



S.S. America Reminds Cadet-midshipmen That One of Them May Become Her Skipper
First-year men, marked with a "P" for plebe, wait on tables at the United States Merchant Marine Academy.

The Young U. S. Merchant Marine Academy Combines Theory, Sea Experience, and Tradition in Preparing Ships' Officers

BY NATHANIEL T. KENNEY

National Geographic Magazine Staff

With Illustrations by National Geographic Photographer Folkmar Wentzel

THE young man ducked from under the radarscope hood, glanced hopelessly at the inky-black glass of the window, then turned to the group clustered in semidarkness behind the ship's wheel.

"Surfaced submarine bearing three-four-eight, sir," he reported. "Range three-zero-two-zero yards. Course three-five-nine, speed eight knots."

In the brief calm that followed I could hear dit-dahs of international code chirping in the radio shack behind the bulkhead.

"What? A sub?" roared Lt. Alfred Fiore, dropping his dividers on the chart.

Lt. Comdr. Arthur Fraser seized the lanyard that hung above the compass. There was a blinding flash of light.

No torpedo exploded beneath us, however. We were merely attending an electronic-navigation class of the United States Merchant Marine Academy at Kings Point, N. Y. Commander Fraser, instructor, did indeed grab a lanyard: it raised a shade, and sunshine struck suddenly through an ordinary window in Bowditch Hall (page 700).

Classroom Sails Safely on

After "navigating" this classroom through a make-believe war zone, a dozen cadet-midshipmen turned from shining rows of gyroscopic compasses, radar and loran receivers, fathometers, and direction finders to look out the window. Beyond the green tree-studded campus lay the western end of Long Island Sound.

"All right, Mr. Baldwin, we'll check your solution," said instructor Al Fiore to the cadet at the radar. "That's your surfaced submarine," and he indicated a deep-laden oil barge chugging past City Island's complex of yacht yards.

"That's not bad. A sub would give almost the same radar return she does. But the course you figured would bring her on the Stepping Stone rocks!"

"Wait," said Commander Fraser. "I looked

under the blind. She really was heading this way, dodging those plebes out there learning to handle lifeboats."

"In which case, I will overlook Mr. Baldwin's grin of triumph," said Fiore, trying not to smile himself. "Class dismissed."

Academy a War Baby

Here, hard by busy Long Island Sound, within sight of the towers of New York City, Uncle Sam schools hundreds of youths who will sail the merchant ships of tomorrow.

Kings Point, the 12-year-old U. S. Merchant Marine Academy, is a youngster compared to West Point and Annapolis, or even to the Coast Guard Academy.* Of the Nation's service schools, only the Air Academy, born last year, is newer. Yet there is no lack of regimental spirit and dedication among Kings Pointers.

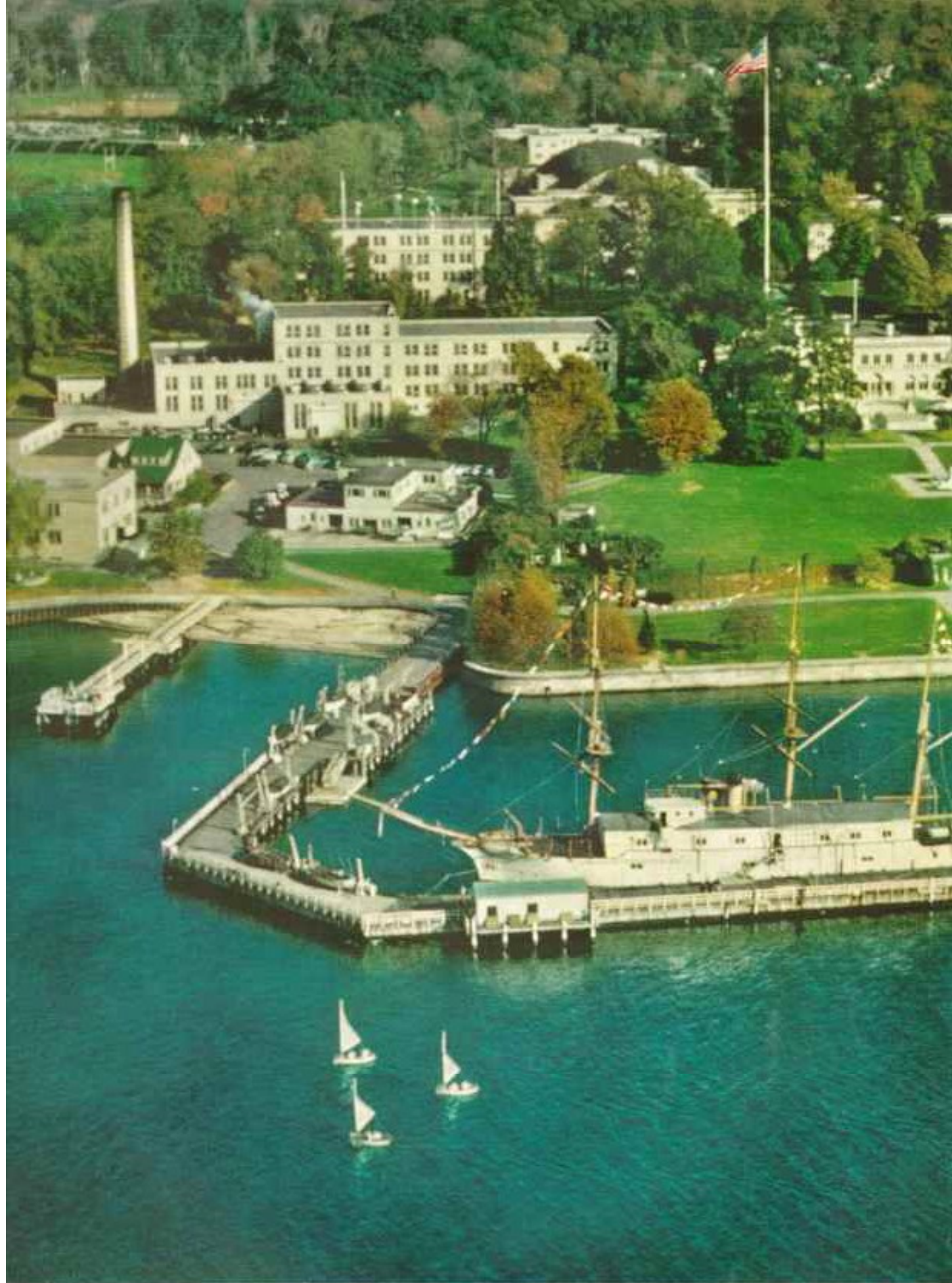
As visiting Annapolis midshipmen and West Point cadets remarked to me: "They have a wonderful spirit. We don't understand how they get it without the long-established traditions we have."

