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THE CALIFORNIA NAUTICAL SCHOOL

By LIEUTENANT (j.g.) BENNETT M. DODSON, *U. S. Naval Reserve*

MANY officers of the fleet have seen the trim white training ship *California State* on the Pacific coast and in other parts of the world. It is not generally known that this ship is owned by the United States Navy, and that it is a part of the navy's program for the training of officers for vessels of the American Merchant Marine—vessels that will form a definite source of supply to the fleet during war-time operations.

The California Nautical School operates the training ship which is part of its equipment. The school is maintained by the Navy Department and the state of California. Its mission is to produce a superior type of licensed officer for the American Merchant Marine, educated in the prime essentials of a highly specialized profession, and trained to recognize the importance, especially on board ship, of such qualities as obedience, leadership, orderliness, co-operation, and loyalty.

The California Nautical school was established by authority of an Act of Congress passed in 1874. The Act authorizes the Secretary of Navy to furnish to several states a suitable training ship with equipment for the benefit of a nautical school for the instruction of youths in navigation, seamanship, marine engineering, ship construction, etc.

California, New York, Massachusetts, and Pennsylvania have taken advantage of this Act and have established schools. The *California State* is based in the port of San Francisco; the *Empire State* in New York; the *Nantucket* in Boston; and the *Annapolis* in Philadelphia.

In 1931 the U. S. Shipping Board cargo vessel SS. *Henry County* was secured by the Navy and loaned to the state of California. The ship was refitted, altered, and modernized for its purpose. The training ship is 261 feet in length and of 4,000 tons displacement at normal draft of 17 feet. She can carry enough fuel oil to give a cruising range of 10,000 miles at 9 knots. There are accommodations for 12 officers, 132 cadets, and 16 crew. The boat equipment consists of four 24-foot whaleboats; two 28-foot whaleboats; two 26-foot motor whaleboats; two 16-foot wherrys; a 20-foot dinghy; and a 36-foot motor launch. She has been equipped with a modern machine shop, a class and recreation room, a galley, an electric bakery, a laundry, and mess compartments. Modern navigational and engineering devices have been installed.

The Navy Department has loaned the school the U. S. Navy Fuel Depot at California City on San Francisco Bay for use as a base. This base is equipped with a large machine shop, forge shop, sail loft, recreation building, academic building, boat basin, and a pier for the use of the ship. The grounds are covered with beautiful flowers and foliage the year round.

The school is administered by a Board of Governors. Four members are appointed by the Governor of the state; the fifth is State Superintendent of Public Instruction. The State Legislature appropriates funds to the support of the school. The Navy Department matches this appropriation up to a maximum of $25,000 per annum, in addition to the loan of the training ship fully equipped and the annual overhaul.

The present Superintendent-Commander, Captain Neil E. Nichols, U. S.

Navy (Retired), was selected by the Board of Governors from a list of applicants who had been approved by the Navy Department. His duties are twofold. He is commanding officer of the ship and is superintendent of the school. The officer-instructors are licensed merchant marine officers especially selected to perform the duties of a ship's officer and to instruct cadets in the professional subjects.

A candidate for admission must take a competitive mental examination that is based upon high-school subjects. The examination is given throughout the state each year in June. The applicant must undergo a rigid physical examination. The age limits are 17 to 23 years, inclusive. Upon entrance the cadet is required to deposit $100 towards costs of uniforms and textbooks. To help cover costs of food, quarters, and the annual cruise an annual fee of $225 is required for residents of California and $500 for residents of other states.

The length of the course is 3 years. The Cadet Corps is divided into 2 departments, deck and engineer. Each department follows a separate curriculum. Deck cadet graduates are eligible for license as third mate on ocean steam and motor vessels, and engineer cadet graduates are eligible for license as third assistant engineer on ocean steam vessels. These licenses are issued by the Bureau of Marine Inspection and Navigation after the cadet has successfully completed a professional examination.

If the applicant is selected, he is required to report aboard the training ship at the base during the month of August. The new cadet is issued undress uniforms, fitted for dress uniforms, and is assigned to a temporary division—known to the Cadet Corps as the "swab division." He finds that he will sleep and eat aboard the ship for the next 3 years, and that he will attend drills and instruction on the base when not cruising. From August until December he is put through a rigorous routine of physical exercises, infantry drill, boat rowing, sailing, and marlinespike seamanship. Minor tasks are assigned to him on deck and below, and he is introduced to messcook duty. In addition he must attend classes for 4 hours each day in elementary seamanship, metallurgy, marine engineering, and mechanical drawing. The last of November he faces the final examination, and if successful is assigned to a permanent division with the upper classmen.

He accompanies the ship to the navy yard in December for annual overhaul. Here he attends no formal classes, but acquires experience and knowledge by assisting in those tasks coming under the heading "to be accomplished by ship's force." He is taken on conducted tours through the shops, and must fire on the rifle range.

After a short leave over the holidays, he assists in preparing the ship for the coming cruise. His hours of toil and blisters are made easier by the thought that soon he will be sailing out the Golden Gate.

