



August 2012



Hail Christopher Vargo!

The USS NORTH CAROLINA Battleship Commission announces the appointment of Chris Vargo as Assistant Director of the Battleship. As second in command to the Executive Director, Vargo will manage the day-to-day operations of the Ship and hold the responsibilities for activities of the Maintenance Department to preserve, restore, repair and exhibit the Battleship.

This multi-faceted position includes supervision; technical engineering; paraprofessional, curatorial, and administrative work in the management, repair, restoration, display and operation of our unique facility.

LCDR Chris Vargo served as Chief of the Inspections Division at the U.S. Coast Guard's Sector North Carolina. His responsibilities included ensuring that over 140 certificated passenger and cargo vessels and over 20 regulated waterfront facilities complied with security and safety regulations designed to protect U.S. ports and our

citizens. Additionally, he oversaw the screening and safety and security examinations of approximately 900 foreign commercial

“Chris joins the staff at a critical time. As hull repairs, overnight camping and other major renovations for the Ship are executing or in the planning stage, Chris’ education, experience and focus on safety make him uniquely qualified to take on the challenging role. He is a welcome addition to the staff.”

**CAPT Terry Bragg
Executive Director**

cargo ships that visit North Carolina each year. He ensured proper federal oversight of all hazardous cargo operations within Sector North Carolina, including explosive cargo transfers at one of the nation's largest Department of Defense ammunition depots.

Vargo enlisted in the Coast Guard in 1990 and achieved the rank of Chief Electricians Mate before earning a commission in May 2000 through the Coast Guard's Officer Candidate School. His

afloat tours include service in the Deck Department in USCGC WOODRUSH (Sitka, AK), as an Electrician in USCGC DILIGENCE (Wilmington, NC), and as the Chief Electrician in USCGC VIGILANT (Cape Canaveral, FL).

Ashore, he served as the Executive Officer and Chief of Prevention at Marine Safety Unit Wilmington, NC, as the Military Aide

to the Coast Guard's Atlantic Area Commander in Portsmouth, VA, as the Chief of Prevention and Senior Investigating Officer at Marine Safety Unit Huntington, WV, as a project manager in the Short Range Aids to Navigation Directorate at Coast Guard Headquarters, Washington, DC, and as the Electrical Shop Supervisor at the Coast Guard's Group Hampton Roads in Portsmouth, VA.

(Continued on page 14)

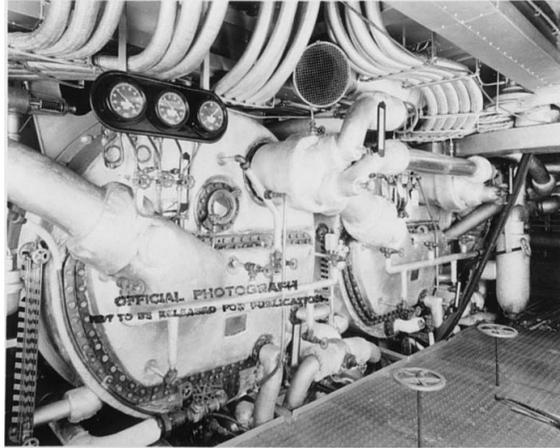
Making Fresh Water at Sea: The Foster Wheeler Evaporators

Surrounded by salt water, the Battleship needed fresh water for daily operations. The Ship's evaporator units ran almost constantly converting salt water to distilled fresh water for the engine boilers and potable water for daily use (drinking, cooking, bathing, medical, washing dishes and laundry).

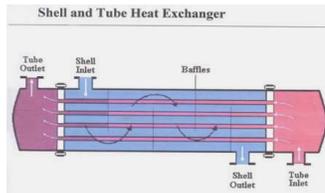
The Battleship's main evaporators are located in the Evaporator and Distiller Room on the second platform just forward of the No. 1 Machinery Room. The evaporators occupy a space that is separated into upper and lower levels. A floor made of metal grating allows free access to the pipes that pass between the two levels. Each Foster-Wheeler Triple Effect Evaporator was designed to produce between 40,000 and 52,000 gallons of fresh water per day.

How Does It Work?

The system uses shell and tube heat exchangers in which one medium (water/vapor/steam) passes through the shell and another medium passed through the tubes. The two mediums do not mix, but heat transfers through the tube walls. The hotter medium becomes cooler and the



cooler medium becomes hotter. The amount of heat exchange is a function of flow rates and tube surface area.

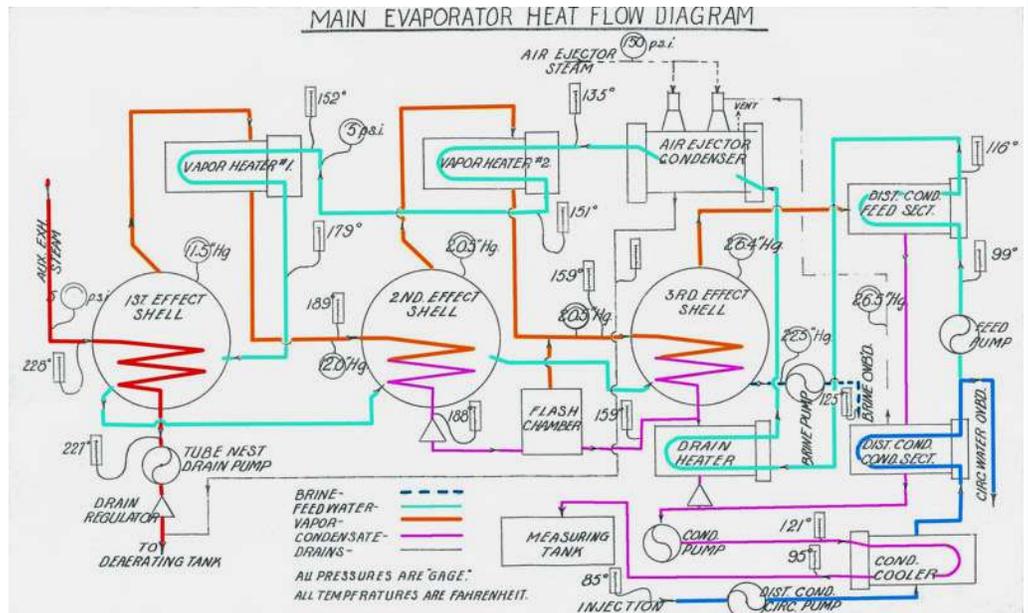


This is a complex machine. To simplify the explanation, I have broken it down into four processes: Heating, Cooling, Evaporator Feed, and Distillation. After the 1st Effect, the water vapor is condensed to make fresh water leaving brine which has an increasing concentration of salt as the fresh water is re-

moved. Eventually the brine is pumped over-board.

