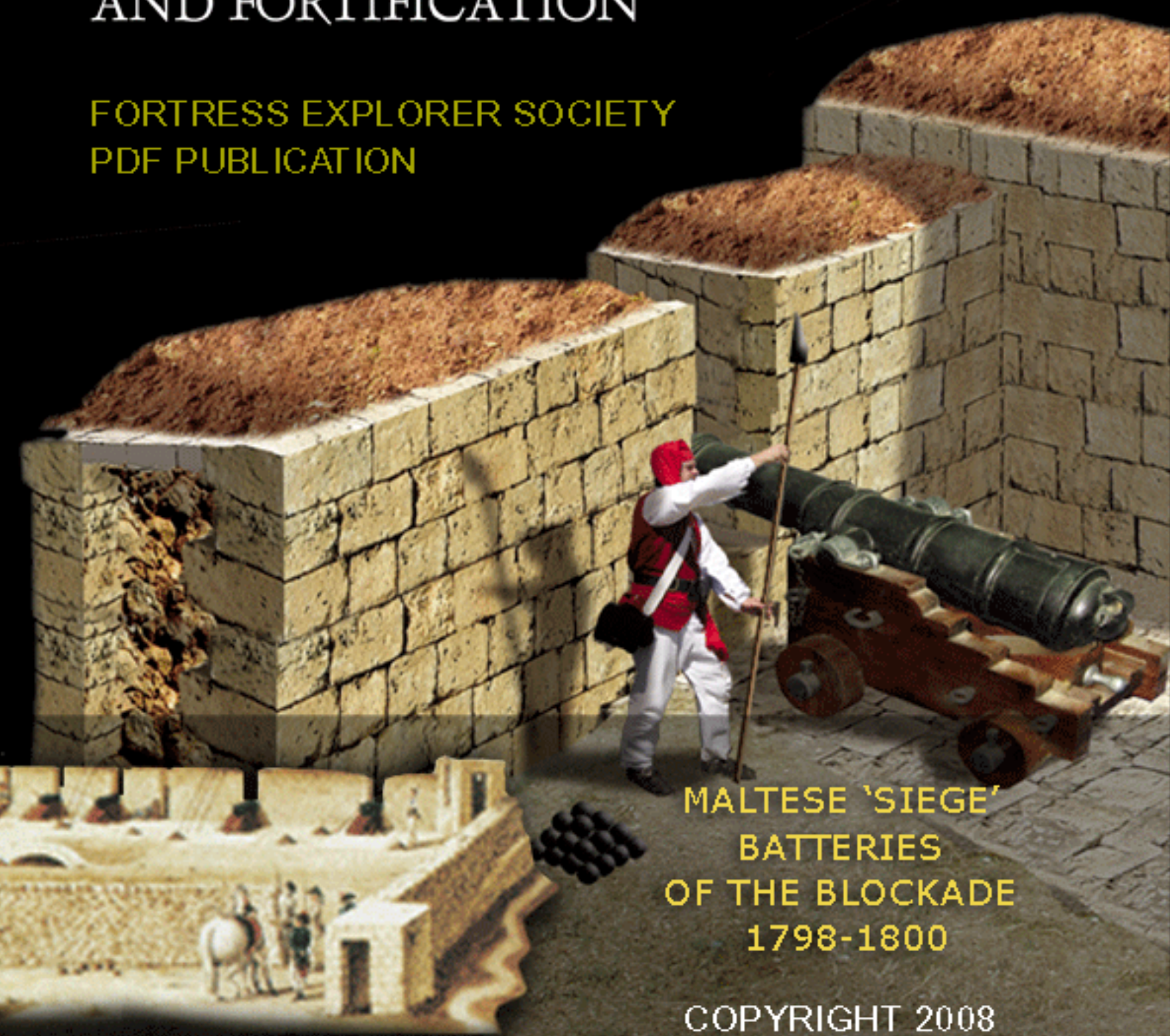
# ARX



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ONLINE JOURNAL OF  
MILITARY ARCHITECTURE  
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MALTESE 'SIEGE'  
BATTERIES  
OF THE BLOCKADE  
1798-1800

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# LES FORTIFICATIONS ET LE PATRIMOINE MILITAIRE IMMATERIAL

by

*Philippe de la Hausse de la  
Louvière*

La république de Maurice est l'un de ces rares pays dans le monde ne possédant pas d'armée, malgré une histoire mouvementée marquée par les conflits militaires. Sa position stratégique justifiait sa fortification dès le 17<sup>e</sup> siècle, lorsque les hollandais s'y sont installés, suivis des colons français puis anglais. A l'époque, les batailles faisaient rage, les bateaux étaient arraisonnés, et les commerçants ainsi que les forts étaient puissamment armés. Beaucoup de mauriciens ignorent cet héritage, malgré les nombreux forts inscrits au patrimoine national et le fait que 35% de nos monuments nationaux ont des affiliations militaires. Cependant, les récents débats sur l'esclavage et le marronnage ont suscité l'intérêt de la population pour la résistance armée et le patrimoine militaire. L'exploration sous marine de deux épaves a dévoilé la portée de ces conflits sur la mixité culturelle et la société actuelle. Les épaves comprennent un vaisseau coulé lors de la seule bataille gagnée par les forces navales de Napoléon face aux anglais, en 1810. L'autre

vaisseau est l'un des rares fragments connus de navire ayant servi au commerce des esclaves, et représente donc un précieux témoignage.

Les conflits franco-britanniques du 19<sup>e</sup> siècle et l'esclavage sont deux périodes charnières qui ont déterminé la forme et la structure de la société moderne – une démocratie créole dont 50% de la population descend d'ancêtres esclaves. Ces vestiges ainsi que d'autres rappellent les origines de la mixité culturelle de Maurice aujourd'hui.

Habité depuis quatre siècles seulement, la population de Maurice est originaire de trois continents européens et asiatiques venus en colons, et esclaves natifs de Madagascar et du continent africain. Le fait que Maurice ait signé les trois conventions de l'UNESCO concernant la protection du patrimoine culturel témoigne de sa diversité culturelle. Comment protéger et conserver le patrimoine militaire d'un pays démilitarisé qui prône les valeurs d'une société non-militaire ? Et pourquoi voudrait-on protéger et valoriser un tel héritage ? Je pense que ces deux questions trouvent réponse dans l'interdépendance du matériel et de l'immatériel. Maurice est devenue ce qu'elle est aujourd'hui à cause de son passé militaire, et de l'évolution géopolitique des 400 dernières années. De plus, alors que

Maurice épouse une zone de paix dans l'océan indien, il est significatif de noter que la plus grande base militaire américaine en dehors du territoire des Etats-Unis se trouve à Diégo Garcia, territoire revendiqué par les Mauriciens. La protection et l'étude de notre héritage militaire ne peut qu'être bénéfique aux mauriciens du 21<sup>e</sup> siècle, car elle permet d'apprécier les avantages d'une société de paix, et de comprendre le rôle que les rivalités passées ont joué dans la détermination des valeurs contemporaines.

Une aile entière de notre musée national est dédiée à la bataille de Grand Port, plusieurs ONGs et structures gouvernementales ont entamé des projets de restauration sur d'importantes fortifications, et le Ministère du tourisme s'est récemment embarqué dans un vaste projet de restauration de la citadelle, dans la capitale. Plusieurs ONG's ont demandé les autorités d'enregistrer l'Ile de la Passe, un îlot fortifié, sur la liste indicative du patrimoine de l'humanité, mais jusqu'ici elles n'ont pas réagi. Il faut maintenant prêter attention aux valeurs immatérielles de ces sites, à la vie des hommes et des femmes qui y ont vécu, le rôle qu'ils ont joué dans la construction de la société contemporaine, ainsi de suite... Il nous faut intégrer la sauvegarde des sites fortifiés dans la conscience des communautés, afin que matériel et immatériel se complètent et se soutiennent mutuellement.



# MALTESE 'SIEGE' BATTERIES OF THE BLOCKADE 1798-1800

by  
*Dr. Stephen C . Spiteri*

The French capture of the Maltese islands in the summer of 1798 was no accidental affair. This small but strategically sited archipelago, built into a formidable bulwark over the course of 268 years by the Order of Hospitaller knights, had become an important and heavily fortified base that no naval super power vying for the control of the Mediterranean Sea in the late eighteenth century could afford to ignore. Napoleon had set his eyes on the Island as early as September 1797, realizing both its strategic importance and the need to prevent the British from acquiring the place: 'Why should we not seize the island of Malta?' he wrote to the Minister of War a year before the Army of the East set out on its incredible mission to conquer Egypt in an imaginative strategic attempt to cut off Britain's lifeline to India by seizing Egypt and the Levant; 'our squadron ... could take some troops and, whilst passing by, land a garrison of 2000 men at Malta, an island which will sooner or later belong to Britain if we have the stupidity of not forestalling them. May you [*the Executive Directory*]

take a resolution which will authorise me to cultivate the means of information which I have already on Malta and at the moment which I will consider opportune seize the place and put a garrison therein'.(1)

In April of the following year the Executive Directory instructed Napoleon to seize the island of Malta, but only if this could be accomplished without compromising the success of the Orient expedition. Yet the fall of Malta was inevitable. At the end of the 18th century, the Order of St. John, impoverished and anachronistic, and ruling over an alienated population, had reached its lowest ebb. Napoleon's troops, aided by a strong fifth columnist party involving many of the senior Hospitaller knights themselves, seized the islands with hardly a shot being fired, in the words of Dr. Alfred Sant, in 'a gallant, almost chivalric manner ... almost without any blood letting, allowing the Grand



Master and the Knights to leave Malta with full military honours'.(2)

*Above, and below, Napoleon Bonaparte and his invasion of Malta.*





*Drawings of French, Maltese, and British troops involved in the Blockade (Courtesy of Mr. Denis A. Darmanin).*

The inhabitants' initial reception of the Republican occupation, however, was rapidly replaced by a disillusionment which, in the space of a mere three months, erupted into open rebellion. Most historians blame the high-handed manner in which the French authorities went about introducing radical political and administrative changes and also, perhaps more importantly, in the manner with which they began to despoil the churches of their sacred religious treasures and icons to pay their garrison. The Maltese response was quick and savage and caught the French off their guard. Vaubois and his French garrison reacted by barricading themselves inside the safety of the formidable harbour fortifications. Their half-hearted sorties against the insurgents' encirclement were bravely repulsed by the inhabitants, who despite being unprepared and very poorly armed quickly managed to organize an

effective resistance. In this manner, the struggle quickly evolved into a stalemate with the Maltese in control of the countryside and the French firmly in command of the fortified harbour areas.

The French, on their part, were content to simply hold out until the arrival of reinforcements but the Maltese were desperate and quickly sought foreign assistance. A number of delegates were dispatched to Sicily to implore the help of the King of the Two Sicilies. Somewhere off the coast of Sicily, they were intercepted by the British fleet then returning from its victory at the Battle of the Nile under the command of Lord Nelson. On boarding the vanguard, the Maltese delegates explained to Nelson that their compatriots had risen against the French and were intending to entreat King Ferdinand to provide them with arms and ammunition. They also implored Nelson, as an ally of His Majesty the King of

Two Sicilies to succour them by blockading the Grand Harbour. Nelson's battle weary fleet was then in no state to undertake a blockade and so he in turn requested the Portuguese, Britain's allies, to do so until the British fleet could return to relieve them later on.

Subsequently, Nelson, mistrusting the Portuguese, sent Captain Alexander Ball with some ships to assist the insurgents. The allied ships kept up a blockade of the French inside the harbour area. The French force, under the command of General Vaubois, consisted of 3053 men, well armed and well led. The Maltese, on the other hand, numbered around 10,000 men but were ill-equipped and unable to lay siege to the French positions. The arrival of British troops, although serving to alleviate the plight of the Maltese did little to break the deadlock, and the blockade was to continue for two years until the French were forced to surrender when their food supplies ran dry.

The story of this blockade and siege, and its historical, political, and military significance, has been already well studied and narrated by many other historians, chief amongst them Dr. Carmelo Testa. It is not the intention to repeat it here. What is less well studied and understood, however, is the nature of the fieldworks, camps, batteries and fortifications which the Maltese insurgents, on their own initiative, built to envelope the French positions in the harbour areas around Valletta. The importance of these fortification lies largely in the fact that these works were designed and built, unaided, by the Maltese themselves, relying as they did on their long experience and involvement in the Hospitallers' defensive efforts. This monograph seeks to draw attention to these truly 'Maltese' fortifications.



### **Order of Battle**

The French force, under the able command of General Vaubois and consisting of 3053 infantry and five companies of artillery, was well armed and well led. They were reputed to have corn for eighteen months and plenty of oil. The ring of massive and solidly built rock-hewn ramparts, stretching some 5 kms around Valletta and its two harbours, were practically impregnable and 'a prova di bomba'.

The Maltese insurgents on the other hand, numbered around 10,000 men, of whom only 2,358 were adequately armed. (3) They also deployed a number of cannon, taken mainly from the coastal batteries, towers, and entrenchments that had been built by the Hospitaller Knights for the defence of the island throughout the course of the seventeenth and eighteenth centuries. The Maltese leaders of the popular revolt, however, were mainly patriots and not soldiers. Although resourceful, they were inexperienced in the art of warfare, especially against a well-trained professional army that also had the advantage of occupying formidable strongholds. Their desperate situation was aggravated further by a serious scarcity of provisions, and by divided political loyalties within the various factions.

Fortunately for the Maltese, the French were soon to be cut off from any outside help trying to reach

*Top left, Marble bust of Vincenzo Borg 'Brared', on display at the small museum at St. Helen's Church, B'Kara. Left, Close-up view of the Cupola of St. Helen Church, B'Kara, on which were posted sentinels so as to keep a lookout for any movements of French troops during the duration of the blockade.*

*General Vaubois,  
Commander of the  
French garrison*



them by sea. Following Nelson's promise a combined picket force of British and Portuguese ships began to patrol the sea outside the mouth of the Grand Harbour.

As a result, there followed a two year blockade, which, for a handful of engagements, was relatively quiet as investments go. Indeed, for most of the time the two sides simply sat and faced each other, the French behind the safety of the strong harbour fortifications and the Maltese from behind their quickly prepared positions which enveloped the harbour defences within a large semi-circular contravallation.

### ***Maltese 'siege' fortifications***

The fortifications hastily erected by the Maltese insurgents were designed to keep the French garrison hemmed inside its fortified harbour enclave. Consequently, these fortifications were not really siege works in the true sense of the word. The primary Maltese preoccupation throughout the revolt revolved around the fear of a punitive French reprisal against the rural villages. The inhabitants knew that they had neither the men nor the resources to lay siege to the formidable and well-armed harbour



fortifications and so all their efforts were aimed at making a French excursion out of the harbour enclave as difficult as possible. Here, they ingeniously exploited the nature of the rural landscape surrounding the fortifications which, divided into innumerable stone-walled fields, provided a ready made system of entrenchments. All that the

inhabitants had to do was to link the fieldwalls together, plugging in country lanes, roads, and valleys, and in so doing create an extensive and continuous form of circumvallation. They then stiffened this with a number of camps, batteries, and sentry-posts placed at strategic intervals. This organic form of circumvallation, laid out in a

large crescent shaped line, spanned all the way from in front of Fort Tigné, to the west of the harbour entrance, right round to St. Rocco, opposite Fort Ricasoli on the other side of the anchorage - a perimeter of some 10 kms as the crow flies.

The insurgents' main camps were situated at Gharghar, San Giuseppe, Tas-Samra, Corradino, Tarxien, Zejtun and Zabbar, with secondary camps to the rear at San Anton Palace in Balzan, and Città Vecchia. (4) Each camp was responsible for a number of batteries either in the vicinity of the camp itself, or spread out in the neighbouring countryside. Thus, for example, Vincenzo Borg's men at Gharghar manned five such batteries, three large ones at

| Names of Posts     | No. of men |            |             | Pieces of Ordnance |           |           |          |           | 4-pdrs    |
|--------------------|------------|------------|-------------|--------------------|-----------|-----------|----------|-----------|-----------|
|                    | Sergeants  | Corporals  | Privates    | Mortars            | 32-pdrs   | 18-pdrs   | 12-pdrs  | 8-pdrs    |           |
| Gharghar or B'Kara | 25         | 23         | 290         | -                  | -         | 8         | -        | -         | -         |
| St Joseph          | 23         | 14         | 192         | -                  | -         | -         | -        | 1         | 2         |
| Tas-Samra          | 27         | 14         | 182         | -                  | 2         | 2         | 2        | 2         | 1         |
| Corradino          | 16         | 18         | 190         | -                  | -         | 1         | 1        | 1         | 2         |
| Ta' Borg (Tarxien) | 15         | 15         | 200         | 2x10"              | 2x1.68 Pd | 3         | 1        | 1         | -         |
| Zejtun             | 18         | 23         | 307         | -                  | -         | -         | 1        | 2         | 1         |
| Zabbar & St Roque  | 8          | 39         | 362         | 1x 13"             | 4         | 5         | 2        | 4         | 2         |
| Mdina              | 8          | 4          | 136         | -                  | -         | 1         | 2        | 6         | 5         |
| San Anton Palace   | 9          | 11         | 160         | -                  | -         | -         | -        | -         | -         |
| <b>Total</b>       | <b>149</b> | <b>170</b> | <b>2039</b> | <b>3</b>           | <b>8</b>  | <b>20</b> | <b>9</b> | <b>17</b> | <b>13</b> |

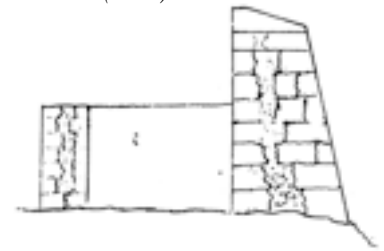
Ta' Ittwila, Imrabat, Ta' Ischini and Sqaq Cappara, and Ghemmuna, all overlooking Fort Manoel and Tigne', except for the last one. Other important batteries were located at Tas-Samra, facing Portes Des Bombes, Marsa (Jesuits Hill), Tarxien (Ta' Borg), Corradino (della Campana and del Palazzo), Zejtun and San. Rocco, facing the land front of Fort Ricasoli, and at Qala Lembi, opposite Fort Tigne'.

To date, most of the information regarding the insurgents' defensive positions came from the so-called Lindenthal map, first studied by Prof. Quentin Hughes and later published by Dr. Carmel Testa in his seminal work on the French in Malta. This paper now presents a new, hitherto unknown plan which reveals in much greater detail all of the Maltese 'siege' positions. Entitled 'General Plan of the Fortifications, City and Harbours of Malta with the Environs & the British Batteries established in the Late Blockade', it

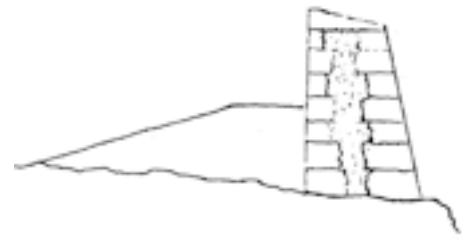
seems to have been drawn up from surveys carried out by Captain Gordon and the Royal Engineers with soundings taken by Mr. Reynolds, Master in the Navy. The plan was copied by 2nd. Asst. Draughtsman Thomas Decklam, under the direction of Captain S. T. Dickens, CRE on 15 July 1803 (hereafter this plan is referred to as the 'Gordon' map). Added to this cartographic information is the visual information provided by a number of contemporary drawings depicting a number of the batteries, mostly done by Antonio Grech which, despite their rather naive graphic style, provide valuable constructional details which otherwise would have been lost. All of these drawings, however, show the batteries from the rear and provide no information on the manner in which the faces of the batteries were revetted and strengthened against bombardment.

*Below, General layout of a typical parapet employed in a Maltese 'siege' battery.*

*Sectional elevations showing rampart and banquette construction at Ta' Falca Entrenchment (1732).*



*Profilo del Tro. ieram.<sup>to</sup> nelle Parti a. b. c. d. e. f.*



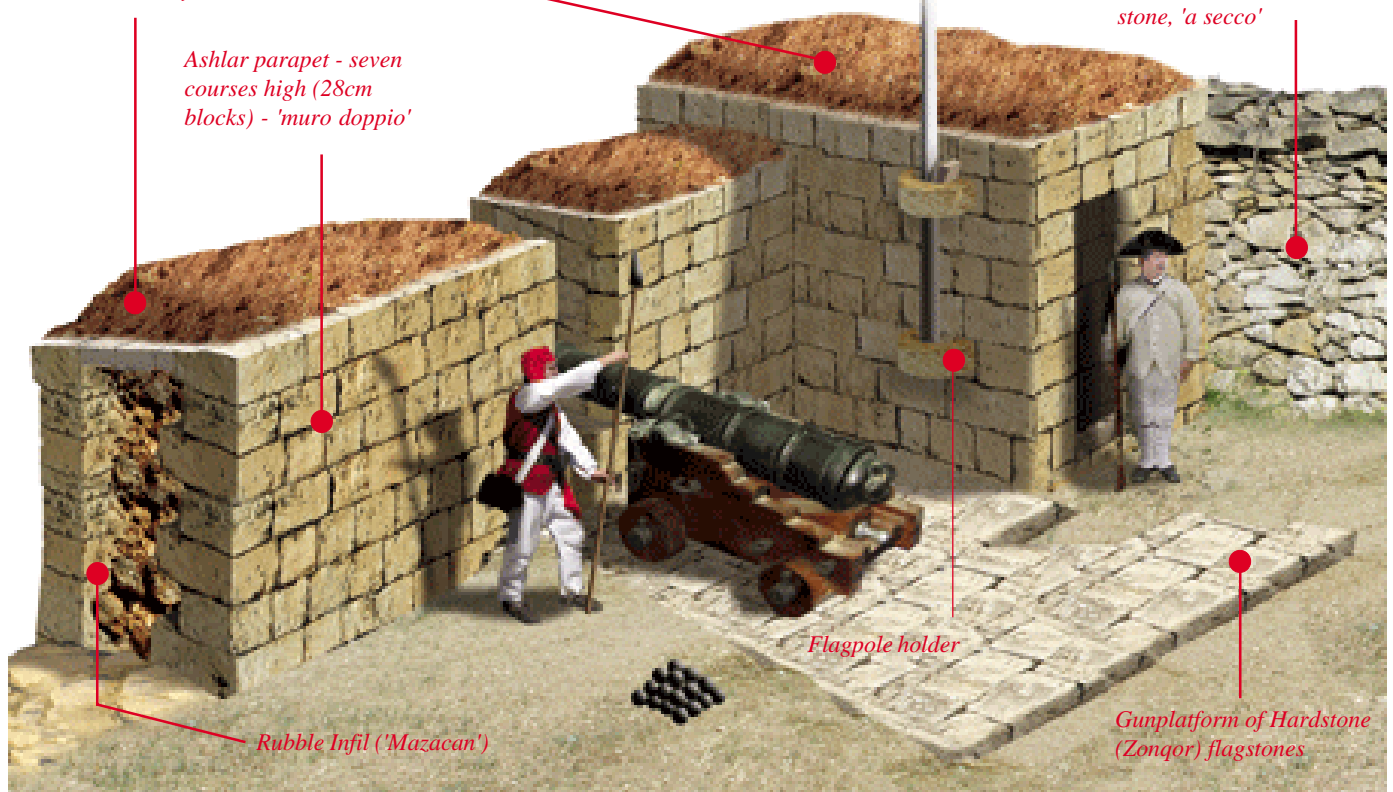
**Shape, form and construction**

The available information tends to show that the locally-contrived fortified works were, basically, a cross between the coastal entrenchments of the Hospitaller

*Thick layer of soil on superior slope of merlon and sentry-room*

*Ashlar parapet - seven courses high (28cm blocks) - 'muro doppio'*

*Flanking wall built of rubble stone, 'a secco'*

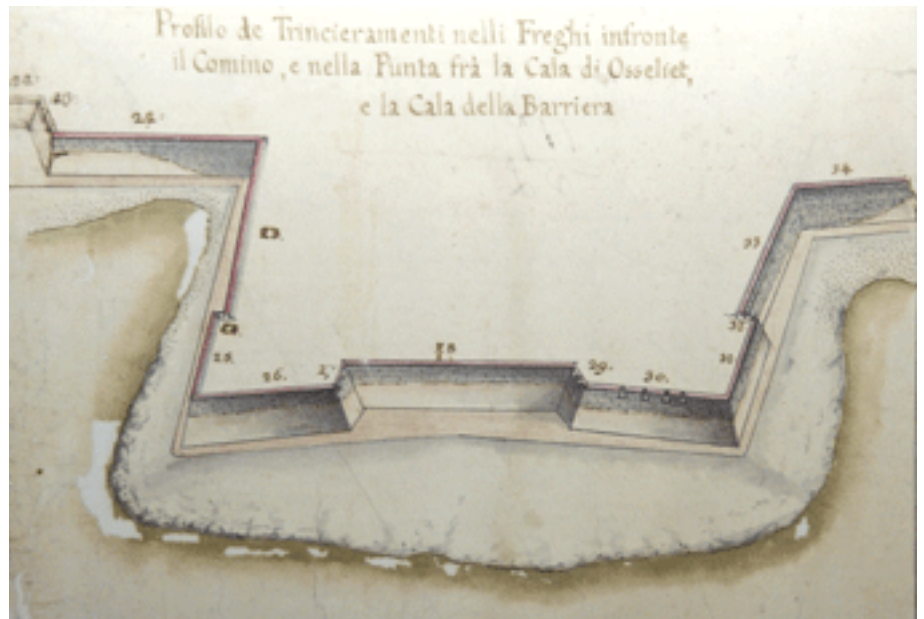


*Rubble Infil ('Mazacan')*

*Flagpole holder*

*Gunplatform of Hardstone (Zonqor) flagstones*





period, most of which were erected post-1761, and improvised 'opere soldatesche' in stone. A close study of the available information on the Maltese siege fortifications shows that these consisted of three main types: (a) large batteries of six to 9 guns placed behind masonry parapets, with flanking and rear walls surrounding a gun platform fitted, guncrew shelters, 'barracks' and sentry-post; (b) small outlying batteries and (c) long stretches of stone entrenchment walls for musketry fire.