On the cruise he is assigned one month to the engineering and one month to the deck department. In each of these departments tasks are assigned in such a manner that he may acquire a detailed working knowledge of the routine operations, and that he may qualify as fireman, oiler, water tender, helmsman, and signalman. At the end of the 2-month period, when the cruise is about half over, he must decide whether he wishes to become a deck cadet or an engineering cadet. By this time he has acquired sufficient experience to be certain of his inclination, and is able to make the decision wisely. Upon making his decision he will be assigned to a deck or engineer division, and will henceforth pursue a specialized curriculum.

At the end of the cruise and leave period in June, he enters his second class academic term. His academic studies, if he

is a deck cadet, are navigation, seamanship, cargo handling, ship construction, plane and spherical trigonometry, and communications. His practical instruction in infantry drill, boat handling, marlinespike seamanship, and maintenance is continued. If he is an engineer cadet, he studies steam engineering, electrical engineering, mechanical drawing, marine propulsion, and ship construction. His practical work in infantry drill and boat handling is continued, and he is given extensive practice in machine shop, forge, and mechanical repairs. Engineer cadets, as well as deck cadets, qualify for coxswain of boats under oars and sail. Deck cadets qualify for coxswain of power boats.

During his second cruise the deck cadet practices navigation by taking daily observations of sun and stars and by carrying out the "day's work." Before leave is granted at end of the cruise, he must be able to recite the International Rules of the Road "word for word," and he must be able to meet promptly and intelligently difficult situations of the Rules that may occur. In a similar manner the engineer cadet is required to learn the wiring and piping system of the ship, and to perform certain machine-shop assignments during such times that he is not on watch as fireman, oiler, or other detail.

Upon completion of the second cruise and leave period he at last becomes a first classman, and if he has been outstanding in studies, conduct, and aptitude, he may be promoted to cadet commander, cadet officer, or petty officer. A first classman is given heavy responsibilities and he finds that his leadership ability is put to a severe test. The upkeep of various parts of the ship is his responsibility, and he is assigned lower classmen to be under his supervision. One of his assignments will be that of mate of the berth deck, in which he maintains discipline and supervises the routine tasks in the mess and berth deck. If he is a deck cadet, he will be required to stand watch as officer of the deck, or if he is an engineer cadet, he will be assigned watch engineer duty.

Academic classes are resumed in which the deck cadet studies advanced navigation and nautical astronomy, cargo handling, ship construction and stability, economics, foreign trade, navigation laws, and communications. The engineer cadet studies electrical and marine engineering, ship construction and stability, and navigation laws. At intervals lectures are given by prominent men in the shipping world and by naval officers.

On his third and final cruise, the deck cadet is assigned duty for periods of one week as officer of the deck, quartermaster, navigator, meteorologist, first lieutenant, and mate of the berth deck. While on duty as officer of the deck, the cadet is required to assume responsibility for the safety of the ship under the supervision of an officer. Likewise, the engineer cadet is given one week assignments as cadet chief engineer, watch engineer, electrical officer, machinist, and mate of the berth deck. Since the number of first classmen is less than 50, each one is fortunate enough to have all of the above weekly assignments one or more times during the cruise. Needless to say, such experience proves to be extremely valuable to the future officer. With an unsatisfactory mark in aptitude he cannot be recommended as an applicant for a license.

After the final cruise, he spends a few weeks "boning" for the coming examination for third mate or third assistant engineer. Upon successful completion of the examination, he is issued his license and is graduated. This year, for the first time, the graduate will receive a Bachelor of Science degree.

Present plans call for additional studies in navy regulations, gunnery, damage control, tactics, and international law and military law. It is planned to make

