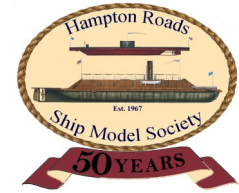


Hampton Roads Ship Model Society

Logbook!

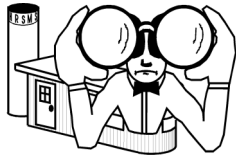


No. 400

WWW.HRSMS.ORG

October, 2019

From The Bridge



Mystery Photo



Captain's Log 10.12.19

There is an event coming up on October 17th at 2pm at the Mariners' Museum well worth attending. Rich Carlstedt will present his build of the working 1/16 scale steam engine from the USS Monitor. I spoke with him the other day from his home in Wisconsin, and he sounds like a very interesting and engaging fellow. After visiting his website, I decided that this is a demonstration not to be missed. He has produced a book of his engineering and research. He wishes to make it available, a very generous gesture.

I don't care what you have to do to get out of work, chores or the house, get to the Mariners' Museum on Thursday, October 17th at 2pm.

Here is a link to the Mariners' announcement of the event:

https://www.marinersmuseum.org/event/rich-carlstedt-and-the-ultimate-uss-monitor-steam-engine-model/?mc_cid=f387cb8ee1&mc_eid=c30db97f1a

See you there,

Dear Leader

THE ANSWER

The answer to Mystery Photo 399:

USS Worcester (CL-144)
Off San Juan, Puerto Rico, circa 1949-51.
A HO3S helicopter is flying overhead.

MEETING NOTICE

Date: Saturday October 12, 2019

Place: Mariners' Museum

Time: 1000 Hours

Mystery Photo #399: Think of something as simple as the manual transmission. Fifty years ago they were pretty dominant in the automotive market. At that time, the automatic transmission was still sort of strictly in the domain of the higher end vehicles. Yeah, you could get it in the lower end models but it was considered an option. Today the automatic is so mainstream that you have to really look hard to get a manually equipped vehicle, and that includes your big semi-trucks.

The age of automation—we're in it. We are starting to see machines that perform all sort of tasking. In fact, we no longer call it automation. Today, we refer to the phenomenon of machine controlled processes as autonomous, robotics, or mechatronics. Fancy words to describe how the machines are doing our work for us so we can be free to go out and protest.

For all you purists and enthusiasts out there, we can report that the automatic gearbox, in planetary form, is just a little over a hundred years old. The first mass-produced and practical automatic transmission for the automobile was introduced in 1939. Prior to that, mechanized objects required manual intervention to perform their tasking. When you consider the ships of old, they could require anywhere from a few to many hundreds of trained operatives to make them work and function as intended. For naval ships we can see that the compliment increase greatly. Old sailing ship of the line used upwards of a thousand able, and not so able, bodied seamen to man the guns and trim the sails. Prior to World War Two, while the vessels had changed from wood to steel and the propulsion from sail to steam driven propeller, the compliments were larger still as the components of the vessel were still largely manually operated.

Now let's look just at naval gunnery:

For years, the gun itself was primitive. Prior to the Civil War, hand loading powder, wad, and shot through the muzzle of a smooth-bore barrel was state of the art. This loading method covered the full gamut of ordnance. As time marched on, we began to see changes to these weapons in the form of breech loading, cased ammunition, and rifling. Loading and aiming lagged behind and remained a manual process up until the late 19th to early 20th century. A crew served weapon was an accurate phrase. Yes, some mechanization was starting to happen as gun and shell weights exceeded man's ability to muscle the weapons around. Had the aircraft not come along drastically increasing the speed of engagements and causing

(Continued on page 2)

Modeler of the Month

October 2019

Bob Moritz



I was born and raised in Somerset, New Jersey, farm country at that time. Hobby shops were nowhere to be found. So my modeling start was when I was able to ride my bike by myself to town about 10 miles away. That is when I discovered my first hobby shop (local drug store). Not much there but some plastic plane kits by Monogram and ship kits by Revell. I don't know why, but the ship model kits fascinated me. So I have built ship models ever since. Basically World War II era ships. I continued building models until I left home in my twenties then took about a ten year break to get my career in computers going.

