



# The CDSG Newsletter



The Coast Defense Study Group, Inc. — Winter 2019



## Chairman's Message

Thomas D. Batha

The winter quarterly telephonic board of directors meeting was conducted on January 27. As might be expected for this time of year, the primary topics were membership renewals and the coming conference. I would urge all members to send in their renewals for 2019 as soon as possible. This is important for a number of reasons but primarily for planning and projections. We are moving back to the 400+ membership numbers we enjoyed in the past and this is encouraging.

Also discussed was the spring conference visiting the Harbor Defenses of the Chesapeake Bay. The registration fee is needed immediately (see the enclosed form) so that final transportation arrangements may be completed.

A future special tour to Corregidor has been placed on hold for now. The CDSG board has dispatched founding member Glen Wiliford to the Philippines to check out the local situation and report back on feasibility. (Actually, Glen was going anyway.) The future Special Tour to Sydney, Australia for 2020 has also been placed on hold. Ian Wolfe will be attending the 2019 CDSG Annual Conference and we will speak with him about the issues that led him to postpone the tour and how we can get this tour back on track.

Quentin Schillare reports that plans for the 2020 New Orleans conference are well in hand and progressing normally.

Finally, the 2021 conference site will be the Harbor Defenses of Savannah and Charleston. More details will follow in future Newsletters.

Once again, please send your membership renewals and conference registration fees in ASAP and stay warm.

I look forward to seeing all of you in Virginia in April.

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## Preservation & Interpretation Committee Report

Gordon Bliss

### Year in Review 2018

I don't have any significant news about progress at Fort Monroe over the past year. Those attending the conference this year will be able to see the current situation for themselves and we should be able to get an update on plans for the fort. I'm looking forward to seeing many of you there.

The CDSG continues its involvement with a coalition of groups working to prevent Plum Island NY, site of Fort Terry, from being sold for development and to keep it as a nature preserve along with preserving the remaining structures of Fort Terry. The Department of Homeland Security, the current agency in control, has agreed to a new environment impact study of the island. However, they have also stopped all outside visits to the island, so there is no chance to see Fort Terry for the indefinite future. My understanding of the

## CDSG Meeting and Tour Calendar

Please advise Terry McGovern of any additions or changes at [tcmcgovern@att.net](mailto:tcmcgovern@att.net)

2019 CDSG Conference

April 10 - 14, 2019

Chesapeake Bay, VA

Terry McGovern, [tcmcgovern@att.net](mailto:tcmcgovern@att.net)

2020 CDSG Conference

March 2020

New Orleans, Louisiana

Quentin Schillare, [qschillare@kc.rr.com](mailto:qschillare@kc.rr.com)

2021 CDSG Conference

March/April, 2021

Charleston/Savannah

Gary Alexander, [gary\\_a\\_alexander@nps.gov](mailto:gary_a_alexander@nps.gov)

## Other Meetings and Tours

April 3-6, 2019

Council on America's Military Past Annual Conference  
Tuscon, Arizona

Danny Johnson, [campconference@hotmail.com](mailto:campconference@hotmail.com)

May 1-5, 2019

INTERFEST Annual Meeting

Berlin, Germany

Oliver Zauzig, [zauzig@hotmail.com](mailto:zauzig@hotmail.com)

May 18-26, 2019

Fortress Study Group Overseas Tour

Peloponnese, Greece

[chairman@fsgfort.com](mailto:chairman@fsgfort.com)

May 2019

Association Vauban Annual Congress

Strassburg, France

Alain Monferrand, [congress@association-vauban.org](mailto:congress@association-vauban.org)

June 14-25, 2019

Association Saint-Maurice d'Etudes Militaires Tour

Stuttgart & Ulm

Pascal Bruchez, [president@asmem.ch](mailto:president@asmem.ch)

September 13-15, 2019

Deutsche Gesellschaft für Festungsforschung Annual Meeting

Esslingen, Germany

Andrea Theissen, [anja.reichert@uni-trier.de](mailto:anja.reichert@uni-trier.de)

September 13-17, 2019, 2019  
 Association Saint-Maurice d'Etudes Militaires Tour  
 Northern Italy  
 Pascal Bruchez, president@asmem.ch

September 24-31, 2019  
 Forte Cultura Pilot Tour  
 Malta  
 Hans-Rudolf Neumann, hrv.neumann@t-online.de

September 2019  
 Fortress Study Group Member Day  
 Liverpool, United Kingdom  
 chairman@fsgfort.com

September 2019  
 Association Vauban Tour  
 Alain Monferrand, congress@association-vauban.org

October 11, 2019  
 International Fortress Council Annual Meeting  
 Prague, Czech Republic  
 Kees Neisingh, secretariat@internationalfortresscouncil.com

September 12-19, 2020  
 ECCOFORT/INTERFEST Study Tour  
 Kotor/Montenegro  
 Hans-Rudolf Neumann, hrv.neumannqt@online.de

October 16, 2020  
 International Fortress Council Annual Meeting  
 Luxemburg  
 Kees Neisingh, secretariat@internationalfortresscouncil.com

January 3-17, 2020  
 Fortress Study Group Overseas Tour  
 Hong Kong & Singapore  
 John Cartwright, jcartw8117@aol.com

September 12-19, 2020  
 Eccofofort / Interfest Study Tour & Seminar  
 Kotor & Montenegro  
 Hans-Rudolf Neumann, hrv.neumann@t-online.de

October 10, 2020  
 International Fortress Council Annual Meeting  
 Luxemburg  
 Kees Neisingh, secretariat@internationalfortresscouncil.com

May 9-16, 2021  
 Fortress Study Group Overseas Tour  
 Gibraltar  
 Alistair Graham Kerr, psgeditor@hotmail.com

current situation with the new lab that is being built in Kansas is that it will be at least 1-2 years before the current lab can move from Plum Island, so we have some time to work this issue.

At Fort Adams, volunteers continue to work on keeping the outer works clear of excess vegetation and are now clearing three of the Endicott batteries south of the main fort. Battery Bankhead has been cleared of vegetation more than once and work is now being done to clear debris from the gun pit area. Battery Talbot has been partially cleared and the vegetation around Battery Belton has been cleared and the battery cleaned up. They are also continuing to work on clearing the remaining parts of the Advanced Redoubt.

There have been multiple developments in the Boston area. A small group of us had an opportunity to visit Fort Warren in Boston Harbor with a Massachusetts DCR planner to both review improvements and work in progress at the fort, as well as to offer advice on what's significant to interpret. At East Point, Nahant Northeastern University has a plan to expand their Marine Science Lab there by adding a new building on top of Battery Murphy. There is some more detail on this in a separate article in the newsletter. A full copy of the Northeastern presentation can be downloaded at [http://www.nahant.org/documents/administrator/northeastern\\_university\\_dec\\_11\\_2018.pdf](http://www.nahant.org/documents/administrator/northeastern_university_dec_11_2018.pdf).

And at Halibut Point, the Massachusetts DCR has just recently finished their rehabilitation of the fire control tower and attached barracks there.

And finally, I just received an update about improvements done at Battery Gadsden, Fort Moultrie which will help preserve the

structure, part of which houses the local library. This is the type of item that we wouldn't hear about if it wasn't for a local person who contacted us for information and is now providing an update on what is happening there. My thanks to Dr. Walsh for this.

### Volunteering for Preservation

This is where I periodically get on my preservation soapbox to encourage members to get more involved in preservation. This can start as simply as letting myself or the Representative Committee know of changes or activities going on at a local coast defense site that may have an effect on it. The last item above is an example of this. The Preservation and Representative Committees can get more involved in helping protect a site, but only if we know about it. There have times where we only learned about a structure being destroyed or buried after it has already happened. Many sites are part of parks and have a local friends group or other community organization that supports it, even if it is primarily about the site as a part and not about the fort. By being part of such a group, one can help others appreciate the coast defense aspects of the site. We can, and have many times, provided information to groups like this so they are more aware of what it is that they have and how to interpret it. Finally, some locations, either as part of a friends group or more informally, have volunteer groups that actively go out and work on sites such as the one at Fort Adams that I mention in my reports. This can be simple cleanup and vegetation removal, going all the way up to structural repairs. Many of the best maintained and interpreted coast defense sites are so because they have an active volunteer group there that helps in doing so.

If you have a Preservation issue or question, or for further information on any of the items I've mentioned, contact the Preservation Committee Chair, Gordon Bliss, Bliss, at [preservation@cdsg.org](mailto:preservation@cdsg.org).

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## **Outreach & Representative Committee Annual Report**

Norman Scarpulla

Filling site representative vacancies continues. During 2018 five long-time members agreed to cover sites.