The keys to continuous fresh water production are low temperature, keeping the evaporator tubes immersed to minimize scale formation and not removing too much fresh water from the brine. As the brine becomes more concentrated with salt/minerals, a scale forms on the tubes of the heat exchangers and reduces their effectiveness.

Cornstarch and boiler compound were added to reduce the scale, allowing the system to operate longer between shut downs for tube cleaning. Our system produced about 1/3 fresh water and 2/3 brine from the Evaporator Feed.

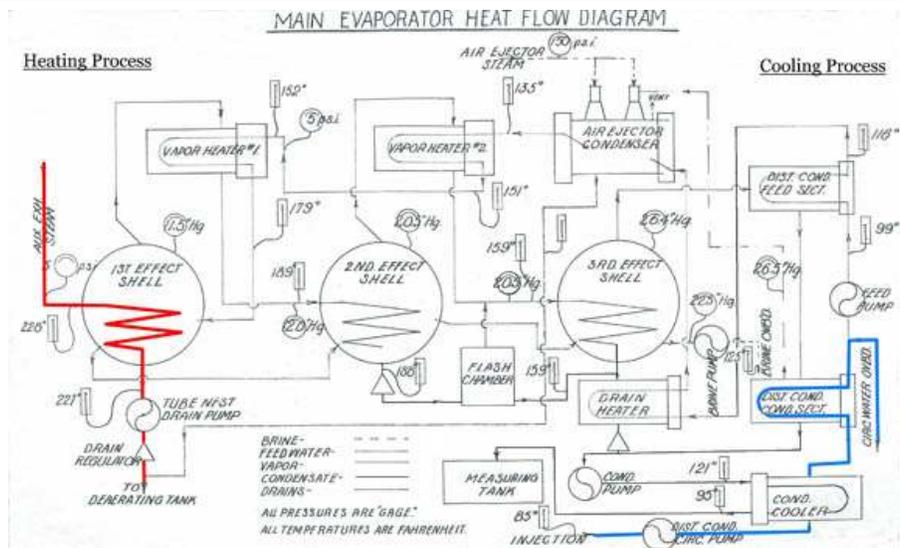


Hand drawn diagram found in the evaporator compartment. The colors have been added.

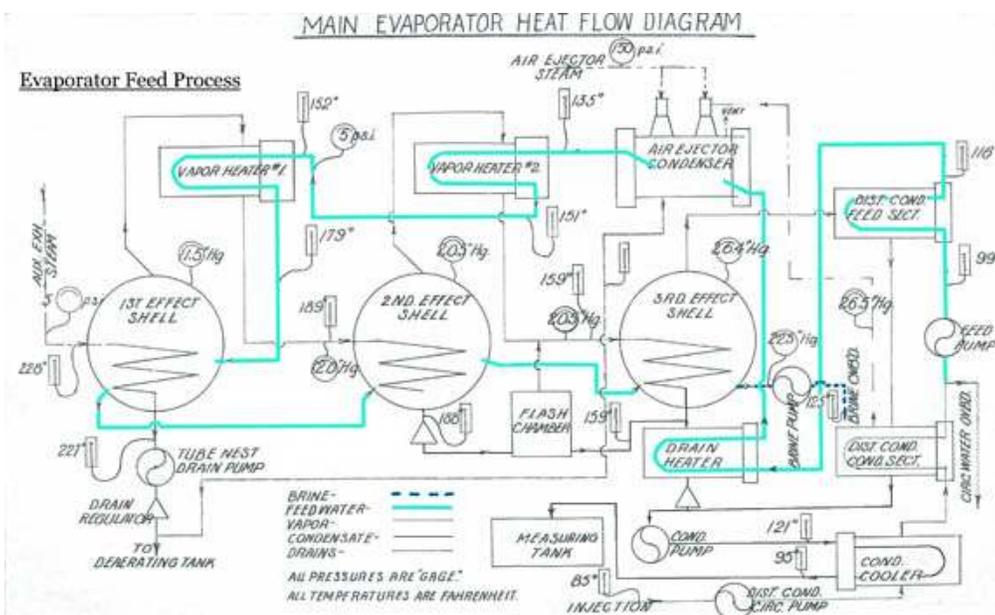
The Heating Process

Waste steam from the engine boilers (228 deg F) passes through the tube nest of the 1st Effect Evaporator. A portion of the evaporator feed water is boiled and enters the 1st Effect Shell at 179 deg F. The waste steam and any condensate is drained to a pump on the lower level where it is pumped back into the boiler feed water system. This water contains contaminants from the engines and is only used to supply heat at the start of the distillation process.