I got introduced in my thirties to 1/1250 waterline models. I was hooked back into modeling once again but this time I collected the waterline models and started to build 1/700 and 1/350 plastic model ships. I have about 400 waterline models now in my collection. Also have constructed a workshop and display area in my cellar. The plastic models gave way to resin and wooden models in the past 16 years. The resin models are my favorite. During this time period I joined the IPMS club in Richmond and learned a great deal about painting, using an airbrush, sanding, what types of glue to use, proper way to use and apply decals and many other skills all on plastic models. I now apply these skills to resin. It was great but I wanted to do more in wood and resin. That's where HRSMS comes in. People in this group taught me skills needed to work in wood. Now I'm building wooden ship kits. The latest kit finished is the Baltimore Clipper Alexander Hamilton. Resin hull with wooden masts and yard-arms. And I recently started on the Armed Virginia Sloop by Model Shipways. My favorite time period for sailing vessels is 1812, but I still model WW II ships and am almost done with a 1/200 scale model of the USS Wisconsin BB-64 in post WWII configuration.

I want to thank the members of HRSMS for all the encouragement and advice they have given me since I joined the club.

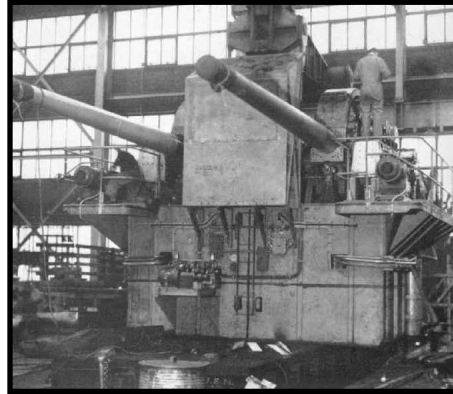
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requirements for high aiming and rapid fire, we might not have seen much change to the paradigm.

Ordnance in warships was always a mixed affair.

Prior to the introduction of aircraft, naval warfighters focused almost solely on horizontal, linear engagements. We



152 mm/47DP Mk.16 in the shop,

shot at them and they shot at us. As firing distances opened to beyond point blank range, gunnery became more of a hit or miss affair, with shot usually falling more in the miss column rather than registering a hit. Instead of maneuvering and patiently waiting to

close the enemy for a broadside, gunners had to deal with

increased distance and the motion of their ship, the motion of the enemy's vessel, atmospheric, and weather before firing repeatedly to achieve a hit. A warship's "big" guns began to be fitted to turret-like, trainable mounts while secondary armament was still fitted casemate style along the side of the hull. Crude and rudimentary aiming devices were created, complex equations were performed to obtain a firing solution, and hits were still rare but they did happen. For example, as late as the Spanish American War the rate of hits to misses was extremely dismal for the U.S. Navy. Quoting a report: "During the engagement the Brooklyn fired 473 five inch shells, of which it appears...that 15 took effect, making a percentage of about 3. The Iowa fired 251 four inch shells, with a total of 13 hits, making a percentage of about 5." Warship design was evolving but it was still nothing to brag over when compared with modern practice.

So that is where the leadership and brains of the U.S. Navy found themselves early in World War Two. Yes, improvements in gunnery had rapidly increased the chance of achieving a hit on the enemy and confidence was high that these hits would happen. Radar was making its arrival along with things like the 5-inch, 38 dual purpose rapid fire rifle, and the proximity fuse. But the threat from the air was increasing faster than efforts to defend from it. While big caliber gun duels were still envisioned as the major form of surface engagement with the enemy, defense from aircraft could not be ignored. More guns and men were added to these ships to the point of them resembling pin cushions. Since ships were still largely manually oper-

(Continued on page 3)

Special thanks go to Gene Berger, Bill Altice, Tim Woods, Ryland Craze, John Cheevers and Bill Clarke for their help and crazy road trips we had to the National Archives to do research and IPMS Nationals. Thanks to all

