



Fortress Study Group
CASEMATE

No. 132 January 2025 ISSN 1367-5907



Korea — Italy — Netherlands — UK — Greece



CASEMATE 132 January 2025



The Chair

As we enter 2025 can I wish you all the best for the new year which is also the 50th anniversary of the foundation of the Fortress Study Group. We will be marking this milestone with a full programme of events including a conservation focussed conference in Portsmouth in September. Our provisional plans include a member's day in March, a tour to Crete in April, the conference and study days in Portsmouth in September and hopefully a tour to Belgium in October. Full details of these will be shared on the website and through the email newsletter.

In this 50th year I am proud to say that we are increasingly focussed on making good on our charitable purpose 'To advance the education of the public in the study of all aspects of fortifications and their armaments, especially works constructed to mount or resist artillery'. We have always reactively offered grants when approached, but in 2024 we launched what is intended to be a regular round proactively seeking grant applications. Our next round of applications closes on 31 January 2025. We have also joined the Civil War Educators Network and appointed an Education Officer and, during our tour to Northwest Greece we awarded plaques to several sites to recognise high quality restoration and interpretation. To support and hopefully extend this charitable activity we have also launched a fundraising appeal. I have personally set up a regular donation to which the FSG will be able to add gift-aid. Please can I encourage you to consider a one-off or regular donation to support this work.

Over the years we have received generous bequests or gifts from the families of members who have passed. These have occasionally been legacies but often gifts of books or research materials. With permission, we have usually sold books to contribute to our charitable funds. Regarding research material and historic ephemera, such as the Quarmbly collection of old postcards, it is our intention to

make these available to researchers in a digital form to create a FSG archive. If anyone would like to volunteer to help catalogue this material, please get in touch.

We are also working to return FORT to timetable. We distributed the 2023 edition, FORT 51 in December 2024 and we have set ourselves the challenging target to issue FORT 52, the 2024 edition, by the end of March 2025. We have drafts of most of the content but there is still a lot to do to convert this into a published edition including converting the drafts to house style, getting approval from the authors, completing the peer review process, design and producing proof copies, approval of proof copies, printing. We are determined to reduce the delay, but I hope you will understand there is a lot of work yet to do. We will then need to move on to FORT 53 and although we have articles in mind, we would always welcome more for the pipeline. So, if you think you could write a FORT article or know of another potential author please get in touch.

For those of you who use social media we have established a new Facebook group - forts and fortifications. This is open to members and non-members alike and is proving to be an informative discussion forum so please consider joining in.

Finally, to close on a positive note and a request. I hope you would agree that the FSG produces excellent material through, FORT, Casemate and the Webinars and organises enjoyable and educational events. If you think we are good please tell you friends and help us recruit new members, especially younger members, so that we can grow our membership to sustain this good work in our second half century.

David Clarke

The Editor

Welcome to the January issue of Casemate with I think some interesting articles including a report on Korean fortification given at the Chatham conference. My thanks to those whose articles or pieces of news were sent in, and to David Ross for the design and production. Sadly, we also carry a note on the passing of one of our members, Pam Fiorini, who many will have known. Pam was asked to write

an article for Casemate some time ago on the female view on our obsession and I have taken the opportunity of reprinting it. Looking forward I see our next trip is to Crete which will coincide with my birthday so anyone who wants to defray my costs as a present just send me your cheques to the Editors address.

Norman H Clark

Officers Of The FSG

TRUSTEES

Chairman	David Clarke <i>chairman@fsgfort.com</i>
Secretary	Nick Dougan <i>secretary@fsgfort.com</i>
Treasurer	Geoff Lee <i>treasurer@fsgfort.com</i>
Trustee	Charles Blackwood <i>Charles_blackwood@sky.com</i>

EX-OFFICIO MEMBERS

Editor Fort	David Lakin <i>fort@fsgfort.com</i>
Editor Casemate	Norman H Clark <i>normanhclark1@gmail.com</i> 50, Forth Park Gardens, Kirkcaldy, Fife, KY2 5TD
Reviews Editor	John Tomkinson
Pictures Editor	Charles Blackwood, <i>Email as at left</i>
IFC Rep	Dave Bassett <i>basettdave@yahoo.co.uk</i>

COMMITEE

David Flintham, Paul Beckmann, Alistair Graham Kerr,
James Gosling, John Bray, Sam Watson, Lewis Sharp

11, Fordwell, Llandaff Village, Cardiff, CF5 2EU
Membership Secretary David Laverick
The FSG Website is www.fortresstudygroup.org

Contents

Regulars

- 2 Chairman, Editor, Officers of the FSG, Contents
- 4 Publications of other Societies,
- 5 Future Events, Obituary, News / reports
- 43 Reviews
- 51 Items For Sale, Contributions to Casemate, Subscriptions

Reports and Features

- 7 Korean Fortifications
- 16 A wander through central Piemonte
- 22 The unknown fortress world heritage - the "Stelling van Amsterdam"
- 28 Wenceslas Hollar and the fortifications of King's Lynn
- 33 Reflections from the distaff side
- 34 Ionian Tour with Eternal Greece 2024
- 37 FSG/ PFS joint Plymouth study tour

Casemate – all rights reserved © Fortress Study Group.

Printed and distributed by The DCS London Group

*The opinions expressed in this magazine are those of the Editor or individual contributor,
and do not necessarily reflect the views of the FSG*

Design and production by D.C.H. Ross

Registered charity number 1194017



Crownhill Fort; eastern caponier looking forward to the Haxo casemates (Photo: David Clake)



Drakes Island; General view of the island during the 1990 FSG Conference (Photo: David Clarke)

Front cover: The main gate of Woodland Fort. The road is occupying the infilled ditch (Photo: David Clarke).

Back cover: Surviving woodwork to a window of the inner courtyard of the keep at Tregantle Fort (Photo: David Clarke).

Publications Of Other Societies

The publications sent to FSG are reviewed below. It is not possible to reprint these in full so where it conveys the content the title of the article is given and if not a short explanatory note.

The Editor has contact details for the various groups should members wish to subscribe to or contact them.

Subterranea September 2024 Issue 66

Subterranea Britannica goes to Saxony
Crossness Pumping Station: Preparing To Go Below
A Short Visit to Rochester
Scotland Beneath the Surface – a subterranean odyssey
Digging Downwards and Sideways for Water in Brighton, Sussex
World War II domestic air-raid shelter in Colchester
Bex Salt Mines, Switzerland
Health & Safety underground: water

Forts and Works – 50 August 2024

Spies, Subs and Wildlife – Radar and Radio intercept stations around Cook Strait in WWII
Derek and the see-saw – Early searchlight emplacements
Bob Semple's Tractor Tank Lives Again
Auckland's Lost Guns

Coast Defense Journal – Volume 38, Issue 3, Fall 2024

Cast Iron and the New Generation of Coast Defense Guns
The Historic Endicott-Era Batteries of Battery Bluff Park in San Francisco's Golden Gate National Recreational Area
Coast Artillery in Panama During World War II and After Seacoast Mortar Batteries, 1869

Coast Defense Journal – Volume 38, Issue 4, Winter 2024

The Personal Diary of Captain G R Ames
Protecting Powder Magazines in Third System Forts 1826-1860
Armament for the Coast Defenses, Bethlehem Iron and the 100-Gun Contract
Appendix to Armament for the Coast Defenses, Registry of the Bethlehem 100-gun Contract Gun Tubes
Ventilators on Army Coast Artillery Buildings, 1890 to 1917

CDSG Newsletter – Fall 2024

Updating the Most Endangered Coast Defense Sites
Webpage Listing
Summary of the 2024 Member Survey Responses
Fort Fremont Delivery Table Project
Bora Bora Stand Down
CDSG 2024 Key West Conference Tampa Special Tour May 7-11, 2024
CDSG Special Tour to HD of Tampa

CDSG Newsletter – Winter 2024

Proposed CDSG Annual Conference 2026, Coastal Defenses on Oahu
Stabilizing one of the last WW2 steel fire control towers in the USA
CDSG and Fort Wiki
Hampton officials push to restore Fort Wool
Army begins the clear up of Shoals Point, Sitka
Fort Stark conditions and clean up
Visiting newly restored WW2 fire control tower 3 at Dewey Beach, DE
A visit to the National Museum of Military Vehicles, Dubois, Wyoming

Palmerston Forts Society 'Redan' 85, 2024

When I think of the first Redan I have, No16, June 1989, the year I joined the PFS, and compare it to the latest edition, it is a very different animal. No 16 was A5, staple bound, 34pp, a stiffish cover, minute type, some good plans but, sensibly, no photos. This edition is as usual of 100pp, perfect bound, stiff covers and gloss paper, full colour - an excellent quality journal. Now an annual publication, in early days there were sometimes two in one year. **Charles Blackwood**
This year's articles:

- The Bombardment of Steep Holm, 1898
- The Snyder Dynamite Projectile
- Fort Gilkicker – the revelation of the Victorian Fort
- Victoria Fort, Osborne House
- Victorian Campaign Medals – The New Zealand Medal of 1845-47 and 1860-66
- Fort Wynyard, Cape Town, South Africa
- Fort Paull at War

Future Events

Unless otherwise noted for details of any FSG organised tours, contact the Secretary

Spring Members Day - York - 15th March

Fortifications at Risk Conference - Portsmouth - Friday 05th September 2025

Portsmouth Study Tour 6th to 8th September 2025

Up-to-date details available via the newsletter and on the new FSG Website www.fortresstudygroup.org

OVERSEAS TOURS

International Tour to Crete 2nd to 16th April 2025 - registration open

International Tour to Belgium – October 2025 Dates tbc

Zoom Presentations Details circulated via Newsletter

Obituary

Pam Fiorini, 1948 – 2024

Pam's first FSG trip was to Bermuda in 1998. She managed to cope with us and returned in 2008 to visit Slovenia after she retired, thereafter attending all our trips up to Malta in 2017. Pam always came prepared for these journeys. An avid reader she clearly studied where she was going and was



keen to question our guides. Her constant companion was her husband Mike whom she had married in 1969 after her graduation from Seattle University.

Surprisingly Pam had interests other than fortifications! Reading and knitting but particularly, cooking. Pam and Mike were keen to host meals and one or two of our members, on trips to Seattle, were welcomed to their home to sample her excellent culinary skills.

I, along with many other members of FSG, and CDSG, will have been saddened by news of Pam's death. The world will be a little lessened with her passing.

Pam was asked to write an article on the 'female view' of all this fort hunting and it has been reproduced in this issue.

Norman H Clark

News / Reports

FSG Charitable Grants

In late 2023 FSG launched its first ever proactive grant application process. This process is being managed by the Charitable Activities Sub-Committee who, after carefully reviewing the applications, made three awards in May 2024.

These were:

- £800 to the Slough Fort Preservation Trust to support the restoration of the west wing battery.
- €1500 to Fort Le Bron in Lyon for an educational cut-away cannon display
- £1500 to create a WW2 educational experience

All three projects have since made good progress with the funds provided and there are more details (which will continue to be updated) on the website, as below

<https://www.fortresstudygroup.org/pages/slough-fort-grant>

[grant](https://www.fortresstudygroup.org/pages/fort-de-bron-creates-an-educational-replica-cannon)

<https://www.fortresstudygroup.org/pages/fort-de-bron-creates-an-educational-replica-cannon>

<https://www.fortresstudygroup.org/pages/shoreham-fort-grant-for-ww2-experience>

Slough Fort

Slough Fort Preservation Trust have used a grant from the



Left: Holdfast ring after initial cleaning, note damage to cast iron-work believed to have been caused by attempted removal for scrap (photo Author). Right: The complete cleaned, treated and painted holdfast ring (photo Clive Holden)

News / Reports (Continued)

Fortress Study Group to help restore the West Wing Battery constructed in 1891 for a 9.2 inch and a 6-inch breach loading gun on disappearing mountings. Until recently the 9.2-inch emplacement had been filled in and capped with concrete. Having gained Scheduled Monument Consent, the Slough Fort Volunteers excavated the emplacement and surrounding area over six weeks. In the process they discovered the original holdfast ring and the remains of the original road into the fort. The FSG grant has already contributed to conservation of the holdfast ring and the recreation of gulleys to line the uncovered roadway.

Fort De Bron

The Association du Fort De Bron are the volunteer custodians of this Séré de Rivières fort near Lyon completed in 1871. The fort was armed with 120mm breech loading guns using the 'De Bange' breech system and the association have previously created a very convincing replica gun and carriage. They applied for a FSG grant to help fund the manufacture of a replica cut away barrel of a 120mm de Bange gun to show the principles of how the gun and breech



worked. This will form part of an 'artillery room' in one of the casemates explaining late 19th Century artillery. The replica gun has already been moulded. The next stage will be to create a 'scene' with shells, cartridges, mannequins and interpretive signage.

Shoreham Fort

A recent FSG grant has helped the Friends of Shoreham Fort create a WW2 education area. Following the success of their WW1 Memorial Trench, the Shoreham volunteers have

secured and repurposed the vandalised west caponier to create an immersive WW2 air-raid experience as part of a wider display on the civilian experience of the second world war. The new facility has already been visited by organised



school groups which is bringing a new generation into contact with the fort.

FSG Charitable Fundraising Appeal

To support the FSG grant programme to grow and sustain the grants we provide we are launching a fundraising appeal open to members and non-members. The short-term objective is to raise £3000 to double the funds FSG have budgeted from reserves for our second round of grant applications. To hit this target would require a dozen people to donate the equivalent of a pint of beer a week!

The longer-term objective is to grow and sustain our grant making activity so that we can do more to encourage research into and restoration of fortifications.

If you would like to make a one-off or regular donation you can do so on the 'Appeal for Donations' page on the website. Please tick the **'gift aid' box if you are a UK taxpayer as this increases the funds, we raise by 25% at no cost to you.**

<https://www.fortresstudygroup.org/pages/fsg-charitable-activity-appeal>

The Society for Post-Medieval Archaeology is Europe's leading society for the study and promotion of historical archaeology. The SPMA was founded in 1966 with the aim of promoting the archaeology of late medieval to industrial society in Britain, Europe and those countries influenced by European colonialism. The Society now covers the

archaeology of the period up to the present day. To achieve this aim the Society publishes the triannual journal Post-Medieval Archaeology, and a twice-yearly newsletter, as well as regular monographs, and holds conferences and meetings.

web site: <https://spma.org.uk/>

Korean Fortifications

By Myongjong Shin

As part of the recent Chatham Conference the IFC delegation organized several talks, one of these by Myungjong Shin from South Korea, a chief researcher at the GyeongGi Institute of Cultural Properties, in charge of the conservation and management of the country's mountain fortresses.

This report introduces a topic which few of us will be familiar with and so as Editor of Casemate I was very pleased to be given a copy of the conference notes for this talk. What follows is the speaker's text with some minor adjustments after translation.



An Introduction

This is a very difficult and complex topic even for me, because Korean fortresses before the 10th century are hard to date. As I will explain in a moment, until about the 10th century, the Korean peninsula had constructions built by different nations in their own way. They were captured and lost, and the fortresses and its materials that the other side had built were modified and often improved. So, there are many different opinions among scholars in Korea about what happened to the fortresses before the 10th century, and new findings are still being made through additional excavations.

Secondly, we have very little information about the fortresses that are currently part of North Korea, except for the major

cities, so we will discuss the fortresses that are in North Korea's neighbours China and South Korea.

Finally, I'd like to look at the geographical features, form, and construction of the fortresses.

In fact, if I were to give you a detailed description of a fortress, there are so many elements to it, including its location, scale, materials, builders, and the various features of the fortress: gates, posts, parapets, lookouts, outworks, water gate, cistern, buildings, batteries, and so on. I'd love to go into all the details, but due to time limitations, I'm just going to talk about a few important things today.

My main goal in presenting this topic here today is to help you come up with an iconic image of a "Korean fortress" in your mind.

Introduction

South Korea is located here. In terms of total area, the Korea Peninsula is about the same size as the United Kingdom. The entire Korean Peninsula is a 70% mountainous area. You can see that South Korea has a large mountain range on the right.



The recent adoption of the "ICOMOS Guidelines on Fortifications and Military Heritage" in 2021 has created a global perspective on fortifications. The objectives of the Guidelines on Fortifications and Military Heritage are to establish basic principles for interventions and methods of research that are specific to the conservation, protection and value of fortifications and their surrounding cultural landscapes.

From prehistoric to modern times, from earthen walls to the present day, there are many different castles, and fortifications and military heritage is an important link in the history of mankind. Fortifications have been a necessity for human communities to defend themselves. Fortifications may include a range of architectural forms from earthworks to complex structures designed for offensive and defensive purposes. Surviving fortifications and military heritage from the distant past to recent times have served as a major link to the history of human settlements, nations, and regions.

Koreans and Korean History – a Brief Overview

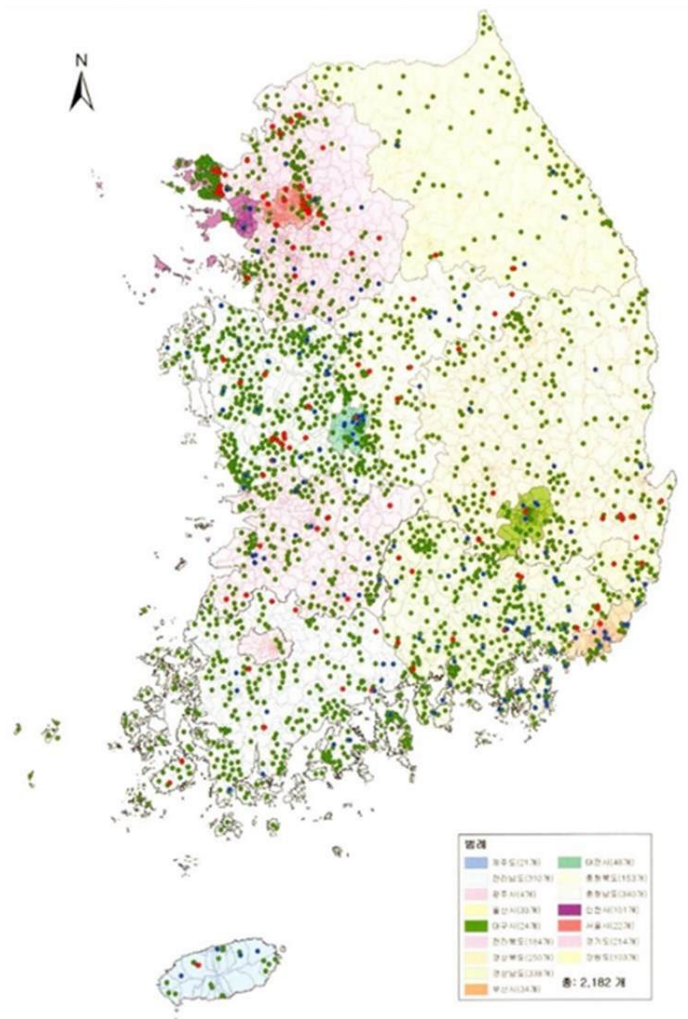
In the record of royal and state operations from the 14th century to the early 20th century, it is written that "We are a nation of fortresses" as we have between 3200 to 3300 fortresses in the historical records. The record also says that "it was because of the benefits of mountain fortresses" that

we were able to withstand various invasions.

Some of fortresses are listed in North Korea, but it is difficult to pinpoint their location and there has been no actual research. Of the total 3300, about 2200 are in South Korea. Of these, there are 1920 non-designated cultural properties. There are about 100 nationally designated cultural properties that are managed by the government. The difference between national and non-designated is determined by various factors such as size and value.

Distribution of fortress heritage

- 2,182 sites



To give you a brief overview of Korean history, the oldest book in Korean history is the Samguksaegi, (The History of the Three Kingdoms) a 12th-century chronicle. It's a collection of accounts of the Korean peninsula from ancient texts from B.C. written in classical Chinese. It also includes folk tales. We usually base our ancient history on these books, and when we do archaeological excavations, they usually match the records. The historical chronology of the Korean Peninsula based on excavations and historical records is as follows.