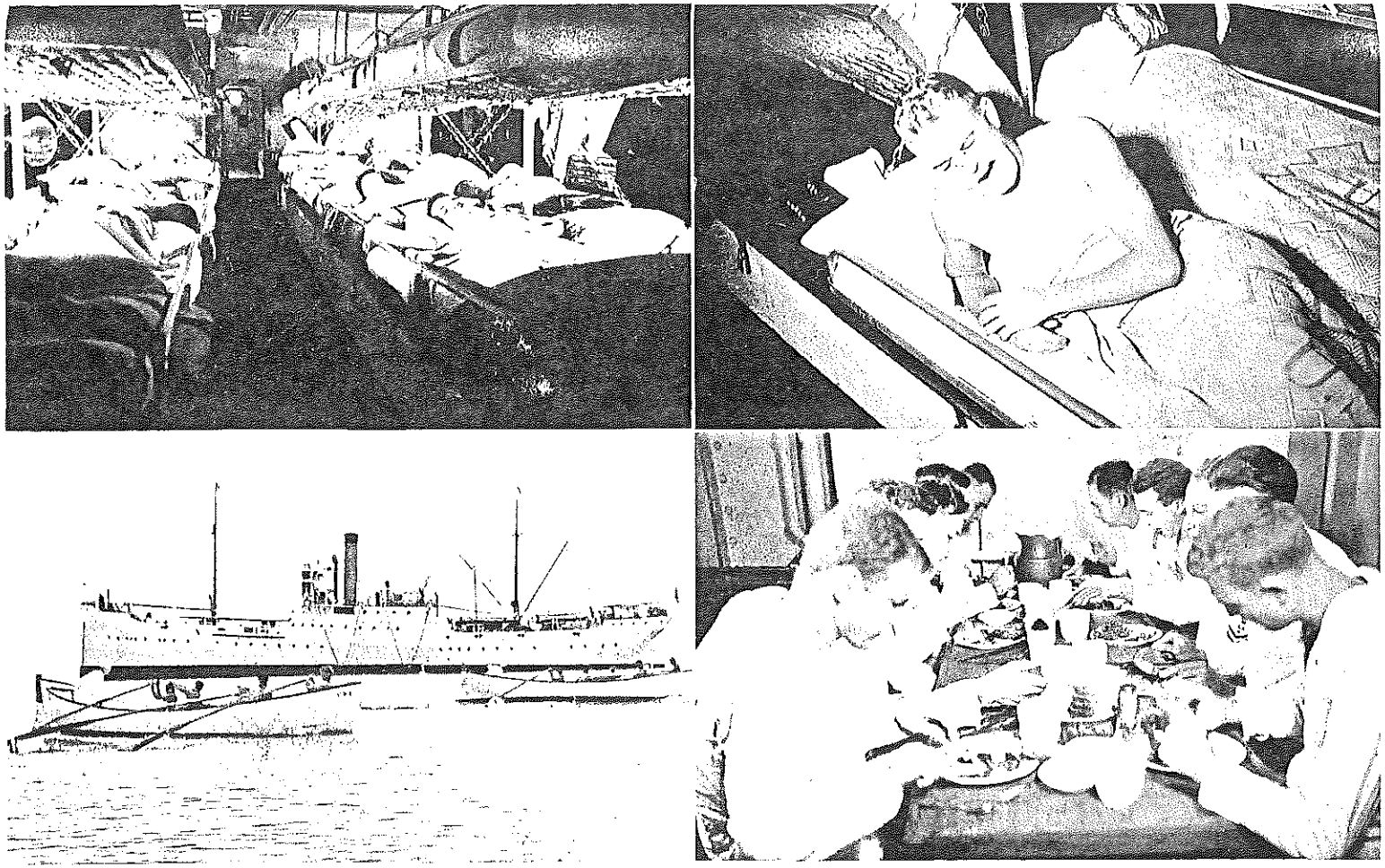
each student a Merchant Marine Cadet, U. S. Naval Reserve, and to commission the graduate as Ensign, U. S. Naval Reserve, as soon as he has qualified after serving the required time in the Merchant Marine on his license.

The *California State* has visited the following ports on her annual cruises: Eureka, Santa Barbara, Los Angeles, San Diego, Manzanillo, Mazatlan, Acapulco, La Union, Balboa, Callao, Valparaiso, Punta Arenas, Buenos Aires, Montevideo, Rio de Janeiro, Trinidad, Puerto Colombo, Cartagena, Cristobal, Vera Cruz, Galveston, Washington, New York, Barcelona, Nice, Villefranche, Naples, Alexandria, Port Said, Colombo, Singapore, Manila, Guam, Sydney, Melbourne, Auckland, Papeete, Suva, Pago Pago, Honolulu, and Hilo.

Ample shore leave is granted for recreation and for study of foreign port facilities, laws, and customs. The Cadet Corps has been entertained generally very well at the various ports of call.

The success of the California Nautical School is evidenced by the fact that the demand of ship operators for their services has exceeded the number of graduates available. Today many graduates hold responsible positions on vessels of the American Merchant Marine.