Bob Moritz

What's Happening at the Museum

I have to begin in the past tense this month because, well, one of the most significant and interesting events has already occurred! 'Course most of us couldn't have attended anyway! The International Congress of Maritime Museums (ICMM) recently wrapped up its 2019 Congress in Sweden. Two of the most appreciated speakers, according to much positive feedback, were our own V.P., Lyles Forbes and our Prez and CEO, Howard Hoege III! Their presentations, centered on making a maritime museum sustainable, were considered informative, very positive and well received. No surprises there. Some years ago the conference and attendant symposia were held at our Museum and it was the most interesting and engaging event I've ever been a small part of. My favorite presenter and the Director of the *Wasa Museet* in Stockholm, Mareka Heden, graciously spent nearly an hour with me discussing the conservation of the famous warship. These congresses and presentations are usually and necessarily more about the business of operating and administering a maritime museum than about the artifacts and experiences of a maritime culture but the venues...! The *Wasa* was involved as well as other significant locations. Well, it was clearly a feather in our cap and an experience worth setting aside time for.

Next up... Ever wonder how USS Monitor's amazing main steam engine worked? Underwater? Or why John Ericsson is considered an engineering genius? Mark your calendars for a special guest lecture by national award-winning model maker and engineer Ricard "Rich" Carlstedt. The leading expert on Ericsson's engine, Carlstedt has spent years researching and studying this remarkable machine. In addition, he has created the most accurate model of the engine ever made and it actually works! He will operate the model after his talk and answer questions. This, whether or you're an engineer or a rowboat captain, promises to be an awesome presentation!! Punch up this link,

<https://www.marinersmuseum.org/event/rich-carlstedt-and-the-ultimate-uss-monitor-steam-engine-model/>

to learn more and see the scale engine Carlstedt built. He'll be here October 17th at 2:00 and his presentation is free to members. All others just pay admission and take a seat! By the way, he credits our own, now deceased, Bernie Denny for guidance and skill development!

That's it for this month. Holidays are around the corner. More about wreaths on lions and Christmas on the *Monitor* next month!

Ron Lewis

Nautical Term

Idler Now called a dayman, a crewmember that does not stand sea watches, such as various artificers and yeomen. The term was probably jocular, for the people who had "all night in."

Tim Wood

AMERICAN NAVAL HISTORY 1821

January 21: The schooner Lynx sails from St. Mary's Georgia, for the West Indies and disappears en route. She probably wrecked on Carysfort Reef, Florida.

May 17-25: Four French slavers are captured off the mouth of the River Gallinas on the west coast of Africa by the schooner Alligator.

October 16: The brig Enterprise discovers 4 pirate schooners and a sloop in the act of plundering 3 American merchantmen off Cape San Antonio, Cuba. The pirates set fire to 2 of their vessels and attempt to escape on the others but all are captured.

October 29: The pirate schooner Moscow is captured off the coast of Santo Domingo by the sloop Hornet.

November 5: The schooner Alligator is fired on by the Portuguese warship Marianno Flora in the central Atlantic. The Marianno Flora is captured after an action of one hour and twenty minutes.

November 8: The schooner Porpoise destroys a pirate vessel off Cape San Antonio, Cuba.

December 21: A pirate schooner is burned by the brig Enterprise near Cape San Antonio, Cuba and also lands a party that destroys the pirate base ashore.

1821 Ends with no further actions.

Bob Moritz

(Continued from page 2)



ated in every respect, cramming more on board quickly used up their reserve weight margins. Something had to be done.

It's been noted that more scientific innovation came out of World War Two than in just any other definable unit of time. There's nothing like a war to drive technology and to remove budgetary restraints from the designer's tool kit. And that's the impetus behind the vessel masquerading in the month's Mystery Photo.