This is a map of Gojoseon in 2333 BC, also known as Old Joseon, the first Kingdom on the Korean peninsula. The

Chronology of Korean History

B.C.

A.D.

About 700,000 years ago : The beginning of the Paleolithic culture
8,000 BC : Neolithic culture begins
2333 : Founding of Gojoseon (Old Joseon)
1500 : Beginning of the Bronze Age culture
Around 400 : Dissemination of iron culture
Year 57 : Founding of Silla
Year 37 : Founding of Goguryeo
18th year : Founding of Baekje

42 : Founding of Geumgwan Gaya
372 : Introduction of Buddhism
676 : Silla unifies the three kingdoms
698 : Founding of Balhae
918 : Founding of Goryeo
1392 : Founding of Joseon
1897 : Establishment of the Korean Empire
1919 : Establishment of the Provisional Government of the Republic of Korea
1948 : Establishment of the Government of the Republic of Korea

governance changed from a tribal state to a federated state before 37 BC.

Following this there were three ancient states, which competed until the 7th century. In the 4th century, Baekje, in the 5th century, Goguryeo, and in the 6th century, Silla which became the dominant power on the Korean Peninsula. In the 6th century Silla unified Korea, while other states of the Goguryeo people were created in the north.

In the 11th century, a state called Goryeo emerged, and the current administrative form of Korea was settled after the 15th century during Joseon Dynasty. In other words, the history of Korea has been continuous from the country of Goguryeo in B.C. to the three kingdoms after B.C. to the single system of Goryeo and Joseon after the 10th century.

Features of Fortresses by Era - Three Kingdoms Period Fortresses , Goguryeo (BC 37~668)



Onyeosanseong fortress

Let's start with the mountain fortresses of Goguryeo, which lasted from 37 BC to 668 BC. On the Korean Peninsula, three Goguryeo fortresses can be found in what is now North Korea and neighbouring China. Of the three, **Onyeosanseong fortress** was built after Goguryeo was first established and was added to the World Heritage List in 2004. It is about 800 metres above sea level and has a circumference of about 4.2 kilometres.



Onyeosanseong fortress

Originally, in ancient times, there were fortifications on the plains to protect the king and their people and mountain fortifications in case of an emergency. However, the exact location of the flatland fortress is not known.

The second Goguryeo mountain castle is **Hwando Mountain Castle**. There is a fortress on the plain and a mountain fortress close by. You're going to want to remember the shape of this mountain fortress because that's what we're going to see over and over again.



Onyeosanseong fortress

To give a very brief overview of the characteristics of Goguryeo castles, fortresses were built to connect mountain ranges, including valleys. Secondly in the case of a fortress built on a mountain, it is a stone structure filled with earth inside. One or two layers of stone pillars are stacked to create a living space inside. The third characteristic is that the castle stones are pyramid-shaped on the outside and filled with thin, long stones on the inside, so that the wall will not collapse if the outer surface is removed. The gates are usually open and wooden.



Hwando Mountain Castle



Above and below: Hwando Mountain Castle



Above and below: Baekam Fortress



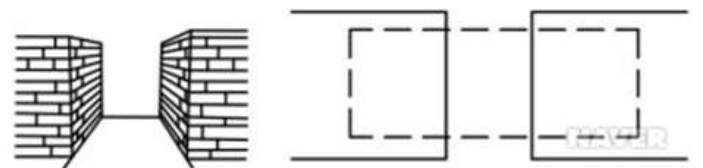
Next is **Baekam Fortress**. The circumference is approximately 2,5km. If examine the filling stones where the outer stones have been removed, you can see them sticking out sharply. Looking at the wall as it was built, you can see that the lower part of the wall is battered. The base stones were stacked back-to-back and stepped to add stability to the wall structure.



Baekam Fortress



Baekam Fortress



Features of Goguryeo fortresses: open gates

Baekje (BC 18 ~ 660)

As mentioned earlier, there were three competing states on the Korean Peninsula from the late 2nd BC to the 7th century AD, and one of them was Baekje. Baekje's fortresses remain in the original locations, but they were reconstructed with stone walls in later periods, so it is difficult to find the original Baekje Fortress.

Among them are **Pungnap Toseong** and **Mongchon Toseong**, which are both fortresses in Seoul, but as we saw earlier, the king usually lived in a flatland fortress and fled to a mountain fortress in case of emergency.

Right: the Pungnap Toseong and Mongchon Toseong fortresses





Above: Pungap Toseong fortress



Mongchon Toseong fortress

In its current state, the fortress is now a residential area. The total perimeter is 3.5 kilometres, and the castle is 11 metres high. In terms of features, the largest is its earthen walls.



This photo shows the excavation site as it is. It is about 45 metres wide at the bottom. As you can see in the photo, the construction method is to make a mould of wood and layer different types of earth. When we excavated the site, we found different block shapes and types of soil. The order of construction is to build the core axis first and then both sides alternately. In the middle, tree branches are inserted to stabilise the structure and bind it together.



Silla (BC 57 ~ 935)

Compared to other fortresses, Silla was better at building walls out of stone. In the 5th century, with walls 15 metres high, the 1.3km long **Gomosanseong Fortress** was built. If you look at another fortress, it was also built on a mountaintop, including a valley. The most important feature



Gomosanseong fortress

of a Silla Fortress is that it had a Chemise, which stabilised the structure of the wall. If you look closely at the castle stones, they were built with stones that can be cut into thin slices.

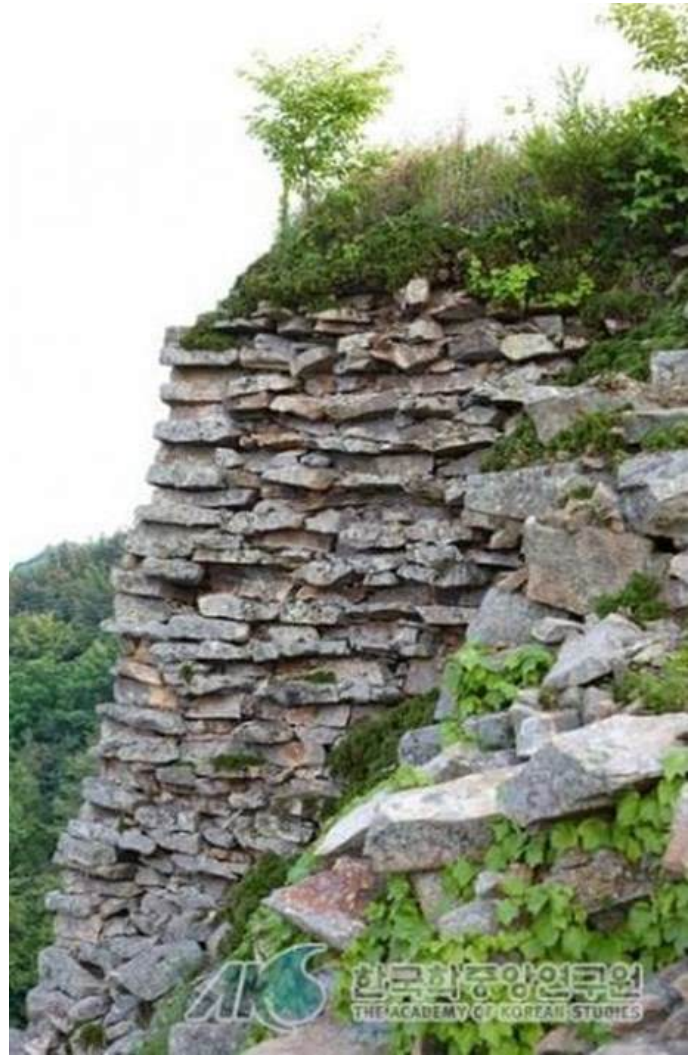
The 6th-century fortress, which was built before the unification of the Korean peninsula by Silla in the 7th century, was renovated in the 8th century, and it is also a mountain castle with a valley. During the excavation, we were able to see the difference between the inside and facade of the walls. We estimate that the inner stones date from the 6th



Gomosanseong fortress



Above and below: Samnyeonsanseong Mountain Fortress



Samnyeonsanseong Mountain Fortress

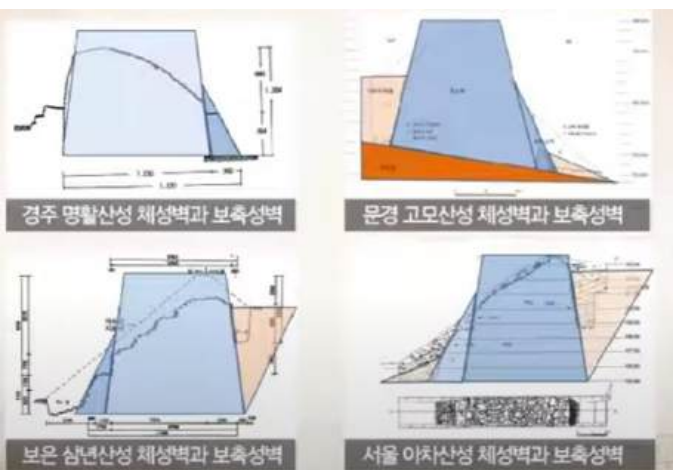
stones are shaped like kernels of corn. The bottom stone is quite large. Keep this shape in mind as it will be used in another case later on.



century and the outer stones from the 8th century. The



Above and right:
Iseongsanseong
Mountain Fortress



Goryeo Fortresses (918 ~ 1392)

The Goryeo period was frequently attacked from the outside, from Mongolia to the north and Japan from the sea to the south. During the Goryeo Dynasty, the capital was in Gaekyung, which is now in North Korea, and the capital was moved to Ganghwa Island in the south to protect the people



and the king when the Mongols invaded from the north. At first an outer wall was built, and then a middle wall. If you look more closely, the island is on the left. The castle is built

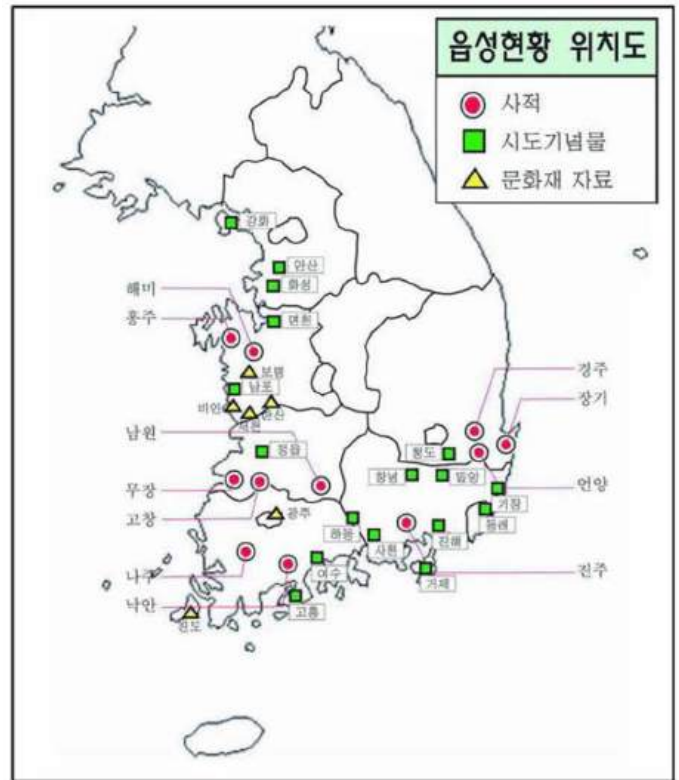


with earthworks, which is the same as the earthwork construction method in the Baekje period before that.

The reason why the Mongols were unable to attack Ganghwado for more than 30 years was because of the large difference in tides, and the land inside the castle becomes sea again at high tide, so the Mongols, who were strong in inland warfare, could not attack Goryeo.

Joseon Fortresses (1392 ~ 1910)

Next is the Joseon Dynasty of the late 14th to early 20th century. The Joseon dynasty lasted for 518 years, and it can be divided into the early and late periods based on two major



wars. The two major wars also led to a change in weapons and a lot of changes in the construction of fortresses. During the Joseon Dynasty, towns were built to defend the Korean Peninsula from Japanese invaders from the southern sea. According to a 1530 record, a total of 160 towns were built along the coastline near the sea and along rivers. Currently, there are about 40 towns remaining out of the total 160.

In the early period, defence was mainly based on town walls, but after the 1636 Qing-China Invasion of Korea, when the Chinese invaded from the mainland north of the Korean Peninsula, the focus shifted to building mountain castles.

Japanese colonization led to the abolition of the town walls. Towns developed during the Joseon Dynasty were built on plains, mountains, or a combination of plains and mountains, and can be divided into three types based on the shape of the road. They consist of a village with administrative offices and people living inside.

During the Japanese invasion in 1592, the king realized that the town was insufficiently defended, so he built a mountain and capital defence system to defend Hanyang City and escape in case of emergency.

This structure is called an outwork, which has different names for different types in different domestic fortresses.

With the introduction of artillery, a casemated embrasure for guns was placed at the end of the elongated defences to defend the valley below. In addition, an extension was built in the 18th century to compensate for the Qing Chinese firing artillery from the peak here to attack the interior of the castle. In other words, the development of weapons led to the development of fortifications.

In addition, the size and stacking of the stones changed after the introduction of firearms, from the corn-grain-shaped stones of the 7th century Silla period.



Namhansanseong fortress

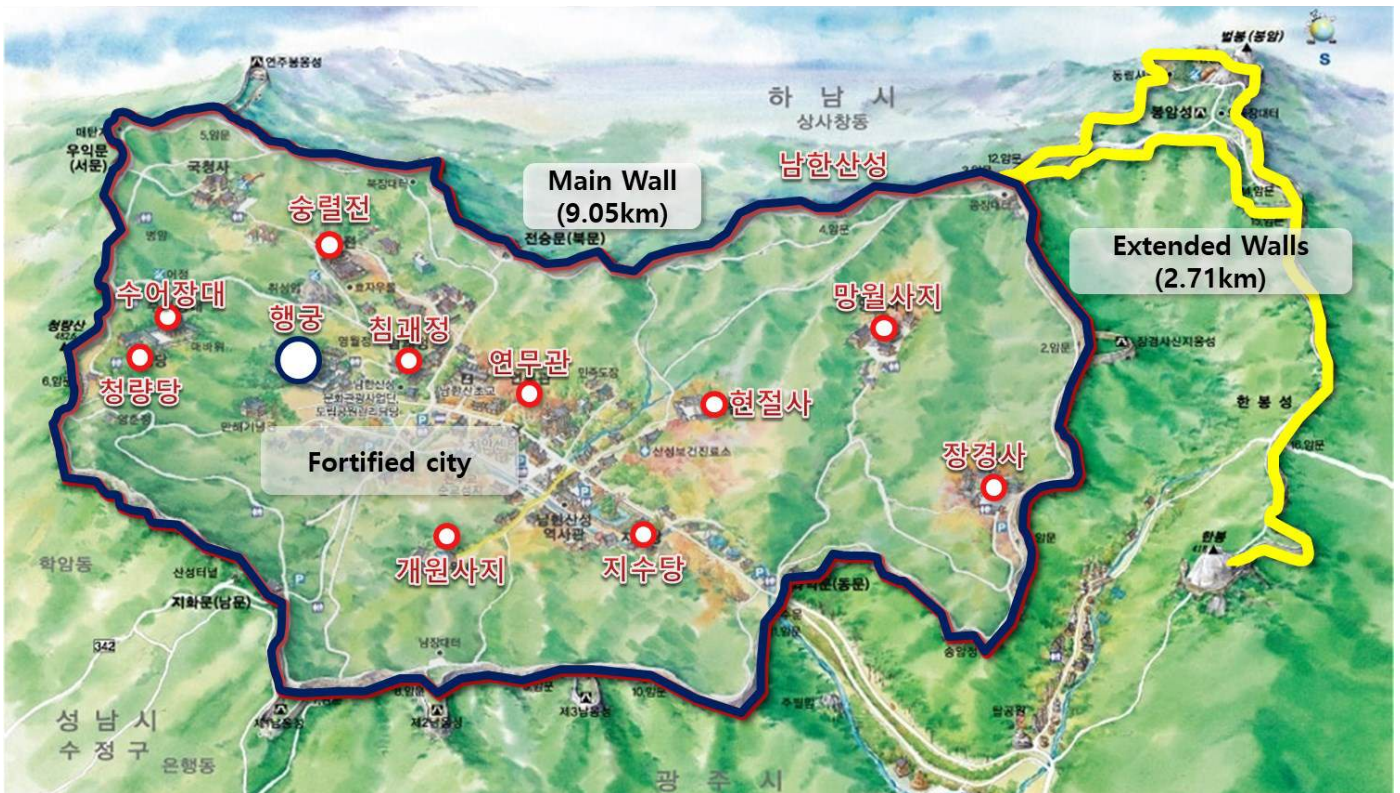
Finally, Jeong Weak-yong, a practitioner who planned Suwon Hwaseong Fortress, which was inscribed as a World Heritage Site in 1997 and developed the crane and building mechanisms for its construction, categorized in his book on Korea's fortified strategic points. It is a defence system that fits the topographical features of Korea.

Some Conclusions

The Korean peninsula is 70% mountainous and experienced numerous invasions and so came to rely on mountain fortresses. From the end of the Goryeo Dynasty to the beginning of the Joseon Dynasty defences were based around town walls but after two major walls defences came to be based around mountain fortresses. This saw the tactic called cheongyaipbo where the population would withdraw to a fortress with all supplies and tire out the enemy before



counter attacking. Fortresses in Korea are dominated by valley enclosing fortresses that maximise terrain advantages.



A Wander Through Central Piemonte

(Part 1)

By Peter E. Presford

Tucked away in the north-west corner of Italy, this region (the second largest in Italy after Sicily) is not the easiest to access by air. Although you can fly to Milan, and from there make the 2-hour trip by shuttlebus to Torino, (Turin), its capital city.

For this small article, we will hire a car at Milan airport and, very loosely, travel through central Piemonte, from its border with Lombardia to the fine city of Torino. But first a little detail on the type of areas we will be travelling through.

Piemonte is surrounded on three sides by the Alps which brings with it a very diverse landscape. In the south-west of the region, at Monviso, rises the River Po which swings round to brush Torino and hence onwards through Lombardia to the sea near Venice. The region is not densely populated and is very similar to Wales statistically. It has an area of just over 25,000 sq. km (Wales 21,000+), population just over 4,000,000 (Wales 3,000,000+). Its largest city, Torino, doesn't

even reach a million, and only one after that (Novara) passes 100,000.

We always felt at home in central Piemonte, Langhe, Roero and Montferrat. Perhaps because of its similarity to parts of North Wales, especially the areas around the Vale of Clwyd with Ruthin and Denbigh. Gentle hills and winding roads. No vineyards there though, no Barolo with its castle or Barberesco with its fine tower.

The region of Piemonte has (had!) more than its fair share of towers, castles, forts and bastioned towns/cities. Even the smallest borgos (villages) seems to sport a 'torre di avvertimento – warning tower. Although many are ruined there are still a surprising amount that remain in fair to good condition. Renovated, in some cases almost rebuilt, and holding pride of place in the borgo. A proud symbol of their history.

Our picture of the one at Barberesco is atypical of the ones you might come across; with the scaffolding that you see on its right-hand side, temporary steps to access its very highly placed entrance doorway. You can also often find other ruined buildings around the base of such towers. These towers are normally square, though very rarely you can find a round or slightly oblong ones.



The warning tower at Barberesco.



