The 820 Newsletter

World Wide Web Edition

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Ltjg Robert Baldwin, Editor

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SHIP'S OFFICE

Note from the Mailroom We are once again mailing the newsletter from the editor's home at 432 E. Irvin Ave., State College, PA 16801. You can contact the editor, Bob Baldwin, at this address, his email address rcb9@psu.edu or phone 814-238-8686. We hope to update this mailing list with paid-up members of the Association as soon as practicable. New email address for the RICH's webmaster: Marshall DuBois mkdubois@acun.com

Relieve the Watch Your newsletter editor has had this watch for five years. When I took the job (volunteered) at Don Oberdoester's request at the first meeting of the RICH Association it was to be a temporary solution to a long-term need. It has been more than temporary and, I might add, a great experience but I think it's time for someone else to come forward and "relieve the watch." If you are interested please contact me or Hoot Gibson. (843-899-7194)

Reunion Reminder It's time to do your 1999 trip planning now and to schedule the RICH's reunion to be held in Pine Bluff, Arkansas April 21-24 under the direction of Johnny Skillen, 912 E. 2 nd St., Pine Bluff, AK 71601, Home:870-535-3331 Office:870-534-9527

The Reunion Port of Call will be the Best Western Motel at 870-536-8640.

We are looking forward to a good turnout especially from all of you Western and Midwestern RICH sailors.

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The Millennium Approaches for the Navy

Many magazines and newspapers I have recently read have had pieces on the coming millennium; it seems as if we should have one too. Let's consider what the Navy foresees in the "out-years" for itself.

The current Chief of Naval Operation, Adm. Jay L. Johnson, in an introduction to the 1998 edition of "Vision, Presence, Power: A Program Guide to the U.S. Navy" lays out his view of the significant course changes he sees that the Navy will be making in the early part of the upcoming century. As former sailors, it should be of great interest to us to learn just where he and the Navy's top leadership believe we are headed. Adm. Johnson says: "We are in the midst of a revolution that will dramatically transform the U. S. Navy as we fulfill future requirements."

According to the CNO the "Navy and Marine Corps Team" is expected to play a central role in meeting this country's drastically changing force structure. By structure, the Navy means the appropriate mix of ships and aircraft (the buzzword is "platforms") we should have in our fleet. The challenge is to accurately identify and then meet the defense goals set for the Navy in playing its central role as a vital part of our national defense in the foreseeable future. Have we done this before? Yes, the Navy has often changed its course over our history by restructuring the fleet to meet new requirements. As an example let us just quickly consider a bit of 100-year old naval history as we get ready to leave this century behind. Near the end of the last century the Navy, often referred to as the "New Steel Navy" or just the "New Navy", emerged from a challenge to modernize by surpassing a hemispheric navy to whom we were then being compared. That navy was Chile's! Our fleet's woeful condition finally got the attention of Congress. The force structure slowly began to change. With the addition of a few new steam-driven ships beginning in 1882-83, following years of post-Civil War decline, it was ready for the Spanish-American War of 1898. A "New Navy" was born culminating in the thoroughly modernized battle line of the First World War era.

In the late 1890s era our naval leadership was struggling with modernization; the evolution from sail to steam and wood to steel, the problem of coaling a fleet that was no longer tied to the U. S. coastline, filling this modernized fleet with personnel who could manage the new technologies of electrical motors, telephones, pneumatic systems, reciprocating engines, optical sights and sighting systems, refrigeration, primitive radio communications and big guns. That modern fleet at the turn of the century now seems as primitive to us as ours may look to observers in 2098. Recall what your RICH looked like compared to the relatively new Aegis-equipped, missile-armed, Arleigh Burke class destroyers. We were as capable in our era as the Burke's are today.

The naval leaders of the late 1890s, if you read history, were wrestling with the same sorts of over reaching future planning questions with which we are attempting to deal. They too were trying to modernize their fleet in terms of the naval science of their day and the threats presented to the nation and fleet by the technology of many foreign powers. And, like us, they also were trying to do it all within a severely limited shrinking budgets. We now term that process "force structuring." It is a process used to build the Navy into an unbeatable force within the budgetary constraints imposed by Congress, our overseas commitments and our unforeseen contingencies. Currently "information superiority" is the planning byword; in the 1890s, it was speed, armor and gunpower.

