



# The CDSG Newsletter

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The Coast Defense Study Group, Inc. —November 2008

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## Chairman's Greeting!

Steven Kobylik

Greetings to you all from the Pacific Northwest! First, on behalf of the Board of Directors, we would like to thank Jonathan Prostak for the great job he did this past year at the helm of the Coast Defense Study Group. Also a hearty "welcome aboard" to newly elected board member Tom Kavanagh. I feel honored and privileged to be elected the CDSG BOD chairman. This year I look forward to working together with you in the continuing study of coast defenses and fortifications and in defining the future of the organization.

This past year has been rewarding, challenging, and sad for our organization. We were fortunate enough to have a successful 2008 Conference in Galveston before the horrific hurricane that devastated the region. Our condolences also go out to family

## CDSG Meeting and Tour Calendar

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

2009

February

Civil War Fortifications Study Group Annual Conference  
Memphis, TN  
TBA  
[info@cwfsfg.org](mailto:info@cwfsfg.org)

April 1-5

Coast Defense Study Group Annual Conference  
Baltimore-Washington  
Jon Prostak & Andy Grant  
[ewinslow@enter.net](mailto:ewinslow@enter.net)

May 1-3

Alpine Fortification Forum  
Fort de Montperche, Savoie  
TBA

May 6-10

Council on America's Military Past Annual Conference  
Pittsburgh, PA  
Dale Floyd  
[caponier@aol.com](mailto:caponier@aol.com)

May 23 - 30

Fortress Study Group Overseas Tour  
NE Poland  
Hans-Rudolf Neumann  
[hrv.neumann@t-online.de](mailto:hrv.neumann@t-online.de)

September

Fortress Study Group Annual Conference  
Newcastle & NE England  
Roger Thomas  
[dave.bassett@ons.gsi.gov.uk](mailto:dave.bassett@ons.gsi.gov.uk)

October 2-11

Bunker and Fortress Tour  
Albania  
Hans-Rudolf Neumann  
[hrv.neumann@t-online.de](mailto:hrv.neumann@t-online.de)

October 2-11  
Great Fortress and Bunker Tour  
Albania  
Hans-Rudolf Neumann  
hrv.neumann@t-online.de

October 4-5  
International Fortification Forum 17th Annual Fair  
Ouvrage Galgenberg, Metz  
TBA  
a15@wanadoo.fr

October 24  
International Fortress Council Annual Meeting  
Prague, Czech Republic  
Carlos Scheltema  
carlos@scheltema.org

2010

February  
Civil War Fortifications Study Group Annual Conference  
To Be Announced  
To Be Announced  
info@cwfs.org

April 13-18  
Coast Defense Study Group Annual Conference  
Puget Sound, WA  
Steven Kobylk & Alfred Chiswell  
sjkobylk@aol.com

April 18-19  
Coast Defense Study Group Special Tour  
Victoria, BC, Canada  
Steven Kobylk & Alfred Chiswell  
sjkobylk@aol.com

May  
Council on America's Military Past Annual Conference  
San Francisco, California  
Dale Floyd  
caponier@aol.com

July  
Fortress Study Group Overseas Tour  
SE France (Briancon)  
Keith Phillips/Mike Brock  
dave.bassett@ons.gsi.gov.uk

September  
Fortress Study Group Annual Conference  
North Wales & Ireland  
To Be Announced  
dave.bassett@ons.gsi.gov.uk

October  
Coast Defense Study Group Special Tour  
Wilmington/Beaufort, NC  
Phil Payette  
hrforts@aol.com

October  
International Fortress Council Annual Meeting  
To Be Announced  
Carlos Scheltema  
carlos@scheltema.org

October  
International Fortification Forum 18th Annual Fair  
Ouvrage Galgenberg, Metz  
TBA  
a15@wanadoo.fr

2011

May  
Fortress Study Group Overseas Tour  
Elvas, Portugal  
TBA  
dave.bassett@ons.gsi.gov.uk

October  
International Fortification Forum 19th Annual Fair  
Toul, France  
TBA  
a15@wanadoo.fr

and friends of members that have passed away this year – their fellowship, enthusiasm and willingness to share their knowledge will be greatly missed.

In last August's *CDSG Newsletter*, Mark Berhow wrote about what may be one of our greatest challenges and opportunities for the forthcoming year. With changing times, technology, and member demographics, the BOD concurs that a review of our Mission, Goals and Objectives is in order. Stay tuned with updates on our WEB site and the opportunity to participate in defining the future of your organization in the spring.

Unfortunately, the current world financial/economic crisis has had an effect on travel plans for many and as a result, a couple of special tour packages, to Oahu and Normandy, have had to

be cancelled. We thank the leaders of these special tours for all the effort and hard work. I hope that we can reschedule these tours at a future date.

If you plan on attending just one U.S. Coast Defense related site or vacation in the coming year, I would encourage you to attend the CDSG April 2009 Washington-Baltimore Conference. I am excited about this conference for several reasons. Jonathan has developed a great agenda and has gained access to sites normally off-limits to the general public (see the Newsletter attachment). It also offers insights into all the different periods of US Coast Defense, so one can follow the progression from 18th century thru modern times. This progression is not seen in many harbors. Visits to the Washington Navy Yard and the archives are a real

special bonus. I would also recommend that you and maybe even your family could increase the experience and value of this time to explore our nation's capital. With the conference being in April, the cherry blossoms may even be out! Take a couple of extra days visit the sites and even make an appointment to see a congressman or the legislature in action (maybe).

We are approaching the holiday season with Thanksgiving just passed and Christmas around the corner. It reminds one of the holidays at the harbor defense forts a century ago. Special printed menus were in order, and it was one of few times cigars and "bottle" beer would be served in the enlisted company dining areas! At Thanksgiving, usually the officers were invited to dine with the troops while at Christmas the officers and married enlisted dined with their own families. On Christmas eve at Fort Casey, as I am sure in all the other forts, a floor-to-ceiling Christmas tree would be set up, possibly in the gym, adorned with homemade decorations (with a US flag hung behind), with soldier-purchased toys scattered around, dolls for girls and army toys for boys. All the fort and surrounding community children would be invited to attend a special Christmas celebration. They would sing carols, hear an inspirational sermon and then ol' Saint Nick would make an appearance. Every child was beaming and had an opportunity to receive a gift from him. For many this was their only gift and they were grateful. The community in return, during the holiday season, invited the soldiers to their homes for food and fellowship in the true holiday spirit so they could get a taste of home.