The answer is that Kings Point, until it can put more years in its wake, simply makes do with one of the most glorious of all American traditions—the United States Merchant Marine. Not the history of the school but that of the calling it serves binds Kings Pointers in the brotherhood of the sea.

"Welcome Aboard!"

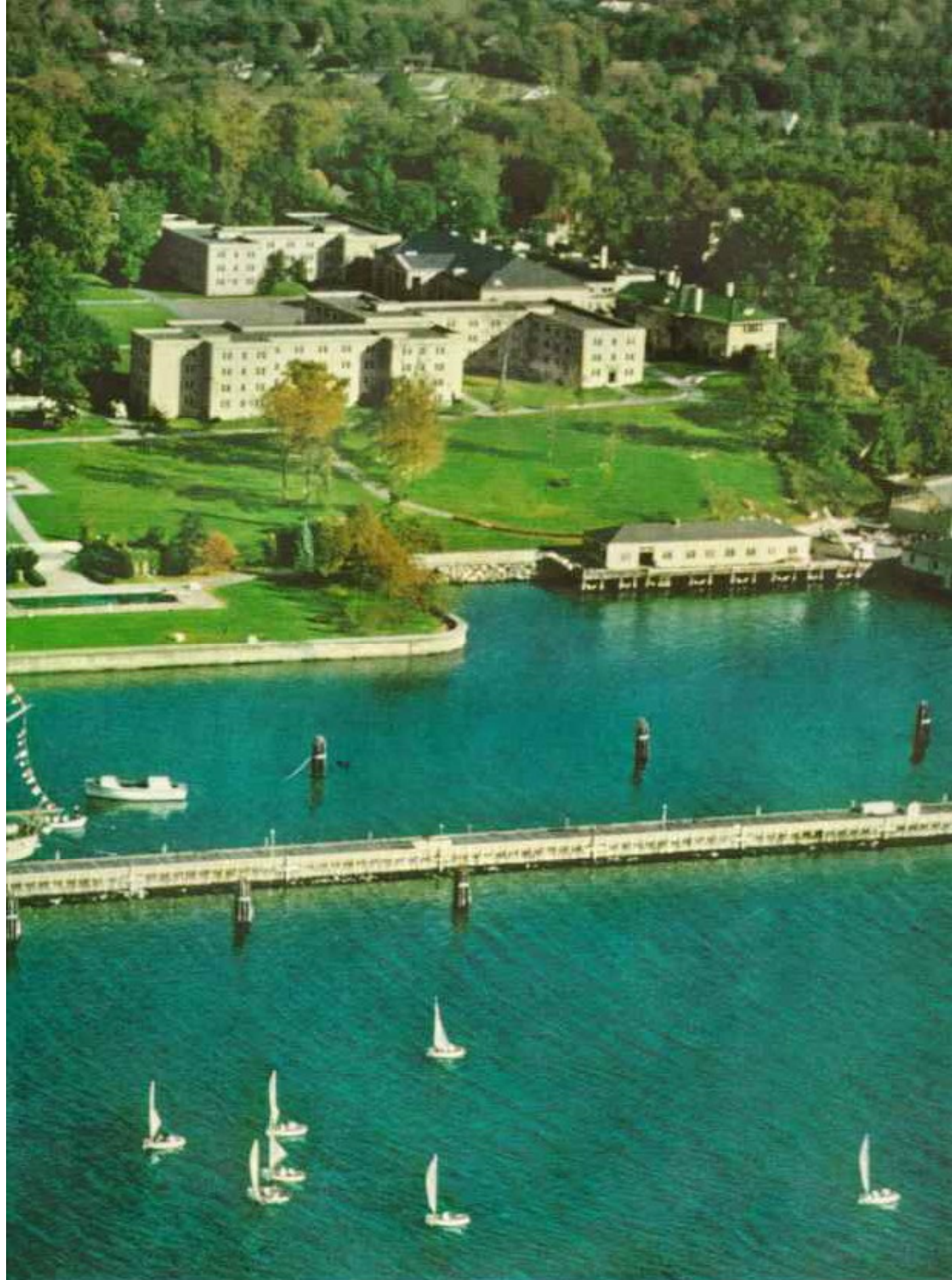
I came to the 65-acre campus on Long Island's north shore early in September. A college year was beginning. Plebes (freshmen) still wandered uncertainly about in blue dungarees; Academy tailors would fit them out in trim khakis and snappy blues.

