

EFFORTS Annual Congress 2023
Maastricht (NL), 2-5 October 2023

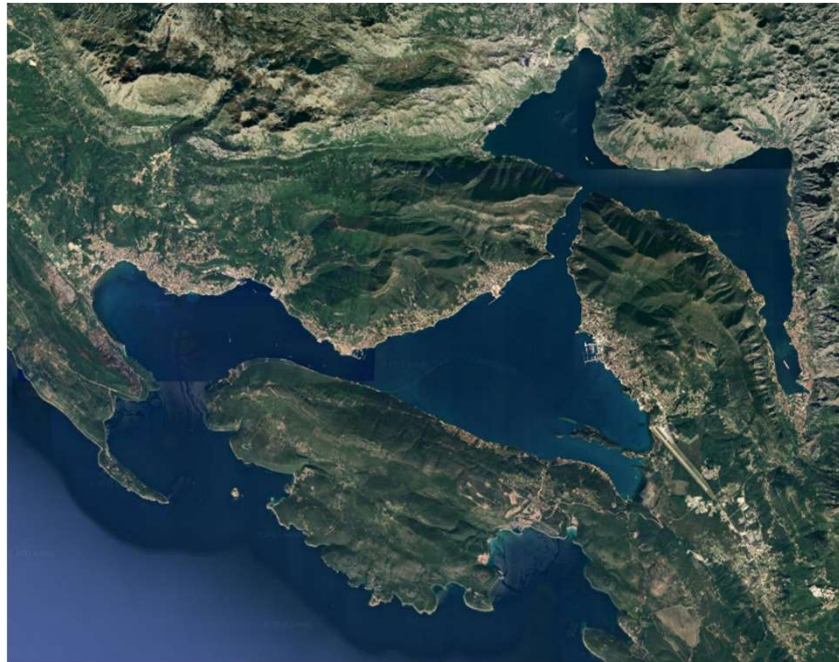


MAMULA FORTRESS - NEW HERITAGE HOTEL
Herceg Novi, Boka Kotorska Bay, Montenegro

Katarina Nikolić Krasan, conservation architect
Conservation Studio PROJEKTOR

INTRO AND BRIEF HISTORY

Boka Kotorska bay or Bay of Kotor is a huge fjord-like bay on the southern part off the Adriatic coast. It has 5 town and numerous villages along its coast. Historically, the main town is Kotor. The deepest part of the bay has been designated to the UNESCO World Heritage List, while the rest of the bay is its buffer zone. For over 2000 years Boka was a center of the wider region, the meeting point of western and eastern civilizations, the center of arts, crafts, architecture, and trade. Throughout its history all major empires used to fight over it for its important geo-strategic position. The empire we are talking about today is the Austrian Empire or Habsburg Monarchy that ruled the entire Balkan region in 19th and the beginning of 20th century.

