



A History of "Service To The Fleet"

U.S. Department
of Transportation

United States
Coast Guard



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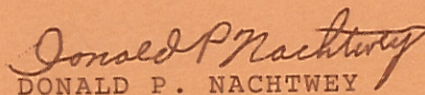
15 July 1985

From: Commanding Officer, YARD
To: Friends of the Coast Guard YARD

Subj: COAST GUARD YARD HISTORY

1. This publication unfolds the colorful 86 year history of the Coast Guard YARD. It documents the shipyard's many successful projects throughout the years. It serves as a tribute to the YARD's military and civilian employees. They have dedicated their time and talent to maintain quality "Service to the Fleet" for nearly nine decades.

2. This book should be made available to all persons both inside and outside the U.S. Coast Guard who request information on the Coast Guard YARD's history.


DONALD P. NACHTWEY



A History of "Service To The Fleet"

Introduction

The U.S. Coast Guard YARD, founded in 1899, is the only shipbuilding and repair facility of the United States Coast Guard.

It is the Coast Guard's largest, most modern industrial plant. The YARD is responsible for construction, repairs, and renovation of vessels and various aids to navigation, and for the manufacturing of miscellaneous Coast Guard peculiar equipment. The shipyard provides logistics support to the Coast Guard Fleet throughout the world, for it serves as the Service's Ship Inventory

Control Point. The YARD also acts as a storage facility for decommissioned vessels.

Today, over 830 civilian employees are employed and 150 military personnel are stationed at the YARD. It spans 112 acres and has an annual budget larger than \$70 million.

Besides its principal shipyard role, the Coast Guard YARD serves as host facility for the Baltimore Group, Curtis Bay Station and several homeport ships.

For 86 years now, the shipyard has lived its motto "Service to the Fleet." Its history is found in the following pages.

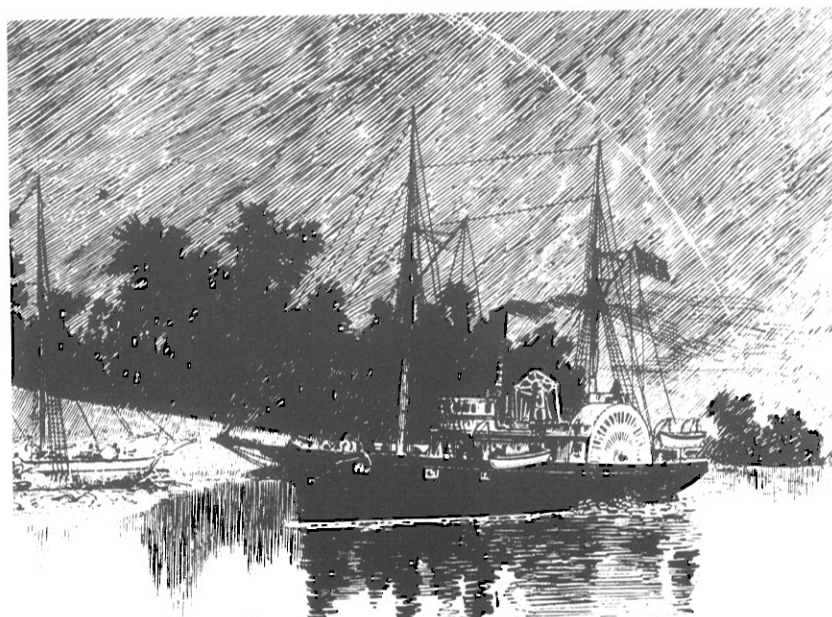


A mural of the YARD, painted by BMC Samuel Emrys Evans in 1946, hangs in the Conference Room of the Main Administration Building. The painting depicts the industrial activities of the YARD during the Second World War.



An early Arundel Cove shot (above) reveals a densely vegetated area. But thanks to the wisdom and eagerness of LT John C. Moore (left), the land would eventually be developed into the Coast Guard YARD.

The turn of the century was accompanied by a burst of nationalism, a public awakening to the value of the armed services. This was mainly a result of the U.S. war with Spain. Spurred by this support, LT Moore arrived at Arundel Cove in 1899 on board the COLFAX (below) and began operation of his shipyard.



The YARD Begins

The site occupied by the YARD has been a part of Maryland's history from the very first days Lord Baltimore dispatched English settlers to his overseas dominion. On June 29, 1663, two hundred acres of land, the major portion of today's Coast Guard YARD, were patented to Paul Kinsey. He named his estate "Curtise's Neck." Sixteen years later, on July 18, 1679, his friend, George Yates, acquired an adjoining lot of 250 acres which he named "Denchworth." The stream which marked the western limits of Kinsey's estate, now Curtis Creek, was called "Broad Creek." In Yates' patent, Arundel Cove is described as the "Cove of Curtise's Creek."

The question naturally arises, why did the first colonists in this general area settle on Arundel Cove? Kinsey was free to select his estate from the many scores of thousands of acres of land all touching on the Patapsco or its estuaries. Why this particular spot?

The reasons prompting the selection were quite sound, as events later confirmed. The first colonists, as was natural in such undeveloped, unsettled country, used the Bay and its tributaries as a broad highway to all points in early Maryland. Little time would be required by Kinsey and venturesome fellow explorers to discover that in all this wide and generally fertile area, Arundel Cove was the most satisfactory anchorage. It afforded perfect protection in ample water depth. It was strategically located to the Patapsco River, with short and easy access to the Bay itself. In short, geography, or nature, or merely fate, marked this favored location for an important future.

In proof, two and a third centuries later, these identical reasons, plus the important fact that the Bay leads to the Atlantic, would prompt the establishment of a small boat building and repair plant for the United States Revenue Cutter Service at Arundel Cove.

Since the formation of the Revenue Cutter Service in 1790, the construction of its life-saving boats and larger vessels had been carried out in private yards. Repairs were likewise made on contract. As the nation grew in size and its activities broadened, the Service also increased in scope and importance. The building and upkeep of its constantly increasing number of vessels gradually became a serious matter of mounting cost. Often too, both the quality of work done and prices charged by private yards proved unsatisfactory. To

improve these conditions, certain individuals felt the service should build and repair its own vessels. Among those advocating this idea was Lt. John C. Moore, an experienced officer, at the time in command of the COLFAX, an ancient side-wheel vessel that had served with the Navy in the Civil War.

Moore argued that maintenance and repair could be accomplished more reasonably in the Service's own yard than in commercial shipyards, and pointed out Arundel Cove as an excellent site for such a Depot. He suggested that the idea might be more readily "sold" to Congress if the Depot could be designed to do double duty as a base for the School of Instruction as well.

Lt. Moore and his supporters approached Captain-Commandant Shoemaker (1895-1905), and he agreed with their suggestion. He pointed out, however, there was the matter of funds for the venture; money that must be appropriated by Congress. But the Service itself could scrape together a few hundred dollars which could be enough to start a small yard manned by workers drawn from Service personnel. Lt. Moore accepted the responsibility and furthermore knew exactly where the plant should be located. Lt. John C. Moore, founder of the present U.S. Coast Guard YARD at Curtis Bay, was well equipped by training and experience to undertake the strenuous task. He was then in his 41st year.

The COLFAX Arrives

It was in April 1899, that Lt. Moore, aboard the COLFAX, was on his way at long last to establish the experimental yard at Arundel Cove. The government-leased land, on part of which the small boat building and repair plant was to be erected, was on the north side of the western half of the Cove – some 35 acres leased at the rate of \$800 per year. The original shoreline was approximately 300 feet from the present southeast bulkheads. Well up into the Cove, at its most sheltered part, ten and twelve feet of water carried to within a few yards of the north shoreline. It was here Lt. Moore carefully outlined his plant setup – four small buildings – a mill for sawing, shaping and dressing lumber (about where the machine shop is now); a boat shop proper for actual assembly and construction (between the present facilities management building and the boat shop); a storage structure (adjacent to and behind the present

facilities management building) housing a sail loft where sails, hatch covers, tarpaulins and other canvas work could be produced, and squarely in the center (just above where the woodworking shop now stands), an administration building. The COLFAX provided the living quarters for the entire force of some twenty workers – officers and men from the COLFAX.

It took the summer, fall and winter of the first year to get the initial work started.

In 1900, a small railway was constructed to repair the life-saving boats. These famous unsinkable, self-bailing-and-righting boats, already well-developed, were perfected during the first few years they were produced at the Cove. A variety of other small boats were built, including the 26-foot race point surf rowboats. A small machine shop and several auxiliary buildings were erected in 1901, and additional enlisted personnel transferred to the Cove. The cutter COLFAX furnished steam from her boilers to constitute the central heating plant for these buildings. The winters during this period were extremely severe, and the waters of Arundel Cove and Curtis Creek frequently froze to a depth of 12 inches or more.

Original Coast Guard Academy Site

Late in the fall of 1900, the CHASE arrived to establish permanent winter quarters at Arundel Cove. The arrival of the CHASE, a famous vessel in her day, marked the beginning of the Coast Guard Academy, now located at New London, Connecticut.

Instruction had started 23 years earlier when Capt. J.A. Henriques fitted out the old topsail schooner, J.C. DOBBIN, as a training school for the first class cadets. Winter quarters for academic instruction were then established at New Bedford, Massachusetts. In 1877, the J.C. DOBBIN was abandoned in favor of the CHASE. The CHASE was an ideal training ship.

The custom was soon established to spend four to six months each year in cruising instruction, returning by fall to lay up at New Bedford for the school term. This routine was abandoned when the CHASE left New Bedford in 1895 to proceed to Baltimore to be lengthened. For the next five years, the CHASE laid up during the winter months at various southern ports of the United States. It was after these tours, in the fall of 1900,

that the CHASE established permanent winter quarters at Arundel Cove.

Cadets lived aboard the CHASE until 1906 when additional dormitory space was acquired in the form of the ORIOLE, a Maryland naval militia cast off hulk originally built as a sloop-of-war in 1838. CAPT J.P. Gray tells us, "Depot workmen laid a hardwood flooring on the ORIOLE's spar deck to make a drill and dancing hall. Four large staterooms, each accommodating four cadets, a dining room and galley were built into the gun deck. Cadets on the ORIOLE were living in greater comfort than those on the CHASE. All was not perfect, however, for the ORIOLE had open seams and would sink every now and then, always around midnight, in eighteen inches of water – signifying that the old Swede who was charged with tending the bilge pump had consumed too much schnapps."

Arundel Cove was selected because the wanderer in many ports could find a home on a site controlled and directed by the Revenue Cutter Service itself. An additional reason could have been that the commandant of the school at that time was Captain David Allen Hall, a native of Baltimore.

It was decided, for the best interest of the Service, to keep the school and the boatbuilding plant separate and apart. The CHASE was moored about where drydock No. 1 on the south bulkhead is now located. A good stout "L" shaped pier about 400 feet long was built. This came to be known as the "Long Dock" and was located about where Drydock Headhouse No. 1 now stands. As long as the school remained at the Cove, the school ship was moored to this pier. (In 1941, this pier was demolished.)

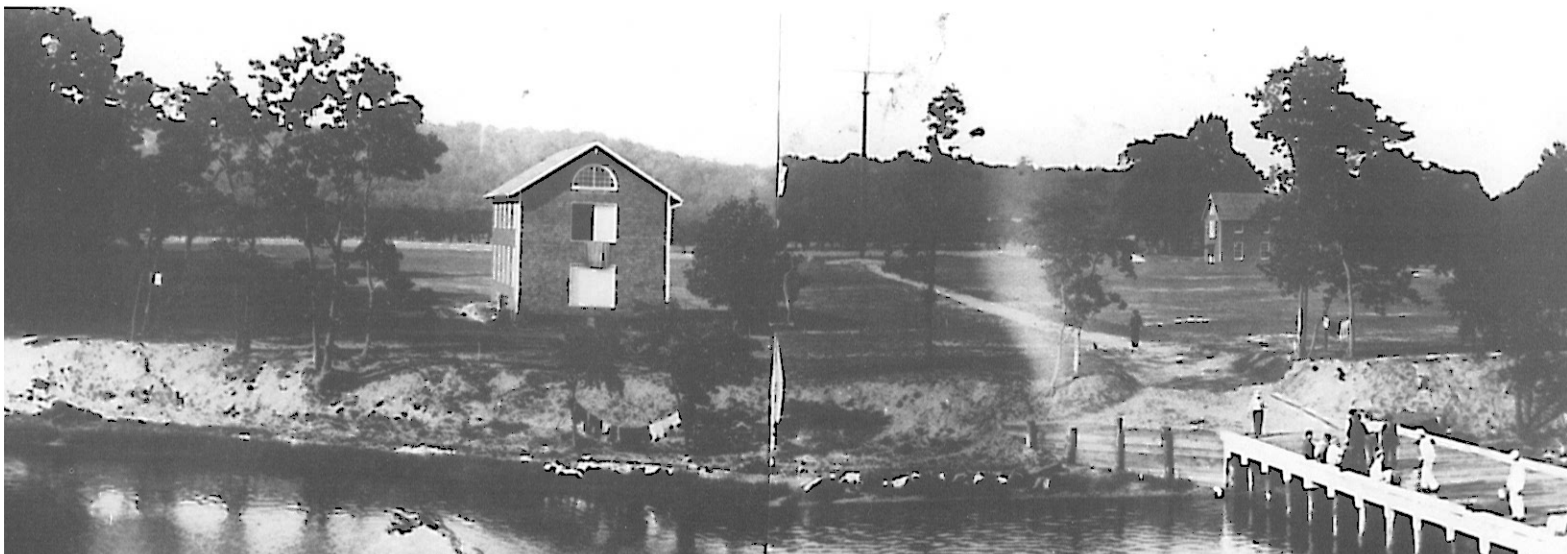
And now, for the first time, in 1906, an important step in establishing the permanency of the Academy was taken. Lt. Moore's sailors, assisted by those from the CHASE, erected a rough two-story wooden building on the shore along the West Depot boundary to serve for instruction of the cadets. Baltimoreans have long claimed this building marked the real beginning of the Coast Guard Academy. As you recall, all instruction up to that time had been aboard the school ship. It was a humble forerunner of the present magnificent New London Academy facilities.