In that same spirit, if the opportunity arises, give a soldier, sailor, airman or marine a taste of home this holiday season. The BOD wishes you and yours all the best this holiday season!

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**CDSG 2009 Annual Business Meeting**

The 2009 Annual Business Meeting of the Coast Defense Study Group, Inc., will be held at the Comfort Inn BWI Airport, in Linthicum Heights, MD, on Friday April 3, starting at 7 PM.

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**2009 Annual Dues for the CDSG**

The 2009 annual dues for the CDSG will be \$40 for members in the United States, \$55.00 (US) for members in Canada, and \$70 (US) for all other foreign members. As you may know the cost of preparation and mailing publications continues to increase. The United States Postal Service has dropped its surface mail rate and it costs on average more than \$8 US to mail our publications to overseas locations. We have created a new rate for Canadian members. Next year we will be going to a new perfect bound magazine type binding format as well. Please remember that ALL membership renewals are due January 1, 2009. Please renew as soon as you can.

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**CDSG 2009 Annual Conference  
Special Tour planned to  
Naval Surface Warfare Center - Dahlgren**

We are planning a special tour to the restricted Naval Surface Warfare Center – Dahlgren and its unique naval ordnance on Sunday afternoon, April 5, 2009 as part of the CDSG 2009 Annual Conference. Our interest in this naval proving ground goes back to when Dr. Robert Zink, a long time physicist at the NSWC, founded the CDSG due to his personal interest with naval weapons that were used in U.S. coastal defense batteries. At our various conferences Dr Zink showed us photographs the unique 12-inch gun M1895M1A (#19) on Railway Mount M1918 (#9) and 8-inch Gun MK VI M3 on railway carriage, as well as the historic naval tubes, such as the 16-inch guns Mk II (#96/#100) used as coast artillery, that have been at the NSWC since World War II. Our group has always wanted to visit these artifacts in person and take photographs of them. Since we are gathering from around the U.S. for conference in the Washington area the U.S. Navy has agreed to give us a guided tour to all our members. We will gathering a list of those wishing to attend along with their personal data so visitors passes can be issued in advance to visit this facility. For further information please contact Terry McGovern at tcmgovern@att.net or at 703/934-3661.



A recent photograph of the 12-inch railway gun at Dahlgren

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**CDSG Fundraising Challenge:  
Update as of November 2008**

The Great Gull Island Dock Project at Fort Michie, New York

The CDSG Fund is happy to report that our membership has met the Great Gull Island Dock Project fundraising challenge by matching the \$1,500 that the CDSG Fund had donated for this project in April 2008. Helen Hays of the American Museum of Natural History thanks the CDSG and its members very much

for the \$3,000 they we have provided towards the rebuilding of the dock at Great Gull Island. While Helen reports that she raised \$331,742.78 for this important project, the projected costs of the dock has also risen so that she is still \$55,357.22 short of the amount she need to have in hand before the project is put out for bid. Helen requests that we ask our member again to donate to the CDSG Fund so we can make an additional gift to help her raise the final amount. Please consider making a gift for this worthwhile project. In case you do not remember the details of this request please read below.

Great Gull Island lies at eastern end of Long Island Sound and is owned by American Museum of Natural History. The island's 17 acres currently provides nesting sites for over 20,000 terns (members of the gull family) each year making it one of the largest terns nesting sites in the world. The museum began the Great Gull Island Project in 1969 in order to protect and monitor the tern colony during the breeding season. Each year volunteers from the U.S. and South America (the winter home for these terns) occupy the island from the end of April through the first week in September. These "bird" people are led by Helen Hays. They monitor the colony annually, marking nests, banding checks and trapping the adult terns.

supplies ashore. This flimsy dock finally washed away in the spring of 2007. The only way the bird people could conduct their 2007 season was to have a charter boat bring a scow to Great Gull Island, weather permitting, to ferry people and supplies from the boat to the island's south beach. Strong winds sometime prevented landing, resulting in trip cancellations that limited the number of personnel and amount of supplies they could bring to the island in 2007. Helen Hays has begun a fundraising campaign to replace the dock to solve this access problem as the Great Gull Island Project is a "self-funding" project of the museum (which means the volunteers must raise funds to continue the program each year). The cost of building a dock that will survive in this hostile marine environment is very expensive – estimated at \$320,000 (now estimated to be \$387,100). Helen has worked very hard to raise funds and as of end of April 2008 she has pledges in hand for \$280,085 (she now has \$331,742.78 in donations). Permits have been obtained and bids for the work are being sought with the goal of building this new dock during the summer of 2008 (now expected to be the summer of 2009).



A 1920s view of Great Gull Island and Fort Michie when it had a large dock

Before it became the seasonal home for terns, this island served the Coast Artillery Corps as Fort Michie, part of the defenses of Long Island Sound. Fort Michie mounted an impressive array of coast artillery (a total of six batteries) from the unique 16-inch disappearing gun of Battery Davis of the Endicott-Taft period to a 90mm AMTB battery during World War II. The massive emplacement of Battery Davis and isolated location makes this island in many ways similar to Fort Drum in Manila Bay.