Castello della Volta

Castello della Volta overlooking Barolo, is certainly more interesting than the over renovated castle in the town. Though that is there to sell very expensive bottles of wine. Whilst these towers and castles are, normally, quite easy to find within areas of habitation, remains of defences such as

bastions are not. Where they do exist, they are just part of the landscape. Something to park lorries on, traffic islands and, in the case of Chieri, a tunnel driven through and used as an underpass. But the fun is seeking them out and finding out exactly what does remain. So, in general, this is not an article of grand remains or buildings but sad fragments that war and modernity has left behind. Not forgetting a chap called Napoleon, who did more than anyone to clear the landscape of would-be obstacles.



The town of Valenza

So, let's start on the eastern border of this region where, overlooking the River Po, and once holding a very strategic position against the might of Milan, lies the town of **Valenza**. Today there is next to nothing left of its fortified past. Only on its eastern side where it overlooks the River Po is there any sense of its important position. Now known as 'the city of jewellers', a name that does nothing to point to its illustrious past. The town was sacked by French troops (1499 and 1515) and reconquered by the Spaniards in 1521. The fortifications must have been substantial by the time of the 'Thirty Year War', because in 1635 it resisted a siege from the French for 60-days, and again in 1641. There were more sieges in the following years with the city being owned by different



The Porta Reale at Alessandria

fractions, and the fortifications finally being swept away by, like countless others, by Napoleon's engineers.

From Valenza the road (SP494) winds downwards for 9-miles, until it swings along the northern bank of the river Tanaro. Between the few buildings that line the road to your right-hand side, can be seen the huge bastions of the fortress of **Alessandria**. The entrance is opposite the bridge that leads over the Tanaro into the city of Alessandria itself.

To explain why it is here I'll quote directly from the excellent web-site of the city 'The construction of the Citadel of Alessandria was part of a vast defence programme of the Savoy state that included a system of forts to block the alpine accesses to the plain: the fort of Bard to control the passes of the Little and Great St. Bernard, that of Brunetta near Susa and that of Fenestrelle in the Val Chisone. The fortresses of Cuneo and Saorgio and the fort of Ceva in the Tanaro valley already existed - at this point (1800) Napoleon decreed the demolition of all the fortresses that made up the defensive apparatus of Piemonte, apart from the fort of Fenestrelle, the Citadel of Turin and the Citadel of Alexandria. Indeed, the latter, in the intentions of Napoleon, was destined to become the major French defensive work in the Po valley and an essential logistical centre essential for military operations in Italy'.



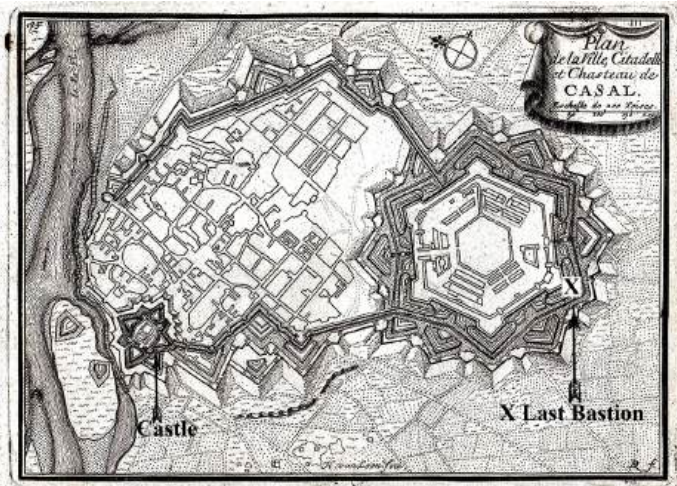
The citadel of Alessandria (1846)

This fortress should be well known to members of the F.S.G. Although we never managed to visit ourselves, I believe it is now open every day from 9am to 5pm. The Italian Wikipedia pages have some very good information, and there are some excellent videos on YouTube. There is at least one museum on site, on uniforms I believe.



Forta Acqui

Although there is little to see around the city south of the river, remains of two forts still exist. One south of the city is known as Forte Ferrovia, simple because 'ferrovia' means railway in Italian, and the railway runs smack through the middle of it! The second, surrounded by the western sprawl of the city is, **Forte Acqui**, and doesn't seem too badly off having mainly allotments for close neighbours.



The city of Casale Monferrato

If you have managed to visit Alessandria fortress you can now carry on swinging northwards up the SP31, where 21 miles later you will have arrived at the sprawling city of **Casale Monferrato**.

Once again, this town lies on an important crossing of the River Po, and once again nearly everything of the vast defensive works has been swept away. But it is pleasing to find that the Castello Paleologo still exists, so named after its builder who completed the works in 1357. About a 100-years later over a thirty-year time span the castle was vastly altered, then four huge ravelins were added.

The first to go was the eastern ravelin, then later in the 19th century the others went to create space for a market. It still retains this function today along with car-parking spaces. Now looking somewhat isolated in fields of concrete (Casale

became known as the 'Concrete City' due to the production of this material), the castle is mainly used today as an exhibition centre.



The East Bastion at Casale Monferrato

The old map of the city shows the castle in its top north-western side, whilst a huge citadel takes up the southern end (arrowed on the map) of the defences. One of the huge bastions of this citadel still exists today and can be driven into



Casale Monferrato castle

(more parking space!). If this was just one bastion what was the rest like?



One of the towers of the castle at Casale Monferrato.

On the eastern side of the city is the 'ex-caserma Nino Bixo', a huge barracks built in 1907 (decommissioned 1999), though built on the site of an earlier, and smaller, artillery barracks that most likely lay within the city's defences.

A pleasant drive of 14 miles or so south will bring you to the compact town of **Moncalvo**. Whilst never a bastioned town (as far as I know?) it is well worth a stop for an hour or so. A country road takes you through a short tunnel as you approach the town, after which you turn sharp right and up into its main centre.

This spur of land that the tunnel is driven through belongs to the town, and still contains remains of walls and towers. When parking up in a large square you are given the impression there is not much to see. But a short stroll will take you out of the square and along the flank of the remaining walls. If you are lucky (depending on your point of view, unlucky) there may be a game of 'Tamburello' in progress. This will be in front of the old fortifications, the open space being used as a tamburello court. The game is played with a purpose made tambourine, and a ball something like a tennis ball. After an interesting cultural break and maybe a lunch of the famous Piemontese 'Bollito Misto'. An interesting dish of



Monvalvo.

at least five boiled meats, though not perhaps for the more faint-hearted diners.

A further 12-miles south will bring you to the sprawling, and fascinating, city of **Asti**. Perhaps better known for its sparkling



The Torre Troyana at Asti .

'Asti Spumante'. Whilst there is again, a huge sprawling piazza for parking, just don't arrive on one of the market days. In fact, make sure you don't arrive at any town of a decent size on a market day (unless you like a spot of shopping?)

The city is also famous for its many towers. Certainly, a rival to San Gimignano (Tuscany), though perhaps not as tall and dramatic. Though a height of 150ft (44-metres) is not to be sniffed at for the 'Torre Troyana' (pictured). Its square base of some 20' dates from the 12th century but was not finished until 1260-1280 and was fully renovated in 1905. This tower is a good example of one of the 150 or so that once existed in the city.

Whilst at first there seems little to see in the city besides



The city wall of Asti.

remains of towers, a pleasant stroll to the top of the town will bring you to a small park. This area (top centre on plan) used to house the old castle, remains of which are in a closed off area behind the walls. Along this stretch of wall can still be seen indentations from cannon shot.

Walking to your right (westwards on plan) you can follow the wall, over a road where a gate used to be, and as far down as the red X on the plan. Here are remains of not only the wall but a later addition in the shape of an added-on bastion.



Many of these remains are behind later buildings, but they can be seen.

We will curtail our trip southwards here and save travelling

the 20-miles or so further south to Asti's great rival, Alba. Even sadder remains there.

It is noticeable on many of these old maps that old town/city walls were not removed (at least not for many years), but bastions and towers of all shapes and sizes were added. A favourite being an imposing arrow shaped design.



A map of the city of Chieri

Asti sports one of these at its southern tip on the map. But for an excellent, and still existing example, we must travel to **Chieri**. This city lies 22-miles NNW of Asti (10-miles west of



Chieri, Bastione della Mina

Turin) and has remains of several small bastions and older walls. But the one we are interested in is a huge arrow bastion positioned north-west on our map of the city, and

from our Google view you can see how massive it is. The size of this work is emphasized by the road driven through its tail, and the diminutive cars on that road.

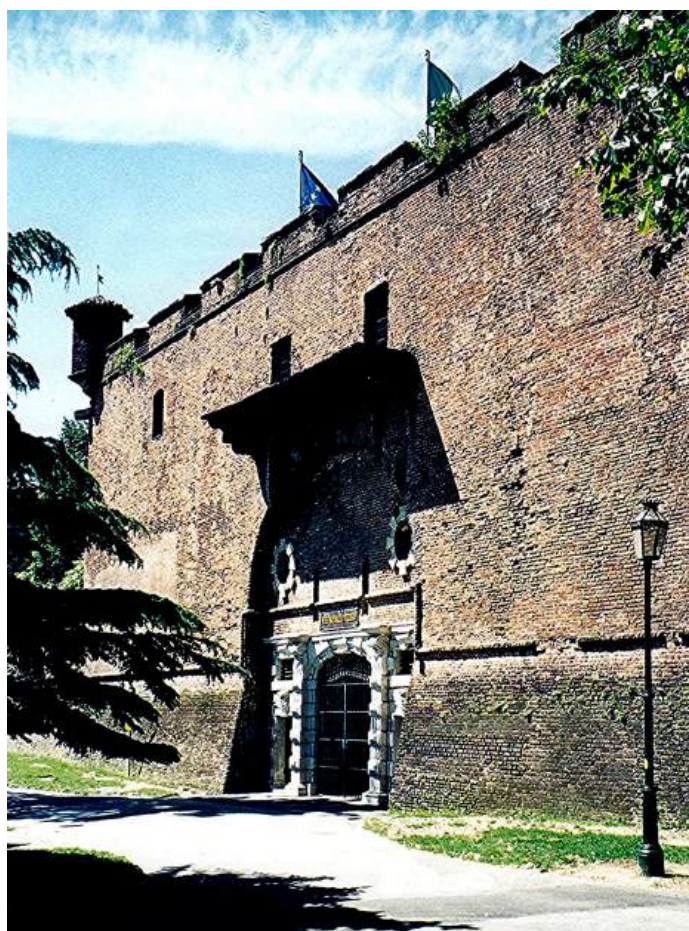
Proposed after a siege in 1550. and for once we have the engineer responsible, Francesco Bernardino da Camnago, known as 'Vimercate'. This bastion, 'Bastioni Mina', was built mainly over the course of 1551. I believe it was given a good tidying up about 2010, and extra works have been promised.

Turin, a large and complex city of many periods fully deserving an article of its own.

So just a few general pictures of the many remains that can be found. Our first picture is of the 'Cittadella di Torino' (or



Torino walls .



Torino Mastio, now a museum.

'Mastio'), which is a gatehouse and now home to the *National Artillery Historical Museum*. Though we have rarely found it open. The fortress was erected in 1564-70 on designs by Francesco Paciotto; who had something to do with Antwerp, I think?

Our second picture is of remaining walls over in the north-east corner of the city, in the *Giardini Reali di Torino* to be exact. Hunting around these gardens you will find some remains of the wall. The picture depicts what is known as the *Garittone del Bastione di San Maurizio*. In the background is the striking *Mole Antonelliana*.



Sally port exit, Torino.

Third picture; this is in a very small space when you exit a Sally Port from the original walls. You can see the light pattern shining down from the glass pavement above. All unsuspected under people's feet passing by. It is calculated that some 9-miles (about 14kms) of tunnel were dug, and I seem to recall that a figure of 2-miles (3kms or so) are accessible today. You certainly cover more than a few yards on a tunnel tour. All through a nondescript concrete building known as the *Museo Civico Pietro Mica e dell'Assedio di Torino del 1706*.

Well worth every penny.

The unknown fortress world heritage - The “Stelling van Amsterdam” (UNESCO World Heritage Site)

Text and photos by Hans-Rudolf Neumann

From September 28th to October 5th, 2024, a study tour to the “Stelling van Amsterdam” took place with seven international experts from Germany, Switzerland, France and the Netherlands. Preparations for the tour began in 2019 but were then interrupted by the pandemic and had to be restarted afterwards. They turned out to be difficult because 31 objects had to be coordinated in the end, for which neither a local guide nor a local travel agency was available .



Fig. 2: Introductory evening at Hotel Corendon Schiphol with René Ros (right) and Peter Schat (left).

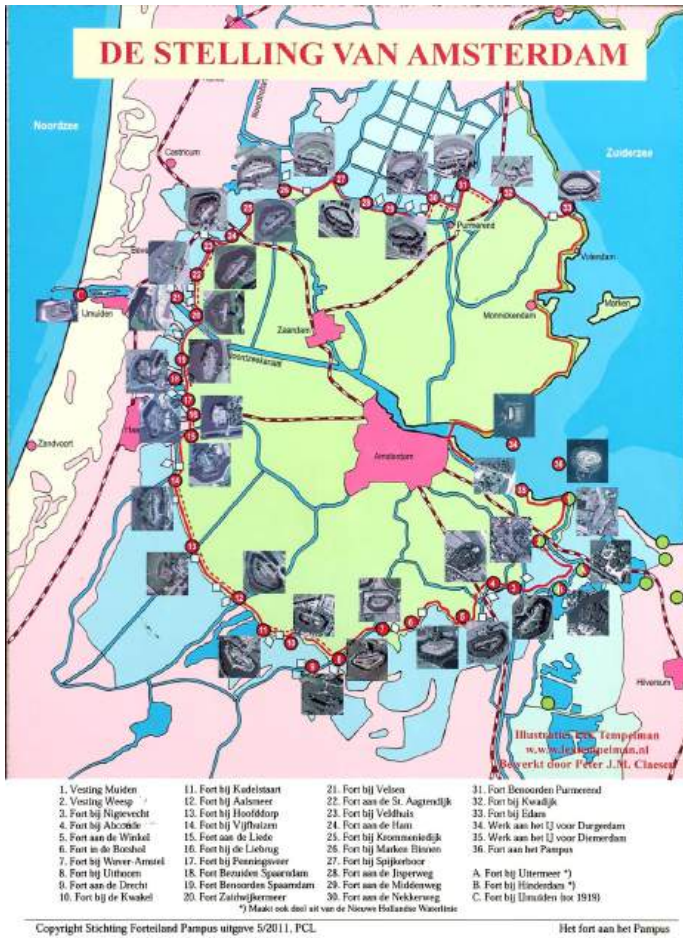


Fig. 1: Wall panel in various forts with a depiction of the fortress ring around Amsterdam

In the end, support was found less in the official bodies responsible for the World Heritage than in fortress enthusiasts and idealists. The head of the “Documentatiecentrum Stelling van Amsterdam”, René Ros, did an excellent job here; and Peter Schat, whom the author had met at a seminar as part of the “Baltic Fort Route”, also spontaneously offered to accompany the group for one day. Trying to explore a major fortress with more than 40 batteries and forts within a week is impossible. So, it was necessary to

consider in advance what the main focus should be. This was achieved by dividing the site into six fronts, from which different objects were selected. It was important to note that a large part of the forts could be visited due to UNESCO's requirement for accessibility, but this could only be done in consultation with the respective owners and users. This was the real focus of the preparation work: drawing up an exact schedule for the tours in consultation with the users for each day.

About the organization, it should also be mentioned that a hotel had to be found from which the arterial roads in all four directions could be reached quickly; in the end, a minibus was used as a self-drive vehicle due to the size of the group, the quality of the access roads and to minimise costs.

The “Stelling van Amsterdam” consists mainly of casemated concrete forts; their construction began in the 1890s, lasted more than a quarter of a century due to various adjustments in view of the further developed artillery ranges, and was already obsolete by the time of the First World War. During the German occupation in the Second World War, the armament was melted down and the forts were often used as ammunition depots and prisons. The Dutch army used some of the forts as depots for a while during the Cold War before the fortress was completely abandoned.

The following fronts were inspected: on September 29th, 2024: Fort Uitermeer with the former armoured fort Pampus in the Zuiderzee as well as other facilities in Muiden and the Diemerdam battery (Fig. 03 - 08).

on September 30, 2024: the Beemster Polder with the forts on the Nekkerweg ('Resort Beemster'), near Marken-Binnen, near Spijkerboor, near Edam and north of Purmerend (Fig. 09 - 13).

on October 1, 2024: the Atlantic Wall battery near Heerenduin and the armoured fort on the fortress island of IJmuiden, as well as the forts near Velsen, near Krommeniedijk and Aan Den Ham (Fig. 14 - 18).

on October 2nd, 2024: the forts on the Drecht Line with the forts at Am Drecht, near Uithoorn, near Waver-Amstel, at Winkel, near Abcoude and near Nigtevecht (Fig. 19 - 24).

on October 3rd, 2024: the forts in the Haarlemmermeer with the forts at Vijfhuizen and Hoofddorp, the battery on the Sloterveg and the fort at Aalsmeer (Fig. 25 - 28), and finally

on October 4th, 2024: the trip to the fortified town of Naarden and facilities such as Karnemelksloot, Fort Hoofdwijk and the French camp in Bussum as a transition to the 'New Dutch Water Line' (Fig. 29 - 33).

As an introduction, René Ros gave a photographic presentation on the evening of 28 September at the Hotel Corendon Schiphol, which illustrated the historical and structural development of the major fortress. Each participant was in possession of an 80-page folder that presented the individual objects of the visit in words and pictures, thus providing basic information in advance that did not need to be repeated on site. On 30 September, Peter Schat published a detailed report on the group's excursion to Fort Pampus in several editions of the 'Noordhollands Dagblad' of Mediahuis Nederland B.V. in the local press around Amsterdam under the title 'Geen toerist te bekennen op Stelling'.

The attention of the tour participants and visitors was also linked to a certain curiosity, as the development of a tourism concept - especially for foreign tourists - is still a major task for most of the facilities. So far, the individual forts can usually only be visited at weekends; in September of each year, there are also themed focus events.

There will also be a printed documentation of this tour, which will present the individual objects in words and pictures as well as archival documents and can already be subscribed to at: hrv.neumann@t-online.de. This documentation will primarily present the various management models in the respective forts.

The following photos were taken during the visits to the individual forts and batteries.



Fig. 3: Reduit of the fort at Uitermeer



Fig. 4: Reduit at the Ossenmarkt in Weesp



Fig. 5: Overview board on the island fort Pampus showing the tour and return times



Fig. 7: Reduit of the west fort in Muiden.



Fig. 6: Information board in Muiden about the individual fortifications



Fig. 09 Passageway in the wellness area of Fort Resort Beemster on Nekkerweg



Fig. 10: Traces of fire in the self-protection training area of the fort near Marken-Binnen



Fig. 8: Depending on the photographic location, 'swinging lines' between ammunition bunkers and the new restaurant building erected on the historical ground plan in the former Diemerdam battery.