Bill Ricker – Fourth Cliff MR, Scituate, MA

Bill Cole – Cape May MR, NJ

Roy Hatanaka – Fort MacArthur, San Pedro, CA

Greg Jennings – Fort McDowell, San Francisco Bay

Gerardo Pinero Cadiz – Puerto Rico

Also, five new members volunteered to represent sites.

Chip Woodman & Al Hodson – Casco Bay, ME

Ralph Stenzel – Galveston

Doug Crist – Fort Ward, Puget Sound

Charles Carter – US Virgin Islands

If you would like to see the complete list of representatives, please access the CDSG website.

We have divided the coastline into regions, each with a regional coordinator, who recruit site representatives in their regions. The regions and coordinators are:

New England – Norm Scarpulla

New York – (vacant)

Mid-Atlantic – Terry McGovern

South Atlantic – Gary Alexander

Gulf Coast – (vacant)

Pacific Coast – Mark Berhow

It would greatly strengthen our visibility and influence to have regional coordinators for Gulf Coast and New York. If you can be the site representative for a section of coast, a harbor, a fort, or even just one fire control site, please contact Norm Scarpulla ([nkscarpulla@icloud.com](mailto:nkscarpulla@icloud.com)).

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## **Request to CDSG Membership**

Terry McGovern

The CDSG Representative and Outreach Committee is working on gathering current contact information for all the coast defense site owners in the USA. We need this information for our outreach efforts both to inform site owners on the value of protecting these sites for future generations as well as to encourage them to become members of the CDSG. We are asking you to send us this contact information (Site Name and Location, Owner's Name, Owner's Address, Owner's Telephone Number, Owner's Email Address, Website Name (if any), and Owner's Primary Contact Person) for your local coast defense sites (this could be from a fire control station to an entire fort as our database will be organized based on ownership, i.e. one entry per owner). Please send this information to Terry McGovern ([tcmcgovern@att.net](mailto:tcmcgovern@att.net)) and to Norman Scarpulla ([nkscarpulla@icloud.com](mailto:nkscarpulla@icloud.com)). Thanks for your assistance.

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## **Coast Defense Study Group Membership Update**

Quent Schillare, Membership Committee Chair

As an Internal Revenue Code 501(c)(3) non-profit corporation, the CDSG maintains records of many things, including membership. For the last several years our organization has sustained just short of 400 members. We ended 2018 with 394. Member dues are the life blood to support our quarterly *Coast Defense Journal* and the *CDSG Newsletter*, and the annual conferences to historic seacoast defense site and any special tours.

As of this writing we have 323 renewal for 2019, an 82% renewal rate. Four new members have joined and, unfortunately, two members have notified us that they now longer want to maintain their membership. Our membership runs on a calendar year basis with most members renewing at the end of each year.

However, some of us are busy and delay sending in our dues until after the New Year. As a friendly reminder we send out a late dues list with the spring *Newsletter*. You will find it elsewhere in this edition. If your name is on the list and you have paid, please accept my apology for dinging you for something you have already done. If you have not sent in your membership renewal, please do so with a check to me or the online renewal on our website (<https://cdsg.org>). For information, we are pretty much split on how we renew. So far this year about 52% of renewals have been by mail. This probably reflects the age of our many of our members. The earliest manifestation of the CDSG was 1978. That is 41 years ago!

Speaking of the start of the CDSG. We still have several members whose names appear in Volume 1, Number 1 of the *Coast Defense Study Group News*, the predecessor to the *CDSG Newsletter*, published in November 1985. Sixteen members have persevered from those halcyon days to today. For the record: Charles Bogart, Alfred Chiswell, Roger Davis, Elliott Deutsch, Joel Eastman, Dale Floyd, Dave Hansen, Alex Holder, Leslie Hulkower, Ed Jerue, Mike Kea, Dave Kirchner, Gary Paliwoda, Charlie Robbins, Tom Vaughan, and Glen Williford. Many others on the list have gone to the great gun block in the sky but are still remembered when we get together. When you see any of these graybeards (so to speak, of course), thank them for maintaining their membership and supporting the Coast Defense Study Group for a long time.

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## **2019 CDSG Annual Conference (April 10th to 14th) Last Chance to Register**

Terry McGovern

Attached is the registration flyer for the 37th Annual CDSG Conference at the former Harbor Defenses of Chesapeake Bay (HDCB). Register NOW as several deadlines are approaching very quickly. The first deadline is the cut-off for access the block of room at very low room rates by March 10. After this date, you can still book but rates and availability will be at market rates. The second deadline is providing your ID information for

submission for a background check for the Army & Navy by March 30. If you miss this date you can still attend the conference, but you will not be able to visit sites still controlled by the army and navy. I urge you to make your hotel reservations and send in your registration to me along with the registration fee as soon as possible.

As you know the former defenses of Chesapeake Bay protected Hampton Roads and the bay's large collection of important military sites, industrial enterprises, and the access to important cities of Washington, Baltimore, and Richmond, resulting in several layers of coastal defenses. Gaining access to the remaining coast defense structures of former HDCB with its sub-units of Fort Monroe, Fort Wool, Fort Story, Fort John Custis, and the older Fort Norfolk has become much more difficult since our last conference to the Tidewater area in 2000. General security issues since "9/11," the continuing military use of Fort Story, concerns about impacts on wildlife, health & safety concerns, and even weather issues have made our efforts to receive permission to visit the many coast defense sites, as well as obtaining access to interior spaces, a very complex process. Only by attend the CDSG Annual Conference can you visit these "off limits" sites and we will not return for another twenty years!! Access will only get more difficult, so please plan on attending our annual conference.

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## 2109 Annual Business Meeting Friday, April 12, 2019

Terry McGovern – Corporate Secretary

The CDSG Board of Directors is happy to announce that the CDSG Annual Business Meeting will be held at the meeting room at the Lake Wright Resort, 6280 Northampton Blvd., Norfolk, VA 23502 at 6:00pm. The Board urges all members to attend to hear annual reports from the board and committees and to discuss plans for the coming years, as well as ask questions about your organization.

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## CDSG Fund

The CDSG Fund supports the efforts of the Coast Defense Study Group by raising funds for preservation and interpretation of American seacoast defenses. The CDSG Fund is seeking donations for projects supporting its goals. Visit the CDSG.ORG website for more details.

Donations are tax-deductible for federal tax purposes as the CDSG is a 501(c)(3) organization, and 100% of your gift will go to project grants. The Fund is always seeking proposals for the monetary support of preservation and interpretation projects at former coast defense sites and museums. A one-page proposal briefly describing the site, the organization doing the work, and the proposed work or outcome should be sent to the address below. Upon conclusion of a project a short report suitable for publication in the CDSG *Newsletter* is requested.

Send donations to (and made out to):

CDSG Fund c/o Quentin Schillare

24624 W. 96th Street, Lenexa, KS 66227-7285 USA

Or use your credit card via PayPal on the [www.cdsg.org](http://www.cdsg.org) website.

Send Fund Project requests to:

CDSG Fund c/o Terry McGovern

1700 Oak Lane, McLean, VA 22101-3326 USA

Please prepare a written request of your need and how your request relates to the goals of the CDSG.

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## CDSG Logo Hats, Shirts & Patches

The CDSG is pleased to offer custom-made hats, T-shirts and patches to our membership. Wearing these hats, T-shirts and patches are a great way to make others aware of the CDSG and its goals. It is also an excellent way to promote new memberships in the CDSG.

The CDSG patches have been available for several years. Designed especially for the CDSG, these quality patches combine the Coast Artillery Corps and the Corps of Engineers symbols to reflect their involvement in U.S. coastal defenses. This logo is now on hats and a set of T-shirts which are great for showing the CDSG "flag."

To order your hat, T-shirt or patch, please complete the order form below and send it along with your check (made out to CDSG, Inc.) to Terry McGovern at 1700 Oak Lane, McLean, VA 22101-3326 USA (e-mail: [tcmcgovern@att.net](mailto:tcmcgovern@att.net)).

CDSG hats, T-shirts and patches ordering information

Black T-shirt with white ink:

Size & # \_\_\_L \_\_\_XL \_\_\_2XL \_\_\_3XL

Red T-Shirt with white ink:

Size & # \_\_\_L \_\_\_XL \_\_\_2XL \_\_\_3XL

Kacki T-Shirt with black ink:

Size & # \_\_\_L \_\_\_XL \_\_\_2XL \_\_\_3XL

Navy T-shirt with yellow ink:

Size & # \_\_\_L \_\_\_XL \_\_\_2XL \_\_\_3XL

Total Number: \_\_\_ times \$ \_\_\_\_\_ = Total \$ \_\_\_\_\_

(domestic \$18/overseas \$26 each)

CDSG Cloth Patch: \_\_\_ times \$ \_\_\_\_\_ = Total \$ \_\_\_\_\_

(domestic \$4/overseas \$6) each

CDSG Color Decal: \_\_\_ times \$ \_\_\_\_\_ = Total \$ \_\_\_\_\_

(domestic \$2/overseas \$3) each

Hats: \_\_\_ times \$ \_\_\_\_\_ = Total \$ \_\_\_\_\_

(domestic \$20/overseas \$25) each

Be sure to include your name and shipping address.