The large batteries were in substance considerably more than just ephemeral fieldworks. A number of contemporary prints and sketches depict the batteries at Gharghar

(Ittwila), Tas-Samra, ta' Borg and Marsa, show the unmistakable influence of, and similarity to, the permanent type of bastioned entrenchments and coastal batteries built earlier in the century by the Knights at places such as Spinola, Armier, and Birzebbuga, with their thick parapets and merlons

*Hospitaller 18th century coastal entrenchments came in two basic types - the bastioned enceinte and the tenaille trace, examples of which are shown on this page. Top left, Ta' Falca; left, Benghisa Point; above, top, Armier. Most of the tenaille trace entrenchments were built in the 'pietra a secco' style as shown above at Benghisa Point (now demolished) and in the redan of the Naxxar Entrenchment, below, erected around 1722 by Charles Francois de Mondion.*





constructed of coursed ashlar masonry, v-shaped embrasures with narrow necks, and masonry platforms [both continuous and singular] for both cannon and mortars, possibly of Zonqor flagstones. It is not surprising that

*Dry and wet masonry rustication techniques employed in 18th century Hospitaller coastal entrenchments: Left, top to bottom, Bahar ic-Caghaq and Ta' Kassisu, Mellieha. Above, 'Pietra a secco' style at Xghajra and, below, smooth-faced coursed ashlar (Coralline Limestone) at Ta' Falca, l/o Mgarr.*



these works were modelled on the old coastal batteries and entrenchments built by the Knights (the last one of which was erected at Delimara Point in 1795) given that many of the *capomastri* and labourers involved in the construction of the siege batteries during the blockade would have had been continually employed in Hospitaller fortifications. The last massive programme of coastal work, begun in 1761, continued for a decade or two until funds ran out. Where the Maltese 'siege' works differed considerably from their Hospitaller fortifications, however, was largely in plan since the 'siege' batteries were basically elongated platforms facing directly onto the enemy positions, thereby lacking the bastioned or tenaille trace of the Hospitaller coastal defences. Most of the Maltese 'batteries' were open to the rear with practically no, or very little, provision for flanking defences, and these usually in the form of simple, traverse-like stone rubble walls, some of which seem to have been existing field walls or rural stone huts that were simply incorporated into the enclosures. Only one battery, that at Tarxien seems to have been enclosed to the rear with a large redan-style entrenchment (see gazetteer below). The most important and labour intensive part of these batteries was the main parapet, pierced with between four and six embrasures in the larger batteries. Contemporary watercolour paintings by Antonio Grech show the superior slopes of the batteries' parapets and merlons, together with the roofs and terraces of adjoining magazines, as being covered with a thick layer of reddish soil. This was a technique intended to provide added protection to the masonry structures in order to prevent the stone from splintering on being hit by enemy shot – a technique which was also recommended earlier during the



*Above, top, Embrasure opening in parapet of Wied Musa Battery showing rusticated nature of masonry and use of ashlar quoins. Below, Parapet and gun platform of Wied Musa Battery (1715-16). This is one of the best preserved platforms of its type. Above, Superior slope of Ta' Kassisu entrenchment showing soil-bound rubble fill.*

course of the eighteenth century by the Order's French military engineers in one of their reports on the parapets of the harbour fortifications. Judging from the scale of the drawings, this comprised a layer of soil some 30 cms thick spread out evenly on the superior slopes of the merlons and on the roofs of the adjoining sentry-post and buildings. It is not clear from the contemporary drawings if the superior slopes of the merlons were built with a pronounced slope or not, and if so, if these were covered in flagstones or lime-mortar in the established manner found in other Hospitaller fortifications. It is presumed that this was the case, although the haste with which the works materialized all over the Islands tends to argue against too many refinements. Most prints show battery parapets built of smooth faced dressed ashlars, seven courses high. Given that most of the stone blocks employed came from dismantled rural buildings (a fact that is well documented), this means that the battery parapets were around 1.96 m high (most contemporary buildings were erected with ashlar blocks of stone 0.28m high). A two meter high parapet, as also clearly shown by the contemporary prints, provided more than adequate full-length protection to the gun crews and any

soldiers sheltering within the fortified enclosures.

It is not known what type of foundations, if any, such heavy masonry parapets were built on. The painting of the Gharghar Battery, for example, seems to suggest that its parapet rested directly on an underlying rubble field wall and this may, indeed, have been the case for most of the other batteries given that most were located inside existing fields. This method would have given the battery fronts a higher elevation, making them difficult to escalate but would also have made them rather unstable in the long run, especially if subjected to continual bombardment. A sounder alternative would have been the exploitation of outcrops of Globigerina limestone where these could be found, or the side of surface-quarries which are also frequently encountered in the rural areas around the Grand Harbour.

Another important feature found in all the batteries, were the gun platforms. The contemporary drawings show that all embrasures and gun positions, including mortars, were equipped with hardstone flagstone platforms much in the same manner as can still be seen in many Hospitaller fortifications and batteries of the period. The drawings tend to show platforms of the individual wedge-shaped type, serving each embrasure as well as continuous gun platforms serving the whole battery. Although the former hastened the process of construction and cut down on the quantity of flagstones required, the lack of a continuous platform meant that guns could not be easily moved from one embrasure to the other if the need arose. The earthen nature of the ground inside such a battery enclosure (given that most were fields) would have necessitated good and well-laid hardstone platforms. Another important consideration in





such large fieldworks would have been the need for the drainage of rain water. Again, no information is available on this issue, but without any such provisions, many of these batteries would have been turned into a morass of mud in the rainy seasons, and possibly also suffered structural instability in the enclosing walls and parapets

A number of camps and batteries were provided with a large underground barrel-vaulted magazine, or casemate, 'magazeno sotteraneo coperto con troglio a' prova di bomba' capable of housing many soldiers.(5) The *capomastri* under the command of Vincenzo Borg 'Brared' built a five-gun position with an underground shelter within only a few days while another battery at Tal-Imrabat was fitted with two underground cellars capable of housing a hundred soldiers.

A feature common to most batteries seems to have been the small box-like sentry rooms which could also



*In the hands of Maltese insurgents, the rubble fieldwalls became veritable, and effective entrenchments, which, coupled with the narrow country lanes, provided perfect conditions for ambushes and good defensive positions against direct assault.*

have doubled up as a store for firearms and munitions. Most of the drawings show these placed on either side of the main parapets or along the rubble wall enclosures to the rear. Almost invariably, all are fitted with ring-like flagpole holders that could have been nothing more than re-utilized gate-post pivots found in most farm buildings. Vincenzo Borg is recorded to have built 25 such stone sentry rooms, many of which as freestanding posts along the surrounding country lanes and fields, in order to guard the line of circumvallation.

This line of circumvallation was an interesting element that exploited an important characteristic feature of the Maltese rural landscape - the ubiquitous rubble-stone field walls. The Maltese quickly linked these together by plugging in lanes and roads to create a continuous masonry obstacle, in the form of a veritable 'entrenchment' that was intended to surround the fortifications and prevent the French garrison from breaking out of its enclave to attack the insurgents in their camps and villages. Although, for most of its length, this wall of circumvallation consisted simply of existing fieldwalls, usually around 5 feet high, and built of rubble stone 'a secco' (dry stone walling) some parts were rebuilt by the insurgents to a greater thickness and even fitted with banquettes to serve as musketry parapets.

Vincenzo Borg erected 200 *canes* (around 400 ms) of 'muro della larghezza di palmi quattro con banchina dietro per la moschetteria nelle strade e posti avanzati all'inimico per impedire le sortite

*Right, Masonry pivot holes for wooden gates commonly found in Maltese farmhouses. Blocks such as these would have been easily re-utilized to serve as excellent flagpole holders.*



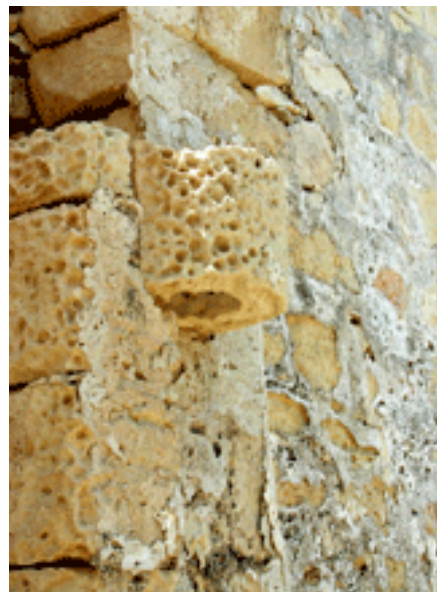
*Many rural buildings were dismantled by the Maltese for their masonry blocks and timber beams - the two most important building materials employed in the construction of the insurgents' fortified works.*

contro la campagna'. (6). In some places existing walls were dismantled, such as the fields and enclosures belonging to the Contessa Bologna, at the 'clausurata' Scibiesch' situated 'sotto il tiro del cannone' so as to assist 'il passaggio dei soldati'[Maltese] .(7)

General Graham was much impressed by these walls. In a letter to the Duke of York, dated 30 December 1799, he wrote that '...the whole country is highly cultivated and divided into very small fields by dry-stone walls, frequently very high, which the barefooted inhabitants get over with great agility and behind which they are excellent

tirailleurs. These walls everywhere go to the foot of the glacis, and around the Cottonera, which has none they run close to the works. Under their cover the Maltese frequently fire on the French sentries on the ramparts, showing great address in avoiding the return of musketry and grape-shot by shifting their places after firing; by those means they have made themselves very formidable to the French as marksmen. The enemy have no outposts nor do they show themselves outside their works.'

The defensive qualities of these field walls are best illustrated by the failed French counterattack of 12





insurgents from neighbouring positions began to congregate in the area and launched their own savage retaliatory attack.

Many buildings outside the established perimeter at times also served as 'advanced' posts. Casa Blacas, for example, abandoned after the summary murder of its owner, the Knight Vatanges, housed a company of soldiers from Tas-Samra camp, who were sent there to keep watch on San Giuseppe Road.

The work on all the fortified positions was usually done at night under the cover of darkness to prevent the French from firing on the insurgents as they thus employed. Many Maltese men, from all walks of life, gave a helping hand in their construction. John Camilleri, a priest, worked on the construction of Tal Borg Battery when not involved in the fighting. The men at



*Above, top, A remnant of the Blockade - an explosive iron shell now used as a counterweight in the belfry of St. Helen Church, B'Kara (Courtesy of B'Kara Parish Church). Above, and right, iron round shot fired from the Cottonera enceinte by French soldiers during the Blockade, embedded in the facade of a house in Triq Bajada, Zabbar.*

September 1799, when a company of French soldiers from Fort Manoel undertook a sudden sortie to silence a solitary gun position posted on Mensija Hill (San Gwann). The French advanced up the hill close to the position but were stopped in their tracks with a hot hail of musketry fire from behind adjoining fieldwalls and trees and were soon forced to beat a hasty retreat once other



Tas-Samra, for example, managed to pull down, under the cover of darkness, all the field walls opposite their position all the way up to vicinity of the Floriana outerworks, in order to deny the French any form of shelter in the event of an attack. They then encumbered with that same rubble and stones the main highway (Starda San Giuseppe) leading to Mdina and the



countryside, thereby effectively sealing all approaches from Floriana. As an added anti-personnel measure, they also threw broken glass into the streets and country lanes. In a letter to Lord Hamilton dated 18 May 1800, General Graham, states that the whole area around the harbour, for a distance of eight miles, was littered with obstructions and the enemy only had a few roads which they could use to make a sortie. The roads in front of Fort Tigne' and Fort Manoel, for example are described as being 'very narrow and in a bad condition' while all roads facing Cottonera and Fort Ricasoli had been 'broken up or blocked'.

The Lindenthal map shows a perimeter of around ten kilometres of such walls spread out in a roughly semicircular pattern around the harbour areas. This perimeter consisted roughly of two parts, the first, starting from near San Rocco Battery, went all the way round to Casal Nuovo (Rahal il-Gdid) after skirting the outskirts of Zabbar; the other, according to Mifsud, went from Corradino down to Marsa, Blata l-Bajda, Msida, Ta' Xbiex,

Gzira and ended near Qala Lembi opposite Fort Tigne'.

This was a vast perimeter by an standards and required an extensive network of sentry posts to keep continually under control and surveillance. One must also not forget that added to these 'siege' positions were a number of other posts located outside the harbour area which were intended to guard and defend vulnerable bays and coastal areas. Vincenzo Borg's men, for example, attacked and captured the tower at St. Julian's Bay and his men occupied and held the Qawra entrenchment and manned its artillery, which they used to good effect to repel an incursion by some French gunboats in September 1798. Vincenzo also built a large battery on the peninsula now known as Dragonara Point (Ghemmuna) to protect the entrances to St. Julian's and St. George's Bays. The Maltese also invested in St. Paul's Bay, which became their principal harbour for the duration of the blockade. To this end they made use of the existing Hospitaller towers and coastal batteries. Vincenzo Borg had three

*French sortie on the Corradino position, after Agostino Scolaro.*

large wooden beacons, enclosed in glass, built to alert vessels approaching Malta not to enter the Grand harbour. One of these was placed at St. Paul's Bay (possibly on top of a tower), another at St. Julians and the third at Casal Zabbar in front of the Cottonera Lines. The men of Zejtun manned the towers and batteries of Marsaxlokk and Marsascula, and those of Mdina, St. Paul's Bay.

### ***Construction Materials***

Owing to the acute sense of urgency, the majority of the Maltese insurgents' fortifications were built with whatever material was found readily available at hand. Much of the masonry, as a matter of fact, was cannibalized from houses and farmsteads in the rural areas, as in the case of the Lembi Battery, which was built with the stonework and earth taken from a *clausura* (field) at Sliema belonging to Salvatore Camilleri. In a later petition, Camilleri claimed these



View from Tas-Samra Hill showing the countryside and fields outside the glacis of the Floriana land front fortifications with the San Giuseppe Road in the foreground.

demolition works had caused him 2,260 *scudi* worth of damage to his property (8). The magazine of St. Rocco Battery was constructed with timber beams taken from ruined houses at Paola. (9).

It is very unlikely that any lime mortars were used to bond the masonry parapets and walls together, given the expense involved. In all probability, the infill of 'mazacan' forming the core of the parapets would have been bound together with a cheap soil mortar, a technique, as a matter of fact, also frequently employed by the Knights in many of the works of fortifications. The rubble-stone flanking walls and those shown enclosing the batteries from the rear, however, would have been built in the '*pietra a secco*' style as can still be encountered at the Naxxar (1722) and Ta' Falca (1732) entrenchments. As in these works, the insurgents' walls may have also employed large ashlar quoins for salients and corners.

A report in the Cathedral Archives at Mdina mentions that, in all, 920 *scudi* were paid for the construction of 392 metres of 'double' walls at the localities of Mrabat, Ta' Xini,

Sqaq Kappara, the camp and battery at Gharghar and at Ta' Ghemmuna.(9a)

Another important material was Zonqor, a durable hardstone laboriously quarried, which was used in Hospitaller fortifications to provide the guns with stable platforms on which these could recoil effortlessly. Zonqor slabs, too, would have been cannibalized from buildings and street pavings in the surrounding areas.

The military experience that native *capomastri* had acquired under the Hospitaller knights was also put to use in the arming of the batteries with guns removed from the old coastal batteries. The insurgents appear to have encountered considerable difficulty, however, in transporting heavy cannon over the uneven terrain, '*lavoro fatto con gran stento per trasportare cannoni dalla trincea di S. Paolo detta la Mistra e da altri luoghi difficilissimi per armare le batterie*', (10) and even constructed special carriages for the purpose. In all, the Maltese seem to have been able to arm their works with around seventy guns and a small number of mortars.

It is evident that the men who were responsible for building these works of fortification were well versed in military matters. The soldiers and *capomastri* who erected the defences did so using their knowledge and experience of such

matters acquired under the knights. Men like Michele Cachia, Vincenzo Chetcuti and nameless other *capomastri* serving with the insurgents in the capacity of engineers and builders were responsible for designing and building these works.(11)

Michele Cachia was one of the most distinguished Maltese architects of his time and during the Order's rule had also served as adjutant to the knight-commander of the village militia of Zejtun. He took an active leading role in the construction of Tal-Borg Battery at Paola, Kordin, and Zejtun and in other military works at Marsa and in the inner basin of the Grand harbour. In 1799,

General Graham wrote to his superiors informing them of the defensive redoubts that he himself had built near Torre de Grazia (Delle Grazie Tower), which work was constructed chiefly by the Maltese under the direction of Matteo Bonavia, 'a very zealous and intelligent inhabitant, bred in the line of an engineer.' Bonavia was appointed by the British expeditionary force, together with his son, to act as assistant engineer. Contemporary documents also mention Pietro and Saverio Xerri who served as engineers and were stationed at the San Giuseppe Camp. Salvatore Camilleri, from Valletta, stated that he had drawn up the 'modello' (plan?) of the 'Trincea della Marsa'. Apart from having suffered the loss of his field in Sliema, which was dismantled to provide building material for a battery, Salvatore also claimed that he had built at his own expense a casemate at Marsa Battery. He is also recorded as having produced two detailed scale models in wax of the fortifications of Valletta, Cospicua, Vittoriosa, and Senglea for the benefit of British officers.(12)



The Maltese were also assisted by foreign military engineers. In September 1798, the Portuguese Admiral Nizza ordered his engineering officer, Don Antonio Consalvo Saverio Pereira, to go ashore and advise the Maltese on the best siting and construction of their trenches. He was critical of the work at Tal-Borg when he found out that his instructions for the mounting of a howitzer were ignored.

At a later stage by both Italian and British military engineers came on the scene. One of these was Signor Alberto Diodat *ingegnere*, (13) a Neapolitan. Another was Captain Gordon, the first Royal Engineer officer to work in Malta. It is not known what works Diodat helped supervise, but Gordon is known to have set up a number of advanced positions under Ball's directions at Bighi. Gordon died in Malta on 30 November 1802. A small marble plaque dedicated to his memory was, until a while ago, to be found inside Fort Ricasoli.

Lt.-Col. Lindenthal, an Austrian, seems to have also functioned in such a capacity for in December 1799, Ball wrote to Lt.-General Henry Fox requesting that he retain Lindenthal's services in the absence of an engineer in order to construct advanced positions.

### ***Arming the Batteries***

In all, the Maltese seem to have been able to arm their works with some seventy guns and a small number of mortars and howitzers, most of which (save for the mortars) were collected from the many batteries and towers scattered around the Island's coastline. On 10 December 1798 Captain Ball informed Nelson that the Maltese had requested eight mortars and some battering cannon from the

British but were 'much disappointed at getting only two mortars and not any cannon.' Still, Grech's contemporary drawing of Tal-Borg Battery shows a British naval carronade mounted on a static mount. Some guns seem to have also been brought from Sicily, and at least one of these, 'El Pronto' fell into the sea at Marsaxlokk when it was being transferred from ship to shore, only to be recovered centuries later in the 1960s by Royal Navy divers and placed on display at the Palace Armoury in Valletta.

The Maltese appear to have had a surprisingly low amount of cannon, given the fact that in 1798, the coastal fortifications would have been armed with around 300 guns.(14) A French inventory of the artillery pieces deployed in the coastal defences of Gozo and Comino alone, for example, drawn up on 30 August 1798 (15), shows at least 61 guns, more than half of which were 8-pdrs and over. Allowing for the cannon which the insurgents would have retained for the defence of St. Paul's Bay, Marsaxlokk and other important anchorages, this still leaves a large number of cannon unaccounted for. Such a discrepancy may be explained by the fact that many of the guns could have been taken over by the French before the outbreak of the revolt. On the other hand, the insurgents appear to have encountered considerable difficulty in actually transporting the heavy guns to their batteries, 'lavoro fatto con gran stento per trasportare cannoni dalla trincea di S. Paolo detta la Mistra e da altri luoghi difficilissimi per armare le batterie,' (16), having had to construct special carriages for the purpose.(17)

The French, on the other hand, could count on 598 cannon, 49 mortars and 10 howitzers, 254,469 round shot, 7,606 grapeshot rounds, 6,753

bombs, 7,460 grenades, 1,143,939 musketry cartridges and 672,000 lbs of gunpowder.(18) It has also to be appreciated that their forces were in effect stretched out over twenty-five miles of fortification and, consequently, Vaubois could hardly afford to risk his three thousand men on counterattacks without weakening his position. Notwithstanding, the French did attempt two major sorties in 1799, in order to silence the batteries at Tas-Samra, Gharghar, and Corradino, but both were repulsed by the insurgents with heavy losses for the French. The Maltese themselves attempted a number of general assaults that gained nothing for the insurgents while a plot involving an insurrection inside Valletta was discovered and its leaders executed before a firing squad.

### ***British Field Works***

The arrival of two British regiments from Messina, the 30th and 89th British Regiments of Foot, in December 1799, under the command of General Graham called for the construction of other provisional works of fortification. Most of these men were dispatched to Ghaxaq and Zejtun while three companies of the 89th were stationed at Naxxar. (19)

The 30th Regiment was charged to occupy the advanced posts at Zejtun, Zabbar, and the battery at San Rocco. The 89th was stationed at Gudja and Luqa with advanced posts at Tarxien and the Maltese battery in front of it. The Marines were sent to San Giuseppe – northwest of Hamrun – and assigned the advanced post and battery at Samra. During the night the advanced posts communicated with one another by advanced sentries or patrols. In all these posts there were also a

considerable number of armed Maltese, who in the night occupied small houses in front of the line of communication, making frequent patrols. (20)

The general headquarters were initially established at San Anton Palace but were later transferred to Villa Muscat Dorell at Gudja, conveniently located behind the main British positions. Fort Rohan (i.e., St. Lucian's Tower and battery), inside Marsaxlokk Bay (on the southern part of the Island) was chosen as the main base for the unloading of supplies. By the end of 1799, the British forces had taken up their final positions outside the main fortifications. General Graham seems to have been very fearful of a French counterattack and was anxious to secure his rear with the construction of a number of redoubts; '...an entrenched post is established at Marsa Scirocco, and a fortnights provisions are already in store there. The next work to be undertaken immediately is a strong redoubt near the Torre de Grazia (Delle Grazie Tower) for the protection of the right, and which will secure a retreat from the battery of San Rocco towards Zejtun, though Zabbar should be lost.'

Since Graham's men were much employed in landing stores and munitions, the work was 'chiefly done by the Maltese under the direction of Bonavia, a very zealous and intelligent inhabitant, bred in the line of an engineer' whom Graham 'appointed', together with his son, 'to act as assistant engineers'.

'I flatter myself' wrote Graham to Lord Nelson, 'that Your Excellency will not think that I exceed the bounds of my instructions by incurring the expenses of these purely defensive works, without which I shall consider the small

force here exposed to too much risk, should the enemy determine to make a vigorous effort against us.' (21) His greatest fear was the unexpected arrival of a French relief force, in the event of which, British troops would have had to be evacuated. An emergency retreat and evacuation plan was, therefore, laid down. This involved the construction of a strong redoubt at l-Hofra, a hill halfway between the village of Zabbar and the coast. This was designed to shield the retreat of the troops from San Rocco Battery towards the village of Zabbar from where all the forces were to be pulled back hastily and concentrated in the village of Zejtun, a defensible maze of narrow streets and tight packed houses standing on a hill and surrounded by a rural terrain crisscrossed with rubble walls. (22) From Zejtun, the 30th and 89th were then to withdraw to the safety of the awaiting ships anchored beneath St. Lucian's Tower. In front of this tower the British built a continuous entrenchment spanning from Vendôme Redoubt towards Ferretti Battery, effectively sealing off the peninsula from the rest of the mainland. The position was further strengthened with the construction of a redoubt built on the high ground ahead of the entrenchment. (23) As things turned out, however, the plan was never put to use. French relief forces never reached the Island and Vaubois' troops never attempted to break out, not even to attempt to spike the guns of the Maltese batteries, some of which were astonishingly close to the French positions.

The first British works of fortification on Malta were a number of siege batteries built around the harbour area under the direction of Captain Ball. The first recorded was a work to take 10-inch mortars taken from HM Bomb Ship *Stromboli* and erected by a

small artillery detachment under the command of Lt. John Vivion in order to bombard the French vessels at anchor inside the Grand Harbour. (24) Other batteries were built and armed with the guns taken from Ball's ship, the *Alexander*. These batteries appear to have been built very close to the enemy lines because, Captain Gordon, the engineer officer, believed them to be untenable. (25)

Again in October 1799, Ball constructed what he considered to be an important battery on the Bighi peninsula even though his military engineers thought it untenable; 'I am sure it is irregular according to strict tactical rules to go there immediately, but I think if Your Lordship were to see it you would apt to deviate from the regular progression. (26) Once again in October of 1799, Captain Ball informed Nelson that he was 'busy in constructing batteries close to the enemy fortifications, which when completed will block up the port of La Valette, and make it very difficult for a ship to enter.' These works were 'attended with very heavy expences', because, as he goes on to explain 'we are upon a rock without soil, which we are obliged to bring from a great distance, and to send to Sicily for all our fascines.' Curiously, however, none of these works appear on any of the known plans, including those mentioned in this paper, and their exact positions remain unknown until revealed by further research. Judging by Ball's reference to 'fascines', it would appear that the British advanced batteries were more ephemeral in nature and made of gabions filled with earth.

### ***French surrender***

The investment made by the Anglo-Maltese forces in the field fortifications, coupled with naval

blockade of the harbour, proved effective in keeping the French tightly sealed within their harbour enclave. The few half-hearted French attempts to counterattack the insurgents' positions at Zabbar, Corradino, and Gharghar had failed. Trapped within their fortifications, the French garrison began to suffer greatly for want of food. The situation, however, was not much better for the Maltese and their allies, all of whom were similarly 'dying off fast for want' of food. (27) In 1800, it was still touch and go which of the two sides would survive. In February, some 1,200 Neapolitan troops arrived in Malta to be followed by more supplies. Meanwhile, the French were trying to run in a relief force. Their ships, however, were intercepted off Cape Passero by an English squadron and forced to strike their colours. Although this victory helped ease the worry of the high command, the British were still not confident of their ability to intercept further relief forces before they could reach the island. In July 1800, another 1,500 men under Major General Pigot arrived in Malta and General Vaubois, now convinced that there was no more hope of receiving any help and reinforcements, and with his stocks of food practically exhausted, finally capitulated to the British on 4 September 1800. The following day British soldiers entered the fortifications of Floriana, Tigne' and Ricasoli and hoisted the Union Jack over the harbour fortifications. To their great annoyance, the Maltese patriots were excluded from the arrangement and ratification of the terms of capitulation, because, according to general Pigot, for all their great exertions, perseverance and bravery, the Maltese could never have compelled the French to surrender without the help of British fleet and army.

With peace restored and the Islands secured in British possession, the 'siege' batteries and other fortifications no longer had any role to play in the defence of the island. Eventually they were all dismantled, their stonework reutilized in fieldwalls and other rural buildings. It is not known, however, exactly when these works were dismantled. It could well be that the majority were only dismantled after 1814, when Malta was made a British possession at the Treat of Paris in 1815.

Today there are no physical remains left whatsoever of the Maltese 'siege' positions. Most of the sites were heavily developed and urbanized and are totally unrecognisable. A few sites, such as Tas-Samra and Capuchin Convent still have features that were standing at the time, such as neighbouring buildings and churches, which stood in the immediate vicinity of the defensive works.