Fig. 11: In front of closed gates at the fort near Spijkerboor due to a legal dispute



Right Fig. 12: Personal tour with senior boss Henk Bart at the Wijnimport J. Bart branch in the fort north of Purmerend



Fig. 13: Watercolour painting of the fort near Edam in the fort of the same name



Fig. 16: Aerial photograph of the fort near Velsen taken at Fort Pampus on 29/09/24 from a board



Fig. 14: In the bunker museum of the former coastal battery Heerenduin of the Atlantic Wall near IJmuiden



Fig. 17: Model section of the fort at Krommeniedijk in the fort of the same name

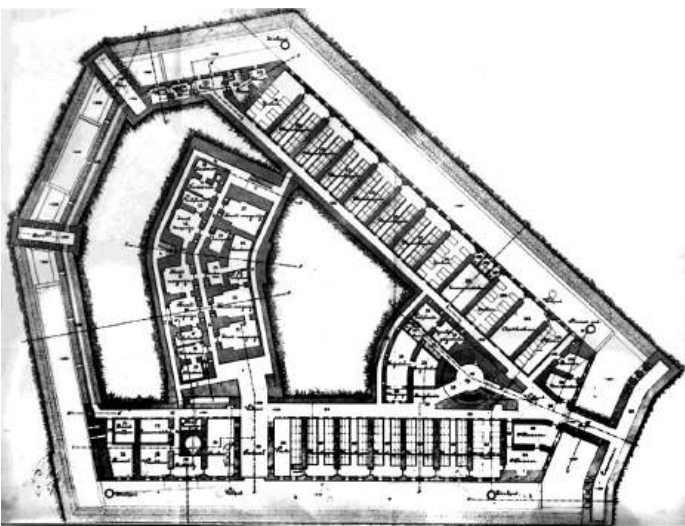


Fig. 15: Floor plan displayed in the armoured fort of the fortress island of IJmuiden



Fig. 18: Equipment of a crew casemate in the museum fort Aan Den Ham



Fig. 19: Rear of the main building with traditor casemate in the background of the fort on the Drecht



Fig. 20: Original washroom in a casemate of the fort near Uithoorn



Fig. 24: Single gun in the traditor casemate of the fort at Nigtevecht



Fig. 21: Observer's bell against the background of an automatically operating lawnmower on the roof of Fort Waver-Amstel



Fig. 25: Illustration of the ground plan of the art fort at Vijfhuizen on a fire plan



Fig. 22: Genieloods (armoury and artillery shed) at the fort on the Winkel, which has been abandoned as a campsite



Fig. 26: Armoured bell for small arms at the end of the fort's poterne near Hoofddorp



Fig. 23: The two-storey revers façade in the fort at Abcoude

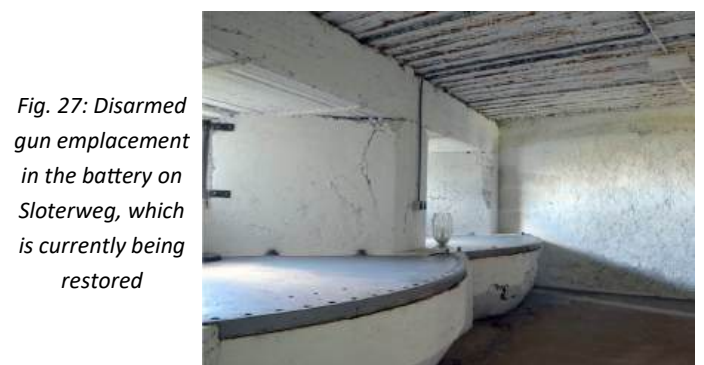


Fig. 27: Disarmed gun emplacement in the battery on Sloterweg, which is currently being restored



Fig. 28: Renovated rear with traditor casemate of the fort near Aalsmeer



Fig. 32: Thoroughly renovated Carnot wall at Works IV in Bussum



Fig. 29: Sunrise at Fort Kijkuit



Fig. 33: An uncovered entrance to an object in the 'Franse Kamp' bunker complex in Bussum



Fig. 30: View from the Turfpoort bastion (fortress museum) across the cannon yard to the access road to Naarden fortress



Fig. 34 Two-storey traditor casemate in the gorge of fort near Hoofddorp. The fort now serves as a restaurant and theatre.



Fig. 31: Group photo at the Karnemelk lock, flanked on both sides by a redoubt



Wenceslas Hollar and the Fortifications of King's Lynn

By David Flinham

"We all love big discoveries. We would not be human if we didn't. People outside archaeology assume that it's all about those moments in a trench when there's a glint of gold or your trowel scrapes the bones of a skeleton. But nine times out of ten, the really exciting finds aren't made on excavations at all. The process or revelation can be far more humdrum – but still just as exciting."¹

Archaeologist Francis Pryor wrote these words as part of his story of the archaeology of the Fens, and they equally apply to an archaeological project 45 km north-east of Pryor's Flag Fen: King's Lynn Under Siege (KLUS).

KLUS has spent the past four summers excavating on the site of one of the town's bastions (built 1643-4). This article is not to discuss the results of these excavations, which are reported elsewhere², but to consider one of the project's key source documents, Wenceslas Hollar's *Groundplat of Kings Lyn*. This is the earliest known scale plan of King's Lynn, and depicts the town in both plan form, and as a panorama ('prospect'). The plan uses a numbered key to identify local landmarks which are repeated on the accompanying prospect.

In what exact context Hollar created his *Groundplat of King's Lyn* is unknown. During the 1650s, however, Hollar was producing prints for Sir William Dugdale's work on the Fens³.

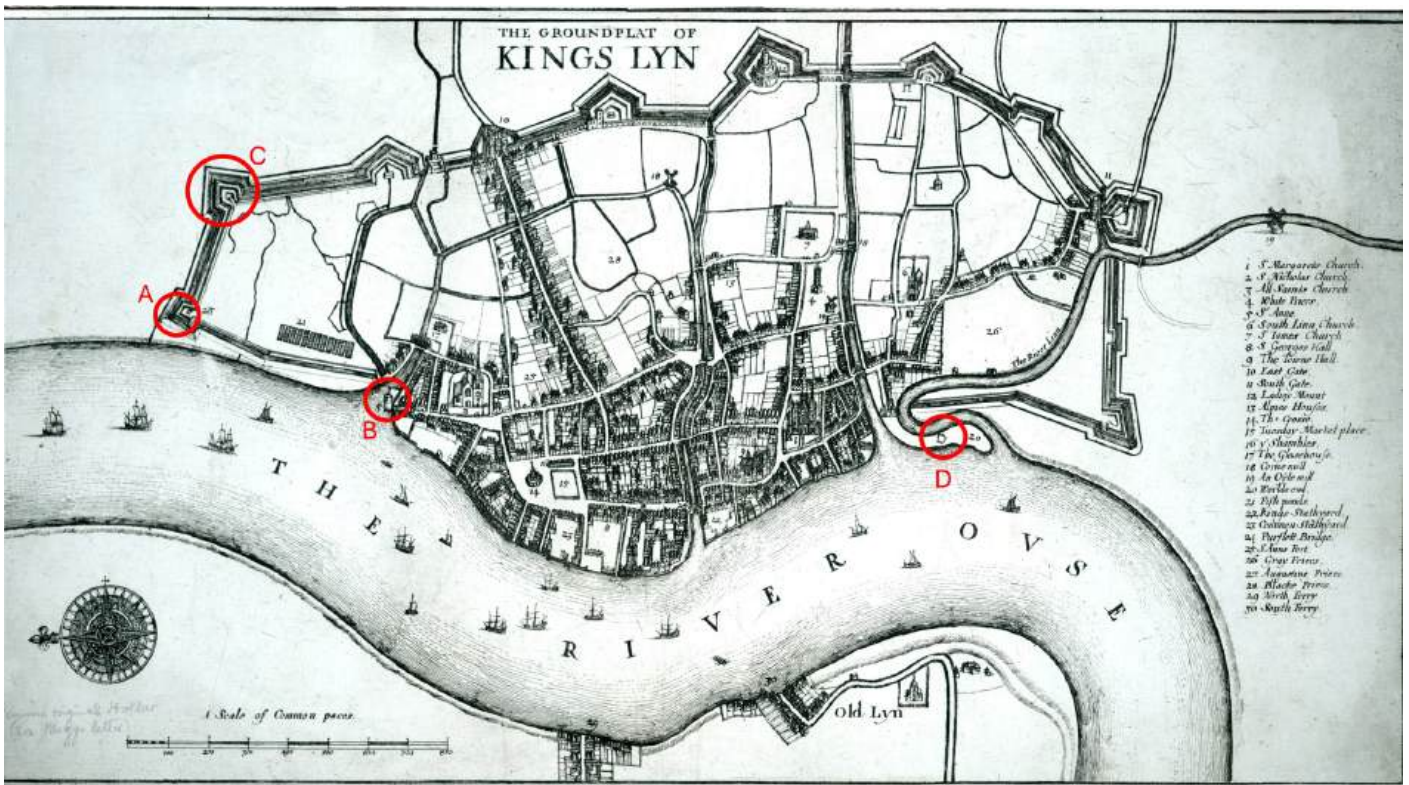


Fig. 1: Hollar's c. 1660 *Ground Plat of Kings Lyn* (P987b). Highlighted is the incorrect placement of St Ann's Fort (marked as 'A'), its correct position ('B'), the north-east bastion ('C'), and the Worlds End ('D') (Thomas Fisher Rare Book Library, University of Toronto)



Fig. 2: In the accompanying *Prospect of King's Lyn from the West* (P987a), Hollar has correctly located St. Ann's Fort (highlighted). (Thomas Fisher Rare Book Library, University of Toronto)

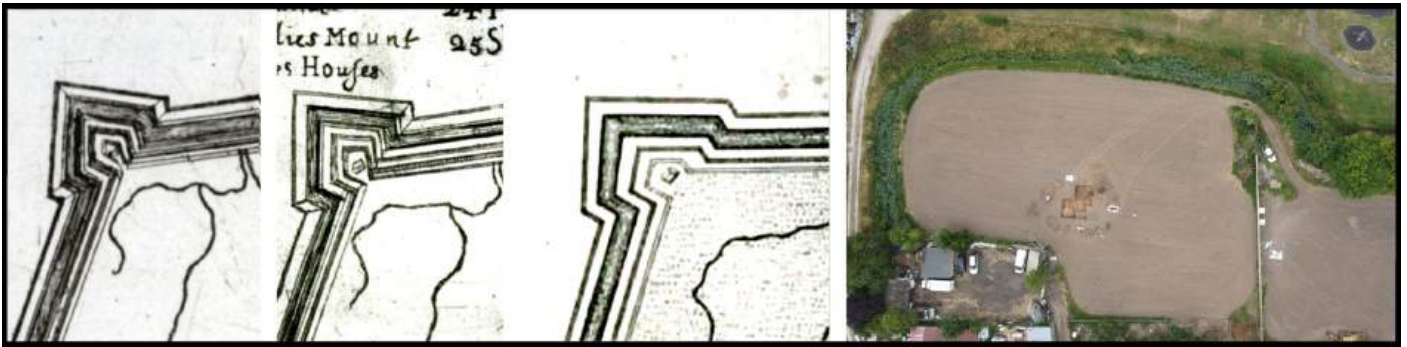


Fig. 3: King's Lynn's north-east bastion as depicted by Hollar in c.1660 (left), Henry Bell in 1670 (centre-left), William Rastrick in 1725 (centre-right), and captured in an aerial view of the site during the 2022 KLUS season (right). The angle of the bastion's flank is clear in the aerial view. (Thomas Fisher Rare Book Library, University of Toronto/Kings Lynn Museum/Norfolk Mills.co.uk/Gary Rossin)

Dugdale's brother-in-law was Guybon Goddard, and during the late 1650s, he was writing a history of King's Lynn, so it might be that Hollar's Groundplat was created for Goddard's book⁴. In his analysis of the Groundplat, David Higgins identifies that it could not have been surveyed before 1655 (this is when the oil mill on the Greyfriars site (which Hollar identifies as '19') was built), or after 1667 when the windmill "near the Blackfriars" (18) was demolished. Therefore, a rounded date of c.1660 seems reasonable⁵.

Despite dating from 15 years after the fortifications were constructed, it is the most contemporary depiction of the entire circuit of fortifications, showing them in almost pristine condition. These fortifications were designed by Richard Clampe⁶, who left plans of two of the system's bastions (but not, as far as is known, a plan of the entire scheme). Clampe was paid £1 to survey the land, following which, he planned the fortifications. His service as a military engineer is highlighted by his 1647 petition to Parliament for recognition having

*"adventured his life in ye service of ye parliam't having first served under ye command of ye right hono'ble ye Earle of Manchester, then of his Excell'cie Sir Tho: Fairfax & afterwards with ye Com'tee of Lords & Comons before Newarke, as Engineere"*⁷.

This demonstrates that he served first under Manchester (appointed to command the Army of the Eastern Association in August 1643), which suggests that Clampe's first military experience came either during the siege of King's Lynn (August-September 1643) itself or in its immediate aftermath, and the fortification of the town was his first commission. Perhaps one of the reasons then, for the elaborate design of the town's fortifications came from Clampe's desire to impress his new employers⁸.

However, Hollar's plan is not without its flaws. Firstly, he shows the flank of the north-east bastion being at right angles to the curtain. In fact, the flank is angled in such a way that it could provide enfilading fire across the face of the

neighbouring bastion. This mistake is repeated in Henry Bell's *The Groundplat of Kings Lyn* of c.1670, which is an updated impression of Hollar's plan. However, it is accurately depicted in William Rastrick's 1725 map and was clearly identified by aerial photography during KLUS 2022 excavation.

St. Ann's Fort (Hollar identifies this as number 25) is shown in its correct position in the accompanying prospect (*The Prospect of King's Lyn from the West*)⁹, but is misplaced on the Groundplat (a mistake unfortunately replicated on several maps and plans since¹⁰). St. Ann's Fort has an interesting history and reflects the wider coastal defence strategies during the 16th, 17th, and 18th centuries.

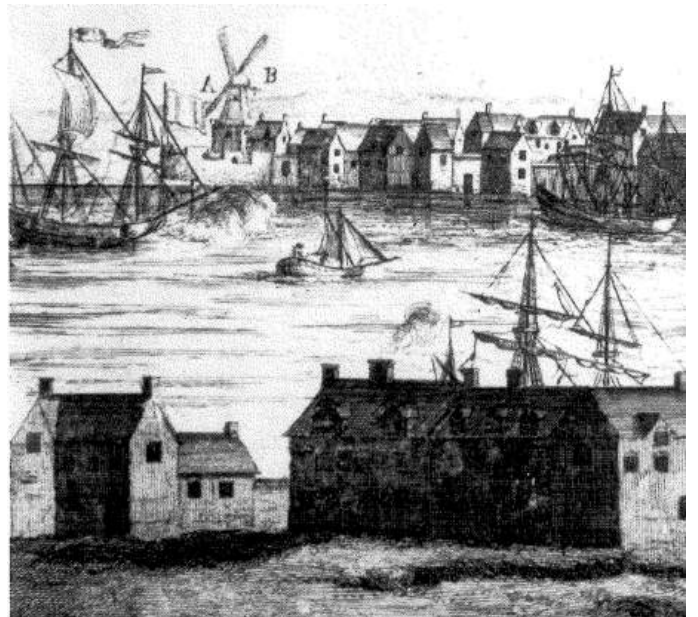


Fig. 4: A close up of Henry Bell's 1695 Prospect of LYN REGIS from the West, depicting St. Ann's Fort (identified as 'A'). (From an original held in the King's Lynn Museum)

In 1570/71, in the face of attack by France, a fort, subsequently known as St. Ann's Fort, was constructed at the mouth of the Fisher Fleet to protect the seaward approach to the town. This fort would ultimately perform this function for some 250 years. Rearmed in 1625 in response to the threat of privateers operating out of Dunkirk, in October 1640, for the "better defence of the town", it was ordered that a gun platform be added to the fort¹¹. It was manned during the Civil

Wars although in 1652, Parliament felt that the town was secure enough that it could be demilitarised, and the fort's guns were removed to London.

The fort was rearmed at the Restoration, but in October 1688, the guns were again removed, and this time shipped to Hull, although they were returned the following year (but were left unmounted). On 24 October 1692, the Corporation of King's Lynn ordered "that the Great Guns belonging to the old fort at St Annes, lately returned from Hull be placed againe there. And that so many of them be mounted as carriages can be found for". Bell's *The Prospect of Lyn Regis from the West* (c.1695) depicts cannon protruding through the fort's embrasures¹², although in his 1725 map, Rastrick depicts 12 cannon (probably 9-pounders), these are shown as nmounted.



Fig. 6: The site of St. Ann's Fort is today marked by the name of a house on the site and by a modern street name (insert). In the background is the Trues Yard Museum where the King's Lynn under Siege Project was launched in January 2018. (David Flintham)

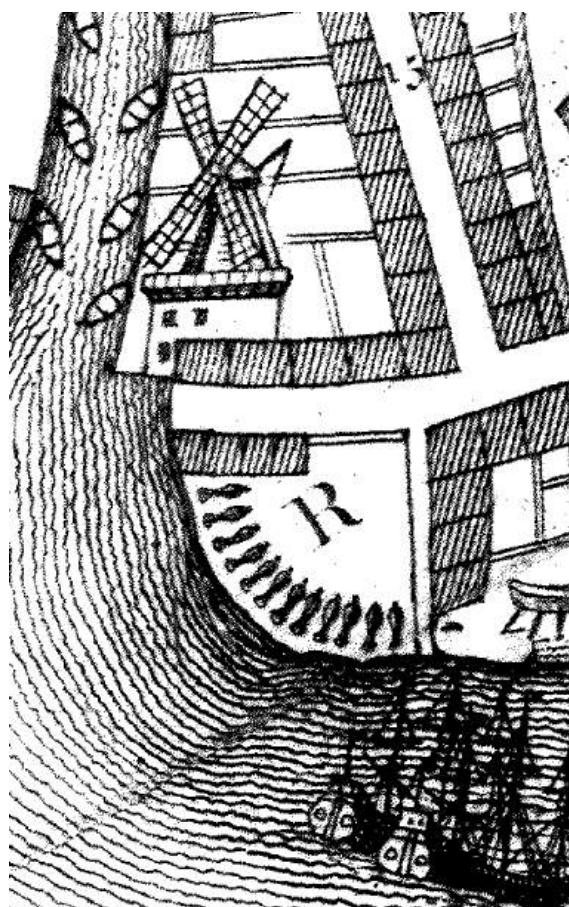


Fig. 5: An extract from William Rastrick's 1725 Iconographia, showing St. Anns Fort and its 12 unmounted cannon. (Taken from an image held by Norfolk Mills.co.uk)

These guns would be returned to the Ordnance in 1716, but in 1744, the fort was rearmed with ten 18-pounders, which themselves were replaced with ten newer 18-pounders in 1778. These guns lasted into the Napoleonic Wars, after which, they were removed, although St Ann's Fort itself was still standing in 1853¹³, but by the 1904 Ordnance Survey edition, only the site of the fort is marked. Today, the fort is remembered in the name of a street and by a house.

Moving away from St Ann's Fort to the south of the town, at the end of a small promontory where the River Nar enters the River Great Ouse (now Boal Quay) was an alehouse known as 'The Worlds end'¹⁴. Clampe shows this alehouse at the centre of a small fort armed with four cannon (there are empty embrasures for a further three). Hollar depicts the fort, but not the alehouse, indicating that the alehouse had been demolished by 1660.