The Cooling Process



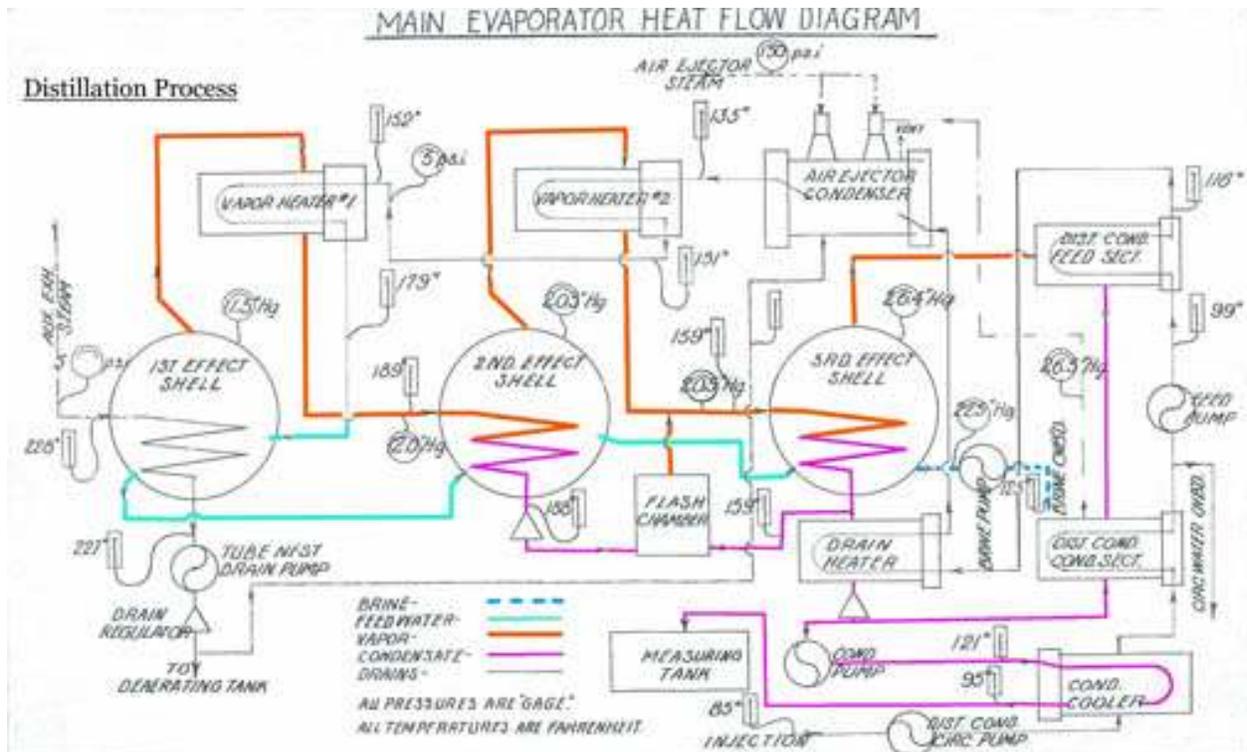
Seawater enters at 10.6 gallons per second (GPS) or 38,000 GPH through a suction sea chest in the bottom of the ship. That flow is passed through the shell of the Distillate Cooler and the shell of the Condenser Section of the Distilling Condenser. This great flow of water reduces the hot distillate product of the process from 121 deg F to 95 deg F. Eighty Five percent (85%) of the seawater intake is then pumped overboard through the overboard sea chest.



The Evaporator Feed Process

The remaining seawater (6327 GPH/1.75 GPS) is called Evaporator Feed (Feed) and it passes through a series of five heat exchangers. The heat exchangers use the distillation processes water vapor to heat the Feed to 179 deg F. The Feed passes through the tubes of the feed section of the Distillate Condenser and the Drain Heater's shell. This flow raises the Evaporator's Feed's temperature to 124 deg F.

The Feed passes through the Air Ejector Condenser where waste steam from the Air Ejectors heats the Feed to 139 deg F. Then the Feed passes through the tubes of the 1st and 2nd Effect Vapor Heaters which heat it to 179 deg F. It passes into the 1st Effect Evaporator shell. A portion of the Feed boils off in each effect and the remainder moves onward. As the water vapor is boiled away the salt in the Feed becomes more concentrated. At the end of the process the concentrated Evaporator Feed (called brine) is pumped overboard.



The Distillation Process

The Evaporator Feed enters the shell of the First Effect Evaporator where it passes around a tube nest containing waste steam from the engine room boilers (228 deg F). It heats the Feed enough to produce fresh, clean water vapor. This vapor at 189 deg F (11% of the Feed) passes through the shell of Vapor Heater #1 where it heats the incoming feed water. The waste steam is piped back to the boiler feed system since it contains contaminants from the engine room and is not fit for consumption or potable use.

The vapor (189 deg F.) then passes into the Second Effect Evaporator tube nest where it heats the remaining Feed. In the Second Effect, the air pressure is reduced so that the water boils at a lower temperature (150 deg F.). The Second Effect works just like the First Effect. About 11% of the

Second Effect Feed becomes water vapor.

The water vapor at 159 deg F passes through the shell of Vapor Heater #2 where it heats the incoming feed water. The vapor passes into the Third Effect tube nest at 159 deg F. This vapor is augmented with vapor coming from the Flash Tank where Feed has been turned to water vapor by passing it into an expansion tank. The reduced pressure in the Flash Tank allows some of it to flash (vaporize).

The air pressure is reduced in the Third Effect Evaporator enough for the Feed to boil at an even lower temperature (100 deg F.). The Feed passes around the Third Effect tube nest and about 16% becomes water vapor. The remainder of the Evaporator Feed contains a high concentration of salt and minerals. It's called *brine* and is pumped overboard.

CREW MEMORIES

I was transferred to the evaporators for eight months under "Fresh Water" Pearson who was really rough on me. Watches were stood in underwear shorts and sweat made for salt sores. I was able to get out of the evaps by teaching Lt. Kircher, our Division officer, how the evaps worked. He needed the knowledge as part of his job and I needed out of there.
Frank Haas

I had never realized what luxury fresh water could be. Naturally, the capacity of the "evaps" was not infinite, and so fresh water discipline was strictly enforced by limiting water accessibility to limited periods called "water hours."
Bill Faulkner

The water vapor (product of the boiling process in all three Effect Evaporators) exits the upper shell of the 3rd Effect Evaporator at approximately 121 deg F. It is cooled and condensed by passing it through:

1. The Distillate Condenser Condensing Section
2. The Distillate Condenser Feed Section
3. The Distillate Cooler

These heat exchangers condense the water vapor to distillate en route to the fresh water measuring tank and the fresh water pumps. The heat exchangers also reduce the distillate from 121 deg F. to 95 deg F. while at the same time raising the temperature of the 85 degree seawater feed to 116 deg F. The effectiveness of the last two heat exchangers is due to the high flow of 85 degree seawater that is passing through their shells.