The shingled frame school building housed a drill hall on the first floor, three classrooms on the second floor and a loft above for the storage of sails and gear of

Work begins on construction of the lumber mill (right).

This photo (center) depicts cadets working on board the CHASE in 1905. The sign in the upper right reads, "DEPOT - REVENUE CUTTER SERVICE." The picture was taken near today's Boat Shop, the northern corner of Arundel Cove.

Doing laundry was part of the cadet's daily routine as depicted in this early YARD photo (bottom), taken near the east waterfront's shore.





Cadets at Arundel Cove march to class in 1909 (top).

The Academy School Building is pictured in the left foreground (center).



The Corps of Cadets participate in training exercises (bottom).

the CHASE. Steam heat was provided by the Depot, and lighting was by acetylene gas. While the installation could not be described as sumptuous, it was adequate for the purposes intended. Boats for the Life Saving Service were being constructed; cutters were coming in for maintenance and repair, and a shore-based Academy was being developed.

The school fared well at Arundel Cove, although until the government purchased the site in 1905, there were scant accommodations for shore life. Later, a few homes were erected outside the reservation, including the eight two-story houses named "Heiskell's Row," just outside the main entrance gate (now known as the east gate). Some of these were occupied by officers of the school, but the cadets continued to live aboard the school ships moored at the "L" shaped pier.

In 1903, Congress acted upon the training period for the cadets, and a three year program was instituted at the Academy. The course of study was officially designated "School of Instruction for the Revenue Cutter Service" in 1904, when there were seven instructors and eighteen students. Three years later, two civilian instructors were appointed, and the School's curriculum was broadened to include cultural as well as technical subjects. In return, the students were, for the first time, required to agree to remain in the Service for at least three years following graduation. (It is interesting to note that the curriculum was practically unchanged until 1930, when the present four year course was adopted.)

Thus, year by year, conditions at the Cove improved. The cadets lived a strenuous existence. Every moment of the day was utilized and there was little time the students could call their own.

Beyond the large drill ground which stretched to the rear of the school building, laid a considerable stretch of undeveloped land which the instructors and cadets used to plant vegetables. It is now the open area east of the Administration Building.

The "Puddintown Express," consisting of two mules and a wagon, brought food daily from Baltimore.

During the pioneer days of the Depot, there were very few automobiles, and transportation to and from the carline terminal in Curtis Bay was primarily by water until 1927. The bus line from the YARD to Baltimore was not put into service until January 2, 1946.

Prior to 1927, ships undergoing repairs operated

liberty launches for their personnel – weather permitting – to Curtis Bay. Hawkins Point Road, the only land route, was a sparsely populated narrow rough country road of sand, reinforced somewhat with oyster shells. The bridge over Curtis Creek, located about 150-feet northwest of the present bridge, was a narrow, rotted, and patched wooden structure with a swinging draw operated by hand jacking, and later by a gasoline engine.

While the bridge was a convenience to pedestrians and vehicles, it was anything but that to boats and ships. Craft approaching the narrow draw were required to signal and secure until the bridge could be laboriously opened. The gasoline engine propulsion of the draw was nearly as slow as the hand method, for the engine had to be started for each opening.

Since the Depot was not equipped with a drydock, vessels had to be sent to commercial shipyards for drydocking. When the vessel could not proceed under her own power, the Depot tug had to nose the towed ship into one side of the narrow draw openings, give the towed craft a hard push, quickly break loose all lines and then back clear and steam through to the other side of the draw where the tow was picked up and resumed. Amazingly enough, there is no documentation indicating any incident resulting in damage to the bridge, tugs, or towed vessels as the result of this maneuver.

Workmen were brought to the Depot by the steam tug ARUNDEL, which left Flood's Park at the end of the carline at 6:50 a.m. and departed from the YARD each day at 4:15 p.m. Those who missed the boat on its morning run to the Depot either had to walk the two miles of rough road – occasionally some were fortunate enough to hitch-hike a ride in a farm wagon – or return home. If they missed the evening cruise, or if the boat was inoperative due to mechanical trouble or the weather, they had to walk to the carline or remain at the Depot overnight. Ships crewmen returning from town who missed the liberty launches had to walk the road at night. There have been stories told of highwaymen hiding along the dark road to waylay returning service men and rob them of their few dollars. Men were urged to walk the road in groups of two or more.

Another important step forward was taken in 1906 when Congress authorized the appointment of cadet engineering officers commissioned directly from civilian life. The act of 1906 also provided a six month period of

cadetship for engineers and subsequently extended this to a full year. It must be remembered that it was not until 1926, long after the Academy had moved to New London, that the line and engineer corps were combined.

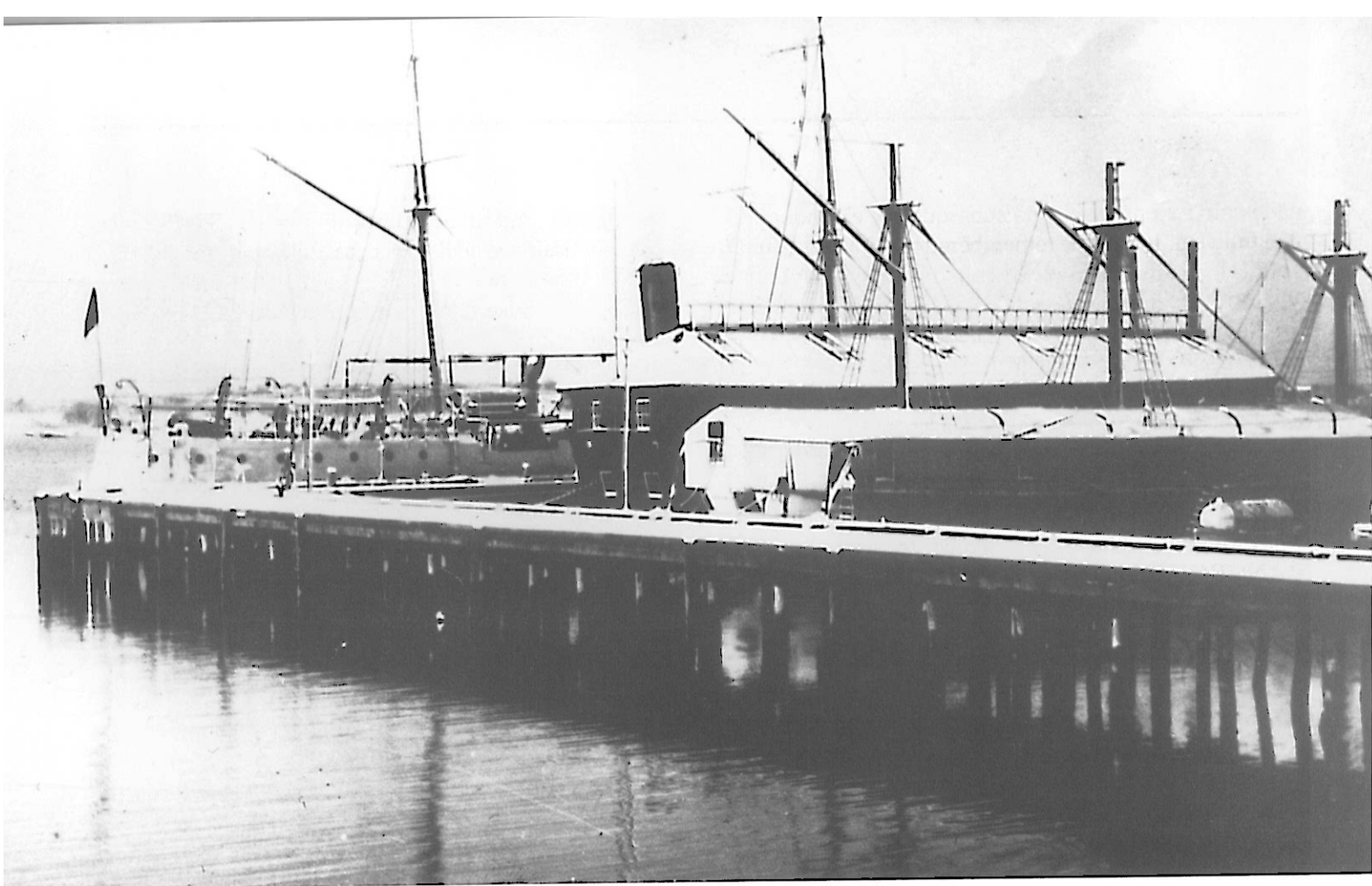
With the establishment of a shore installation, the School of Instruction again began to gain an identity independent of its training ship. The CHASE was still used for cruises and housed at least half of the Corps. But time was taking its toll on the faithful and beloved old ship. Not only was she aging; she was proving too small for the needs of the new "three class" Academy as well. In 1906, the Navy agreed to turn over the BANCROFT, a former Annapolis training ship. This vessel would accommodate at least 50 cadets. Designed as a kind of cruiser in miniature, she was an auxiliary two masted sailing vessel of 190' length, 32' beam. She was armed with 14 five and six pounders, a torpedo tube, and a Gatling gun, and she carried armor plating. Taken to a Baltimore shipyard in 1907, she was renamed the ITASCA, fitted with new water tube boilers, and re-rigged as a brigantine. Refrigeration was installed; compartmentation was made watertight. The bill for conversion came to \$100,000 – almost five times the original cost of the CHASE.

In the spring of 1907, the CHASE was stripped of her sails, light yards, and running rigging. When ITASCA arrived at Arundel Cove, a massive transfer of

equipment and materials took place. CHASE was decommissioned and towed to Baltimore for use as a quarantine station. ITASCA set off on an extensive European cruise under the command of CAPT W.E. Reynolds.

While cadets regretted the passing of the old bark CHASE, they welcomed their new found freedom from less dependence on the winds; further, they were pleased to be able to train with more modern equipment. In some respects, however, the shift was a mixed blessing. No longer did they enjoy the luxury of staterooms. From now on, they swung hammocks at night, tryced them and stowed them in daytime, and had only lockers and seabags to call their own.

Toward the end of the first decade of the present century, shipbuilding and repair work at Arundel Cove had increased. The industrial activity was no longer suitable for study. CAPT John Reinburg, Superintendent of the School of Instruction, appealed to Washington, and the Treasury Department took action. Fort Trumbull, at New London, was transferred from the War Department to the Revenue Cutter Service. When the ITASCA returned from her summer cruise in 1910, she headed for Connecticut where, for the first time, the cadets lived in barracks ashore. The school remained at Fort Trumbull until some of the present academy buildings were constructed in 1932.



The Academy's Schools of Instruction at Arundel Cove in 1909 are pictured above. The United States Revenue Cutter ITASCA is in the background. The CHASE is in the foreground. The ORIOLE is docked in between.

The Turn of the Century

The Revenue Cutter SEMINOLE had the distinction of being the first major vessel customer. She had been built by Columbia Iron Works in Baltimore, for \$141,000, under a contract dated October 28, 1897. Following her commissioning on September 3, 1900, she was assigned duties at Boston, Massachusetts. The SEMINOLE's orders were to proceed to Arundel Cove for overhaul and painting. She arrived on June 18, 1902. In July, the ALGONQUIN followed.

Thus, from 1899 to 1905, the quality and quantity of the work turned out at the YARD confirmed the opinion of Captain Moore and of Captain-Commandant Shoe-

maker that the plant should be made a permanent part of the Revenue Cutter Service. Consequently, in 1905 a strong effort was made to have Congress authorize a "Revenue Cutter Station at Curtis Bay," and to appropriate money to purchase the site. Congressional action was sought on the basis of need and economy, considering that \$60,000 had been saved on repairs of service craft during the previous four years. It wasn't until the last day of the session on March 3, 1905, the bill was passed authorizing the establishment of the Station and appropriating \$30,000 to purchase the land. To economize, however, Congress cut out an appropriation for \$65,000 for building a cutter for the Pacific Coast, thus effecting an overall savings to the Government of \$35,000.

Dr. Sidney O. Heiskell, the resident physician at the Quarantine Station, and Mr. Walter R. Townsend, a Baltimore attorney, from whom the first 36 acres of land had been leased, followed the Congressional proceedings closely. Apparently, there was an understanding between them and the Service concerning the property needed and the price to be paid. On October 4, 1905, the partners purchased the 97 acre Hall Farm on the south side of the Cove for \$10,000. On the same day, they sold the originally leased 36 acres, plus 29 acres of the Hall Farm to the Service for \$30,000. The future of the plant was secure. Plans could now be made for its future development to fit the needs of the Service.

The facilities at the Depot were enlarged and improved upon consistently from 1910 to 1920. The storeroom was enlarged; buildings were erected to provide for the stowing of gear belonging to vessels undergoing repairs; a boiler and pump house were constructed; a foundry, boat, sheetmetal, electrical, paint, upholstery, and blacksmith shops were built; mess halls, barracks, garages, recreation building, lumber storage sheds, and other structures were set up.

In 1915, the Revenue Cutter Service and the Lifesaving Service were combined to form the United States Coast Guard. The Depot was selected as the site to train surfmen in the care and operation of the new gasoline engines. These were augmenting the traditional oars and sails of the Lifesaving Service.

In those days, there was little background knowledge about such machinery and few people had seen the newfangled contraptions. But the advantages of engine power had been proved, and the Service was determined to introduce it as rapidly as funds permitted.

The school was housed in a shed along the west Depot boundary. After a few years, this training activity was transferred to Cape May, but the Boat Shop continued to develop and supply the boats needed for the service.

Work During World War I

On April 6, 1917, after the United States declared war on Germany, the Coast Guard's more than 200 officers and 5,000 men were ordered into action with the Navy. World War I was the first time the Coast Guard served as part of the Navy. The Coast Guard was in the thick of the action, convoying cargo ships and screening

transports. Several units of the U.S. Navy were sent to the Depot for repairs and conversion. Work on these Navy vessels was expedited to the fullest extent.

After 1924, production of boats, canvas work, and numerous other articles for the needs of the Service were stepped up. Extensive overhaul and repairs were performed on such then-modern vessels as the YAMACRAW, SENECA, SEMINOLE and many 100 foot, 125 foot, and 175 foot patrol boats and seagoing tugs. The 500 personnel of the Depot now included civilian employees along with the enlisted men. The Depot was rapidly coming into its own.

