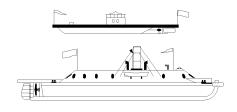
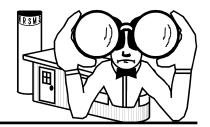
Hampton Roads Ship Model Society

Logbook



No. 224 WWW.HRSMS.ORG FEBRUARY, 2005

From the **Pilothouse**



The January meeting of the HRSMS was both a time for reflection on the recent loss of our dear friend and colleague Joe McCleary and an affirmation of the club's intentions to continue on the paths already chosen. A lot was accomplished in the way of business, and the patience of the attendees is greatly appreciated. Those present voted on a slate of candidates for the election of officers to be held at the February meeting, agreed on sending monetary gifts in his name to two charities favored by Joe McCleary, and discussed plans for the Nautical Research Guild's annual convention, which we will host from 4 to 6 November this year in Hampton. Also established was the date March 19th for the annual HRSMS banquet, and sign-up sheets with menu selections will be sent out to you all soon.

The meeting was not all business, however, and those present had the benefit of our host, Bob Comet's, description of the two new kits he is working on, including a Norwegian Olsever boat and also had the treat of examining two of Charles Landrum's fine models, one a finished waterline model of the U.S.S. LEXINGTON as she would have appeared had the ship been completed as a battlecruiser instead of an aircraft carrier and the other a much-modified full-hull model of the battleship ARIZONA backdated to her appearance in the mid-1930s. Both Bob's and Charles's impromptu presentations gave rise to a general agreement that adding similar discussions to the regular presentations at future meetings would be very welcome. Accordingly, those present listed what they were working on, and those not present who would like to discuss their work at meetings are asked to contact program chairman Bob Comet.

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Mystery Photo



Mystery Photo #223: The object! When looking at this month's submission, you can't help but compare our "object" with the rectangular solid that was the focus of Arthur C. Clarke's book, 2001 A Space Odyssey – two simple geometric solids that cause us to wonder. But, I wonder if we should go so far as to compare the chimps who were puzzled by that rectangle to ship modelers who are puzzled by this orb? And, I wonder about the comparison in light of the fact that 2001 A Space Odyssey and our image are works by men named Clarke. Yes, Bill's back and the odyssey this month is unusual for sure!

Looking at this image, there is a lot of 'I suppose' in it. For instance: Could say that we are looking at the construction of a spherical LNG tank, the kind fitted to the LNG tankers built by General Dynamics in Quincy, Mass., as was supposed by Harvey Williams. Harvey didn't mention it, but I suppose the tank could also be used for LPG, Mapp gas, City gas, Helium, Hydrogen, or a host of other gases - you get the picture. Tom Saunders says this type of tank is called a Hortonsphere®.

On the other hand, I suppose the image might represent work on the Times Square New Year's Eve ball. I suppose we could be looking at an image of a gas storage tank over at NASA, Langley. I suppose this might be a containment vessel built by the Hampton Regional Scientific Meteorological Society to surround and contain the Black Hole for Ship Models. I suppose we could be looking at the mock-up of the 1939 New York World's Fair Perisphere. (That would be the Trylon directly behind in the background.)

Dave Baker in a thoughtful and original reply has these suppositions: "[it] is probably of the float from the ball cock on the master sanitary flushing system on the new (Continued on page 2)

Saturday March 19, 2005 Radisson Hotel, Hampton (Mystery Photo—Continued from page 1)
OUEEN MARY II: soon after the

As always, Bob and Karen Comet were great hosts, and their generosity in sharing their home on a cold January evening was appreciated by all.

One item has not been settled, and that is finding a replacement for Joe McCleary to volunteer on Tuesdays in the Ship Modeling Demonstration Booth at the Mariners' Museum. If you have the time and are interested in volunteering, please contact me at (757) 565-7991 or by Email at davebaker@erols.com. The booth provides an excellent opportunity to show the public, including youngsters, the great enjoyment of ship modeling and also gives us a chance to meet and recruit new members for the HRSMS.

Bill Clarke, the chairman of the NRG Conference Committee, Heinz Schiller, and I went down to the Virginia Aerospace Museum at Hampton early this month to make the necessary arrangements for the NRG conference and then went over to the Radisson Hotel where the conference will be held and worked out with them not only the arrangements there but also for the HRSMS Banquet. Heinz was able to negotiate a considerable savings in the cost of using the facilities at the museum, and we are greatly in his debt. Bill will be keeping us up to date on further conference developments.