One of these similarities is gaining access to this island. The rocky and exposed nature of the island makes landing on the island difficult and the bird people have been relying on the remnants of an old army dock for years to bring both people and

As a CDSG member, you might ask why we should care if a dock exists at Great Gull Island or not. The answer is that while the bird people need a dock to conduct their work on the island, we "fort" people also need a dock so we can visit the remains of Fort Michie. Over the years, the members of the CDSG have been able to visit this restricted island as volunteers to help the Great Gull Island Project mobilize and demobilize each year for their annual season (and at the same time visit the fortifications). Many times our visits required us to stay overnight and the bird people are great hosts, both feeding and housing us. Perhaps our joint interest in the island and its future, for different reasons, bring the two groups together. As a result of our joint interest



Helen Hays has asked the CDSG Fund to make a donation to her "dock fund" so they can build a new dock this year.

The CDSG Fund has agreed to challenge our members to donate for this worthy cause. The CDSG Fund has donated a total of \$1,500 to this project and we "challenge" our membership to match this giving by donating another \$1,500 allow us to provide \$3,000 to this important project (which our members have done so). Our Great Gull Dock challenge seeks to have all donations in hand no later than January 2009. Remember your gift is the CDSG Fund is tax-deductible for federal tax purposes and 100% of your gift will go to the Great Gull Island Dock Project (please indicate this purpose on your check). Please send your check made payable to the CDSG FUND as soon as possible as Helen needs to build this dock this summer. Your check should be mailed to Alan Hardey at 1577 Braeburn Road, Altadena, CA 91001-2603.

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**Fort Monroe advocate dies while waiting to cast ballot**

Posted to: *Hampton Military News* Obituaries  
By Kate Wiltrout  
*The Virginian-Pilot*  
© October 31, 2008  
NORFOLK

The leader of a citizens group seeking to turn Fort Monroe into a national park died Monday of an apparent heart attack. Henry O. Malone, 74, helped found Citizens for a Fort Monroe National Park in 2006, and was its president.

Known to many as "H.O.," Malone was a dogged, deep-voiced advocate for the historic post. He spent 14 years there as chief historian of the Army's Training and Doctrine Command.

In 2005, the government said it would close the base. Concerned about development on the 570-acre waterfront property, Malone buttonholed politicians. He wrote letters, organized meetings and united a diverse group of people.

"H.O. was the spark plug that brought us together, and he had total dedication to the best interests of the future of Fort Monroe," said Louis Guy, president of the Norfolk Historical Society and secretary of the citizens group.

Mark Perreault, a board member, said Malone was undeterred by setbacks: "He just dusted himself off, got up and kept going straight ahead. He was an inspiration to us all."

A longtime Hampton resident, Malone was an Air Force pilot before earning a doctorate in history.

Friends said Malone collapsed while in line to cast an absentee ballot at the Norfolk registrar's office. They said he had planned to spend Election Day outside polling places, getting signatures on a Fort Monroe petition.

"He died, in a way, working to preserve Fort Monroe," said Charles H. Cureton, who worked for Malone at Training and Doctrine Command.

Kate Wiltrout, (757) 446-2629, kate.wiltrout@pilotonline.com

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The family asks that in lieu of flowers, memorials take the form of tax-deductible donations to the Fort Monroe National

Park Foundation, another organization privileged to have Dr. Malone as its president:

Fort Monroe National Park Foundation  
P.O. 097  
Fort Monroe, VA 23651

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**Graffiti Removal**

John Martini

Here are some photos of the progress of graffiti removal at Battery Townsley.



Main corridor wall before cleaning



Application of "Taginator" graffiti remover



High-pressure blast with super-heated water. (Sorry for the photo quality; it is a very wet process.)



Corridor wall after cleaning.



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**Reproduction Guidons**

Joe Janesic  
Fort MacArthur Museum  
www.ftmac.org  
562-577-5052

With more and more batteries being actively restored around the country, I was asked for our source for military Guidons.

Cynthia Soto  
The Guidon Flag Company  
13302 Gilbert Street  
Garden Grove, CA 92844  
714 638-5092  
<http://guidonflagco.com/index.html>  
Email: [Theguidonflagco.socal.rr.com](mailto:Theguidonflagco.socal.rr.com)

Cynthia has made a number of excellent museum-quality flags for us in the past year, including a great 3<sup>rd</sup> Coast Artillery regimental flag. She keeps the coast artillery pattern for guidons ready to go and her materials are really first rate. A number of re-enactment groups have used her services, and we cannot recommend her enough. These are pictures of a guidon she recently made for us.



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**Scale Model of 10-inch DC gun**

Jack Buckmeir  
[jackbuckmeir@yahoo.com](mailto:jackbuckmeir@yahoo.com)

Here is a little information on the 1/6 scale 10-inch M1901 DC being built for the Fort Stevens Museum in Oregon. The pictures were taken at a demonstration at Rilea Armed Forces Training Center (ONG).

The carriage is mounted on a steel swivel stand, it has the upper racer aprons and electric controls, and the catwalks & rails installed. The gun raises and lowers at the touch of a switch. Soon it will also traverse and elevate automatically as well.

By watching videos of DC carriages in operation, I was able to match the speed of the model to the firing of an actual gun. I find that observing the model as it works gives you a great admiration and respect for the tremendous engineering talent of the men that designed and built the disappearing carriages.

When triggered, the barrel begins to rise slowly, and then the gun levers rapidly accelerate the barrel to the in-battery position. Once fired, that accelerating facet of the design in reverse forces a quick starting lift of the counterweight and then gradually slows the inertia of the barrel backwards down to the rest position in recoil. An absolutely perfect pattern for the recoil of a large weapon.

The Fort Stevens Museum staff has a place picked out for the display, so hopefully we can have it installed soon. The completed display will need at least a 6x8 ft. footprint but an 8x8 footprint would be much better.



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## The 1971 Mine Defense of Chittagong

Charles H. Bogart

When it achieved its independence from Great Britain in 1947, the Indian sub-continent split into two countries along religious lines. The Moslem areas congealed into West Pakistan and East Pakistan, and the largely non-Moslem population formed India. West Pakistan and East Pakistan (Bengal), while sharing the same religion, were populated by ethnic groups with different cultures and languages. Tensions between East and West Pakistan led to a 1971 rebellion by the Mukti Bahini. When this uprising was put down with great violence, many Bengalis fled to India and established guerrilla training camps. India supported the rebels, and in December 1971, India and Pakistan went to war, with India launching an all-out offensive against East Pakistan.