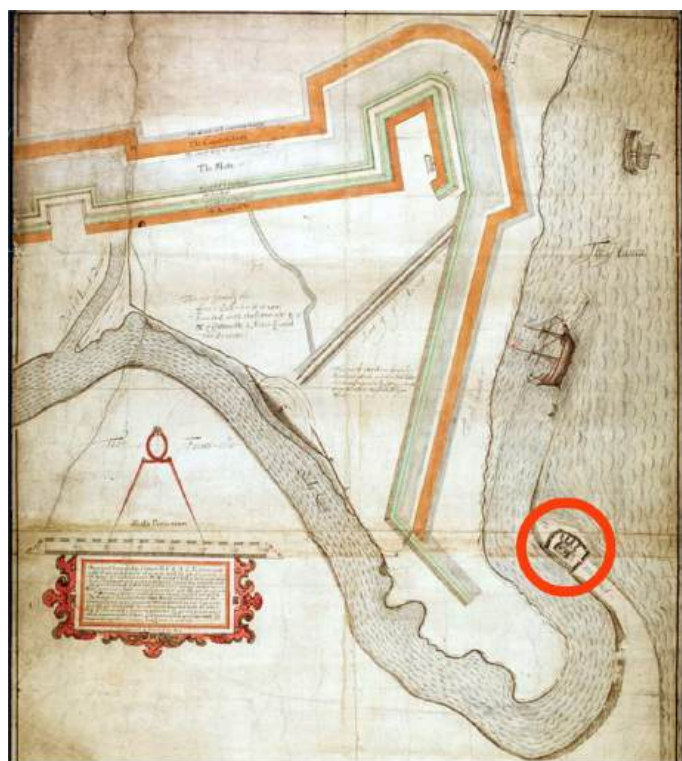


Fig. 7: Richard Clampe's plan of the south-west bastion (constructed in 1643-44) is on display in the town's archives. In this view, The World's end is highlighted. (David Flintham)

Hollar's *Long View of London from Bankside* (1647)

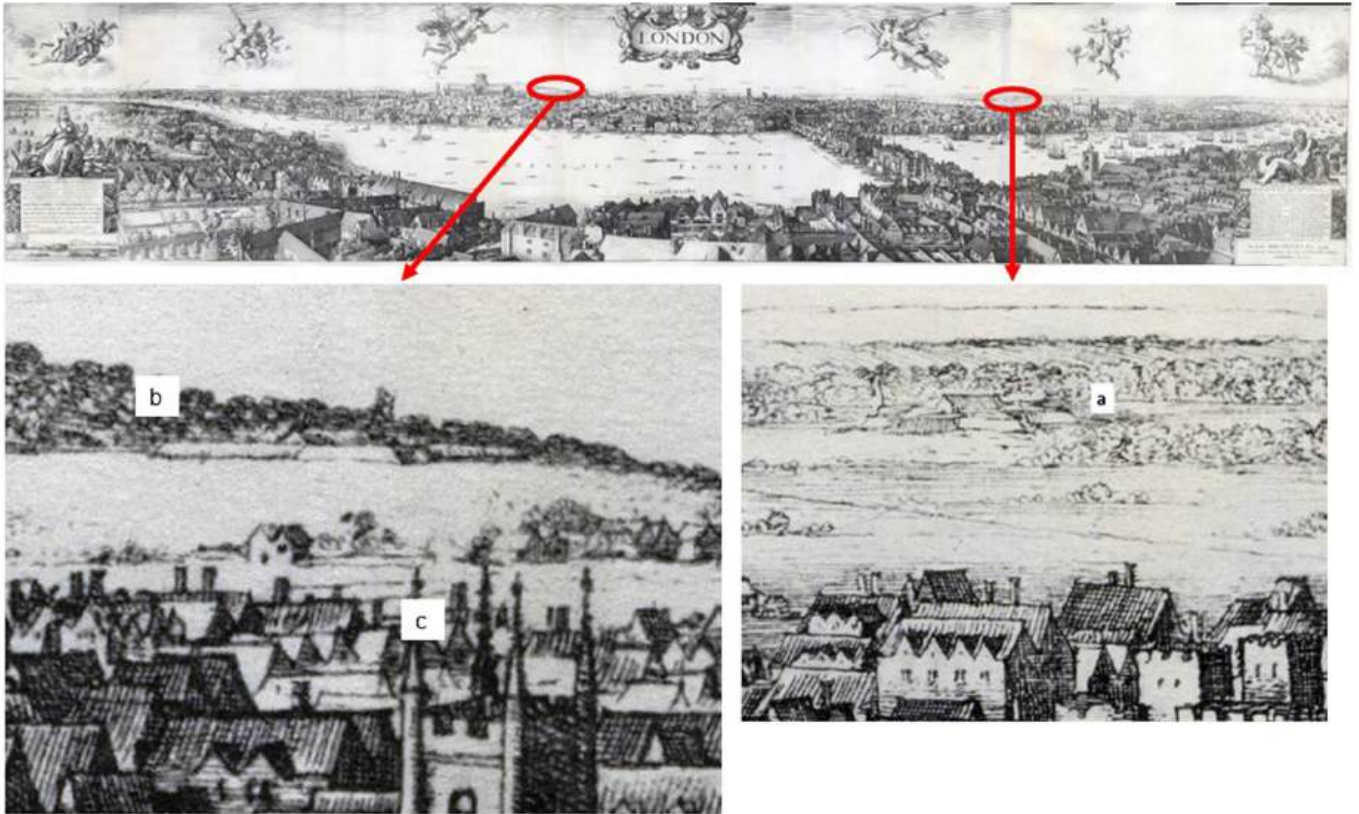


Fig. 8: Several of London's Civil War forts are visible in the background of Hollar's 1647 view of London (P1014). 'a' is the fort by the New River Head, 'b' is the fort close by today's Angel Islington, and 'c' is the fort close to today's Whitechapel Hospital.
(Civil War Defence of London Project / Thomas Fisher Rare Book Library, University of Toronto)

Outside King's Lynn, reviewing other of Hollar's works has produced even more surprises, most astonishingly his 1647 Long View of London¹⁵. This is a view of the Cities of London and Westminster from the tower of St. Mary Overy in Southwark. It is an incredibly detailed work, but it was what lies in the background that has proved to be fascinating. The Civil War Defences of London project has put this work 'under the microscope', and this analysis has revealed images of some of the forts constructed during the Civil Wars to defend London, images that have been unknown until now¹⁶. This has prompted examination of some other of Hollar's works, most notably his two portraits of the Earl of Essex which also have revealed fortress-related images.

The works of Wenceslas Hollar are an important source for students of 17th century fortress warfare¹⁷, and whilst they shouldn't be taken solely at face-value, they contain a mass of information. Perhaps not as immediately exciting as a new discovery in the field, close examination of them can result in new and unexpected discoveries.



Fig. 9: Wenceslas Hollar's portrait of the Earl of Essex on foot (P1401) with a (as yet unidentified) fort in the left background.
(Thomas Fisher Rare Book Library, University of Toronto)



Fig. 10: An extract from Wenceslas Hollar's equestrian portrait of the Earl of Essex (P1400) depicting the Lord General's military successes in 1642-3 (the full portrait is shown as an insert). The fortifications of Gloucester ('Gloster'), London, and Reading ('Reding') are depicted.
(Thomas Fisher Rare Book Library, University of Toronto)

¹ Francis Pryor, *The Fens*, (London: Head of Zeus Limited, 2019), p. 83

² David Flintham, 'Kings Lynn under Siege', *Batter their Walls, Gates and Forts: The Proceedings of the 2022 English Civil War Fortress Symposium*, (Warwick: Helion and Company Limited, 2023), pp. 63-87; David Flintham, 'King's Lynn Under Siege', *Current Archaeology*, issue 398, May 2023, pp. 42-47

³ Sir William Dugdale, *The history of imbanking and drayning of divers fens and marshes, both in forein Parts and in this Kingdom*, (London: Alice Warren, 1662), https://archive.org/details/bim_early-english-books-1641-1700_the-history-of-imbanking_dugdale-sir-william_1662/mode/2up [accessed 07/10/2024]

⁴ <https://catalog.folger.edu/record/344147> [accessed 03/10/2024]; <http://www.dugdale-society.org.uk/History.html> [accessed 03/10/2024]; Marion Roberts, *Dugdale and Hollar: History Illustrated*, (Delaware: University of Delaware Press, 2002). Guybon Goddard's manuscript is in the Bodleian Library (Tanner MS 289, fol. 14).

⁵ David Higgins, *The ingenious Mr Henry Bell: His Life, His Work, His Legacy, His King's Lynn*, (King's Lynn: Phoenix Publications, 2005), p. 30.

⁶ David Flintham, 'Richard Clampe, Fortress Engineer, c1617-1696', *Fort*, (Fortress Study Group: 2019), volume 46, pp 3-14.

⁷ '27 December 1647' in *Journal of the House of Lords*, (London: House of Lords, 1767-1830), volume 9, 1646, pp. 614-615

⁸ In 2018, I wrote that Earith Bulwark in Cambridgeshire might have been Clampe's first commission (*Fort 46*, pp. 5-6). My recent research suggests that this assumption is almost certainly

erroneous, and Earith Bulwark was probably constructed after King's Lynn's fortifications.

⁹ Hollar's depiction is in two parts: uppermost is (a) *The Prospect of King's Lyn from the West*, a distant view of the town viewed from the opposite of the River Great Ouse. Below is (b) *THE GROUNDPLAT OF KINGS LYN*. This work is catalogued as P987: Richard Pennington, *A descriptive catalogue of the etched work of Wenceslaus Hollar, 1607-1677*, (Cambridge: Cambridge University Press, 2002), p. 166

¹⁰ Most recently in Nick Lipscombe, *The English Civil War: An atlas and concise history of the Wars of the Three Kingdoms, 1639-51*, (Oxford: Osprey Publishing Limited, 2020), p. 112

¹¹ *Hall Book*, No. 8, 30 October 1640, King's Lynn Borough Archives, KL/C 7/10 folio 66.

¹² Higgins, *The ingenious Mr Henry Bell*, pp. 38-9

¹³ Peter Kent, *Fortifications of East Anglia*, (Lavenham: The Lavenham Press, 1988), pp. 232-36

¹⁴ As those who attended the Chatham Conference in October 2023 will testify, the pub close to Tilbury Fort is also named *The Worlds End*.

¹⁵ Wenceslas Hollar. *London. The Long View*, (1647), P1014

¹⁶ David Flintham, 'Seats of War: Current investigations into ECW Fortifications', *Novelty and Change*, (Warwick: Helion and Company Limited, 2024), pp. 67-80.

¹⁷ David Flintham, 'His Majestie's Scenographer: the Military Art of Wenceslaus Hollar', *Home and Away: The British Experience of War, 1628-1721*, (Warwick: Helion and Company Limited, 2018), pp. 150-188

Reflections from the distaff side

By Pam Fiorini

Study Tours are not the sole preserve of men – wives and girlfriends are often present – and usually they do not look on the activities in quite the same way and with quite the strong focus on the fortifications as our men, who can be very strongly focused indeed. So, Charles Blackwood, then Casemate editor I asked Pam Fiorini, who accompanies husband Mike on these forays, to give us one woman’s point of view. Here it is.

On the recent FSG tour to Briançon, our Casemate editor asked if I would be willing to share a few thoughts as a non-fort enthusiast. Where to start? Why do I come? So many forts...so little time. Briançon is the fourth FSG tour that I’ve taken; earlier tours were to Malta, Slovenia, and Northern Poland. They have all been very enjoyable. My primary interest lies in the historical perspective. Tours to various fortification sites give us the opportunity (excuse?) to visit areas that we might otherwise ignore. Each tour includes a handout booklet of materials. While the true aficionados are immersed in mortar, brick, concrete and artillery details, I’m interested in whatever historic information is provided in order to help me understand better the significance of what we will be seeing. Stunning scenery is an additional bonus.

Then there is the social aspect; in this age of globalization, it is wonderful to have acquaintances and friends from around the world. Fellow FSG members are always willing to share experiences, photos and materials – to say nothing of opinions! The social/dinner hours and bus rides give us an opportunity to converse and renew these relationships.



Fig. 2: Pam (left) at Briançon 2011, Photo Norman Clark.

With the advent of retirement, we are now able to add time prior to and/or after the actual tour dates. This allows us time to adjust to the jet lag and to visit non-fort aspects of the area (heresy to many I expect).

There are always certain aspects of these tours that remain challenging: how it can take sooooo long to study one item of concrete, a people-less photo shot, physical challenges at some locations, glitches and gaps in information regarding timing the return to buses or hotels. These are usually minor and best resolved with patience and a sense of humour. Finally, of course, it goes without saying that I enjoy Mike’s company!



Fig. 1: Pam (6th person from the left) at Briançon 2011, Photo Norman Clark.



Ionian Tour with Eternal Greece 2024

By E Paul Beckmann

An important part of the tours the FSG has had in Greece has been the presentation of plaques to Regional and Local Authorities and to the Ephorates of Antiquities. The FSG Tour of 2019 to the fortifications of the Peloponnese presented a plaque to the Ephorate of Antiquities for the conservation works carried out on the superb Venetian fortress of Palamedes in Nafplion.

My wife and I carried out a preliminary exploration of the proposed Ionian tour in 2019 and it was based on these explorations that the recommendations to award the plaques were made. Subsequently Covid19 intervened resulting in a four-year gap before the plaques were presented.

This year the FSG presented no less than five plaques, three to mainland fortresses (one in the Peloponnese) and two to the fortifications in Corfu. It was emphasized to these authorities that the plaques are awarded to be fixed, hopefully in prominent locations, within the relevant fortification. Eric Cauchi of Eternal Greece went to a great deal of time and trouble from the outset to arrange the presentations, in some cases agreement to the presentations was only made by the recipients a matter of two or three days before the event took place.

Our first presentation was at the Fortress of Rion, initially of Ottoman construction but extensively modified by the

Venetians. The presentation was held in an open-air theatre within the Rion Fortress, (making excellent use of the available space and the ambiance of the place) and a crowd of over eighty invitees, including local dignitaries and interested local people were present. The presentation was made to Mr Charalambos Bonanos, the Deputy Regional Governor of Tourism Development; Mr Panagiotis Sakellaropoulos, the Head of the Ephorate of Antiquities of Achaia; the Archaeologist-Byzantinologist, Dr. Anastasia Koumoussi, head of the restoration team at the Rio Fortress and Ms Eleni Katsouli, representative of the Ephorate of Antiquities of Aetoloakarnania and Lefkada, Civil engineer and supervisor of the restoration works of the Castle of Nafpaktos, John Harris, the immediate past chairman of the FSG was kind enough to present all of the awards, in Rion, Aghia Mavra and Corfu on behalf of the FSG. During the various speeches, Mr Bonanos mentioned that visitor numbers to archaeological sites and museums in the Western Greece Region had increased by 161,493 from 2022 to 2023 and are expected to increase still further.

The event was also attended by the Mayor of Nafpaktia, Vasilis Gizas, the President of the Municipal Council of Nafpaktia, Angelos Stavropoulos, the President of the Regional Council, Christos Paisios, the President of the



The tour group and guides at Aghia Marva. Photo by Eric Cauchi.

Chamber of Achaia, Platon Marlafekas, the President of the Chamber of Aitoloakarnania, Panagiotis Tsihrizis, representatives of the municipal districts of Rio and Antirio, ecclesiastical representatives of the Metropolis of Patras and representatives of local government, including the Head of the Directorate of Education, Culture, Sports, Tourism and Employment, Dr. Lavrentios Vassiliadis, the Head of the Department of Tourism Strategy Planning, Georgia Papaspyrou and the executives of the Directorate, Vasiliki Karapanou and Yolanda Deli. Following the award ceremony, the participants were treated to a buffet lunch in a tented area within the fortifications.

For the Fortress of Rion, the FSG Plaque was awarded for the 'Consolidation – Presentation – Enhancement of the West Venetian Bastion (Sector B') of the Rion Fortress, Region of Achaia' directed by the Ephorate of Antiquities of Achaia, works which ran from 1st April 2014 until 15th December 2015. These works involved removing the contemporary earth fill and archaeological excavation followed by extensive and sensitively handled restoration of the building remains. Some of these works involved removing concrete coatings and modern constructions when the fortress was used by the Greek Army. The result is a startlingly good piece of restoration, which can be seen in context with the rest of the fortress (and can be seen from above from the modern Rio-Antirio Bridge immediately adjacent) as well as its function in conjunction with the Antirrhio Fortress on the opposite side of the Gulf of Corinth. Subsequent to the above date, even more extensive works have been carried out, more than justifying the plaque award. The FSG group were guided around both the conservation works and some more intriguing recent excavations by the archaeologist Dr. Anastassia Koumoussi, whose enthusiasm was very infectious.

For the Fortress of Naupaktos (Navarino), the FSG Plaque was awarded (again at the event at the Fortress of Rion) for the 'Partial Reconstruction and Structural Reinforcement of the Castle of Naupaktos and Enhancement of the Archaeological Site' directed by the Ephorate of Antiquities of Aitoloakarnania and Leukas. The archaeologists Dr Ioannis Chouliaras (Director of 22nd Ephorate of Byzantine Antiquities) and Dr Olympia Vikatou, (Director of the Ephorate of Antiquities of Aitoloakarnania and Leukas) directed and supervised the works. The award was presented to Ms. Vivian Staikou (MA in Prehistoric Archaeology), Archaeologist of the Ephorate of Aetoloakarnania and Lefkada and of course Ms Eleni Katsouli, who worked on the Fortresses of Rion, Naupaktos and Aghia Mavra.

I originally contacted Eleni by email in 2019 and she was extremely helpful in the organisation of the tour. The works at Naupaktos lasted from 1st November 2013 until 31st August

2015 and involved restoration of the eastern and western sea walls and the retaining wall of the Prophet Elias church within the fortress. The result is a superb piece of consolidation of an important fortress, the name Naupaktos meaning 'shipyard', as it was an important naval base for the Ottoman navy. Again, subsequent to the original date, even more works have been carried out, more than justifying the plaque award. When the FSG tour group visited Naupaktos the following day, we were awarded a guided tour of the conservation works and recent rather exciting excavation works in the fortifications by Ms. Vivian Staikou. Towards the end of the afternoon a smaller group of the FSG were guided by Eleni Katsouli around the eastern side of the fortifications, including the amazing north gate and a recently excavated (and very fragile) Ottoman Mosque and hamam. The group made a strong bond with Eleni (Elena) Katsouli, whose English is excellent and whose enthusiasm for the fortifications matched and even surpassed those of the group.

At the Fortress of Aghia Mavra (Santa Maura), an Ottoman fortress again extensively modified by the Venetians and latterly the British and the Greeks, the FSG Plaque was awarded for restoration and consolidation works to the walls of the fortress. A second, more informal presentation took place here, Ms. Vivian Staikou being the recipient for the fortress with Eleni Katsouli again in attendance. Ms Efrossini Chalikiopoulou, guard at the fortress, acted as a group photographer. In August 2019, when I originally visited the fortress, this work was well-advanced. The Ephorate of Antiquities and the Directorate for the Restoration of Byzantine and Post-Byzantine Monuments have been instructed to prepare a management plan. The fortress was occupied by the British after the Napoleonic Wars and there is a long-forgotten 'English' graveyard there, as well as an officer's tomb on the ramparts. It appears mosquitoes and British soldiers were not compatible even then! Yet again, throughout the Covid interval, works had continued on the conservation of the site, but also in the provision of a much-needed museum within a couple of casemates in the northern corner of the fortress. Another internal building has been prepared as a small cinema for public viewing, explaining some of the complex history of the fortress. Ms. Vivian Staikou guided the FSG members around much of this large fortress assisted yet again by the indefatigable Eleni (Elena) Katsouli. Aghia Mavra was closed during much of the contract period for conservation work and was not due to be re-opened to the public for another week after the FSG visit. The FSG tour group was extremely lucky in that our plaque award resulted in the fortress being opened for the day in our honour.

The second major presentation was to the Ephorate etc of Corfu. This was in respect of both to the Paleo Frurio (Old

Works) and Nea Frurion (New Works) of Corfu, each being presented with a plaque. The presentation was made in the Regional Authority Offices in Corfu Town, the recipients being Mr Spyridon Chalikiopoulos, Deputy Mayor for Sustainable Tourism and Public Relations; Mr Christos Anthis, Deputy Governor, Regional Authority of the Ionian Region and Director of Cultural Affairs and Ms. Diamanto (Tenia) Rigakou, archaeologist, Director of the Ephorate of Antiquities of Corfu. The Paleo Frurio was the original Venetian fortification of Corfu and is now part of the UNESCO World Heritage site. It has been the subject of various restoration projects but requires a great deal more expenditure to secure much of the crumbling structure. C19th British demolitions did little to improve the state of these fortifications. A deservedly popular tourist destination, the fortifications are spectacular, even though some 70% of the total extent has prohibited access. The fortifications are protected by the Hellenic Ministry of Culture (ministerial decision of 1980), the Ministry of the Environment, Spatial Planning and Public Works (Presidential decree of 1980) and the Municipality of Corfu (Presidential decree of 1981). A conservation management plan for all the fortifications is in hand. Several of the restoration projects appear to be in delay, almost certainly relating to the economic difficulties of the last few years in Greece. An FSG plaque recognises the works which have been carried out (including the relatively recent remounting of several artillery pieces within the fortress) but more importantly is seeking to encourage the Authorities to be more proactive.