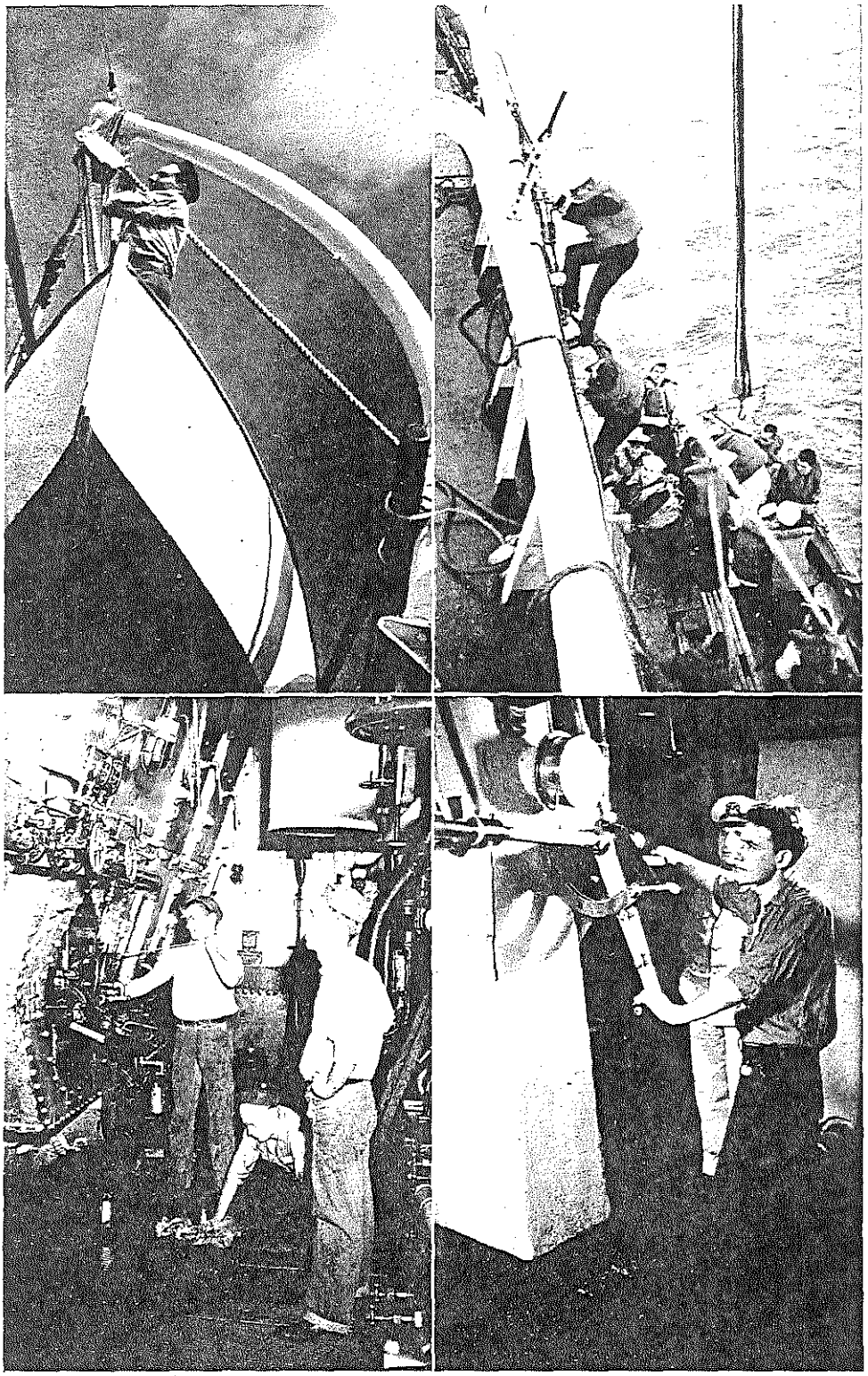
OTHER *nations write of their pasts, we . . . still look to the future, still have a greater destiny ahead than any behind.—Analectic Magazine* (U.S.A.), 1815.