The United States entered into the combat phase of World War Two on 7 December, 1941. You all know that. But, unofficially, the United States entered into what became World War Two several years earlier when they embarked on many rearming programs for the military—do you all remember Roosevelt's Two-Ocean Navy Act? Also known as the Vinson-Walsh Act, the law was enacted on 19 July, 1940, and drove the largest naval procurement bill in U.S. history, it increased the size of the U.S. Navy by 70 percent. The Act authorized: 18 aircraft carriers, 2 Iowa class battleships, 5 Montana class battleships, 6 Alaska class cruisers, 27 cruisers, 115 destroyers, 43

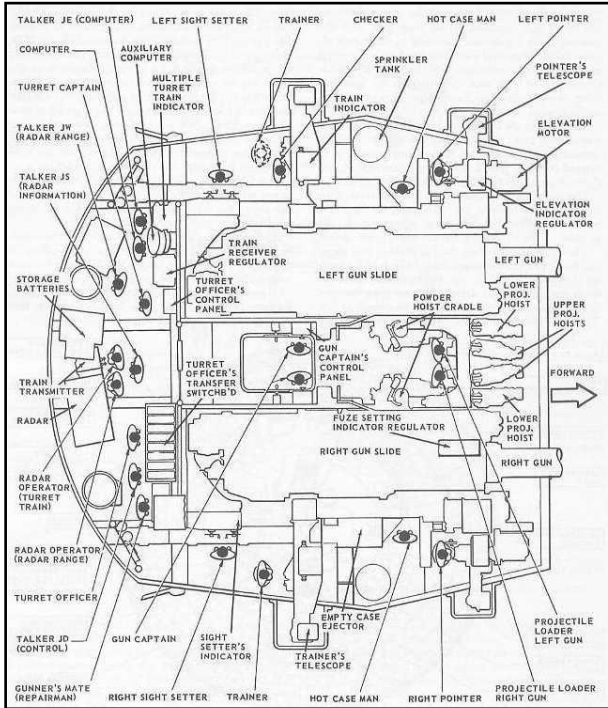
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submarines, 15,000 aircraft, 100,000 tons for auxiliary ship conversion, and 300 million in facilities and other upgrades. It's interesting to note (in view of today's dysfunctional Congress) that the law only required one hour of floor debate before it was voted on and passed 316-0.

So the money was there and prior treaty obligations could be discarded to give the designers a free hand to design the



6"/47 Turret

“ultimate” version of many warship types based on the technology at their disposal and the current understanding of warfighting. However, since many designs had their origins in the political climate just prior to Vinson-Walsh and were mature and under construction, more were just ordered and built. But, if you've read anything at all about US Navy ship types from the war period, you will see that the “cruisers” were perhaps the most serious compromised designs of the lot. They were seri-

ously overweight or out of growth margin from almost the beginning of their service, at a time when space and weight reserve was needed to allow for more equipment (like radar) and self-defense armament.

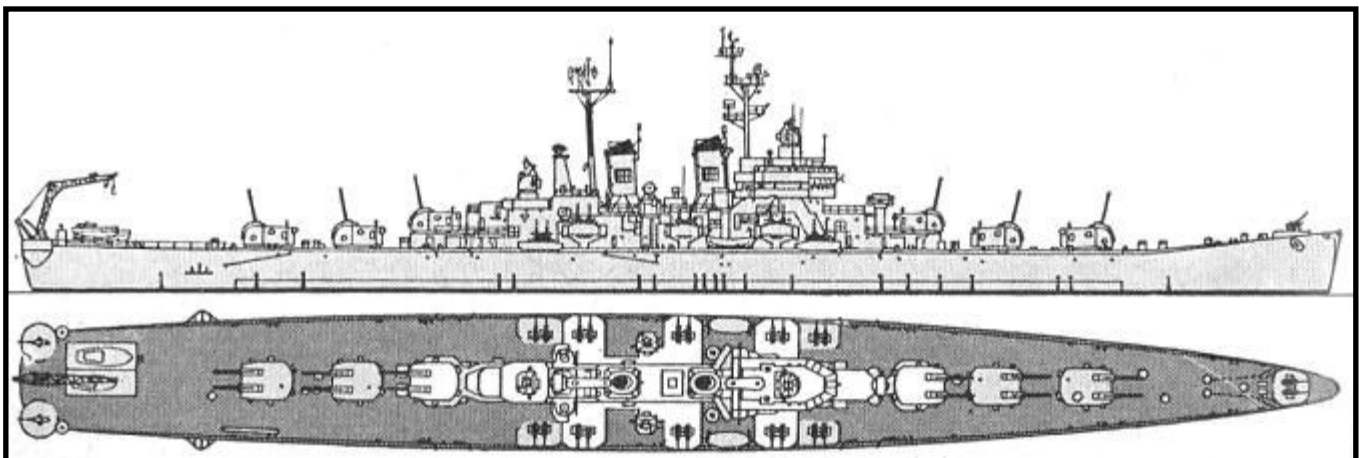
The origin of the vessel in this Mystery Photo dates back to 1937 when it was realized that on the treaty limited displacement for light cruisers a solution was needed in order to provide adequate surface firepower as well as adequate armament that could be used for anti-aircraft defense. What designers did was take the existing 6-inch/47 caliber Mark 16 gun as was being used in the current Cleveland and Brooklyn class and design a mount with automated shell handling and loading equipment. The resulting gun mount proved to be too heavy for that hull and development languished. Some activity followed when the designers shopped around for another home for the weapon. Since it would not fit into the existing weight-limited