Given the limitations of the available information, it is difficult to draw any definite conclusions about the effectiveness of these works of fortification. It is true that they helped enforce the blockade, and therefore, were more or less successful in their intended role, despite their shortcomings but then again they were never attacked with any real determination by the French. Sited safely out of range, or at the extreme range, of the French batteries on the main fortifications (with the exception of Tas-Samra which was well within range of Floriana guns), (28) they did not suffer unduly from the effects of heavy counter-bombardment. General Graham believed that the puny Maltese batteries were more insulting to the French than annoying, since the latter's guns could respond to them by tenfold

fire. Writing of San Rocco Battery, for example, he thought it 'unfortunate' that this battery had opened up in the first place as it had given the French 'a jealousy in that quarter'. They fired frequently on it. It was then estimated that the French had fired some 23,300 bombs and grenades, and 81,000 round shots during the course of the siege. On one day alone, they fired 114 cannonballs and many bombs. At one time, on 4 March 1800, a French cannon ball managed to hit and blow up a gunpowder magazine near Tal-Borg Battery. Earlier, on 15 December 1799, three gunners at the same battery were killed by French retaliatory fire.(29) Three other Maltese insurgents are mentioned as having lost their lives at Tas-Samra Battery by enemy action.(30) On at least one occasion, Borg's positions near the seashore at Sliema were hit with the fire from some French ships which were also able to go in and out of Marsamxett harbour with impunity, owing to the very bad weather which momentarily kept the blockading ships away. The insurgents' own fire, on the other hand, rather than aimed at the fortifications, was more often than not directed at the urban areas in order to demoralize the inhabitants. On learning that Borg's three batteries at Gharghar were 'finished and ready to begin', Captain Ball suggested that these fire upon the town houses of Valletta 'a little in the night to give the alarm, and a little in the day'. Borg's cannon on Gharghar hill were so far away, however, that their fire had hardly any effect on the town. On 23 February 1800, Tal-Borg Battery fired on the harbour hitting a ferry boat discharging its passenger at Vittoriosa wharf, killing many civilians.(31) A cannon-ball fired from Tas-Samra, on the other hand, decapitated an unfortunate French

soldier manning one of the guns on St. James Bastion in Valletta

Shells from Tarxien are said to have reached Valletta but without causing much damage. Four fire shells called 'matte' fell on the roofs of houses in Senglea but burnt out harmlessly. (32). By early 1799, the mortars at Tal-Borg had fired some 400 shells on Cospicua and Senglea demolishing many houses but leaving hardly a dent on the ramparts. Zabbar, being the nearest to the French-held fortifications, suffered accordingly. The dome of the parish church developed serious cracks on being hit repeatedly by stray shots and, eventually, had to be built anew. In one particular incident, in November 1799, a cannon ball struck the dome, dislodging some stones within which fell and killed a 35-year old woman praying inside the church. (33)

General Graham seems to give the Maltese patriots less credit than they deserved, for they had not built their batteries with the intention of laying siege to the fortifications but to harass the enemy and, more importantly, to place French infantry, in the event of a counter attack, at a tactical disadvantage once they dared venture outside the protective cover of their own fortress guns. In a way, these positions were designed to tempt the French out into the open where they could not enjoy the cover of their own guns. Indeed, in all of the infantry attacks on the Maltese positions, which the insurgents repulsed with great courage, the French soldiers suffered greatly and were always compelled to beat a hasty retreat to the safety of their ramparts.

However, had the French managed to land strong reinforcements, equipped with batteries of field artillery, then their attacks on the

insurgents' positions might have turned out to be a very different story.

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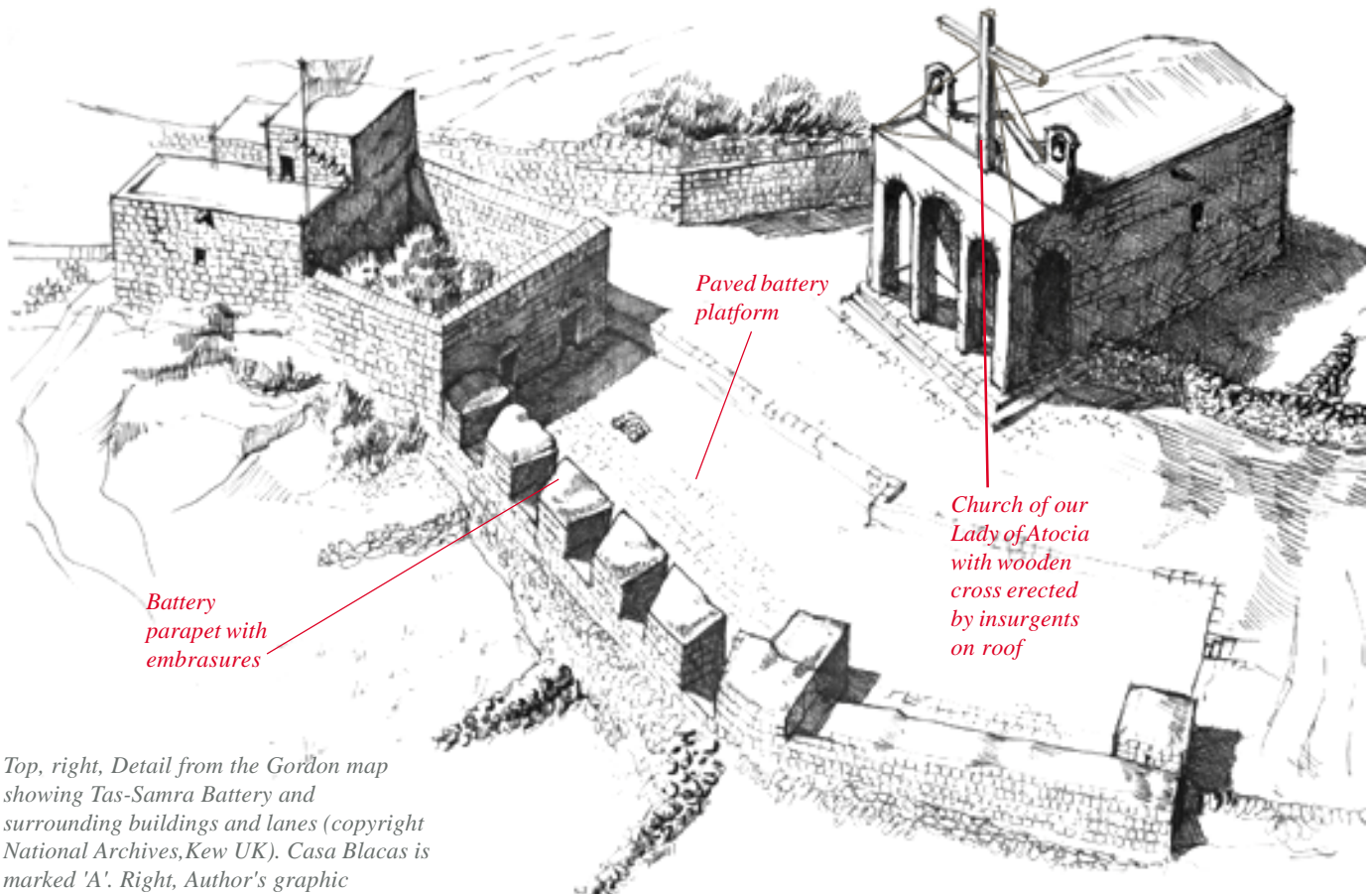
## GAZETTEER

MALTESE  
SIEGE  
BATTERIES  
and related sites

# (1) TAS-SAMRA BATTERY

*The gazetteer of Anglo-Maltese fortifications  
and related sites : 1798-1800*

Tas-Samra Battery was positioned on a hillock overlooking the Floriana land front fortifications and the main roadway out of Valletta and Floriana (through Porte des Bombes) along Strada San Giuseppe which passed through Hamrun and led north to Mdina. It also overlooked the sensitive areas down at Marsa and Corradino. It was known as an 'advanced camp' ('campo avanzato della Samra') given its proximity to the Floriana fortifications. Such was its importance, that the French, in a desperate attempt to neutralize it, had on one occasion bombarded it for five hours without respite. The Maltese, far from being discouraged, flew a large black flag from the battery and placed a large wooden cross on top of the nearby church. At one point it appears to have armed with nine guns (see table on page 9) but is only shown with four



*Top, right, Detail from the Gordon map showing Tas-Samra Battery and surrounding buildings and lanes (copyright National Archives, Kew UK). Casa Blacas is marked 'A'. Right, Author's graphic reconstruction.*



*Above, Various views of the Church of Atocia at Tas-Samra, Hamrun, with its arcaded portico and sundial. The church seems to have changed very little from the way it would have appeared back in 1798-1800. The battery stood exactly south of this church, in an area nowadays heavily built up. The structure which flanked the battery appears to have survived as have other landmarks in the area, such as the large building in Atocia Street, right, which served as a barracks for Canon Caruana's men.*



guns and two mortars in a contemporary illustration. The battery platform had a broad v-shaped plan open at the rear but was shielded by a number of adjoining garden / fieldwalls, some buildings, and a church, all of which occupied the same hillock. The battery parapet seems to have been fitted with five embrasures and a continuous flagstoned gunplatform.

*Above, Contemporary view from the rear of the Tas-Samra Battery. The drawing shows a relatively low parapet, covered with a soil topping, five embrasures, four guns and two mortars and an adjoining stretch of low parapet without embrasures. There are also two small sentry rooms. In the background can be seen the land front fortifications of Floriana and Porte des Bombes. Flanking the battery is a building which hosts a flagpole and, to the extreme right, one can clearly make out the side of the arcaded portico of the Church.*



Two small stone sentry boxes guarded the east side of the battery while a relatively large house and its walled garden enclosure protected the west flank of the battery. This building seems to have served as a sort of barrack for the troops for the drawing shows a flag flying from a pole fixed to the side of the building. The platform seems to have been bordered to the rear by a low masonry kerb.

The church of Our Lady of Atocia, (or Tas-Samra as it is known by the Maltese), with its arcaded portico stood immediately to the rear of the battery and is one of the few landmarks dating to the blockade that are still standing as existing at the time. The church contains one of the very last paintings by Antoine Favray, an altarpiece of the Virgin and Child signed and dated 1791. The contemporary drawing of the battery shows one of the side arches of the church's portico. A large sundial is carved into the masonry on the south side of the church. Another large building, still standing, stood a little distance away in an alley to the rear of the church. This too given its size and dominating position could have been used to accommodate the 223 men stationed in the Tas-Samra camp. Other documents state that it was at

times garrisoned by as much as 600 men owing to its very close proximity to the Floriana outerworks and fortifications.

According to Mifsud, the Samra camp was garrisoned by the battalions of Zebbug, Siggiewi, and Naxxar and, later, was also assisted by English sailors and marines. The Zebbug battalion was divided into four companies and each in turn into three platoons. A half 'guard platoon' consisting of a sergeant, corporal and twelve soldiers, kept constant watch on top of the Atocia Church. Another platoon was stationed on the 'ramp' (?) of the camp.

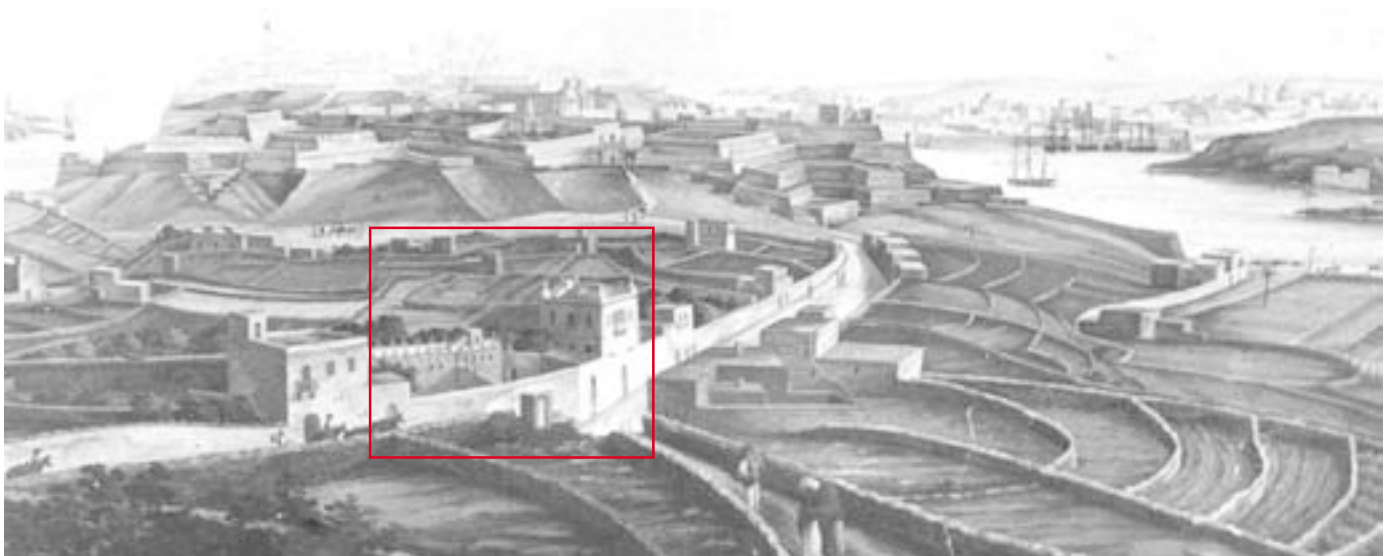
The Tas-Samra camp was under the overall command of Canon Frangisku Saverio Caruana and the direct command of Angelo Cilia and his deputy Isidoro Attard. It had a chaplain, Fra Antonio Baldacchino, and a surgeon, Antonio Muscat. Vincenzo Borg states that two of the guns, possibly the 32-pdr culverines, were brought from B'kara after having been removed and transported with great difficulty from St. Mary Tower in Comino.

Tas-Samra camp fed two other small batteries located in the immediate vicinity. One, a four gun emplacement, was placed some distance down the hill in front of



*Above, Portrait of Canon Frangisku Saverio Caruana, commander of the Tas-Samra Camp. Below, View from Tas-Samra Hill showing the fields and rural buildings outside the glacis of the Floriana land front fortifications. Casa Blacas is shown in the foreground, highlighted in red. It was used by the Maltese insurgents as sort of advanced blockhouse to control the main road (Strada San Giuseppe - present day St Joseph High Road) coming out of Floriana from Porte des Bombes. The section of the road leading to Casa Blacas was strewn with stone and broken glass to hinder the approach of French troops.*

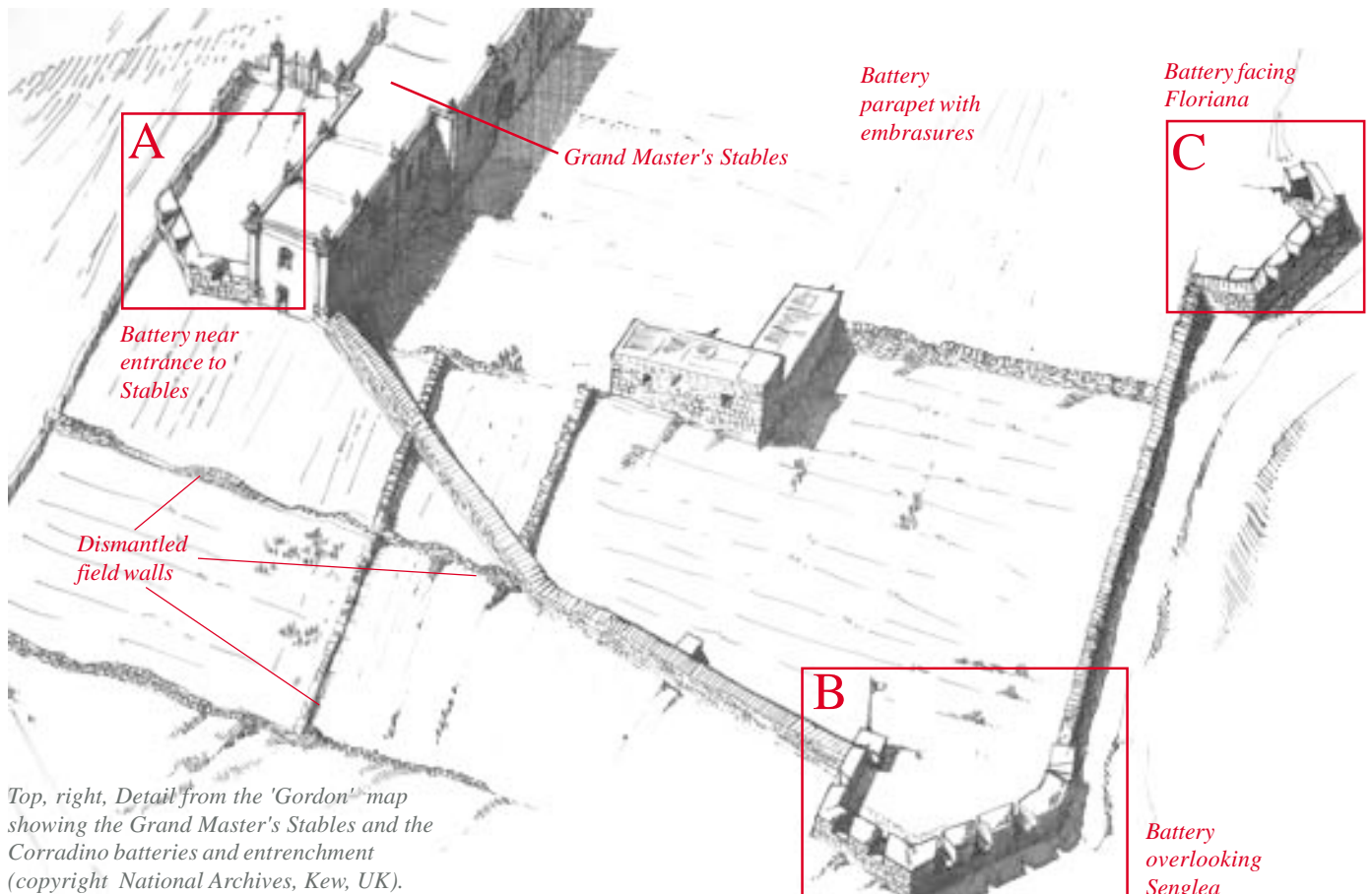
Casa Blacas (marked 'A' on map), itself used as a blockhouse. The other, smaller, was armed with three cannon and surrounded by a moat filled with water.



## (2) CORRADINO BATTERIES

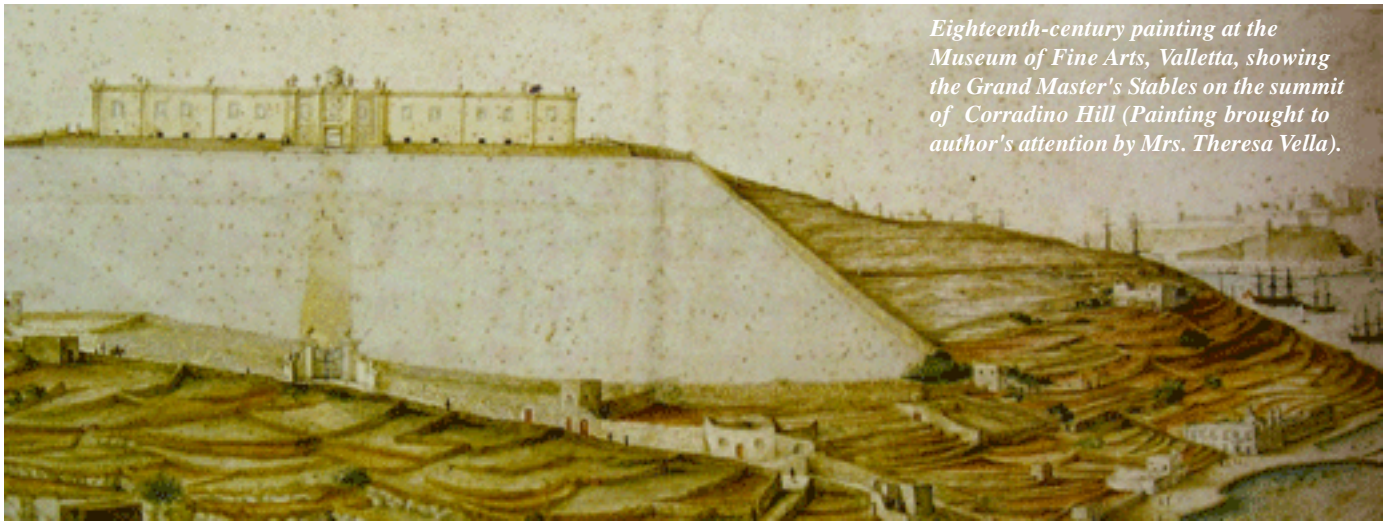
*The gazetteer of Anglo-Maltese fortifications  
and related sites : 1798-1800*

The Corradino camp and batteries covered a very large surface area and presented one of the largest advanced positions held by the insurgents. The battery and camp were sited on, and exploited, the extensive grounds and fields of the what had been the Grand Master's Stables. This large, and little known building, a Baroque palace-like structure, is shown in a painting of Corradino (see opposite page) and was a very distinctive landmark. It was eventually demolished by an order of 21 January 1811, when, because of its old and ruinous state (possibly because of the French bombardment) it was dismantled and its stonework reutilised for the formation of a new coastal road at the foot of the Corradino headland. It was a massive building which must have also served as a barracks for the insurgents. Santo Formosa



Top, right, Detail from the 'Gordon' map showing the Grand Master's Stables and the Corradino batteries and entrenchment (copyright National Archives, Kew, UK).





*Eighteenth-century painting at the Museum of Fine Arts, Valletta, showing the Grand Master's Stables on the summit of Corradino Hill (Painting brought to author's attention by Mrs. Theresa Vella).*

was seriously wounded in his right leg when the building was hit by a French bomb which crashed through three floors, burying him in the debris.

The Corradino position consisted of three batteries: one covering the main entrance to the stables and facing Ghajn Dwieli (A); another linked by a long entrenchment wall, overlooking the Grand Harbour (B); and a third, isolated, situated towards the south western end of the enclosure, overlooking the Floriana Lines (C). Mifsud states that the position was divided into two parts. The first was an entrenchment known as *Della Campana* which overlooked the road coming from Senglea. This was armed with two 8-pdr cannon removed from the Xrop (Xiorb) l-Ghagin coastal

entrenchment. The second consisted of two batteries, one of which he calls 'la trincea del palazzo' (i.e. the Grand Master's stables) which was armed with two 8-pdr guns placed in front of the entrance to the palace, facing Ghajn Dwieli, and the other, also with two pieces 'dietro il palazzo', facing Marsa, as shown in the Gordon map. Early in the insurrection, Santo Formosa armed the position with four 6-pdr guns while the British later added two 9-inch mortars and a third. North of the position, towards the cliff-face of the Corradino heights, stood a 'Belvedere Tower' which may also have been used as an advanced sentry post by the insurgents. No contemporary drawings of Corradino batteries are known to the author. The Lindenthal and Gordon maps differ on the plan of this

battery. The graphic reconstruction shown here is based on the more detailed Gordon map. A coloured sketch by Agostino Scolaro, entitled 'Sortita de' francesi nel Coradino nel 1798' shows French troops attacking the position, from the main road at Ghajn Dwieli, with the 'palazzo' to the rear, and the Maltese insurgents firing back from behind the safety of the fieldwalls in the area.

The whole position is recorded as having been armed with five cannon (see table on page 9), amongst these an 18-pdr taken from St Julian's Battery.

The Corradino camp was garrisoned by 224 men, mostly from Rabat and Casal Dingli and placed under the overall command of Emmanuele Vitale.



*Detail from drawing by Agostino Scolaro showing the Grand Master's Stables (upper left hand corner) and Maltese insurgents firing on attacking French troops from behind stone walls.*

### (3) TAL-BORG BATTERY - TARXIEN

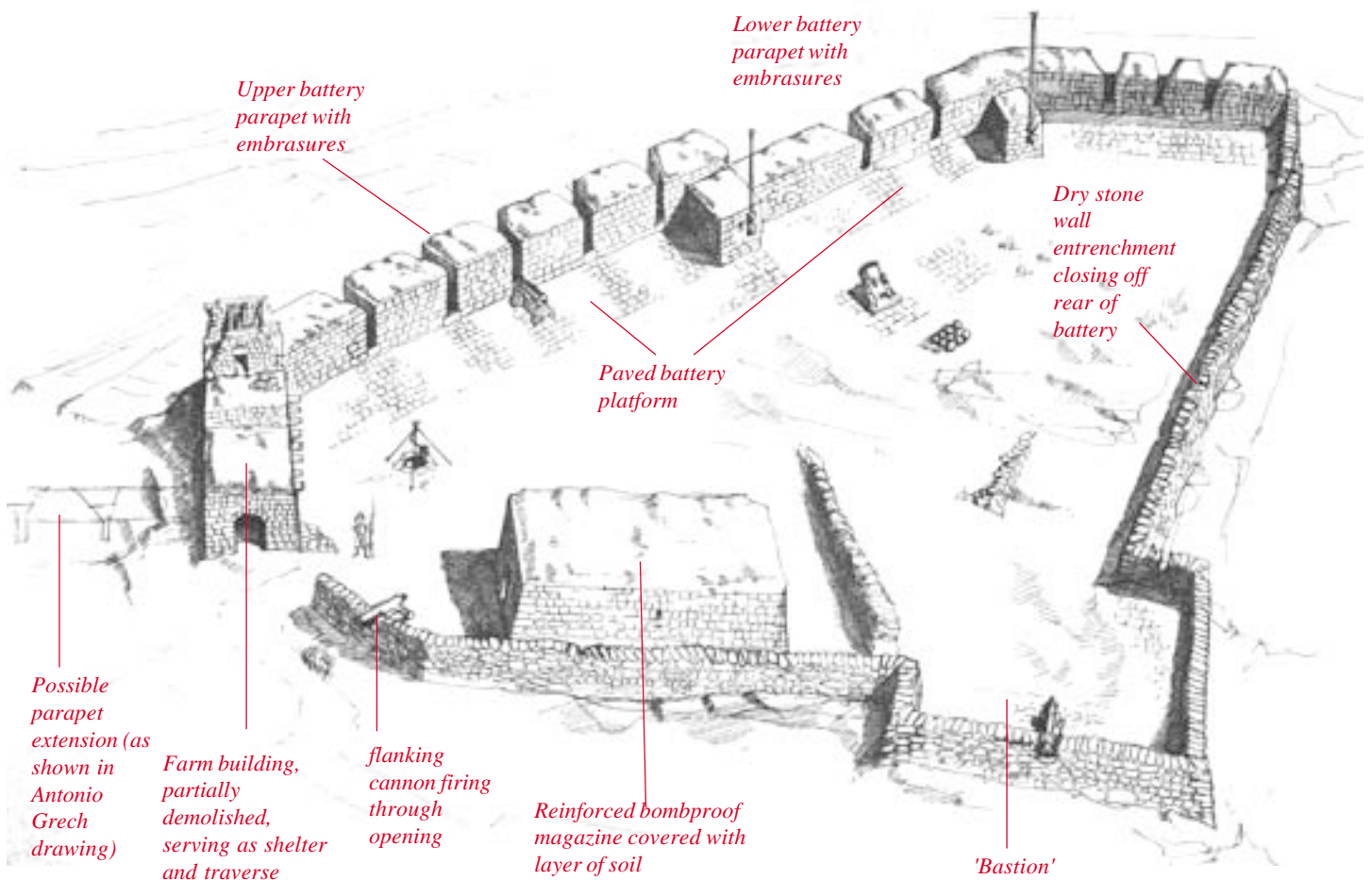
*The gazetteer of Anglo-Maltese fortifications and related sites : 1798-1800*

Tal-Borg Battery was located on high ground, north of the village of Tarxien and about 700m south of St. John Almoner Bastion on the Cottonera enceinte. It was one of the largest and best defended batteries erected by the Maltese insurgents during the course of the blockade. It was built in a field belonging to a certain Caterina Busuttill who later received 142 *scudi* in compensation. According to the Gordon map, the work consisted of a large platform, built on two different levels, apparently at different stages. Grech's drawing shows a thick masonry parapet, seven courses high protected with a covering layer of soil on the superior slopes of the merlons.