Dave Baker, Acting Skipper

MINUTES



HRSMS Monthly Meeting January 21, 2005 Host, Bob Comet

The meeting was called to order by the Mate Dave Baker at 2000 hours.

Dave asked for a moment of silence in remembrance of Joe McCleary.

There were no corrections to the Minutes. A Purser's report was given.

Old business: NRG Conference, Bill Clarke said there will be a Conference Planning meeting on February 8, 2005 at 700pm at Jack Bobbitt's House. He said we are missing one speaker for the conference. He talked about options for putting conference literature in a binder. A separate bank account will be established for conference operation with seed money coming from the HRSMS treasury and any remaining funds returned to the society. Don Preul's compensation for his casting work was discussed. Jack Bobbitt asked that members bring model to meetings so we can use those for discussions on technical topics. Dave proposed a sheet for people working on models. Alan Frazer said he would host

QUEEN MARY II; soon after the maiden voyage, it had to be removed and rendered watertight again after its too frequent immersion in caustic effluent from overfed passengers. Or perhaps its the ultimate 19th Century Tsarist Navy warship, the little-known "Spherical Popovka," intended to be able to bring a weapon to bear regardless of what degree of roll, pitch, yaw, or heave the ship might be experiencing; unfortunately, the ship's crew had not been given sufficient consideration, and THEIR degree of heave proved the vessel's undoing. Or, perhaps..." Well, you get the picture.

Do you suppose we are looking at a spherical assembly that is part of a large western-river dam project? I remember seeing photographs of turbine housings and large pipe and valve assemblies that Newport News Shipbuilding built for dams out West. There are certain similarities between this image and the Newport News photographs.

Now Bill, in a thinly veiled effort to muddy the water, would have us believe that the object is an aid to navigation. Buoy oh buoy is he out there. Apparently in the anomaly laden swamp around the modeler's black hole, objects in the image are smaller than they appear.

Instead of all that, suppose we take a slightly different tack with this photograph? After looking at it very, very closely, let's suppose we place the image on the West Coast. The foliage in the lower right part of the frame sure looks like Douglas fir to me. And I suppose we could date the image to the late thirties or early forties by studying the vintage automobiles parked in the lower right just below the trees. This is no supposition, but the tank under construction looks to be a completely welded. You can see the butt-welded seams and the alignment clips for joints that are not yet welded. The lifting pads and clips all seem to be welded and not riveted to the tank. I suppose from that we can further define the image's date – once again, can we say early forties?

Do you suppose my initial geographical placement of the tank is too far west? Could it be that this tank is being fabricated in Idaho for the U.S. Navy's nuclear power program? Are we allowed to ask that? Is this a reactor containment vessel or maybe a liquid waste holding tank? No, this supposition is too far fetched. Even the great Clarke couldn't get his hands on construction photos of nuclear facilities and equipment; I think I'll head west again.

OK, I don't see evidence to support this idea, but suppose we accept that this photograph documents construction of equipment at a naval facility. So we have to ask: Why would the U.S. Navy build a spherical vessel of this size? What naval programs needed large spherical tanks to hold what...Gas? What kind of gas did they use in great quantity in the thirties and forties...hydrogen, helium? Do you suppose that this was a helium storage tank for blimps? Are we talking "air"-ships this month?

The US Navy operated two types of airship, dirigibles and blimps. Dirigibles are classified as heavier than air (HTA) machines that have a fabric-covered rigid structure, which defines the airship's shape and supports the gas bags. The gas bags provide the lift. Blimps, however, are classified as lighter than air (LTA) machines and dispense with the rigid

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(Mystery Photo—Continued from page 2)

structure. The shape of the LTA is defined by the shape of the gas bag.

Early dirigibles used hydrogen - the lightest of all gases - for lift, but its flammability made it dangerous to use; we all remember the Hindenburg disaster. Those nations who were able switched to helium for their lift gas. Furthermore, the rigid structure was easily damaged in severe weather and most early dirigibles were lost. When the non-rigid LTA was developed by Goodyear, the US Navy made the switch to the blimp. Also, the United States was fortunate to have a natural helium deposit near Amarillo, Texas, which made it possible for the U.S. Navy to fly fleets of non-rigid airships during World War II.

Alright, if that's the case, in order to identify our object we need to concentrate on Naval Air Stations (NAS) that operated blimps. So, were any lighter than air bases located on the North West coast in the early forties? It's time for the first of what became several Google searches...I searched for naval air stations.