* See, in the NATIONAL GEOGRAPHIC MAGAZINE, "Under Canvas in the Atomic Age," by Alan Villiers, July, 1955; "The Making of a West Pointer," by Howell Walker, May, 1952; "West Point and the Gray-Clad Corps," by Lt. Col. Herman Beukema, June, 1936; and "Annapolis, Cradle of the Navy," by Lt. Arthur A. Agerton, June, 1936.



Merchant Marine Academy at Kings Point Educates Officers Beside Salt Water

Wiley Hall, the former Chrysler mansion, stands in front of the 171-foot unguyed steel flagpole, reputedly the country's tallest. Stack at left discharges smoke from a Liberty-ship boiler plant that heats the entire Academy.



Cadet-midshipmen in Dinghies Train for College Races on Breezy Long Island Sound

The museum ship *Emory Rice*, a onetime U.S. Navy gunboat, ties up in Hague Basin, an artificial harbor. Formerly she took cadets on cruises; today she rests in dignified retirement. A housing above her deck contains maritime relics.

Petty Officer Harry Odell, in the Navy-like uniform of the United States Maritime Service, logged me in at Vickery Gate, bidding me a cheery "Welcome aboard!"

"In 1938," recalled Lt. Everett Northrop, assistant librarian, to whom I applied for an initial lesson in Kings Point history, "the Maritime Commission established a merchant marine cadet-training program.

"At first our cadets trained only aboard merchant ships. Then we added shore training at temporary bases.

"When we were handed the staggering job of training officers to man the increasing American World War II fleet of cargo vessels and transports, the Government quickly realized that we needed a permanent institution.

"One of your own Society's trustees, Vice Admiral Emory S. Land, was chairman of the Maritime Commission during the Academy's building days. Admiral Land gave wholehearted support to the project, and we honor him as one of our founding fathers.

"He retains his enthusiasm for the Academy. Each year he gives the Admiral Land Medal and Award to the Kings Point graduate with the best record in naval architecture."

Former Mansion Now Nerve Center

For \$100,000 the Federal Government bought the million-dollar estate of the late Walter P. Chrysler at Kings Point, on the edge of Great Neck, a 19-mile drive from New York. Here the United States Merchant Marine Academy came into being. The late President Franklin D. Roosevelt hailed its dedication on September 30, 1943.

The campus was later enlarged by the purchase of adjoining properties, but the Chrysler place with its gardens, terraced lawns, and Italianate mansion, now used as administration building, remains its hub (page 705).

In 1950 the Maritime Administration, a part of the Department of Commerce, assumed the training responsibilities of the Maritime Commission. Academy staff titles denote Maritime Service rank, not Navy, although most of the teachers also hold commissions in the Naval Reserve.

One finds it hard to believe that almost everything here was built and equipped in the space of a few hectic war years.

"Among our early leaders must have been some first-rate supply officers," smiled a member of the faculty.

"For example, the fine furniture you saw

in the Delano Hall cadet-midshipman lounge showed up here, along with a French-built motor lifeboat, soon after the liner *Normandie* burned at her pier in New York."

Most remarkable acquisition was the entire engine room of a Liberty ship. It stands two and a half decks high in Fulton Hall. While heating the whole campus, it teaches students how to make a steamship go.

Engine cadets man the pulsating plant around the clock. They make actual repairs. Though they have been known to lose eyebrows to burner flarebacks, the fuel-oil smoke from the tall stack is usually the light-brown haze that means good firing.

Hobby Is Homemade Steamboat

One day I saw the cadet officer of the watch listening round-eyed to a phone.

"The physical training chief, Comdr. James Liebertz, is getting after him for too little hot water in the gym showers," grinned Capt. Lauren McCready, engineering department head, whose hobby is cruising in his own little homemade steamboat (page 702).

"A prime lesson for 'Mr. Gadget,' as they call engineering cadets. Now he knows what the 'Old Man'—the captain of the ship—will say if later in life he lets steam drop in the middle of the Pacific."

Cadets and instructors working together built a complex, compact planetarium. Here a switch brings the Southern Cross into the concave plywood "sky" or sets the low mid-summer sun to circling the Arctic Ocean. From their chairs students can see the stars over the Indian Ocean and the Bay of Biscay.

Each State is assigned a Kings Point cadet quota. Applicants must prove high-school educations or the equivalent, take competitive examinations held annually in the major cities, and pass the rigid Navy physical examination for officer candidate.

Kings Pointers are Navy as well as Merchant Marine cadets. They graduate with three diplomas: commission as Naval Reserve ensign, bachelor of science degree from their fully accredited alma mater, and license as third mate or third assistant engineer.

All cadets take the usual college sciences such as chemistry, mathematics, and physics. Teaching only these and the sea specialties, Kings Point would turn out mechanically qualified officers.

"But the Merchant Marine officer should be well educated and able to act as an am-



© National Geographic Society

697

Illustrations by National Geographic Photographer Volmar Wentzel

↑ Model Lifeboat and Air Blower Teach the Rudiments of Sailing

When the order comes, "Abandon ship," sail can save lives; hence cadets learn to handle boats under canvas. These boys find how to trim sail in a stream of air blown by the baffle box behind the instructor.