You can also order online at [cdsg.org/shopping/](http://cdsg.org/shopping/)

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## East Point Update

Norm Scarpulla

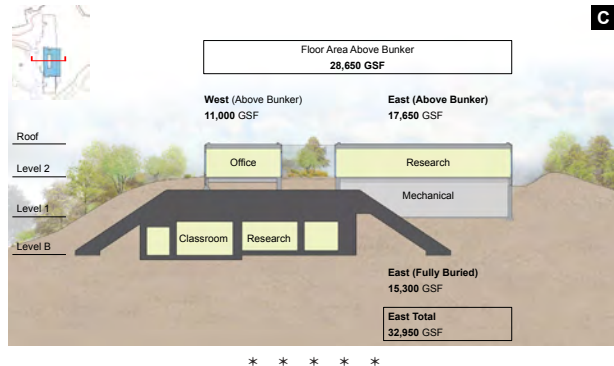
During World War 2, the Army used East Point at Nahant, MA for three batteries as part of the Harbor Defense of Boston. As a temporary measure in 1942, they emplaced a two-gun battery of 155mm cannon on Panama mounts. The permanent construction was Battery Murphy (CN104, 2x16" CBC), its PSR, and Battery 206 (2x6" SBC). Later a Nike missile firing complex was located there. In 1967, Northeastern University acquired the site for its Marine Science Center. Since then, the Center has



repurposed Battery Murphy for laboratories, without altering the basic structure. Recently, Northeastern has proposed to expand the Center by adding a new office and laboratory building to sea face of Battery Murphy. Many Nahant residents have objected to the plan; their concerns are focused on potential visual impacts and increased traffic on the single main road through town. On December 11, 2018, Northeastern presented plans to a meeting in Nahant. They showed three concept drawings for the new building. All three involve a two-story structure attached to the front of Battery Murphy, with the second story sitting on top. Although not explicit in the drawings, the plans would involve removing the earth cover from the front of the battery, and creating some method of connecting the new building to the interior of the battery. To view or download the presentation slides, go to:

[http://www.nahant.org/documents/coastal\\_resources/northeastern\\_university\\_dec\\_11\\_2018.pdf](http://www.nahant.org/documents/coastal_resources/northeastern_university_dec_11_2018.pdf)

The drawing below is the cross-section from one of the three plans. All three plans have a similar impact on the battery structure.



## Ten Reasons to Attend the New Orleans Conference

Quent Schillare

The Coast Defense Study Group's annual St. Babs Conference will visit the defenses of New Orleans from March 4-8, 2020. The CDSG last visited the area in 2002, a long time in the life of late 18<sup>th</sup> and 19<sup>th</sup>-century masonry forts and early 20<sup>th</sup> century concrete batteries exposed to weather and benign neglect on the Gulf of Mexico. The tour will visit eight separate forts designed to protect the mouth of the Mississippi River and the city of New Orleans. Three forts south of the city protected Southern approaches to the city (Livingston, Jackson, and St. Phillip). Five more (Forts Massachusetts, Pike, and Macomb (originally Fort Wood), Battery Bienvenue, and Proctor Tower) defended the city on the east. One last fortification, Tower Dupré, has lost its fight with the weather and is little more than a pile of granite blocks and will not be visited. This tour is masonry heavy but does include eight concrete batteries at Jackson and St. Phillip. Transportation will be by car, chartered boat, and airboat.

Why attend the conference? Here are ten reasons:

1. Travel though the Mississippi delta with its marshes, sugarcane fields, and wildlife. Lots of birds.
2. Take a chartered boat eleven miles off the Mississippi coast to West Ship Island to visit Fort Massachusetts, a unique fort with the only circular scarp in the Third System.

3. Visit Fort Pike, the first fort designed and constructed in the Third System. See what Simon Bernard had in mind when he started.
4. Visit Fort Macomb and explore why and how the Board of Engineers largely duplicated Fort Pike's design.
5. Take a boat ride to Battery Bienvenue, the fort closest to New Orleans, and learn why it was sited where it was (Hint: it is where British forces landed in late 1814).
6. Take a short boat ride to Proctor's Landing to see the partially completed masonry tower. The first American fort with interior structural iron girders.
7. Travel by car to Grand Isle and take a short boat ride to Grand Terre Island to visit the only Mississippi River fort on the Gulf of Mexico. See what hurricanes and wave action can do to a masonry fort.
8. Travel by car down the west side of the Mississippi to Plaquemine Bend and Fort Jackson, a masonry regular pentagon with bastions. The kind of fort to warm John Weaver's Third-System heart.
9. Crawl over the remains of Battery Ransom (2x8-inch DC) inside Fort Jackson and Battery Millar (2x3-inch MP) outside along the river.
10. Take an airboat across the Mississippi to Fort St. Phillip and explore the Spanish/French masonry fort and the concrete remains of seven Endicott batteries (3-inch to 10-inch).

[*Bonus reason*] When the conference ends—or before it starts—you are in New Orleans! A world-class tourist destination. More later.

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## 5-Inch Model 1897 Coast Artillery Gun Identified

Thomas Batha

I recently had the opportunity to examine a known 5-inch M1897 surviving gun in Indiana, PA. I located it only after some difficulty, at the VFW post on 824 Indian Spring Road, Indiana, PA. It is mounted (tube only) in an inverted position with the breech open. The markings on the muzzle face, once exposed, revealed it to be Serial Number 14, made in 1901 by Bethlehem Iron Co. With this information it was easy to determine that the gun was originally emplaced in Battery McGrath at Fort Rosecrans, CA.



Thirty-five M1897 guns were manufactured: 25 by Bethlehem and 10 by Watervliet Arsenal. They were designed to be mounted on the Model 1896 Balanced Pillar Mount. This mount turned out to be unsuccessful and was deemed obsolete after about a decade of peace-time use.

When the United States entered WWI in 1917, it was decided to convert existing seacoast guns on fixed fortification mounts to fill the role of heavy field artillery. It was planned to re-employ them after the war. This may explain why the newly made field carriages were scrapped immediately after the war while the tubes and breech blocks were placed in storage.

In 1917, 28 of these guns were dismounted and shipped to the Morgan Engineering Company in Alliance, Ohio. No. 14 was shipped on September 26, 1917. This indicates that not only did Morgan fabricate the carriages and limbers, but they also fitted them to the new carriages. It is unclear where they were proof fired, but it does not appear that they passed through an army facility. On March 29, 1918, Morgan shipped No. 14 to Fort Monroe, who arranged overseas shipment from the Newport News Port of Embarkation on August 21, 1918. In June 1919 it was returned from France and received at Aberdeen Proving Ground.

Finally, on July 29, 1931, No. 14, minus its carriage, was donated to Homer City Township, where it resides today.

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## 2019 CDSG Annual Conference Special Tour to Fort John Custis and Fisherman Island MR

Terry McGovern

During the 2019 CDSG Annual Conference we will be devoting an entire day to touring the surviving WW2 coast artillery structures at former sites of Fort John Custis and Fisherman Island Military Reservation. The fort and MR are located across the Chesapeake Bay Bridge-Tunnel at Cape Charles, part of the Eastern Shore of Virginia. These locations are difficult to visit, as both are wildlife refuges under the control of the U.S. Fish and Wildlife Service. The USFWS does not encourage visiting these sites and only through several rounds of negotiations and inspections did the CDSG get special use permits to visit these sites. By attending the 2019 CDSG Annual Conference you will gain rare access to these structures and the rare items within, so please register for the conference today.

### Fort John Custis (1940-1948)

Fort Winslow was the original name (Sept. 10, 1941), named after BG Eben Eveleth Winslow, but Eastern Shore residents wanted the fort named after a local hero, Capt. John Parke Custis, so the name was changed Feb. 5, 1942. The approach of World War II caused the US Army to purchase the property of Henry Alexander Wise at the tip of Cape Charles to allow the construction of coast artillery batteries, working with those at Fort Story on Cape Henry to protect the large 12 to 15-mile entrance to the Chesapeake Bay against enemy warships. In the summer of 1941, the Pennsylvania Railroad laid trackage into the fort and firing spurs for 8-inch railway guns were constructed. After

Pearl Harbor, several 8-inch railway guns were moved from Fort Monroe to the fort and were ready to fire on Dec. 29. Additional 8-inch railway guns were added in June 1942. In October 1942, construction was started on a casemated battery for two 16-inch guns and a shielded 6-inch two-gun battery. Fort John Custis and the defenses on the nearby Fisherman Island reached their peak in the fall of 1943 with over 1,000 troops manning the 16-inch, 8-inch railway, 6-inch, and 90 mm guns, along with controlled mines, searchlights, radars, and fire control towers. As the threat of war moved away from Cape Charles, the number of troops declined and by July 1946 the fort was placed on caretaker status. By May 1948, the US Army closed the fort and most of the coast artillery material and weapons were dismantled by 1949.