Courtesy Lieutenant (j.g.) B. M. Dodson, U. S. Naval Reserve

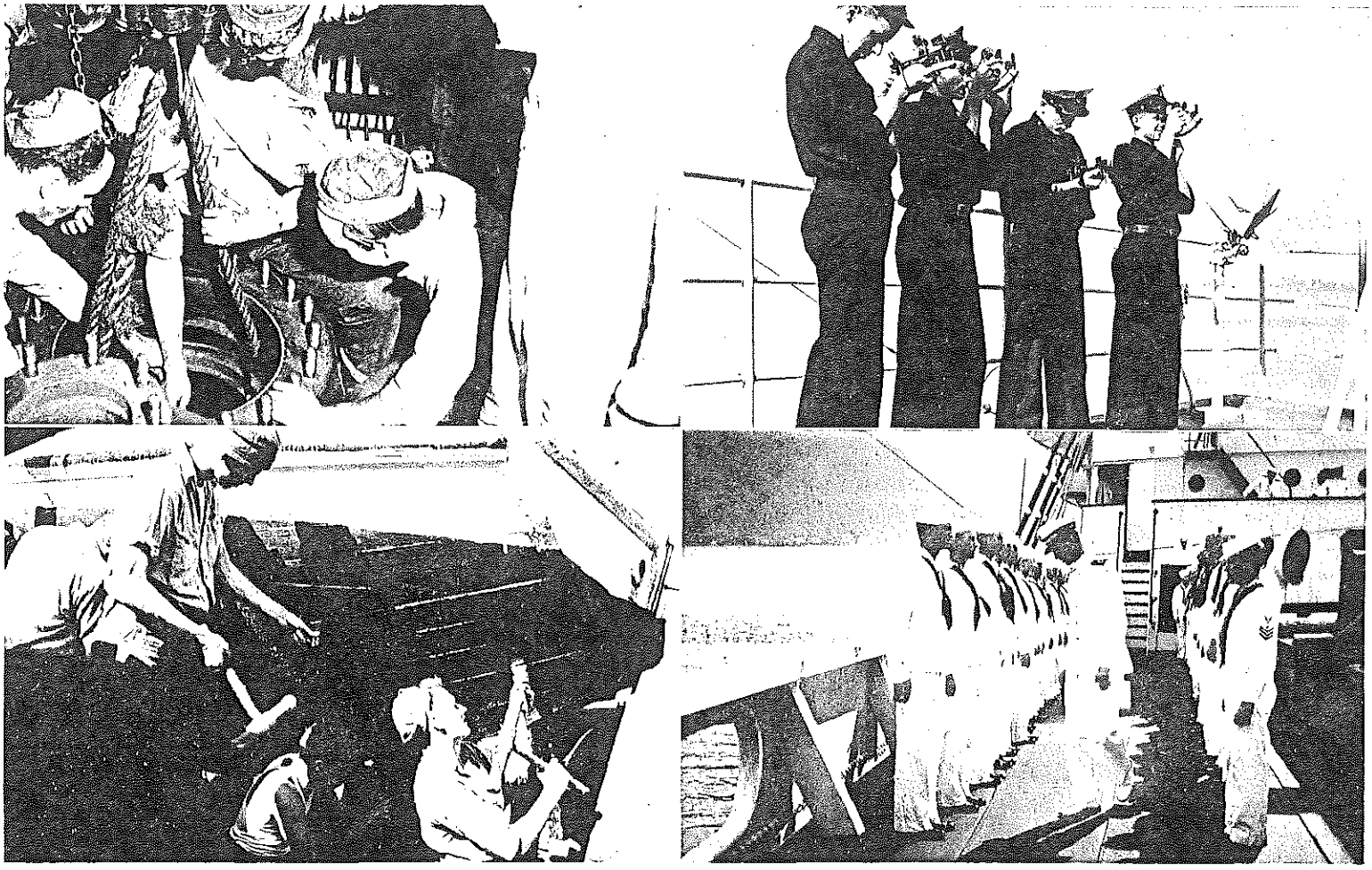
DAY BEGINS ON THE *CALIFORNIA STATE*

(a) Five minutes before reveille
(b) Reveille
(c) The morning appetizer
(d) No absentees



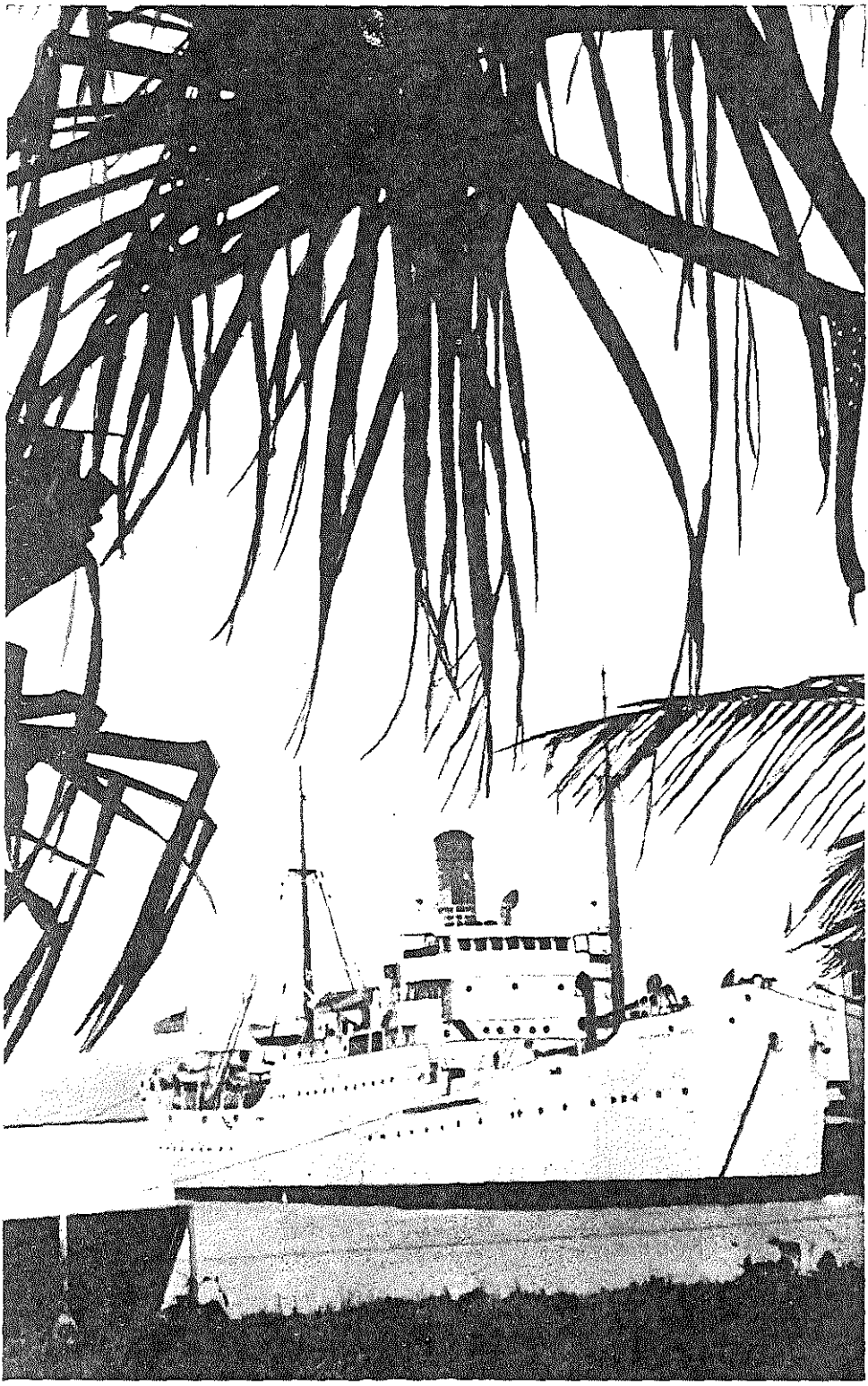
Courtesy Lieutenant (j.g.) B. M. Dodson, U. S. Naval Reserve