The force structure of tomorrow's Navy is being determined by no less than a major redefinition of Sea Power. With the demise of the 40-year Cold War, the changing world's political climate, the altered military capabilities of old and possibly new adversaries our naval force requirement have also changed significantly. During the Cold War the Navy and Marine Corps responded to approximately 190 international crises, some major, many minor. This amounts to about one critical response required of our naval forces every 11 weeks. In the seven year period beginning in 1990 the team responded to one crisis about every 4 weeks. To do this continually has put a tremendous strain on the ships, aircraft, and personnel of the fleet. The number one problem for the Navy today is attracting and keeping top-flight personnel under such a demanding operating tempo. The question is how do we structure our Navy going into the next century to handle a wide range of contingencies and the accompanying stresses they place on a dwindling number of qualified personnel? This must be accomplished against the background of a steadily shrinking fleet.

Since the Gulf War in 1991 the size of the fleet has been cut by almost a third and the number of officers and enlisted personnel has been reduced by 32% (184,000 personnel). How does the Navy see the fleet's hardware structured to meet the unknown contingencies in the beginning of the next millennium? This is what it may look like in the future based on the "1997 Quadrennial Defense Review."

- 12 Aircraft Carrier Battle Groups with 11 active carriers and one reserve
- 50 Nuclear-powered attack SSNs ballistic missile SSBNs
- 14 Nuclear-powered strategic training carrier
- 10 Active Carrier Wings (CVWs) and
- 116 Surface warships, 112 in one reserve CVW in the active force, 4 in
- 12 Amphibious Ready Groups (ARGs) the Naval Reserve Force

The real question, it seems to this writer, is how are we going to attract and keep the technologically skilled personnel needed to man this new fleet? That plan has yet to be worked out.

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FROM THE ENGINEERING DEPARTMENT

The RICH's Steam Plant Many of us avoided the ship's steam plant like the plague and about all we "non-snipes" knew of it was the hot blasts of moisture-laden air that poured up into the port inboard ship's passageway or onto the main deck when the hatches to the engineering spaces were open. We cursed it when it deposited gobs of black soot on our freshly washed-down decks or on our meticulously groomed white dress canvas. We thanked it, however, when it got us home and grumbled when it lost-the-load. The following description of the RICH's boilers is principally intended for those who knew little of the engineering plant

Actually the editor, when he first came aboard RICH as a fresh caught Ensign, answered the Captain's question of where he would like to be in the ship's organization with: "Engineering Sir." The answer was: "Congratulations son you are going to be the ship's Communications Officer and it's back to Newport, RI and the DESLANT Communications School for you." A cheery "Aye, Aye sir" was the answer and thus there was no engineering duty for me.

Let's get on to describing our steam plant: You may recall that there were two boiler spaces (firerooms) on the RICH where the steam to drive us through the water and, incidentally, to cook our chow was generated. The engineering plant occupied a significant part of the ship aft from approximately the midpoint of the bridge for some 77 feet. Located all below the main deck the engine and boiler spaces took up approximately one quarter of the ship's length and about one-third of its volume. These spaces were sequentially arranged, fore to aft, fireroom—engineroom—fireroom—engine room. This alternating arrangement in modern American destroyers was first used in the Benson-Gleaves Class DDs to give more flexibility in maintaining or producing an alternate means of power if one or more of these spaces sustained battle damage. The RICH's engineering plant reflecting that design was essentially the same as in the preceding class of World War II destroyers, the Fletchers.

The ship had four Babcock and Wilcox Company boilers, two located in the forward fireroom and two in the after room. There is, of course, the old engineer's story that there were only three major "stinkers" (expletive word cleaned-up for publication) in the Navy. Babcock, Wilcox and whoever it was to whom you were directing your wrath. We had four boilers. By comparison RMS TITANIC, with which the whole world is now thoroughly familiar, had 29 located in six separate firerooms. Of course the TITANIC was a bit larger than the RICH! Naval boilers, unlike those in merchant ships, are designed to raise steam rapidly, be easily controlled to meet ever-

changing speed requirements, and accommodate both a high as well as economic steaming demands.