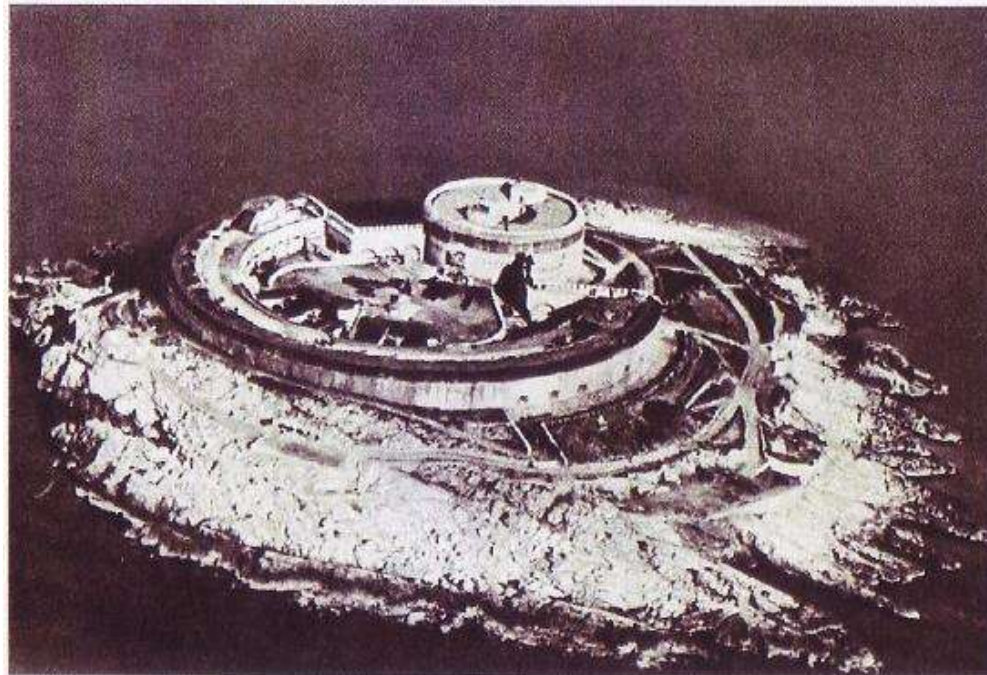


Back then, the main naval harbor of the Empire on the Adriatic coast was in Pula (Croatia), while Boka Kotorska bay was the most southern one.

Its primary role was to protect the Strait of Otranto - the entrance to the Adriatic sea, from Ottomans.

Mamula is a fortress built on the island of Lastavica at the very entrance of the bay.

It was built in 1854 and in 1865 it was named after admiral Lazar Mamula who was conducting its construction.



Ovaj telegram bio je izložen na zagrebačkoj pošti, prilikom 100-godišnjice telegrama u Zagrebu:

Der erste Adjutant der Armee an Seine Exzellenz Herrn F.M.L. baron Mamula in Zara. -Wien am 31.August 1865 No.3717/G.A.S.M. Seine Majestät der Kaiser haben mich allergnädigst beauftragt eure Exzellenz zu der verdienstvoll hinterlegten dienstzeit Glück zu wünschen und haben gleichzeitig allergnädigst zu befehlen geruft das zur bleibender Erinnerung an eure Exzellenz in dem Königreich Dalmatien selbst, das Fort auf Scoglie Rondoni bei Cattaro fortan den Namen "Fort Mamula" zu führen habe.

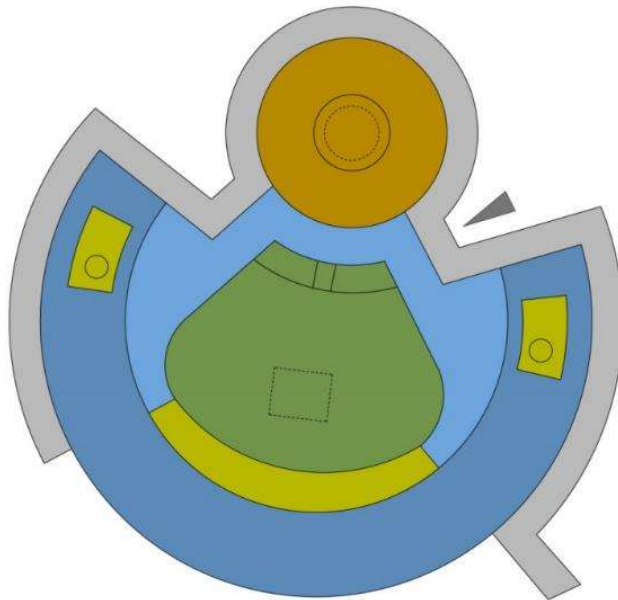
Von der K.U.K. Telegram Hauptstation Zara. Teleg. No. 1949 aufgeben in Wien in der Burg am 31. August 1865 um 12 Uhr 10 Minuten, angekommen Zara 31. August 1 Uhr 35 Minuten.

It is unknown if there was something on the island before Mamula but naval strategy and logic would indicate there was.

Along with two other fortresses (Punta Oštro and Arza), Mamula was a part of the first defensive line of the vast fortification system named Fortress Boka that consisted of over 100 military facilities strategically placed all over the bay. It circumcised the entire bay, protecting its core from the sea and from inland.

Mamula is one of the oldest forts from that era and was designed for the weapons of the first half of the 19th century.

It consists of the round tower, fortified wall with casamates, central elevated courtyard surrounded by 2 low courtyards, 2 water tanks, a moat surrounding the entire fortress, a small pier, and several watch posts around the island. As after 10 years it became obsolete, during 1870's a new and modern Mörser battery was added.



Even Mamula was extensively used as a military facility until the end of the Second World War (1945), it is mostly known as a prison as during the First and Second World Wars it was used as an infamous prison for military and civil internees.

It was abandoned from 1945 until 2015 even it was owned by the Military.

At the beginning of the project it was found in rather derelict state with numerous stone and almost all metal elements missing while its construction remained intact.