On May 1, 1928, employees of the Depot were blanketed under the Civil Service Act by an Executive Order issued by President Calvin Coolidge. The Depot had two hundred and forty-five wage board and two classified employees on its civilian employment rolls in 1928. The military complement of officers and enlisted men at this time was approximately two hundred and fifty.

Although vessel construction, repair, overhaul, conversion, and the manufacture of many items for the Coast Guard were progressing at a high plan, Depot facilities were becoming outdated. The shops and other buildings were wooden, and, by now, too small and inadequate. The machinery, boilers, and plant and shop equipment in general were second hand acquisitions from old cutters and salvage piles. Additional mooring space was sorely needed, and the shallow water depth placed a limitation on the type of vessels which could safely be dispatched to the Depot. The Depot personnel consisted of a small, but highly efficient mixed force of military and civilian mechanics and seafaring men with numerous trades. The work load was flexible, increasing considerably in summer months, and decreasing in winter months.

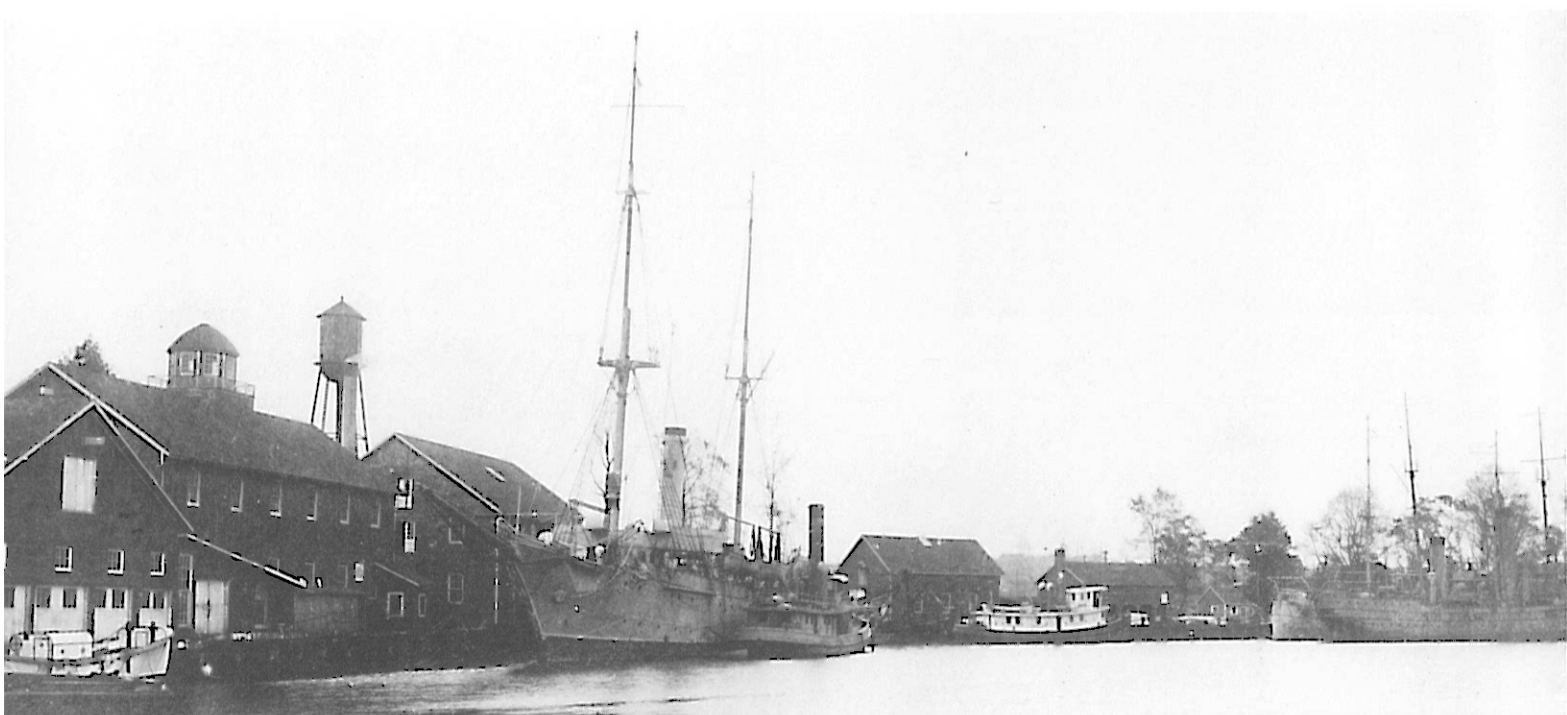
Despite its inadequate facilities, the Depot had gained a nationwide reputation for the fine quality of its work. Its small boats were famed throughout the world, wherever life-saving stations were located or cutters patrolled the seas. The Depot's production was excellent, in spite of considerable handicaps.

By 1934, the industrial plant of the Depot had definitely become outmoded, and the buildings and equipment had, for all practical purposes, far surpassed their normal span of operations. Funds were obtained through Congressional appropriations to modernize the



The picture of the waterfront above was taken in late 1919 or early 1920.

The photo below pictures the scene from a different angle at the same time period.



plant. New boat, gas engine, and machine shops were constructed and equipped, and a forty-ton marine railway was installed.

These improvements were followed in 1937 by a new ordnance building (now housing Baltimore Group, Bldg. No. 70). The two-story concrete and brick structure used as a small-arms supply repair base and an ordnance building was, at the time, the most imposing and modern structure at the Depot. In 1939, the Lighthouse Service of the Department of Commerce was transferred to the Coast Guard. With the acquisition of the Lighthouse Service, buoy construction became another major Depot function.

From Depot to Shipyard

With the advent of 1940, the Depot took on aspects of a large, extensive, modern shipyard, but greater and more modern improvements and additions were yet to come. As the possibility of another World War loomed, a Congressional Committee, foreseeing the need for greater shipyards capable of repairing, overhauling, converting, and redesigning, made an inspection tour of the Depot. They determined its requirements for war-time operations and functions. The Committee arrived at the Depot aboard the now famed cutter ALEXANDER HAMILTON. They conducted a thorough inspection



Construction of the shipyard's facilities stepped up in the 1920's and 30's. Bulkhead construction is pictured in the left photo.

The YARD was called the U.S. Coast Guard Depot in that era, evidenced by the photo below.



of the Depot, and recommended an extensive program of expansion. The program was accepted by Congress, and large appropriations were made for the purpose of further developing the Depot. A new concrete and brick administration building; a 3,000 ton floating drydock; a combination shop building for the sheetmetal, electric, pipe and rigging shops; a 320 foot by 60 foot concrete pier with a tower crane; and two shipways were all constructed with the funds made available by Congressional action. Other improvements in this program included dredging of the channels and waterways approaching the Depot, a high pressure boiler to augment the heating plant and to test steam fixtures on vessels at the Depot, and the installation of new pipe lines.

When this broad program of expansion and improvement had been fulfilled, the Depot was no longer a small repair and supply base. It was now comparable in size and operations functional to a medium-sized Navy Yard. This is when the official designation was changed from the U.S. Coast Guard Depot to the U.S. Coast Guard YARD.

In addition to work performed on all manner of Coast Guard vessels, the Coast Guard YARD manufactured all types and sizes of navigational buoys; outfitted equipment for small boats in the field, and made machinery parts for all sizes of vessels. These materials were requisitioned by other Coast Guard units. Also, practically all canvas work for the Coast Guard Service, such as awnings, boat and gun covers, etc. were manufactured at the Coast Guard YARD. On a yearly basis, the YARD constructed an average of 300 small wooden boats ranging from 10-foot dinghies to 52-foot buoy boats, including the world famous Coast Guard 36-foot 8-inch nonsinkable, self-bailing, self-righting life-boats. The boatbuilding programs of the YARD were conducted on a production-line basis.

The first steel hulled boat to be built at the YARD was constructed in 1940. She was a 40-foot prototype motor lifeboat. The CG 40300, upon completion, was assigned to the Ninth Coast Guard District.

Shortly after Pearl Harbor, the Navy purchased adjacent land and enlarged the area and facilities of the YARD, increasing the land area to its present 112.5 acres. The approximately 50 acres added were the western and northern areas of the present YARD. Two

new piers, approximately 60 feet by 400 feet, each served by tower cranes, were constructed, along with 1,800 foot bulkhead for mooring vessels. A new shop building was erected which contained fabricating, electric, and pipe shop annexes, and an outside machine shop. New temporary type buildings for the paint shop, garage, employment office, and storehouses, were also erected. Railroad track was laid throughout the YARD with connections to the Baltimore and Ohio main line. A cafeteria building was constructed, and the Navy assigned a 1,000 ton all-steel floating drydock to the YARD to relieve the heavy docking schedule of the No. 1 drydock. The YARD drydocked over 125 vessels in excess of 60 feet in length each year. Locomotive cranes and other railroad equipment were provided. These improvements made the YARD a first-class ship repair and building plant, with many features not found in other shipyards in the Baltimore area. Its capabilities were limited only by the capacity of the 3,000-ton drydock for underwater work, and the depth of the water, which was approximately 20 feet. The floating equipment of the plant at that time included a 110-foot steel hull steam derrick barge of 25 tons capacity, an oil handling and sludge removal barge, a 96-foot steam tug, and a 75-foot fireboat.

New Work Era

The 110-foot Harbor Cutter MANITOU and her sister ship KAW marked the beginning of a new era in the work of the Coast Guard YARD. These two 110-footers were the first cutters to be built since the recent completion of the ship building ways and the enlargement of shop facilities. Now, the Coast Guard could build at least a part of its own ships where formerly it undertook only repair work. The MANITOU and the KAW were being constructed on the shipways at the same time; however, the MANITOU, on September 29, 1942, was the first of the two vessels to be launched. The KAW followed three months later.

The next large vessel to be constructed at the YARD was the cutter IRONWOOD, a 180-foot buoy tender which was launched on March 16, 1943. She was powered by a 1,200 horse power diesel electric drive engine and could cruise at the speed of 13 knots.



In the early 1940's, a small, wooden office building served as the YARD's Main Administration Building. It was located between Building 4 (today, housing the Facilities Management Department and the Woodworking Shop) and Building 1 (the present Main Administration Building). (top photo)

Construction of the YARD's shipways began in 1941 (center photo). They are capable of simultaneously constructing two 350' x 45' ships.

Construction of the west portion of the waterfront is shown in this 1942 photo (bottom). Today, this section is home base for the Curtis Bay Search and Rescue Station and two of the Coast Guard's Fifth District ships, CGC RED BIRCH, a 157' buoy tender, and CGC SLEDGE, a 160' construction tender.





Largest Cutters Ever Built

On July 5, 1943, the keel was laid for a 255-foot class cutter. Once completed, she would be the largest cutter ever to be constructed by YARD employees. Only seven months later, on February 29, 1944, the MENDOTA was launched.

One month after the launching of the MENDOTA, on April 29, 1944, the cutter PONTCHARTRAIN, another 255-class cutter, was launched. Both the MENDOTA and the PONTCHARTRAIN were entirely constructed and outfitted at the YARD.

In 1944, the YARD was contracted by the U.S. Navy to build six 100-foot ocean going tugs. The first keel was laid on April 29, 1944. As the U.S.C.G. YARD Band played "Anchors Away," on July 14, 1944, the first of the series of 100's were launched, the SATAGO and the SONNICANT. The next 100's, the SECOTA and the TACONNET, were launched on August 4, 1944. The SECOTA was named after an Indian village of the 16th century on the north bank of Pamlico River, in present Beaufort County, North Carolina. The TACONNET was named after an Abnaki Indian village near Waterville, Kenebec County, Maine. The final series of 100's were launched on October 14, 1944, the TENSAW and the TOPAWA.

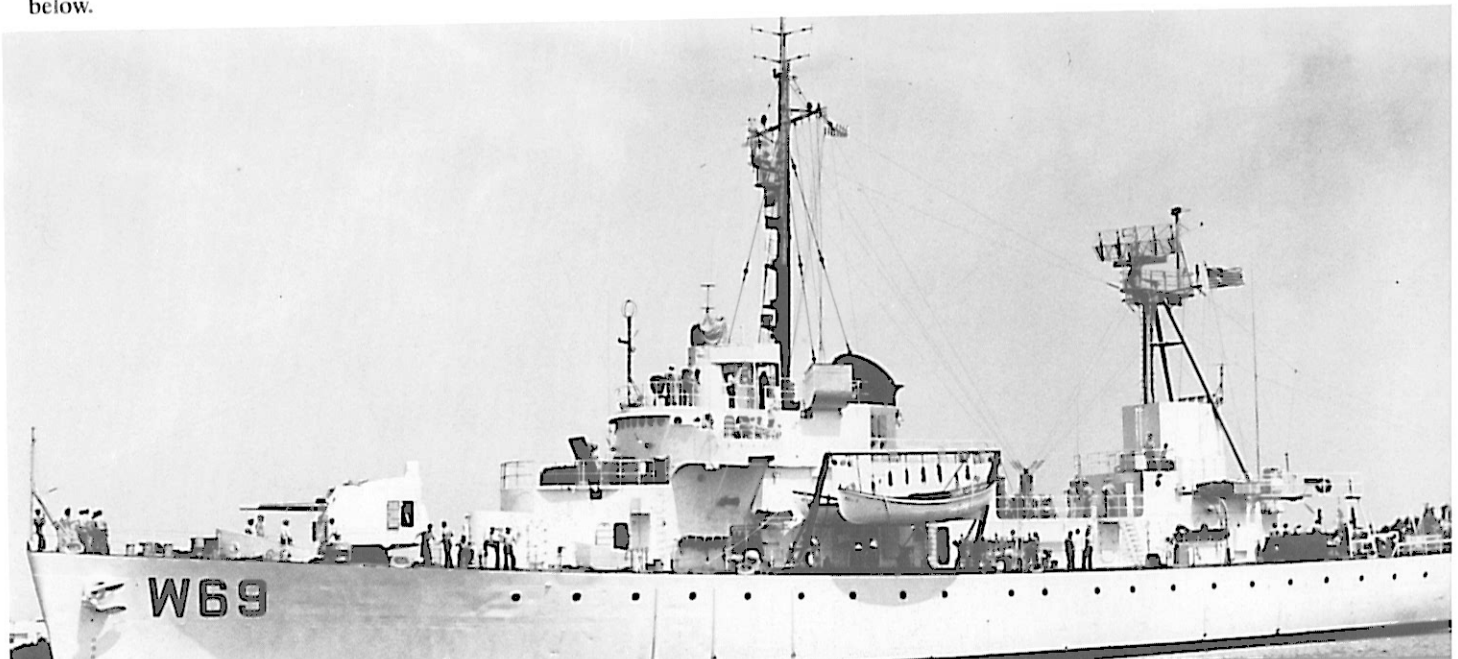
The YARD, in January 1945 employed 3,100 civilian workers, and the military complement increased accordingly. Ships of many allied nations were repaired, including submarines and surface vessels. In as much as the need for small boats never ceases, small boat construction activities were not neglected.