In 1950, the military reservation received a new lease on life when it was transferred to the US Air Force for the Cape Charles Air Force Station, home station of the 771st Squadron. The station supported about 500 airmen during the 1950s & 60s, manning very specialized equipment as part of the military's new national air defense radar network. In 1963 it became a joint use facility with the FAA but in 1981 all these missions were moved to Naval Air Station Oceana in Virginia Beach, and the Cape Charles Air Force Station faded into the sunset. The USFWS acquired part of the property in 1984 to establish the Eastern Shore of Virginia National Wildlife Refuge, which now encompasses 1,340 acres.







8-inch railway gun emplaced at Fort John Custis during WW2. Note camouflage.

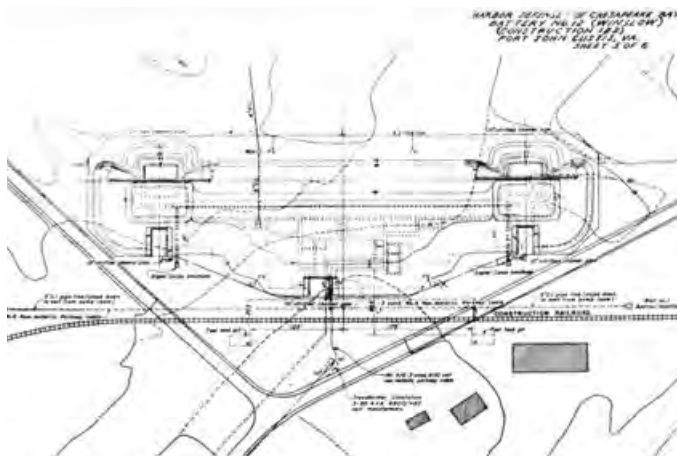
### Fisherman Island Military Reservation

Fisherman Island, also referred to as Fisherman's Island, is the southernmost island on the Delmarva Peninsula chain of barrier islands, on the Eastern Shore. Located at the entrance to the Chesapeake Bay, the island is subject to great changes in its landscape from waves and runoff. It was first formed about 200 to 250 years ago. The US government role on the island began with the U.S. Marine Hospital/Public Health Service Quarantine Station (1890-1919). During World War One, the army installed two 2-gun 5-inch gun batteries (Batteries L and M). The army post was then called Fisherman's Island Camp. The military reservation was officially established in 1919 in a land swap with the U.S. Treasury Department for Craney Island, Portsmouth, VA.

World War Two created new military interest in the island. Battery BCN 227 (1943-1965), Anti-Motor Torpedo Boat Battery 20 (aka New Battery Lee) (1942-1944), and Anti-Motor Torpedo Boat Battery 24 (1943-1946) were built, as was a mine casemate. The U.S. Navy took control of the island from 1949-1969. The remaining abandoned guns were finally removed in 1976, and the steel-frame BC stations and searchlight towers were knocked down in 1986. The two 6-inch guns from Battery 227 were sent to Fort Pickens; FL, one 90 mm AMTB gun went to Battery Parrott at Fort Monroe; and one 90 mm AMTB gun went to Fort Moultrie, SC. (It was later moved to Fort MacArthur Military Museum, where it awaits reassembly.) The island became the Fisherman Island National Wildlife Refuge 1969, within the USFWS Eastern Shore of Virginia National Wildlife Refuge. It is cut in half by U.S. Highway 13 and the Chesapeake Bay Bridge-Tunnel. Public access to the island, including beach access, is restricted.



Two key items that those attending the 2019 CDSG Annual Conference will be able to visit are Battery Winslow and its 16-inch/50 cal. barrel and Battery BCN 227 with its surviving complete power rooms.



### Battery Winslow (1942-1948)

Planning for BCN 122, which was named Battery Winslow when the fort was renamed Fort John Custis, began on August 1941, with actual construction begun in October 1942. This was a casemated battery that mounted two 16-inch guns, each capable of shooting a 2,100-pound, armor-piercing projectile (AP Mk3) 25 miles out to sea. The guns and their associated ammunition magazines, power rooms, and store rooms were protected from air and naval attack by dozens of feet of concrete, steel, and earth. The battery was completed on June 30, 1943, at a cost of \$1,554,866 (not including the guns) and was transferred to the Coast Artillery Corps on November 12, 1943. In July 1943, the two guns received protective shields. Associated with the battery, nearby protected structure contained the battery's plotting and switchboard room, as well as fire control towers up and down the coast. The battery was active throughout World War II, its guns being cut up for scrap in 1949. From 1950 to 1980, the



16-inch gun #393 aboard USS *Missouri* during the Japanese surrender ceremonies in Tokyo Bay, September 2, 1945. The barrel was removed from the battleship turret during the Korean War and put into storage.

*Library of Congress*

battery supported operations at the Cape Charles Air Force Station. Since 1980, the structure has been abandoned and partly sealed. In 2013, a 16-inch/50 cal. barrel that once was mounted on the Battleship USS *Missouri* was placed on display in one of the battery's gun casemates. The 16-inch gun barrel, U.S. Navy Mark VII #393, was originally mounted in one of the forward gun turrets aboard the famed battleship and saw extensive action during World War II and the Korean War. The turret and barrel are prominent in historic photographs of the Japanese surrender ceremony held aboard the battleship in Tokyo Bay on September 2, 1945.



16-inch/50 cal. barrel and projectile now in Battery Winslow's casemate - May 25, 2013



Battery Winslow in 1943 with 16-inch/50 cal. gun.



Battery Winslow's main service gallery - which will be visited during the CDSG Annual Conference

### Battery BCN 227 (1943-1965)

Battery 227 was a reinforced-concrete World War II 6-inch coastal gun battery located at Fisherman Island Military Reservation, Northampton County, VA. Battery construction started Apr. 15, 1942, was completed Oct. 31, 1943, and was transferred to the Coast Artillery Nov. 12, 1943, at a cost of \$271,352.12. Abandoned in 1965, this battery had two 6-inch M1905A2 guns mounted on M1 shielded barbette carriages (SBC), one on each side of an earth-covered reinforced-concrete support structure. These 6-inch World War II coastal gun batteries were designed to replace obsolete Endicott-Period batteries. Of the 87 planned, only 45 were completed, many not until late in the war (1944-1945). The 6-inch guns fired 105-pound armor-piercing projectiles over 15 miles at a rate of up to 5 rounds per minute. The gun crews were protected by a thick shield around the gun. Only six of these guns remain in the world, two in Battery 246 at Fort Columbia, WA; two in Battery 234 at Fort Pickens, FL; and two at Fort McAndrew, Newfoundland, Canada, in Battery 282. The guns now located at Fort Pickens came from Battery 227, as unlike its sister batteries, its guns and supporting equipment were never scrapped. While the guns were removed, the power room and all its equipment has survived and will be visited during the CDSG Annual Conference in April 2019.



BCN 227's 6-inch gun with shield being installed in 1944.



BCN 227 power room today. The board, motor generators, radiators, and mufflers remain.



## CDSG/FSG Joint Tour to the Defenses of Switzerland

The second half of tour report (Part 2/2)  
Terrance McGovern & Norman Clark

A joint Coast Defense Study Group & Fortress Study Group tour of the modern (1890 to 2000) defenses of Switzerland took place from August 11 to August 19, 2018, with 30 tour members. The tour's goal was to visit the full range of Swiss defenses from the period – from an air defence missile site to modern long-range artillery - during our week in Switzerland. This is the 12<sup>th</sup> special tour that Terry McGovern has organized for the CDSG or the FSG and the challenge this time was the large number of site owners and the logistics required to move our tour members quickly and efficiently through all regions of this mountainous country. Key to the success of this tour was our local CDSG member, **Martin Egger**, along with **Maurice Lovisa** and **Pascal Bruchez** of the Association St-Maurice d'Etudes Militaires (ASMEM). Through Martin's and Maurice's excellent efforts over the last three years, we actually visited every site on our schedule and several more that were not. To make this tour happen, Martin and Maurice arranged authorization/access/guides for us to visit about 50 sites, to arrange hotels, ground transportation, daily meals, and many other logistical details that are required during such tours. The tour would not have occurred without their efforts and their detailed knowledge about each site we visited, as well as their translation services.