The Gearing Class's boilers are described as "three-drum, express type" boilers with a "divided furnace, controlled superheat and a single uptake." The three-drum part means that there was a main water drum, where the initial or saturated steam was collected above the furnaces, and two other "lower" water drums (a water screen header and a water wall header to be specific for you engineers) all connected together by a series of water tubes arranged in banks. In the RICH's boilers, also described as an M-Type boilers, water and steam moved through these tubes to the main drum where the steam was ultimately collected. Heat needed to boil that water, derived from burning Naval Standard Fuel Oil (NSFO) was transferred to the water by radiation, convection and conduction –just like the process going on in your home's oil burner/boiler-if you have that sort of system. It took about 4 hours from a cold start to get a boiler up and on the line. Boiler feed water is a highly purified form of water in which the many impurities that would hinder or damage the steam producing system have been removed. Remember water hours? Any major reduction in the ship's ability to make large amounts of boiler feed water in the distillation plant resulted in water rationing. Some times this lead to those horrible salt-water showers but only if the feed water supply was really low. The hot gases generated by the burning oil in the furnace passed around the boiler tubes and after some diversion went up and out the ship's stacks. To keep the soot level down the engineers would "blow the stacks." This was done about once per watch at sea sometimes expelling black soot onto our clean decks and equipment. Regular soot removal was done to improve the efficiency of the heat transfer in the system.

The ship's engineering plant could produce and use two types of steam: saturated and superheated. The boilers operated at an air pressure of 615 pounds per square inch (p.s.i.) to produce saturated steam at around 470°F and at 565 p.s.i. to generate superheated steam at 850°F. The first steam ship designed to cross the Atlantic, the British side paddle steamer "Great Western" (1846) operated solely on saturated steam at 5 p.s.i. Heat is required for the production of steam and the temperature at which steam forms depends on the air pressure. At normal atmospheric pressure the temperature at which steam forms is, of course, 212° F but with increasing pressure the temperature at which it forms increases. The heat applied to saturated steam in order to raise its temperature above 212°F is known as "superheat." Why this brief diversion into the physics of boiling water? Well superheated steam has lots of advantages over saturated steam in naval boilers namely; it cuts down on the corrosion of piping and machinery, it reduces erosion of the integral parts of engines by water and unwanted particles that would be carried with saturated steam and it reduces the rate of the loss of heat to the surrounding piping and machinery. Moreover, as the temperature of the steam rises, in an average steam turbine, there is a significant rise in the efficiency of the steam in that engine. Should the occasion arise, and it did many times, when we needed to shut a boiler down to enter the casing for repairs it took between 24 and 48 hours to cool it down to the point where it could be safely entered. Even then it was a difficult, cramped hot place in which to work especially if one was in the Red Sea or in S. E. Asian waters.

Steam generated in the RICH's boilers was directed to the ship's turbines where it was converted into the propulsive force to turn the two screws (propellers) with which the RICH was fitted.
Well maybe that's a rather simplified and long-winded explanation, for the non-engineers of how we boiled one heck of a lot of water on the good ship RICH. Because of the hard work of a lot of our engineers those boilers and that WWII steam plant got us to where we needed to get and home again. Our engineers deserve a lot of credit as those talented guys were working with an elderly, often cranky, steam system. Thanks to Bill Owen (now CAPT USN Ret.), one of our engineering officers in the late '50s, for contributing to this short piece.

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USS RICH · DD-820 · DDE-820

Tom Hegele's Log

[Tom's log last time left us tied up in NORVA on a routine day in 1964. We continue from that point:]

Saturday & Sunday, 30 & 31 May 1964. In port NORVA. Weekend Duty. Stood two quarter deck watches.

(Editor's note: May is a great time in NORVA but standing a quarterdeck watch at the old DesSub Piers in November-January can really be brutal especially when that cold biting wind fetches all the way across Hampton Roads from Newport News at about 20 kts.)

Monday, 1 June 1964. In port NORVA. Routine day in port. Worked in gun mounts and ammunition magazines.

Tuesday, 2 June 1964. In port NORVA. Routine day. All officers went to USS FURSE (DD-882) to give them their AdminInsp. Was made CDO (Command Duty Officer) while staff was gone. The thought that my CO and XO trust my judgement enough to have left me in charge gave my morale a much needed boost.

Wednesday, 3 June 1964. In port NORVA. Routine day. Relieved as 2nd Division Officer by LT(jg) Mark Bonham. Very sorry to have given up 2nd Division. I am now just 3rd Division Officer. GM2 Hamilton gave me a very thorough briefing of how the 5"/38's operate. Weapons Class at OCS was interesting, but nothing takes the place of hands-on experience. Routine maintenance is critical if these mounts are to be ready when needed.