A SAILOR'S LIFE IS A LIFE OF EASE



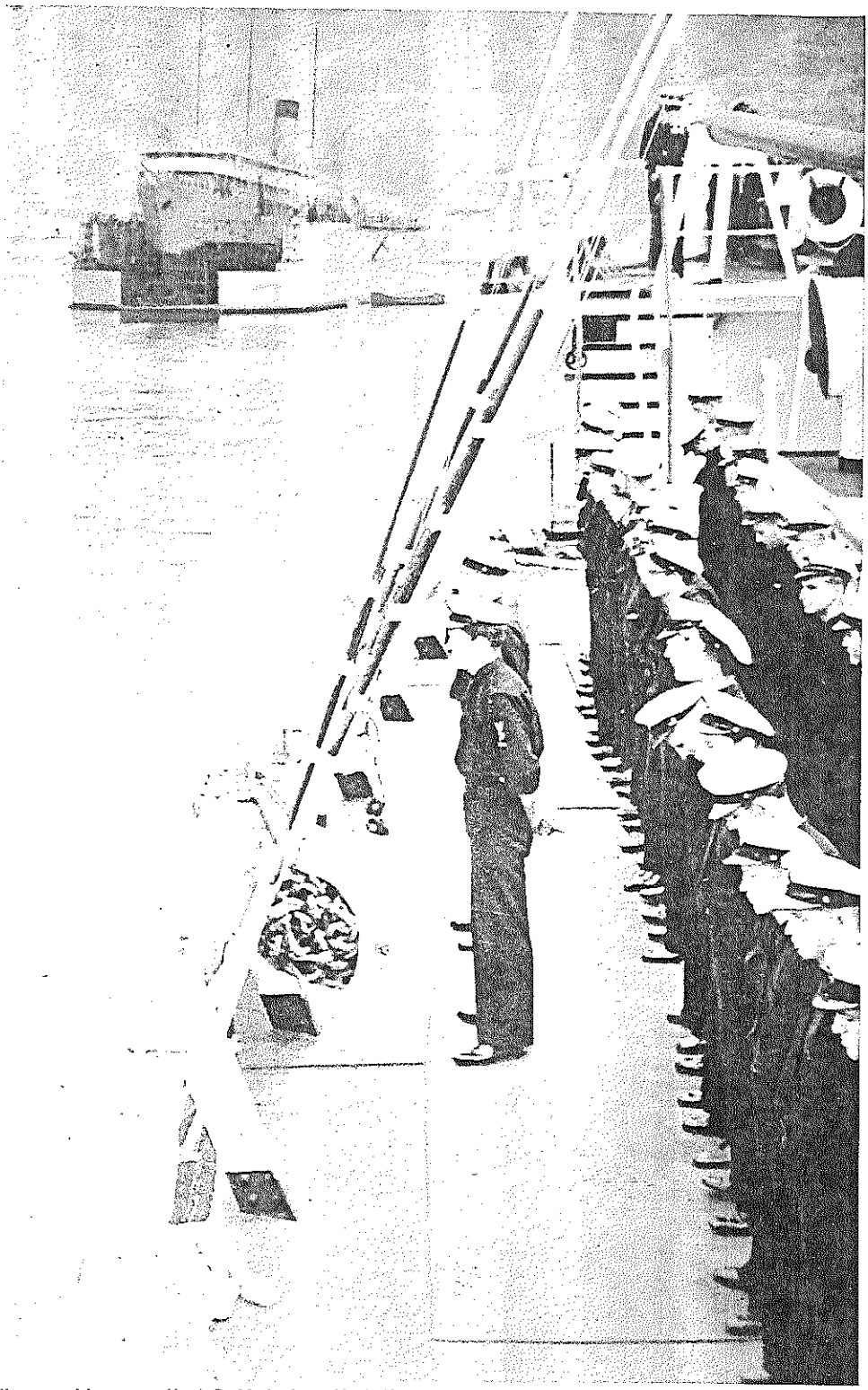
Courtesy Lieutenant (j.g.) B. M. Dodson, U. S. Naval Reserve