The Nea Frurio, (New Works) of Corfu also received a plaque in recognition of works still in hand. The Nea Frurio was a later addition to the Venetian fortifications (still pretty old!) but for some reason appears not as highly regarded as the Paleo Frurio. It has, like Paleo Frurio, some British installations (pre-1864, including a substantial fortified barracks of 1842 near the highest part of the fortress) as well as some works by the great Venetian Engineer Jancik (who also built works at Modon and famously designed the works at Palamidi). Again, the awarding of an FSG plaque recognised the works which have been carried out and seeks to encourage the Authorities to be more proactive. There are a number of problems associated with the setting of this fortification, which has been eroded by urban development immediately adjacent. International recognition by the FSG it is hoped might help swing opinion and produce more funds for the management of the works. Currently a substantial area of one bastion flank is suffering subsidence issues and the wall concerned has been stripped back to reveal the counter-forts behind. This and other dangerous points in the fortifications have resulted in public access allowed only to rear of the fortifications, which of course is immensely frustrating to visitors such as the FSG. Mr Andreas Grammenos, Deputy Director of the

Interpreters Union, was present at the ceremony and personally guided the FSG tour group around both the Neo Frurio and Paleo Frurio, for which we are extremely grateful. Andreas is extremely knowledgeable on the history of the Corfu fortifications and a friend of Theophilos Tzikas accompanied us.

Coincidentally, the day after the FSG tour group visited the Corfu mainland fortifications was the 160th anniversary of the accession of the Ionian Islands to Greece, a day marked by processions around Corfu town with brass bands (a British cultural introduction to Corfu, along with cricket and other things) helicopter and extremely loud fighter jet flypasts. It was rather humbling to note the British blew up the defences on Vidos Island and some of those in and around Corfu before handing them over to the Greeks. Our collective conscience was somewhat salvaged when it was pointed out to us by Theophilos Tzikas (our exceptionally knowledgeable guide on Vidos, a strong advocate for more to be done on conserving the Corfu defences, who provided a great deal of help in organizing the tour and to whom we are again extremely grateful) that it was Austrian insistence on the destruction of the Corfu defences prior to them being handed over to the Greeks; the British managed to mitigate some of this destruction, but it was nevertheless extensive.

I believe the impact of the presentation of the FSG plaques on the recipients is profound. Firstly they are seen to recognise those involved in the conservation and preservation schemes, often immensely complex works, for which their remuneration is relatively poor. Secondly, they confirm to the Regional and Local Authorities that these fortifications are indeed seen and valued by a wider public, specifically the large number of tourists who visit Greece, the revenue from whom is by far the greatest income for the Greek state. Hopefully, this will translate into state investment in the fortifications. Thirdly, the responsible organisations within the Greek state are not necessarily all aligned on the need to invest in this work, but as Mr Harikiopoulos, the Deputy Mayor of Tourism of Corfu alluded to in his acceptance speech, perhaps it needs the presence of an external organization such as the FSG to encourage closer co-operation between the various organisations. Fourthly, the reputation of the FSG as a group with an international 'reach' is considerably enhanced by the gift of the plaques. Lastly, and for our group most importantly, the presence of these plaques may well encourage other visitors to these magnificent fortresses to join the FSG.

The FSG tour participants recognised the amazing amount of work Eric Cauchi and Mania Rapti of Eternal Greece had invested in the tour, particularly in the organisation of the events around the presentation of the FSG plaques, which was far beyond the organisation of tour itself. Eric and Mania are profoundly thanked.



FSG/ PFS Joint Plymouth Study Tour

By David Clarke

The 2024 joint Palmerston Forts Society (PFS) and Fortress Study Group study tour commenced on Friday 06 September with an optional visit to **Crownhill Fort** where we were welcomed by Ed Donohue of the Landmark Trust who have owned the site since 1986 and restored it to the highest standard with an unrivalled range of original and replica artillery. The Trust's misfortune of a cancelled holiday let booking was our gain as we were privileged to be able to visit the former officers' quarters which are normally occupied by holiday makers. They were furnished in an appropriately comfortable vintage, but slightly austere, style and I felt they would be ideal for a digital detox as there was no TV and I suspect no Wi-Fi.

Ed explained that the fort was now on a sustainable footing with a combination of rent from small businesses and holiday makers. We were shown around by enthusiastic and dedicated uniformed volunteers, and it was good to see that

this section of the Victorian army had an open mind about women joining up!

I wonder whether we will ever again see such a complete restoration complete with appropriate armament, both original and very convincing replica guns including; two 40 pounder Armstrong Rifled Breech Loaders, one on a unique replica Moncrieff Disappearing Carriage and one in a Haxo Casemate, four 32 pounder smoothbore breech loaders in the caponiers on original carriages and a real 32 pounder smoothbore on a C-pivot carriage standing in for the 64 pounder RML which would have been in that position.

Although I had been to Crownhill Fort several times before, I enjoyed being reminded of what a Royal Commission Fort and its armament would have looked like in its heyday.

The next day was to be what many saw as the highlight of the weekend, the opportunity to visit Scraesdon and Tregantle Forts, still retained by the military and normally closed to the



Fig. 1: The PFS/ FSG Group at Crownhill Fort (David Clarke)

public. These were the two forts actually built of the three recommended for the 'Antony Position' to protect Plymouth from an attack from the west.



Fig. 2: Crownhill Fort; replica 40 pounder Armstrong RBL (Rifle Breech Loader) on Moncrieff Disappearing Carriage. (Foto: Nick Dougan)

Scraesdon was a derelict delight used for Royal Marine training. Set on a hillside it has two levels, the upper level surrounded by casemated barracks is comparatively manicured and the lower level largely overgrown. The lower level, divided into two by a traverse features a three-gun Haxo Casemate looking north across St German's River.

There are gun positions including two Moncrieff emplacements on the upper level facing towards Tregantle Fort. A rifle gallery runs round three sides of the fort with a long and vertiginous flight of steps on two sides due to the hillside. In several places in the gallery the natural rock was exposed, and it was clearly not as stable as might have been hoped as the gallery had been reinforced and narrowed in locations where the rock had presumably started to move during construction of the fort.



Fig. 3: Scraesdon Fort; Haxo Casemates in the lower level. (Photo: David Clarke)

When the fort was built, the steep hillside necessitated the construction of a rope worked incline, part of a 1.5-mile tramway, used by bring building materials from a quay on the

river. The Tramway extended across the peninsula to Tregantle Fort, and the route can be partially traced by carefully examining OS maps.

The next official visit was Tregantle Fort, but your Chair and Secretary managed to bag another fort and a nice cafe along the military road at **Whitesand Bay Battery** an 1890's battery mounting three 12.5-inch RML and two 6-inch BL HP disappearing guns and an adjacent practice battery mounting four 64 pounder RMLs. The battery was constructed because, by the 1880's, the range of naval guns had increased so that hostile ships in Whitesand Bay would be able to bombard Devenport Dockyard 8000 yards away. In an example of Victorian economy, the 12.5-inch RMLs were removed from the Breakwater fort and so the emplacements were specially built to accommodate the 'small port' carriages from the Breakwater Fort. The contrast with the Royal Commission fortifications is obvious, this battery takes the form of a line of concrete emplacements with magazines between and below the guns. The dry ditch which originally surrounded the fort has been infilled. Now a caravan site this battery is in reasonable condition with notices explaining the key features.



Fig. 4: Whitesand Bay Battery; emplacement for 12.5 inch RML on 'small port' carriage. (Photo: David Clarke)

Returning to **Tregantle**, we had the run of the open batteries and the keep but the barracks and magazines were closed off for security and bat reasons respectively. This is a very large fort, originally designed for eighty-seven guns and 1000 men. Roughly hexagonal in shape, the south side comprises a two storied casemated barracks with flanking 'demi-bastions', the other sides of the fort have dry ditches and to the east there is a 'keep of last resort' separated from the rest of the fort by its own ditch and with guns positioned to fire both out of and into the fort. The keep was in better and tidier condition than when I last visited with the FSG in 1990 with the windows in generally good condition and the previous debris removed. It was encouraging to see the way surviving woodwork had been saved. Although not a full restoration it was clear some commendable conservation had been going on. Since 1903

there have been rifle ranges to the seaward of the fort and the site, including the ditches are still used for this purpose. In the evening, we were the guests of the community hub at

because post war the ditch had been filled with air-raid rubble to widen the road meaning that the lower level of the main gate (with loops that would have fired into the ditch) was buried. A diorama inside the fort of an American D-Day convoy portrayed the original road and ditch rather effectively. We were able to look in the caponiers and



Fig. 5: Tregantle Fort; looking towards keep and main gate from the northern ramparts. (Photo: David Clarke)

Woodland Fort, one of the string of Forts built on the recommendation of the Royal Commission of 1860 protecting Plymouth from attack from the North. These forts sit on a prominent ridge which became very clear when our host Andy Sturdy took us on a guided walk around the perimeter. Walking down into the valley to the north demonstrated the commanding position of the forts and batteries on the ridge. On the gorge side it was less easy to understand the fort



Fig. 7: Woodland Fort; northeast caponier from the ditch. (Photo: Nick Dougan)

magazine which are not normally accessible. It is good to see a Fort fulfilling such a positive role in its community. We ended the evening with pasties and a game of skittles in the club room.



Fig. 6: Tregantle Fort; looking west along the northern ramparts. (Photo: David Clarke)

The next day we assembled in light rain at **Maker Heights** to see the Maker Redoubts which in the 18th Century were the means of preventing Plymouth being attacked or bombarded from the West. The redoubts run across the Rame Peninsula from the Plymouth Sound to the Tamar River with the Maker Barracks at the approximate centre of the line. Due to the increasing range of artillery, Scraesdon and Tregantle were built c5,700 yards further northwest to fulfil the same role in the mid 19th Century.

It was the invasion scare following a combined Spanish and French fleet anchoring in Cawsand Bay in 1779 whilst the Royal Navy was distracted by the American War of Independence that triggered the construction of the fortifications on the Rame Peninsula. Although invasion was avoided because disease broke out on the fleet, the warning was clear, Plymouth needed to be better defended. The response included the Maker Redoubts which were built from 1782, with the Barracks added in 1804-08.

Our hosts were the Rame Conservation Trust who are responsible for the sites, our knowledgeable guide and 'man with the keys' was RCT Trustee Andrew Martin. We were also escorted by Napoleonic era re-enactors from the 32nd Cornwall Regiment of Foot who were camped at Rame that weekend. They certainly added some atmosphere to the visit!



Fig. 7: Maker Barracks completed in 1808. (Photo: Nick Dougan)

We first walked southeast towards Plymouth Sound, looking at the earthworks that are redoubts No 2 (in front of the barracks) and No 3 which is still well defined before reaching the more substantial stone-faced Redoubt No 4. Originally built as a simple artillery platform in 1782, it was reinforced with masonry and a barracks block in 1787 to create an irregular quadrilateral 'fort' armed with eight (probably) 32 pounders. Disarmed after 1815, the site was remodelled in 1887 for two 12.5-inch RML. In the early 1890's these guns were removed to the immediately adjacent Maker Battery and Redoubt No 4 rearmed in 1898 for three 4.7-inch QF (dismounted 1927), the emplacements for which remain. It was at this point that it became known as Grenville Battery.

Having removed longstanding squatters, the Trust have ambitions to restore the battery but have the challenge of identifying a sustainable use for the site.

The immediately adjacent Maker Battery for three 12.5-inch RML and latterly two 6-inch BL is in private hands and was not part of the visit. However, from a distance, the site looks more cared for than it has previously. From the path between Redoubt No 3 and 4 it is possible to look down into Cawsand Bay and the eponymous fort or battery.



Fig. 8: Maker Hights, Redoubt No 4 also known as Grenville Battery from 1898 when these 4.7 inch QF emplacements were constructed. (Photo: David Clarke)

We then cut across the peninsula to Redoubt No 5 which is effectively the northern end of the line but due to the lie of the land is set northeast of Redoubt No 1 and is not a projection of the line through Redoubts No 1 to 4. Like Redoubt No 4, at the Southern End of the line, it was revetted in stone with a stone-built barracks on the gorge side. Armed with nine guns in 1808 it was not remodelled by the 1860 Royal Commission and is therefore a very rare survival of a late 18th C fortification. The Rame Conservation Trust are gradually repairing the site with a new bridge being installed in 2020 to allow access across the ditch.



Fig. 9: Maker Hights, Redoubt No 5 northeast corner. (Photo Nick Dougan)

We returned to the Maker Barracks for lunch with a choice of two excellent cafes with both appropriately housed, one in part of the old barracks and one in a Nissen Hut. This also gave the opportunity to explore the adjacent WW2 Heavy Anti-Aircraft Battery, Plymouth 1 which had been armed with four and later six 3.7-inch guns during WW2. The battery survives in reasonable condition and has been listed since our visit. The RCT have ambitions to tidy up and restore the site with suitable interpretation.

After lunch we walked to nearby **Hawkins Battery** to be welcomed by owner Kevin Pigeon who very generously allowed us to explore the battery which is now a holiday park. The battery was completed in 1892 for four high angle 9-inch RMLs and rearmed in 1915 for two 9.2-inch BL high angle guns. The latter were not used in many locations. Utilising old Mark VI 9.2-inch guns and a new 45 degree mounting they could achieve a 16,600-yard range. Approved in 1906, work did not start until 1912, and they were not completed until 1915 and duly abandoned in 1927. The two 9.2-inch HA emplacements sat over the inner two of the RML emplacements which run in a west - east line across the site with a magazine in a traverse at the centre of the gun line. When the battery was rebuilt, it was surrounded by a loopholed concrete wall and a dry ditch to the southern front. There were three blockhouses (or caponiers?) on the perimeter. This perimeter defence was typical of batteries

built in this period (e.g. Blyth, Spurn, Kilnsea) and it was interesting to see the blockhouses retained their original shutters and spalling of the concrete roof beams revealed the use of short lived patented 'indented bar' reinforcement.



Fig. 10: Hawkins Battery; looking along the line of the ditch to the eastern blockhouse. 1900 fitters shop to the left. (Photo: David Clarke)

At this point, several of the group with jobs to go to on Monday left us and others took a break. About a dozen of us headed south to explore Penlee Battery. In the 1970s the site was largely demolished and most of the underground works backfilled, and the site became a nature reserve. It is difficult to interpret this overgrown site but with the help of good plans and the resourcefulness of one member who brought secateurs and a lopper with him, we were able to make sense



Fig. 11: Drakes island; General view of the island. (Photo: David Clarke)

of it. Completed in 1893, the battery was armed with one 67 ton 13.5-inch BL mk III and two 6-inch BL MK IV both on HP mounts. It was later upgraded to three 9.2-inch BL MK X. The 13.5-inch BL was the largest breach loading gun to be emplaced for coast defence in the British Isles during the Victorian era. We know that many of the underground structures remain intact but that is for another day.

On the final day of the study trip a group of about 40 assembled at the Barbican Landing Stage in the shadow of Plymouth Citadel for the short crossing to **Drake's Island**. We were shown around this complex site by Chris Luckhurst and several other volunteer guides and given plenty of time to explore.

Drake's Island is aligned approximately east-west with the eastern end commanding the channel into Plymouth and the western end the entrance to the River Tamar and Devonport dockyard. This strategic position has meant the island has been fortified since the mid 1500's. From the water, the most

defences. It remained important however and the upper battery and its magazines were partially rebuilt around 1903 for three 6-inch BL and three 12-pdr QF. There was much interest in exploring the extensive magazine complex and trying to understand the phasing of its development with, for example, remains of shell and cartridge lifts for both RML and BL eras. Of course, one of the standout features of the Island is the survival of one of the 12-inch RMLs on a replica carriage and all three of the 11-inch RMLs.

A further three 12-pdr QF were in the 'lower battery' at the western end of the island. In the second world war the Island was rearmed with two twin-6 pounder Anti-Motor Torpedo Boat guns, one covering each channel and cross-firing with the twin 6-pounders at Western King's on the Mainland. Both these emplacements are in poor condition and the prominent Director Towers have been removed.



*Fig. 13: Drakes Island; original 12 inch RML on replica carriage.
(Photo: David Clarke)*

Drake's Island is a very special site with a fascinating history. The owners have planning permission for conversion of the barracks to a 25-room hotel and the casemated battery into 25 suites. In the meantime, they are to be commended for making the Island accessible to the public in a managed way. The island has an extensive and fascinating range of buildings, with many, sadly in very poor condition. It is to be hoped that a sustainable model for the Island's future can be found.

is was a very enjoyable weekend both for the sites visited and for the social aspect and it was very positive to have a mix of PFS and FSG delegates. Particular thanks must go to Lewis Sharp and Dave Newman who negotiated access to the sites (not easy) and organised the whole weekend ably assisted by other PFS colleagues. We must also thank MOD and all the other site owners for their generosity in allowing our visit. Thanks also to Alistair Graham-Kerr who prepared another of his detailed tour guides, including the PFS "Fort Logs" for all the sites visited, which is now available on the FSG website.

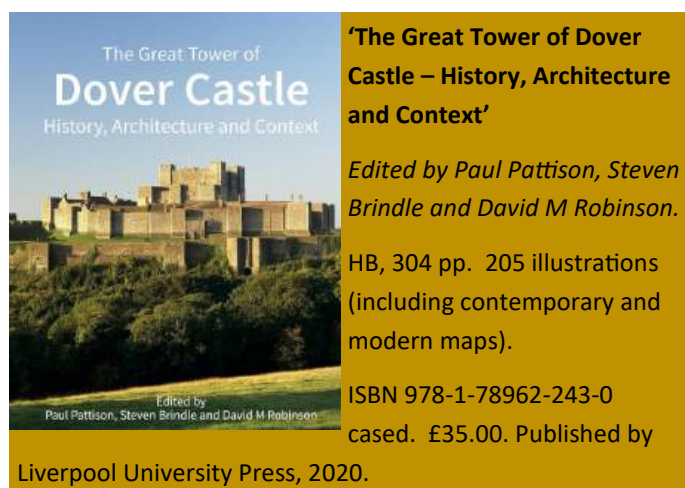


*Fig. 12: Drakes Island; 2019 view of the casemated Battery (Note the 'slots' for the twin 6 pounder fixed lights below the casemate line.
(Photo: David Clarke)*

prominent feature is the curved casemate battery facing east which was built in the 1860's on the recommendation of the Royal Commission. There were 21 casemates, each intended for a 9-inch RML protected by an armoured shield and behind the casemates were the expense magazines and main magazine, built into the rock. Not all the casemates ever received shields or armament. It was good to see PFS colleagues applying the learning from Gilkicker Fort to interpreting the racers and shields in the Casemates. Above the casemated battery, on the top of the island, was an open semi-circular battery for two 12 inch and three 11-inch RML below which were magazines in a curved tunnel following the gun line.

With the construction of the Breakwater creating an outer defensive line of Staddon, Bovisand, Breakwater and Picklecombe Forts, Drake's Island became part of the inner





'The Great Tower of Dover Castle – History, Architecture and Context'

Edited by Paul Pattison, Steven Brindle and David M Robinson.

HB, 304 pp. 205 illustrations (including contemporary and modern maps).

ISBN 978-1-78962-243-0

cased. £35.00. Published by

Liverpool University Press, 2020.

This magnificent book has contributions from the editors and many other eminent academic contributors with a wide range of expertise. It is the first book to look forensically at the structure of the Great Tower, its historical and landscape context, its purpose and evolution and finally its presentation. Originally built by Master Maurice for the Angevin King Henry II in later C12th the Great Tower is sited at the core of a series of earthwork defences almost certainly of Iron Age origin and occupying an area of 30ha. making it one of the largest castles in Britain. The site at Dover was garrisoned from 1066 until 1958, making it one of the oldest buildings to have a continuous military presence in the UK.