USS Worcester (CL-144) Testing her anti-nuclear radiation "washdown" system, 7 July 1954.

cruiser hull, and attempt was made to have it mounted on the new Montana class battleship. That attempt failed when The Bureau of Ordnance's own study showed that the 5"/38 and 5"/54 designs were better choices. The project languished when

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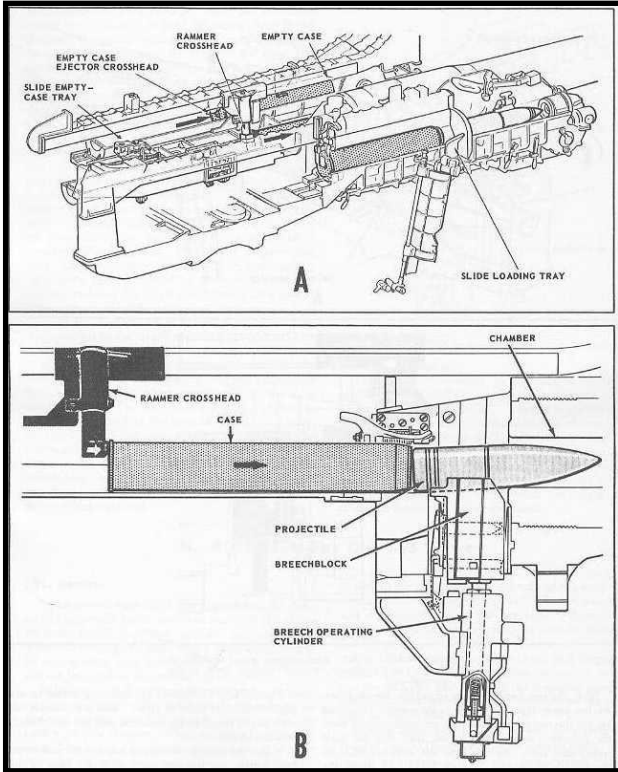


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war needs drove existing designs as a means of getting hulls to sea quickly.