↓ A Class in Marlinespike Seamanship Learns the Art of Rope Splicing

Plebes wear the "freshman's" regulation haircut. Two of them employ a wooden fid to part the strands of a large hawser, used in docking and towing. Sailors' standard knots are demonstrated on the bulkhead.



bassador of our American way of life everywhere in the world," said Rear Adm. Gordon McIntock, Academy superintendent.

The Admiral went to sea as a cadet at 16, soon after graduating from prep school, third in his class. When he received an unlimited master's license at 22, he became one of the youngest United States shipmasters.

Two years later he had a sea command, and for 12 more years he took ships to the far corners of the earth. Adelphi College, of Garden City, New York, recently awarded him a Doctor of Laws degree in recognition of his achievements.

"I want every Kings Pointer to have a good background in the liberal arts and humanities," the Admiral continued. "I want them to represent their Nation and their profession with distinction at sea and ashore, as did American shipmasters of old."

Choice of Foreign Languages

"Therefore, we have a Department of History and Languages, known on campus as the 'Longhair Department.' It doesn't try to produce poets and artists, but it does help make Merchant Marine officers cultured gentlemen, and this is as it should be."

In the Longhair Department each cadet

has his choice of learning French or Spanish or Russian. He studies the story of Western man, investigates the place of his country in history, and looks at the great cultures that are the Western heritage.

I attended one of Lt. Victor Lugowski's lectures on ancient classics. He used color slides. They showed Homer's Mediterranean lands as seen today from a ship, and they made the lecture come alive for fascinated cadets who would one day see those places too.

A Seaman's Holiday

Later I learned that Lugowski made the slides himself during summer leaves. Like many of his Academy colleagues, he sails at every opportunity, feeling that in this way he best keeps in touch with latest developments in the marine profession.

Most of the teachers, especially of technical and professional subjects, are Merchant Marine officers as well as college graduates. In more than one of their offices I saw university degrees hanging on the wall beside master's or chief engineer's tickets for any ocean, any tonnage, or any horsepower.

With a world of complex learning to impart, Kings Point sets a dizzy academic pace.

Cranes Hoist Cargo Aboard a Model Ship

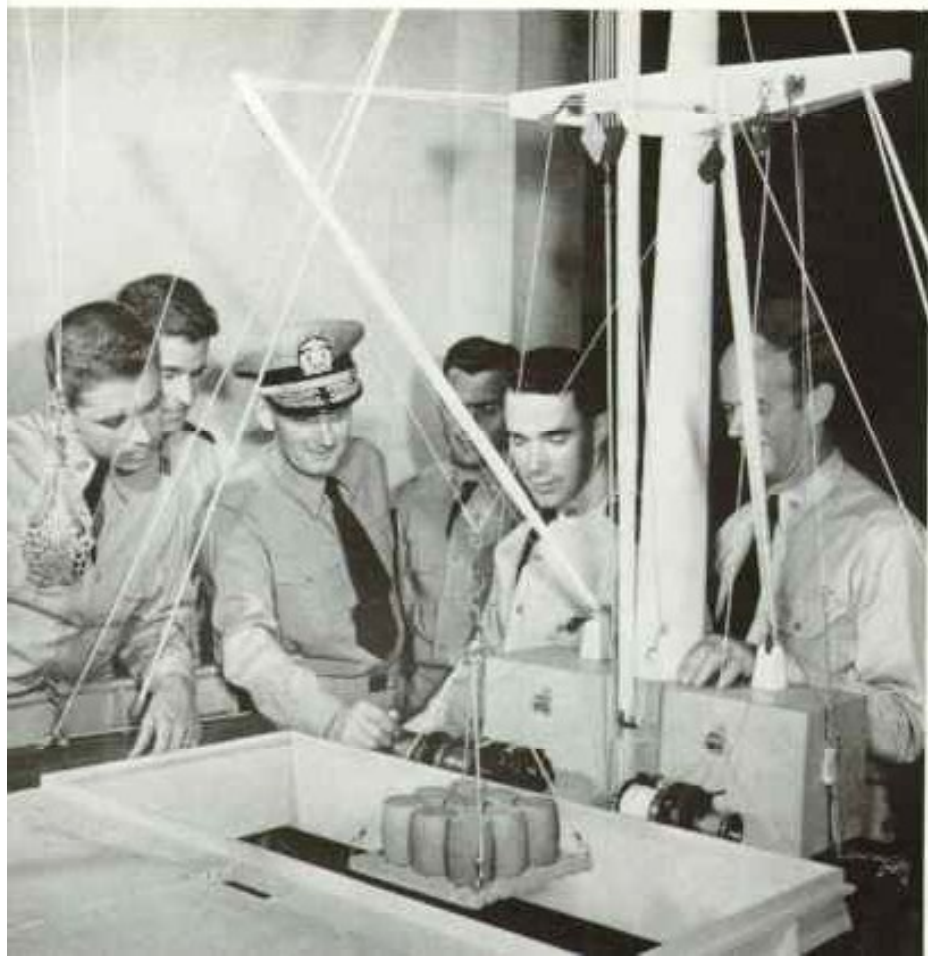
Rear Adm. Gordon McIntock (in cap), superintendent of the Academy, watches nautical-science students practice the standard cargo system used on most freighters and passenger ships today.