The search identified ten blimp or LTA bases that were randomly distributed around the coastal regions of the continental United States – five on the East Coast, two for the Gulf of Mexico, and three on the West Coast. (Weather conditions along the Alaska coastline almost certainly curtailed blimp use there.) Of the ten, only the oldest facility is still in operation; that being the famous, or infamous, Lakehurst, New Jersey NAS.

Of the three West Coast lighter-than-air bases, only one was located in the Pacific North West, the Tillamook Naval Air Station located about 8 nautical miles south west of Tillamook, Oregon. Construction of the base began soon after the Japanese attack at Pearl Harbor and was rushed to completion in the spring of 1943. The largest identifying feature of this and all LTA bases was the blimp hanger. Squadron ZP-33 with a complement of eight K-ship blimps was stationed there. The K-ships were 251' long & filled with 425,000 cubic feet of helium. A fixed-wing patrol squadron was added in 1944. The last Navy blimps left Tillamook in 1945

Following the war, the base remained an active military airfield, but was used primarily for aircraft storage. The huge blimp hangers were ideal for this. The February 1947 issue of Naval Aviation News reported the following aircraft inventory: 203 TBM Avengers, 27 F4U Corsairs, 57 SC Seahawks, 62 SB2C / SBW Helldivers, 32 JRB Expeditors, and 34 SNB Kansans. There are reports of other aircraft stored there as well; one indicating 107 FM Wildcats.

I don't know if its coincidence or our good luck, but this particular NAS still exists, in a manner of speaking. Although the navy decommissioned the base in 1948, much of the physical features remain including one of two wooden blimp hangers. These are the largest structures of their kind in the world. The second hanger burned in 1992. The fire was spectacular and made worse as it was fed by the enormous amount (135,000 bales) of hay stored within. Other identifiable features include: the circular blimp mooring pads, and the paved runways.

How does this base tie in with our mystery object? After carefully reviewing archival photographs of the base, it would seem that two of these spherical storage tanks were constructed on site to hold new stock and reclaimed helium. One was located adjacent to each blimp hanger. Recent images show that these tanks have been scraped. The web site for the Tillamook Naval Air Station Museum has several National Archives photographs showing these tanks. I suppose the other LTA bases had these tanks too, but they don't have Oregon Douglas Fir trees in the background.

As for the tank, the Chicago Bridge and Iron Company (CB&I) holds claim and copyright to the design of a spherical liquid and gas storage vessel named for its inventor. Called a Hortonsphere®, the first was assembled in 1923. The company founded by Horace E. Horton and George and William Wheelock in 1889, was then and is now one of the world's leading engineering, procurement, and construction companies. Horton was a unique innovator and a leader in steel fabrication.

He made sure the company stayed on the leading edge of the industry. Some notable achievements include: 1893 – The company's first standpipe for water storage, built in Lake City, Iowa. 1894 - Chicago Bridge & Iron erects its first steel plate elevated water storage tank in Fort Dodge, Iowa. The tank, long an icon for water towers, was the first built with a full hemispherical bottom, one of many technical innovations that have marked the company's history. 1923 – Designed to conserve vapors and eliminate fire hazards, CB&I builds the first floating roof tank for the oil industry. Floating roof tanks have since become the industry standard for safe and economical storage of petroleum products. Also in 1923, CB&I constructs its first Hortonsphere®, a spherical pressure vessel for the storage of volatile liquids and gases. 1932 - The company builds its first all-welded oil storage tank for Patterson Oil Company in Paulsboro, New Jersey. 1934 – CB&I supplies the first all-welded penstocks to the Tennessee Valley Authority for use in the TVA's first hydroelectric plant at the Norris Dam. 1939 - The first allwelded Watersphere® elevated tank, the modern water tower, with a capacity of 100,000 gallons, is built in Longmont, Colorado. 1941-1945 -CB&I builds floating dry docks and landing ship tanks (LSTs) for the U.S. Navy at shipyards in Louisiana, California, Illinois, and New York. 1945 - The company establishes a field welding department and contributes to the development of welding codes and standards. 1950 - CB&I revolutionizes tank construction with the introduction of the automatic girth seam welder, significantly reducing the work-hours required to build a tank. 1952 - CB&I erects the world's largest Hortonsphere (225 ft diameter) in West Milton, New York, for the Atomic Energy Commission. 1954 - The world's first Waterspheroid® elevated tank, with a capacity of 500,000 gallons, is built in Northbrook, Illinois. 1955 - CB&I introduces Hortonclad®, a composite metal having an integral and continuous bond produced through vacuum metallurgy, for use in process and storage vessels. The company erects liquid oxygen spheres at Cape Canaveral, Florida, for use in fueling the U.S. space program. 1958 - CB&I's Operation Cryogenics research

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(Mystery Photo—Continued from page 3)

program proves the viability of 9% nickel steel material for the storage of low temperature gases; 9% nickel steel subsequently becomes the industry standard for cryogenic storage. **1960** – The company supplies 13 large diameter penstocks, with a total weight of more than 15,000 tons, for the Niagara Generating Plant near Lewiston, New York. **1961** – CB&I builds the world's largest environmental test chamber at North American Aviation's research laboratory in El Segundo, California, one of many test chambers CB&I has built for the aerospace industry.