Due to the quality of its construction, but also to its distant location and abandonment its integrity has been almost entirely preserved.

From 1918 till 2015 no research, conservation or construction work was done on the fortress or the island.

The island with the fortress has been protected as a national monument of culture since 1959.

The fortress has a significant state of authenticity as through all its history it had only one major intervention during 1870's when a new and modern Mörser battery was installed.

NEW USE

Since 2015 the island with the fortress have been leased to the Swiss company ORASCOM Development Holding for the period of 49 years. The owner of the company is SAVIRIS family from Egypt.

THE AIM OF THE PROJECT

The **main challenge** was who to revive a 170-year-old fortress that was designed for ascetic life of soldiers with minimum of space, food, water, etc. per person, into a luxurious hotel with maximum amenities per person.

Therefore, the **main goal** was to **preserve its integrity and authenticity through adaptive re-use** and to make the least damage possible. It was done by introducing a set of conservation principles at the very beginning of the design as well as by constant presence and supervision during the works.

MAIN CONSERVATION PRINCIPLES

1. Preserve morphology of the island.
2. Preserve the original setting of the fortress.
3. Preserve and restore the original fabric of the fortress.
4. Protect and revive original vegetation and landscape design.
5. Keep new interventions to a minimum.
6. Make new interventions reversible and easily removable.
7. Preserve the original layout of the fortress.
8. No construction interventions were allowed as the original construction was found in an impeccable state, apart from 2 small positions that were bombarded in WW 2.

RESEARCH AND DESIGN PROCESS

1. The national conservation authority issued CONSERVATION CONDITIONS as well as URBAN AND TECHNICAL CONDITIONS that gave the general instruction for design and restoration.
2. A Study Tour was organized along the Dalmatian coast with the final destination in Pula in order to research the pool, the current state, the way of use, and the way of maintenance of the existing Austrian and Austro-Hungarian fortresses in Croatia.
3. A historic and archival research was done in the following archives:
 - Kriegsarchiv - Austrian State Archives (Vienna, Austria)
 - Historic State Archives in Croatia (Zadar, Split, Pula and Zagreb)
 - Kotor Historic Archive (Kotor, Montenegro), etc.

It resulted in numerous new findings about its construction and history.

Upon these findings, detailed technical survey, analysis of the current state was done as well as the Conservation Design.

The Concept Design was done by MCM Studio from Lisbon (Portugal).

Main Design was approved by the national conservation authority as well as by the Ministry of Spatial Planning and Construction. It contained all engineering phases, such as: architecture, low voltage and high voltage electricity, water and sewage systems, fire protection, traffic, water desalinization, lightning protection, etc.

Over 30 engineers were involved in the design process.

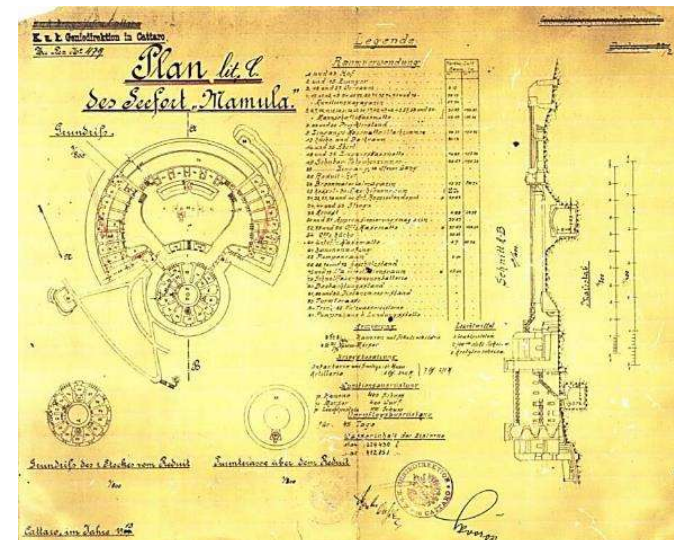
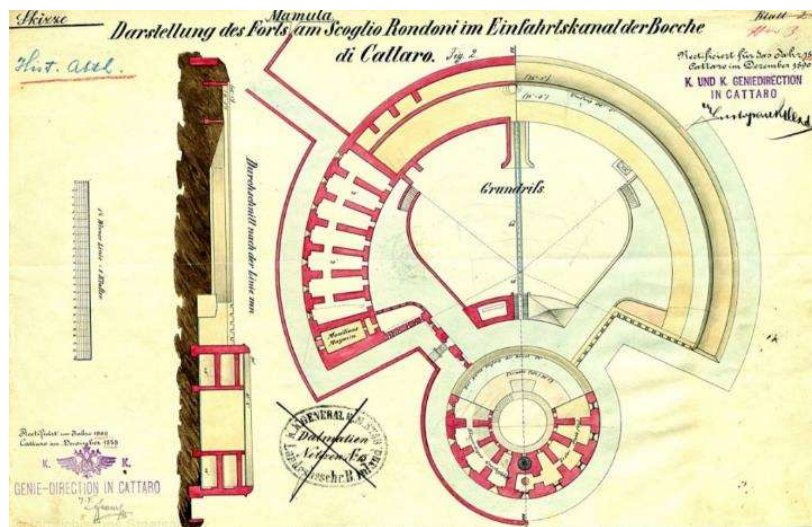
Considering that the fortress was used as a prison during the First and Second World War a historic and archival research on this specific topic was performed by the Faculty of History (University of Montenegro).