The west side of this battery, facing Corradino, was flanked by a large



*Rear views of Tal-Borg Battery, after Antonio Grech (above - courtesy of Ian Bouskill ) and unknown artist below. Note the reddish soil layers on magazine and merlons as well the mortar battery to the right.*



partially ruined rectangular farm building ('razzett') which was incorporated into the layout to serve both as a traverse and a protective shelter for the guncrews and garrison. Contemporary drawings also show a large barrack building, with its roof well covered in a protective layer of soil and with a side entrance facing away from the line of enemy fire, towards the rear of the gun platform. Unlike the other works, the Tal-Borg Battery was defended to the rear by a trenchment-like wall stiffened at the salient with a small bastion, in the manner encountered at the Ta' Falca entrenchments near Mgarr, built by the Knights around 1732. The Lindenthal and Gordon maps differ in the plan and details of the battery. The plan shown in the Gordon map, however, corresponds more closely to the illustration by Antonio Grech.

This battery is known to have been built under the able supervision of the engineer Michele Cachia. The position was garrisoned by a company of around 230 men.

The main upper platform, and the first to be built, was armed with five iron cannon 'fatti nella fabbrica di S. Gervas e portati dalla Cottonera', (see table on page 9) together with two 6-inch mortars disembarked from a British vessel on 7 December 1798. Grech's drawing also shows a naval carronade placed on a static naval mount.

The lower battery was armed with only two guns but seems to have had at least five embrasures. Mifsud states that the Tal-Borg Battery was later armed with two 'fusieri che sparano colle granate' as well as nine 18-pdrs, four of which 'vennero posti sotto la batteria Tal Borg in un'altra batteria'. At least one of the guns, as shown in Grech's drawing (and perhaps even more) was employed in protecting the rear of



*Above, Detail from the Gordon map showing Tal-Borg Battery and surrounding buildings and lanes at Tarxien (copyright National Archives, Kew UK).*

battery, its muzzle opening out through a cutting in the rubble, fieldwall type of entrenchment placed across the gorge of the work. The enclosure, however, was only loosely formed and had a crude cutting in lieu of a gateway. At least one internal field wall, probably retained from an existing field, seems to have served as a traverse, dividing the interior into areas. The Grech drawing also shows two small box-like sentry rooms grafted onto the main parapet, both of which were fitted with flagpoles and shown flying the colours of the Kingdom of Two Sicilies and the Royal Navy respectively.

Grech's illustration also clearly shows an open well (*bir*) situated close to the flanking building on the western end of the battery,

immediately to the rear of the gun-platform. It also hints at the existence of a third parapet, fitted with embrasures, grafted to the left of the farm building.

No traces of the battery exist nowadays but it is said that Tal-Borg Battery occupied the site of the present-day *Pace Grasso* football ground.



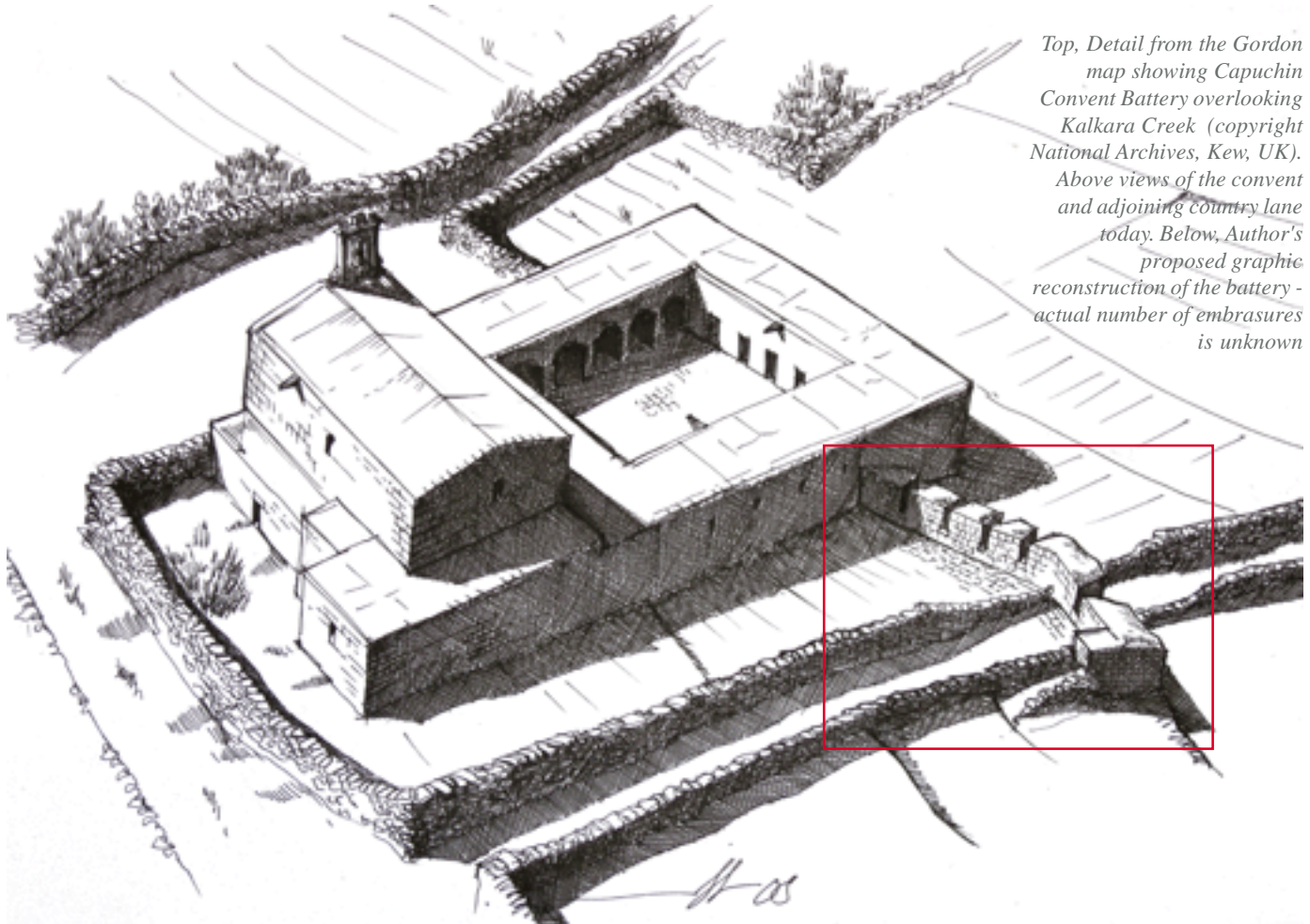
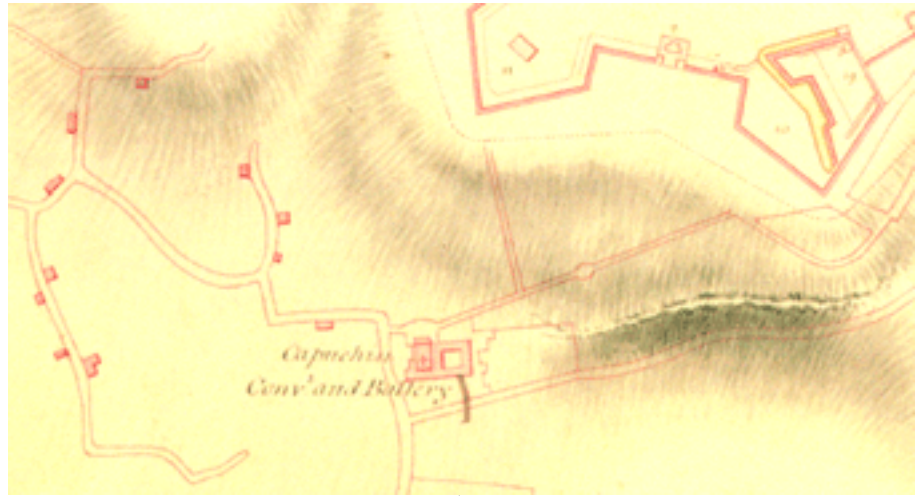
*Above, Enlarged detail showing the representation of Tal-Borg Battery in the Lindenthal map. This differs considerably from the way it is shown in the Gordon map although it likewise reveals a redan-trace entrenchment to the rear. It is very crudely drawn when compared to the Gordon map which is also drawn to a much larger scale, and, hence, is more attentive to detail in true cartographic fashion. This makes the Gordon plan more likely to be the correct representation.*

## (4) CAPUCHIN CONVENT BATTERY

*Gazetteer of Anglo-Maltese fortifications  
and related sites : 1798-1800*

The Capuchin Convent Battery was a medium sized gun position facing Kalkara Creek and the Post of Castile in Birgu. It was very close to the Cottonera fortifications but sheltered from them by the Capuchin Convent on its left side. It was built in such a manner to cut across and plug a country lane (today Triq il-Kapuccini) coming up from Kalkara Creek. The convent itself (albeit reshaped) and the country lane still exist.

There is no reference to this battery or its armament other than in the Gordon map. It may have been one of the batteries built by Captain Ball in the vicinity of Bighi which he mentions in a letter to Lord Nelson.

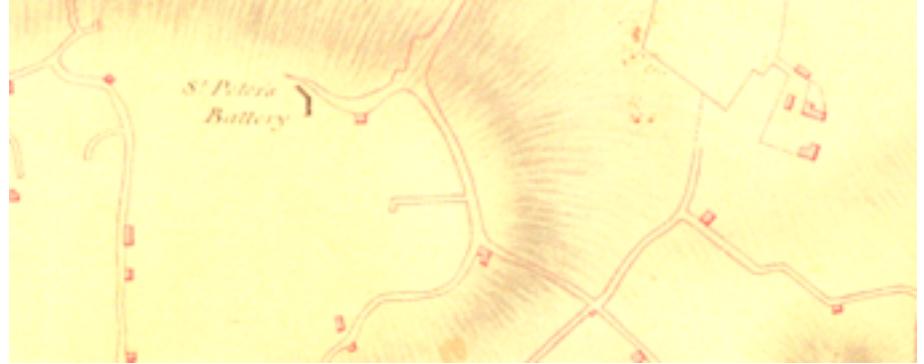


*Top, Detail from the Gordon map showing Capuchin Convent Battery overlooking Kalkara Creek (copyright National Archives, Kew, UK). Above views of the convent and adjoining country lane today. Below, Author's proposed graphic reconstruction of the battery - actual number of embrasures is unknown*

## (5) ST. PETER BATTERY & THE ZEJTUN BATTERIES

Like the Capuchin Battery, there is hardly any record of St Peter's Battery other than the entry in the Gordon map. This small battery was situated some three hundred metres to the rear of the Capuchin Battery, roughly half way between the latter and St Rocco Chapel. It was probably manned by the Zejtun militia. Its armament is unknown.

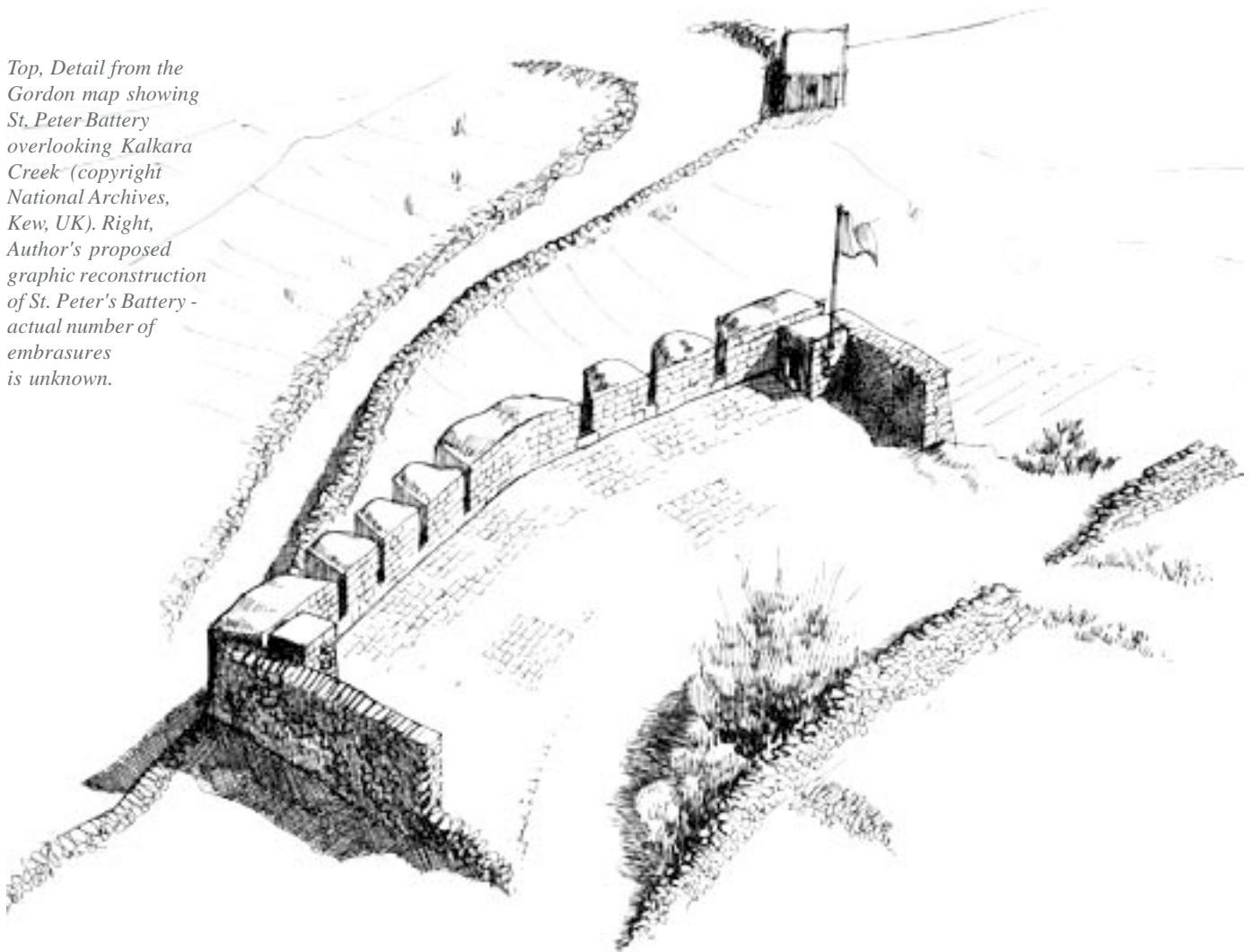
The village of Zejtun, which is not shown in the Gordon map, had a number of small batteries. One, called 'della Croce', was situated close to the parish church. Another two, known as 'Tal Caspio' were situated close to St. Clement's Church and were armed with two 8-pdrs. Another three, known as 'Tal



Fax', were placed close to the Church of St. Gregory guarding the road to the bay of Marsascala. The proposed reconstruction of the battery shown below is purely hypothetical in its details, and is based on the elements found in the other documented batteries. The Gordon map shows an open work to

the rear and was fronted by an ascending road. There seem to have been no farm buildings in the vicinity for quite some distance all around, thereby suggesting that some form of barrack accommodation could have been provide by an underground vaulted chamber as built at the Gharghar Battery.

*Top, Detail from the Gordon map showing St. Peter Battery overlooking Kalkara Creek (copyright National Archives, Kew, UK). Right, Author's proposed graphic reconstruction of St. Peter's Battery - actual number of embrasures is unknown.*





## (6) WINDMILL REDOUBT

*Gazetteer of Anglo-Maltese fortifications  
and related sites : 1798-1800*

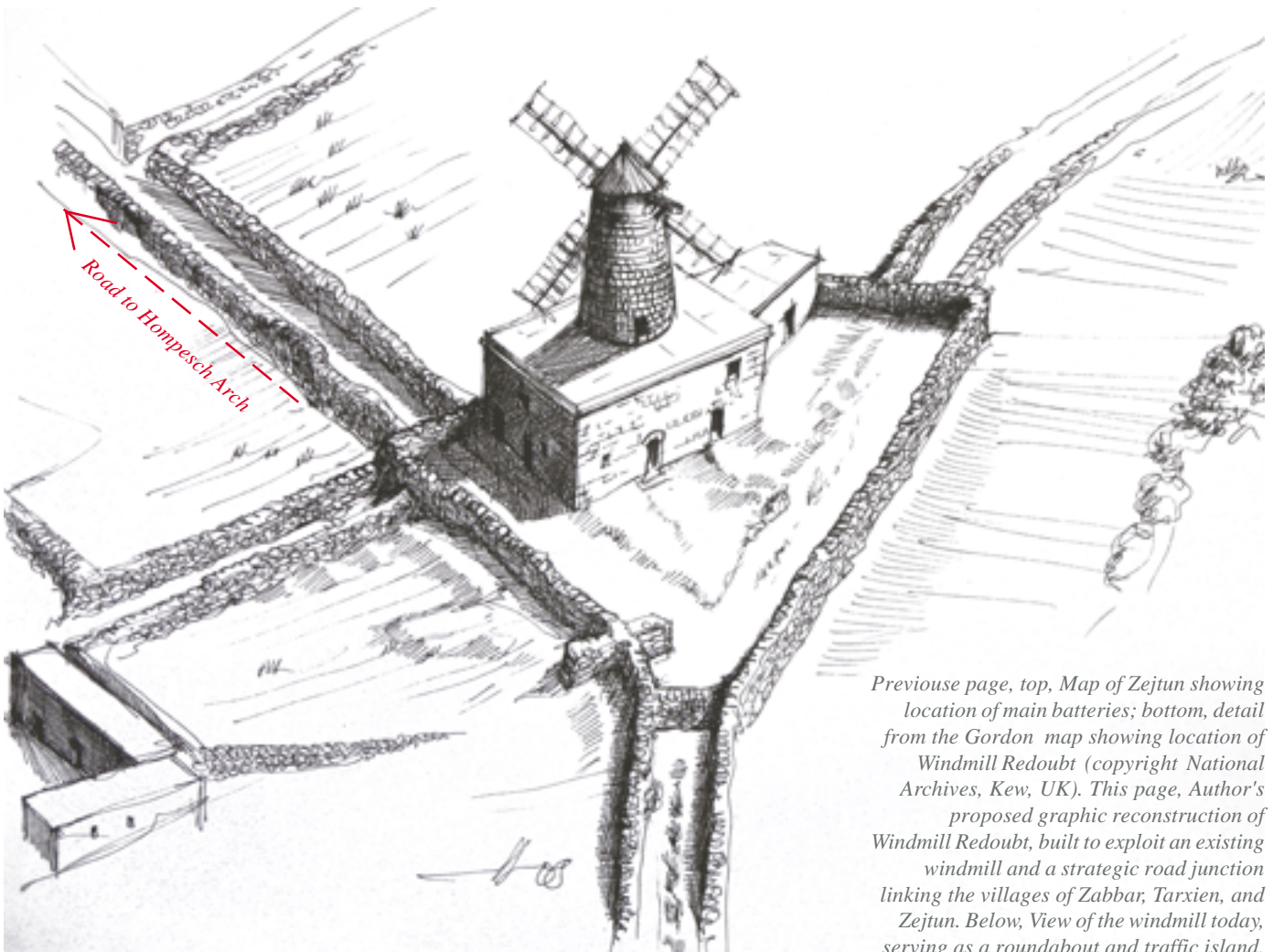
Windmill Redoubt was situated along the line of circumvallation linking the towns of Zabbar and Tarxien and guarding the road to Zejtun. The windmill itself, with some modifications, is still standing while the immediate area around it now serves as a large traffic round about. The redoubt, constructed of rubble-stone walls, possibly incorporating stretches of existing field walls, was roughly triangular in plan and was designed in such a way as to plug three intersecting country lanes, the present day Triq 10 ta' Settembru 1797, Triq id-Dejma, and Triq Ghollieq.

The solid windmill building, which occupied nearly all the north side of the redoubt, served as a blockhouse, providing accommodation and shelter to the troops assigned to defend it, while its tower doubled up as an excellent



lookout post from where Maltese insurgents kept a watch on neighbouring enemy positions and the gateways along the Cottonera enceinte. No

information is known to the author as to the size of the garrison and number and quality of cannon and other armaments that were deployed in this post.



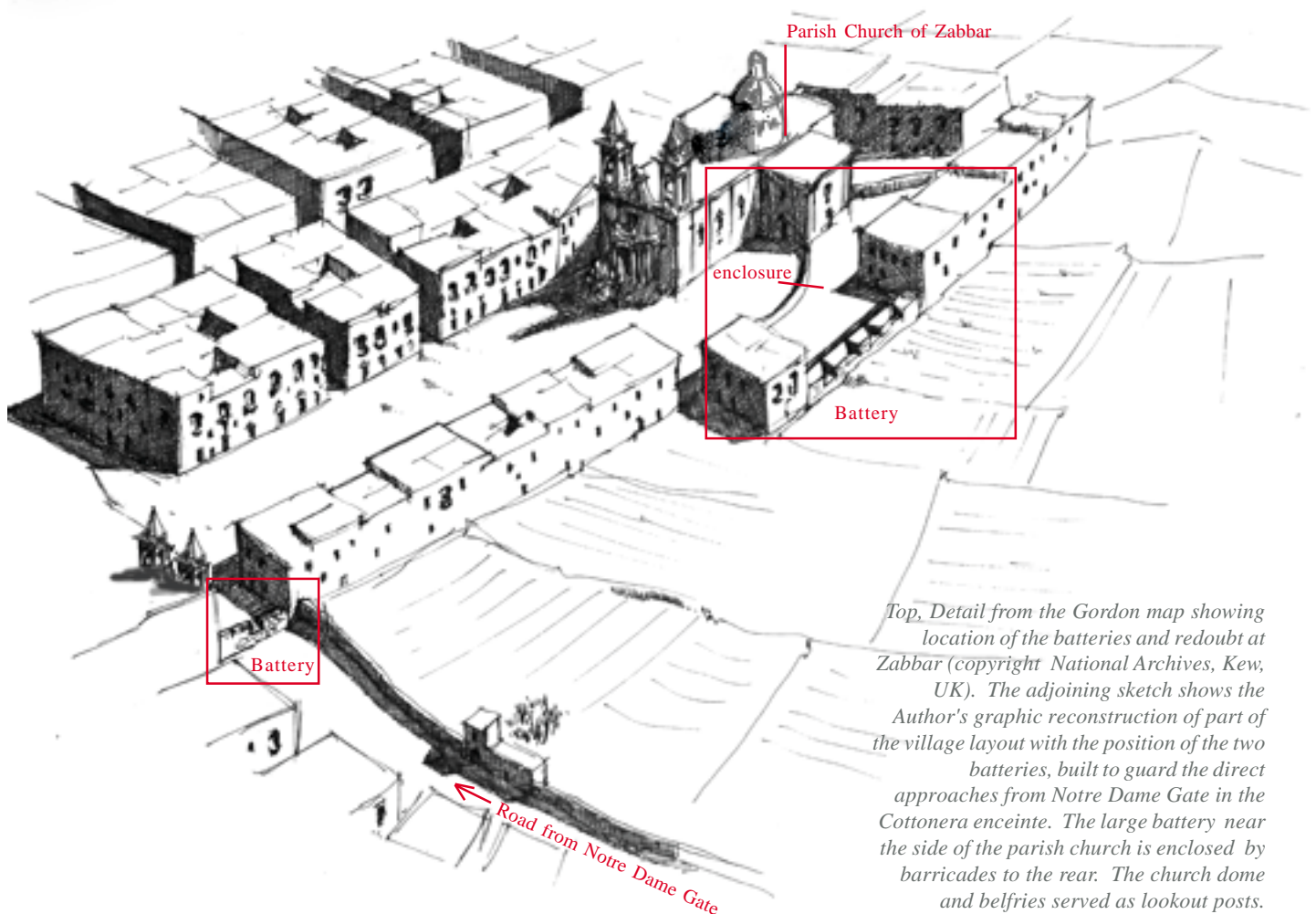
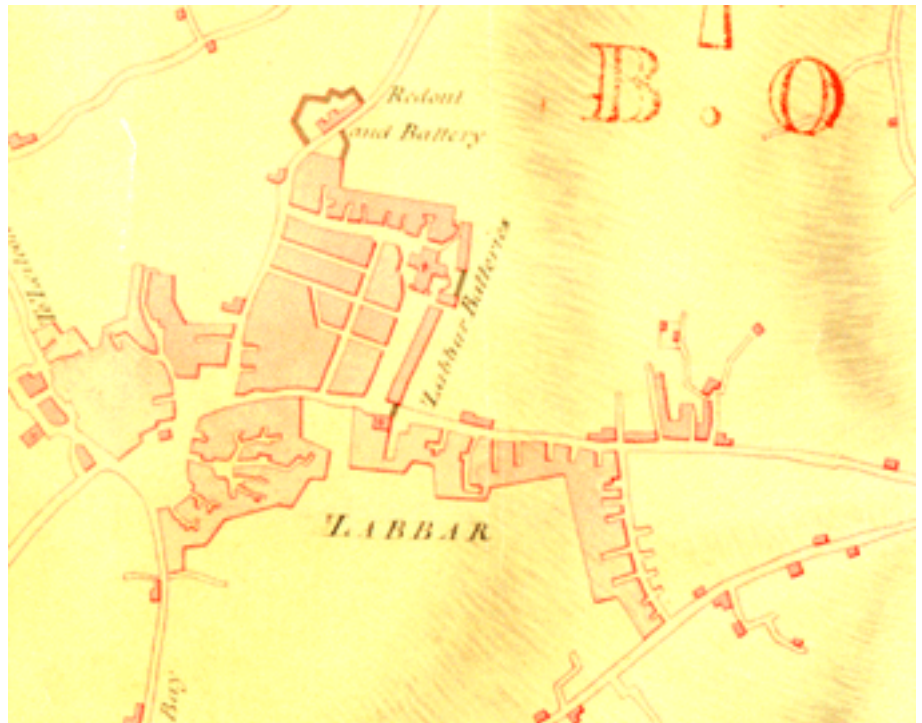
*Previous page, top, Map of Zejtun showing location of main batteries; bottom, detail from the Gordon map showing location of Windmill Redoubt (copyright National Archives, Kew, UK). This page, Author's proposed graphic reconstruction of Windmill Redoubt, built to exploit an existing windmill and a strategic road junction linking the villages of Zabbar, Tarxien, and Zejtun. Below, View of the windmill today, serving as a roundabout and traffic island.*