The Pakistani Army had but three infantry divisions and one armored regiment in East Pakistan. Air transport between West and East Pakistan meant a 1000-mile flight over India, while sea communications necessitated a 5000-mile voyage around India. To block maritime reinforcement of East Pakistan, the Indian Navy established a distant blockade, using surface ships and aircraft from its carrier INS *Vikrant*.

The Pakistani high command hoped to use Chittagong, the principal port in East Pakistan, to bring in supplies from neighboring Burma (now Myanmar), using local trading craft. It also appears that Pakistanis wanted by the Mukti Bahini saw Chittagong as an escape route if Pakistan lost the war. To protect the port, the Pakistani Navy laid contact sea mines on a north-south axis, west of Chittagong. The field consisted of 94 moored contact mines in an area 30 miles long by 15 miles wide. The field was very porous but no less deadly.

The planned uses of Chittagong as a blockade-running port or a maritime escape route, failed. Indian naval aircraft and ships shut down the sea approaches to and from Chittagong. When the Pakistani Army in East Pakistan surrendered December 16, 1971, the new government of Bangladesh found the port of Chittagong blocked by mines. Having no navy, they turned to the Indian Navy to open Chittagong. They also asked the Indian Navy to open the mouth of the Pussur River, which had been closed by the Mukti Bahini, using mines supplied by India.

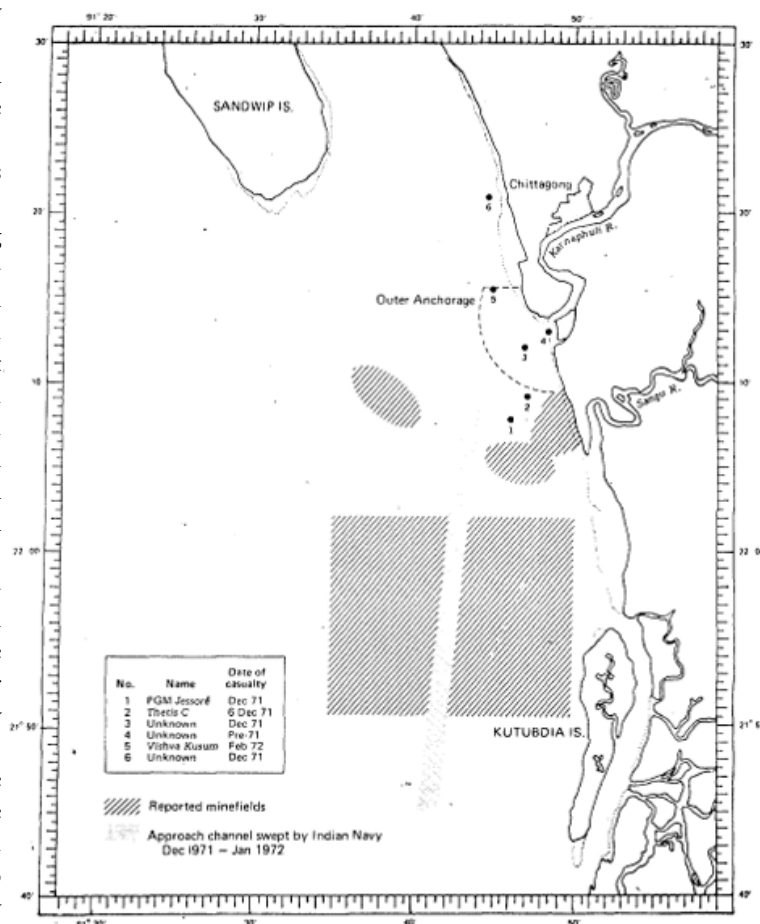
The Indian Navy had eight oceangoing mine sweepers divided between the Bay of Bengal and the Arabian Sea. INS *Bhatkal*, INS *Cannanore*, and INS *Bulsar* were in the Bay of Bengal. *Bhatkal* was undergoing regular maintenance, so only *Cannanore* and *Bulsar* were initially available to begin sweeping.

*Cannanore* and *Bulsar* were first assigned to open the Pussur River. With no other minesweepers available, the Indian Navy hired four small fishing trawlers and outfitted them as minesweepers to sweep the channel entrance to Chittagong. Between December 27, 1971, and January 2, 1972, these converted trawlers opened a channel into Chittagong by skirting the minefields. However, these

trawlers had cut only a few mines, and most of those cut had not risen to the surface but had drifted off underwater.

On January 25, 1972, the minesweepers *Cannanore*, *Bulsar*, and *Bhatkal* arrived off Chittagong and started to sweep the waters around that port. The waters cleared by the trawlers did not prove to be free of mines, for on February 5, 1972, the merchant ship MV *Vishwa Kusum* hit a drifting mine and on February 11, SS *Esso Ark* struck a drifting mine while approaching Chittagong; both ships were sunk. On February 13, INS *Bulsar* hit a mine while sweeping. Fortunately, the mine did not explode, although it damaged *Bulsar's* propellers. When it floated to the surface it was sunk by small arms. On February 26, 1972, the Indian Navy finally announced they had opened a mine-free channel, 26 miles long and 24 feet deep, from the sea into Chittagong.

The Indian Navy continued sweeping until June, seeking to clear all sea mines laid off Chittagong. However, ill feelings were building between India and Bangladesh over the inability of the Indian Navy to clear all the mines. Some in Bangladesh saw the continuing presence of the Indian Navy at Chittagong as a plot by India to seize that port. Thus it was with some relief that the Bangladesh government told the Indian Navy in July 1972 to cease sweeping and turn the operation over to the Soviet Pacific Fleet, who sent 22 Soviet mine sweepers, salvage ships, and support ships to clear the mines and rebuild the port facilities. Estimates of the minesweeping force ranged from four to nine "modern minesweepers." The minefields were swept within a



MINEFIELDS AND WRECKS IN APPROACHES TO CHITTAGONG



reasonable time, but salvage operations dragged on for two years, apparently due to limitations of Soviet salvage equipment.