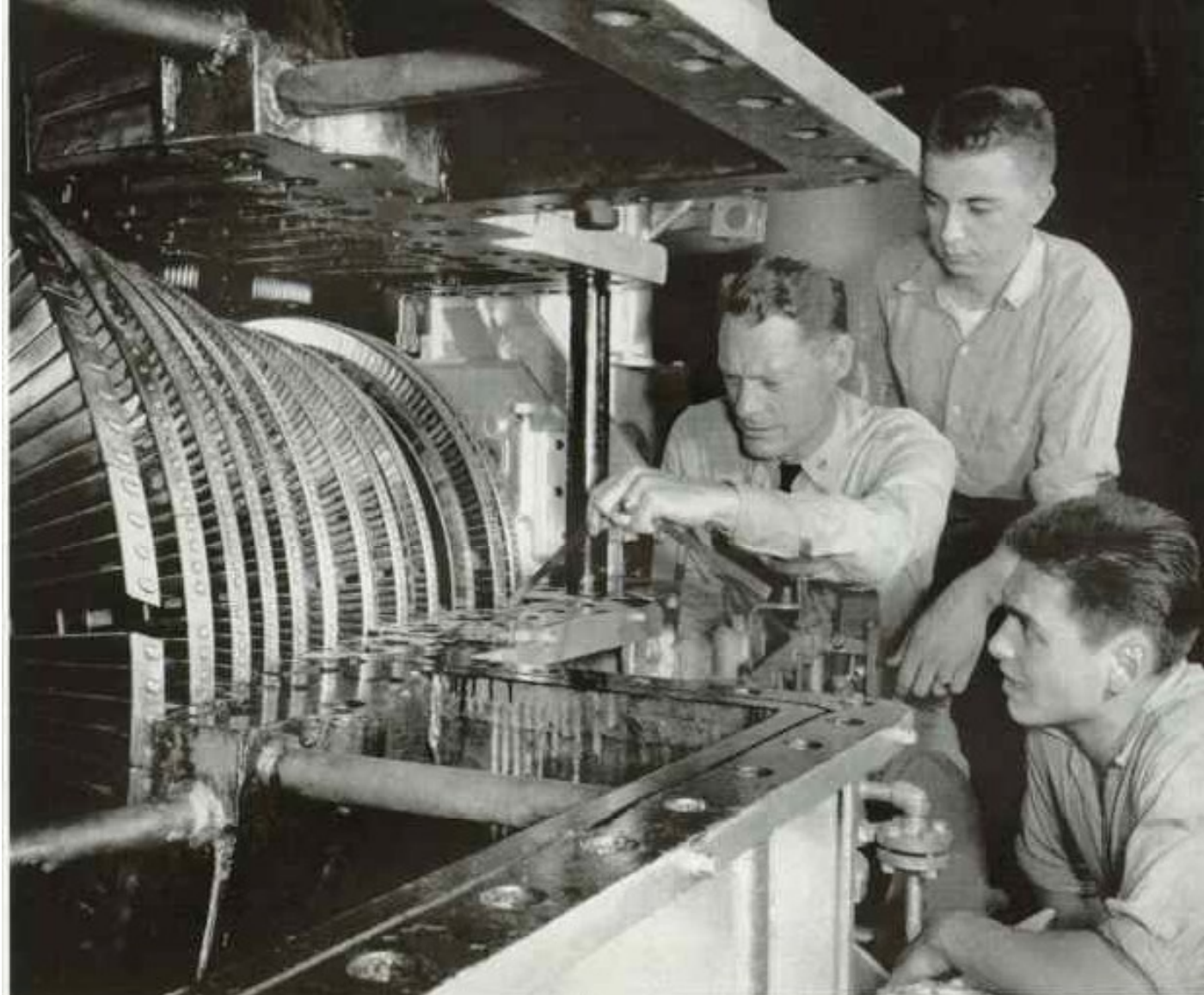
Lt. Comdr. Owen E. Thompson (right) and the cadet beside him operate controls on the far side of the mast table. "Airplane sling" lowers barrels into the hold. Loaded net at left is part of a second cargo gear not visible in the picture. Many modern vessels use two sets of gear; they can serve the same hatch simultaneously.

Virtually all loading is now done by machine. Cables, spooled on drums, are driven by electric winches.

Three shoulder stripes identify the cadet-midshipmen as first classmen (seniors). They graduate as deck officers, becoming third mates.

National Geographic Photographer
Robert F. Sisson





Naval Vessel's Turboelectric Unit Propels the "Ship" in an Engineering Laboratory

This full-size turbine, originally built for a naval destroyer escort, is specially mounted to aid instruction. The turbine powers a vessel's propellers. High-velocity steam directed from nozzles spins the turbine's blades. Close clearances between blading and nozzles are imperative; otherwise large volumes of steam rotate with blading, increasing turbulence and friction. Lt. Comdr. Sidney O. Carlson shows these cadet-midshipmen how to check clearances with a feeler gauge, which can determine tolerances of 1/10000 inch.

School keeps for 11 months each year, and fewer than two-thirds of an average plebe class answers the roll on graduation day.

The highly regimented campus life follows the West Point and Annapolis pattern. The student body as a whole is the Regiment of Cadet-Midshipmen and is divided into battalions and companies.

Campus buildings bear the names of those who in days past made the Stars and Stripes respected in every sea: Nathaniel Bowditch, father of United States navigation; Capt. Samuel Samuels, master of the sailing packet *Dreadnought*; Nathaniel Brown Palmer, Yankee sealer and discoverer of Antarctica; Robert Fulton, steamboat genius; cadet-midshipman Edwin J. O'Hara, who died in World War II, fighting a four-inch deck gun as his

merchant ship went down; and many others.