Distillate from the Third Effect Evaporator tube nest



TOP:
1st and 2nd Effect
Evaporators



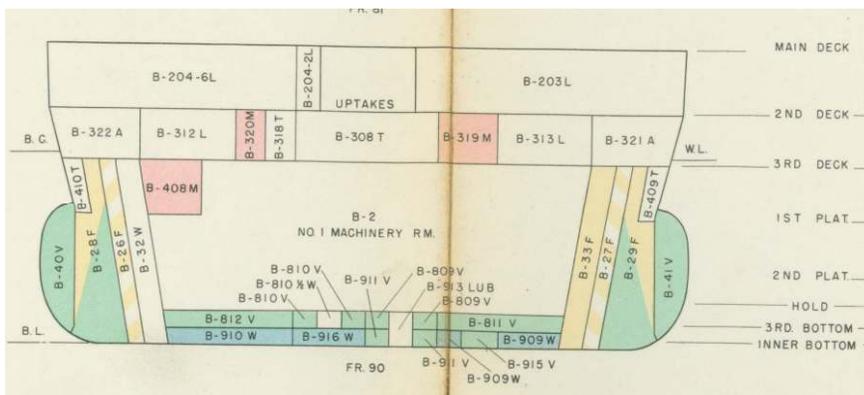
BOTTOM:
3rd Effect Evaporator

passes through the Drain Heater. This process reduces the temperature to 121 deg F. This fresh water then joins the rest of the distillate going through the Distillate Cooler to the fresh water measuring tank and fresh water pumps.

Summary

In this article's scenario about **10.6** gallons per second of seawater entered the Ship. Nine **(9)** gallons per second was used to cool the distillate and was then pumped overboard. The remaining **1.6** gallons per second formed the Evaporator Feed. After passing through all three Effect Evaporators, the system produced **.6** gallons per second of fresh water and the remaining brine was pumped overboard. In round numbers, about 6% of the original seawater feed (33% of the Evaporator Feed) became fresh water.

Ken Rittenmeyer



Reserve boiler feed water and potable water (shown in blue) were stored just beneath the evaporators and engine rooms. This arrangement kept the Ship's fresh water supply close to the main fresh water consumer, the boilers. In an emergency the potable water could be tapped into to keep the boilers running.

Flow Through the Foster Wheeler Evaporators

Seawater

	Tubes/Area	Exit Temperature
Suction Sea Chest		85 deg F
Distiller Circulating Pump		85 deg F
Distillate Cooler	110/72 sq ft	86 deg F
Distillate Condenser—Condenser Section	200/400 sq ft	103 deg F
Evaporator Feed Pump		103 deg F
Distillate Cooler—Feed Heating Section	84/151 sq ft	116 deg F
Drain Heater	112/165 sq ft	124 deg F
Ejector after Condenser	76/50 sq ft	139 deg F
Vapor Heater #2	50/100 sq ft	152 deg F
Vapor Heater #1	50/100 sq ft	179 deg F
1st Effect Evaporator	436/399 sq ft	
2nd Effect Evaporator	436/399 sq ft	
3rd Effect Evaporator	436/399 sq ft	
Brine Overboard Pump		
Discharge Sea Chest		

Distillate/Vapor

	Tubes/Area	Exit Temperature
1st Effect Evaporator		189 deg F
Vapor Heater #1	50/100 sq ft	189 deg F
2nd Effect Evaporator	436/399 sq ft	159 deg F
Vapor Heater #2 / Flash Tank	50/100 sq ft	159 deg F
3rd Effect Evaporator	436/399 sq ft	121 deg F
Drain Heater/Dist Condenser-Feed Section	112/165 sq ft 84/151 sq ft	121 deg F
Dist Condenser-Condenser Section	200/400 sq ft	121 deg F
Distillate Condensate Pump		121 deg F
Distillate Cooler	110/72 sq ft	95 deg F
Fresh Water Test/Measuring Tank		

U. S. S. NORTH CAROLINA
HULL DEPARTMENT
DAILY (1000) REPORT OF FRESH WATER

Date: _____ 19__

TANK INVENTORY RECORD					
TANK	INPS	CAPACITY	VEGETABLE	RECEIVES	TOTAL
5-301W	8076	9500			
5-301W	8748	6450			
5-301W	9999	6500			
5-301W	9699	9500			
5-301W	17285	17000			
5-301W	17169	16750			
5-301W	15683	18500			
5-301W	17333	17300			
5-301W	12959	12800			
5-301W	15123	13400			
5-301W	12497	12300			
5-301W	12247	11700			
TOTALS	163,761	159,500			

* To conform with Navy Yard New York Fuel No. 885-291888.
† Emergency Fresh Water Yards, only to be used upon specific authority of the Commanding Officer.