The format of the tour was a travelling study tour with a new hotel every night except one, so by the end of the tour we made our way completely around Switzerland (see map), beginning and ending at the Zurich Airport. We used two 15-passenger mini buses (with a baggage trailer) as the roads we travelled were too difficult for large vehicles. Our drivers, **Bruno Mattli** and **Stephan Funk**, professionally and safely took us to all the sites with no issues, for which we were very thankful. Joining us at the Zurich Airport was Martin Egger, who was with us for the whole tour, while Pascal Bruchez and Maurice Lovisa joined along the way. These gentlemen acted as our guides, helpers, and interpreters.

At the end of tour narrative in the first part of the Swiss Tour Report (*CDSG Newsletter*-Fall 2018), the group was staying at the Hotel Beggasthauss at the top of the St. Gotthard Pass (2,106 meters), so the night air was clear and crisp as we prepared to start to visit the defenses in western Switzerland.

### Day 6 – Thursday – Aug 16<sup>th</sup> – Secret Locations/Forte Airolo/Nufenen Pass Troop Shelter

After breakfast, we went for an excellent talk given by **Col. Serge Monnerat** on the modern Swiss fortification weapon systems that we would be visiting that morning. As these two weapon systems are still part of the Swiss Armed Forces, we would be under security restrictions (no electronic devices, no photographs taken inside or outside the bunkers, and no information on these weapon systems should be made public). These rules would be repeated several times during our morning visit.

Since our visit to these two sites in the St. Gotthard Pass area, the Swiss Government has decided to no longer keep these weapon systems on caretaker status. The weapons will be scrapped and the structures sealed or sold in the coming years.

From St. Gotthard Pass we made our down the pass to the area around Airolo for our tours of the two special sites. These were detailed tours of a modern 12 cm fortress mortar position in a monobloc structure and to a large protected concrete structure that contained two 15.5 cm fortress cannon 93 L52, known as the BISON. We hope examples of these weapon systems are



Forte Airolo C. Penfold



Armored Casemate with 8.4 cm Model 1880 cannon at  
Fort Airolo C. Penfold



Dummy 12 cm Model 1879 in original armored turret  
C. Penfold



retained and become museums, so the apex of the Swiss fortress system and its ordnance are preserved for future generations.

After these visits we travelled to **Forte Airola**, where we met **Augusta Allidi**, who would take us round the site. The opening of the nearby St. Gotthard tunnel in 1882, and in the same year the triple alliance between Italy, Germany, and Austro-Hungary brought into focus that this was now the shortest route through Switzerland. For these reasons the fort was built between 1887 and 1890 and was a real mix, having been designed, armed and built by just about every nation which bordered Switzerland. An Austro-Hungarian engineer for design; armour and weapons from Bohemia and Germany as well as Belgium and much of the labor provided by Italy. The fort is a compact four-sided massif with an undulating granite roof and a plan like a Brialmont work with ditch covered by caponiers. The main armament was two 12 cm Model 1879 cannon mounted on the roof in a single turret; two 12 cm Model 1888 ball mortars; five 8.4 cm Model 1880 cannon; four 5.3 cm Model 1887 guns, and twelve 8.4 cm Model 1871 bronze cannons mounted in the three caponiers. Additionally, there is a one-kilometre tunnel connecting the fort to the St Gotthard railway tunnel which lies below the forts position. The fort continued to be improved before finally opening as a museum in 1989, though it remains within a military compound. Some of the tunnel defenses were also seen as well as a couple of mounted Fahrpanzer turrets, but not all in their original positions. The fort is in the Italian-speaking portion of Switzerland, so the language used in the fort is Italian.



Fahrpanzer Turret with 5.3 cm gun located near Forte Airola  
*T. McGovern*

We now turned towards the Nufenen Pass, climbing to its summit where we stopped briefly to see from the outside a Swiss army shelter for mountain troops and of course took more photographs. From here we dropped down into the valley for a pleasant coffee break and stunning views. We finished our travels for the day in Brig. Our hotel for the night was the Hotel Good Night Inn, located in nearby Glis and our tour members were on their own to locate dinner.

## Day 7 – Friday – Aug 17<sup>th</sup> – Festung Naters/Fort Commeire/ Fort de Champex

Leaving our hotel in the morning, we crossed the River Rhone into Naters and a short climb brought us to **Festung Naters**, where **Pascal Bruchez**, also involved in the tour organisation, joined us for the rest of the trip. Our local guides for this festung were **Erich Bumann** and **Theo Imhof**. Again, the fort was built to cover an important route, Brig-Naters, standing at the point where the Simplon Pass meets the Rhone valley. The fort was begun in 1939 with troops moving in in 1940 and the armament being ready by 1942. The armament initially comprised four 7.5 cm guns but by 1943 two additional 10.5 cm fortress guns had been mounted in a new western part to the fort. Flanking bunkers provided external defence with a 90 mm anti-tank gun, 20 mm anti-aircraft guns, and machinegun positions. The fort had all the usual barracks, stores, accommodations, and engine rooms, but a rare addition was a vault in which the Swiss National Bank held some of its gold reserves. We looked, but it was empty. The fort, which was declassified in 2002, also has other museums covering the local area, including one for the Papal Swiss Guard.

We now set out on a long drive to the west, passing into the third of the main routes through Switzerland and the defensive area around Martigny, with a pass over to Chamonix and France to the west, to the north to Geneva and to the south the Grand St. Bernard leading to Italy. Here in Martigny, we stopped for a lunch



10.5 cm fortress gun at Festung Naters *P. Bruchez*



Main gallery with passageway to 10.5 cm gun chamber at Festung Naters *P. Bruchez*





Festung Naters kitchen with cooking kettles P. Bruchez



7.5 cm fortress gun at Festung Naters C. Penfold



Power room with Sulzer motor generators and switchboard at Festung Naters C. Penfold



Plotting Room at Festung Naters with standard artillery calculator  
T. McGovern

break on the banks of the Rhone River facing a fort (**Follatèrres**) on the other side of the river. This fort has been decommissioned and its interior equipment has been removed. By this point we were seeing camouflaged gun positions in every shadow, but this site proved that not only were we right but looking harder just made you become aware of even more.

South of Martigny, we met **Jean-Pierre Salamin** and **Pierre-André Kuenlin**, who with Pascal would show us round **Fort Commeire** and then **Fort de Champex**. As we were now in the



7.5 cm gun bunker disguised as Alpine cabin at Fort Commeire  
P. Bruchez



Camouflage entrance to Fort Commeire C. Penfold



Main gallery in the barrack area of Fort Commeire  
C. Penfold



French-speaking area of Switzerland, the names of the forts and locations used French names. **Fort Commeire** is on the eastern side of the route to Italy opposite Champex above the town of Orsières. Construction of **Commeire** began in August 1940 and was completed by September 1943, but the fortress guns were only installed in May 1944. The fort had positions for four 7.5 cm cannons, two of which, as we had seen before, were disguised as alpine cottages. We were able to get close to these by squeezing out an emergency exit and walking round the steep slope above the public road. It was demilitarized in 1999 and became the property of the association in 2009.

Gathering our members aboard our two coaches, we headed down this side of the valley and up the other to **Fort de Champex**. This fort would come to hold a special place in the hearts of many of us because here we spent a night underground in a real Swiss fort. The fort was built between 1940 and 1943 and was armed with four 7.5 cm guns (two of these positions were converted to 10.5 cm guns at later date) as well as an outer defence including machineguns, 8.1 cm fortress mortar and six anti-aircraft guns. In addition, **Fort Champex** was the command post for the St. Bernard area, co-ordinating the fire of **Fort Champex, Commeire, Follatères** and **Dailly**.



Main gallery to Fort Champex's barrack area is well stocked for our overnight stay *C. Penfold*



Fort Champex's well stock magazines provide plenty of ammunition for the 10.5 cm and 7.5 cm guns *C. Penfold*



Protective door system between barrack area and gun casemates at Fort Champex *C. Penfold*



Tour members enjoy dinner in Fort Champex's mess *C. Penfold*

For our overnight stay we were issued sleeping bags and assigned to typical barrack rooms with bunk beds, while using centralized latrines with group showers. We were treated to an excellent meal and good wine in the fort's mess. Staying underground beneath tons of rock in narrow galleries affected our tour members in different way. Some drank schnapps and sang patriotic songs late into the night, while other spend hours exploring and photographing ever inch of the fort, while some of tour members departed to stay at the hotel located above the fort. As I am not a fan of schnapps and a very poor singer, I opted for exploring the fort and practicing gun drill and ammunition handling on the fort's artillery and operating the fire control calculators in the plotting room. In the morning, we checked out of the fort and walked to the hotel above the fort for breakfast.