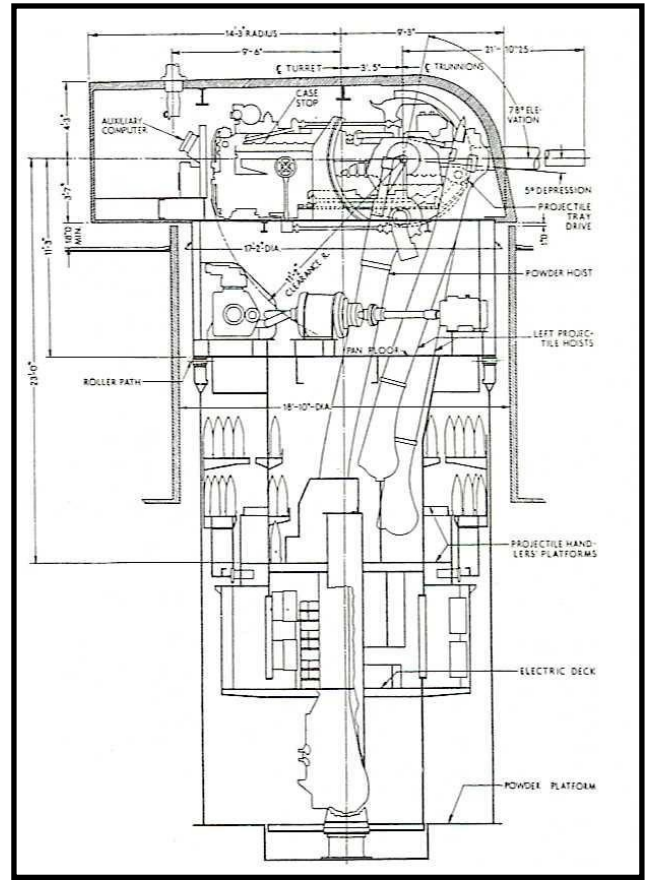
When it was clear that the weight problem of the light cruisers would not be resolved and it was increasingly clear that a larger weapon was need to combat new emerging aircraft threats, that “free hand” took over and a new, larger design was produced to accommodate the 6-inch, Mark 16 dual purpose weapon. The ship’s design was ready by 1943 and two hulls were laid down in 1945. Of the six planned for the class only four were named and only the two laid down were completed.



6”/47 Dual-purpose gun

Tim Wood sent in the sole reply and he identifies the vessel as USS Worcester, CL-144, and he places the image off San Juan, Puerto Rico sometime between 1949 and 1951. The ship was virtually brand new then having been commissioned in 1948. In the photograph was see the vessel is being escorted by a helicopter, perhaps one from the ship itself. The helicopter is a version of the HOS3 which is the Navy version of the Air Force Sikorski H-5. Prototypes were first flown in 1943 (you smart cats can go back into MP library and see what vessel was the naval testbed for this machine) and it became operational in 1945. That area at the stern of the cruiser where you see ship’s boats and a crane had a hanger built into the hull.

The shape of the hull itself is interesting in how it was optimized for construction. This design carried an external armor belt. Since armor came in flat plates, if you look at the lines you will see a pronounced knuckle below the waterline. Above the knuckle, in way of the armor, the frames are vertical to accommodate mounting the plating. This ship also featured an



6”/47 turret section

external wash-down capability to help rinse off nuclear fallout. After that, you see a pretty standard design for the time from the naval design office.

The gun proved to be somewhat problematic. One of the contributing issues was that they used a dual projectile hoist system - one for AP and one for HC/AA shells - which proved to be a source of jamming. Another issue might have been a combination of the automatic loader and the high angle of fire combined with the high rate of fire. Whatever the reasons are, the twin automatic 6-inch (152 mm) guns never achieved fire rates of more 9-10 rpm verses the design rate of 12.

Her DANFS entry chronicles her career, some of it appears here: “Worcester was laid down on 29 January 1945 at Camden, New Jersey, by the New York Shipbuilding and Drydock Corp., and launched on 4 February 1947. Sponsored by Gloria Ann Sullivan, the daughter of Mayor F. G. Sullivan of Worcester, Massachusetts, she was commissioned at the Philadelphia Naval Shipyard on 26 June 1948, with Captain T. B. Dugan in command.”

Following shakedown, training and some short cruises, “Worcester operated off the eastern seaboard, ranging from Newport to Norfolk and south to Puerto Rico, with visits in between to Philadelphia, before she began her second 6th Fleet deployment in the spring of 1950.” Perhaps this was when the Mystery Photo was taken. Tim already provided the photo’s caption, but I would like to add that the image was captured as

(Continued on page 8)

2019 Picnic



The Cook and the Chef



John Cheevers says it was this big.