The Great Tower was built following the murder of the Archbishop of Canterbury, Thomas Becket in Canterbury Cathedral in December 1170 and it is now considered that it represents Henry II re-asserting his power as well as being linked to the cult of the martyr Becket. Within a short period of Becket's death (he was canonised in 1179) the Angevin Empire was convulsed with revolts and wars, which Henry was lucky to survive. In 1179, Henry's erstwhile enemy, King Louis VII of France arrived unexpectedly, at Dover to make a pilgrimage to Becket's shrine. It seems that this event may have triggered Henry's determination to demonstrate his power by constructing a magnificent palace / fortress on a dominating position over the port of Dover.

What is fascinating about the history of the tower is the way in which it has been misinterpreted in modern times. It has been pointed out that as a palace it was originally lacking some basic facilities, such as fireplaces (they were added in much later) and must have been extremely draughty and in some areas rather dark. Against this, as a fortress it was extremely old-fashioned when it was built and although an external circuit wall was built slightly later, it was never a 'state of the art' fortification. What this book does show is that it was built essentially as a landmark, perched high above

the Port of Dover on top of an already imposing headland and proclaiming itself as a gateway castle to England.

The main area of interest for the FSG is chapter 13 by Paul Pattison, entitled '*The Great Tower as a military building, c.1680 – 1930*'. The Great Tower had been considered for use as a prison in the Nine Years War, but it wasn't until the War of the Spanish Succession that it came into use; the prisoners came from a variety of backgrounds and left some interesting graffiti in the tower. After the Peace of Utrecht in 1713, the Great Tower was seriously neglected and it wasn't until the War of the Austrian Succession (1740-8) that a comprehensive and extensive repair programme for the Great Tower and the Inner Bailey was instituted during the period 1744 – 56. This established a permanent and substantial garrison in the Castle, whose remit included the whole of the Dover area. The castle's main function as a structure became the defence of the landward approaches to the port from the east, with new gun batteries and the garrison intended to hold against any flank attack. The garrison was also sufficient to be able to defend the port.

The proposed works to the castle were commenced in 1747 and included extensive face work to the Great Tower as well as substantial internal alterations, to accommodate, for instance 80 bedsteads, 104 forms and 52 tables. By November 1756, acceding to pressure for additional troop accommodation, the builders managed to create sufficient space for a battalion of soldiers – perhaps 810 men.

In 1779 further repairs were carried out on the Great Tower which included the construction of a powder magazine and the commencement of new works on the Western Heights. In two phases, 1794 – 1805 and 1810 – 1812 huge sums of money were spent on the fortification, the bulk during the first phase. This work saw the abandonment of the barracks with the Great Tower, but the establishment of a rooftop battery, magazine and large Board of Ordnance storehouse.

The rooftop battery construction involved removing the 1745 roof and the construction of a new flat roof carried on twin brick parabolic arches, the gap between the vaulting and the roof cover presumably filled solid. These vaults, although a permanent alteration to the Great Keep, are a superb example of Georgian engineering. Nine roof-top guns were deployed on the roof, five 68-pounder carronades, one 13" mortar and three 10" mortars, all standing on a timber platform. With such a weight of artillery, no wonder such massive vaulting was considered necessary! Pattison point out that the intention of this armament was to fire upon enemy troops approaching from the Deal Road with a mix of shell, grape and canister.

The Great Keep returned to care and maintenance in the period 1815 – c. 1853. Another period of refurbishment commenced in the 1850s, lasting until 1870. This was with the intention of making the Great Keep ‘a keep of last resort’, much aligned with military thinking of the time, which was itself concerned with the re-emergent threat from the French. An inspection of 1854 again listed the five 68-pounder carronades (by then dismounted) and four 8” shell guns (possibly installed after 1841, but without carriages). The latter were eventually mounted, were still in location in 1887, but were removed by 1892.

Throughout the remainder of the C19th and into the early C20th, the Great Keep retained its function as a magazine and especially as ordnance storage, but by 1900, gunpowder had been replaced by other chemical explosives and the magazines were no longer required. A Mobilisation Store to the west side of the Inner Bailey in 1901 contained the arms, clothing and equipment for 1,000 reservists of the Royal Garrison Artillery and it appears the Great Keep had the same purpose. Some changes and alterations were carried out during this period, but these were relatively minor, with the possible exception of the restoration of the two chapels within the keep, probably carried out around 1871.

The Great Keep remained as an ordnance storage depot throughout the First World War and for some time after. In 1920 there were between 15 and 16,000 rifles in special-made racks as well as cavalry swords, pistols, bayonets and tools. However, this equipment had to be regularly maintained and by 1930 it was realised that the timber floors, saturated in oil, would be a serious fire hazard, with the result that the stores were withdrawn and the building handed to the Office on Works by September 1930.

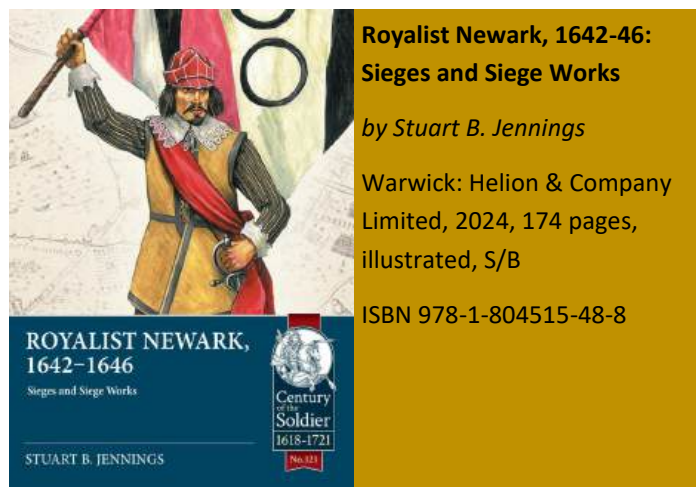
The public had been able to visit the Great Tower for many years and from around 1882 a retired Captain of Royal Artillery, Charles Orde-Browne assembled a rather wide selection of arms and armour with a number of mannequins, all of which was rather scathingly dismissed by the Curator of the Armouries in 1925. Access to the whole castle was then free, despite the Ministry of Works acquiring more and more land between 1904 and 1963. When English Heritage set up the management of the castle in 1985 it included changing for access but also began a more systematic series of interpretation of the castle, ‘The Great Siege Experience’ (of 1216) being one.

More radical changes occurred when by 1990, English Heritage was able to open up the Cliff Tunnels. Originally known as the Casemate Level and constructed in Napoleonic times, this was substantially extended and became the Headquarters for Vice Admiral Ramsay’s Operation Dynamo – the Dunkirk evacuation. English Heritage organised the very successful ‘Secret Wartime Tunnels’ as an exhibition followed by the opening of the former hospital at Annexe Level.

English Heritage’s arguably most challenging exhibition was ‘The Great Tower Project’ which carefully and minutely considered the possibilities of recreating the atmosphere of the original Angevin Royal Palace, while studying the impacts on the existing structure. The result has been an outstanding success with minimal impact on the building. Even the C18th brick vaulting is not too intrusive.

I am aware that not all of this magnificent book is of essential interest to members of the FSG, but the detail of the various chapters is superb and helps create in the reader the awareness of time and continuity in such outstanding buildings which dominate the landscape. Dover is indeed well -described as the ‘Key to England’.

E. Paul Beckmann



There can be few other towns that can claim to have played such a pivotal role in the First Civil War of 1642-7 than the Nottinghamshire town of Newark-on-Trent. Located where the Fosse Way and the Great North Road cross the River Trent, it influenced the eastern and northern strategies of both the Parliamentarians and Royalists for much of the conflict. Besieged three times, it was one of the last Royalist garrisons to fall to Parliament, only surrendering in May 1646 when the King himself had surrendered to the Scots.

Today, the vestiges of the sieges are not hard to find, and in the Queen’s Sconce (a four-bastioned earthwork fort), the town possesses perhaps the most well known Civil War fortification to be found anywhere. Added to which, it has been the home to the National Civil War Centre since its opening in 2015.

Whilst it is included in virtually every history of the period, dedicated books about Newark are surprisingly few. Indeed, you probably have to go back to 1964 and the excellent RCHM’s Newark on Trent: The Civil War Siegeworks to find a detailed study of the sieges and siege-works. Therefore, the

latest addition to Helion's Century of the Soldier series is welcomed.

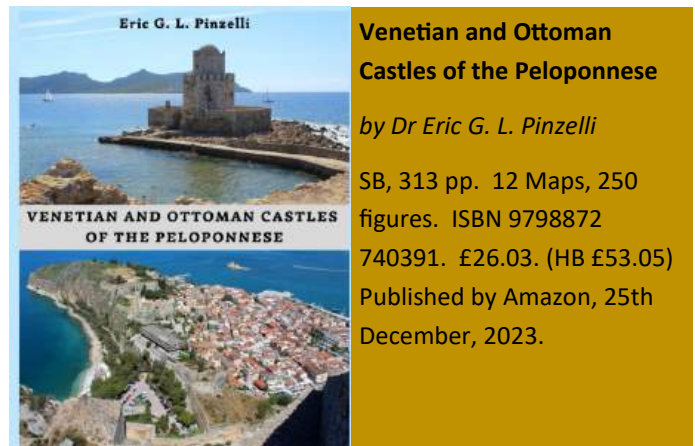
In Royalist Newark, 1642-46, author Dr. Stuart B. Jennings has written a thorough history. His use of contemporary and eyewitness accounts is excellent, and in so doing, provides a detailed account of the sieges. He considers Newark in its wider context, and how events elsewhere affected the town, although occasionally a distraction, this emphasises how crucial the town became.

The author's analysis of the fortifications themselves is less assured, however. In his drawing of "A skonse" in his 1639 Animadversions of warre, Robert Ward, curiously has the bastion flanks angled inwards, towards the curtain. Reproducing Ward's drawing, Dr. Jennings suggests that it was the basis for the Queen's Sconce. But in actual fact, each flank of the Queen's Sconce is either angled to provide fire across the face of the neighbouring bastion, or at right-angles to the curtain to provide enfilading along the face, something which is clear in the 1964 plan, and is also apparent in aerial photographs. So, for a detailed examination of the fortifications, readers would still probably need to regularly reference the RCHM book. As a result, this new title complements, rather than replaces the 1964 book.

And in the 60 years since the RCHM book was published, there have been numerous archaeological investigations in and around the Newark area which have revealed Civil War-related evidence. But surprisingly, these investigations have been largely overlooked, as have several recent specialist studies concerning military engineering and fortress warfare. Probably the best known, and most detailed plan of any Civil War siege is Richard Clampe's 1646 plan of the siegeworks. Both the British, and Ashmolean Museums have versions of this plan, and the British Museum version is reproduced as part of the book's preface. This plan is worthy of fine-tooth comb analysis, yet one can't avoid the feeling that by not doing so, the author has missed a trick.

But these points aside, this is a valuable, and long overdue history. It is bound to be popular, particularly at the National Civil War Centre where the absence of such a history has been a noticeable gap on the shelves of its giftshop.

David Flintham



Eric Pinzelli and I have corresponded by email on this subject several times, particularly when I was involved in the planning of the proposed 2020 FSG tour of the Peloponnese in 2019. In his acknowledgements, Eric refers to this book being based on elements both of his thesis and dissertation completed between 1996 and 2003 at the University of Provence. Pinzelli has also written 'Masters of Warfare: Fifty Underrated Military Commanders' (Pen and Sword Military 2022), 'Venise et L'Empire Ottoman: Les Guerre de Morée (1684-1718)' SB 2020 (in French), 'Modon, the eye of the Republic' a paper presented at the Late Venetian Fortification conference at Split 4-5 October 2019 as well as many more.

Pinzelli's own background is interesting, being Canadian and having served in the French Marines before taking a more academic role, teaching and writing. As he states, Pinzelli has always been at pains to examine historic conflict zones by visiting the sites himself and forming his own impartial opinion. Pinzelli's own great hero is Enrico Morosini, Doge of Venice, one of the main protagonists of his book of the Morean War. This fascination shines through in 'Venetian and Ottoman Castles of the Peloponnese', the book effectively reading as a gazetteer of the principal defence works involved in the Morean War.

Pinzelli covers eleven main fortifications, Corinth and the Acrocorinth; The Larissa Citadel of Argos; Napoli di Romania (Nafpoli); Monemvasia; Zarnata; Kelefa; Coron; Methoni; Zonchio (the old castle of Navarino); Anavarin (the new castle of Navarino) and Mora Kalesi (Rio). Many of these are familiar territory for FSG members who went on the Fortifications of the Peloponnese tour of 2019, while Rio was visited by the FSG in May 2024.

Pinzelli's expertise is as a military historian and his enthusiasm for Morosini's actions around the fortifications of the Peloponnese is one of the main links between them. While Pinzelli describes the various fortifications very well, it is the historical context which he details superbly, supported by a great deal of recently-discovered information from the Venetian archives and by recently-published papers on Ottoman military matters. This context is what is often missed

in fortification history, but of course is a vitally important part of that history.

As an example of Pinzelli's writing, the description of the seizing of Modon by the Venetians and the subsequent modifications of the defences by Sergeant General Jansic (or Jancic?) is detailed and fascinating. The Venetian ambitions were as usual curtailed by limited funds and when in August 1714 a large Ottoman army and fleet swept down on the fortifications, part of the garrison mutinied. The morale of the garrison was already low not least because despite the powerful fortifications of Palamidi at Napoli di Romania, the city had fallen within nine days of the Ottomans commencing siege operations. When this huge force arrived at Modon, there was little heart to stand a siege.

The description of the Venetian siege of Coron (known as the 'Eye of the Republic') is detailed and rather horrifying. Lasting 48 days, this was one of Morosini's first victories in the conquest of the Morea – and one of his most expensive. At the end of the final storming of the fortress, Venetian and Allied casualties stood at 653 dead and 762 wounded. Thirteen knights of St John and 220 other Maltese troops killed, while the Ottomans are estimated to have lost 7,000 men.

Interestingly, after the siege, Alexander, Earl of Wemyss was appointed Superintendent of the Venetian and Allied Army, while his brother Andrew became the Governor of Modon. Andrew Wemyss was replaced and then reappointed from 1701 until August 1704 when he was again replaced. The story of the Venetian garrisons and their munitions throughout the Venetian occupation appears to be the same throughout all the Peloponnesian fortresses, where clearly overstretched Venetian logistic and human resources began to fray and morale plummeted, with the result that when the massive Ottoman reconquest began the Venetian fortresses fell like a pack of cards.

The photographs and plans in Pinzelli's book are superb and he is lavish in their use. Contemporary plans of fortifications by artists such as Coronelli are placed next to excellent photographs by the author.

Appendix 1 is an excellent Glossary of Venetian and Ottoman government and military titles. Appendix 2 is Chronology of each of the eleven fortresses featured in the book.

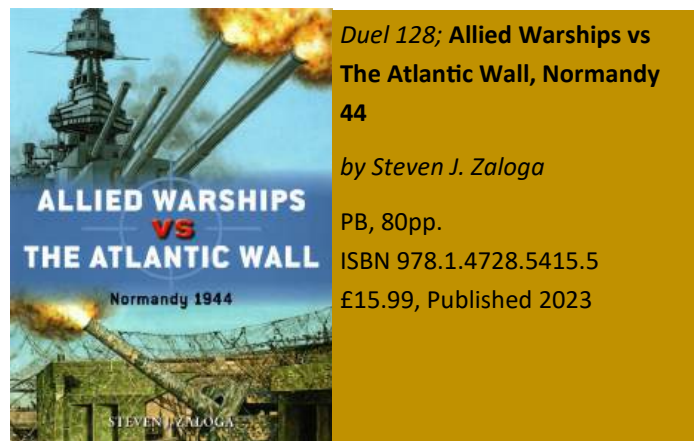
At the end of the book Pinzelli has a heartfelt chapter entitled 'Landmarks in Peril', in which he bemoans the advent of 'hyper-tourism' with all its attendant problems and the increasing number of fires which have devastated entire regions and accelerated desertification. The 2024 FSG tour saw at first-hand some of these issues, such as the recent construction of huge 'all inclusive' hotels in Corfu, with their massive tourist numbers impacting on Corfu town and of course the fortifications, impact magnified still more by the then presence of two cruise ships, one of 8,000 passenger

capacity and one of 4,000. Despite the introduction of a modest 'tourist tax', tourist numbers are inexorably increasing. Pinzelli is very correct in sounding alarm bells about the Greek landscape.

All in all, a very satisfactory book, particularly if you have visited any of the fortresses described. Pinzelli has shone a light on an era not previously fully understood by an Anglophone audience.

E. Paul Beckmann

Osprey Publishing produce several series, amongst which are *Duel* 80pp, *Campaign* 96pp and *Elite* 64pp; all PB, fully illustrated with photos in colour and b/w, plans, maps and artwork.



Horatio Nelson once quipped that 'A ship's a fool to fight a fort' an adage that for a long time held true.

By D-Day 6 June 1944 the Allies had plenty of experience in amphibious landings and had learned hard lessons when attacking fortified batteries at Dieppe, North Africa, Pantelleria, Sicily and Salerno. The best way to do so appeared to be avoid them as far as possible and attack somewhere else. While warships were most unlikely to score direct hits and destroy concrete batteries, they could help to neutralise them for long enough to get troops ashore and attack them from land. This experience was brought to bear in the Naval support of the D-Day landings.

The Royal Navy had four battleships in support, the US Navy had three; heavy cruisers were two and three respectively, light cruisers 17 and nil, with two Free French and one Polish; destroyers and escorts, 85, 40 and 17; monitors, two British.

An Introduction and Chronology are followed by Design and Development where we learn that many of the German coast batteries defending Flanders, and several rail guns, were moved in WW2 to France and the Low Countries, especially the Pas-de-Calais, to support the intended invasion of Britain.

After Allied raids at Lofoten, St Nazaire and Bruneval, Hitler decreed that a wall be built, so in March 1942 the Atlantic Wall got under way. The Germans assumed that any attempt at a landing would be aimed at acquiring a port, deemed essential to support a major landing, hence the heaviest defences were to be found around ports. Equally, concrete defences would act as a force multiplier and help free-up troops for Hitler's attack upon Russia. While early batteries were open, by the time of D-Day many were enclosed in concrete bunkers.

For the Atlantic Wall there are descriptions of the different Navy and Army bunkers, weapons and operating systems, with details and plans of bunker and weapon types and fire control.

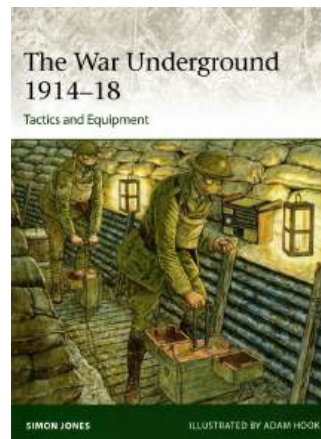
For the development of Allied operations there are good descriptions of the lessons learned from the contested landings in North Africa – head on – Pantelleria (Operation *Corkscrew*) – the value of bombing, even if inaccurate, and Sicily – the failure to prevent the escape of 102,000 Axis troops and much equipment.

With the concentration of defences around ports, attacking elsewhere – a policy made possible by the development of vessels able to land machines and troops directly onto a beach, was duly noted by the Germans leading to the extensive use of defences on the beaches.

The Graham Report of 1944 distilled Allied experience and made recommendations that heavy bombing would be necessary to damage coast batteries and naval gunfire to suppress them for long enough for troops to land. This was the policy pursued on D-Day and after descriptions of artillery defences and bombing attacks against primary *Neptune* (the landing operation) sites, the book turns to post-*Neptune* engagements, in particular the actions of battleship US *Texas* and Bombardment Group 2 against *Batterie Hamburg* and its four 240mm guns, defending seaward approaches to Cherbourg. The history of the ship is described, along with its armament and fire control and the combat itself.