The CGC MANITOU, built in 1942, is pictured above. The 255-foot United States Cutter PONTCHARTRAIN is pictured below.



The famous CGC MENDOTA, launched in 1944, is seen below.



Coast Guard Training Station

Across the Cove, which was cluttered with vessels of all types, a huge Training Station sprang up virtually overnight. Not only were men being trained at the station, but a special program was set up to train horses and dogs for war-time duties. Many World War II employees may recall the dogs barking as they arrived for work in the early morning hours.

“Cutters”

During the war years, prime athletes were made part of the station crew as well as at many other Coast Guard installations. The YARD baseball team took on and defeated all comers, including the New York Giants, Philadelphia Athletics and other big league teams. Records indicate that organized YARD baseball goes back as far as 1908. The YARD also had football and basketball teams that played in league competition against teams from the Baltimore Metropolitan area. But the name of the game was ice hockey, and the name of the team was United States Coast Guard “CUTTERS.”

Thousands of loyal Baltimore hockey followers – older ones that is – will never forget names like LCDR C.R. MacLean, Hub Nelson, John Maricucci, Seymour Hunter, Joe Kucler, Frankie “Johnny Zero” Brimsek, just to mention a few. Most fans would agree the CUTTERS comprised the finest all around team ever to represent Baltimore ice hockey circles. The CUTTERS home ice was Carlin’s Iceland Arena in Baltimore.

At this time, Baltimore had a minor league team, the Orioles, which was so weakened by the draft that it had to drop its franchise. The Coast Guard had enlisted many young hockey players and was invited to take over the Orioles franchise in the Eastern Amateur Hockey League. LCDR Clifford R. MacLean, Personnel Officer at the YARD, became the playing manager of the team, and Mel Harwood, formerly of the Baltimore Orioles hockey team, became the coach.

In the 1942-43 season, the team played a 50 game schedule, playing home games during the week, then traveling by train on the weekends to play teams like Boston Olympics, the New York Rovers, and the Philadelphia Falcons. During the week, the men worked their regular shift at the YARD. The team paid for its

Coast Guardsmen receive their instructions at the YARD’s Training Center during the Second World War (below).





New York Mayor Jimmy Walker (right) presents the 1943-44 U.S. Amateur Title to LCDR MacLean (left) and the YARD's ice hockey team, the famous "CUTTERS" (above).

own travel expenses out of home game receipts, and in the 1942-43 season, took in \$24,000. They turned over the excess money to the YARD's athletic fund for football and baseball equipment. When they had the finances, the 30 piece Coast Guard Band went with them on the road.

In the 1943-44 season, the CUTTERS won the U.S. Amateur Title. The trophy was presented to LCDR MacLean and the team in Madison Square Garden by Mayor Jimmy Walker of New York.

Post-War Reduction-In-Force

During the period from 1945 thru 1950, reduction-in-force (RIF) was the name of the game. The YARD reduced its wartime civilian employment level of 3,100 to a peacetime level of 1,200 civilians. This situation was complicated by the return of hundreds of WW II veterans who had left the YARD to enter the armed

forces. These men and women were entitled to re-employment rights, and the YARD was obligated to give them a job. Very little new construction was done during that time. Vessel overhaul and repair work, plus buoy construction and miscellaneous manufacturing, constituted most of the YARD's work load. This type of work continued to 1950, when the Korean War broke out.

The Early Fifties

By 1950, the abilities and capabilities of the YARD were well known. YARD employees may recall what was known as the "tunnel of love," a quonset hut which was purposely built over railroad tracks and extended from Bldg. No. 8 to Pier 3. Inside this tunnel, workmen constructed the metal 40-foot life-saving patrol boats on a production-line basis. The YARD built approximately 300 of these boats, and at one time could turn out one "40-footer" craft per day. This wasn't the only



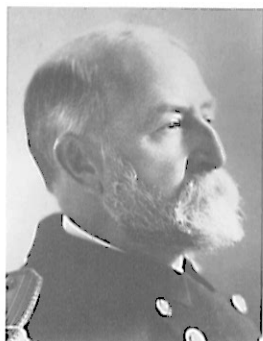
Boat Shop workers in 1952 remove a 10'6" fiberglass hulled dinghy from the mold (top photo).

In the early 1950's, the YARD constructed the 52' wooden buoy boats (center photo).

YARD personnel launched the Lightship AMBROSE in 1952 (bottom photo).



Commanding Officers of



CAPT Russell Glover
USRCS
1899 - 1903



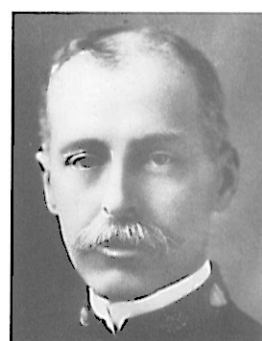
CAPT John Moore
USRCS
June, 1903 - May, 1905



CAPT Daniel Foley
USRCS
May, 1905 - May, 1908



CAPT James Brown
USRCS
May, 1908 - July, 1911



CAPT James Moore
USRCS (USCG)
July, 1911 - November, 1919



CAPT Leroy Reinburg
USCG
July, 1937 - January, 1946



COMO William Keester
USCG
Jan., 1946 - Sept., 1949



CAPT Milton Daniels
USCG
Sept., 1949 - Feb., 1951



CAPT Charles Dean
USCG
April, 1951 - March, 1953



CAPT Charles Thomas
USCG
July, 1953 - January, 1955

D



RADM Ellis Perry
USCG
June, 1969 - June, 1970



CAPT Loy Renshaw
USCG
June, 1970 - June, 1972



CAPT Richard Goode
USCG
June, 1972 - June, 1974



CAPT Robert Duin
USCG
June, 1974 - May, 1975



CAPT Robert Sims
USCG
May, 1975 - July, 1975

D

Comm

D

Comm

Seattle

he Coast Guard YARD



CAPT Bernard Camden
USCG
November, 1919 – April, 1923



CAPT Aaron Gamble
USCG
April, 1923 – April, 1926



CAPT Randolph Ridgely, Jr.
USCG
May, 1926 – October, 1929



CAPT James Hottell
USCG
January, 1930 – June, 1934



CAPT Henry Fisher
USCG
June, 1934 – July, 1937



CAPT George Hicks
USCG
April, 1955 – July, 1956

D



CAPT Vernon Day
USCG
July, 1956 – June, 1962

D



CAPT Charles Columbus
USCG
July, 1962 – June, 1965

D



CAPT Arthur Engel
USCG
July, 1965 – June, 1967

✓



CAPT Charles Scharfenstein, Jr.
USCG
June, 1967 – June, 1969

D



CAPT Benedict Stabile
USCG
July, 1975 – June, 1977

✓



CAPT John Lobkovich
USCG
June, 1977 – June, 1980

✓



RADM Robert Lucas
USCG
June, 1980 – May, 1981

✓



CAPT Barry Roberts
USCG
May, 1981 – November, 1983

✓



CAPT Donald Nachtwey
USCG
November, 1983 –

✓

construction being done at this time. On August 4, 1950, the U.S.C.G. Lightship SAN FRANCISCO was launched, and exactly two years later, on August 4, 1952, her sister ship, the Lightship AMBROSE, was launched. In 1953, the AMBROSE returned to the YARD for minor alterations and for the installation of a new mast and beacon light. The tripod mast was the first to be installed on any Coast Guard Lightship. The new light was of English design and manufacture. It could develop 5.5 million candlepower using only six 1000 watt bulbs. The AMBROSE was the subject of magazine and newspaper stories, and also was featured on national television programs.

The early fifties saw the construction of 36 foot 8 inch motor life boats, 30 foot rescue boats, 40 foot buoy boats, 52 foot buoy boats, 25 foot 10 inch self bailing surfboats, 10 foot plastic dinghies. The plastic boat construction marked another advancement for the YARD in the manufacturing of small crafts.

The 95-Foot Patrol Boat Program

At 10 a.m. on February 26, 1953, the first of the 95-foot steel patrol boats was launched at the YARD. The rest were scheduled for launching at the rate of one each week. These boats were being constructed on a production-line basis with the last one scheduled to hit the water by the end of the fiscal year, barring unforeseen delays. It was on the Coast Guard's One Hundred and Sixty-Third anniversary date, August 4, 1953, that the last of the sixteen 95-footers was launched. Her christened name, the ELECTRA, was constructed of a steel hull and aluminum superstructure. YARD personnel were optimistic that once the 95-footers had the opportunity to demonstrate their ability, additional ones would be manufactured.

YARD prediction came true. In the next seven years, the YARD constructed forty-two additional 95-footers for the Coast Guard and the U.S. Navy; however, not without modification. On January 3, 1955, the YARD launched its first two Class "B" 95-footers being built under the current program. Six weeks later, on February 14, 1955, the YARD launched two more 95-footers. The last series of 95-footers to be built at the YARD were modified again. The final 95-footer Class "C" was launched in 1962.

A Shift Toward Steel Boat Construction

After the Korean conflict, the YARD reduced its work force to 1,100 civilian workers. The YARD work load for fiscal year 1954 was reduced to approximately \$9,500,000. This meant that for the next twelve months, fewer ships would be sent to the YARD for repair, fewer boats would be built, and less manufacturing and special projects would be undertaken. Also, at this time, the Training Stations were disbanded. Vessels were laid up; some would remain in storage at the YARD. Even as the YARD saw and felt its force slowly dwindling, it continued to uphold its established reputation.

The overhaul of aging ships is an ever-increasing challenge to engineering. How to repair the ship on the money allocated and also bring her up to Coast Guard standards of seaworthiness and efficiency are constant challenges.

The 125-foot Patrol Crafts (WPC) were nearly thirty-six years old at this time, and many of them which came to the YARD were in deplorable condition. The YARD succeeded in restoring them, as well as, the twenty-nine year old 165-footers to a sound seaworthy condition once again.

The next several years saw the YARD shift further toward steel utility boat construction. Also, the YARD, during this time, was very active in miscellaneous manufacturing, ship repair and new vessel construction. This included the 95-footer program, navigational buoys construction and repair, and many special projects. Some of the vessels that visited the YARD for repair or modification were the Cutters RELIEF, PANDORA, ANDROSCOGGIN, GENTIA, and the CASTLE ROCK.

In the late 50's and early 60's, the YARD took on a unique project. Workers built a great number of the sled mounted wanigans, pre-fabricated buildings that were initially put in the Arctic back when the first major U. S. efforts were made on this relatively unknown continent. In addition, many of the T-5 pre-fabricated buildings at Camp Century, Byrd Station and McMurdo Sound Station in the Antarctic were constructed at the Coast Guard YARD. Of note is that the YARD also built many of the buildings that were sent to Greenland for the Army and this included the installation of a nuclear generator. Interesting work for a shipyard, especially for the Coast Guard's shipyard!



One of the YARD's longest building programs, the construction of the 95' steel patrol boats, began in the middle 1950's (top photo).

YARD built wanigans are transported to their destination sites in the Arctic (center photo).

The YARD launched the CGC AZALEA, a 100-foot buoy tender, in 1958 (bottom photo).



On October 3, 1956, the cutters CHILULA and the AVOYEL were commissioned at the YARD. These two decommissioned Navy vessels were completely revamped by YARD personnel, and within 90 days of their arrival at the YARD were ready to serve as vessels of the Coast Guard Fleet.

On March 4, 1958, the Coast Guard Cutter AZALEA was launched at the YARD. This 100-foot buoy tender was equipped with a pile driver and a 5 ton capacity steel boom which worked from an aluminum alloy mast. The cutter AZALEA was air conditioned for living comfort and her machinery cooled through the hull by a skin system using treated water. On May 23rd, the AZALEA was formally placed in commission, assigned to replace the forty-two year old PALMETTO, and would be homeported in Charleston, South Carolina.

In April 1958, the YARD completed the assembly of a new light beacon for Oak Island Light Station. This beacon was considered to be the most powerful in United States history. The upper lights were rated at 14,000,000 candle power.

In July, 1958, YARD management announced that the work load would increase over the next several years. The YARD's volume of business in fiscal year 1958 would be in excess of 12 million dollars. The scheduling of work for the YARD is developed jointly by Coast Guard Headquarters and the YARD. Some of the work projects for fiscal year 1958 were: (1) overhaul nine Navy YP Boats (2) forty-eight ship overhauls (3) construct thirteen steel 40-foot UT Boats (4) construct 30-foot wood UT Boats (5) construct 100-foot buoy tender (6) construct eight 95-foot Patrol Boats and (7) miscellaneous construction.

The USCGC DEXTER was commissioned at the YARD on June 30, 1958. Approximately one year later at appropriate ceremonies, the CGC COMANCHE was commissioned. Both of these cutters were completely refurbished at the YARD. The USCGC DEXTER was the former USS BISCAYNE, which was decommissioned following World War II. She was recommissioned as the CGC DEXTER in 1946 and served as a North Atlantic Weather Patrol vessel until 1953, when she was again decommissioned. The CGC COMANCHE was formerly the USS WANPANOAG of the Navy's reserve fleet.



The YARD's 82' patrol boats served with distinction during the Vietnam War (above).