## (7) ZABBAR BATTERIES & REDOUBT

*Gazetteer of Anglo-Maltese fortifications  
and related sites : 1798-1800*

Zabbar, or Citta' Rohan as it was called in the last years of the Order's rule, was the closest Maltese town to the French harbour fortifications. As such, it received continual French attention, being repeated attacked by French troops and bombarded from the guns on the Cottonera ramparts. The people of Zabbar reacted by barricading its streets and alleys and fortified it with batteries and a redoubt. Mifsud mentions that the villagers erected a battery 'sotto la statua della Madonna con 2 pezzi di artiglieria' and built two other *trincee* in the square near the church of St. Roque and in the 'piazza che da per la strada detta Ta' Uied il Ghajn (Wied il-Ghajn). The Gordon map shows three batteries, altogether plugging the main approaches to the



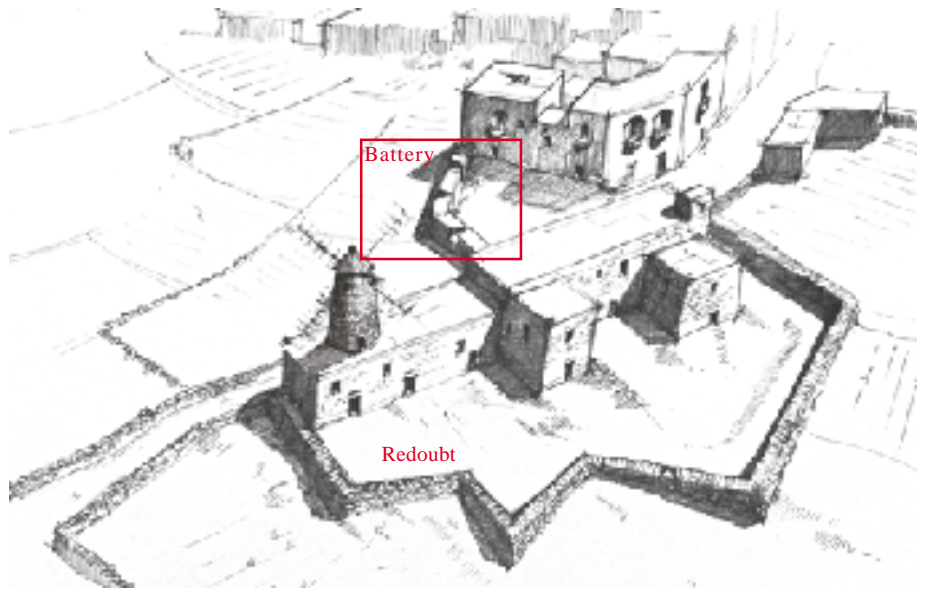
Top, Detail from the Gordon map showing location of the batteries and redoubt at Zabbar (copyright National Archives, Kew, UK). The adjoining sketch shows the Author's graphic reconstruction of part of the village layout with the position of the two batteries, built to guard the direct approaches from Notre Dame Gate in the Cottonera enceinte. The large battery near the side of the parish church is enclosed by barricades to the rear. The church dome and belfries served as lookout posts.



main town square and church, together with a large redoubt. The latter consisted of a large tenaille-trace type of entrenchment built to envelope a large building, or block of houses, fronting a road leading into the town, present-day Triq Bajada. This redoubt is very similar in plan to the 'pietra a secco' type of entrenchment which was built by the knights around the base of St. Agatha Tower in Mellieha.

The Zabbar militia battalion was under the command of Clemente Ellul, and his deputies Giuseppe Cachia and Giuseppe Ellul. The artillery men at Zabbar were Francesco Grima, Giuseppe Bonnici, Francesco Pace, Pasquale Falzon, Giovanni Spiteri, Salvatore Micallef, Paolo Scicluna, Michele Darmanin, Giuseppe Agius and Angelo Fava.

In a letter to Lord Hamilton (18 May 1800), General Graham states that the batteries near Zabbar were completely protected by stone casemates, thereby suggesting that these positions were either fitted with underground shelters for the troops, as at Gharghar, or were covered over to protect the gun crews.



*Above, Author's graphic reconstruction of the large redoubt and battery protecting the southwest flank of the village (along Triq Bajada). The range of buildings which were incorporated into the redoubt appears to have survived and included a windmill (see photograph left). The other batteries were located close to the churches shown in the photographs below.*

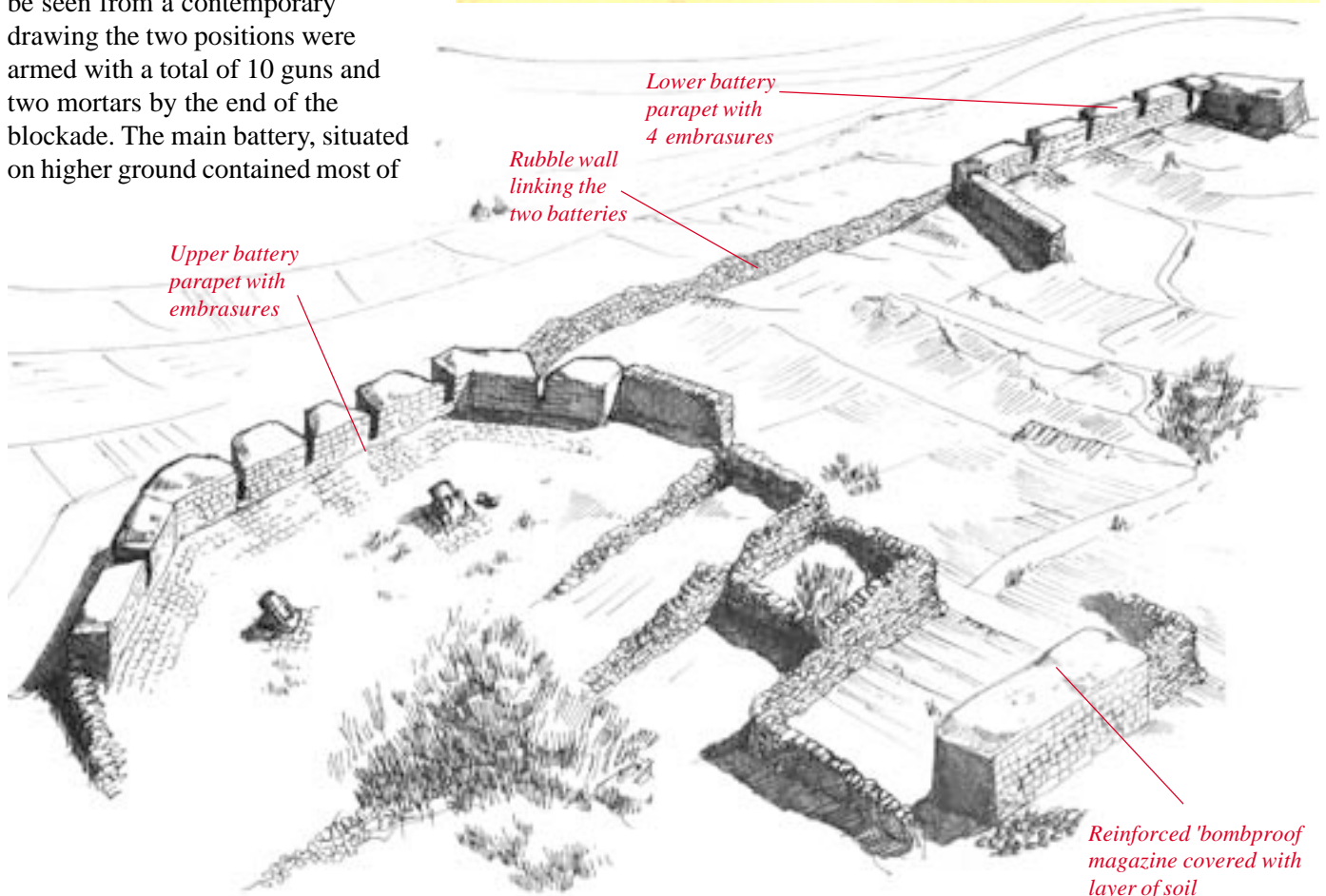
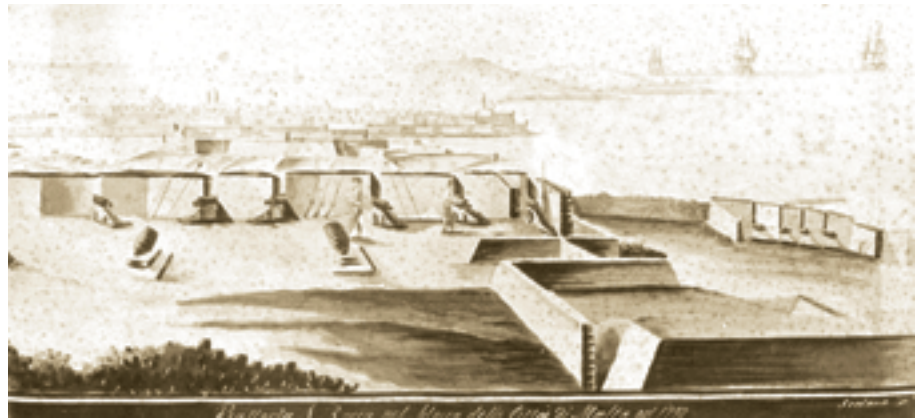


## (8) SAN ROCCO BATTERY

*Gazetteer of Anglo-Maltese fortifications  
and related sites : 1798-1800*

The San Rocco, or St. Rocque (St. Rock) Battery marked the southernmost end of the Cottonera side of the insurgents' circumvallation. This position was set up to control both Fort Ricasoli and the entrance to the Grand Harbour. The battery consisted of two distinct gun platforms set on top of a low hillock (later occupied by Fort St. Rocco - 1872), and at a distance of around 30-50 ms apart, open to the rear and separated by a various field / orchard walls. The position was served by a large magazine built by Michele Cachia around December 1799, in which were employed timber beams removed from the 'Casini di Casal Nuovi' (Rahal il-Gdid).

Initially the work was armed with only two 6-pdr iron guns but as can be seen from a contemporary drawing the two positions were armed with a total of 10 guns and two mortars by the end of the blockade. The main battery, situated on higher ground contained most of



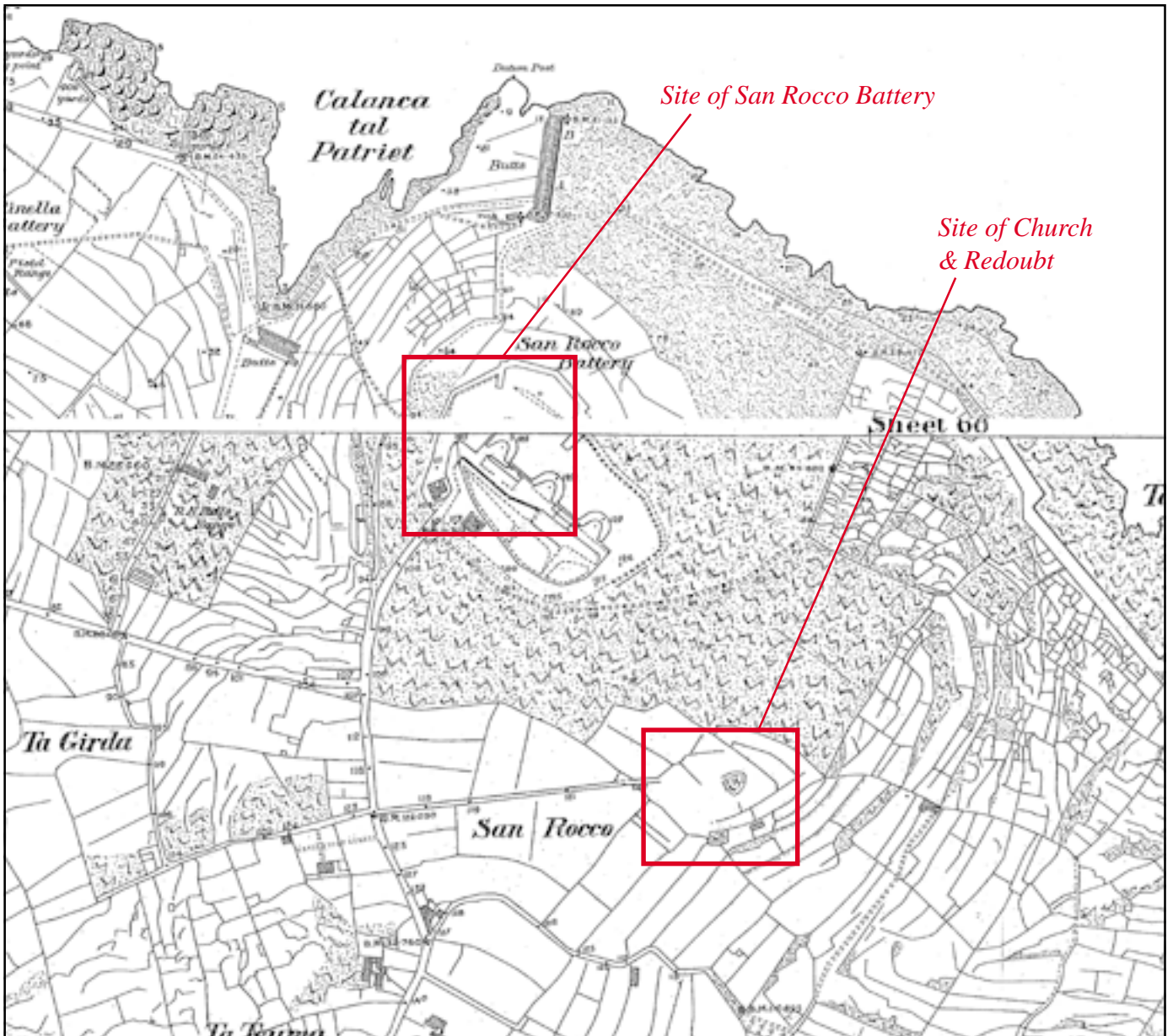
the guns. Mifsud states that the 'gran trincea detta di San Rocco' was armed with a total of seven guns, five 12-pdr cannon and two 8-pdrs. The lower battery, however, situated closer to the shoreline, is shown armed with four guns. Possibly these are the four 32-pdrs listed in Mifsud's table which would have been most usefully employed in a coastal defence role, aimed at mouth of the harbour.

The Gordon map shows two batteries fronted by a country lane straddling a hillock, south of which stood a long stretch of rubble-stone type of coastal entrenchment built by

Bali de' Tigne in the latter half of the eighteenth century.

Gen. Graham was not much impressed by San Rocco Battery. He remarks that it was continually being fired upon by the French gunners in Fort Ricasoli even though it was about 700 ms distant from the fort.

*Previous page, Rear view of San Rocco Battery, by unknown artist showing clearly the two gun positions and magazine to the rear; below, detail from the Gordon map showing location of San Rocco Batteries (copyright National Archives, Kew UK). Parts of the enceinte of the Hospitaller coastal entrenchment along the adjoining shoreline are still visible today (right)*



## (9) JESUIT HILL BATTERY

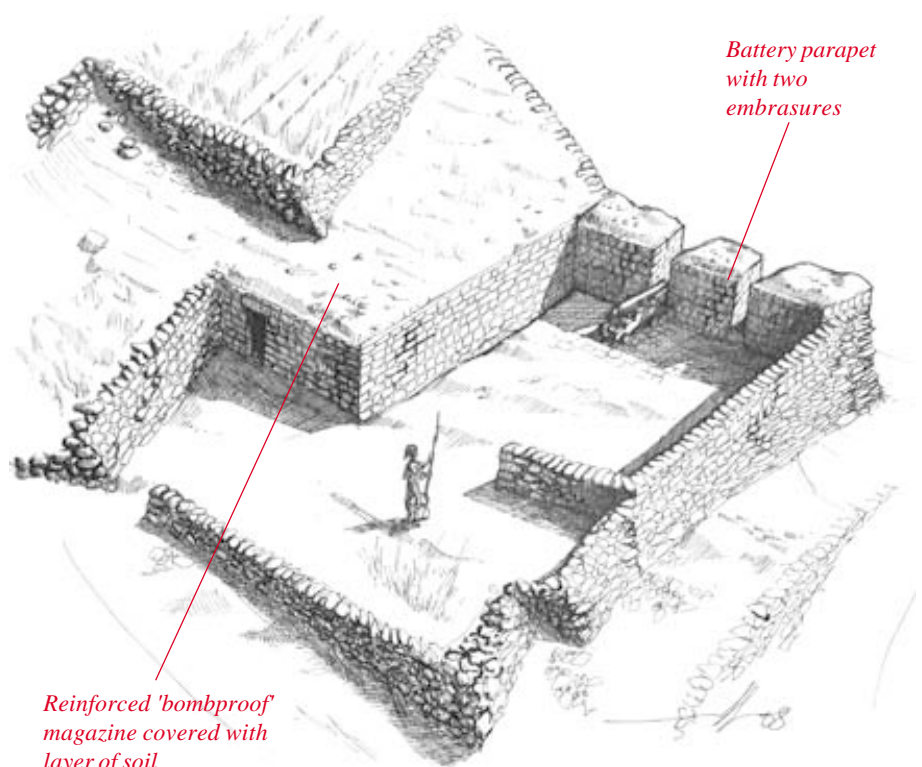
*Gazetteer of Anglo-Maltese fortifications  
and related sites : 1798-1800*

The batteries overlooking the inner reaches of the Grand Harbour, in the area generally known as Marsa are well documented. The one occupying the higher ground, known as Jesuit Hill ( Jesuit Battery or Point Cortin Battery), was aimed at the harbour side of the Floriana enceinte. This small battery was considered as an advanced post of Tas-Samra camp although its guards came from Casal Fornaro (Qormi).

Grech's drawing shows a small battery armed with only two cannon, fronted by a short stretch of masonry parapet pierced with two embrasures, a flanking rubble wall (possibly an existing field wall) on one side, and a large magazine expertly grafted into the adjoining terracing on the other. In this manner the magazine was well camouflaged and protected by a thick layer of soil.

Grech's drawing, as well as the Gordon map, show a large building situated to the rear of the battery. This could have served as a kind of blockhouse or barrack block. In Grech's drawing, one of the corners of this building (to the left of the picture) is shown being hit by a cannon ball fired from a French battery on Magazine Bastion at Floriana - the insurgents guns are returning fire.

*Top, right, Rear view of Jesuit Hill Battery with the lower Marsa Battery in the background, after Antonio Grech (courtesy of Ian Bouskill ); below it, detail from the Gordon map showing the two Marsa batteries (copyright National Archives, Kew, UK). Right, Author's graphic reconstruction of Jesuit Hill Battery with rubble field wall enclosure and adjoining reinforced magazine built to exploit the protective cover provided by the field terracing on that particular hillock.*



# (10) MARSA BATTERY

*Gazetteer of Anglo-Maltese fortifications and related sites : 1798-1800*

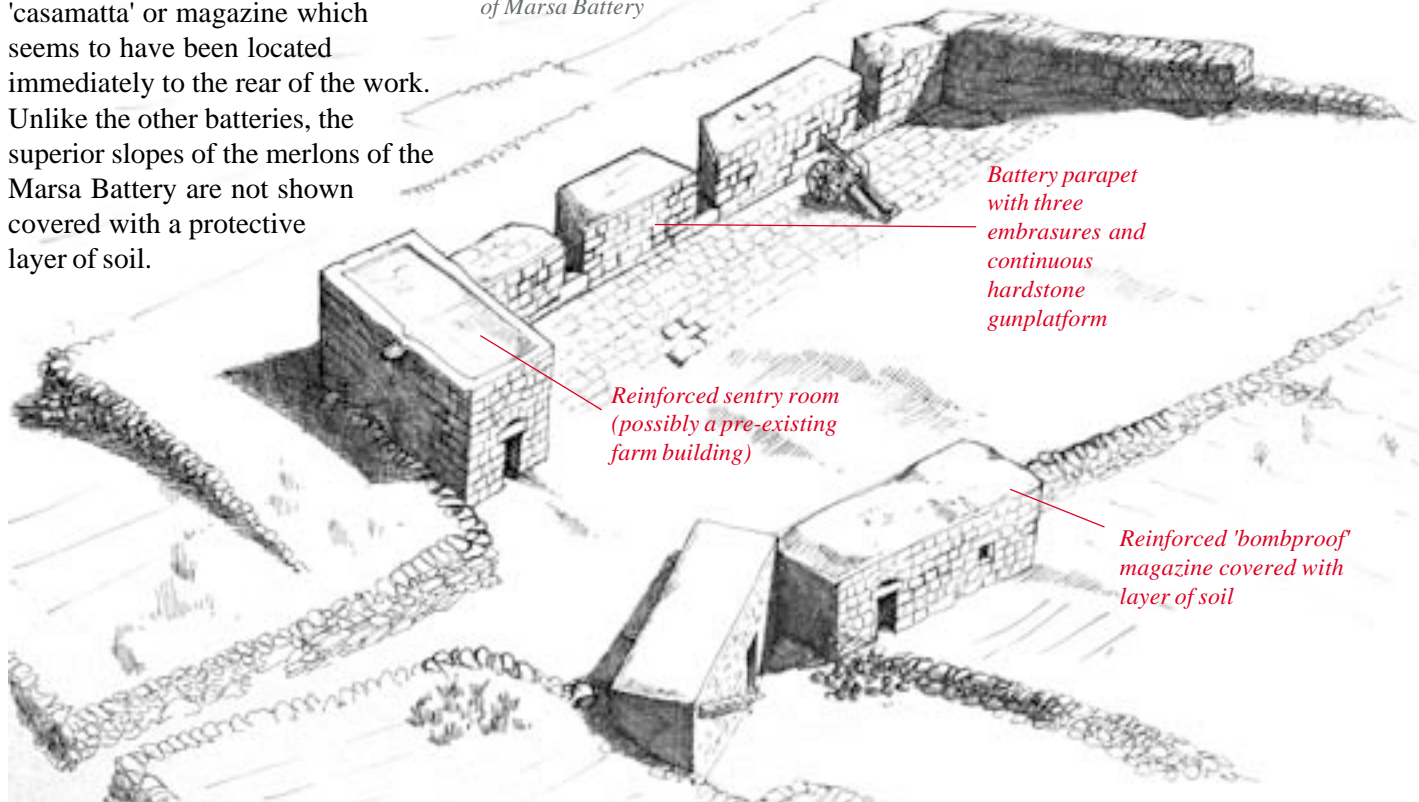
The second battery in the inner harbour area was Marsa Battery, or 'Trincea della Marsa' which was situated at the foot of Jesuit Hill, close to the shoreline. This was also a small work consisting of a short parapet fitted with three embrasures, the merlons being of unequal length, and served by a continuous hardstone platform.

Contemporary drawings show a sentry room or magazine to the left and a low rubble stone type of flanking wall to the right. It was armed with two iron guns and a howitzer on a field carriage. An often published drawing shows Captain Alexander Ball and Gen. Graham inspecting the Marsa Battery on horseback. The same howitzer is again shown in the background.

Salvatore Camilleri from Valletta claimed that he had made the 'modello' (plan?) of this battery and even built at his own expense the 'casamatta' or magazine which seems to have been located immediately to the rear of the work. Unlike the other batteries, the superior slopes of the merlons of the Marsa Battery are not shown covered with a protective layer of soil.



*Above, top, Rear view of Marsa Battery, after Major James Weir, Royal Marines; below it, another view showing Captain Alexander Ball and Gen. Graham inspecting the same battery on horseback. Both pictures show a field howitzer. Below, Author's graphic reconstruction of Marsa Battery*



# (11) GHARGHAR BATTERY

*Gazetteer of Anglo-Maltese fortifications  
and related sites : 1798-1800*

The Gharghar, or Harhar (Araar), Battery, also known as Ta' Ittuila (It-Twila) was one of the batteries built by Vincenzo Borg. It was designed to control the approaches from Gzira and overlooked the land front defences of Fort Manoel. The Gharghar Battery is beautifully illustrated in one of Grech's drawings which shows a relatively linear platform with a high frontal masonry parapet, two flanking walls, the right one of which is clearly built onto an existing fieldwall, and enclosing the rear, a high rubble wall which stopped short of the flanking walls to provide entrances into the work.

The drawing shows three masonry sentry posts, one on either side of the gun platform and a third guarding the opening at the rear of the battery. Presumably, a fourth would have protected the left opening (not shown in the picture).

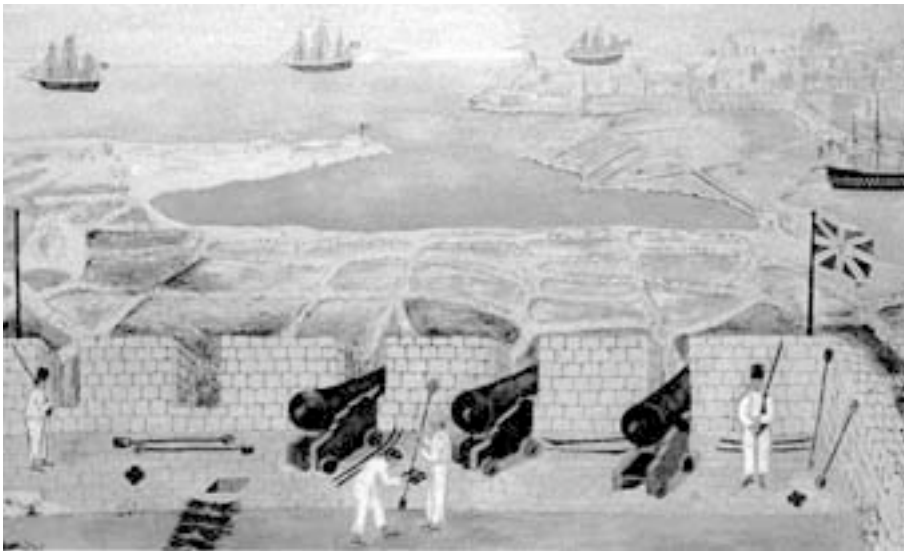


*Rear view of Gharghar Battery, after Antonio Grech (above - courtesy of Ian Bouskill). Below, Author's graphic reconstruction of Gharghar Battery with its underground casemated magazine.*

Gharghar Battery was fitted with an interesting arrangement for the accommodation of troops in the form of an underground vaulted casemate, a 'magazeno sotteraneo coperto con troglio a prova di bomba' capable of housing a hundred men, although this claim may be slightly exaggerated given the scale of the structure. The Grech drawing shows a semi-

circular double arched barrel-vault, what at the time would have been termed 'troglio raddoppiato' and covered with soil. A second anonymous drawing of the battery shows a rectangular opening in the ground, at the rear of the gun platform, possibly a ventilation shaft feeding the underground casemate. It is not clear, however, if this





chapel which is still standing. This would have been located to the rear of the battery, while a farm building which was occupied by Vincenzo Borg's men, served as his field headquarters.