WITH NOTHING TO DO BUT TO GO ASHORE



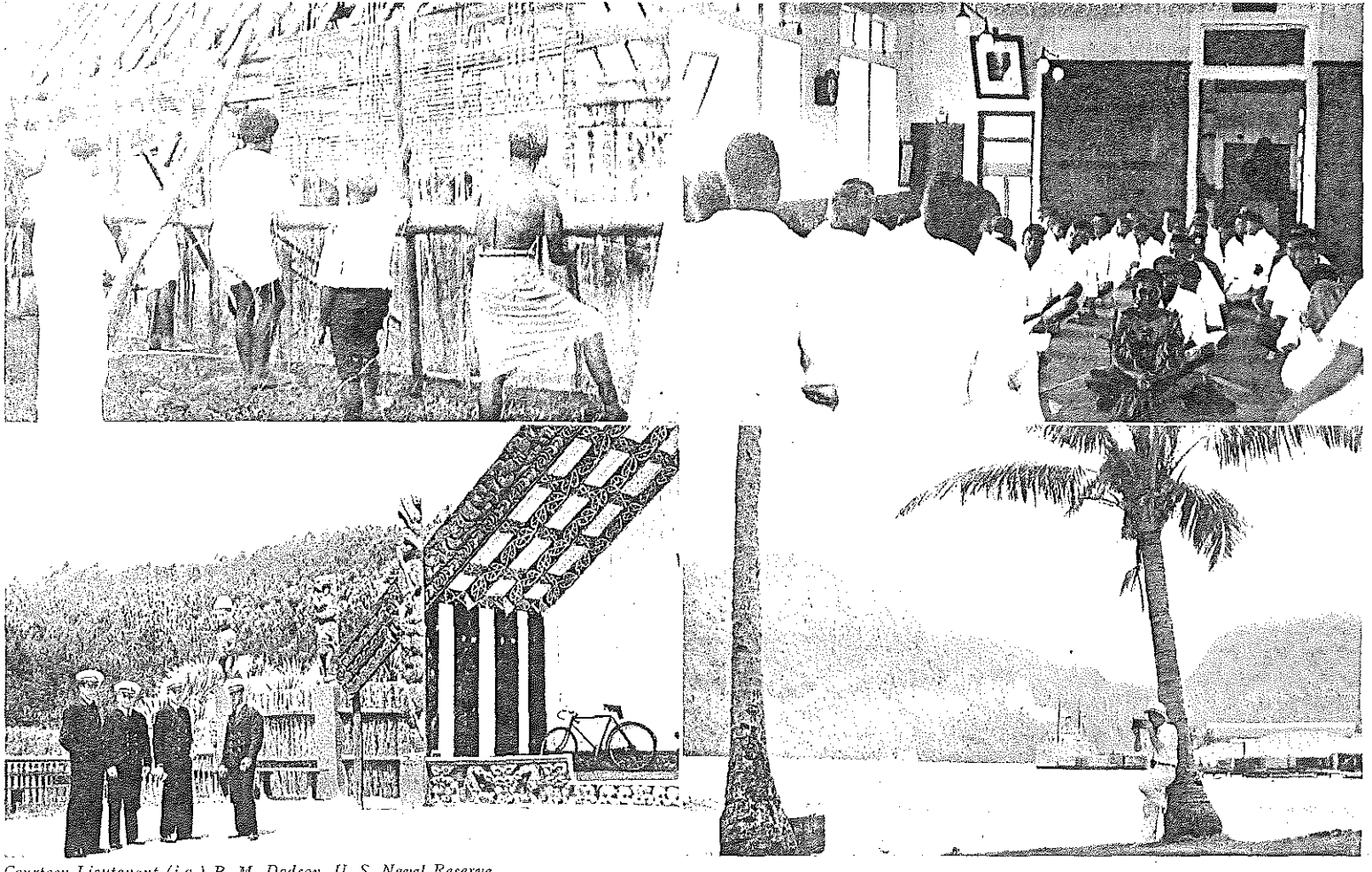
Courtesy Lieutenant (j.g.) B. M. Dodson, U. S. Naval Reserve

CALIFORNIA STATE AT HILO



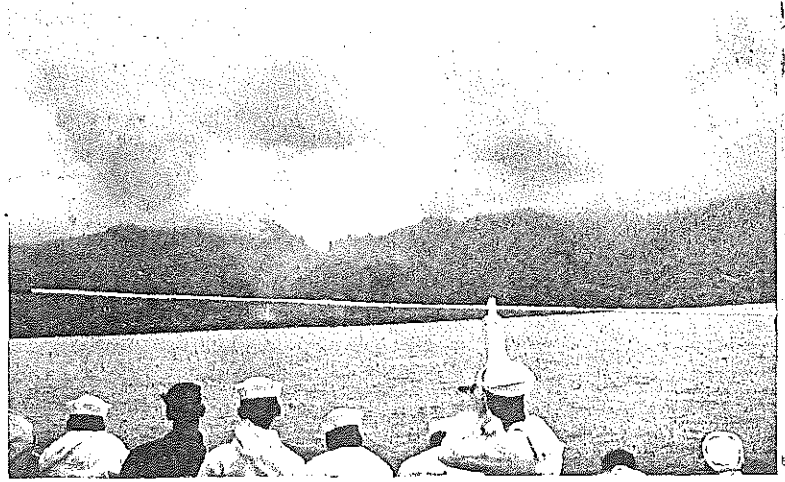
Courtesy Lieutenant (j.g.) B. M. Dodson, U. S. Naval Reserve