The 82-Foot Patrol Boat Program

The first of seventeen vessels built at the YARD under the 82-foot program was launched on February 24, 1960. This program marked the YARD's first use of the inverted erection method on assemblies with the hull being constructed in an inverted position. These two sections were then joined together in an upright position at the launching site. The method used for launching the 82-footer was unique. It consisted of lifting the vessel with a derrick barge and placing it in the water instead of the normal shipways launching procedure for a vessel of this size.

Of special interest is the fact that during the Vietnam War, twenty-six of the YARD built 82-footers were quickly and heavily armed and shipped to Southeast Asia to form "Coast Guard Squadron One." They served with distinction throughout that conflict.

YARD Acquires New Tenants

In the fall of 1960, the YARD welcomed Coast Guard Group Baltimore and, under its control, small boat station, Group Station (now known as Curtis Bay Station). The primary duty of the Group then and today is search and rescue, law enforcement, and ice-breaking missions in the upper Chesapeake Bay, from the C&D Canal to Smith Point, including the Potomac River.

(Today, Group Baltimore also controls five other small boat stations: Stillpond, Md., Annapolis, Md., Taylor's Island, Md., St. Inigoes, Md., and Dahlgren, Va. In addition, the Group maintains two actively manned light stations at Thomas Point, Md., and Cove Point, Md.)

Another tenant unit at the YARD in the 1960's was the Field Testing and Development Center, established at Curtis Bay in 1947. This unit changed its name to Research and Development Center after moving to Groton, Connecticut from the YARD in July of 1972 after 25 years as a tenant. Its function is exactly what the name implies – it is the Coast Guard's consumer research laboratory. The Research and Development Center will test anything from a ball of sail twine to a 95-footer, and then let the "consumer" know if it is what they wanted.

The 1960's

In the sixties, the YARD continued to prosper through innovation and employee dedication.

Many of the YARD employees who started working at the YARD shortly after World War I were retiring. These men dedicated four decades of faithful service to the success of the YARD operations. During these ten or more years, the YARD underwent an extensive modernization of facilities and equipment programs. Most of the major Coast Guard ships on the East and Gulf Coasts were on availability here during this era. A schedule was put into effect which would bring ocean station vessels to the YARD once every two years. Usually only thirty days were allotted for all repair work, and anywhere from \$120,000 to \$150,000 were allotted for overhauls.

In the new construction side of the business, the YARD was assigned to build 210-foot medium endurance cutters, construct the 80-foot and 157-foot buoy tenders, and continue to build the 82-footers. The small boat construction continued to flourish with the building of steel 44-footers and 41-footers and many small plastic crafts ranging from 10-foot to 40-foot in size.

On April 14, 1962, the YARD completed construction on the prototype 44-foot steel motor lifeboat (MLB). During the next ten years, the YARD built 110 of these self-righting boats for the Coast Guard fleet. The 44-footers replaced the old wooden 36-foot MLB's which were built by the YARD in the early forties.

In the summer of 1963, the keel was laid for a new 157 foot buoy tender. In April of 1964, the CGC RED WOOD was launched, followed by the RED BEECH and the RED BIRCH. The RED CEDAR and the RED OAK, the fifth and final of its class to be built at the YARD, was commissioned in December of 1971.

The YARD strives to improve its facilities when funds are available. The sixties saw many new buildings started and/or completed, and many YARD facilities renovated. The YARD is unique in some aspects because it's an industrial shipyard besides a living quarters for the military. Because of the increase of repair work done at the YARD, more military were temporarily stationed here. Even though most of these men were quartered on board ships, improved messing and recreational facilities were desperately needed.

The First 210-Foot WMEC Is Launched

In May of 1965, the YARD sent its first 210 foot medium endurance cutter down the ways. The USCGC CONFIDENCE, built at the YARD, was launched. She was powered by two 1000 horse power gas turbines and two 1500 horse power diesel engines commissioned for service in January, 1966.

The Coast Guard YARD built five 210 foot medium endurance cutters in all – the CONFIDENCE, the RESOLUTE, the DURABLE, the DECISIVE and the ALERT.

Vietnam Era

The YARD never let down; it continued to play its part in maintaining the readiness of the Coast Guard fleet during the Vietnam era. New construction flourished during this period with the YARD building new cutters and small patrol boats.

On April 28, 1967, another historical event took place at the YARD. The USCGC WESTWIND and her sister ship, the SOUTHWIND, made the YARD their home base when they returned from cruises in the Arctic and Antarctic.

In March, 1968, construction started on the 80-foot buoy tender TERN. The 80-footer was the first of this type vessel to be built by the YARD. It was designed to operate on rivers, using a stern loading gantry crane to handle buoys. The ship had a hydraulic bow thruster

The 44-foot self-righting steel motor lifeboat is pictured to the right.

The CGC DURABLE, a 210' WMEC, is launched down the YARD's shipways in 1967, as hundreds of guests look on (bottom left).

The CGC RED WOOD, pictured at bottom right, was the first YARD built 157' buoy tender.



and twin right angle drive diesel propulsion engines. The Cutter TERN was the first of the new class of inland buoy tenders to be launched. It was christened on February 7, 1969.

At the same time period, the Coast Guard invented a new weapon that was used by the U.S. Navy in Vietnam. It was called the "Piggyback." It consisted of a 81 mm mortar on the bottom and a 50 caliber machine gun on top. Besides its normal use, the machine gun with tracers could be used to accurately aim the mortar. They were utilized on small craft in Operation Markettime projects during the Vietnam war and were very successful.

During Fiscal year 1968 and 1969, the YARD constructed nine 46-foot stern loading buoy boats. Today, the craft are successfully operating in the New England waterways, the lower Chesapeake Bay, the Great Lakes, and the Mississippi tributaries.

Another large vessel began construction on July 1, 1969, the USCGC RED CEDAR. This 157-foot class cutter was the fourth similar to the others built at the YARD, except this vessel contained a complete sewage treatment plant. The RED CEDAR was launched at the YARD on August 1, 1970.

Birth of a New Decade: The Nineteen Seventies

The nineteen seventies brought with it many innovations in YARD organizational development besides an extensive modernization of facilities program. New construction continued its upward swing with the YARD being assigned to build more ships, increase its orders of small plastic crafts, and several more special miscellaneous projects. Repair work was a constant challenge for YARD personnel. YARD availabilities were scheduled in advance. When an unforeseen repair or replacement became necessary, YARD employees were called upon to perform the extra work.

Some of the noticeable facility changes in that time period were: the enlarging and enclosure of the Structural Shop, Bldg. No. 78; installation of a new electrical system throughout the YARD; a new Paint Shop Office, shower and locker room, Bldg. No. 32; construction of the Central Toolroom, Bldg. No. 77;

illumination increase with the installation of 368 new high output fluorescent lights; a new building constructed on the west side of Bldg. No. 78 to house the structural office staffs; the relocation of Graphic Arts, the Photography Lab, Reproduction, and the Public Works Department to the second floor of Bldg. No. 4; construction of the Electro Shop Bldgs. No. 40 and 40A which would house the Ordnance, Electrical and Electronics Sections; construction of a new BOQ and Dispensary Buildings; renovation of part of the second floor of Bldg. No. 8 to house a new cafeteria, and renovation of Bldg. No. 9 to house the YARD Bowling Recreation Lanes.

The 1970's began with major machinery modernization of the icebreaker CGC WESTWIND, now home based at the YARD. In 1971, the YARD began a multi-million dollar machinery modernization project and hull strengthening project. Extensive hull modifications were made to improve its icebreaking performance and extend its service life.

The YARD accomplished an impressive list of projects during the fiscal year '71 which are worth mentioning at this time: (a) over one weekend, a bow thruster repair on the CGC GALLATIN (b) reblading of the CGC CAMPBELL's main turbine engine in record time (c) first disassembly of the largest controllable pitch propeller in record time (d) reduction gear repair on the CGC ABSECON (e) fire damage repairs and main gas turbine reinstallation on the CGC SHERMAN (f) controllable pitch propeller repairs on the VIGILANT (g) propeller damage repair on the UNIMAK (h) a record breaking number of repair availabilities (i) a considerable number of repair projects for the U.S. Navy (j) completion and delivery of the RED CEDAR (k) launching of the RED OAK (l) delivery of 24 motor cargo boats (m) delivery of 26 motor self bailing surfboats (n) delivery of the aluminum prototype 42-foot utility boat.

A Flurry of Activity

In 1971, the YARD completed construction of a prototype boat designed by engineers at Coast Guard Headquarters in Washington, D.C. This prototype was destined to replace an aging fleet of Coast Guard forty foot steel hull utility boats. The new 41-foot boat had an



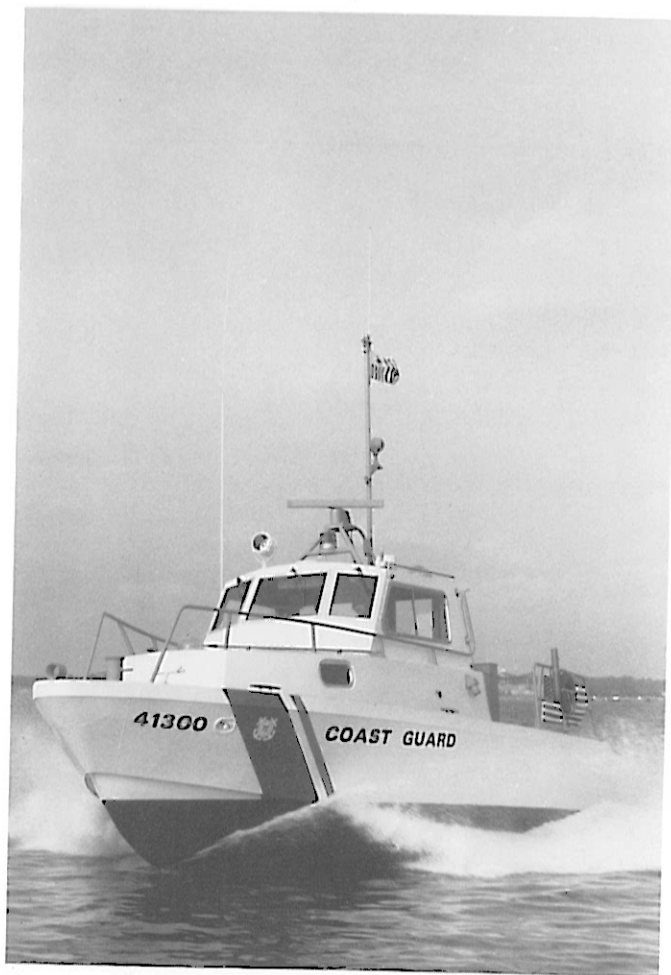
The CGC TERN, an 80-foot buoy tender (top), was launched at the YARD in 1969.



The YARD continued to design and manufacture pieces of ordnance equipment during the late sixties. The "piggyback," a gun successfully used in Vietnam, is pictured in the center left photograph.

One of the newly constructed 46' stern loading buoy boats takes a trial run in the Baltimore harbor (bottom).





The aluminum hull 41' patrol boat pictured above is one of the Coast Guard's most recognizable crafts to today's television viewers and movie goers. Remember, when you see one on "Magnum P.I.," it was made at the Coast Guard YARD!

aluminum hull and fiberglass superstructure. After a formal, six month operational testing period in competition with three commercially designed and built boats, the YARD built boat was adopted. The construction of the 41-foot class began with the first boat delivered in 1973. Coast Guard YARD personnel constructed thirty such vessels a year, from 1973 through 1979. In 1980, and 1981, fifteen boats were delivered each year. When the program ended in 1982, the YARD completed its 207th 41-foot UTB.

The 41-foot UTB, a trim white boat with the famous Coast Guard stripe on her hull, is well known to recreational and commercial boaters throughout the United States. The 41-footer is used primarily for search and rescue and has proven her merit many times under hazardous conditions.

In 1974, the YARD laid the keel for a 160-foot single unit construction tender, the CGC PAMLICO. The tender featured an enlarged work area and an all new hydraulic marine crane, insuring maximum usefulness of the vessel in assigned operations.

Throughout the late 1970's, the YARD constructed three more 160-foot construction tenders: CGC HUDSON, CGC KENNEBEC, and CGC SAGINAW. The vessels were designed to fulfill the primary requirements for construction, maintenance, repair and alterations of fixed structures in expanding marine areas. The ships were built to replace the 100-foot WLI's and replace or supplement the 75-foot WLIC pusher barge combinations.