I'll go out on a limb and suppose the tank in our Mystery Photo was built by CB&I, and that we are looking at the erection of one of two Hortonspheres at the Tillamook NAS.

In the biggest irony to all of the suppositions of this column, the data shows, CB&I has the distinction to have fabricated liquid and gas storage tanks and structures for all of the suppositions mentioned except for those submitted by Dave Baker. Bill, I suppose we should make clear that we like to deal with vessels that keep the water out, not in!

Finally this, taken directly from the Internet: "Over the years, there has been a lot of speculation about the derivation of the term *blimp*. The most plausible explanation, experts claim, is that the name originated with Lt. A.D. Cunningham of Great Britain's Royal Navy Air Service. He commanded the air station at Capel, England, during World War I.

As the story goes, while conducting a weekly inspection of the station, Cunningham playfully flipped his thumb at the envelope of His Majesty's Airship SS-12 and an odd noise echoed off the taut fabric. "Blimp!" he cried out humorously, imitating the sound. As they say the rest is history."

John Cheevers



(Continued from page 2)



the June meeting.

New Business: Nomination of officers was conducted. The following slate was nominated from the floor.

Skipper Dave Baker Mate John Cheevers Purser Eric Harfst Clerk Tom Saunders

Elections will be held at the March meeting.

The Founders award committee was established with past awardees of the award comprising the committee. The Annual Banquet was discussed. There will be a cash bar in the dining room. Further details will be forthcoming. There was discussion about making a memorial contribution in Joe's name to the Old Towne Medical Center and the Williamsburg Land Conservancy. Jack Bobbitt proposed to split the proceeds from the December auction between the two organizations. A motion was made and passed to make the donations. The following people offered to host a monthly meeting:

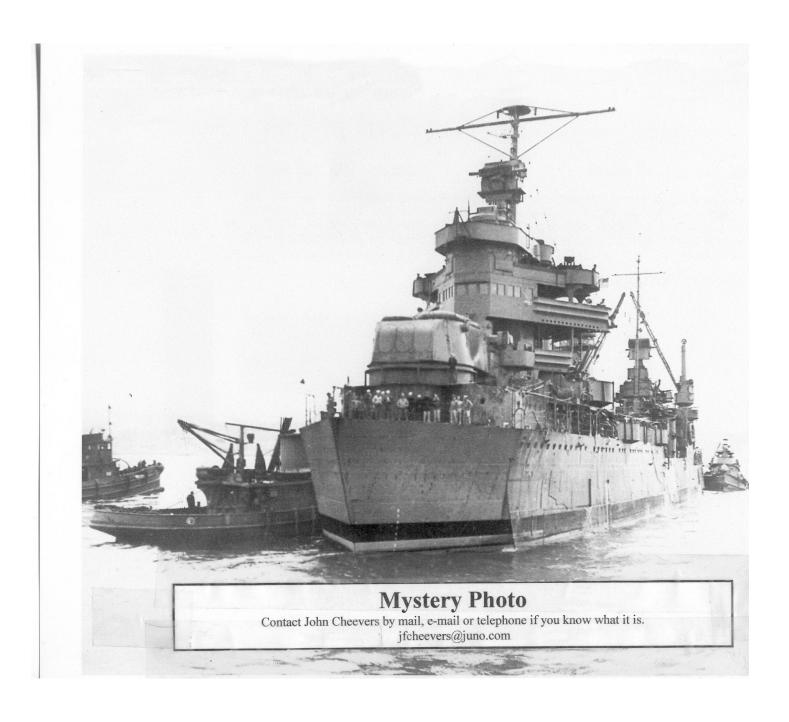
Dean Sword, September Eric Harfst, July Charles Landrum, August

Dave asked if there were members that would man the model builders' stand at the Mariners' Museum, would they please contact him. Dave made an announcement of an upcoming seminar by the Steamship Historical Society of America on January 30. Dave made the suggestion that after the conference in October, that we suggest to Mariners' Museum that we re-hab the model builders' area. There was discussion about this suggestion and it will be revived at a later date.