Marilyn Berger and Greg Harrington working on the chow line..



Social hour before the feed.



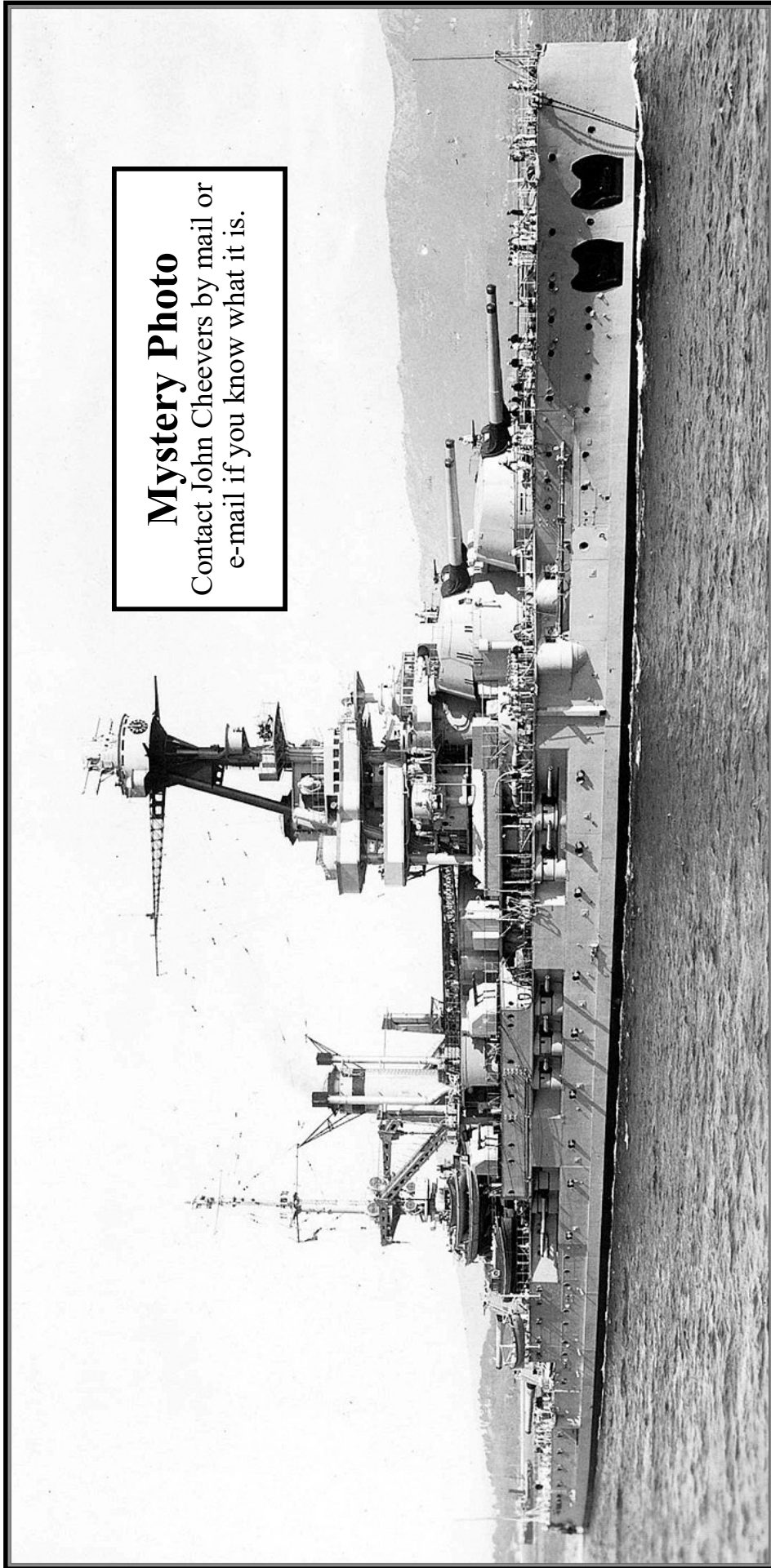
More tales are told.