METER RECORD			
METER	LOCATION	READINGS	
		TODAY	YESTERDAY
1	W.R. A-105-L, Ex. Off. Cabin, S.C.'s 101 to 104, and others (HW & CW)		
2	W.R. Passby & Above (HW & CW)		
3	Crew's W.R. & W.C. (P) B-214-L (HW)		
4	Crew's W.R. & W.C. (P) B-214-L (CW)		
5	Crew's W.R. & W.C. (S) B-207-3L (HW)		
6	Crew's W.R. & W.C. (S) B-207-3L (CW)		
7	Bakery, Crew's Galley, Butcher Shop, Potato Peeler (HW & CW)		
8	Crew's W.R. & W.C. C-206-2L & C-206-3L, Barber Shop (C-206-4L) (HW & CW)		
9	Laundry (P) (CW)		
10	Laundry (P) (HW)		
11	Scullery, After Steam Tables, After Crew's Mess (HW & CW)		
12	Crew's W.R. & W.C. (P) B-214-4L (HW)		
13	Crew's W.R. & W.C. (P) B-214-4L (CW)		
14	C.P.O. W.R. & W.C. (P) B-206-4L (HW)		
15	C.P.O. W.R. & W.C. (P) B-206-4L (CW)		
16	C.P.O. Pantry (CW)		
17	Officers' Galley (HW)		
18	Officers' Galley (CW)		
19	Warrant Officers' Pantry (HW)		
20	Warrant Officers' Pantry (CW)		
21	Miss Attendants' W.R. (HW)		
22	Miss Attendants' W.R. (CW)		
23	Crew's W.R. (S) A-315-L (HW & CW)		
TOTAL			
Evaporator Room — Evaporator Mess			
Evaporator Room — Cook Meter			

The Hull Department kept a close watch on daily fresh water use. Any location that used too much water was reported to the First Lieutenant and corrections were made.

Service to a National Treasure



As you have read in the *Scuttlebutt*, the Battleship *North Carolina* is blessed with an active and vibrant volunteer community. The

Friends of the Battleship are a vital part of this community. We are asking for your help identifying talented and motivated candidates for the Friends of the Battleship Board of Directors for the 2012-2013 term.

There are many reasons people volunteer their time and energy. The Battleship is an irreplaceable state and national treasure. The ship stands as the state's memorial to the ten thousand North Carolinians who gave their lives to the cause of freedom during World War II. The ship also serves as a testimony to thousands of North Carolinians who answered the state's call to save this ship in 1960. Many of you reading this article were school children who

sacrificed their lunch money to save the ship.

Many volunteers find fulfillment in the fellowship and camaraderie working with a like-minded group. Volunteers give not only their time, but their hearts as well. Whether it is a restoration project, research or sharing with visitors to the ship, volunteering is a labor of love.

The Board is in particular need of people with talents or experience in fundraising, strategic planning, reviewing legal documents, accounting, and experience with non-profit organizations. There is always a need for individuals with passion and commitment.

What are the commitments for serving on the Board? The Board meets generally every six weeks. We usually meet for 2 to 3 hours in the Captain's Cabin on the 01 level. Board members are also active in restoration, development,

finance, web site design, recruiting members, and organizing Friends' events.

Candidates do not have to be a Wilmington local to serve. Many of our Board members commute from Raleigh or Charlotte.

Everyone reading this article has a connection to the Battleship *North Carolina* as a volunteer, Friends' member or other supporter. If you are not a Friends member, consider visiting the website and signing up! Memberships start at just \$35.00 for adults.

Take a few minutes to think of the people you know along with their talents and interests. Or you may be interested in serving on your Friends Board. To find out more or to submit a name for nomination, contact:

Frank Glossl, Chairman
Friends of the Battleship
North Carolina
PO Box 480
Wilmington, NC 28402
Phone: 910-251-5797 x2045
friends@battleshipnc.com

We would love to welcome you or a candidate of your choosing to the Board. I look forward to seeing you at our annual meeting in the fall.

John C. Whitley III
Past Chair

Armored Conning Tower Looks Ready for Action

For many years, the armored conning tower in the NORTH CAROLINA was inaccessible, with its foot-thick steel hatch closed and locked in place. Its equipment silently rusted, paint peeled off surfaces, power cables deteriorated, and bronze and brass fitting tarnished practically beyond recognition. Leaking water from the fire control tower above damaged the raised metal flooring and the cables snaking below it. A type-written order worn by time.

In August 2011, maintenance staffer Gary Piatak, opened a narrow access hatch from the Aux. Gyro Room directly below the conning tower, climbed through and figured out how to retract the hatch's blast-proof locking mechanism. He then was able to open the door using a manual crank-and-gear-mechanism. Once again, the conning tower could be entered from the passage way adjacent to and forward of the Admiral's quarters.

The conning tower is two decks below the pilot house and chart house. The fire control tower, forward of the Combat Information Center (CIC), is directly above the conning tower in the same cylindrical structure.

The armored conning tower was one of five locations

from which the ship could be steered: the pilot house, secondary conning in the forward mast, central station, the armored conning tower, and the steering gear room in the ship's stern.



The conning tower was to be used if the ship was under attack and it was too dangerous to continue using the pilot house. However, even when the NORTH CAROLINA and the carrier ENTERPRISE were attacked by some 40 Japanese planes in August 1942, no one left their place in the pilot house.

Certainly the passage of time negatively affected the space. But because it was closed for so many years, much of the equipment remained intact and only the stripping of old paint, polishing and new lighting was required to restore it to its original look.

Restoration Details

In early March, the "Admiral's Crew," a group of volunteers who worked on the restoration of the Admiral's Quarters, began to restore the conning tower.



What Remains in the Conning Tower

Bronze steering column (although the steering wheel is missing), with red battle lights
 Engine order telegraph transmitter and double rudder angle indicator
 Bearing indicator
 Two gyro-compass repeaters
 Radar repeater
 Speed and distance repeater
 Three telegraph keys (for remote operation from Radio Central)
 Radio phone unit
 Two periscopes
 AC to DC rectifiers to provide several hundred DC volt power to the fire control tower
 Pneumatic tube to convey messages to/from Radio Central
 Two TBS (talk between ships) radios were removed, as were sound-powered telephones, telegraph headsets, mechanical clocks, and an inclinometer.

First a lead paint removal company scraped and vacuumed the floors, walls, and ceiling. Then the walls, ceilings, and power cables were repainted. The steering column was disassembled, cleaned, and polished. Switches were color-coded in their original green, yellow, and red configurations.