The Academy hospital is named after Mary A. Patten, a resourceful woman who once commanded a clipper. In 1856 she brought the three-skysail-yarder *Neptune's Car* safely in after her husband, the captain, fell ill.

Cadets reverently salute the handsome War Memorial monument bearing the names of 212 Kings Point cadets and graduates who died in World War II.

To savor barracks life, I spent a night with cadet-midshipman Wayne L. Berry, a tall, serious first classman and petty officer regarded by colleagues and faculty as a better-than-average cadet in all respects.

As a cadet petty officer, Berry had a room to himself on the fourth deck of Jones Hall, but it contained standard equipment for two;



© National Geographic Society

700

Radarscope by National Geographic Photographer Volkmar Wendt

↑ Cadets in Winter Blues Probe the Sky for Its Secrets

Students on the roof of Bowditch Hall operate sextant (left), weather balloons, and a lifeboat's yellow radio set. Span glass covers two of the radar scanners.

↓ Binocular at a Window Checks Ships Seen on the Radarscope

To identify "blips" observed on the screen, students in Bowditch Hall merely look out over Long Island Sound. The scope is hooded to shut out light.



two beds, two chairs, one table, one lamp, four lockers, two washbasins. Berry's rifle stood upright at the head of his bed, and his framed cadet commission hung on a white-painted wall. Otherwise the room was bare as a monastery cell.

I arrived, toothbrush in pocket, at 1855 hours—five minutes before 7 p.m. A bell rang for evening study period at 1900. I took rough notes from time to time, and some of them are as follows:

Berry buries nose in thermodynamics textbook. Kenney ditto, in a magazine. Other first classmen drop by (they're allowed to visit), and they must be studying thermodynamics too, because they use words like "entropy," "enthalpy," and "Carnot cycle."

2130 hrs. Bell rings. Berry shuts book, puts small radio (only authorized room luxury) on table. Kenney relaxes on bunk.

A Visitor Breaks a Rule

Berry: "If you were a plebe, I could fix your wagon for that. Class II offense. *Bunk, sitting or lying on between reveille and tattoo. Ten demerits.*"

Kenney: "Well. May I smoke?"

Berry: "Watch the ashes, though. White-glove inspection tomorrow. They even test tops of window ledges for dust."

2131. Cadets, agog over unusual civilian visitation, jam into room. Bull session. Talk fast and furious; 24 minutes before tattoo.

In this session I steered the conversation away from regimen, searching for what there was to leaven the rigid life.

I heard about dances beside the Chrysler swimming pool, with Japanese lanterns and a June moon and girls in shimmering dresses. For decor at the last one there had been a cadet-built whale in the pool.

The whale really spouted, too, with the aid of a condemned fire hose. When I inquired if anyone ever jitterbugged into the pool, my friends chorused a shocked "No!"

The room rocked with glee at my asking why Lt. (jg) Edward MacCriskin, instructor in ship's medicine, immobilized with heavy lead weights the locked cabinet that houses Little Joe, classroom demonstration skeleton.

"We spread a rumor we were going to steal Little Joe and run him up the flagpole!" one of the visitors whooped.

The flagpole is 172 feet high, the tallest unguyed steel mast in the United States, so the Academy claims (page 694).

"You know why it's so high?" chortled a cadet.

I confessed I didn't.

"So none of us on week-end leave in New York can argue we couldn't see a recall signal!"

Berry and his friends told me they somehow found time to get out student publications, fill the ranks of a successful intercollegiate debate team, attend camera and astronomy club meetings, go spearfishing with the campus Trident Club. Athletics, varsity or intramural, are compulsory. Saturday night movies cost a dime.

A cadet may take his girl sailing on the sound in an Academy boat, sing in the Glee Club, play in the band, or try out for the honor of "ramkeeper." The latter holds Neptune III, the Kings Point mascot, during football games.

Lt. Comdr. Ralph Harpole, Protestant chaplain, told me on a later occasion that the cadets were deeply religious, like seafarers everywhere. Active Protestant, Catholic, and Jewish groups thrive on campus.

Our session in Berry's room ended with tattoo at 9:55 p.m. Five minutes later the bugle blew taps over the loud-speaker system. Within seconds every room light was off and every cadet in bed.

Berry, I judge, was asleep at 10:01 p.m. Around midnight I fell into fitful sleep on a very hard bed.

On routine duties, cadets came and went quietly during the night. They had fire watches and regular watches in the boiler room, in the main administration building, or in the battalion offices.

Wayward Plebe Takes a Brace

At 6 a.m. a bugle brought all hands tumbling to the deck in instantaneous, tumultuous awakening. At 6:30 a plebe took up station beneath a clock in the passageway, standing at a rigid "brace"—exaggerated attention—and calling off the minutes before mess muster.

"Sir, five minutes to mess muster...four minutes to mess muster..."

My roommate popped out of his room precisely at reveille. It was his duty to see that all doors on his deck were open and all hands up and about. Then I found out that the clock-watching plebe was paying the penalty for breaking some part of the semi-official fourth-classman's code which is called

Students Practice Ship Loading → with Bogus Cargo

Reid Pier used to serve wealthy Long Islanders commuting to Manhattan Island by ferry; today it holds hoisting equipment for loading an imaginary freighter. This ship's hold is only a deep concrete pit. In lieu of real cargo, a life raft swings aboard. Steam piped down from the Academy's boiler room powers the winch at right.

Building at left houses the Petty Officers' Club. Its members, who hold rank in the U.S. Maritime Service, are attached to the Academy.