In a post-war report to the United Nations, Bangladesh reported the Indian Navy swept 18 mines off Chittagong, the Soviets, two. Six were found ashore, and three exploded against ships. Thus, 26 of the 94 mines Pakistani mines were accounted for. The other 68 mines are assumed either sunk or or to have accounted for various fishing boats that have disappeared without trace within the area.

As a side note, according to Admiral Kohli, the Indian government brought the 6-inch gun batteries protecting Bombay to war standards during this conflict, while Vice Admiral Hiranandani reports that in 1974 an SSN 2A (Styx) missile system from one of the eight *Osa*-class missile patrol boats bought from the Soviet Union in 1969 was installed ashore at Bombay. It is unclear whether the Styx replaced the 6-inch guns or merely reinforced them.

#### Bibliography

- Hiranandani, Vice Adm G.M. *Transition to Triumph – Indian Navy 1965-1975*. New Delhi: Spantech & Lancer, 1999.
- Kohli, Adm Suren N. *We Dare – Maritime Operations in the 1971 Indo-Pak War*. New Delhi: Lancer International, 1989.
- Krishnan, Vice Adm N. *No Way But Surrender – War in the Bay of Bengal*. New Delhi: Vikas, 1980.
- Pakistan Naval History Section. *Sentinels of the Sea – Pakistan Navy 1947 – 1997*. Pakistan Ministry of Information, 1997.
- Pakistan Naval History Section. *The Story of the Pakistan Navy*. Pakistan Ministry of Information, 1991.
- Peterson, Charles C.. “The Soviet Port-Clearing Operation in Bangladesh, March 1972-December 1973,” Professional Paper No. 123. Arlington, VA: Center for Naval Analysis, 1974. <http://www.cna.org/documents/5500012300.pdf>.
- Polmar, Norman. *The Naval Institute Guide to the Soviet Navy*, 5th ed. Annapolis: USNIP, 1991, p. 44.
- Roy, Vice Adm Mihir K. *War in the Indian Ocean*. New Delhi: Lancer International, 1995.
- Sridharan, R Adm K. *A Maritime History of India*. New Delhi: Indian Ministry of Information, 1982.

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### Death off Nauru

Charles H. Bogart

Nauru is an island in Micronesian South Pacific, just west of the Gilbert Islands at 32°S & 166°E, with an area of 21 square kilometers. Annexed by Germany in 1888 for its phosphate deposits, Nauru was captured by the Australian Army in 1914, and in 1919 became a League of Nations mandate administered by Australia. In compliance with the League's mandate, Australia did not fortify the island.

War returned to Nauru on December 6, 1940, when the island was attacked by German merchant raiders Komet and Orion, accompanied by the tanker Kulmerland. The raiders sank five cargo ships off Nauru. On December 27, Komet returned and bombarded the island's port and mining equipment. With the departure of the German ships, the Australians moved field artillery onto Nauru.(1)

The island was bombed by Japanese aircraft on December 9, 1941, at the start of Japan's Pacific offensive. During December, the Japanese seized the Gilbert Islands as a forward defense line but did little to fortify the islands. The Australians, unable to resupply Nauru, decided to evacuate the island in February 1942. Only the raid on Makin Island by portions of the American 2nd Marine Raiders in August 1942, motivated the Japanese to garrison these islands in strength. On August 25, 1942, the Japanese occupied Nauru with one company detached from the 43rd Guard Force (Palau). In October 1942, the 111th Encampment Corps was sent to the Carolinas to fortify them and nearby islands, including Nauru.

By January 1943, Japanese strength on Nauru increased to 500 officers and men, split evenly between construction workers and naval personnel, and work began on defensive fortifications and an airfield. In February 1943, Nauru was placed under 3rd Special Base Force, headquartered on Betio, and received more men and equipment, becoming home to the 67th Guard Force. It appears that with the arrival of the 67th Guard Force, two 6-inch coast defense guns, plus light and heavy antiaircraft guns, were moved to the island, and Japanese strength increased to 5000 men.

In November 1944, U.S. Navy and Army Air Force planes began to strike the Gilberts and surrounding islands. On November 20, the 2nd Marine Division captured Betio after four days of hard fighting. Meanwhile, U.S. Navy aircraft attacked to neutralize Nauru's airfield. The U.S. Army's 27th Infantry Division was tasked with capturing Nauru, but Admiral Nimitz, commanding in the Central Pacific, considered the casualties on Betio and decided to bypass Nauru.

On December 8, 1944, Nauru was attacked by aircraft from the carriers *Bunker Hill* and *Monterey*. In addition, five battleships and 12 destroyers bombarded the island, firing 810 sixteen-inch and over 3400 five-inch shells on December 8. Among the destroyers participating was USS *Boyd* (DD-544), commanded by Cdr. Ulysses S. Grant Sharp Jr.(2) The ships suffered no return fire, but four American planes were lost to antiaircraft fire over the island. When a raft was spotted floating near the southwest corner of Nauru, *Boyd* was tasked with investigating the raft and retrieving any downed flyer in or around the raft. *Boyd* closed on the raft but discovered no one in the raft or in the water.

As *Boyd* turned to leave, she was taken under fire by two Japanese 6-inch coastal guns that had remained silent during the naval bombardment. The first two shells were on target, and *Boyd* was hit in the forward starboard stack and on the starboard hull below the waterline. The shell that pierced the hull exploded in the forward fireroom, killing one officer and 15 men and destroying that engine room and the main electrical board. This led to a loss of power to the main gun directory and, as a result, *Boyd* was unable to reply to the gunfire. Cdr Sharp ordered maximum power from the surviving engine room and began a high-speed weaving withdrawal. Japanese shells continued to strike around *Boyd*, but she was not hit again as she ran for the open sea. The Japanese ceased firing when *Boyd* reached six miles from Nauru. *Boyd* made it safely to Pearl Harbor for repairs, but 16 windows in the United States would have gold stars hung on them. On September 14, 1945, Captain Hiasyuki surrendered his 3,700 surviving sailors to the Australian Army.