Show & Tell: Pat Mcarthy talked about the Phoebus Auction House and model boats that are slated to be sold at an upcoming auction. Charles Landrum said that Hungates Hobby Shop at Patrick Henry Mall is closing and there are opportunities to find sale items at a good price. It was noted that Denbigh Hobby Shop is moving and model paints are in sale. Jack Bobbitt showed a picture of Eric Romburg's model of the *Hannah*, 1775. Charles Landrum showed and talked about his models of the *Lexington* and *Arizona*. Bill Clarke gave a brief history of the HRSMS. Bob Comet two model kits he is working. John Cheevers showed items he procured at the Richmond Antique Tool Show and Cabin Fever Exposition in York, Pa. and several catalogs.

The meeting was adjourned.

BRING YOUR MODELS AND CURRENT PROJECTS TO THE MEETING



NOTABLE EVENTS

FEBRUARY

11 **H.R.S.M.S.** Monthly Meeting: Host, Dave Baker Election of Officers, "Lap Strake Boats", Jack Bobbitt

MARCH

- 11 **H.R.S.M.S.** Monthly Meeting: Host, Tim Wood "Recomended Hand Toolls for the Novice", Bob Comet
- 19 HRSMS Annual Banquet, Radisson Hotel, Hampton

APRIL

8 **H.R.S.M.S.** Monthly Meeting: Host, Bob Baycar "How to Sharpen Tools" John Cheevers

MAY

- 13 **H.R.S.M.S.** Monthly Meeting: Host, Bill Clarke "Types and Sources for Wood for Ship Modeling" Jack Bobbitt
- 21-22 Maritime Model Expo, NASMA, CBMM

JUNF

10 **H.R.S.M.S.** Monthly Meeting: Host, Alan Frazer

JULY

8 **H.R.S.M.S.** Monthly Meeting: Host, Eric Harfst

AUGUST

12 **H.R.S.M.S.** Monthly Meeting: Host, Charles Landrum

SEPTEMBER

9 **H.R.S.M.S.** Monthly Meeting: Host, Dean Sword

OCTOBER

14 **H.R.S.M.S.** Monthly Meeting:

NOVEMBER

- 4 6 **NRG Conference**, Hampton, Va.
- 12 **H.R.S.M.S.** Monthly Meeting: Host; Heinz Schiller

DECEMBER

9 **H.R.S.M.S.** Monthly Meeting: Host, Jack Bobbitt

JANUARY

21 **H.R.S.M.S.** Monthly Meeting: Host, Bob Comet Nomination of Officers

WATCH, QUARTER AND STATION BILL



 Skipper:
 Joe McCleary (757) 253-1802

 Mate:
 Dave Baker (757) 565-7991

 Purser:
 John Cheevers (757) 591-8955

 Clerk:
 Tom Saunders (757) 850-0580

 Historian:
 Len Wine (757) 566-8597

 Editors:
 John Cheevers (757) 591-8955

Bill Clarke (757) 868-6809 Tom Saunders (757) 850-0580

Webmaster: Greg Harrington (757) 930-4615

Next Meeting

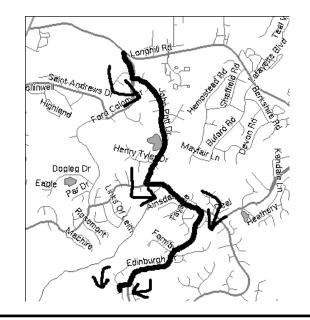
Date: Februaty, 2005

Place: 100 Augusta, Williamsburg, Va.

Time: 2000 Hours Host: Dave Baker

From East: Take Rte 64 west to Rte 199 exit. Continue on Rte 199 west about 8 miles to Longhill road (Rte 612 exit). Go West on Longhill, a total of about 2.5 miles. Turn left into Ford's Colony Drive. Make first left to Guardhouse on John Pott (guards will let you in, honest). Continue on John Pott for 1 mile to intersection with Edinburgh. Turn left on Edin and Edinburgh (second right). Go 1 mile to Shinnecock (fourth right turn, well lit). Turn right on Shinnecock and go about 200ft. to first left, Augusta. House is first on the right, 2 story white colonial.

From West: Take Rte 64 east to 199 exit. Turn right (east) on rte 199 and go about 4 miles to Longhill Road. Turn right on Longhill and follow directions as above.



NOTICE

The Founder's Award ballot and the Banquet Registration Form will be arriving soon.

Thanks

The members would like to thankBob Comert and his wife, Karen for hosting the December meeting.