7.5 cm gun has been reinstalled at Fort Champex  
*T. McGovern*



Late night gun drill on 10.5 cm gun at Fort Champex  
*T. McGovern*

#### Day 8 – Saturday – Aug 18<sup>th</sup> – Fort Dailly/Fort Scex/Fort Cindey

Saturday was to be our last day of touring and leaving Lac du Champex we travelled to **Fort de Dailly** sitting above St. Maurice via our hotel at Martigny. Here we dropped off our luggage trailer so our coaches could climb the mountain road to the fort. Driving north we crossed the river and after running alongside it began climbing taking a sharp hairpin bend – hence the reason for dropping the luggage trailer. The more sharp-eyed noted on the wall against the road a small red plaque carrying the number 29. Yes, that was the number of switchbacks we would take to reach the fort. It did though once again recall the enormous engineering efforts required to build and arm these alpine forts and the extent of the national drive particularly in the period from the late 1930s. There would be photographic evidence in the fort of the problems of moving guns up this road. Passing hairpin Number 1 we were not actually finished, and we went

through some of the narrowest gaps we had met in a village. There was still a climb before we entered the compound which surrounded this large multi-level fort. Our guides for the rest of the day here would be **Pascal Bruchez, Serge Monnerat, and Christian Vaucher.**

**Fort de Dailly** is just one part of Fortress Saint-Maurice, which commands this part of the Rhone Valley. The fort is one of the largest and most heavily armed of Switzerland's forts, with an entrance on the Massif Dailly at 1,250 meters (4,100 feet). Work began on the fort in 1892 and was initially armed with six 12 cm guns plus an additional six in open positions with disappearing mounts along with two 15 cm mortars in open positions, two 12 cm howitzers each in a cupola, two 8.4 cm guns in casemates,



The long galleries of Fort Dailly occupy almost 60km a many levels in this mountain massif *T. McGovern*



Pascal discusses the impact of the 1946 magazine explosion on this gallery and the rebuilding effort *T. McGovern*



and several mobile 5.3 cm pieces. This extensive work raised concerns in France who put in a substantial espionage effort to find out what was going on by interviewing labourers and eventually obtaining photographs from a Swiss officer in 1901.

The open gun positions were considered safe because of the height of the fort but by WW1 that confidence was ebbing, and these were abandoned in the 1930s and replaced by artillery galleries. At **Battery Rossignol**, a gallery of sufficient size was cut to allow towed artillery to be brought in to arm side galleries. Here ten 105 mm Bofors Model 1935 guns were installed. Four were aimed to the north and formed **Battery des Buits**; four were aimed to the south, becoming **Battery de Plex**; two aiming to the east were named **Battery de Rosseline**. **Fort Dailly** was the scene of a catastrophic ammunition explosion in May 1946,



The 10.5 cm gun of Battery Dailly Nord which was installed after the explosion *T. McGovern*



Pascal demonstrates the operation of the digital plotting calculator introduced in the 1980's *T. McGovern*

when shells in three magazines totalling about 449 tons exploded, throwing all four guns of **Battery de Plex** from their emplacements and damaging six more. The blast killed ten workers there to complete a funicular for bringing in supplies. The explosion resulted in further changes, with four 10.5 cm fortress guns being installed. **Battery de Plex** was not replaced, it being considered that the rock cover was now insufficient. Added were two new 15 cm turret guns on 50-meter armoured barbettes, two 8.1 cm fortress mortars, and a battery of twin 12 cm fortress mortars added in the 1960s. The fort was partially deactivated in 1995 and fully decommissioned at the end of 2003, yet some of the underground structures are still in military use.

Upon disembarking from our coaches, we headed underground for a speed-walking tour around the fort's kilometres of tunnels until we were not sure where we were located. We saw a small exhibition of model forts, a battery of guns, and a plotting room using more modern computer-based system. This contrasted with the mechanical method previously used and seen operating in many of the introductory films we saw at other forts. Pascal, an artilleryman, was particularly keen we see and understand it and a couple of members were asked to complete the computations and let us all see how the system functioned. Later he would get us to man one of the guns and "follow the pointers" to aim at our targets. Then, peering through the open breech, he would announce "spot on!"

Pascal led us down a trail from the top of the fort to the "star attraction" of Fort Dailly, the 15 cm turret 58 L42 cannon sporting a camouflage cage to allow the turrets to look like a mountain hut. The group took turns posing with this largest turreted weapon in the Swiss fortress system. These turrets were mounted on a barrette 50 metres (160 ft) deep, with a rate of fire of 22 rounds per minute in bursts, or 15 rounds per minute sustained. Design began in 1949, with the first test firings in 1960. The range of these new guns approached 24 kilometres (15 miles),



Martin Egger and Stefan Klinger pose by the 15 cm turret of Battery T1 *T. McGovern*



sufficient to reach Montreux, Sion, or the Chamonix valley in France. **Battery T1** (for tourelle or “turret”) was located at the old E3 mobile 120 mm battery position at an elevation of 1,300 metres (4,300 ft). **Battery T2** was located at 1,500 meters (4,900 feet) on the Rosseline Heights near **Battery Planaux** (two 10.5 cm turrets installed in 1940). Both batteries were operational from 1962 to 1994.

Going back inside the mountain, we visited the impressive inclined funicular that moved men and supplies from Fort Dailly to the upper part of **Fort Savatan**, which in-turn connected with the valley below. We then toured the ammunition handling and magazines for the 15 cm turret Battery T1 which seem more like a factory production line, as shells and powder filled casing were assembled and moved 50 meters up a shaft to the turret. Pascal narrated a film showing this complex machinery in operation. We moved through the tunnel system to emerge in the garrison area which was completely devoid of personnel but had a nice 12 cm disappearing gun on display. A short walk took us to a lunch provided by the Association St-Maurice d’Etudes Militaires (ASMEM) where we met many of those who had helped us while Pascal’s brother sat at his table melting cheese over braziers. There was no lack of appetites as with the Swiss cheese, we had potatoes, gherkins and wine while in the background we had a trio of Alphorn players serenading us – and marvellous views up the Rhone Valley too.



The incline funicular connects Fort Savatan and Fort Dailly through a tunnel inside the mountain C. Penfold



Battery T1 ammunition handling room at Fort Dailly C. Penfold



Shell and Casing lift at Battery T1 that elevates up a 160 foot barbette to the gun allowing 15 rounds per minute C. Penfold



Turret support chamber with crew lift and spare barrel with access shaft to turret at Battery T1 C. Penfold

Now it was back to the buses, slowly, and our winding route back to the valley and across the river to Sainte Maurice. Here at a bridging point was the **Chateaux de Saint-Maurice**, a customs point at the bridge dating from 1472 with **Tower Dufour**, 1831, above it. This was part of the blocking works at this choke point with, hidden by the forested slopes opposite, many barricades and other defenses also built at the same time. We climbed up a steep trail to the entrance of deep caves that were open to the public, but some way into them lay the entrance (closed to the public, but open to us) of **Fort du Scex** and adjoining **Fort Cindey**.





12 cm disappearing gun on display at the garrison area of Fort Dailly *C. Penfold*



Alphorn player serenade the tour group as we have lunch at Fort Dailly *P. Bruchez*

Fort du Scex is built into the Scex cliff face had its construction starting in 1911. The fort is in galleries which run approximately parallel and about 10 meters back from the cliff face. Side galleries go back into stores and accommodation with others going out to the embrasures for its gun positions. It was initially armed with four 7.5 cm 1903 guns in 1911, along with four machine guns. It was expanded in 1915 to provide additional dormitory space. A connection to the caves at the Grotte aux Fées was created in 1935-6 and in 1938-9 a further four-gun 7.5 cm battery was added. Supplies were delivered by an aerial cableway built in 1922. More tunnels improved the habitability, along with an 800-meter tunnel connecting it to Fort Cindey.

Fort Cindey was built in two phases, 1941-46 and 1948-54. The fort was initially armed with two 10.5 cm guns, with four 90 mm anti-tank guns and machineguns added in the 1950s. The fort also had four mobile 81 mm mortars. In 1984, the forts became a regional command post and all the guns in Fort du Scex were removed, though one was reconstructed for display in 2001, those in Fort Cindey being left in place, the forts being finally deactivated in 1995.