The Gharghar camp was garrisoned by the men of the B'kara and Mosta Battalions. General Graham's report of 28 December 1799, cited earlier, gives the total number of men stationed at the Gharghar camp as 338. It was estimated that a soldier stationed at the Harhar camp cost the Maltese authorities around two *tari* and ten *grani* a day. An interesting detail in Grech's depiction of Gharghar Battery is provided by the small herd of the cattle shown grazing in the fields adjoining the position.

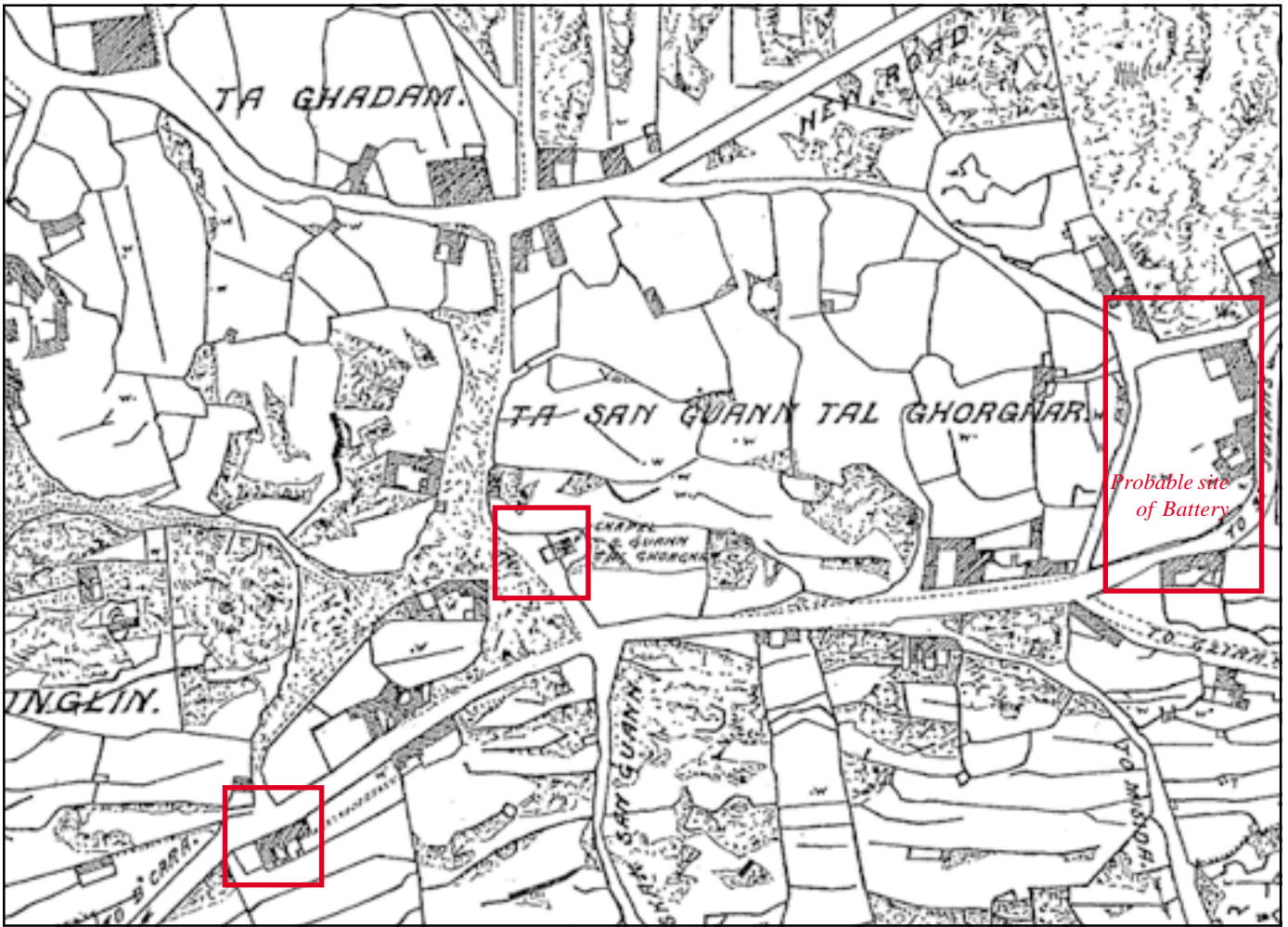
*Top left, Drawing of what has always been taken to be another rear view of the Gharghar Battery. This drawing, however, has many different features from Grech's painting - it shows no sentry posts and a continuous gun platform. It may, therefore, be showing instead the Sqaq Cappara Battery, which likewise overlooked Fort Manoel (shown in the background). Below, Detail from the Gordon map (copyright National Archives, Kew, UK).*

drawing actually depicts the Gharghar Battery and not another smaller battery situated in the vicinity, as clearly shown in the Lindenthal map. This is because the second drawing shows a parapet with only five embrasures and no sentry rooms along the flanks. The Grech's drawing, however, depicts a parapet pierced by six embrasures, the merlons of which are covered with a protective layer of soil. The battery was armed with 'cinque pezzi di cannone da 18' (18-pdrs, with each gun served by its own wedge-shaped platform as shown in the diagram below. Some of the guns used to arm this battery were transported all the way from the Hospitaller coastal battery at Mistra. General Graham's report on the posts, number of men and ordnance drawn up on 28 December 1799 shows the Gharghar or B'kara camp armed with a total of eight 18-pdr guns. However, this is a collective figure which also incorporates all the other batteries and advanced positions erected by Salvatore Borg in the vicinity of Fort Tigne' and Sliema (see following page).

The Gharghar Battery is shown fitted with two flagpoles flying British colours and those of the Kingdom of the Two Sicilies. Mifsud states that it was in this

battery 'ove fu' inalberato lo Stendardo Inglese per la prima volta nella Campagna di Malta'. The Gordon map shows the battery situated high on a hill flanked by two valleys and isolated from any neighbouring farm buildings. There were also no roads or country lanes leading to the position. Various advanced posts surrounded the position. Amongst these was a solitary gun emplacement at a locality known as 'Il-Harrub ta' Stiefnu' which had been set up since the first days of the insurrection. Early twentieth century survey sheets of the Gharghar site show a





*Building used by Vincenzo Borg 'Bared' as his field headquarters during the blockade. This building was located about 150 to 200 metres to the rear of the battery. Above, detail from an early 20th century survey sheet showing the Gharghar area still unencumbered by modern buildings.*



## (13) SLIEMA BATTERIES

*Gazetteer of Anglo-Maltese fortifications  
and related sites : 1798-1800*

Vincenzo Borg was, undoubtedly, the most successful builder of Maltese fortifications during the blockade. His works stretched from the limits of Tarxien all the way to Sliema. Mifsud states that Borg was responsible for building at least four other batteries on the Marsamxett side, apart from the central Gharghar Battery. These comprised a battery known as Ta' Imrabat (possibly in the vicinity of present-day Imrabat Street) which was built to take four 'mortari di bomba' and fitted with a large bombproof, underground vaulted casemate ('magazeno sotteraneo a prova di bomba') capable of housing, like the Gharghar Battery, a 100 men, as well as a guncrew shelter capable of accommodating 'circa vent'artiglieri' (marked 'C' on sketch plan). The second, called Ta' Ischina' was

a small work equipped with an 18-pdr situated in a field called Ta' Xini ( Ta' Cini). Vincenzo Borg used to spend many a night on guard duty at this post on the look out for French vessels attempting to leave the harbour.

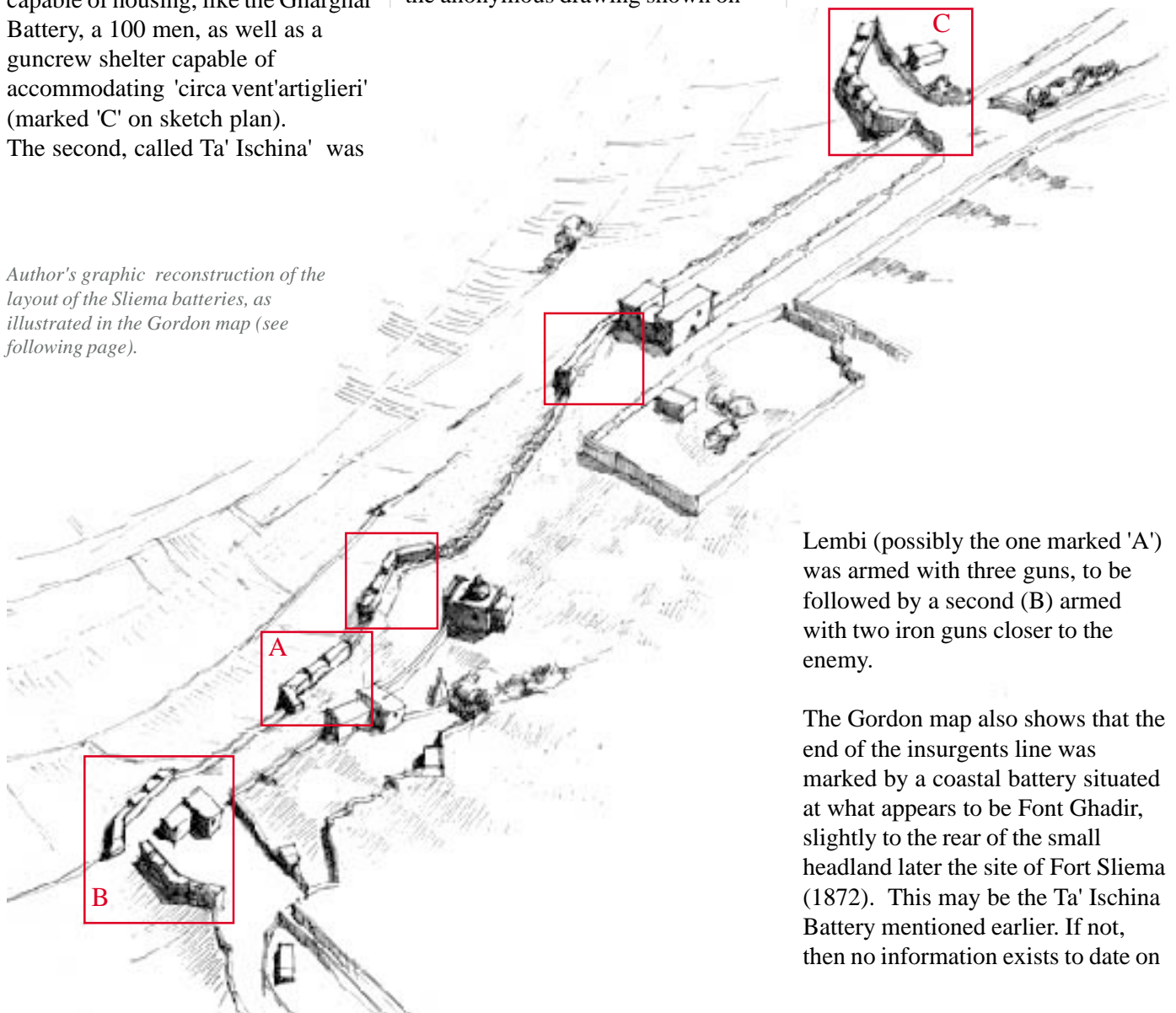
A third battery, called Ta' Sqaq Cappara (present day Kappara), was built closer to Fort Manoel which it was intended to bombard. It is shown in the Lindenthal map, sited below and to the north of the Gharghar Battery. Surprisingly it is omitted from the Gordon map. This may also be the battery depicted in the anonymous drawing shown on

the previous page and often taken to represent the Gharghar Battery.

The Gordon map shows in great detail the location of a large number of batteries and parapets situated along a road descending from a hillock at Sliema and ending at a coastal battery facing Fort Tigne'.

In all, the Gordon map shows six different walled positions situated along the present day Triq il-Kbira. One of these batteries was sited exactly opposite the facade of the small church of Our Lady of Divine Grace. One of these, at Ghar il-

*Author's graphic reconstruction of the layout of the Sliema batteries, as illustrated in the Gordon map (see following page).*



Lembi (possibly the one marked 'A') was armed with three guns, to be followed by a second (B) armed with two iron guns closer to the enemy.

The Gordon map also shows that the end of the insurgents line was marked by a coastal battery situated at what appears to be Font Ghadir, slightly to the rear of the small headland later the site of Fort Sliema (1872). This may be the Ta' Ischina Battery mentioned earlier. If not, then no information exists to date on



Detail from the Gordon map showing location of the batteries at Sliema (copyright National Archives, Kew, UK). Below, Detail from survey sheet showing location of Sqaq Cappara (present-day Kappara).



this obscure work.

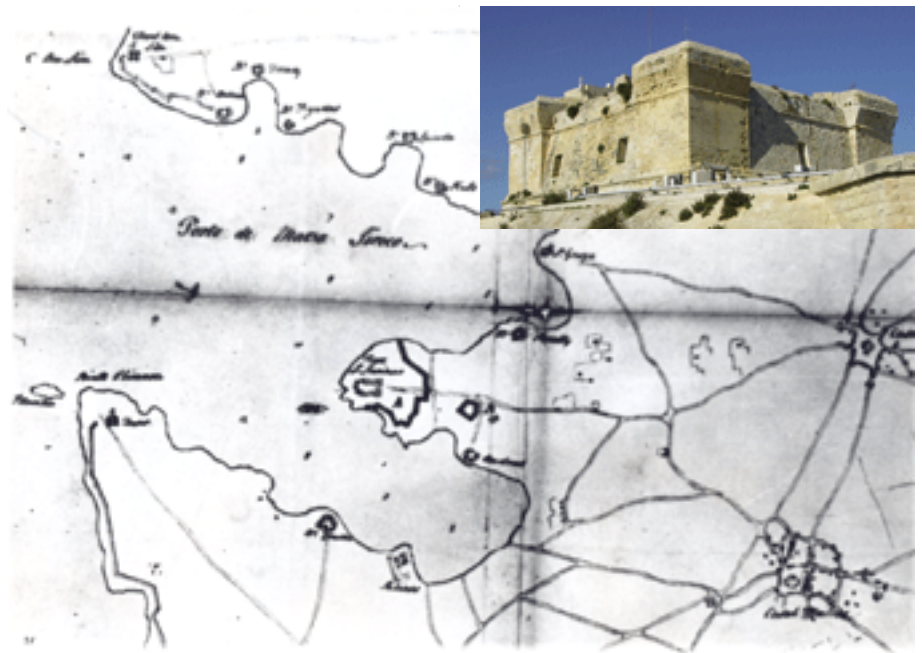
Carmelo Testa wrote that Vincenzo Borg was also responsible for building a large coastal work at Dragonara point, in front of the Spinola entrenchments, the site of the present-day Casino. This battery was known as Ta' Ghemmuna and contained an extensive parapet fitted with nine embrasures and a large magazine. It was built in February 1799 after news reached Malta that a strong French naval force with some thirty vessel was sighted approaching the Island and the British blockading ships had to leave Malta to regroup under Nelson leaving the island unprotected. This battery, which was armed with seven guns, was intended to prevent the French from landing troops at St. George's and St. Julian's bays and thereby attack the insurgents positions from the rear.

*Right, Survet sheet showing location of Ta' Ghemmuna Battery, on the site of the present-day Casino at Dragonara.*



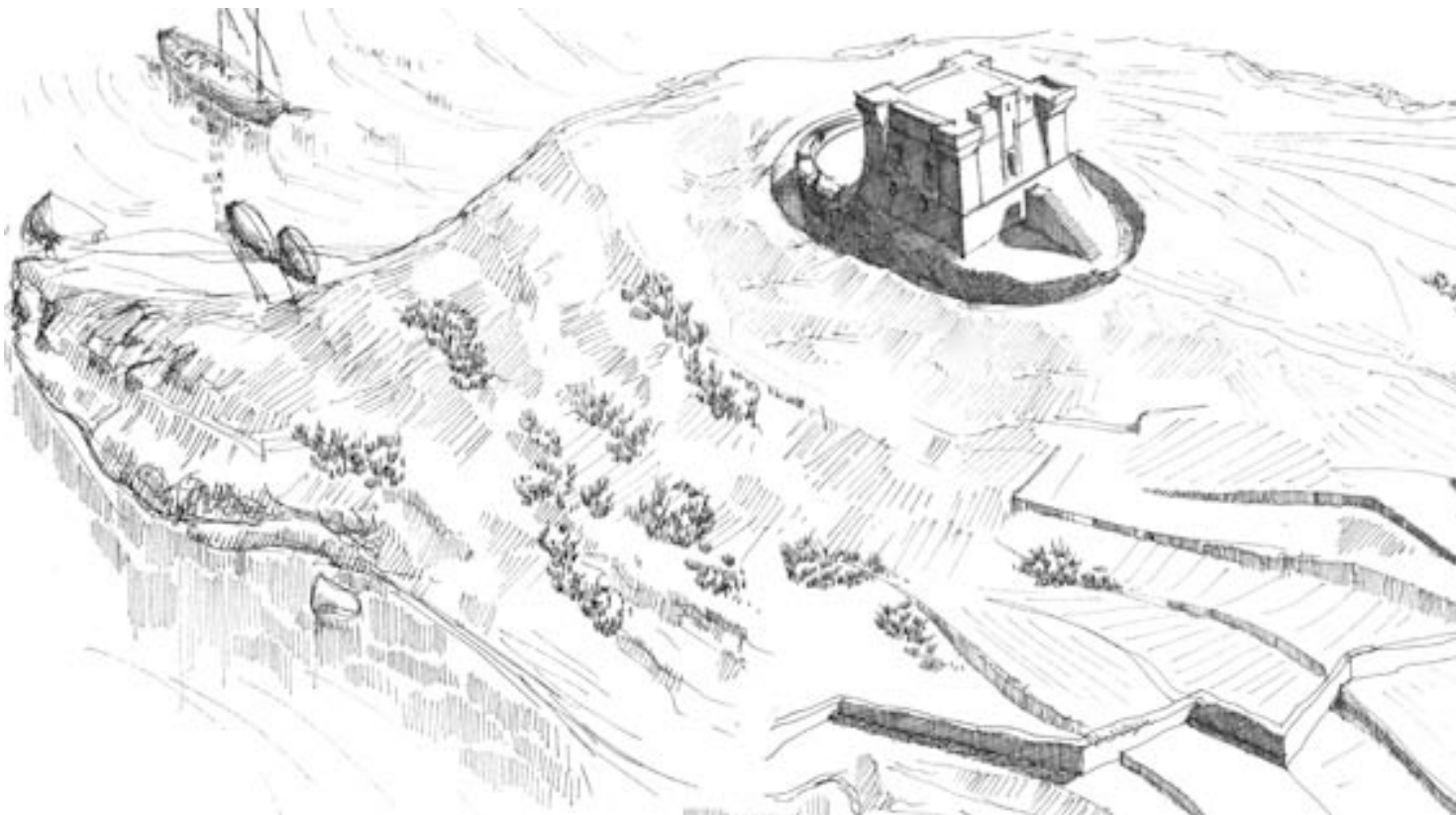
## ST. LUCIAN ENTRENCHMENT AND REDOUBT

The greatest fear of the British military force in Malta in 1799 was the threat posed by the possibility of the arrival of large French relief force, in the event of which, British troops would have had to be evacuated. An emergency retreat and evacuation plan was therefore laid down to ensure an organized and quick retreat from the Island from the harbour at Marsaxlokk. This involved the construction of a strong redoubt around St. Rocco Chapel, halfway between the village of Zabbar and the coast, in the vicinity of the old Hospitaller Tower at Delle Grazie (today Xghajra). This work was intended to shield the retreat of British troops from San Rocco Battery towards Zabbar. This town was to serve as rallying point for all the British forces and from there they were to be pulled back hastily to the village of Zejtun. Once at Zejtun, the British regiments (30th and 89th) were to



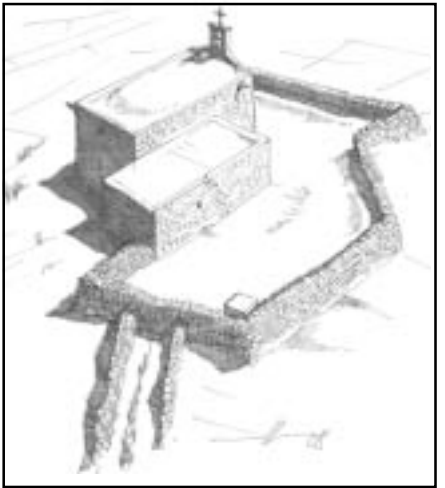
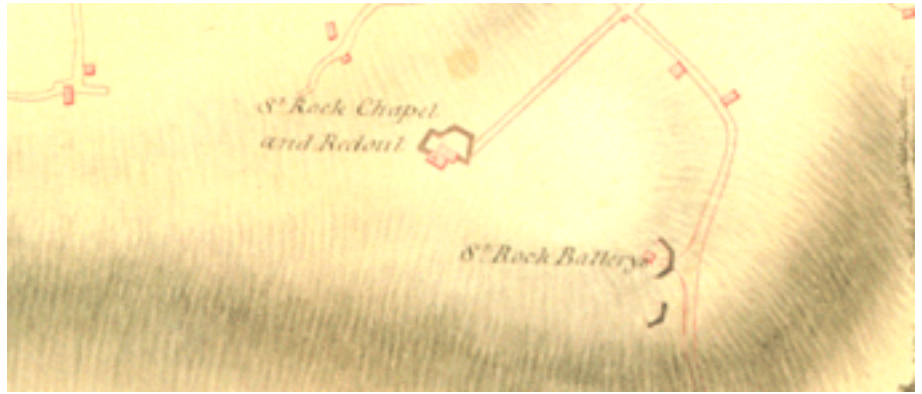
retreat to the safety of ships waiting at anchor near St. Lucian's Tower (or Fort Rohan as it was called after it was enclosed, together with its battery, by a ditch in the 1790s) in Marsaxlokk Bay. This formidable Hospitaller tower with its adjoining

battery was to serve as the keep of a large British entrenchment cutting off the neck of the St. Lucian peninsula. Here the British military, assisted by the Maltese engineer Matteo Bonavia, established an extensive defensive perimeter, a



continuous wall which, as shown in Lindenthal's map, sought to seal off the peninsula from the rest of the mainland (see aerial photograph, right). The position was strengthened further with the construction of a diamond-shaped redoubt built on the ahead of the entrenchment. The Gordon map does not included the fortifications erected around St. Lucian but it does show the layout of the redoubt built at St. Rocco, which incorporated into its enclosure a small rural chapel and an abutting building. None of these works have survived.

In December 1799, Gen. Graham wrote to the Duke of York to inform him that the strong 'moat' [sic - entrenchment] which he was constructing 'about a mile-and-a-half behind the ridge of Gudja and Zejtun to serve as a place of retreat and communication with the ships and stores' was 'nearly completed and being supported by some of the high towers on the coast'. Graham was confident that this work was capable of providing adequate protection 'for some days' if attacked.



Above, Detail from the Gordon map showing location of San Rocco Redoubt, built around a small chapel, right. Opposite page, Detail from the Lindenthal map showing the British fortifications enveloping St. Lucian Tower (copyright National Archives, Kew, UK).

## SITE OF AMBUSH AT MRIEHEL

*Gazetteer of Anglo-Maltese fortifications  
and related sites : 1798-1800*

At dawn of 4 September 1798, a detachment of French soldiers left Porte des Bombs for Mdina to strengthen the garrison there, unaware of the uprising that had erupted there the previous day. The sentinels that Vincenzo Borg had placed on the steeple of the B'Kara church saw the French column making its way up *Strada San Giuseppe* and raised the alarm. In little time the Maltese silently took up a position behind the fieldwalls on the outskirts of the village. The place chosen for the ambush was near the low arches of the Wignacourt aqueduct at Mriehel (opposite the present-day brewery - see photograph). The site was not chosen accidentally.

The determining factor was the presence, in the locality, of a windmill, from on top of which Vincenzo's men could see the French troops clearly moving in their direction. As the column arrived near the low arches and began ascending a low hillock, the hidden villagers, mostly from B'Kara, Qormi, and Mosta, broke cover and opened fire with their 20 muskets and a hail of stones. Caught in the open, in an area devoid of any form of cover whatsoever, the French troops panicked and fled back in disorder to Porte des Bombes leaving behind them many dead and wounded. Three wounded soldiers, among them an officer,



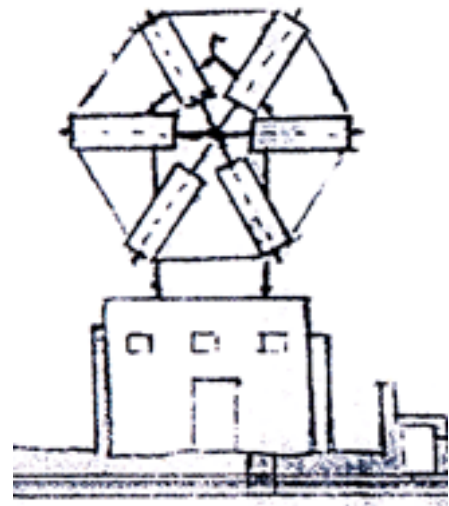
*The site of the ambush of the French troops on 4 September 1798: above, windmill building, minus its tower and sails and, on the following page, the stretch of the Wignacourt aqueduct opposite Simmonds Farson Cisk brewery where the ambush took place in the area known as 'l'Arcata il*

*l'Arcata il*





were carried away by the fleeing French soldiers. The Maltese on their part suffered only two casualties. Although the locality in which the encounter took place has been heavily urbanized and developed over the years, the central features in the landscape that determined the choice of the ambush site are still extant. Both the aqueduct and the windmill, minus its tower, can still be seen along Notabile Road opposite Farsons Brewery.