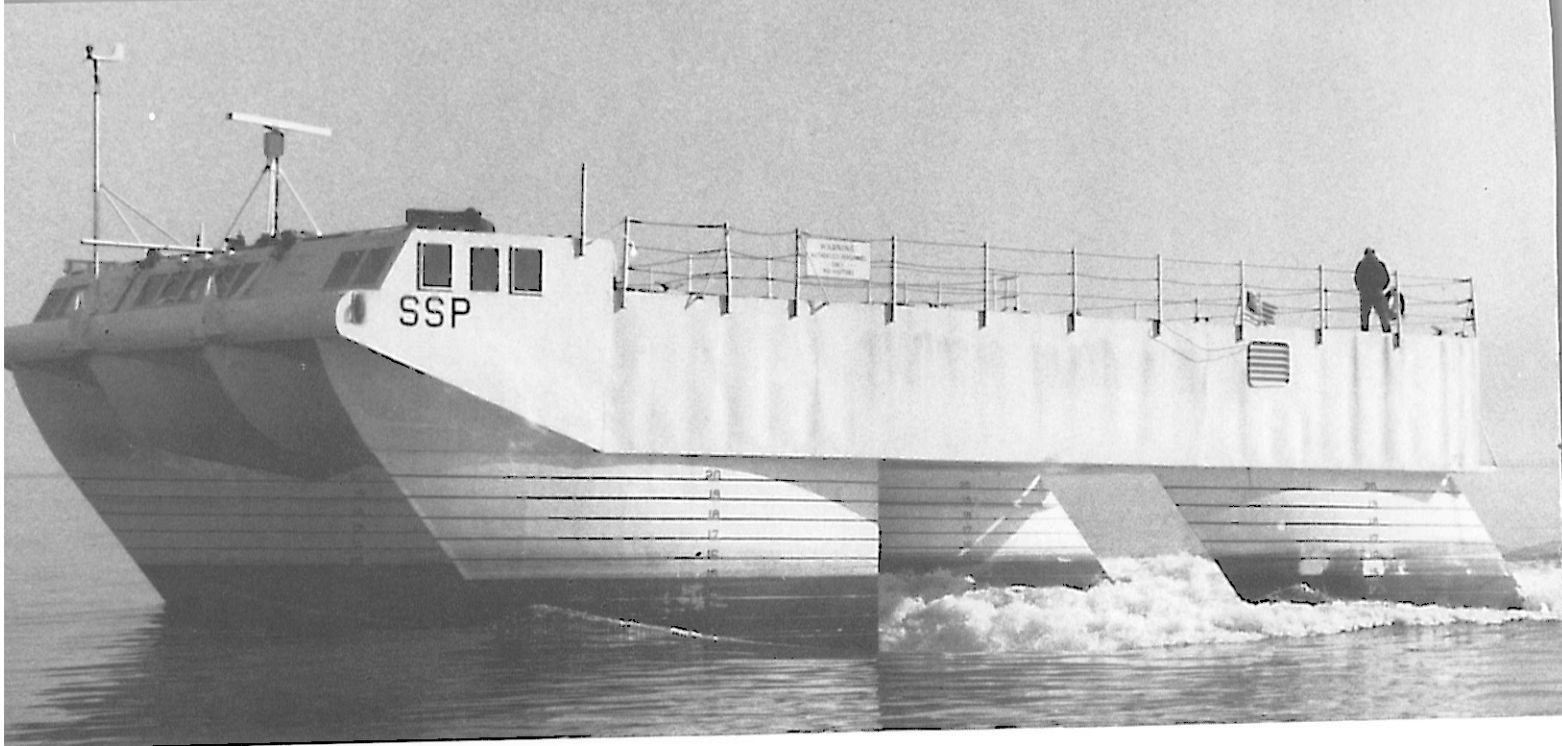
An important segment of the YARD's history would be omitted if the construction of various sizes of small boats at the YARD during the 1960's and 1970's was not mentioned. The YARD was a leader in the fiberglass and aluminum small boat construction industry during that time period. Today, this industry is using many of the construction principles developed at the YARD.

During the 1960's, two hundred and six 25-foot 8-inch motor surfboats were constructed; forty-one 25-foot 8-inch motor cargo boats were built, and four 17-foot fiberglass motor launches were made. In the late 60's and throughout the 70's, twenty-two 31-foot port security boats were produced.

One more small boat project to mention is the construction of 28 fast delivery sleds between 1977 and 1981. Such a vessel is used in oil spill clean-up operations and can be brought to a spill site by fast deployment aircraft.

The YARD has proven over the years that a combination of versatility in engineering principles and expert, innovative craftsmanship can create successful experimental maritime projects. One such technical achievement in 1972 was the construction of a prototype Stable Semi-Submerged Platform (SSP), the SSP KAIMALINO. The ship used the SWATH concept – a small waterplane area twin hull. It can perform many functions requiring speed, maneuverability, and stability better than any conventional ship.

Unlike a conventional ship, the only portions of the ship below the water line are the steel pontoons and half of the struts connecting the pontoons to the aluminum hull. The flat bottom of the craft rides high and dry above the water. The SSP KAIMALINO now successfully operates in the 14th Coast Guard District, the Hawaiian Islands.



A project in the field of experimental design and construction, the YARD built SSP KAIMALINO still successfully operates in the tropical waters of Hawaii (top).

The CGC PAMLICO, a 160' construction tender, was the first vessel of its class to be built at the YARD (center left).

The YARD built over two hundred 25'8" motor surfboats from the early 1960's to 1983 when the program ended (bottom).

In the late 70's, the YARD outfitted six 20-foot WMECs and three 378-foot WHECs with a modern sewage disposal system. Workers converted the existing salt water supply system to a modern, fresh water supply system and changed the gravity flush equipment to a vacuum flush system. The cost of the conversion was estimated at \$240,000 per ship.

From 1973 through 1980, the YARD completed major renovations of the B and C class 180-foot buoy tenders. Beginning with the CGC SLEDGE and ending with the CGC WOODRUSH, 14 vessels underwent extensive renovation. YARD personnel installed air conditioning systems, overhauled main engines and propulsion systems, completed installations of new electronics systems, and improved berthing and living areas. The cost of each renovation was \$5 million.

From 1979 to 1983, the YARD also constructed nineteen 25-foot 8-inch motor surfboats, small fiberglass vessels used as lifeboats and boarding party boats on medium and high endurance cutters.

Another mission at the YARD results from the fact that it has waterfront space to store decommissioned Coast Guard vessels until Coast Guard Headquarters initiates action to sell or scrap them. In the middle

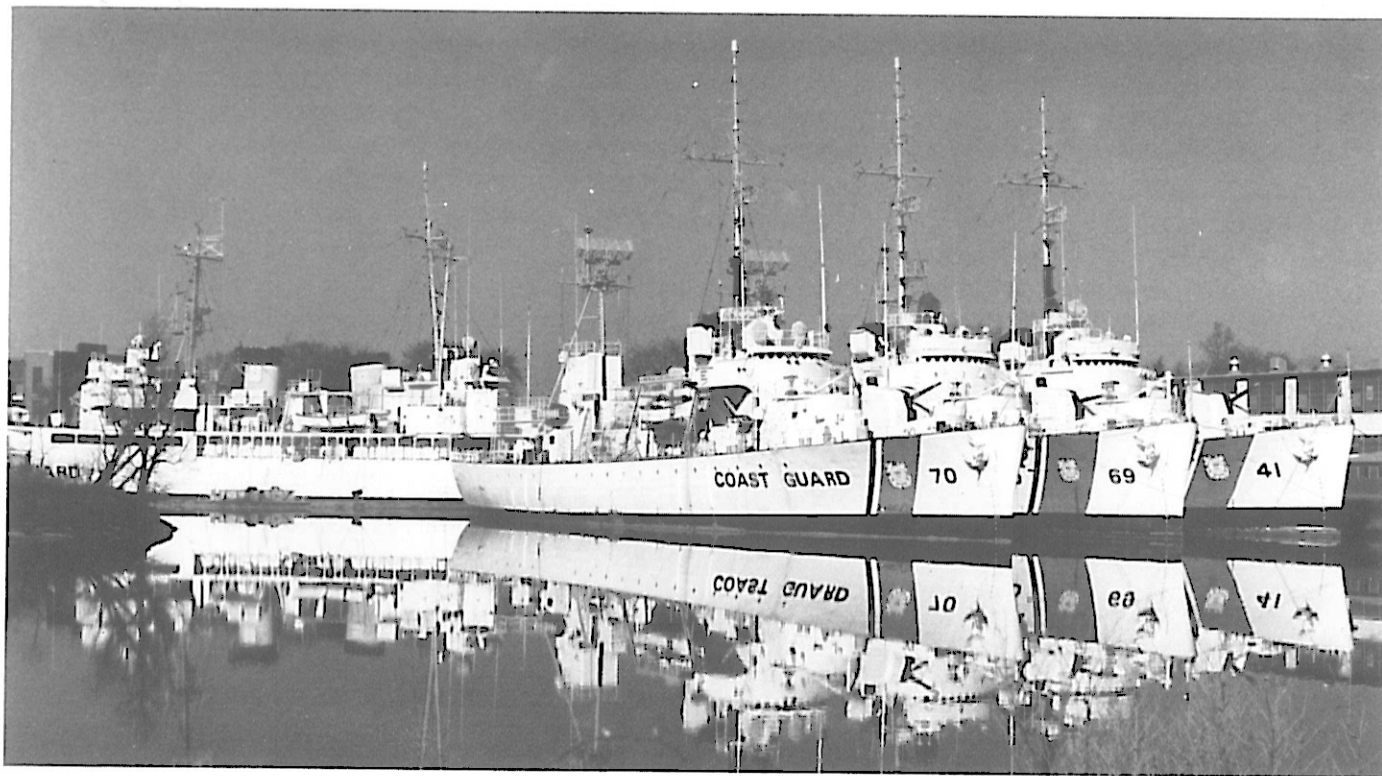
1970's, the YARD had a mothball fleet of three 255-foot high endurance cutters. In 1982, the last "mothball," the 327-foot cutter SPENCER, was sold for \$29,000.

YARD Becomes Home For the SICP

The Ships' Inventory Control Point recently celebrated its 10th birthday. The Commandant established the organization in the mid 1970's to bring together engineering and supply expertise which jointly strives for effective ships' support in the shortest possible time. Through the years, the SICP has achieved this goal, and has, for a decade now, enhanced the YARD motto, "Service to the Fleet."

Commissioned in 1974, the SICP began operation at the YARD with a staff of 58 people. It opened under the supervision of CDR Jack Leatherwood. Its operating budget was \$738,000.

Today, the SICP employs 129 people. Many are equipment specialists and are in the fields of supply cataloging and inventory management. The current operating budget for the SICP is \$11,316,000.



The CGC SPENCER, (left background), and (left to right), the CGC PONTCHARTRAIN, the CGC MENDOTA, and the CGC CHAUTAUQUA are pictured in the mothball fleet above.

95-foot Patrol Boats Undergo Renovation

In 1977, the Coast Guard YARD initiated a program to renovate an expected twenty-six 95-foot patrol boats. Most were in need of repair and modernization. When the program ended in 1983, sixteen had come to the YARD for an average 36 week availability.

As previously mentioned, Coast Guard YARD personnel built all three classes of 95-foot patrol boats in the middle 1950's. Over 50 of the steel hull, aluminum superstructure vessels were constructed. Throughout the years, they have been used extensively at home and abroad. Many patrolled the waters of Vietnam two decades ago. Today, the boats scan North American waterways for search and rescue and law enforcement cases.

YARD workers devoted approximately 50,000 man-hours to each boat's renovation. The average cost for labor and materials was \$2.5 million. Among other items, the job order for each vessel called for an inside and outside hull survey, shell and bulkhead repair, an automatic pilot system, rehabilitation of the berthing area, installation of a new electronics package, and new engine room and noise reduction equipment. All asbestos was removed from the vessels and appropriate asbestos free insulation material was installed.

The YARD Enters the Eighties

The new decade began with a major reduction in force in 1981. Such action was mandated by the present Administration's efforts to control the federal budget. Dictated to reduce the civilian employee ceiling of the YARD to 800 positions, meaning a loss of 367 positions, the YARD completed its RIF by the end of the fiscal year.

In the experimental boat construction area, an operational, prototype vessel used to clean up oil spills on our nation's waterways was built by the YARD in 1982. The ZRV, Zero Relative Velocity Skimmer, today represents the best available technology in the Coast Guard's field of fast current pollution control research. The unique feature of the 46-foot skimming vessel is its aluminum catamaran hull embraced with two, large rotating belts positioned between the hulls. The belts, made of oil absorbing material, rotate in an endless loop much like the tracks on a bulldozer. They

act like sponges soaking up oil as contact is made. The belts are then squeezed as they pass through an on-board wringer. Collected fluid is transferred to storage tanks. The vessel was turned over to the Captain of the Port, Philadelphia, for operational use.

YARD Receives Unit Commendation Medal

In 1981, the Coast Guard YARD completed, within a 2-3 month time limit specified by Headquarters, a major renovation of two former Navy ocean-going tugboats, the UTE and LIPAN.

The 205-foot vessels, active in Naval operations during World War II, were towed from San Francisco to Baltimore in December, 1980. The ships had been temporarily moored at the Coast Guard Base in San Francisco.

The Navy transferred the ships to serve as an addition to the Coast Guard Fleet in the Caribbean. The Coast Guard had experienced a shortage of vessels because of acceleration of search and rescue activities in the Cuban boatlift and increased drug interdiction efforts in the early 1980's. The two ships are now homeported in the Coast Guard's Seventh District, Key West, Florida.

From December 1980 to March 1981, YARD personnel provided a total of 65,141 man-hours in preparing the UTE and LIPAN for Coast Guard service. Work on the ships included major repairs to the heating, fresh water, refrigeration, sanitary and drainage systems; inspection of all machinery; installation of naval engineering and electronic equipment packages; underwater structural repairs; blasting and painting of all machinery on deck as well as the exteriors of the ships; repair of decking in disturbed areas; the overhaul of ordnance and safety equipment, and the design and installation of a small boat cradle and new berthing areas.

As a result of this effort, coupled with an already heavy work load, the YARD for the first time in its history, received the Coast Guard Unit Commendation Medal. Admiral John B. Hayes, then Commandant of the Coast Guard, visited the YARD to present the medal.

The honor was bestowed on the YARD's military and civilian employees for "exceptional meritorious



The design and construction of the ZRV (above) experimented with the current technology in the Coast Guard's field of fast current pollution control research.

From a mothball fleet on the west coast, to the Coast Guard's east coast shipyard, the CGC UTE (below), a 205' medium endurance cutter, along with the CGC LIPAN, underwent extensive renovation at the YARD in the early 1980's.



service from July, 1980 through March, 1981 in support of the Coast Guard Fleet's readiness and modernization."

In presenting the medal, the Commandant said: "Epitomizing the motto 'Service to the Fleet', YARD personnel distinguished themselves by successfully accomplishing the repair of two icebreakers, five high endurance cutters, three medium endurance cutters, six buoy tenders, and one harbor tug. In continued support of law enforcement and search and rescue missions, YARD personnel constructed the new 41-foot utility boats and numerous motor surfboats to be used by major cutters, and in support of the aids to navigation program, by continued construction of the majority of buoys used to mark navigable waters of the United States."

"YARD personnel enhanced the capabilities and reliability of many cutters through major renovations such as the 95-foot patrol boat and 180-foot buoy tender projects. Their multi-phased and uniquely professional renovation of training ship EAGLE resulted in a safer, more dependable training platform. Additionally, personnel of the YARD carried out the administrative and logistical tasks of berthing, messing and transporting ships' crews during related availabilities."

"With rapid response, and faced with an abbreviated planning cycle, YARD personnel accomplished the reactivation of former Navy ships UTE and LIPAN. This work, which included outfitting and provisioning, was accomplished during a period of peak work load and reduced staffing levels. Despite the added work load, YARD personnel prepared the designs, drawings, specifications, and contracts for numerous projects and completed their associated equipment staging and stocking."