Barrack bunk room at Fort Cindey *C. Penfold*



Group photo time for the CDSG/FSG Joint Tour to the Swiss Defenses *P. Bruchez*





10.5 cm fortress gun at Fort Cindey *C. Penfold*



Pascal oversees gun pointing drill on 10.5 cm fortress gun at Fort Cindey *T. McGovern*

During our tour of these forts, I think that our host sensed that we were all hitting our limit on underground galleries for barracks, magazines, power room, and gun rooms after eight days of touring. They took pity on us and scaled back our tour. After visiting the aerial cableway, we retreated through the caves and down the steep trail to our coaches. While being shown round these forts and looking out and over the sights of the guns, it was pointed out that all the bridges had locations for the emplacement of explosive charges to destroy them if needed. Also visible were rows of concrete anti-tank barriers, “toblerones” as they were called. As we headed back to Martigny, we had several stops to visit the remains of these anti-tank barriers. Most had of course been removed in recent years, but numbers remained and these, along with some canalised streams, would have served the purpose of halting an enemy’s advance under the guns of these forts. Crossing the river, we visited a second site with these concrete barriers as well as the positions for road blocks to be inserted in time of crisis. Our last stop was the rail defenses for the rail line



Lavey anti-tank barrier to block approach to Fort Savatan and to the Dailly Massif in the background *T. McGovern*



Fort de Vernayaz occupies a unique location at the mouth of the Trient Gorges overlooking the rail line and Verayaz *C. Penfold*

that climbs up to Salvan. The rail tunnel had armoured doors while several machine guns and artillery emplacements were evident in the cliff face above the rail line.

We now drove back to Martigny to Hôtel-Restaurant Forclaz to get ready for our final tour dinner. We walked from our hotel to a very tall and distinct building topped by a restaurant (at least tall for Martigny!). It was to be the setting for a farewell dinner organised by our Swiss hosts where many of those who had so generously given of their time to show us round and allow us to see the unique military architecture of Switzerland were present. All the elements were there wine, good food, good company, and Serge with a bottle of schnapps – or maybe two. There were deserved thanks to Terry McGovern and Martin Egger too. After several speeches giving thanks and wishing farewell, we return to the hotel for our last night in Switzerland.

### **Day 9 – Sunday – Aug 19<sup>th</sup> – Return to Zurich Airport**

We left the hotel early for our almost four-hour drive to Zurich Airport. Our journey on the motorway allow us to review our





Farewell dinner for the CDSG/FSG Joint Tour to the Swiss  
Defenses where good food and drink was provided  
*T. McGovern*

tour with our old and new friends as well as to discuss future tours. There were hurried farewells with one eye on departure boards, with some taking onward flights and some staying for a few more days. The Joint CDSG/FSG Tour to the Defenses of Switzerland 2018 was over.

Attending this tour were Julie Ann Antal, Michel van Best, Hans Boerst, Patricia Boerst, Carl Chappell, Craig Dyson, Martin Egger, Mariusz Jachimowicz, Tom Kavanagh, Terry McGovern, Gary Paliwoda, Ian Wolfe, David Bevan, Roy Bowden, Stephen

Cannon-Brookes, Norman Clark, Ragnall Craighead, Phillip Doorbar, Barrie Eden, Christopher Foss, Alan Fyson, Martyn Gregg, Jean-Philippe Guichard, John Harding, J. Henry L. Humphreys, Svein Wiiger Olsen, David Page, Clive Penfold, John Shipman, and Tim Wellburn. We had a short guest appearance from Christian Casartelli and Stefan Klinger as well. The success of the tour was primarily due to the effort of our local organizers, Martin Egger, Maurice Lovisa, Serge Monnerat, and Pascal Bruchez, and our support team of drivers and local guides. They made sure we were able to visit every site on our tour plan and that local guides were on hand with keys to allow us inside and to explain each fort's form and function.

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### **The New Year Finds Historic Fort Ward Bakery Restoration In Full Swing**

FORT WARD, BAINBRIDGE ISLAND – Happy New Year from Friends of Fort Ward and the Fort Ward Community Hall project! [Fortwardhall.org](http://Fortwardhall.org)

The turning calendar finds us knee-deep in sawdust, awash in the vigorous clatter of our historic bakery restoration (minor pause for the holidays), and propelled by great press coverage and your ongoing enthusiasm and support en route to project completion in 2019. From a dream, to a concept, to a plan, to this moment: the Fort Ward Community Hall is happening.

For friends, fans and supporters at every level, THANK YOU for a fantastic past 12 months in which we've accomplished so much. On the threshold of the new year, here's what's going on:

#### **MASONRY RESTORATION & OTHER PROGRESS**

An ace team from Lake Stevens-based Masonry Restoration Consulting has been onsite for the past six weeks, giving our little

brick bakery a thorough makeover. These skilled masons recently reopened all windows and doors bricked over by the Navy back in the 1940s, and are now replacing damaged bricks and generally giving the building envelope a good nip and tuck.



We've posted video and stills of their work on our Facebook page and homepage, so you can see these skilled craftsmen in action. It's painstaking work, and possibly the biggest single component of the restoration ... but it's a brick building, so you'd expect that. Bricks are its essence, so they deserve the attention.

This phase of the restoration is funded in part by a Sivinski Grant from the WA Trust for Historic Preservation. Recall that this prestigious award was Our Very First Grant (way back in December 2015!), and we're pleased to finally be spending the "brick & mortar" money on actual brick and mortar. Cheers to the WA Trust for all they do for the cause of historic preservation, and their early support of the bakery restoration.

#### WHAT YOU'LL SEE NEXT

Fill and grading for the community hall's new parking lot begins in early January. The schematics look complicated, but three key points: the drainage will boast custom filtration to keep pollutants out of the waters of Rich Passage, we're keeping asphalt to a minimum, and we saved most of the significant trees. Design is by Browne Wheeler Engineers, with grading and earthwork by Dale Flodin and island-based South Point Development.

The slate specialist from Hanley Construction will be on the roof in the next few weeks, tweaking the bakery's slate shingles to keep the Northwest winter out. The beautiful slate roof is one of the 1910 building's signature elements, and we're glad to be shoring it up for another 100 years. Slate tiles for the patch-up are being contributed by the Dennon family on Parkview Drive, supplementing a cache of tiles from top-secret Station S.



Those new porch beams custom milled by David Kotz Woodworking will be fitted soon, vintage exterior doors and fanlights installed, and the bakery's original façade finally restored. Our next big purchase: custom-crafted, period-correct windows. We think we have a vendor picked out, and we'll be reviewing their proposal and placing an order in the coming days. Plus LOTS more work on the building interior as the community hall's public spaces take shape...



#### NOW LET'S ACKNOWLEDGE SOME GREAT GIFTS

Casey Johnson and the team at Port Madison Wood Floors stepped up this year as major contributors – this excellent island firm is donating materials for a beautiful white oak hardwood floor in the hall's main room. A tremendous gift, which everyone who uses the building will enjoy. Flooring installation and finishing costs will be funded through a community grant by the Bainbridge Island Parks Foundation. We expect the floor to go in sometime in March.

More big thanks to the Suquamish Foundation for a recent \$500 grant. Our neighbors across the bridge have been staunch supporters of our Fort Ward project, with the Foundation's contributions totaling \$4,000 to date.

Many thanks also to the private donors who've given throughout the past year – you know who you are. If you don't, check out our Donor Wall and look for your name! (And your friends' names.)

YES, THERE'S STILL TIME TO GIVE THROUGH ONE CALL FOR ALL. Donations continue to roll in through One Call For All – we are enjoying great support in this, our final Red Envelope campaign. If you've given previously, we are so grateful – you've gotten us this deep into the bakery restoration. If you want to pad your support or want to join the campaign for the first time, now's your chance to make your mark on this neighborhood-driven, historic preservation effort.

FROM THE BAKERY RESTORATION TEAM The Fort Ward Community Hall project remains a three-way partnership of Friends of Fort Ward, the Bainbridge Island Metro Park & Recreation District, and Kitsap County (Fort Ward) Sewer District No. 7. We're also grateful for the ongoing support of Wenzlau Architects, Browne Wheeler Engineers, and Tina Gilbert of the OTWB Inc. project management firm. And our onsite team of David, Casey and Sean from BI Parks. And many, many others!

And so... Welcome 2019! The year we bring the Fort Ward Community Hall project home – for Bainbridge Island, for historic preservation, for community, all thanks to the continued enthusiasm and support of... You. -- Douglas Crist



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## Fort Miles Historical Association Cape Henlopen State Park, Delaware Recent Events and New Projects

Terry McGovern

The CDSG was recently awarded a fine plaque by the Fort Miles Historical Association (FMHA) at the Fifth Annual FMHA Awards Banquet was held December 7 at Irish Eyes Pub & Restaurant in Lewes, DE. This award is to recognize the many years of support that the CDSG has provided to the FMHA and the Fort Miles Museum. This banquet is held annually to salute the dedicated group of Bunker Buster volunteers who contribute thousands of volunteer hours each year and bring their design, fabrication, woodworking, and host of other creative skills every week to Cape Henlopen State Park in support of the Fort Miles Museum and Historical Area. The FMHA also presented awards to other individuals and organizations that assisted the FMHA during the past year.