## Notes

1. I can find no information on the number or type of field artillery gun(s) that the Australian Army sent to Nauru.
2. *Boyd* was a *Fletcher*-class destroyer. Commissioned May 8, 1943, she was sold to Turkey in 1969, and scrapped in 1981. Cdr Sharp rose to vice admiral and commanded the Pacific Theater during the Vietnam War. He died in 2001.

## Sources

Adrian, Capt. Robert. "The Great Escape." *The Tin Can Sailor*. April-June 2008.

McCarthy, Dudley. *Australia in the War of 1939-1945 – South-West Pacific Area First Year*. Canberra: Australian War Memorial, 1959.

Morison, Samuel E. *Aleutians, Gilberts and Marshalls*, Vol. VII in *History of US Navy in WWII*. Boston: Little, Brown & Company, 1975.

Roscoe, Theodore. *United States Destroyer Operations in WWII*. Annapolis: USNI, 1953.

Rottman, Gordon L. *WWII Pacific Island Guide*. Westport, CT: Greenwood, 2002.

Woodward, David. *The Secret Raiders*. New York: W.W. Norton & Co., 1955.

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## News of Defense Systems from around the World

Charles H. Bogart

All material is from open source documents.

### Turkey Seeking Missile Defense Shield

Turkey, seeking to purchase eight missile defense systems, is negotiating to purchase either the Russian S-300/400 SAM system or the U.S. Patriot SAM system. The first two SAM systems will guard Ankara by 2010, while the second two will defend Istanbul. The next two systems will be allocated to Ankara and the last two to Istanbul. The whole system is to be operational by 2012.

### India Orders More Coast Defense SSM

The Indian Army has ordered an additional 100 BrahMos cruise missiles. Although BrahMos is primarily an anti-ship missile, it can also engage land targets. The joint Russian/Indian cruise missile has a range of 290 km, a 300 kg warhead, and a top speed of Mach 2.8. Some three times faster than the U.S. Tomahawk SSM, it has only 60 percent of the payload and a fraction of the range, at an altitude of 10 meters. Kerala High-tech Industries is expanding its plant at Hyderabad to increase production to 50 BrahMos missiles per year. India uses both shore-based and ship-based configurations, and in 2009 will test the missile on a SU-30 MKI Flanker-H multi-role warplane. India plans to purchase 1,000 BrahMos missiles and sell 2,000 to friendly nations.

More recently, India and Russia have announced a joint venture to produce the BrahMos-2, a surface-to-surface anti-ship cruise missile. The sea and land-based version will have Mach-5 speed and a range of 200 miles at an altitude of 30 feet, with a 660-pound warhead.

### U.S. Navy SSM Defense Exercise

In July 2008, the U.S. Navy conducted exercises in the Mediterranean Sea and Persian Gulf, defending against simulated SSM and ASM attacks from Iran, Syria, and Lebanon. The navy's defensive weapon of choice is the Aegis radar coupled to the RIM-161A SAM missile, generally referred to as the Standard Missile 3 (SM-3). At present, the SM-3 has had a 90-percent success rate in destroying target SSM and ASM missiles. Based on the SM-2, it is a four-stage missile with a range of 500 km and a maximum altitude of 160 km. The first two stages boost the SM-3 out of the atmosphere; the third stage fires twice to direct the SM-3 toward its target. The fourth stage is a 9 kg LEAP kill vehicle, which uses infrared sensors to locate and ram the target. Throughout its course, the SM-3 uses an internal GPS system to correct its flight path. The U.S. Navy will have 18 Aegis-equipped ships capable of firing the SM-3 in January 2009, and the Japanese Navy will have four.

### Kuwait Upgrading Its Anti-Missile Defense.

Kuwait is upgrading its Patriot PAC-2 SAM system to the PAC-3 anti-missile version for defense against Iran. The PAC-2 is effective against aircraft at up to 70 km, while the PAC-3 is effective against SSM and ASM missiles to 20 km. It is not clear whether all the present Kuwait PAC-2 batteries will be converted to PAC-3 or if Kuwait will field a mixture of the two missile systems. Each PAC-2 battalion has three to six batteries, each with four launchers. A PAC launcher holds four PAC-2 missiles or 16 PAC-3 missiles. The smaller PAC-3 missile was first used during the Gulf War, knocking down eight of the eleven ballistic missiles fired by Iraq at Kuwait.

### Iran Claims New Coast Defense SSM

Iran claims that it has test fired a new coast defense missile with a range of 300 km. The weapon is said to be a new design developed by Iran using Iranian technology and manufacturing capability. Iran stated that these missiles are to be mounted ashore in the Strait of Hormuz, and they will close the Strait to all shipping if attacked.

### People's Republic of China

The People's Republic of China is fortifying the Shandong Peninsula to control the waters between China and North Korea, Korea Bay, and Bo Hai. A number of S-300 and HQ-9 SAM batteries have been set up in the area. China is also building a site for its new S-300PMU2 air defense system. It is further reported that a number of Silkworm SSM are emplaced along the peninsula's shoreline, in addition to J-8 and J-11 fighters and Xian H-6 bombers deployed on the peninsula. The J-11 are armed with the PL-12 ASM anti-ship missile.

Rumors continue that China has equipped its DF-21 ballistic missile with a high explosive warhead to attack U.S. carriers up to

1,800 km from its coast. The DF-21 is based on the U.S. Army's Pershing missile. China acquired part of a Pershing missile and stole drawings of the missile, and has thus been able to produce a clone of this weapon system. The Pershing in U.S. service had a reported 30-meter circular error. Reportedly, the driving force behind the U.S. Navy's Aegis ships is to have an anti-missile defense system capable of defending against the DF-21. Many, however, doubt the DF-21's carrier killing ability, as a carrier can relocate itself anywhere within a four square mile area during the two-minute flight time of the DF-21.