Along with the whole island being an open museum and respecting the sacrifice of the local people during two tragic periods of prison a Historic and Memorial Gallery is being designed. It will have 3 general segments: a physical display, multimedia presentation, and a web site.

FINDINGS

Beside preliminary research, after the restoration work started, numerous findings were discovered, such as:

1. Original system of collecting and preserving rainwater with 2 water tanks (restored)
2. Network of underground channels for excessive rainwater (restored)
3. Original sewage system
4. Draw bridge at the main entrance (restored)
5. Cargo elevator for the top of the tower
6. Vault and ceiling painting decoration in the tower (restored).



During the current revitalization, the fortress has been restored into a high-end hotel/resort with 32 rooms, 3 restaurants, 4 bars, 3 swimming pools, and a spa. The first guests are expected in April 2023.

The investment so far has come to cca 40 million €.

ACCESSIBILITY

Even the hotel will be operating up to 6 months/year, the fortress and historic-memorial gallery will be accessible 365 days/year

INCLUSION AND SUPPORT OF LOCAL ECONOMY

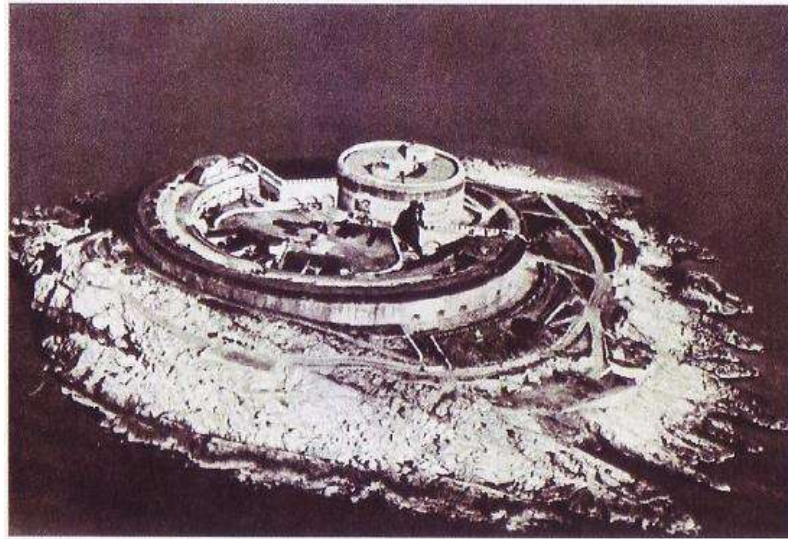
- Cooperation with local community;
- Engaging of local workforce;
- Providing food and wine from local producers;
- Outsourcing hotel work to local vendors (transportation, laundry, etc.);
- Promoting local culture and heritage;