"The devotion to duty and outstanding performance of personnel of the YARD reflect great credit upon themselves, their unit and the United States Coast Guard."

Ships' Repair Availability

Ship repair availability was a major industrial assignment at the Coast Guard YARD in the early to mid 1980's. Several east coast Coast Guard vessels came into the YARD every two years for everything from minor to major repairs. Work took from a few weeks up

to a few months. Each calendar year, the YARD accomplished approximately 18 repair availabilities.

YARD Completes EAGLE's Renovation

For four years, 1979-1983, the Coast Guard Academy training barque EAGLE conducted its normal cadet training program during the summer and sailed to the YARD during the winter months. Here it underwent an extensive renovation and modernization program. The work done to the 47-year-old vessel was dubbed "mid-life."

Built in 1936 by Blohm Voss Shipyard in Hamburg, Germany, it was used to train German seamen for ten years as the Horst Wessel. The Coast Guard acquired Horst Wessel in 1946 as a war prize and renamed it EAGLE.

Throughout EAGLE's service in the Coast Guard, several arrangement and machinery modifications had been made. Most equipment was original retrofit machinery installed after acquisition from Germany. Structurally, no significant improvements had been done since its construction. After more than 40 years of sailing, deck plates were severely wasted, hull rivets weeped, and machinery was becoming obsolete.

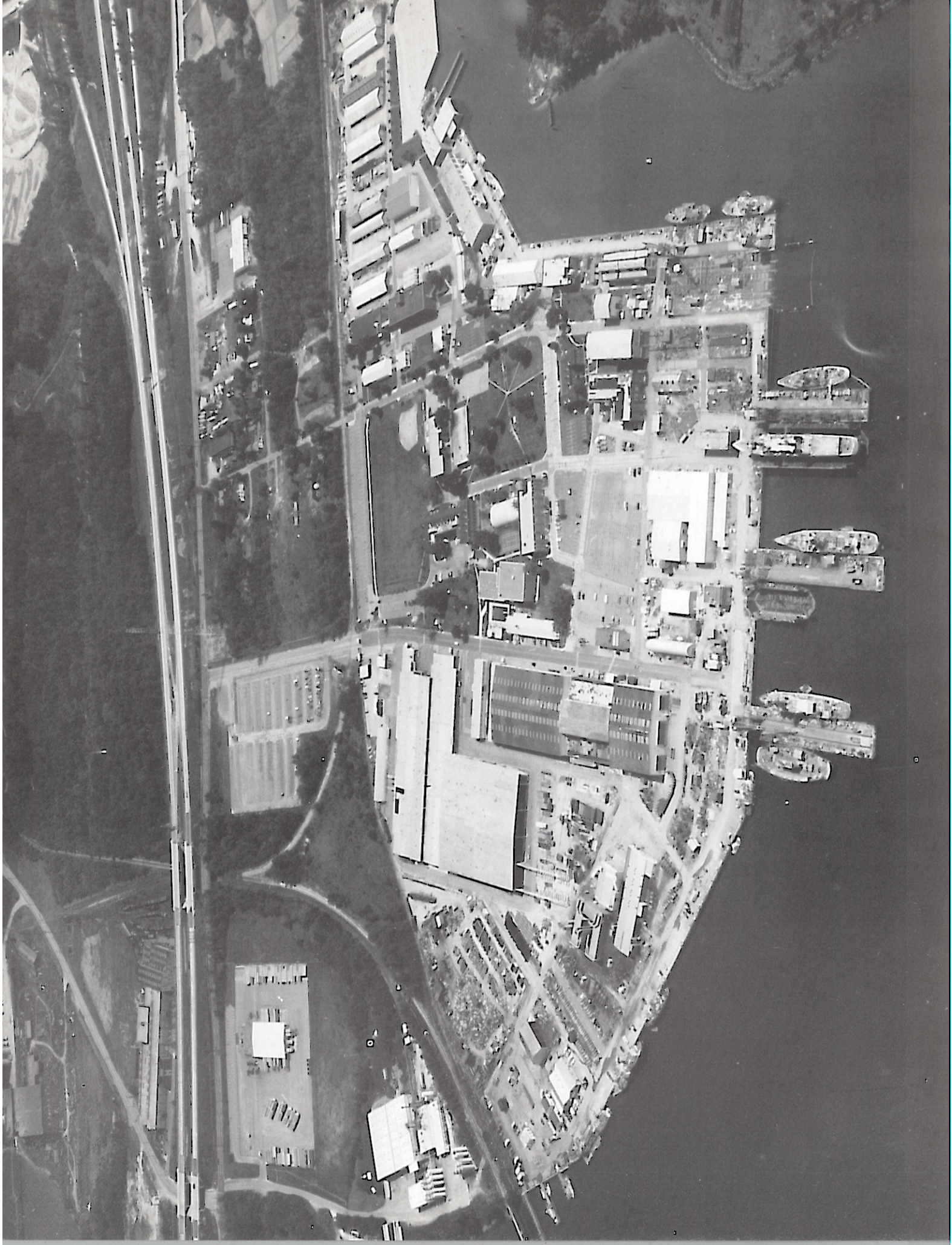
To insure the safe training of Academy cadets, the Coast Guard decided to completely renovate EAGLE. The renovation was divided into three six-month repair phases to be completed in three consecutive years. Before starting the three phases, an emergency phase was completed in the winter of 1979-80. In addition to the major capital improvements, funding and repair for normal corrective and preventive maintenance continued. A synopsis of some of the major work accomplished during each phase is as follows:

Emergency Phase (1979-80):

Main weather deck replacement; overhaul foremasts; ballast area preservation; rivet repair; hull, bulkhead and deck repair.

Phase I (1980-81):

Install three transverse watertight bulkheads; replace forecastle deck; renew main deck; renew second deck; upgrade ventilation; upgrade electrical system; upgrade habitability; replace anchor windlass; renew refer box; ballast area preservation; overhaul main mast; replace watertight doors and hatches.



Phase II (1981-82):

Install three more transverse watertight bulkheads; replace poop deck; renew main deck; renew second deck; additional ventilation and electrical upgrade; install collision avoidance radar and Omega navigation receiver; replace charthouse; replace 25-foot motor surfboards; modify davits; overhaul mizzenmasts; replace auxiliary propulsion engine; replace support machinery; upgrade watertight fittings.

Phase III (1982-83):

Install teak decks; replace reefer machinery; replace sound powered phones; ballast area preservation; overhaul bowsprit; ventilation improvements; rewire mast and navigation lights.

More than 230,000 hours of work completely restored EAGLE to essentially new-ship conditions. The ship was divided into nine main watertight subdivisions making it a two-compartment ship. Its power and responsiveness were improved by installing a 1,000 horsepower Caterpillar D-3999 diesel engine and a Caterpillar 7271 transmission. It was completely rewired with a new power distribution system.

The ship's habitability was improved by providing modern furnishings for the crew. Safety was improved by overhauling all masts and riggings. The electronics equipment was upgraded, providing the ship with state-of-the-art equipment. This includes Tracor Omega, the latest version of the AN/SPS 64 radar with automatic radar plotting accessory and radio teletype equipment.

New air compressors and receivers, a new bilge pump, new Mark IV motor surf boats and new teak wood over all the decks were also added.

After \$9.1 million and four years of work, EAGLE is now a more reliable training platform for academy cadets. They will gain an appreciation of square-rigger sailing, yet still go to sea with all the conveniences of a modern cutter.

The YARD Upgrades Its Image

The early 80's saw the emergence of a new physical image for the YARD.

Newly renovated Bachelor Enlisted Quarters atop Fleet Hall opened for personnel in 1980.

The two top floors of Building 31 were formerly large, open berthing areas. Upon completion of the

renovation, there are now individual rooms capable of housing three to six persons. The improved habitability of the barracks include construction of recreation areas, TV lounges, private toilet facilities, and increased laundry rooms.

The BEQ is designed to house approximately 50 permanent personnel.

New Family and Guest Quarters for military personnel and their families in need of temporary housing opened the same year.

The Quarters consist of five basic units. Each unit contains a kitchenette with range, stove and refrigerator, combined dining and living room, and can be adapted to provide 1, 2, or 3 bedrooms based on need. All units are furnished with cooking and eating utensils and linens. They are individually air conditioned and heated. A separate, smaller unit serves as a laundry and storage room.

A new Security Building near the entrance of the YARD opened in 1982 and houses the YARD's Security Division. Since 1973, the Security staff had occupied temporary office space in a trailer. The new structure, offers needed privacy to conduct security related matters.

The YARD dedicated a multi-purpose activities building in January of 1983.

The building, Columbus Recreation Center, is named in honor of the late Captain Charles Columbus, former YARD Commanding Officer and member of the U.S. Coast Guard Academy's Athletic Hall of Fame.

It contains an AAU regulation basketball court, volleyball, handball and racquetball courts, lockers for both men and women, saunas, a weight room, showers and whirlpool. The building leads to a swimming pool and patio area and outside tennis courts. The Center is designed to provide recreational support for the military personnel stationed at the YARD and especially for crew members from visiting ships.

A Convenience Store began business in 1983 offering to Coast Guard personnel, items similar to what is found at the local mini-market. Customers can purchase bread, milk, eggs, snack items, ready-made sandwiches, canned goods and paper products, disposable diapers, personal hygiene and health care items, soda, beer, cigarettes, pet food, auto parts, and gasoline. The store is run by the YARD's Non-Appropriated Fund Activities.



Columbus Recreation Center



Convenience Store



Family Transient Quarters

Warehouse Complex



YARD Dedicates New Warehouse Complex

The YARD dedicated a new warehouse complex in 1984. It is the largest operating warehouse storage space facility in the Coast Guard.

The project, which began in 1982, involved the renovation of two 1940 vintage warehouses and the construction of additional storage spaces. The work resulted in the enclosure and modernization of an area covering 50,000 square feet.

Of prime importance to the project is the centralization of materials distribution in the YARD. All shipping, receiving and warehousing functions are now under one roof. In the past, because inside space was not available, many supply items were stored outside and in over 25 small buildings. Some were former boat sheds with dirt floors. The majority were so small and narrow, cubic storage was impossible. Now, under a common cover, the new warehouse complex offers the services of direct flow of goods from the receiving room, through the supply complex, to the customer.

The edifice is designed to accommodate bin, pallet, canteliver rack, and dehumidified storage. It is stocked with the most modern of warehousing equipment – two automated mini-trieves used for storage of small, fast moving items; a 23-ton overhead crane for handling large, bulky items; swing-mast and side-loading forklifts; hydraulic load lifters capable of transporting plate metals with a 20-ton capacity, and stretch wrap machines.

In addition to upgrading the warehousing material support for the YARD's industrial operations, the complex assists in the warehousing inventory requested by the Coast Guard's Ships Inventory Control Point at the YARD, the Electronics and General Storage Control Point in Brooklyn, New York, and Coast Guard Headquarters.

Today's Activities

In the area of vessel renovation, the YARD is currently working on the renovation of selected 180-foot buoy tenders under the Coast Guard's Service Life Extension Program (SLEP).

To date, major renovations of the buoy tenders, CGC SORREL, CGC GENTIAN, & CGC COWSLIP have been completed. Work projects on these 1940

vintage cutters have included a total renovation of all living spaces, replacement of all machinery including engines, a replacement package of electronics equipment, and structural modifications. Each vessel has on an average taken 16 months of work, used 210,000 man-hours and cost \$8.5 million. The Coast Guard expects to conduct the SLEP at the YARD working toward the goal of renovating eight more WLB's before the program ends in 1991.

This year, the YARD completed a major renovation of a ferryboat for Coast Guard use in Governor's Island, New York. The KULSHAN, a 30 year old vessel bought by the Coast Guard from the State of Washington's Ferry System, arrived at the YARD in the fall of 1982.

YARD personnel worked an estimated 150,000 production and engineering man-hours on the major renovation before expected delivery of the ferryboat to the Third District. The renovation cost \$6.5 million.

The vessel received all new pumps and electric motors and hull repairs. The vehicle capacity of the ferryboat is up to 55 cars. The KULSHAN was converted from DC power to AC Power and changed from steam heat to electric heat. Renewal of the diesel generators and overhaul of two main propulsion motor were also accomplished. A prime project was construction of a passenger house capable of holding up to 150 people. The KULSHAN is the only Coast Guard vessel classified by the American Bureau of Shipping.

When the KULSHAN was delivered to the Coast Guard in New York, it was renamed "Governor." It joined its two sister ships on the Manhattan-Governor's Island runs.

The CGC ACTIVE arrived at the YARD from New England late in 1984. She was the first 210-foot medium endurance cutter to undergo a Major Maintenance Availability (MMA) at the YARD. Planned to extend the ship's life, the MMA will replace pumps evaporators, and refrigeration and air conditioning compressors, in addition to other obsolete high maintenance or unsupportable equipment.

One of the biggest changes to the ship will be the replacement of the horizontal exhaust pipes with vertical stacks. The ACTIVE will lose an expensive, high maintenance system and will gain more needed space. The "A" class 210-foot will receive new engines and reduction gears.



The CGCs COWSLIP, MADRONA, and CONIFER (upper left) await renovation under the Coast Guard's 180' buoy tenders' Service Life Extension Program.

The Ferryboat KULSHAN, renamed GOVERNOR, left the YARD only a few months ago for the Third Coast Guard District, New York (upper right).

YARD personnel work on the CGC ACTIVE, the first 210' WMEC, to undergo Major Maintenance Availability (center left).

The CGC HARRIET LANE, the third of the Coast Guard's new 270' WMEC class of vessels, began its YARD retrofit last fall (bottom right).



YARD workers will install new modular berths on the ACTIVE. This will increase the number of berths and improve habitability. By removing paneling from berthing spaces, the ship will also gain some deck space.

Improvements to the heating, ventilation and air conditioning systems should also add to the crew's comfort.

The Cutter's radio and navigation electronics equipment, main engine control and monitoring systems and stability and electrical distribution systems are on the work list for upgrade.