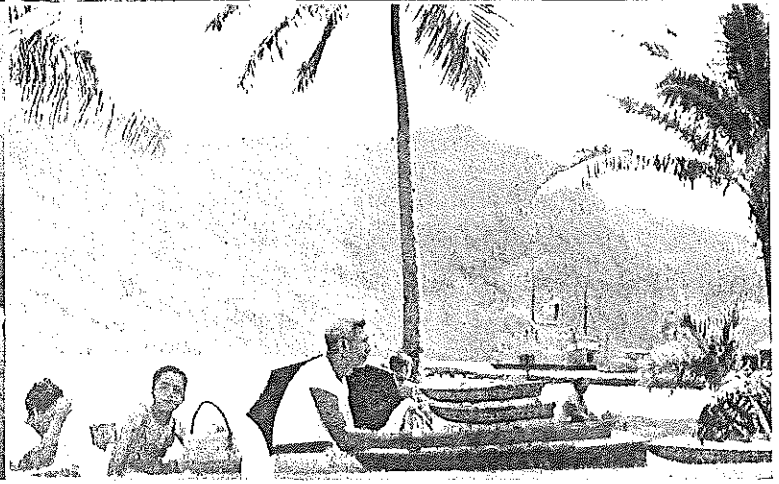
OUTWARD BOUND FROM VALPARAISO



Courtesy Lieutenant (j.g.) B. M. Dodson, U. S. Naval Reserve

(A) BUILDING A HOME IN THE FIJI ISLANDS
(B) AT SCHOOL, SUVA, FIJI ISLANDS
(C) NEW ZEALAND
(D) LANDLOCKED AT PAGO PAGO

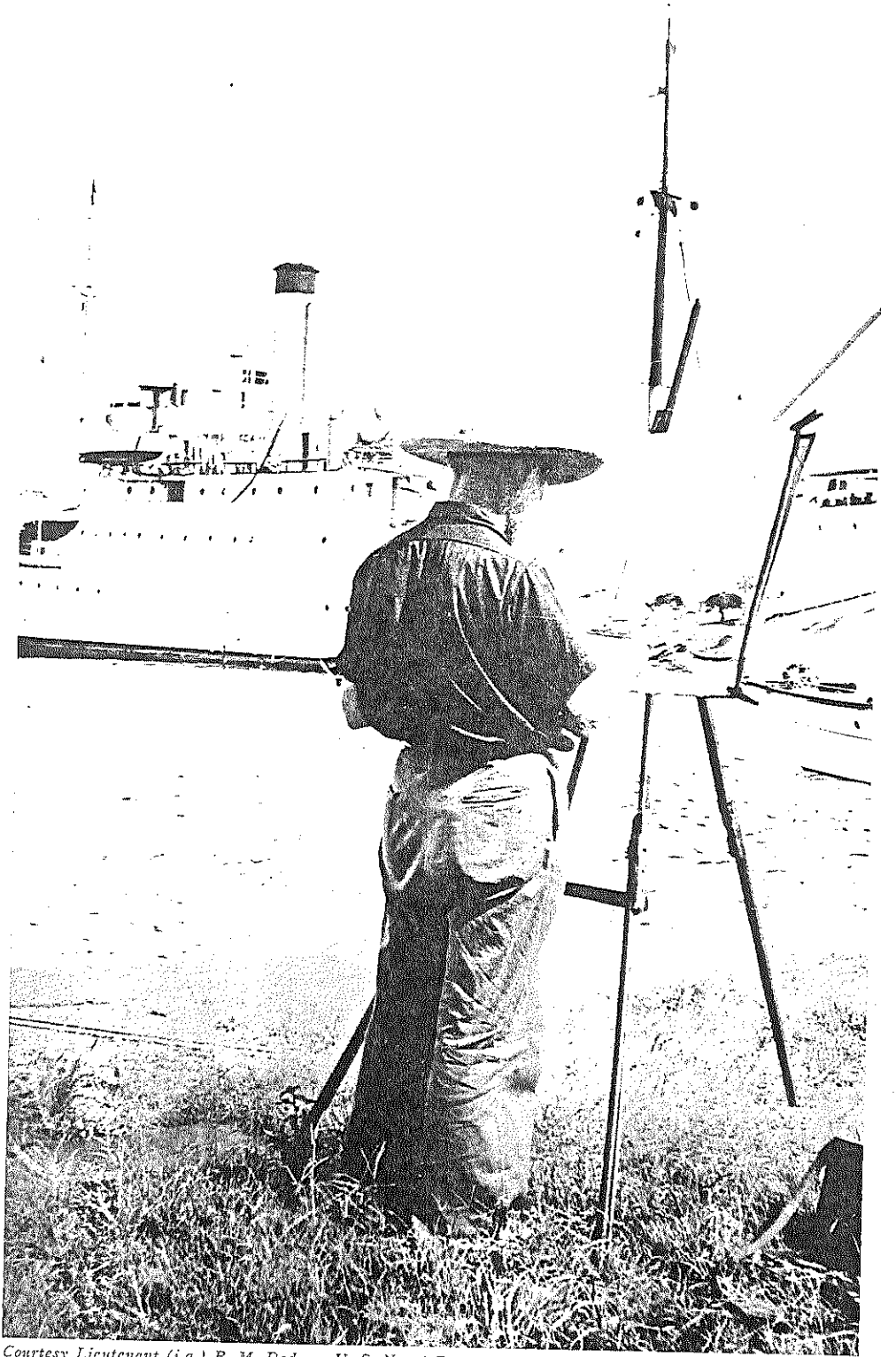




Courtesy Lieutenant (j.g.) B. M. Dodson, U. S. Naval Reserve

PACIFIC IDYLLS

(a) Harvesting sugar cane in Hawaii
(b) And coconuts in Samoa
(c) Coasting Tahiti
(d) At Pago Pago



Courtesy Lieutenant (j.g.) B. M. Dodson, U. S. Naval Reserve

A TAHITI ARTIST PAINTS THE *CALIFORNIA STATE*