Paint was stripped from the bronze periscopes, which were then polished to their original luster. Volunteers Larry Sackett, Roger Wood, George Burn, Ronnie Rhodes and Kent Atkins gave months of work to the restoration project.

The ship's electrician, Steve Lewis, ran new electrical power and installed marine cage-unit lighting, which looks as if it was done by the original shipyard. A single switch controls all the lighting. We can't thank Steve enough for all his hard work, which included crawling around among the power cables below the raised flooring.

The steel raised flooring panels were scraped and polished, ready for new linoleum that matches the original. The chart tables will be recovered as well. The three telegraph keys were restored and electronic sounder kits with speakers were assembled so that visitors can hear the telegraph keys in use. The chart and telegraph tables have been restored as have the chart lights above them. We've installed a 12-volt power supply so that all the



instruments can be back lit with LED lights. We will add a surround-sound system with looped recordings of naval gun battles so visitors can experience what the two officers and nine enlisted men heard when they were at battle stations in the conning tower. Later we will fabricate a replacement steering wheel.

The conning tower now looks very much like it did when the ship was commissioned in 1941. While the tower won't be opened to

the public, it will be used for private tours and fundraising events.

Much of the credit for the restoration goes to Captain Terry Bragg (Executive Director) and Terry Kuhn (Maintenance Director), who generously provided the funds and support for the work. Without them, the conning tower would still be dark, dirty, and unused.

Larry Sackett

Legacy Series: Blue and Gray NORTH CAROLINAS



Carolina Living History Guild members will share displays highlighting the history of the USS *North Carolina* and the CSS *North Carolina* during the American Civil War. Displays will include steam engineering, ironclad ship construction, navigation, small arms of the US and CS navies, and the “arts of the sailor.” Visitors will be able to view reproductions of period small arms and working models of steam engines, as well as many other items.

Saturday
August 11th
8 AM—4 PM
Visitor’s Center
Free with Admission
Battleship 101
August 11th

The final summer Battleship 101 concludes on Saturday, August 11th. Visit with volunteers stationed throughout the ship to learn about life and equipment aboard Battleship NORTH CAROLINA. Free with admission.



We visited on a Sunday morning at 8am in July and had the whole ship to ourselves. Our boys, 6 and 3...had a blast. It was the highlight of our trip. So many cool places to climb and explore and a volunteer who gave them shore leave passes with their names on them.

Trip Advisor
July 9, 2012

Living History Crew Onboard for July 4th

This year, between June 27 and July 8, nine members of the Battleship’s Living History Crew (LHC) served aboard the Battleship and interacted with thousands of visitors from many states and foreign countries.

Frank Glossl, Joseph Hood, James Weber and Andrew Whitley were stationed in the ship’s Combat Information Center, where they were kept busy explaining to visitors the vital role radar played in the ship’s defense. Andrew also spent time on the fantail explaining to visitors the role of V Division and the ship’s OS2U Kingfisher observation aircraft. Chris Harrison volunteered in Damage Control Central, describing to visitors how ship stayed afloat when it was torpedoed in September 1942. David Carpenter provided visitors with information on the ship’s weapons, and Clint Lewallen did some restoration work on the aft 40 mm mount.



Richard Perry and I (shown left) manned the Executive Officer’s Office. We explained the role that office played in managing the personnel records of the more than 2,000 sailors who served aboard. And we gave out 1,325 reproduction USS *North Carolina* liberty chits to visitors of all ages. They were a big hit as always.

Mike Resser

Thanks to our Friends

Members of the Friends of the Battleship as of July 31, 2012. Welcome new members and our returning supporters. Thank you everyone!

ADMIRAL

PPD Development

COMMODORE

K. Corey Keeble
Gregg Thomas and Tom Faust

CAPTAIN

Frank McNeil
Robert Ruffner, Clancy & Theys
Construction
Marvin Starner
John and Melinda Stewart

COMMANDER

John Arnold
Phil Baucom and Sharon Strickland
Betsy Blee
Peter and Karen Brown
William Collinson
Tom and Mimi Cunningham
George and Susan Currie
Ted and Rebecca Gragg
Eric Haines
Bill Herndon
Leslie G. Hollenbeck
Capt. Wilbur D. Jones, Jr., USN
(Ret.)
Newman and Debra Lindsay
McIntosh
Matthew and Danielle Miller
Richard Moore
William Phillips
Charles and Judy Pierce
Dick and Pat Renno
Glenn and Kecia Roseman
Bill and Diane Usher
Jay Weitzel
John C. Whitley
John Wright and Alice Campbell

LIEUTENANT COMMANDER

Robert and Brenda Abbotts
Carrie and Darren Alkins
Jane and Doug Anderson
Kent Atkins

Rodney Axsom
Rodger Aydelette
Dennis and Claudia Banks
Douglas and Karen Barr
Carlisle A. Bateman and Krista
Leeuwenburg
William Brooks and Sharon
Ambrose
David Carpenter
John J. Carter
Cortney Colby and Chris Martin
Capt. Tracy D. Connors, USN (Ret.)
Donald and Linda Daily
Daryl and Nancy Darby
Dave and Carol Derry
Jennifer Devlin and Doug Edge
Skip and Susan Dixon
Capt. Thomas Durant, USN (Ret.)
and Janet Durant
Vernon and Myra Etheridge
Ronald and Pat Fascher
Scott and Zoe Fields
Jason and April Fornes
Nathan and Michele Franko
Tim and Gina Garriss
John and Kristin Gawthrop
John F. and Kim Gottshall
Scott Hamilton and Mike Pennock
Chris Harrison
Egbert M. Herring, III
James and Rebecca Hill
Dennis and Jean Hoover
Dru and John Hopkins, III
Mark and Renee Howard
Penny Jeffers and Jaclyn Capwell
Aimee and Wesley Jones
Jimmy Jordan and Dale Jordan
Chad and Wendi Kittlaus
Michele Kong and Regina Ransom
Alexander and Cindy Koonce
John and Amy Lindsay
John Michael and JoAnne Luongo
Tom and Jennifer Maness
Willie E. McGee, Jr.
Sandy and Clara Monroe
William Monroe and Helen Thomas
Chuck and Cheryl Moore
Steve and Pat Moore
Anthony and Kara Norris
Virginia Oliver
Sarah and Kenneth Oxforth
COL and Mrs. Bruce Patterson