The Analysis of the action is particularly interesting. While the difficulties of naval gunfire actually hitting spread out batteries was amply demonstrated, so was the difficulty of coastal batteries hitting ships moving at around 10 knots. Although the ships retreated north owing to the accuracy of the German fire, with numerous straddles, the three guns (one had been knocked out) fired about 290 rounds and scored five hits; two of which were direct hits and three were ricochets off the sea. Of the five hits, three failed to explode. The conclusions make very interesting reading.

Charles Blackwood



Elite 256: The War Underground 1914-18 Tactics and Equipment

by Simon Jones,
illustrated by Adam Hook.

ISBN 978.1.4728.6105.4.
£14.99. Published 2024

The history of military mining – or under-mining, really – is long and nasty, the earliest recording being in the C9 BC. The siege of Dura – Europos in 256 AD is a particularly grisly example of mine, countermine, and underground combat.

Once artillery had superiority over fortresses the art of military mining declined after heavy use during the Crimean War, until revived in WW1 in a major way, to reach its greatest extent before or since. The siege exercises at Chatham in 1907, where mining and countermining were practiced (see FORT 6, revised edition just gone onto our website) clearly indicates contemporary interest in the techniques. Britain will not have been alone in this; in the early days of the war both German and French miners were using more sophisticated methods and equipment than the British who rapidly increased the numbers engaged, to 25 companies in 1916, with the use of skilled miners and Norton-Griffith's famous 'clay kickers'.

Several problems appeared, one major one with the timing of the firing – the British frequently fired their mines too early for the assault, which led to a second major problem – the capture and holding of a crater. Germany was very good at re-taking and holding craters. The lessons of the Battle of the Crater before St Petersburg in 1864 during the American Civil War had not been learned.

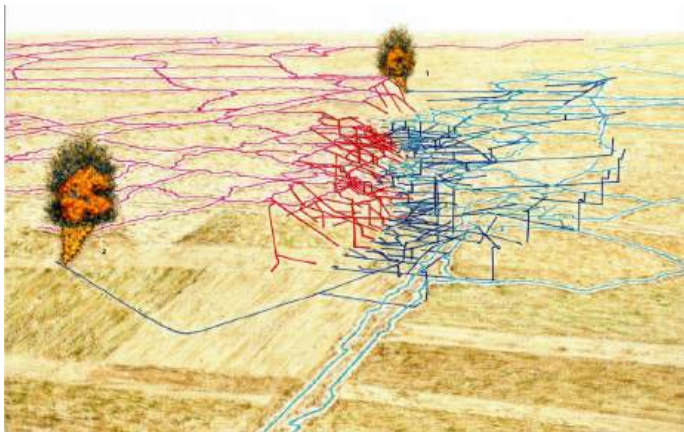
For a mine to be successful a good understanding of the geology was vital and all along the Front conditions varied greatly from clay and to chalk and rock, each bringing its own problems and advantages.

In the Great War mining took place in many theatres, including at Gallipoli on the Anzac Front and on the Isonzo Front, by both sides. The Austrians attacked through an ice tunnel of 1400m through glacial ice. It reached its apogee in 1916, with British, French and Germans very busy mining and countermining but after that use by the Germans and French declined while the British kept it up, partly owing to a lack of heavy artillery to disrupt German deep tunnels and dugouts.

The sheer extent and complexity of mine and countermine systems are extraordinary, as illustrated by a 3D picture.

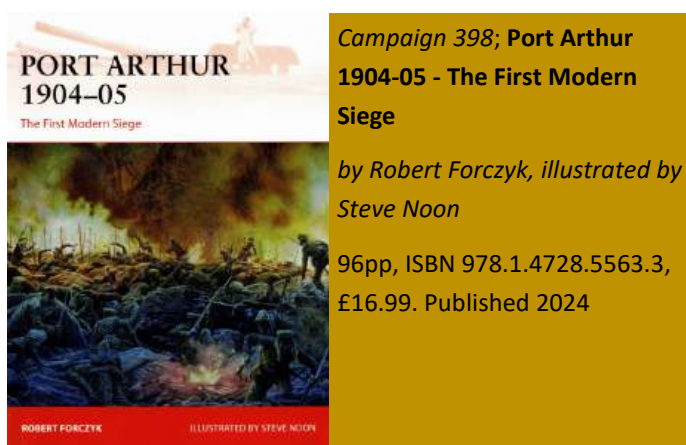
With only 64pp the book is too short to fully describe such a wide subject, but does as very good job, splitting the subject

into eight headings covering Underground Warfare before 1914, Military Mining in 1914 and Mining in 1916, 1917-18, followed by Underground Warfare and Technology, Mining on the Italian Front then Dugouts, Shelters and Attack Tunnels,



Conclusion and a useful Bibliography if you wish to follow up the subject. It's surprisingly comprehensive.

Charles Blackwood



The sub-title says what this siege is best known for – here we see the employment of new equipment and tactics and the change from bloody frontal infantry assaults to heavy artillery bombardments of the forts.

In February 1904 Japan launched a surprise naval attack against the ships anchored at Port Arthur, Russia's fleet base. This was followed in May by a landing on the Liaodong Peninsula and a frontal assault against the heavily fortified lines before Port Arthur itself. The name describes the sheltered bay; the town was split between Old Town to the east of the Bay and New Town to the NW, with about 1.5 km between them. Old Town was protected by a quadrant of forts, batteries, trenches and barbed wire, about 3km to the NE, with the left of the line abutting the railway and the Lun Ho River. New Town was defended by heavy fortifications on the steep 203m Hill, about 4km NW of the town.

As so often happens, history played a significant role in the initial Japanese attack, as they were mis-lead by the ease with which they had taken the peninsula from China in 1894 – the

situation and the defenders were very different just 10 years later.

How Russia and not Japan came to be in the Liaodong Peninsula and Port Arthur, and Japan to possess a greatly enlarged army and navy is well explained in the book. As Vladivostok was Russia's only Far Eastern port, ice-bound for much of the year, Port Arthur was deemed desirable as a warm water port for the Russian Pacific Squadron, though shore facilities were inadequate to maintain heavy naval ships.

The Chronology is a useful reference list, highlighting for instance the date of the Naval attack on 8/9 February and commencement of the land assault on 26-28 July, the number of failed 'general assaults', and the decisive introduction of heavy 28cm siege artillery on 1 October. The forts and batteries were taken one after the other until surrender on 5 January 1905.

The book follows a well-trying and effective format of Origins, Chronology, Opposing Commanders, Forces and Plans, The Campaign, Aftermath and the Battlefield Today.

The commanders on both sides played a crucial and destructive role in the siege; with few exceptions they were experienced only in the methods they knew in 1894, untrained in modern warfare and none had experience in leading armies. As with the Generals, so with the troops of Japan, fairly well-trained by contemporary standards but under-equipped; machine guns eventually arrived but no commander knew how to use them in an attack. The Japanese had not learned what modern firepower could do, leading to bunching up and advances in large groups, seeking a combat resolution at close quarters, leading to an inevitable high casualty rate. Ammunition for field guns was in constant short supply. Much of the heavy weaponry did not arrive until near the end of the war; there had been no planning or assembling of a siege train and when the crucial 28cm howitzers finally arrived to win the siege for Japan they were found to be designed for coast defence and much engineering work was needed to fit them for siege operations. They could and did penetrate and destroy all Russian positions and sink their battleships.

The shape of things to come.

The Russian position at Port Arthur was better than the Japanese; a garrison of 46,000 troops had been assembled, well equipped with modern 7.62mm rifles and, more significantly, Maxim machine guns. The artillery was in a state of flux, switching from Krupp M1877 87mm guns to modern 76.2mm guns M1900, but very few reached Port Arthur, where there was a mixture of pieces. The coast defence batteries were of variable calibres and capability.

Russian engineers were effective and inventive and grew skilled at countermining. Communications between the command centre and outlying positions were poor. During

the siege, with the battleships bottled up, many of the naval weapons, especially the 37mm and 47mm Hotchkiss QFs and nearly all the Maxim guns, were moved ashore to bolster the defence.

Detailed Order of Battle lists are given for both sides.

For the Japanese there was no clear process for strategic-level military planning, causing systemic problems until 1945. Co-ordinating army and navy plans was a particular problem.

Prior to the 'impromptu' siege of Port Arthur, the Japanese Army and Navy were at loggerheads as to the priorities, with the Navy keen to destroy the Russian battle fleet at Port Arthur and the Army wishing to secure the Liaodong Peninsula first. Only the failure of the naval attack drove the need to pursue the siege first. The action is well described.

For the Russians, preparations to defend the port were slow and ill-conceived and inadequate, the navy, having demanded that Russia take and hold Port Arthur, then provided no assistance, until after the failed Japanese naval attack when the naval ships were able to prevent attempts to sink blockships across the harbour entrance, all of which failed. The level of incompetence of both admirals is extraordinary - Russian mines sank ships of both navies.

The siege of Port Arthur was preceded by a Japanese landing higher up the peninsula - it was unopposed even though there were more than adequate troops to mount a counterattack. When the Japanese battle fleet withdrew to blockade the harbour to prevent a Russian naval attack, it promptly ran into a newly laid minefield and lost two battleships and a cruiser.

The army's move towards Port Arthur came to an abrupt halt when several frontal attacks on Nanshan Hill were stopped in their tracks by rows of barbed wire - the Japanese had no wire-cutters - and machine gun fire. Apparently foreign military observers failed to draw the obvious conclusions and decided the result was a bit of a fluke - wrong!

The month-long delay this imposed on the Japanese allowed the Russians make a fighting withdrawal and extra time to improve the defences of Port Arthur. Russian General-mayor Fok continued to make poor decisions and ordered regular disorganised and precipitate retreats, leaving behind much war equipment.

Finally, the Japanese reached the outer defences of Port Arthur, over two months after landing and after a month of fighting to take the outlying defences.

Having prised the Russians out of well-prepared positions Japanese General Nogi believed he could easily overcome the more quickly prepared defences of Port Arthur by a massed attack - he had learned nothing. He 'paid little attention to the enemy, terrain or weather and could not read a military map'. His staff were similarly incompetent. His attacks on outlying posts drew heavy losses but eventually the net closed on the Russian front line and the First General Assault

began. Although massed field-gun fire had destroyed two redoubts and many defensive works, many undamaged concrete shelters and parapets remained and full-on infantry attacks were repulsed with huge losses. General Nogi, operating under thoroughly obsolete methods, was urged to move to more methodical tactics. The shift to trench warfare started at the end of August; saps and parallels were dug to provide a protected approach to enemy lines.

Subsequent attacks were on 174m and 203m Hills, prolonged attacks leading to desperate defence and the failure of Nogi's second general assault, followed by the failure of his third, involving saps, mining and countermining and a full attack repulsed by barbed wire and machine guns, in spite of great losses - Russia's finest hour, but a clear precursor to Gallipoli and the Somme, when the same disastrous tactics were employed.

By 30 October the failures were clear and winter weather arrived, but there was no possibility of relief for the beleaguered Russians.

Nogi finally shifted the point of attack to the critical 203m Hill and after more numerous costly and failed attacks the defences were beaten to destruction by artillery, particularly the 28cm siege guns. Once 203m Hill was captured and artillery forward observer positions were established the fire of the 28cm guns could be directed onto the Russian battle fleet, which was quickly destroyed.

With the loss of the Russian's most effective officers command fell on two totally incompetent general officers, CO Port Arthur, General-leytenant Stoessel and General-mayor Fok who ordered retreat from the forts, allowing the Japanese to tunnel and mine under them, demolishing them and killing half the garrisons. Stoessel had clearly decided to surrender, against the wishes of most of his officers, and in an act of 'criminal stupidity' Fok ordered the withdrawal of the defenders to Old Town.

While a Japanese victory, Port Arthur had been won at great cost in troops and equipment for both army and navy. What had been seen as a minor operation had much reduced the resources available for the main theatre of operations in Manchuria.

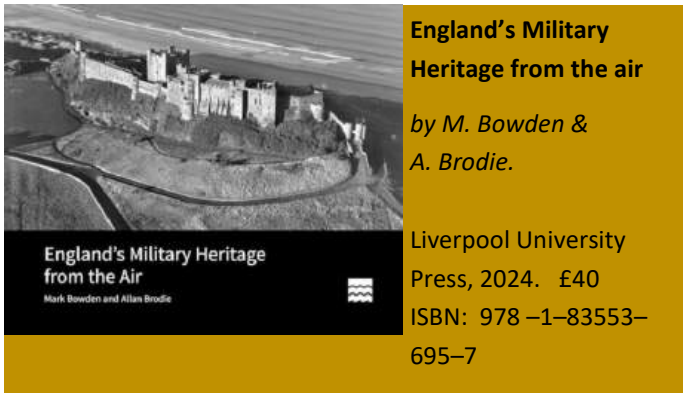
For Russia, their plans for expansion in East Asia lay in ruins.

The whole operation was laden with failure and incompetence by general officers of both sides.

The clear inferences of a new form of warfare were not taken up by other countries until the same problems raised their ugly heads in 1914.

The book brings the story of Port Arthur to vivid life, with excellent detailed information very well supported by numerous evocative contemporary photos, very good battle maps and some first-class artwork.

Charles Blackwood



This book offers a pictorial view of some of the many buildings, monuments, factories with military connections, that our island history has passed down. It shows the sites from the air but often from an unaccustomed perspective. Moreover, many of the image's date from the interwar years, when urban spread had not completely swamped the local environment. It uses the classic pictorial style, one full-page plate with a detailed and definitive description following.

The book's 328 pages contain over 150 full-page plates, organised into 11 historic periods (from pre-history to WWII) with a final chapter commemorating the defence of the UK and the monuments to the cost in lives lost. There is a full glossary, an accessible bibliography and two, very usefully, indexes of the photos by both their locality and subject matter. Rather than attempting to cover every photo, this review comments on a few sites from the later historical periods that should certainly be of interest.

Unsurprisingly, the Tudor period is well illustrated by several of Henry's Device forts and especially that of Southsea castle at the end of its military life. The role played by the castle during the attempted French invasion of 1545, is detailed and its Victorian wing batteries are clearly seen, if unarmed. Another plate, showing the defensive walls of Berwick, focusses exclusively on the riverside walls and shows little if any of the major Marian earthworks, which are non the less described in the text. The three bridges over the Tweed are clearly seen. Finally, in this section is the view of Carisbrooke castle, taken along the castle's entire length. The text carefully details the Elizabethan fortifications and the recent excavations of the flanking casemates that had been in-filled.

The period of the Civil War is associated with some important towns and major battlefields but, perhaps the most interesting plate covers the earthworks of Old Basing. Today these are partly open to the public, but the remains of the bastions are barely discernible and partially obscured by trees. This, almost grazing, photo has leafless trees and picks out the features clearly. The text gives a brief history of the Civil War siege of Basing house. On the other hand, Cromwell's castle in Tresco, has no obscuring foliage and is

clearly seen in its glorious isolation. The classic form of this small coastal fort is brought out clearly, a low battery in front and a defensive work, the tower, at the rear. It is one of many of this type throughout Europe: Tour do Belem, Lisbon; Vauban's tower, Ambletuse; Kilcredaun battery, Ireland and the Milford Haven forts. Several views of the other fortifications of the Scilly Isles are given elsewhere in the book.

Charles' great citadel at Plymouth is nicely pictured in its aerial view, which gives it a sense of mirror symmetry that a simple plan of the fortress fails too fully express. The descriptive text details the work by de Gomme on these ramparts and some of his other projects. He also played a, minor, role in the works about Sheerness and the plate showing these ramparts also includes some of the later works of the Victorian era. In the, 1946, plate showing the entrance to Langstone harbour Fort Cumberland sits looking rather dilapidated – it was a long war. The role of Langstone in acting as a Starfish decoy for Portsmouth harbour is covered in the accompanying text.

The plates covering the Napoleonic period, focus on coastal forts and Portsmouth; after all is said and done, most of the actual fighting took place in continental Europe and the fleet provided for homeland protection. There are views of several, originally admiralty, buildings in London and the two Royal Military Academies (Woolwich and Sandhurst). A somewhat less polished tryp of building is that of Dartmoor prison, originally constructed to house PoW's. In this section we find modern colour photos of some of the surviving ships of the era, a frigate (Trincomalee) and ship-of-the-line (Victory) with their descriptions. The story of Martello towers is a given under an aerial shot of the very underdeveloped town of Dymchurch, towers 24 and 25 and the Eastbourne redoubt is also shown. The view of Fort Pitt, Chatham, is particularly appreciated. Although a military hospital at the time of the photo it stands clear of surrounding urban development, even if a little obscured by trees.

Unsurprisingly the Victorian era is well represented by views of coastal batteries and forts; The Queenborough lines, Frenchman's point battery in Tynemouth Castle, Hurst castle, No-Mans-Land fort, a London mobilisation centre and several barracks. One endearing view was of, the now disappeared, Littlehampton fort. This was a modest sized battery armed with five smooth bore cannon and the only Carnot Wall used in a UK fort; it in no way measures up to the use of such walls in continental forts (Verona, Italy) but is still of interest. The plates showing views of interest for the two World Wars are rather subdued by comparison, since no fighting occurred on UK soil. What we do find are the support facilities of our

armed services; Air-ship hangars, Sea-plane bases, Shell factories, Royal Ordinance works and prefabricated pill-box makers. The famous radar towers at Ventnor can be clearly seen in the, 1949, photo of this happy holiday town but the dismantled section of its pier would not be replaced for another four years. The modern PoW camp, Wollaton Park, certainly looks a lot less overbearing than that of the Napoleonic period but it's very insubstantial nature makes it look no less bleak. The book ends with views of some the memorials to the fallen, the true costs of war and the personal tragedies of families.

J Tomkinson

Contributions To Casemate

Contributions and Materials should reach the Editor by the end of October, February, and June—at least TWO MONTHS before the next issue is due. Send items to—the Editor, Casemate, address and email as on Page three.

Please note that any materials published in *Casemate* can appear on our Website - www.fortressstudygroup.org

Therefore it is essential that any copyrighted materials have permission for use and the original owner is attributed.

If possible, please send contributions as Word text, with illustrations as separate jpegs, indicating where you would prefer the illustrations to appear in the text. Please make sure there are separate and adequate captions for all illustrations and that they are properly attributed. Note also, illustrations – digital pictures need to be of adequate resolution! 1mb+ is preferred, they can't really be too big, but they can easily be too small! Picture of 100-200Kb will not enlarge without pixilation, and therefore cannot be used. Maps and plans are always good, sometimes essential. Hard copy material, as printed text and illustrations can be scanned and OCR'd

Items For Sale

Back Numbers *Please note back numbers of ALL our available publications are now with Alistair Graham Kerr:*

FORT, Casemate, Tour and Conference booklets.

For details of availability and postage costs contact Alistair (address below)

FSG Badges – for lapels, hats, caps, £1 each. Please send SAE. In the UK 2nd class stamps as payment and postage.

All the above available from –

Alistair Graham Kerr, Casemate, 7 Burgh Castle Marina, Butt Lane, Burgh Castle, Norfolk, NR31 9PZ

Subscriptions — UK Gift Aid Declaration

The UK Government allows the group to claim back the tax paid on Members Subscriptions if the Member is a UK tax payer and has signed a Gift Aid Declaration.

I have been asked to make clear to Members *that while the declaration is valid for the duration of the membership if a Member's taxable circumstances change, then it is the members duty to inform the Treasurer*

Geoff Lee, Treasurer

WEBPAGE NEWS -

You can now make all payments through the FSG Website using credit and debit cards as well as Paypal. Also, when paying your subscription online please tick the box for Gift Aid if you are happy to do this. Another feature has been added to the web page....you will now see at the bottom of the homepage two search functions, one for the shop, the other for the whole site. Hopefully this will help you find what you want.



If undelivered, please return to

"Casemate", 7 Burgh Castle Marina, Butt Lane, Burgh Castle, Norfolk NR31 9PZ

www.fortressstudygroup.org

ISSN 1367—5907

January 2025