SUSTAINABILITY

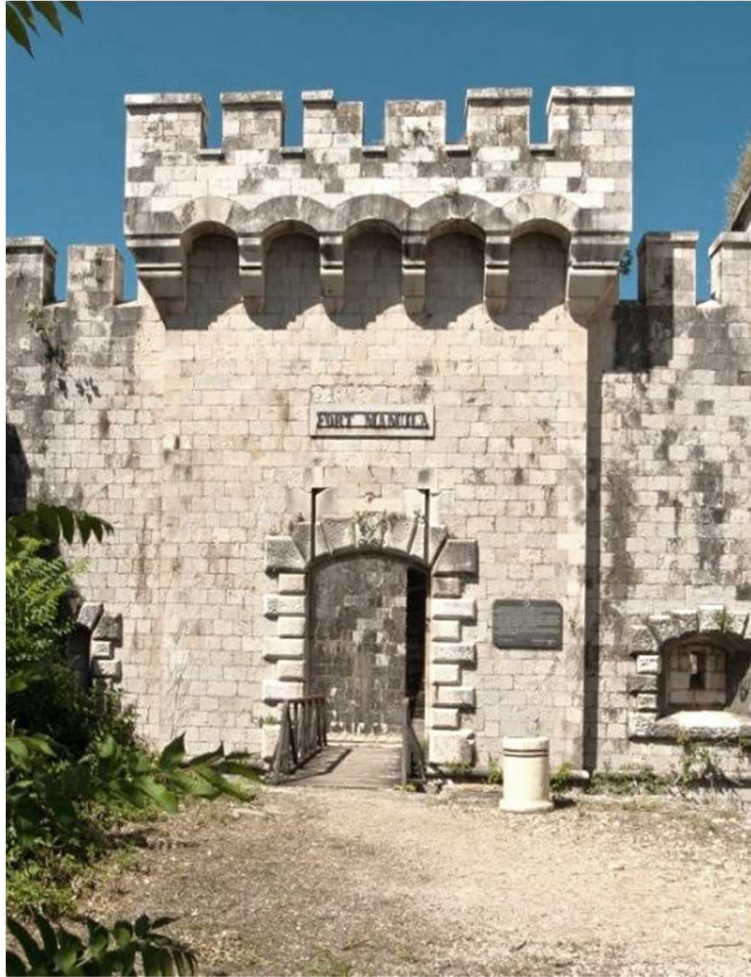
- Printing and use of paper especially in process of check in has been reduce to minimum; Guides and info for guests, newspapers and magazines are communicated through a digital platform;
- All hotel presentations, sales, brochures and documents are produced in online form;
- Usage of plastic is kept to minimum;
- Concept of menus is optimized to minimize quantity of leftovers;
- Producing composite from food leftovers for fertilizing plants on the island;
- All cleaning products are biodegradable and certified;
- Paper napkins and toilet paper are is biodegradable and has green certificate;
- Wastewater is being filtered and purified until it was safe to be send to the sea;
- Rainwater is collected, stored, filtered and used as technical water and for watering plants;
- Segmentation of the waste;
- Recycling glass;
- Recycling of used kitchen oil;

ORGANIZING AND SUPPORTING CULTURAL EVENTS

- Historic-memorial gallery on Mamula history;
- Art exhibitions of Montenegrin and international artists;
- Classical music concerts (local classical music festival OPEROSA, etc.);
- Publishing activities;
- Support to additional research on Mamula and other fortifications;



Images before and after the restoration
Aerial view of the island



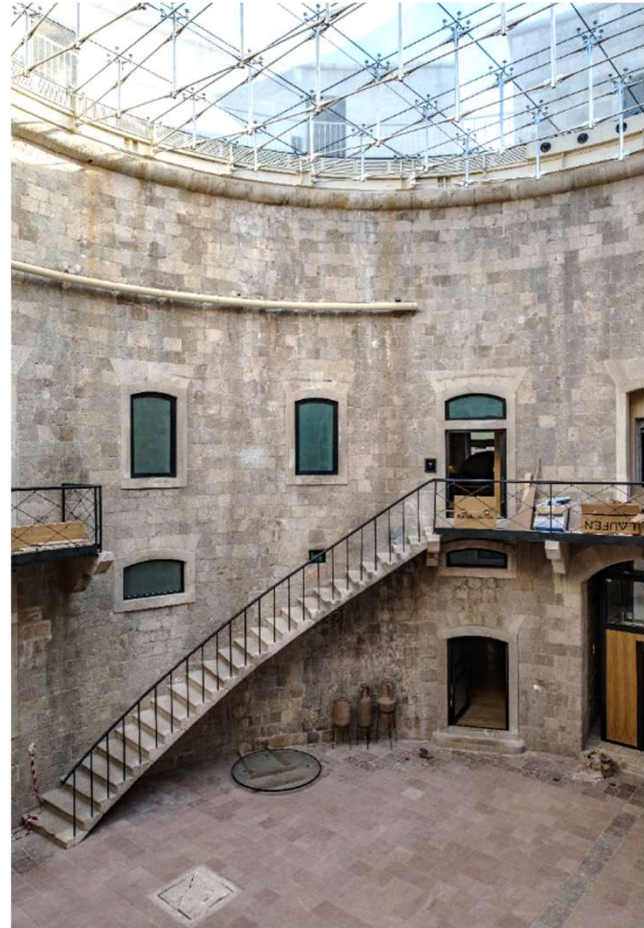
Images before and after the restoration
The main gate