Ken and Fern Rabinowitz
Michelle and Larry Rasco
Pam and Chris Robbins
Mary Kay and Bob Rowe
Todd Sams
Philip Simon
Ben and Sharon Stanley
Larry C. Steffee
Kenneth Szommer and Cheri
Everett
Morgan and Tammy Tackett
Ray and Moroniah Talbot
JoAnn Turzer-Comnesso and
Anthony Comnesso
Dave and Joan Tuttle
Beth and Mike Thompson
Thad and Heather Tucker
Susan and Eric Van Tassel, M.D.
Bob and Lisa Venema
Elizabeth and Terry Weeks
Philip and Diane Wolfe
Jenny Wright and Richard Knight

LIEUTENANT

Darrell and Mary Adams
James and Valarie Algee
Walter G Allred, Jr. and Theresa
Ward
David Autry and Judy Lunceford
John and Mary Beth Bankson
Fala Beasley
Scott Bost and Beth Looney
Billie Boulton
Stuart and Lisa Brandt
Kelly and Michael Brosky
Norwood E. Bryan, Jr.
Jack and E Loraine Callaghan
Charles and Susan Mason Carter
Kenneth and Mary Caswell
Johanna Ceballos and Angela
Tompkins
Julia Chacey and Ted Gosstyla
David Cignotti
Chet and Ardan Ciner
Kay and Steve Clark
Steve and Margaret Collins
Susan Cook and Rich Stuart
Reva and George Cook
Billy and Susan Crocker
Bill Crocker
Jeffrey and Sherry DeLooze
Jennifer and Patrick Drea

Joy and Charles J. Dunlap, Jr.
 Joe and Barbara Duquette
 Randy J Egsegian
 Betty Jo Ellender
 William and Jessica Ellis
 Doug and Margi Erickson
 Eric Eschert
 Thomas R Falcone
 Thomas and Glynda Farmer
 Kate and Rob Ferguson
 Jerry and Donna Flake
 Paul and Sara Flusche
 Drake and Lisa Fox
 Gene and Anne Gallagher
 Frank and Nancie Giacalone
 Germaine and Christopher Glass
 Frank and Ann Glossl
 Jeff and Regina Gordon
 Kim and Rob Gordon
 Sandra and CDR Chuck Gore, USN
 (Ret.)
 John and Morgan Graves
 Fred J. Hall Jr.
 Gary and Rhonda Hall
 Helen and Sion Harrington
 Reg and Jo Ann Harris
 Ralph Harwood
 G. David Heath and Naomi Kleid
 Bill Hendley
 Dennis and Cynthia Hicks
 Robert and Elizabeth Jefferson
 Billy Karl and Connie Ross-Karl
 Patricia and Ken Levin, M.D.
 Larry and Muriel Malaby
 Raymond and Deborah Marquardt
 James and Barbara Marshall-Zank
 Candy and Bill Martin
 Grace Maynard and Worth
 Thompson
 James and Caden Merritt
 Daryl and Angela Millard
 Mark and Mildred Miller
 Victor and Margaret Millings
 Mike Morgan
 Harry Myers and Delma Heine
 Arthur and Anadi Nava
 Meghan Parker and Michael Sennett
 Billy Patterson
 Jonathan Payne
 Thomas Pelton II
 James and Mary Jean Peterman
 Jeff and Nancy Peterson
 Ronald and Carolyn Phelps
 James and Bo Plant
 Vernon and Gloria Porterfield

Mark and Amanda Powers
 David and Christine Renock
 Ronnie Rhodes
 Ken and Pat Rittenmeyer
 Rick and Lynn Rorie
 Marcos and Nathaniel Santana
 Arnold and Catherine Schultheis
 Dan Sheret and Mary Ames Booker
 Paul and Wendy Sidlofsky
 Shay and Monika Simpson
 Marion and Jim Simrill
 Don and Yvette Slawter
 J. Matthew and Lauren Slesman
 Tim and Amber Strunck
 Wilmer Taylor
 W. Robert and Anita Taylor
 Rachel and David Thompson
 Michael and Geriann Toback
 Joseph and Jennifer Toriello
 Christopher Upton
 Jim and Pat Ursic
 Devota and Terry Vereen
 Larry and Judy Vititoe
 Ray and Sue Vito
 Timothy and Susan Wells
 Raymond and Hannelore Williams
 Dr. Mark and J Williams
 Richard and Phyllis Wilson
 Fred and Linda Wood
 Mike Wortham
 Ray Wycoff
 Rick and Linda York

LIEUTENANT (JG)

Sam Abernathy
 Samuel Ashe
 Joseph Benedek Jr.
 Dan Bennett
 Father Mark Betti
 Major Lance Bevins
 Beverly Bloch
 Katherine Brantley
 Capt. Walter Bullard
 Robert Carnegie
 H. Royster Chamblee Jr.
 Daniel Clark
 Mark Cohen
 Thomas Edwards III
 Charles Emerson
 Chris Etheridge
 William Fiebig
 Andres Flores
 Charles Garnes
 Leon Goldstein
 Don Hall

Charles Hall Jr.
 Floy Hamilton
 Ann Helms
 David Hill
 Richard Johnson
 Kurt Lawson
 Don Loftin
 James Magee
 Pat Marriott
 Walter Martin
 Richard McGowan
 Jim McNeely
 Steven Meadows
 Mark Mereyde
 Ken Morris
 Peter Polk
 David Rawlins
 Richard Rennick
 Richard Riano
 Rick Rosati
 Timothy Sanford
 John Schneider
 E.A. Shands
 Robert Shelby
 Andrew Smith
 Nancy Stallings
 Robert Steinbrunn
 Jim Sweetwood
 Ralph Swift
 Peggy Taylor
 Stephen Thrasher
 Ralph Thurman
 Martha Ann Turner
 Alicia Vasilow
 Ronald Vogel
 R. Douglas Walton Jr.
 Thomas Walton
 Megan Weathers
 Andrew Whitley
 Christine Wightman
 Nelson Williams

CHIEF

Colton Alkins
 Jeb Brandt
 Ben Sidlofsky

Support the Friends of the Battleship

Sign me up for the following!