Thursday, 4 June 1964. In port NORVA. Routine Duty Day. Stood two Quarter Deck watches-12-16 (Afternoon) and 04-08(Morning).

Friday, 5 June 1964. In port NORVA. Routine day. Held graded fire drills.

Saturday & Sunday, 6 & 7 June 1964. Weekend leave.

Monday, 8 June 1964. In port NORVA. Routine Duty Day. Stood 08-12 (Forenoon) and 00-04(Mid) Quarter Deck Watches.

Tuesday, 9 June 1964. In port NORVA. Routine Day. Worked with MWB (Mark Bonham) in the morning.

Wednesday, 10 June 1964. In port NORVA. Routine day. Presail conference at 1500.

Thursday, 11 June 1964. In port NORVA. Routine day. Man from VU-6 came in to check our paper work and DASH. Everything is in good shape.

Friday, 12 June 1964. In port NORVA. Routine Duty Day. Stood 12-16 Quarterdeck Watch. Held a graded Fire Drill: grade 88.

Saturday & Sunday, 13 & 14 June 1964. Weekend Leave.

Monday, 15 June 1964. Underway to VCOA. Operating with DESRON 2. Held four Z-17-Gs in the afternoon. Stood 1200-1600 JOOD. Made my first attempt at bringing the ship along side another. Must be constantly aware of physics involved –mass, speed and resistance. Watch flags on other ship for indication of wind. Moving in lea of another ship will cause you to drift into or away from one another. Slow, steady, deliberate movements are best. Let the forces of nature help.

Tuesday, 16 June 1964. Underway in VCOA. Operating with DESRON 2. Conducted DASH Ops. QH-50-C #1126 is down. (The QH-50 was a drone DASH -ASW helicopter, earlier designated as DSN-1 to -3. DASH was a billion dollar program in which these small torpedo carrying aircraft could be directed to a sub contact by their destroyer controllers. The program, for many technological reasons, was not very successful although the DASH personnel worked very hard to make the program work. -Editor). Stood two JOOD watches.

Wednesday,17 June 1964. Underway in VCOA. Operating with DESRON 2. Conducted DASH Ops on USS DOGFISH (SS-350). Dropped one "fish," got one hit. Seas very heavy. Was sick most of the day.

Thursday, 18 June 1964. Underway in VCOA, operating with DESRON 2. Conducted DASH Ops. Helo #1122

down for “jitters” (quick, uncommanded cyclic blade movements). JOODs held tactical exercises. Took the helm for two turns. Stood the 08-12 and 20-24. Use the flag position to give indication of movement and give “standard” helm order to move in that direction then take recommendation from CIC on course and speed. Quick is good, right is better.”

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THE LOSS OF THE USS RICH DE-695 (continued)

The 1944 report of the loss of our RICH’s namesake, the DE-695, written by the Captain while he was still in an English hospital begun in the last newsletter continues:

“(f) About two minutes after the explosion described in (e) above, a third explosion occurred, my only recollection of this being a sensation of flying through the air, after which there must have been a period of unconsciousness.

Upon regaining consciousness, I found myself on the deck some ten or fifteen feet from my usual station on the flying bridge, and got to my fee with some difficulty to survey the damage. The flying bridge was completely demolished with the mast laying across the debris; all personnel appeared dead or unconscious except myself and Ensign W. D. Cunningham, Assistant Gunnery Officer, but upon going to the side, a few more could be seen moving on the decks below. The force of the explosion and its effect on material and personnel was terrific, and the following descriptions are based on personal observations pieced together with information obtained from survivors. It is believed that the mine exploded approximately under the Ice Machine Room in A-407-A.

The bow drooped forward of a spot just aft of #1 3”/50 gun, and it is believed that the force of the explosion had opened, or sprung doors and hatches so that flooding was extending forward of the Forward Messhall and more slowly aft of that space. The ship began to settle slowly by the bow. The forward fireroom was severely damaged and had to be abandoned; the after fireroom lost pressure and was forced to secure. The extent of damage in enginerooms is not definitely known, except for the leakage in No. 2 caused by the previous explosion.