The CGC ACTIVE's MMA is scheduled for completion in January, 1986. The YARD is scheduled to complete the MMA project on the four remaining 210-foot WMEC "A" Class vessels.

The HARRIET LANE arrived at the YARD in 1984 to begin a seven month retrofit, becoming the third 270-foot WMEC to undergo the modification. (The YARD completed work on the CGC TAMPA in November, 1984, and the CGC BEAR earlier last year.)

The modernization package for the HARRIET LANE involved rebuilding the magazine deck as well as the deck beneath the gun. The gun was raised approximately 13 inches. The flight deck received additional visual landing aids and a glide slope indicator. YARD workers installed a complete electronics modification package. Refrigerated spaces and a refrigeration system were added.

Several man-hours were spent in the installation of a "chemical biological and radiological warfare wash-down counter measure system," essentially, piping equipment designed to wash the ship of any fallout in a nuclear confrontation. Personnel also installed a decontamination station involving the conversion of an existing shower, state room and passage way.

In addition to the repair of a small number of warranty items, the HARRIET LANE received towing equipment which the YARD did not install on the TAMPA nor the BEAR.

Estimated man-hours on the HARRIET LANE were 81,000.

Ordnance Work

Although their work is not often as visible as that of

most of the YARD's workers, the Electronics and Ordnance Shops' personnel carry out a vital mission.

When a 378-foot has problems with its 5-inch gun, there's only one place to go to get it fixed... the YARD's Ordnance Shop.

The guns are usually shipped in by truck from 378's throughout the Coast Guard. The covers are pulled off and the guns are stripped down and then rebuilt and painted. The shield attached to the back of the barrel is covered with fiberglass to make it smoother and to keep out the water. This also makes it easier for the barrel of the gun to move vertically across the smoothed surface.

The Ordnance Shop also overhauls the Coast Guard's MARK 32 torpedo tubes. Each 378-foot carries two sets of three each of these tubes. The tubes are completely broken down, heated and resized. Defective parts are replaced and all parts are checked to ensure they can stand the pressure of the tube's firing.

The MARK 56 fire control director is overhauled by the shop personnel, too. Approximately three directors are done per year. They are also shipped here from a variety of Coast Guard units.

Altogether, the Ordnance Shop overhauls approximately three 5-inch guns a year and four ships' sets of torpedo tubes. Also, like the fire control directors, the guns and tubes are both put through practice runs to make sure everything is working properly before they are returned to their respective units.

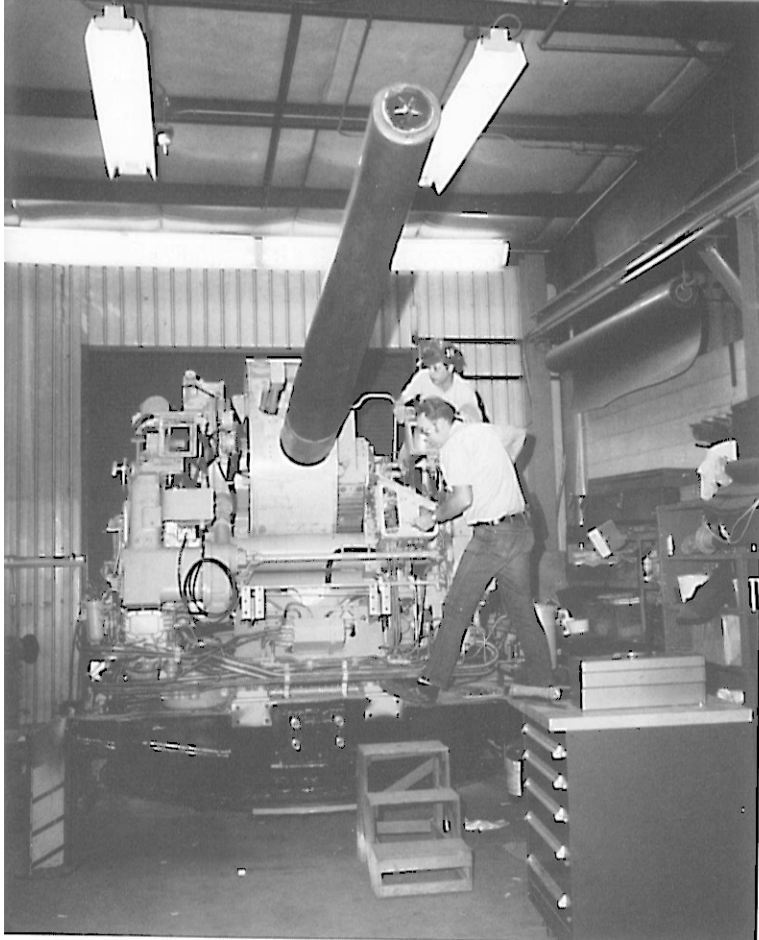
The Electronics Shop does a great deal of work here at the YARD, but the majority of it is classified material.

This Shop is equipped to repair the radar, sonar and fire control systems of any Coast Guard vessel. Using a special system that can simulate the radar characteristics of each type of ship the Coast Guard uses, problems can be found and corrected. Five to ten surface search radar systems are repaired each year.

The radar, sonar and fire control systems are usually worked on while a ship is in the YARD, but parts of the fire control system are often sent to the YARD for individual repairs.

Buoy Production

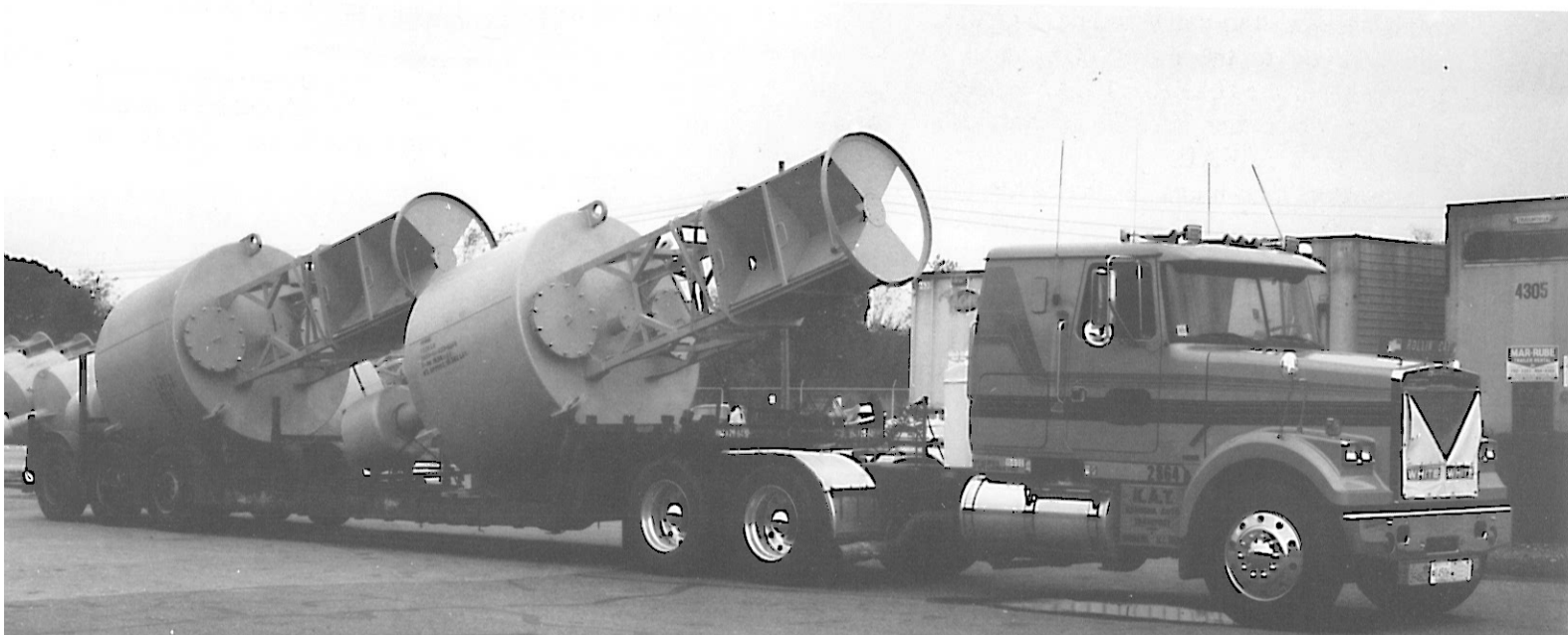
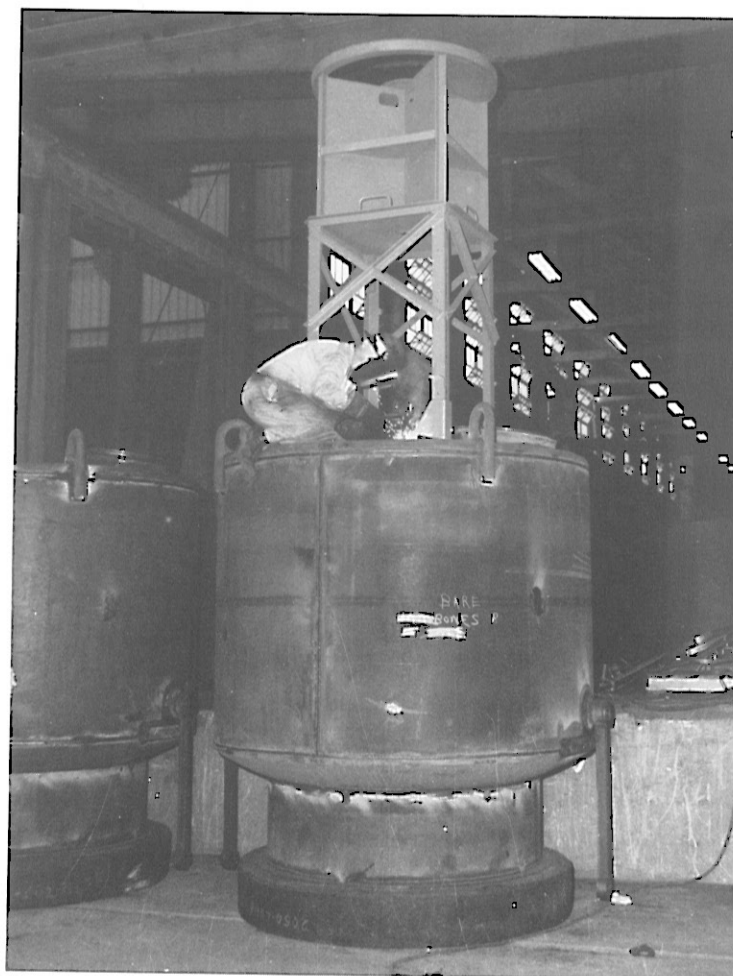
It would be remiss not to talk about buoy production at the YARD before completing its history.



Ordnance Shop technicians work on a Coast Guard's WHEC's 5" gun (top left).

A YARD welder works on one of the Coast Guard's lighted buoys (center right).

Throughout the United States, tractor trailers transport YARD built buoys destined for their home district (bottom).



For four decades, the YARD has manufactured many of the buoys that provide navigational reference for travelers of the United States' waterways. Buoy production began during the Second World War at the YARD and was a major industrial program. Today, buoys are still one of the primary manufactured products made by YARD workers.

The Coast Guard's lighted buoys – large, heavy buoys needed for round-the-clock aid to navigation – are built here. The Coast Guard commercially procures unlighted buoys. These navigational aids mark waterways normally traveled by day, and they are lighter and smaller than lighted buoys.

Two types of buoys in the lighted class are made at the YARD—lighted reflector buoys with a variety of warning devices—whistles, bells, gongs, clappers, and lighted ice buoys designed for heavy ice conditions. The lighted reflector buoys range from size 3½ x 8 feet weighing 1900 pounds to 8 x 26 feet weighing 11,380 pounds. They are made of steel products and steel structural shapes. Ice buoys are steel cone shaped structures; size, 7 x 20 feet.

The buoys are constructed in an assembly line mode. In the YARD's Fabrication Shop, loftsmen prepare templates for the buoys. The patterns are given to the shipfitters, flamecutters, and welders to begin a step by step building process. Plating, angle, and piping made of stainless and mild steel are cut, shaped, and welded to form the buoy's body and tower. Over 150 pounds of welding wire are used on each buoy to produce the outer shell and inside structures. Counterweights and counterweight tubes are added along with flanges and battery pockets.

The Pipe Shop and Inside Machine Shop assist in the project. They provide necessary piping material and machined items such as drilled lantern plates and beveled lifting eyes. Nuts, bolts, coupling, etc. are available from the YARD's supply system.

When fabrication of the buoys is complete, they are moved to the Paint Shop for sandblasting and primer preparation. From there, they are put on the buoy lot

where they wait to leave the YARD by truck for their destination in the continental United States. The Coast Guard District requesting the buoys will be tasked with outfitting them with operational appendages – lights, batteries bells, gongs, etc. Final painting and markings on the buoys will be done at the home district, too.

Last fiscal year, the YARD manufactured 139 lighted reflector buoys and seven ice buoys. YARD personnel are currently working on a contract with the National Oceanic and Atmospheric Administration (NOAA) to construct ten NOMAD (Navy Oceanographic Meteorological Automatic Device) buoys. These navigation aids are used by NOAA to gather off-shore weather information and relay it via satellite to their environmental satellite service. The all aluminum buoys weigh approximately 8,000 pounds. The buoy's boat shape design enables it to stay afloat during even the most severe weather. The NOMAD buoys are moored in water that varies in depth from 200 to 15,000 feet. YARD personnel have completed eight NOMAD buoys to date. The final two buoys are slated for completion this fiscal year.

Closing Remarks

The Coast Guard YARD has come a long way since LT Moore built the first wooden sheds on the banks of Arundel Cove. The YARD has made significant achievements throughout its 86 years.

In the history of the Coast Guard, there has been no finer group of people than the YARD family who has served with such pride and dedication. The hope now is for another 86 successful years as the U.S. Coast Guard moves into the 21st century. With a conscientious goal to serve the Coast Guard and a commitment to produce a competitive product, the YARD will continue to prosper and further build on its renowned reputation of quality service to the Coast Guard fleet!

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