Some of our ladies.

Mystery Photo

Contact John Cheevers by mail or e-mail if you know what it is.



NOTABLE EVENTS

OCTOBER

- 12 **HRSMS** Monthly Meeting: Mariners' Museum
Presentation, John Cheevers, Creating a Compelling
Impression

NOVEMBER

- 9 **HRSMS** Monthly Meeting: Mariners' Museum
Presentation, Karol Budniak ---Making paper models look
like wood

DECEMBER

- 14 **HRSMS** Monthly Meeting: Mariners' Museum
Presentation:

JANUARY

- 11 **HRSMS** Monthly Meeting: Mariners' Museum
Nomination of officers

FEBRUARY

- 8 **HRSMS** Monthly Meeting: Mariners' Museum
Election of officers

MARCH

- 14 **HRSMS** Monthly Meeting:

APRIL

- 11 **HRSMS** Monthly Meeting: Mariners' Museum

MAY

- 9 **HRSMS** Monthly Meeting: Mariners' Museum

JUNE

- 13 **HRSMS** Monthly Meeting: Mariners' Museum

JULY

- 11 **HRSMS** Monthly Meeting: Mariners' Museum

AUGUST

- 8 **HRSMS** Monthly Meeting: Mariners' Museum
Presentation, TBA

SEPTEMBER

- 12 **HRSMS** Monthly Meeting
19 Talk Like a Pirate Day

WATCH, QUARTER AND STATION BILL



Skipper: Gene Berger (757) 850-4407
Mate: John Cheevers
Purser: Ryland Craze (804) 739-8804
Clerk: Tom Saunders (757) 850-0580
Historian: Tim Wood (757) 481-6018
Editors: John Cheevers (757) 591-8955
Bill Clarke (757) 868-6809
Tom Saunders (757) 850-0580

Webmaster: Greg Harrington (757) 218-5368
Photographer: Marty Gromovsky

MINUTES



Hampton Roads Ship Model Society
Monthly Meeting
September 14, 2019
Newport News Park

The meeting was called to order by Mate, John Cheevers at 1130 hours. A motion was made to defer all business until the October meeting. The motion was passed and the meeting was adjourned to the picnic activities.

(Continued from page 5)



Worcester was leaving the Bay of Sau Juan. If you go to Google maps and pull up the aerial of San Juan, Puerto Rico, you can browse street view images taken from the Castillo San Felipe del Morro. Play with this a bit and you can put yourself in almost the same spot where the photographer stood almost 70 years ago. Perhaps he even stood in the sentry box located in the same general vicinity.

Worcester was large and modern and roomy compared to her preceding class and was active for over ten years. But "On 2 September 1958, Worcester departed Long Beach and steamed for the Mare Island Naval Shipyard to commence the inactivation process. She was decommissioned at Mare Island on 19 December 1958 and simultaneously placed in reserve. Worcester was subsequently berthed at San Francisco and, later, at Bremerton, Washington, before she was struck from the Navy list on 1 December 1970. She was sold to Zidell Explorations, Inc., of Portland, Oregon, for disposal on 5 July 1972. The light cruiser, that never had a chance to prove herself in her designed role, was subsequently broken up for scrap."

"Approximately 200 tons of her armor plate was sent to the Fermi National Accelerator Laboratory in Batavia, Illinois, west of Chicago, and the armor is being used for absorption shielding in the particle accelerator and experiment lines."

The automatic 6-inch turret and an adequate hull to carry it came at the zenith of the big-gun surface ship era. As a ship type it became obsolete almost overnight with the advent of jet aircraft, missiles, RADAR, communications, and computers; technologies that came into being during or immediately after World War Two. These technologies placed us on the high speed, automated path we walk today. "Manually operated" is largely a thing of the past as machines govern almost all aspects of our lives. Maybe the cynics are right, maybe the manual transmission has become the new anti-theft device. For grins, it can be noted that the automatic 6" turret was also mounted aboard the gunnery training ship USS Mississippi AG-128 (ex-BB-41).

John Cheevers