Personnel casualties were heavy, the force of the explosion having thrown men as much as fifty feet or more, and it is believed that not more than two or three men who were forward of the mast survived without more or less severe head, back, or leg injuries. Considering the damaged condition of the ship, the immediate and urgent task appeared to be to remove the injured to small craft before the ship should sink, and the number of uninjured able to assist in this task was entirely inadequate to accomplish this in the time believed available.

Life rafts were cast loose. Attempt was made to hail alongside all PT, British ML, and Coast Guard patrol craft in the vicinity, and these vessels sent men and blankets aboard to move the injured off. The crew of the motor whaleboat also came aboard after having picked up survivors blown into the water by the explosions. All these worked unstintingly to remove the wounded to the small craft that came alongside, and left only when the ship started its final plunge. It is estimated –very roughly- that the ship floated for about fifteen minutes, starting its final plunge slowly by the bow, but gathering momentum and turning on its starboard side as it settled.

Men who had been working to remove the injured stepped off with the last injured men as their deck went under. All cleared the ship, swam free of the turbulent waters, and were picked up by a coast guard patrol craft from which we were delivered to LST-491 for treatment and later transferred to hospitals in the United Kingdom. (To be continued in the next newsletter)

What Happened to DesRon 36?

WHAT HAPPENED TO THE MID-1950s DD/DDEs of DESRON-36? (Corrected 11/07/99)

USS BASILONE DD/DDE-824
Laid down by Consolidated Steel,Orange Texas July 7 1945. Launched December 21 1945 and commissioned July 26 1949. Reclassified DDR-824 January 28 1948, Reverted to DD-824 June 30 1962. Decommissioned (?), Stricken November 1 1977. Sunk as target off Florida April 9 1982

USS DAMATO DD/DDE-871
Laid down by Bethlehem Steel,Staten Is. May 10 1945. Launched November 21 1945 and commissioned April 27 1946. Decommissioned (?), Stricken October 1 1980. To Pakistan September 30 1980. Renamed Tippu Sultan, Stricken and scraped in 1994.

USS HOLDER DD/DDE-819
Laid down by Consolidated Steel,Orange Texas April 23 1945. Launched August 25 1945 and commissioned May 18 1946. Decommissioned (?), Stricken October 1 1976. To Ecuador February 23 1977. Renamed Presidente Elroy Alfaro, Stricken and broken up for scrap in 1991.

USS NEW DD/DDE-818
Laid down by Consolidated Steel,Orange Texas April 14 1945. Launched August 18 1945 and commissioned April 5 1946. Decommissioned (?), Stricken July 1 1976. To South Korea February 23 1977. Renamed Taejon, Still active in South Korean Navy.

USS RICH DD/DDE-820
Laid down by Consolidated Steel,Orange Texas May 16 1945. Launched October 5 1945 and commissioned July 3 1946. Decommissioned (?), Stricken December 15 1977. Sold December 1979 and broken up for scrap.

USS ROBERT L WILSON DD/DDE-847
Laid down by Bath Iron Works, Bath Me. July 2 1945. Launched January 5 1946 and commissioned March 28 1946. Decommissioned (?), Stricken September 30 1974. Sunk as target off Puerto Rico January 25 1980.

FROM "MDI" (Mess Deck Intelligence)
What classes of post-war, destroyer-like ships were designed to replace the Gearings?

Arguably it was the Forest Sherman and Chas. F. Adams Classes of DDs and DDGs although these vessels displaced much more tonnage than did the RICH and were over 30' longer. An alternative may be the many Frigates of the Brooke, Garcia, Knox and Perry Classes that began entering the fleet in the late 1970s-early 1980s period. They were much closer to the RICH in displacement (3,650 tons full load) but were much longer in length (440') and had an entirely new engineering system-2 gas turbines. The real answer is probably; None.

Because of the1940s technology the ship's capabilities would not serve any farther than it was stretched during the 820's FRAM-I overhaul and its 32 years of active life. Like the Navy of the 1880s we needed a "New Navy" with ships having modern capabilities!

How many man-hours (OK, PC-person hours; there were lots of women working in shipyards) did it take to build

a WWII DD? RICH was a WWII DD and a late 1944 figure of 677,262 hours is given. (Bath Works figure)

How many Sumner and Gearing Class destroyers were built during the WWII period? There were 60 Sumners and 98 Gearings built and a number were cancelled. These two classes, along with the Fletchers, provided the main destroyer force in the immediate post-WWII years.

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Quarterdeck