City Island, a yacht-repair center, lies in the background.

↓ *Little Effie* Toots a Shrill, Steamy Whistle

Capt. Lauren S. McCready, head of the Academy's engineering department, has a hobby: she is *Little Effie*, a onetime whaleboat that he converted into a coal burner. When he takes a crew for a spin, he selects at least one hefty stoker for her hand-fired boiler. Here Captain McCready, hand on the tiller, steers *Effie* into Hague Basin (page 694). The mainland looms in the distance.

© National Geographic Society



702

S.S. *Miss Calculation*: → a Triumph of Errors

Page 703: The listing model in this tank contains built-in faults designed to illustrate problems of cargo and ballast. With scarcely any effort on the part of her crew, she shows what poorly stowed cargo can do to a ship.

A 100-pound weight at the end of the tackle sets the crazy hull reeling drunkenly. Her handlers occasionally wear bathing trunks.

Stowage and ballast are very important items in a deck officer's training.

Miss Calculation berths in a laboratory full of cutaway ship models and other teaching aids, many of them given by shipping lines.

Reproduced by National Geographic
Photographer Volkmar Wehrli





"class system," or less officially, "class rates."

This code insists that plebes walk in single file, even when there are only two of them. Plebes "square" corners, meaning they change course abruptly, 90 degrees at a change, as on the parade ground. They must also follow starboard edges of walks and corridors, a requirement that provides them miles of healthy extra footsteps per year.

"Sophomores" Roam the Seas

The various cadet classes and ranks are distinguished from each other by a baffling insignia system involving shoulderboard and sleeve stripes. I made an important discovery while trying to learn the system.

"Why," I asked Lt. Comdr. Luis Bejarano, librarian, "doesn't the third class, the sophomore class, have insignia?"

"They do—one stripe," Bejarano replied, "but the third class is scattered over the oceans. Second college year is sea year; the world is the third classman's campus."

"Our system is unique. We don't send our cadets out on mass training cruises. They go as individuals helping work American merchant ships on regular runs. The largest cadet group in any one ship consists of six in the liner *United States*.

"An ordinary cargo or passenger-cargo vessel will carry one deck and one engine cadet. We've had cadets who sailed three times around the world in their sea year. Most have logged 50,000 miles or more."

Steamship lines like the cadet system, cheerfully paying the trainees. They know they are not only obtaining the services of a junior officer, but, more important, helping to train a body of men from which they will later hire their ships' officers.

The Academy keeps a special representative, currently Comdr. Sherman Reed, in New York. Commander Reed's job is to find ships for "sophomores," then keep track of them on their peregrinations, which he does with a boxful of cards on his desk.

Meeting the *African Moon*

The day I talked to him, he had 260 cadets at sea or in foreign ports. All were on regularly scheduled runs—the *United States* today has comparatively little tramp shipping—and so Commander Reed knew pretty well when each cadet would get back to New York.

When a cadet is due in, Commander Reed

or some other Academy officer meets him to find out how he is getting along. On a day when Comdr. Clifford Sandberg, assistant head of the engineering department, drew the meeting duty, I went with him to a Brooklyn pier where the *S. S. African Moon*, Farrell Lines, was unloading baled hides and frozen lobster tails from Cape Town.

She carried two cadets, who shared a state-room on the officers' deck and ate with the officers. The deck cadet was ashore, but the ship's chief engineer quickly produced his engine cadet, Nick Starace. Even in greasy dungarees, he was well poised.

"This was a wide-eyed plebe last year?" I asked incredulously as Starace went off to fetch his sea project.

"They mature fast at sea," nodded Sandberg. "It's a wonderful system."

The commander studied Starace's sea project carefully and marked a high grade on the bulky notebook. I leafed through it later and gathered that the youth had described and sketched the refrigeration machinery with which the *Moon* kept her lobster tails frozen.

Learning Ports and Products

Each cadet works on some sort of sea project in his hours off watch. A popular one with deck cadets is a study of the various products shipped out of ports visited. They bring back samples in labeled bottles. Starace said with a smile that his topside colleague had failed to collect either an elephant tusk or a diamond this voyage.