China has increased its presence within the Paracel Islands. Not only have they built an 8,200-foot runway, a protected ship anchorage with a 1,600-foot dock, an ELINT facility, and a radar-warning network, but they have also introduced man-portable anti-shiping and anti-aircraft missiles.

#### **Russian Tu-160 Bombers Visit Venezuela**

From September 10-18, 2008, two Russian Tu-160 (Blackjack) nuclear-capable bombers visited Venezuela, equipped with dummy X-555 Mach-2 cruise missiles that have a range of 200 miles. The Tu-160 can fly at 1,380 mph and can loiter over the Caribbean Sea for 10 or more hours at cruising speed. At present, the United States has no missile that can take down a Tu-160, as both the army Patriot PAC-3 and navy SM-3 are configured for anti-missile defense. Some defense specialists maintain the deployment of the two Tu-160 bombers to Venezuela has shown that the United States needs to re-establish anti-aircraft capability along its southern coastline.

Meanwhile, Venezuela continues to spend its petroleum dollars upgrading its military. Ten long-range JYL-1 surveillance radars have been purchased from China; three already cover Venezuela's oil fields and refinery complex. All ten radars are expected to be in service by 2013, covering Venezuelan air space. Venezuela is also purchasing 20 Russian TOR-M1 anti-aircraft/cruise-missile air defense systems.

#### **Iran Takes Delivery of Tor-M1 SAM System from Russia**

Russia has announced the sale of 29 Tor-M1 air-defense missile systems to Iran, with instructors in operating and maintaining the system. The Tor-M1 is being positioned to defend against attacks by U.S. aircraft.

#### **Sri Lanka Coast Defense Radar**

On September 9, newly installed coastal air search radar supplied to Sri Lanka by India picked up two unidentified aircraft. Sri Lankan Air Force F-7 fighters shot down one of two separatist LTTE single-engine aircraft. News accounts differ as to the purpose of the LTTE flight, and it is not known whether the aircraft were bombers or transports.

#### **Republic of China**

In October 2008, the United States announced that it would sell 330 Patriot Advanced Capability (PAC-3) SAMs to the Republic of China (RoC) instead of the 384 missiles requested. American had originally proposed to sell six RoC PAC-3 batteries, but this was reduced to four batteries. This means RoC will not be able to provide a complete shield against the People's

Republic of China's 1,300 Dong Feng DF-11 and DF-15 surface-to-surface missiles.

#### **North Korea**

On October 7, 2008, North Korea successfully test fired two KN-02 (Styx) surface-to-surface anti-ship missiles into the Yellow Sea, as part of a coast defense exercise. North Korea is presently constructing KN-02 missile batteries on its east and west coasts.

#### **Israel & United States**

The United States has deployed a high-powered AN/TPY-2 X-band radar to Israel along with supporting staff and equipment. The Raytheon radar unit is considered a transportable radar surveillance/forward based unit (FBX-T). It will help Israel defend against missile attacks, providing early warning of a missile strike and passing this information on to Israeli missile-interceptor units. The Israeli system is also linked to an American joint tactical ground station (JTAGS), which will receive and process threat data for transition to US Space Command via satellite. It is thought that the X-band radar will not only warn of an attack but also serve as part of the testing of Iron Dome, a short-range anti-missile interceptor, and Davids Sling, a medium-range missile-interceptor, two systems that are to become operational in 2013.

#### **Russia**

In 2001, the Russian missile-defense mission was removed from the Strategic Missile Force and assigned to the Space Force. At the same time, the National Air-Defense System was abolished and all its anti-aircraft systems were placed under the Russian Air Force. The Russian military has now concluded that the present separate air and missile defense commands need to be a joint command. Putin has issued a directive stating that by 2016 Russia is to have a comprehensive aerospace defense system capable of defending Russia's borders from an attack from any direction. In order to comply with this directive, new radars are being placed to protect the sea flanks of Russia and its western and southern borders.

Russia has reportedly sold S-300 PMU long-range SAM systems to a number of countries. The system, designed to defend against fighter-bombers, bombers, and cruise missiles, can simultaneously track up to 100 targets and engage 12. Russia has sold 25 batteries to Iran, 20 to China, 8 to Algeria, and 2 each to Vietnam and Cyprus.

#### **Russia & Belarus**

On November 2, Russia and Belarus set up a joint anti-aircraft and missile defense system that integrates the two countries' surveillance and fire control radars and their associated guns and missiles into one defense system. As part of this agreement, Russia will supply Belarus with both S-300 (SA-10) and Tor M-1 (SA-15) anti-aircraft and anti-missile SAM systems as a shield against attack by NATO.

**Georgia vs. Russia**

Russia's attack on Georgia in September 2008 inflicted a major defeat on the Georgia military. However, Russia's victory was not without cost. In 2007, Georgia purchased three batteries of SA-11 SAM missiles from Ukraine. The Russian Air Force proved surprisingly unable to electronically suppress these SA-11 batteries, losing eight aircraft: four Su-25 "Frogfoot" close air-support aircraft, two Su-24 "Fencer" fighters, one Tu-22 "Blinder" supersonic bomber, and one Mi24 "Hind" assault helicopter to these Russian-designed missiles.

Unable to afford a blue water navy, Georgia opted for a coast defense navy to guard its shores. During the September 2008 Russian attack on Georgia, this coast defense navy was virtually destroyed by the Russian Navy. Some reports speak of eight patrol craft sunk or destroyed. However, it is also reported that before being sunk, one of these ships hit the Russian *Slava*-class cruiser *Moskva*, causing a small fire.

A footnote: As a result of the Russian attack on Georgia, that country's air defense radar system is now tied into NATO's air defense command surveillance system.