The primary award for the evening was the Fifth Annual Lee Jennings Memorial Award, presented by Dr. Gary Wray, President of FMHA, supplemented with remarks from Linda Jennings. Lee Jennings was one of the four founders of FMHA, a former Historian of Delaware State Parks, and a man who devoted countless hours toward the painstaking restoration of Battery 519 and other structures at Fort Miles. Non-FMHA folks receiving awards at the banquet included the presentation of a Special Recognition Award to Eric Dawson of Delaware State Parks, to Terry McGovern of the Coast Defense Study Group, and to Jim Pierce, Secretary of FMHA. Thanks were also given to the firms that support FMHA, to Senator Ernie Lopez for his kind remarks and support, to Director Ray Bivens for his support of the Delaware State Parks – FMHA partnership, and to Mark Chura for his tireless construction management efforts at the new Events Venue and entrance road and parking area at the Fort Miles Museum. It was a great night saluting the continuing progress at the Fort Miles Museum and, most importantly, to those who have made the FMHA and Fort Miles Museum and Historical Area a reality.

The next day, I was able to tour the Fort Miles Museum site (Battery #519 and its cantonment area) with Dr. Gary Wray and Mark Chura, Executive Director of the FMHA. They showed me the many projects that the FMHA and Delaware State Parks have undertaken over the past year.

The largest of these projects is a new Events Venue under construction at Battery 519 featuring a “million-dollar view” of the Atlantic Ocean and supplemented by multipurpose indoor space. The Events Venue will feature a temperature controlled indoor space leading to an outdoor patio and stage overlooking the Atlantic Ocean from the top of the Great Dune. As Dr. Wray explains, “Quite frankly what we are offering is an improved road system to access the museum along with a new parking lot, because we desperately need more parking in Cape Henlopen State Park and this new outdoor venue will be able to generate support our Fort Miles Museum by offering a spectacular venue for wedding and reunions.” This effort has involved clearing and leveling the area outside the North Gun Room, while inside that



The new Event Venue at the Fort Miles Museum  
(Battery #519) T. McGovern



Dr. Gary Wray, President of FMHA and Mark Chura,  
Executive Director of FMHA show off the new Event Venue  
T. McGovern



Inside the North Gun Room of Battery #519 with its gun pit  
dug out and covered with wooden flooring T. McGovern

room the 12-inch gun pit was dug out, placing a wooden floor over the pit and a wooden temporary wall (to be replaced with a glass wall) to allow an indoor area so a temporary, traveling WWI exhibition could be installed in Battery 519 right away. The outdoor patio and stage involved pouring large concrete pads, as well as improving the access road to the front of the North Gun Room. Behind Battery 519, construction was underway



for a new parking lot for 103 cars and an entrance road to Fort Miles Museum and Historic Area. A ribbon cutting ceremony is planned for spring 2019.

While inside Battery 519, the museum continues to be refined with new exhibits, an enhanced gift shop, more art galleries, etc., but most of projects occurring over the last year are outside and behind the battery. The Artillery Park has been completely redone to better showcase the large collection of artillery. The dominate display is the complete 16-inch/50 gun which received the final touches by adding a section for a "Proof Steel" on a concrete pad and then positioned a 16-inch shell aimed directly at this Proof Steel. This exhibit not only demonstrates the penetrating power of a 16-inch shell fired at, say, an enemy battleship, but also displays how a new gun barrel is tested before being placed into service.

Nearby, the 8-inch Navy gun MkVIM3A2 on a proof mount has been repositioned. The FMHA wants to reconstruct an original railway mount M1A1 as best as possible. They ask if CDSG members knows of an original railway car to please let them know. They already have a section of track and they would fashion the proof mount as best as possible into a railway mount M1A1. Please send your suggestions to me at [tcmcgovern@att.net](mailto:tcmcgovern@att.net).



New "proof steel" and 16-inch shell exhibit next to the 16-inch/50 gun - IMG 3551 T. McGovern



Restored WW2 90mm mobile gun at the Fort Miles Museum Artillery Park - IMG 3560 T. McGovern

The next stop was the restored mobile 90 mm antiaircraft gun that the FMHA and Delaware State Parks acquired last year. This beautifully restored gun is the exact type utilized at Fort Miles during WWII. The CDSG last saw this gun at the National Electronics Museum, located in Linthicum, Maryland. New tires have been installed, rust was removed, metal replaced, and the entire gun has been painted. The 90 mm is ready to roll and recently travelled to the Rehoboth Beach for the Red, White, and Blue Day festival.

Nearby, I got a chance to use Fort Miles Museum's newly constructed restroom facility that was made possible by a grant from the Longwood Foundation. Much like the new parking facility, it is hard to run a large museum complex without a bathroom. Next to this useful facility, the FMHA continues to upgrade the Orientation Building by constructing a working mess/kitchen within the building and adding a gift shop kiosk; this where the museum tours start so visitors are hungry for items to purchase, whether t-shirts or hot dogs. The Bunker Busters continue to work to restore the six barracks buildings, which are the first buildings encountered by a visitor to Fort Miles Museum complex. With historical accuracy, shutters and windows have been replaced and doors have been installed to ensure security.



Utilized a grant from the Longwood Foundation to install a modern restroom facility adjacent to the Artillery Park. FMHA photo.



Refurbished barracks, which are situated along the walkway leading into Fort Miles. FMHA photo.



Restoring the WW2 Aircraft Warning System ("AWS") shed by the Bunker Busters. FMHA photo.



Temporary wooden wall on the North Gun Room at the new Events Venue. FMHA photo.



Digging out the 12-inch gun pit of the North Gun Room at Battery #519. FMHA photo.

We then travelled further away from Battery #519 to Battery Smith, where the Bunker Busters have developed a large workshop in the battery's North Gun Room. They use this facility to support all the construction projects they undertake. Battery Smith also provides important storage area for the Fort Miles Museum as the former tenant has moved out and the Bunker Busters have been restoring this space as well. One of the projects that I saw underway was the restoration of a WWII Aircraft Warning System ("AWS") shed gifted to FMHA by the Simmons family



FMHA wants to recreate this WW2 photo of a 8-inch railway gun. Can you help them find the various parts?

NARA photo.

of Hooper Island, MD. The AWS served as our first homeland early-warning system before radar, manned by local families up and down the coast on alert for possible enemy planes. This shed was actively used during the war, manned by the family day and night, reporting aircraft flying in the Chesapeake Bay area. Very few of these small observation sheds remain, so Fort Miles Museum is very fortunate to have one in original condition. The AWS shed will further enhance the many interesting outdoor buildings and artillery pieces that can be seen as part of the Fort Miles Museum Cantonment and Artillery Park historical areas.

After my tour of the Fort Miles Museum complex, I went to visit Battery Smith's and Battery #519's PSRs, as well as the Fort Miles Mine Casemate. I was happy to see that using the funds provided by the CDSG Fund, the Bunker Busters have constructed and installed new steel doors on these structures to protect their interiors from further vandalism. Some of the new doors already bear scars from recent attempts to break into these spaces. It is good to see that is 2015 CDSG Fund project is now complete. I urge CDSG members to take the time to visit the Delaware shore and the Fort Miles Museum and Historical Area, as over the last 15 years the FMHA and Delaware State Parks have created the best coast artillery museum on the East Coast.

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### 2019 Nominations Committee

Terry McGovern – Corporate Secretary

The CDSG Nominations Committee, Alex Hall, Alfred Chiswell, and Quentin Schillare, is seeking board candidates for the full board to consider by May 1, 2019. The ballot will be included in the May 2019 Newsletter with results due by July 31. Results will be announced in August 2019 Newsletter. The three-year term will begin October 1, 2019, at which time Thomas Batha will be stepping down from the board. If you are interested in running or have a nomination, please contact Alfred ([alfred.chiswell@gmail.com](mailto:alfred.chiswell@gmail.com)) or Quentin ([qschillare@kc.rr.com](mailto:qschillare@kc.rr.com)) or Alex ([greenugy352@yahoo.com](mailto:greenugy352@yahoo.com)) before May 1.



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berhowma@cdsg.org

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*Permanent Fortifications and Sea-Coast Defenses*, Congressional Report No. 62, U.S. House of Rep. (1862), hardcover reprint \$30 / \$45

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C/O Terry McGovern,

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email: [tcmcgovern@att.net](mailto:tcmcgovern@att.net)

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