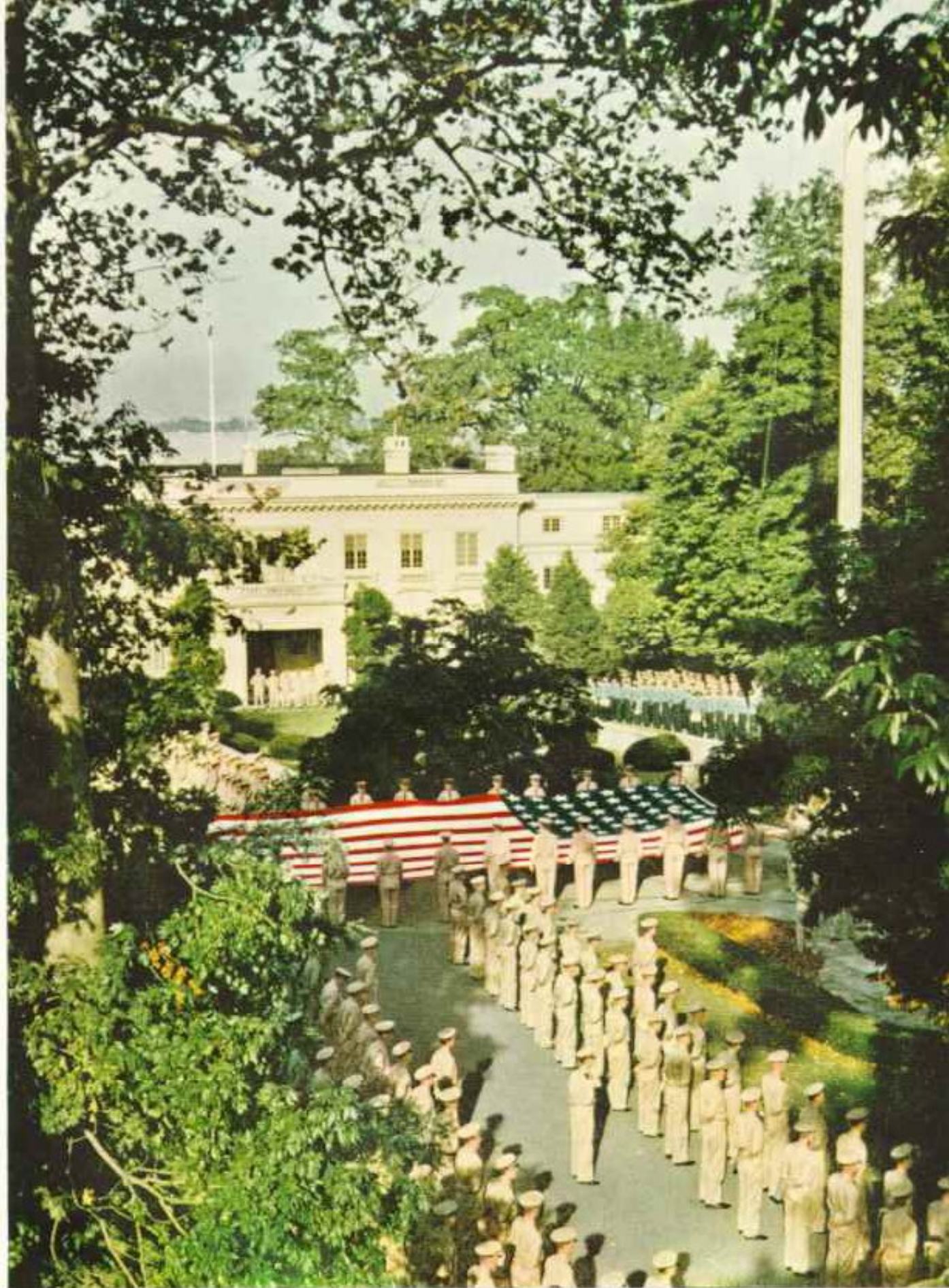
"Mr. Starace, the Chief likes you and wants you to sign on for another trip," said Commander Sandberg.

But Starace said that although he liked the *Moon* and everybody in her, he wanted a tanker next, for experience.

"I'll ask Commander Reed to set it up," Sandberg said. "I take it you have no special problems to discuss?"

"No, sir, not today," replied Starace. "Yesterday I was teed off because the Chief had me type his spares inventory, but today it occurs to me that what I learned that way might come in handy in your classroom next year!"

Later, Starace and I stood alone on deck watching the busy tugs scurrying about their affairs and the quarreling gulls wheeling above the masts. He told me of whales spouting in the windy South Atlantic, of raising lonely St. Helena in the dawn, and



© National Geographic Society

705

Kodachrome by National Geographic Photographer Volkmar Weitzel

Starting Their Day, Cadets in Summer Khakis Fall In for Morning Colors

Two dozen men hold the nylon flag preparatory to raising it. Wiley Hall (background) is the Academy's administrative headquarters, where VIP's are piped aboard. A laboratory class at right wears blue dungarees.



706

Plebes Stand at Brace. "Let's See More Chins, Mister," Says the Upperclassman

After a full day in school, these beginners were routed out in full uniform and lined up in the dormitory hall to learn student discipline. As a privilege of his lofty status, the upperclassman appeared in bathrobe. Brace is a position of exaggerated attention here, just as it is at the other service academies.

of the white mists blanketing Table Mountain behind Cape Town. He had had an education, all right.

I looked into some of Commander Bejarano's files on Academy graduates. Most, of course, had become ships' officers—masters, chief engineers, lesser grades.

More than two-thirds of the officers in the superliner *United States* are graduates of the U. S. Merchant Marine Academy, and so are the captains of several Farrell Lines vessels. A Kings Pointer is chief engineer of one of Esso's largest tankers. Many serve in the Navy under their reserve commissions.

Kings Pointer Doubles as Doctor

Others have become oceanographers, hydrographers, shipping executives, marine-insurance experts, marine-supply men, officials of stevedoring firms, port captains, regular Navy and Coast Guard officers, stationary engineers, and instructors.

One Kings Point grad directs the Hayden

Planetarium in New York. Another, mate in *Meredith Victory* during an epic refugee run made by that ship in 1951, delivered several Korean babies with only his school course in ship's medicine to guide him.

Still another operates a copra plantation on Tahiti. More directly than many, he can attribute his paradisiacal life in the South Seas to the Academy. Calling at Papeete during his sea year, he fell in love with a French girl and went back after graduation to marry her.

Not all Kings Point alumni, of course, end up in such odd anchorages. But certainly the Academy's graduates shove off for the great wide world with well-founded optimism in their hearts. Words of one of their football songs well sum up the faith with which they face the voyage of life:

Heave ho! my lads, heave ho!
Let the seas roll high or low.
We can cross any ocean, sail any river,
Give us the goods and we'll deliver.