Images before and after the restoration
Lower courtyard



Images before and after the restoration
The tower



Images before and after the restoration
Atrium of the tower



Images before and after the restoration
Exerzierplatz (pool deck) and the tower



Images before and after the restoration
Exerzierplatz (pool deck) and the tower



Images before and after the restoration
The eastern lower courtyard with cannon rooms (casemates)



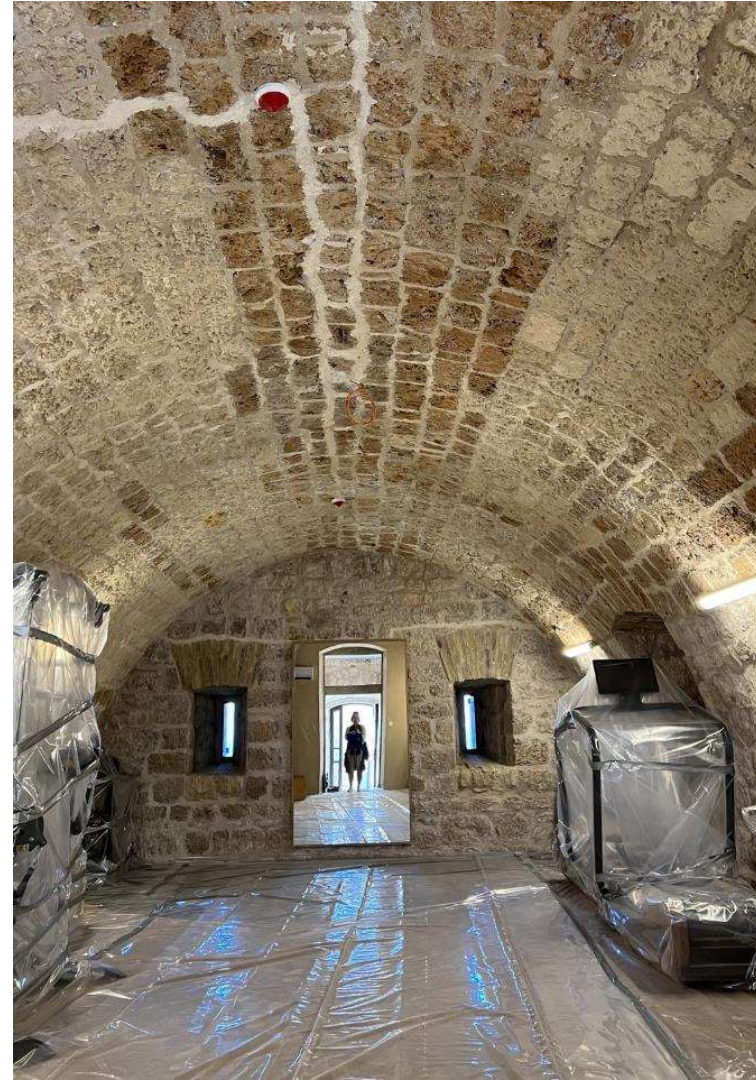
Images before and after the restoration
The western lower courtyard with cannon rooms (casemates)



Images before and after the restoration
Mašikula over the entrance to the tower



Images before and after the restoration
The Mörser battery



Images before and after the restoration
Interior of a cannon room (casemate)



Images before and after the restoration
Interior of a cannon room (casemate)



Images before and after the restoration
The main gate with the draw bridge mechanism



Remains of the painted decoration in the tower



Process of restoration of the painted decoration in the tower



Process of restoration of the painted decoration in the tower



After the restoration



Images after the restoration
Details



Images after the restoration
Details



Images after the restoration
Details



Images after the restoration
Details



Images after the restoration
Details



Memorial Day 2023

80th Anniversary of the prison abandonment



Memorial Day 2023

80th Anniversary of the prison abandonment

PHOTO:
©PROJEKTOR
© Mamula Island Hotel

For more info about the Mamula hotel visit:
www.mamulaisland.com

Thank you for your attention.