*Bascia'. Below, Detail of a sectional elevation of the Wignacourt aqueduct drawn in the mid-1800s showing the profile the area as it would have stood around 1798 with the strategically placed windmill occupying the higher ground, thereby*

*allowing the Maltese insurgents a very clear view of the approaching French column. Top, Drawing by Rev. Frederick Markham of the 'Knisja il-Qadima' at B'Kara with the said windmill shown high in the background.*



# MATTEO BONAVIA ROYAL ENGINEER

by  
*Denis Darmanin*

It was during one of my unscheduled visits to the Museum of Fine Arts in Valletta in the summer of 1996, when my attention was drawn to a portrait titled “*Comm. Tigné, late 18 Cent.*”, located in the then Room 26. Somehow, it did not seem quite to fit the period and person being portrayed. The portrait is of a seated man wearing a dark uniform, emphasised by the bullion fringe epaulette worn on the right shoulder. An open scroll is on a table or stool in front of him, on which are also an inkwell with quill, a pair of callipers, charcoal pen and a setsquare.

## *The Uniform*

The major clue to identifying this officer is by the uniform he is wearing, which strongly resembles that referred to as the Board of Ordnance uniform, as worn by British officers of the Royal Regiment of Engineers in the very late 18th and early 19th centuries. Although labelled as being ‘*Comm. de Tigné*’, this staunch French Knight of the Order of St. John was 82 years old and a paralytic when

the French invaded Malta and even if not, it is doubtful that he would have worn any uniform other than that of the Order. Bali René Jacob de Tigné had remained bed-ridden in Valletta during the entire blockade of the French by the Maltese and British. He died of old age on October 15, 1800, shortly after the capitulation of the French garrison, and was interred at St. Johns Co-Cathedral in Valletta.(1)

According to an article in an issue of the *Royal Engineers Journal* titled, ‘*Uniforms of the Corps of Royal Engineers*’,(2) “*Various other changes in dress were introduced during 1796-99.....while the officer’s coat was differently cut, becoming a double-breasted square along the waistline in*

*front, but falling over the hips into two long tails.....*”.

A book which title is not given but is referred to as “*the Welch and Stalker book*” (3) states: “*Royal Engineers. Coat as made for Mr. George Cardew, December, 1798. Blue superfine cloth coat, black Genoa velvet lapels and stand-up collar lined with the same velvet, and a coat button on the end of the collar, to run with the lapel. Nine twistholes in the lapel a little longer than to admit the button. Three-pointed flap with four holes.... Artillery buttons. Lapel short of the waist.*”

The fact that the portrait shows the officer with only one epaulette is significant. Company officers below





field rank; i.e. Lieutenants and Captains, at the time wore only one epaulette on the right shoulder. Although a similar uniform is referred to as having been worn by officers of the Royal Artillery during this period, (4) the uniform would have had collar, cuffs, and facings on lapels in scarlet, while the stock would have been black.

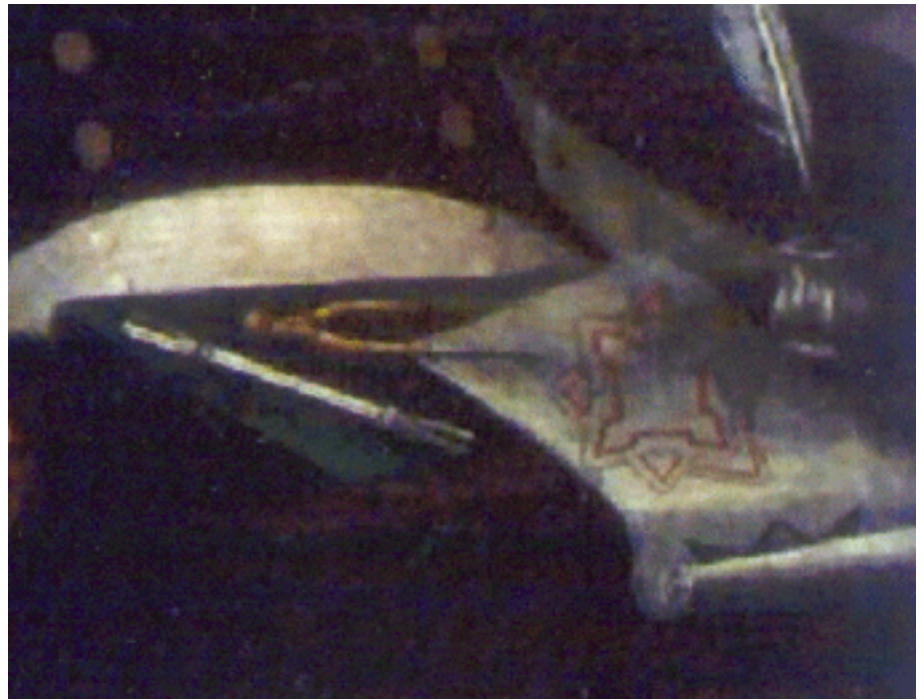
By far the most striking items of dress are the buttons on the 'coatee' at front, cuffs and pocket flap. These are gilded and show the arms of the Board of Ordnance, i.e. a pressed Norman shield with three cannonballs in chief and three cannon above each other in field. There is a hint of 'piles of shot' inserted between the three cannonballs, which R.A. and R.E. 1795-c.1802 long with other designs, is a pattern button. This variation very common in this type of button. (5)

Although mainly worn by the Royal Regiment of Artillery from 1795 to circa 1802, this button was then also a standard issue to the R.Es. (6)

### ***The Scroll***

The unfurled scroll on the table shows the plan of a fort surrounded by a ditch. The British had not built any forts in those early years. The first major works in fortifications were St. Clement's Retrenchment in 1849, Fort Verdala in 1852 and Lascaris Battery in 1854. The only works at the time were minor strategic alterations to the existing forts and fortifications, built by the Order and which were quite reliable to meet any defensive needs of the era. They proved to be so and had survived the onslaught during the Second World War.

Considering the small size and star shape of this fort, the closest in comparison is Fort Manoel at



Manoel Island in Marsamxett Harbour.(7) Four identical bastions are at each corner, each linked by a curtain. Taking account of some artistic license, the structures in front of each curtain, at the front of the *Couvre Porte* and the two side curtains, represent the place-of-arms. The one at the rear is a ravelin with a tenaille behind. At the outer edge are the covertways that surround the fort.

Partly visible beneath the unfurled section are three 'arrowhead' type points, which when compared with the fort's plan, are nothing more than the spurs on the glacis. One remaining example overlooks the road behind the Armed Forces of Malta E.O.D and Diving Unit.

### ***Historical Background***

Going by events in Malta during 1795-1802 and the presence of a British military engineer, the painting must have been executed during the blockade of the French garrison under General Vaubois or the first years of British rule that followed. If going by the first, then the officer is definitely surveying and planning

the siege works but if the latter, then he is either conducting some strategic plan or the fort was then subject of some report in hand.

Following the revolt of the Maltese against the French occupation on September 2, 1798, the Maltese National Assembly asked Lord Nelson for British military assistance after a request to King Ferdinand of Naples did not render any results. Much has been written on this part of Malta's history, but Britain could not assist Malta with enough arms and ammunition, while troops were desperately needed elsewhere. Little by little, some consignments were dispatched to the island and with them very small military detachments. On October 24, 1798 Lord Nelson arrived off Valletta on HMS *Vanguard* and after taking stock of the dire situation, asked Vaubois to surrender; to which the Frenchman had refused. Before departing, he left a small supply of powder for the Maltese and Captain Alexander Ball, RN, to command the British and Portuguese naval force blockading Grand Harbour. On December 29, HMS *Strombolo* succeeded in berthing at Marsaxlokk

and sent ashore 46 ten-inch mortar shells, 12 muskets, bayonets and cartridge boxes, four pistols, some three-inch rope and two bushels of coal. With them landed the first British troops to set foot on Malta; a small detachment from the Royal Regiment of Artillery, consisting of Gunners William Crawford of Capt. and Brevet Lt-Col. G. Wilson's Company, 1 Battalion R.A., and John Mulholland and William Willey of Major George Bowater's Coy., 1 Btn., R.A., under the command of Lieut. John Vivion (799). Detachments of the 30th (Cambridgeshire) Regiment of Foot and 89th (or Royal Irish Fusiliers) Regiment of Foot, along with a number of women and children, arrived on December 6, 1799. (8)

### *The Officer*

To identify the person depicted in the portrait with any degree of certainty was to be quite a task. Narrowing it down was less difficult but definitely not accurate enough.

There were various possibilities as to the identity of the officer, even that of being a Maltese. During the blockade, Captain William Gordon, R.E., (9) was the first from the Corps to land in Malta, (10) having arrived on board HMS *Perseus* on February 20, 1800. In 1801, Captain Gordon had written a report on the defences of Valletta, St. Elmo and other fortifications, which is now in the Royal Engineers Museum. To be recorded with a portrait was a very common practice then.

Similar reports were previously made in 1800 by Major William McKerras, R.E. (11) but as already stated, the single epaulette on the coatee indicates an officer of a lesser rank. Two other engineers whose 'war service' included Malta (1800) were Lieut. James Robertson

Arnold (later Lieut. General Sir James Arnold) and Lieut. John Fox Burgoyne (later Field Marshal Sir John Fox Burgoyne).

In 1803 Captain Samuel Trevor Dickens, R.E. (12) had also written a report on the state of military works on the islands of Malta and Gozo, which made him another likely candidate for the portrait. In 1805 Colonel Dickens (13) was Commanding Officer Royal Engineers in Malta and during July was authorised to raise the Maltese Military Artificers and Sappers and Miners.

The final possibility, that of the subject being Maltese, is Matteo Bonavia (1748-1823), (14) Adjutant of the new Corps, but also referred to as "assistant Engineer".(15) His dress is described as "*and the Maltese officer who was appointed adjutant (wore) that of an officer of the Royal Engineers.*" (16) By 1805 the R.E. officers' uniform had changed, but



retaining the old practice in overseas stations was still quite common.

Nor is the practice referred to as '*hand me down*', when a slightly outdated British uniform was handed down to Colonial troops, to be excluded. Bonavia was formerly a clerk of works under the Order of St. John in Malta. He was a strong opponent of the French and had accompanied Canon Saverio Caruana, one of the three leaders of the Maltese insurgents, on board HMS *Vanguard* as an interpreter in his meeting with Lord Nelson, probably being one of the few Maltese who could speak English at the time.

In his capacity as chief engineer of the Maltese rural militia, Bonavia was captured by the French and imprisoned in Fort Tigné, from where he later escaped to continue the fight with his fellow countrymen. He was made Adjutant of the Sappers and Miners, with the salary of 5s. *per diem* as engineer's pay and 3 s. a day as Adjutant; quite a sum for those days.

Due to his popularity with the Maltese Sappers and his extraordinary influence over them, Bonavia was instrumental in helping the British conquer the prejudice the Maltese had against military life.(17) He continued to serve until June 1814, when he resigned. A commission from the Prince Regent dated October 25, 1825 appointed his son Calcedonio (18) as Sub-Lieutenant in his stead.(19) By Royal Warrant dated October 5th, 1815, the two companies of Maltese Sappers and Miners stationed in Malta were ordered to disband. Calcedonius Bonavia was retained as a Sub-Lieutenant in the corps and appointed Overseer with 4s. a day extra to his engineers pay until he retired from the military on half pay on 1 June 1817. He continued his

employment with the Royal Engineers department in a civil capacity and also on half-pay until his death in 1850.

### **A Contradiction**

The name of Matteo Bonavia doesn't appear in the Army Lists at the Society of Generalists Library in London. Can it be assumed that he was just an employee of the Malta Government rather than a commissioned officer in the British Army? But then, how does one justify the uniform and that he was Adjutant of the Maltese Sappers and Miners?

The same Army Lists confirm that Calcedonio Bonavia had received a commission on October 25<sup>th</sup>, 1815, and that he went on half pay 1st June 1817. He appears regularly under the heading Malta Military Artificers on Half Pay, as Sub-lieutenant until 1850/1851 when he is shown under 'Casualties since our last issue' as he had died in 1850.

### **Conclusion**

Following various enquiries and research, my good friend Joseph Attard Tabone led me to a new source where better evidence can be located. This was the Government Annual Reports for 1927. (20) In the section titled "Report of the Curator of the Art Section" (O 15, Appendix C), prepared by Vincent Bonello as Curator of the Fine Arts Section, Entry No. 10 states: "Portrait of Matteo Bonavia. Purchased. Matteo Bonavia was an architect and engineer (1748-1823). He was assistant to Bali` Tigné".

To have assumed that one of the possibilities represented in the portrait was a Maltese was, therefore, quite correct. Matteo Bonavia should be officially

recognised as having been the first Maltese officer in the Royal Engineers.

### **References and Notes**

1. Manuscripts Vol. 418 (2), 236, National Library of Malta.
2. Royal Engineers' Journal, June 1934, passim.
3. *ibid.*
4. Captain R.J. Macdonald, RA, *The History of the Dress of the Royal Regiment of Artillery, 1625-1897*, London, 1894.
5. David C. Cavendish, BA, AMA, curator/archivist Gibraltar Museum, "Eighteenth-Century Artillery Buttons", in *The Bulletin of the Military Historical Society*, Vol. XX, No. 78, November 1969, 33-40.
6. Major D.A. Campbell, RA, "The Journal of the Royal Artillery, Vol. LXX, No. 2, pp 147-148, and Ernest J. Martin, "Buttons of the British Army - the Royal Artillery and Royal Engineers" in *Just Buttons*, 33-36 (no date available).
7. Stephen C. Spiteri, *The Knights' Fortifications*, Malta, 1990, Illustrations Nos. 138 and 139, pp. 136-137.
8. Lt-Col. M.E.S. Laws, OBE, MC, (late RA), "The Royal Artillery in the Blockade of Valletta, 1798-1800", in *The Journal of the Royal Artillery*, Vol. LXXV, 97-99, 1948.
9. Captain William Gordon was originally commissioned into the Royal Artillery on 1786. He became 2nd Lieutenant in the Royal Engineers on August 22, 1787, Lieutenant on May 27, 1791, Captain Lieutenant on December 31, 1795 and Captain on August 28, 1799. He saw 'war service' in Holland 1793-95, Malta 1800 and Elba 1801. He died in Malta on November 30, 1802.
10. Lt-Col. M.E.S. Laws, op. cit., 105-106.
11. Major William McKerras was first commissioned in the Royal Artillery in 1779. He became a 2nd Lieutenant of Engineers on March 15, 1780, Lieutenant, Royal Engineers on September 21, 1787, Captain Lieutenant on June 1, 1794, Captain on June 24, 1798 and promoted to Brevet Major on 1797 after 'war service' in Santo Domingo, West Indies. His other 'war service' were Gibraltar 1779-83, Holland 1799, Ferrol 1800 and Egypt 1801. He was killed while reconnoitering Aboukir Bay in Egypt on February 27, 1801.
12. T.W.J. Connolly, *History of the Royal Sappers and Miners*, 2nd Edition, Chatham 1857, pp. 154-155. Captain Samuel T. Dickens was Commissioned as 2nd Lieutenant on March 15, 1780. He became a Captain on August 29, 1798 and Lt. Colonel on March 1, 1805. His 'war service' is recorded as Ferrol 1800 and Malta 1800. As Sir Samuel

Dickens KCH, he was promoted to Lieut. General on January 10, 1837 and died in Ipswich on October 11, 1847.

13. Colonel A.G. Chesney, *History of the Maltese Corps of the British Army*, London, 1897, p. 75.
14. *ibid.* p. 78.
15. Connolly, op. cit., p. 155.
16. Chesney, op. cit., p. 80.
17. *ibid.* p. 78 (n).
18. *ibid.* p. 90.
19. *ibid.*, pp. 91-92 (n).
20. GR-65 (Museums), N.L.M.

This paper was first published by the author, with minor alterations and under the title "Portrait of an Unknown Officer" in: *The Bulletin of the Military Historical Society (UK)*, Vol. 47, No. 188, May 1997, and *The Sunday Times (of Malta)*, October 12, 1997.

### **Acknowledgements**

I am ever grateful to Mr. Dominic Cutajar, former Curator of the Museum of Fine Arts, Valletta and Mr. Dennis Vella for their assistance, especially with the photographs of the portrait. Also to Dr. Stephen C. Spiteri, Dr. John N. Rhodes TD, curator of the Royal Engineers Museum, Chatham, Kent, Joseph Attard Tabone and to Robert Marrion, Bryan Fosten, and the late Norman Litchfield.

# MINING THE GRAN CASTELLO FOR DESTRUCTION IN 1645

by  
Godwin Vella

Notwithstanding the huge resources that had been invested in refortification of Gozo's main central fortress during Grand Master Wignacourt's reign at the beginning of the seventeenth century, the Hospitaller knights and their military engineers continued to view the Gran Castello as an inherently weak military position, incapable of resisting a determined assault by a modest opponent. This weakness was seen to derive largely from the fortress' isolated and landlocked position in centre of the island, threatened as it was by neighbouring high ground.

This deficiency became particularly worrying during the mid-1640's when a strong attack on the Castello was being feared.(1) The Order reacted to this pressing menace by re-evaluating the Island's extant fortifications and establishing a contingency plan of action.(2) In his "Breve relatione delle qualita` della Fortezza dell' Gozzo e di quello che

convenga farsi", Fra Giovanni Bendinelli Palavicini confirmed the Castello's critical weaknesses and proposed the abandonment of Gozo, and the redeployment of the militia, artillery pieces and ammunition in Malta.(3) The greater part of the local population and all heavy artillery and related munitions were to be transferred immediately, while the smaller artillery, the defending garrison and the remaining civilians were to be carried over to Malta shortly before the arrival of the hostile besiegers.

## ***Blowing-Up the Castello's Main Fronts***

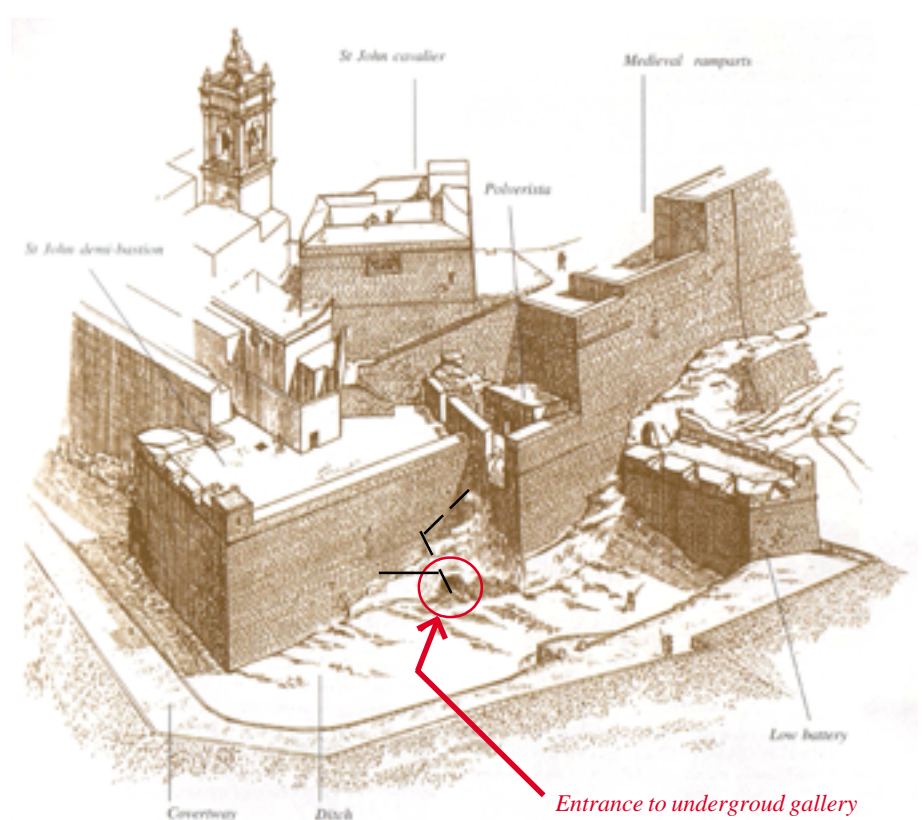
The proposed plan, however, would have rendered Gozo and its defences fully accessible to the Ottomans who would in turn employ it as a base of attack against Malta. Palavicini, therefore, suggested the blowing up of the Castello's main bastions via the excavation of a series of subterranean mines along the south and east facing flanks, namely "nell'

angoli tanto interiori quanto esteriori, e mezzo delli loro fronti".(4) The fornelli or explosive mine chambers at the end of each tunnel were to be charged with gunpowder barrels and eventually exploded shortly before the arrival of the enemy.

Palavicini's drastic proposal was backed by another reconnaissance by Count d'Arpajon who stated that "non possa far altro che in tutto a questo conformarmi". Likewise, d'Arpajon urged the Order to proceed with the abandonment of Gozo, leaving behind a small garrison and enough supplies for fifteen days only.(5)

These two reports were presented and discussed during the Council Meeting of 16th June 1645.(6) Palavicini's and d'Arpajon matching

*Graphic aerial view of St. John's Demi-bastion and adjoining works. Note the subterranean mine entrance at its foot (after Stephen C. Spiteri).*



recommendations were approved without hesitation. The Castello was to be abandoned if attacked by a strong force, while the proposed tunnels were to be dug out immediately. The following 1st July, the Commissioner of Works was instructed to send over to Gozo a skilled tradesman or an engineer to co-ordinate the excavation of the said subterranean mines.(7) These were in fact completed that same year.(8)

A notable Ottoman assault was actually attempted in 1645, when nine galleys from Bizerta headed towards Mgarr Bay. The vigilant and swift cavalry under the command of the Island's Governor, though, prohibited their landing.(9) The threat of a massive incursion over, the entrances of the highlighted underground structures seem to have been walled up and subsequently obscured by the re-modelling of the access road along the south-facing flank and the accumulation of a thick layer of earth and debris in the remaining part of the ditch.

**Mine gallery?**

The entrance of what looks to be one such 1645 subterranean mine complex was brought to light in



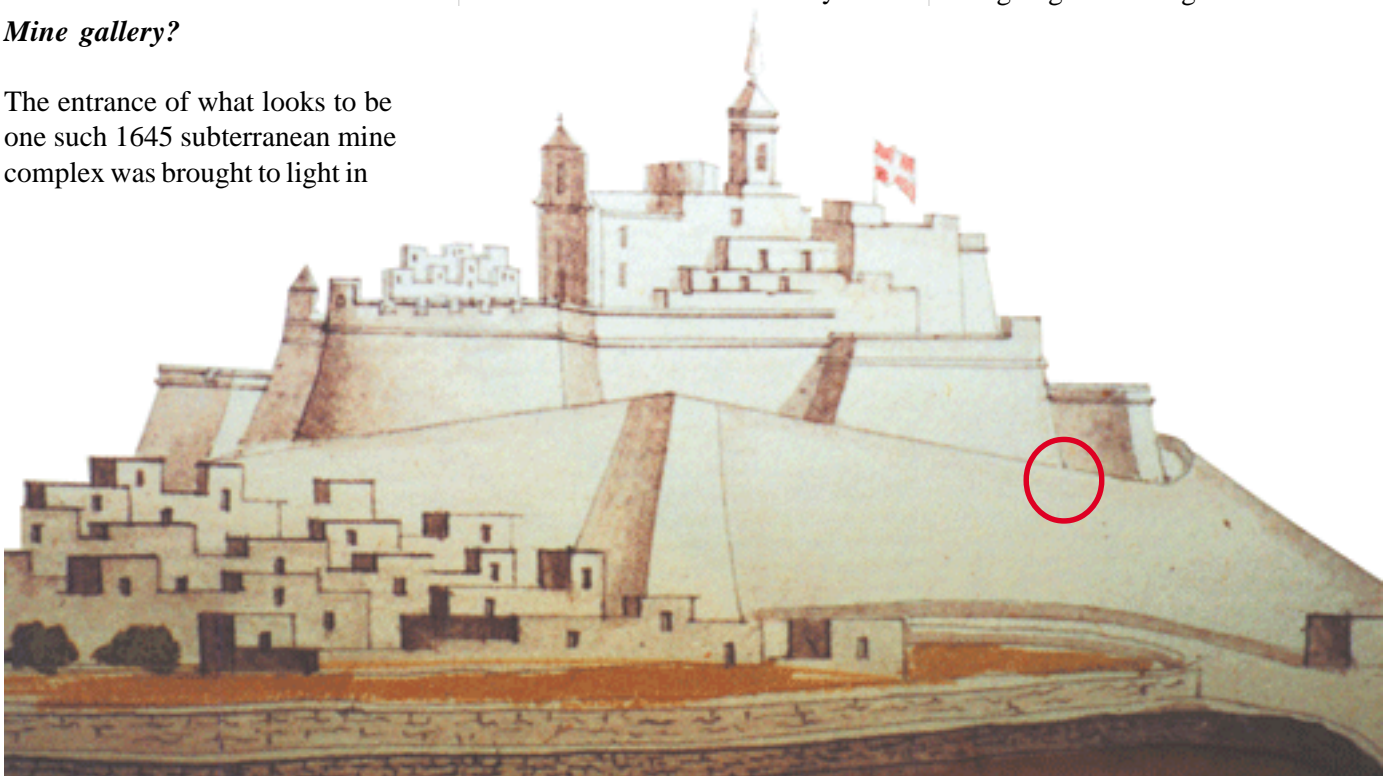
*Above, General view showing the entrance to the subterranean mine in the lower left corner. The section of a Bronze Age silo-pit and the entrance of a World War II shelter are visible in the upper right corner. Above, right, Flank and rounded orillion of St. Michael Bastion.*

autumn 1991, during the extensive rehabilitation and restoration project of St. John's demi-bastion and adjoining battery. It is found at the base of the northern extremity of the



Demi-Bastion's east-facing wall, and heads towards the northwest. When the first two meters or so were cleared, two side passages emerged, while it became evident that the central gallery was carefully backfilled and sealed by a well-built wall. The then Museums Department was called in and it was decided to halt the clearance works in view of a future scientific dig.(10)

To date, this relatively recent and yet intriguing archaeological feature is





Above, Lateral gallery - note the rock-hewn channel skirting along the left-hand wall.

still awaiting exploration, and access is not possible except for the first few metres.

The central gallery is some 1.5 metres wide and has a flattened arch

Below, Subterranean mine entrance as discovered in 1991 (photo by Mr. George Vella). Note the rough finish of the visible wall sections sealing off the mouth of the gallery.



ceiling. Its maximum height reaches up to about 1.4 metres, though the original floor seems to be lying at a lower level. The backfilling consists of well-packed stone boulders cemented together with terra soil, while the sealing wall is built of ashlar blocks of irregular dimensions. The flanking tunnel on the right hand side is blocked, whereas the one on the opposite wall can be followed for around two metres to the point where it splits up into two smaller passages set at ninety degrees to each other. Worth noting also is a small rock-hewn channel running along a sidewall, possibly for the housing of the fuse.