Levels	Price
<input type="checkbox"/> Chief	15.00
<input type="checkbox"/> Lieutenant (jg)	35.00
<input type="checkbox"/> Lieutenant	45.00
<input type="checkbox"/> Lt. Commander	75.00
<input type="checkbox"/> Commander: Select <input type="checkbox"/> A or <input type="checkbox"/> B	150.00
<input type="checkbox"/> Captain	300.00
<input type="checkbox"/> Commodore	500.00

Total: \$ _____

Name: First Adult

Name: Second Adult

Address:

City, State, Zip Code:

Phone:

Email:

- New Member Renewing Member
- Donation Only _____
- Gift Membership _____
name of gift giver

Method of Payment

- Check payable to Friends of the Battleship
- Visa Master Card

*Please call the Battleship with your
Visa or Master Card information.*

How did you hear about us?

- Web Program
- Facebook Other _____
- Friend _____

P.O. Box 480 • Wilmington, NC 28402
Phone: (910) 251-5797 Fax: (910) 251-5807
www.battleshipnc.com

MEMBERSHIP LEVELS

Chief **15.00**

Youths 12-18 years old
Youths under 16 must be accompanied by an adult

Lieutenant (jg) **35.00**

One adult

Lieutenant **45.00**

Two adults living in the same household

Lt. Commander **75.00**

2 adults living in the same household and
3 children or grandchildren under 18 years of age

Commander **150.00**

A) 2 adults living in the same household and
8 children or grandchildren under 18 years of age
OR

B) 2 adults living in the same household and
3 children or grandchildren under 18 years of age
and 5 one time visit guest tickets

Captain **300.00**

Lt. Commander benefits and private guided tour for
up to 15 guests who purchase \$10 tickets

Commodore **500.00**

Lt. Commander benefits and Private Hidden
Battleship Tour for up to 8 guests who purchase
\$10 tickets

Friends of the Battleship NORTH CAROLINA
is a 501(c)(3) charitable organization. All gifts are
fully tax deductible as allowed by law.

Tax ID #: 58-1074102

All Membership Levels Offer

- Unlimited admission for one year
- 25% discount in the ship's store—online and on site
- Discount for Lifelong Learning Programs

Online membership purchases and renewals coming soon!

BATTLESHIP NORTH CAROLINA

P.O. Box 480
Wilmington, North Carolina
28402
910-251-5797

www.battleshipnc.com

Executive Director
Captain Terry A. Bragg,
USN (Ret)

Assistant Director
LCDR Christopher Vargo,
USCG (Ret)

Business
Elizabeth Rollinson
Comptroller

Maintenance
Terry Kuhn
Maintenance Director

Ship's Store/Gift Shop
Leesa McFarlane
Retail Sales Director

Artifact donations,
collections research,
and volunteers
Kim Sincox
Museum Services Director

Advertising, Marketing,
Public Relations and
Filming
Heather Loftin
Promotions Director

Teacher and school
information, rentals and
special functions
Danielle Wallace
Programs Director

School/Group reservations
or general information
Shelly Robinson
Public Affairs Assistant

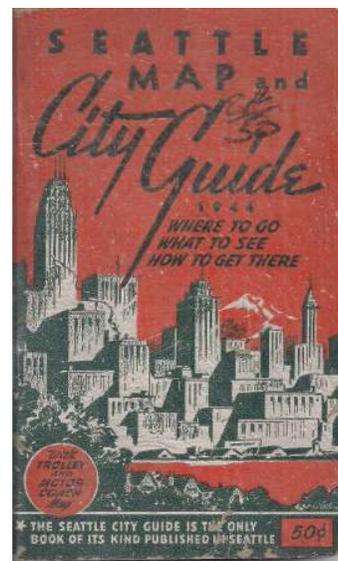
Collections Highlights-New Donations

Pith helmet featuring the Battleship's campaigns and battles chronicled in pen. Robert Morgan donated a prized possession that belonged to his uncle, Chief Boatswain Mate Thomas Wayne Dillingham. He served on BB55 from 1941– May 1945.



Oak, wall mounted cabinet from the Armored Cruiser NORTH CAROLINA. It is marked "Warrant Officers / Room 2 / WT 23 LBS / USS North Carolina." Donated by retired U.S. Navy Warrant officer, Kirk Binning.

Convoy, May 1918. Published onboard the Armored Cruiser NORTH CAROLINA as she made a voyage across the Atlantic during WWI.



A Seattle Map and City Guide, 1944, from crew member Charles M. Paty. The Battleship was in the Bremerton Navy Yard in the fall of 1944 for updates and maintenance.

Crew member Lloyd Glick donated his dog tags and U.S. Navy identification card.



(Continued from page 1)

Vargo is a native of Erie, Pennsylvania. He earned a Bachelor of Science Degree in Management in 2006 and an Associate of Arts Degree in Electronics Technology in 1999, both from the University of Phoenix. His military decorations include the Coast Guard Commendation Medal (four awards), Coast Guard Achievement Medal (three awards), the Commandant's Letter of Commendation, the Humanitarian Service Medal (two awards), the Armed Forces Expeditionary Medal, the Coast Guard Sea Service Ribbon, and the permanent Marine Safety Professional Insignia.