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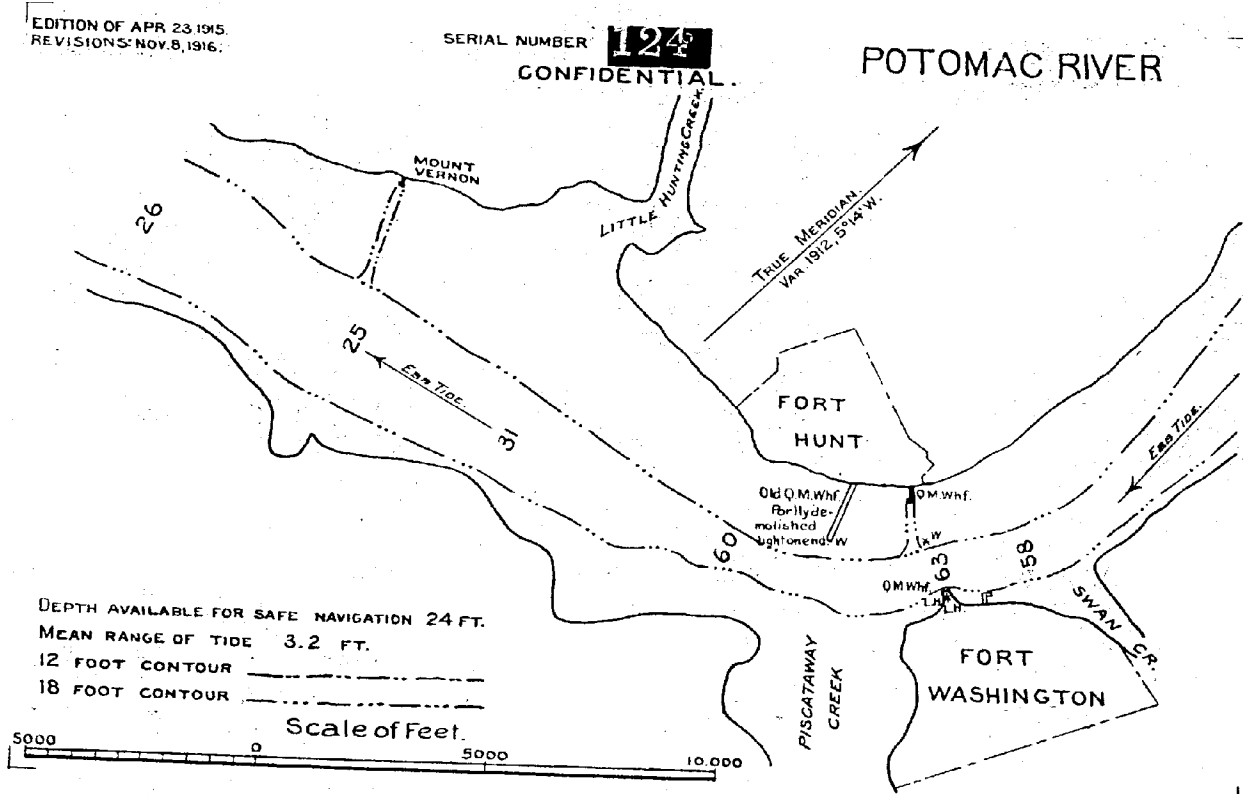
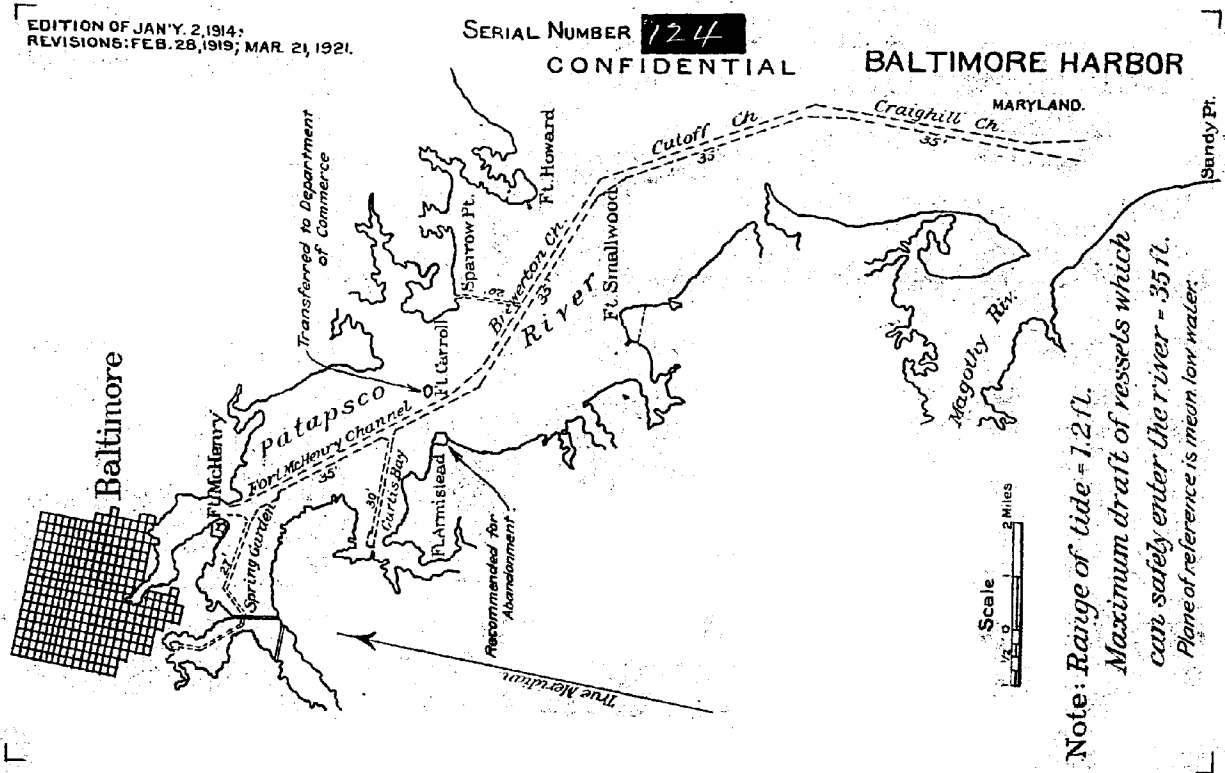
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