A striking characteristic of this rock-hewn complex is the inferior workmanship manifested in the rendering of the visible sections of the walls and ceilings. This must be attributed to the hurried fashion in which the respective subterranean mines were dug out. In the aforementioned instructions of 1st July 1645, the Commissioner of Works was also urged to engage the services of as much as possible workmen, provided that their fee was not excessive.

Despite the Gran Castello's serious deficiencies and the excavation of a series of subterranean mines to blow

it up, the dilemma of whether it should have been retained or replaced by a new coastal fortified town haunted the Order until their expulsion by the French in 1798. Fort Chambray was not intended to replace the Castello but to compel the enemy to attack two strongholds and thus alleviate it of some of the pressure,(11) while the Castello was relieved of its role as an armed citadel only on 1st April 1868.(12) Equally significant, however, its early 17th century defences were at no stage enhanced to reflect the subsequent developments in the art of fortification.

### *Acknowledgements*

Information by George Vella and Stephen C. Spiteri was crucial to put together parts of this article.

### *References and Notes*

1. A. Samut-Tagliaferro, *The Coastal Fortifications of Gozo and Comino*, (Malta 1993), 92.
2. These included also Garzes Tower (1607) and the first Marsalforn Tower (1615).
3. AOM 6551, *Discorsi e Pareri Sopra le Fortificazioni – Tomo II*, fol.96v.
4. Ibid. fol. 97r.
5. AOM 6554, fol.299.
6. AOM 6553, *Decreti in Materia di Guerra 1554-1645*, fol. 41r.
7. Ibid., fol. 64v.
8. Agius De Soldanis, (Farrugia G., *Ghawdex bil-Grajjja Tieghu*, Malta 1936,) 145.
9. Ibid.
10. Verbal communication from Mr. George Vella, officer in charge of the quoted restoration project (11 October 2006).
11. S. C. Spiteri, *Fortresses of the Knights* (Malta, 2001), 243.
12. Samut-Tagliaferro, 285.

FORT ST  
ROCCO  
THE FIRST  
BRITISH  
FLANKLESS  
FORT IN  
MALTA

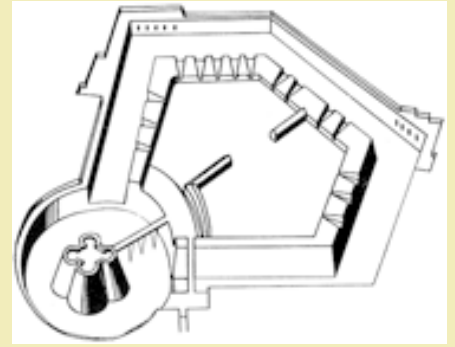
by  
*Dr Stephen C Spiteri*

Col. Lewis, writing in the 1860s, stated that in the early years of the nineteenth century, British officers considered Fort Tigne', built by the Knights of St. John in 1792-95, to epitomise the 'perfection of a small fort without flanks ... capable of considerable resistance.' Major McKerras writing soon after the British took over Malta in December 1800, considered it a work constructed with great deal of

ingenuity. The British military were immediately impressed by this small diamond-shaped fort and their engineers were quick to take up its 'theme' of a flankless fort, erecting their first such work on the Island of Anholt, off Denmark, in 1812, and then in a more fully-developed form, at Fort George on the island of Vido off Corfu in 1825. The three main aspects of such 'polygonal' forts, inspired by the writings of the Frenchmen Marc Rene' Marquis of Montelambert, were an irregular pentagonal plan, an isolated keep commanding the gorge of the work, and the use of caponiers and counterscarp galleries to provide flanking fire.

The first British 'polygonal' fort to be built in Malta, however, would only materialize in the 1870s. It was erected at San Rocco, on the eastern shoreline, opposite Fort Ricasoli, where it was placed to command the approaches to the Grand Harbour. Unfortunately, given the importance of the site, it was not to last long and was eventually replaced by a much larger coastal defence battery. Luckily, however, the record plan of the first Fort St. Rocco, drawn by Lieut. Chard RE and signed by Col. Henry Wray, CRE, on 9 January 1878 has survived and this shows

*British Battery, Anholt Island (1812)*

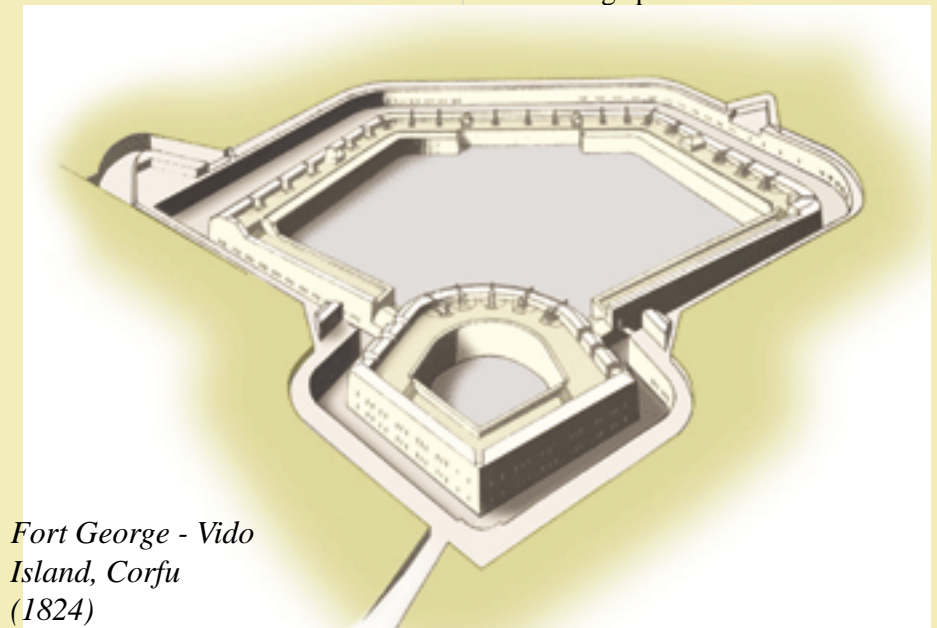


a small fan-shaped work, with a detached rectangular keep, linked by flanking caponiers to the body of the work and flanked by counterscarp musketry galleries accessed by underground communication tunnels.

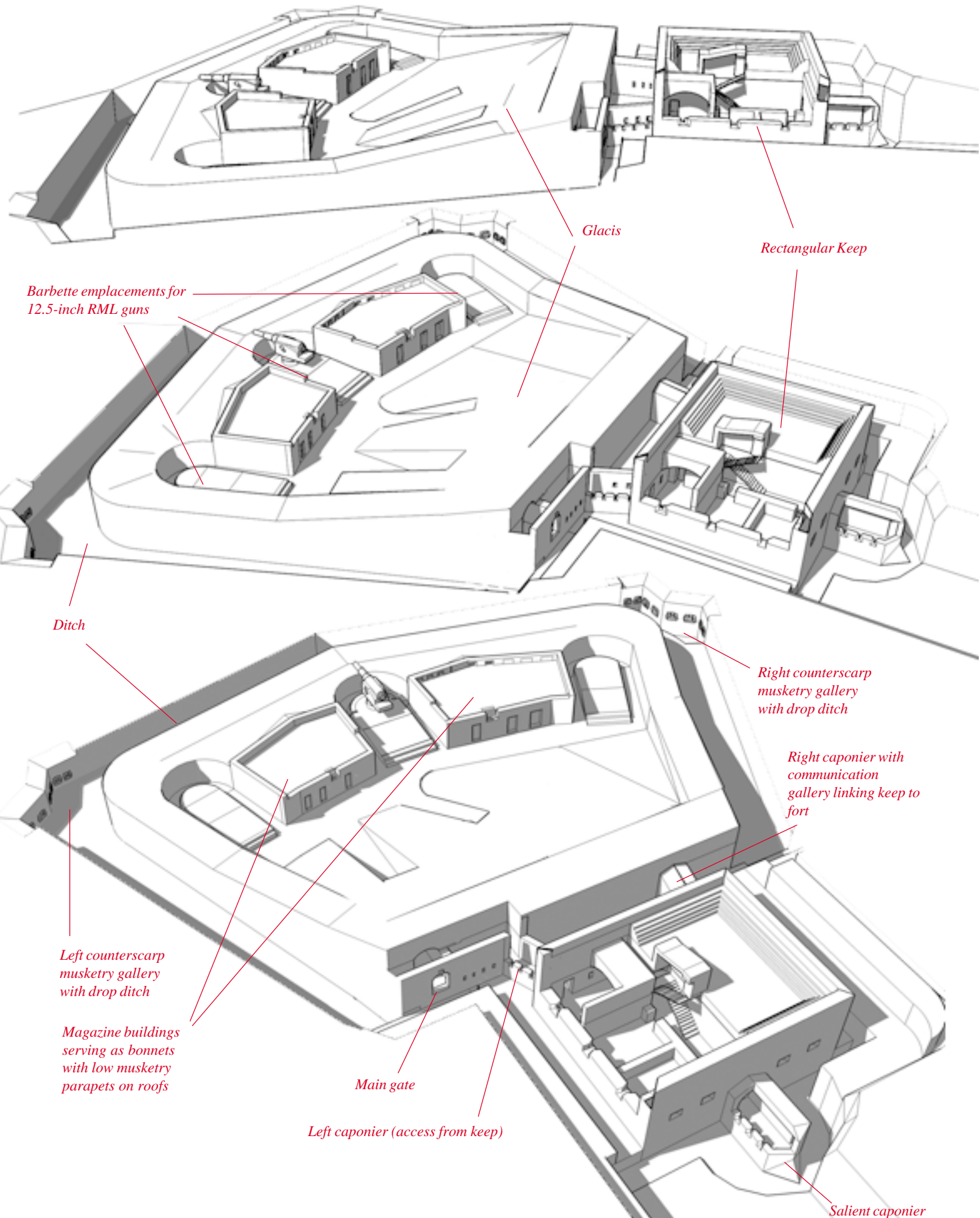
Work on this fort appears to have begun either late in 1872, or early in the following year for by January 1873 it was already being proposed to upgrade its armament of three 11-inch RML guns to 12.5-inch guns.

More of a battery than a fort, its relatively small interior was occupied by three circular barbette emplacements for RML coastal guns, their adjoining magazines, and the sloping glacis of the keep to the rear.

The magazines stood in the intervening spaces between the



*Fort George - Vido Island, Corfu (1824)*





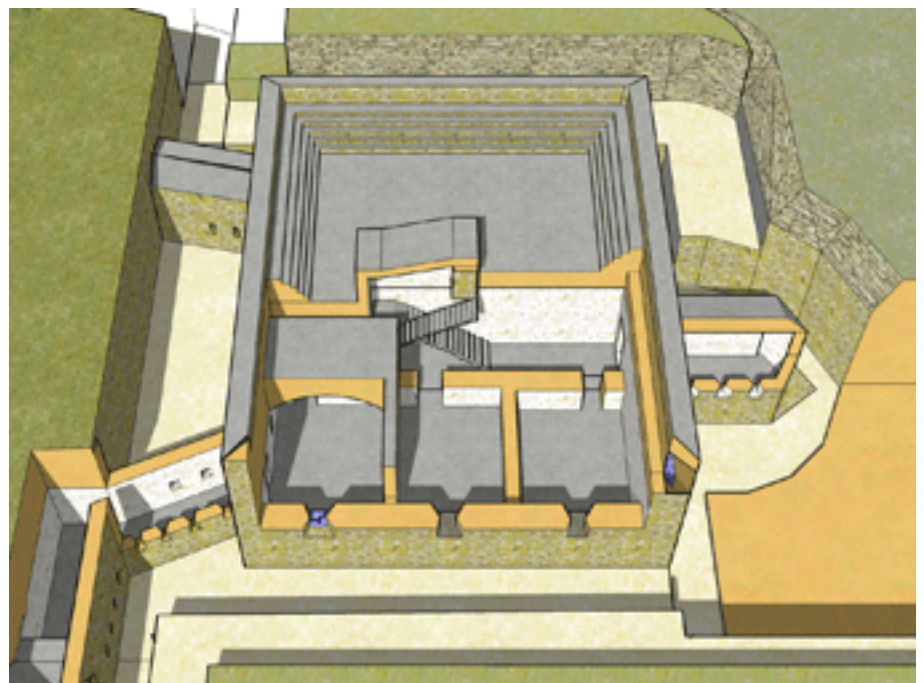
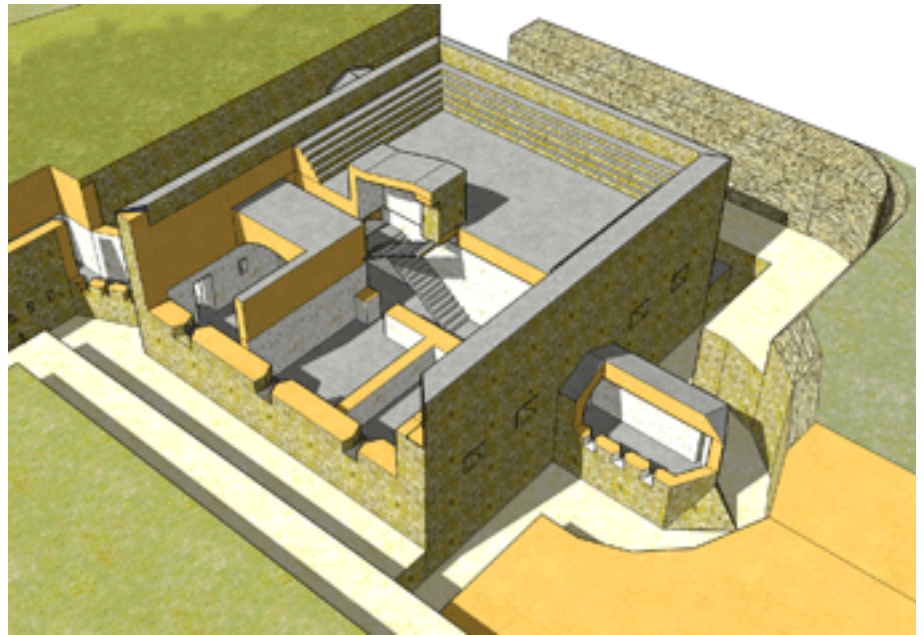
three emplacements, placed below ground, and capable of storing 197 shells/cartidges each. Above these, at ground level, stood the ammunition serving rooms, the roofs of which were fitted with 'bonnets' (loop parapets pierced with loopholes) for infantry fire.

The most unique feature of this fort was its rectangular keep, a single-storey blockhouse type of structure built in stone and designed to house a small garrison of sixteen men, two sergeants and an officer. The men slept in a single barrel-vaulted room on one side of the building and the officers in three smaller vaults on the other side, the two separated by a vaulted corridor in which stood a central staircase leading to the terrace, which was itself surrounded by a high four-step banquette and parapet.

The walls of the keep were pierced by a total of 12 musketry loopholes and were defended by three caponiers, one of which served as a caponier of communication linking the keep to the body of the fort (see reconstruction drawings, right).

The southern face of the keep, guarding the main access path into the fort, was the most heavily defended, fitted with four loopholes and a spur-shaped caponier. The keep had no gate or door and was only accessible from inside the fort. The main gate into the fort itself was situated on the left hand side of the gorge, flanked by the keep.

Lt. Gen. Nicholson and Maj. Gen Goodenough, inspecting Fort St. Rocco in 1888, found a number of faults inherent in the design of the work. They believed it to be 'very cramped, owing to the interior being almost filled up by the keep and its glacis.' The keep, in particular, they found to be 'really unnecessary', and the 'work would have been better without it.' Projecting above every part of the fort, it was seen as a



*Author's graphic reconstruction showing various cutaway views of the interior of the keep and its caponiers.*

liability as it provided a conspicuous skyline and an 'excellent mark for ships to fire at'. Their recommendation was to cut down the 'useless' stone parapet and banquette to roof level.

In the end, the whole keep was eventually swept away and a large fort, devoid of any keep was planted in its stead. A few elements of the old fort, however, particularly the

front of the work with its ditch and counterscarp, including the two galleries have survived, albeit in ruins.

*For further reading see Stephen C. Spiteri, British Military Architecture in Malta (Malta, 1996), 241-252 and Quentin Hughes, Britain in the Mediterranean and the Defence of her Naval Stations (Liverpool, 1981). All artwork, copyright of Stephen C Spiteri 2008*

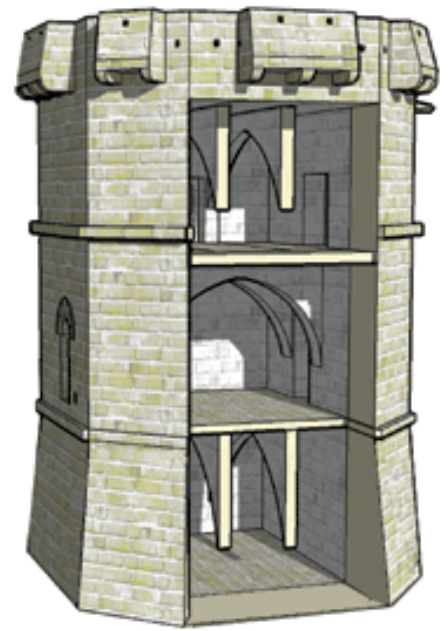
## A MEDIEVAL TOWER AT QRENDI?

by  
*Dr Stephen C Spiteri*

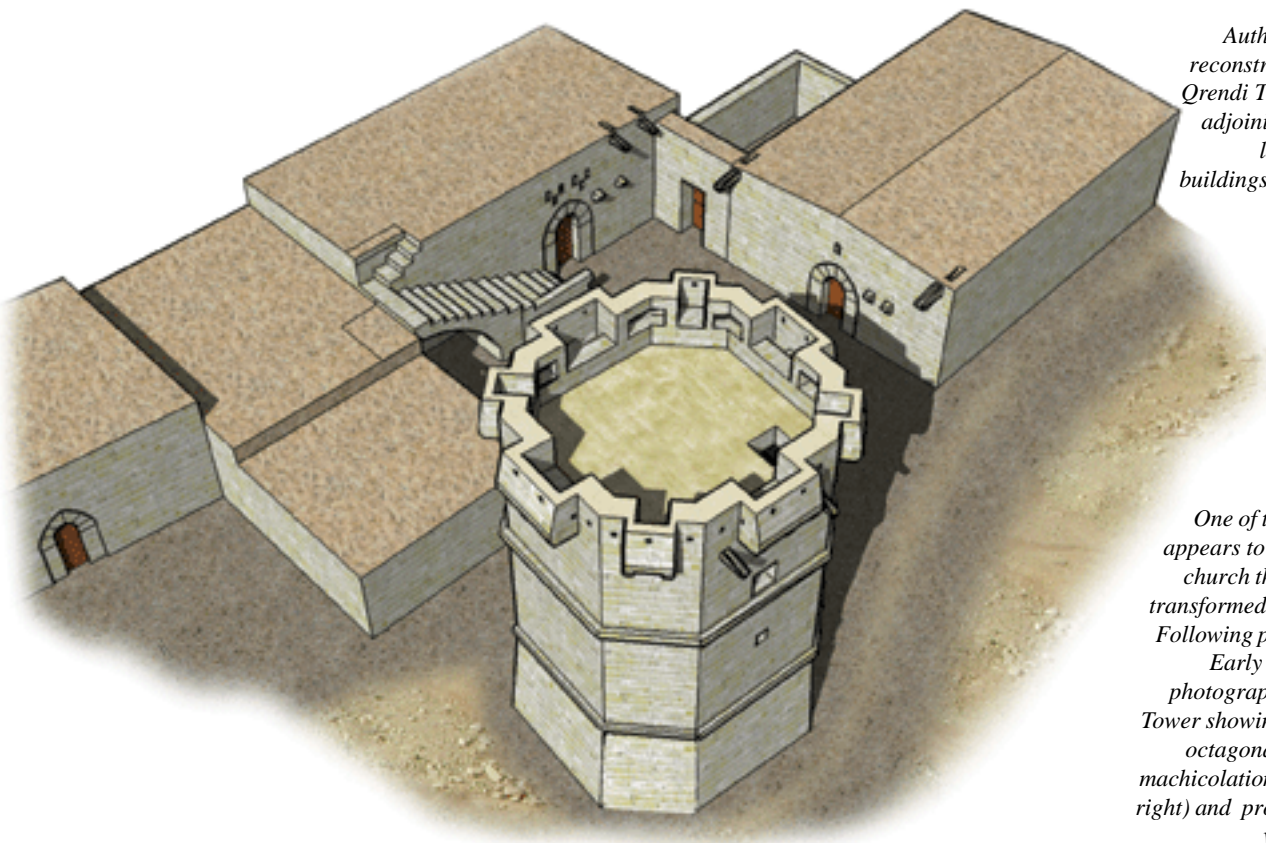
An important component in the defence of the Maltese throughout its history has been the tower. By the late 1300s, the Maltese islands already seem to have acquired a network of such elements, many of which appear to have been privately owned. Others, like the one which

stood in the plain of Burmarrad, seem to have formed part of royal fiefs and were granted in return for military service. The growing threat of Muslim corsair *razzie* towards the late fifteenth century led to the adoption of a system of coastal watchposts. An attempt, in 1488, by the islanders to get the king of Sicily to build them a strong tower on the island of Comino, however, proved futile. At least one small coastal watch tower is known to have been built during this period, at the mouth of the Grand Harbour (*Tarf il-Ghases*). Matteo Perez D'Aleccio's map of Malta at the time of the Great Siege depicts around eleven towers spread across the countryside. Some of these, although having long since disappeared, are also known through documentary sources. Torre Falca, which once guarded the road from Mgarr, soldiered on well into the eighteenth century.

The nature of Maltese medieval towers, however, is little understood



owing to the nearly total absence of surviving structures. The only two sources of information are the remains of the base of a circular tower at Xlendi, in Gozo, and, perhaps, *Torri Tal-Kavallier* in Qrendi. The latter, long believed by many historians as being a sixteenth or seventeenth century work, needs to be re-evaluated in the light of its



*Author's graphic reconstruction of the Qrendi Tower and its adjoining cluster of late medieval buildings (left), based on existing structures.*

*One of the buildings appears to have been a church that was later transformed into a barn. Following page, top left, Early 20th century photograph of Qrendi Tower showing clearly its octagonal form, box-machicolations (detail top right) and projecting rain water spouts (Maltese 'mizieb' - sing.)*

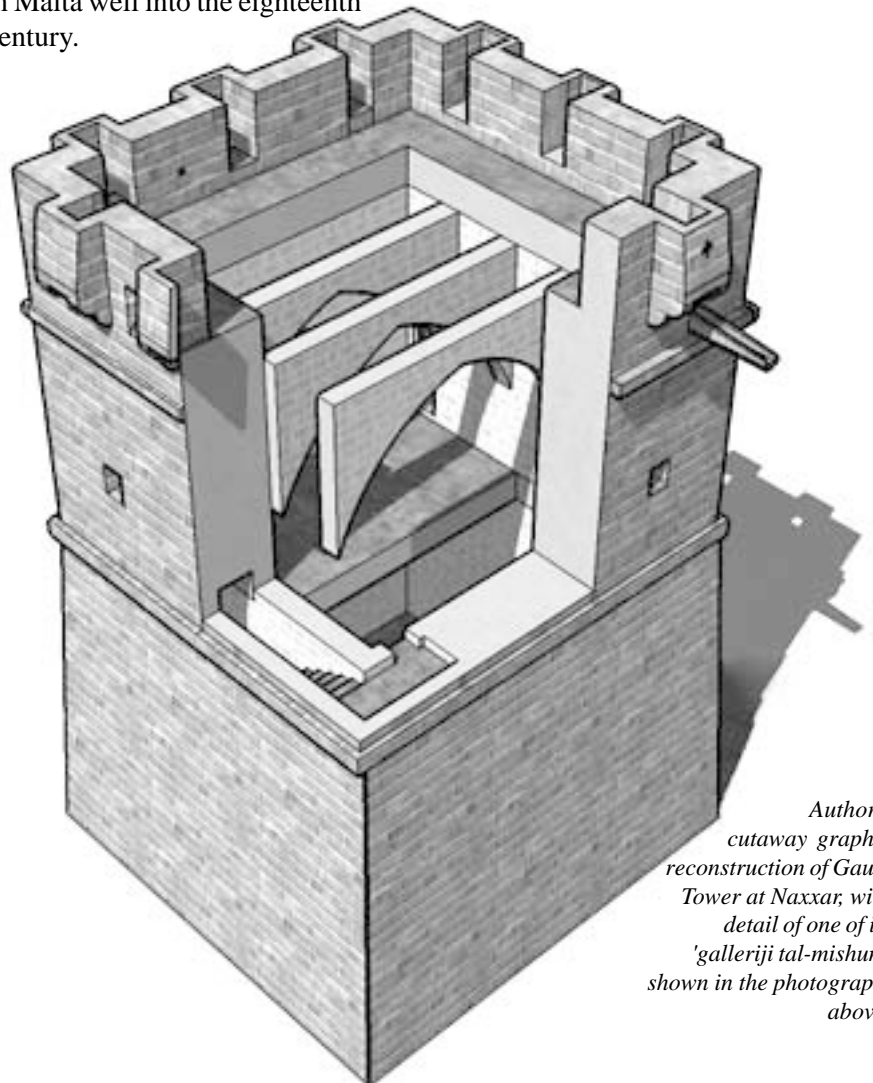


various archaic architectural features and contextual setting. Qrendi Tower's octagonal plan, pointed internal arches, heavy use of machicolation, and total absence of gun loops, together with the fact that it forms part of a medieval complex of buildings (including what also appears to have been a church - see drawing on opposite page), are possible indications of a pre-1530 origin. If so, it reveals a high level of workmanship and shows that tower design in late-medieval Malta was not confined to simple rectangular templates, of the type described by Mgr. A. Mifsud's in his work *La Militia e le Torre Antiche di Malta*.

The remains of the base of Xlendi Tower, likewise built with fine, smooth-faced ashlar reveal that this was a large structure with a circular-plan. If D'Aleccio's illustrations of the Maltese countryside can be trusted for their detail, than it would seem that circular towers were not an uncommon feature in the local landscape.

The basic defensive device of the Maltese medieval tower seems to have been the *piombatoio*, or box-machicolation, the drop-box known as the *gallerija tal-mishun*, a balcony-like structure that was projected outwards on stone corbels and used for dropping projectiles and

boiling oil on assailants. Qrendi Tower has eight, one on each face, while Gauci Tower in Naxxar, a tower built privately around the time of the arrival of the knights in Malta, has nine, has three on each face. Drop-boxes remained a common feature of towers and rural buildings in Malta well into the eighteenth century.



*Author's cutaway graphic reconstruction of Gauci Tower at Naxxar, with detail of one of its 'galleriji tal-mishun', shown in the photograph, above.*