

STATE OF CALIFORNIA  
DEPARTMENT OF EDUCATION  
CALIFORNIA NAUTICAL SCHOOL  
SAN FRANCISCO, CALIFORNIA

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*General Information*

CONCERNING

The California Nautical School



CALIFORNIA STATE PRINTING OFFICE  
HARRY HAMMOND, STATE PRINTER  
SACRAMENTO, 1931

**Members of the Board of Governors,  
California Nautical School**

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**GENERAL INFORMATION CONCERNING THE CALIFORNIA  
NAUTICAL SCHOOL**

**Legal Authority for the School.**

An act of congress of March 4, 1911, authorizes the Secretary of the Navy to furnish upon application of the governor of a state a suitable vessel with her equipment, to be used as a nautical training ship in certain ports of the United States, San Francisco being one of the ports.

By virtue of this act, and with a view to stimulate interest in the United States Merchant Marine, an act of the California legislature dated June 3, 1929, provides for the establishment, management, operation and maintenance of the California Nautical School.

**Object of the School.**

"The California Nautical School shall be maintained at the port of San Francisco \* \* \* for the purpose of giving instruction in the science and practice of navigation, seamanship, steam, diesel and electrical engineering. \* \* \*" (Section 1, California Nautical School Act.)

The enormous growth in the size of modern steamers, the great advance made in marine science generally, the application of modern invention to all that appertains to life afloat, calls for wide and basic knowledge. The scholastic and technical requirements of the maritime profession are increasingly exacting, and render most desirable, if not imperative, sound preliminary training, if a youth aspires to command. It is the object of the California Nautical School to afford such training and to prepare its students to become creditable officers of the United States Merchant Marine.

**Management of the School.**

"Within the department of education there is established a board of governors of the California Nautical School of five members, of which the state superintendent of public instruction shall always be the executive member thereof, and the other four members shall be appointed by the Governor of the State of California. \* \* \*" (Section 2, California Nautical School Act.)

"\* \* \* Three of the appointed members of the board of governors shall always be experienced in commercial ship operation." (Section 3, California Nautical School Act.)

"The members of the board of governors shall serve without pay. \* \* \*" (Section 4, California Nautical School Act.)

"\* \* \* The board shall \* \* \* fix the terms upon which students shall be received and instructed therein and suspended, discharged or graduated therefrom; make all regulations necessary for

its management and control, and provide from time to time for cruises in and from San Francisco harbor. \* \* \* (Section 1, California Nautical School Act.)

“The board of governors shall provide, maintain, manage and control a state nautical school, pursuant to the provisions of this act. \* \* \* (Section 6, California Nautical School Act.)

**Qualifications for Admission.**

“Admission to the school as a pupil, tuition and keep shall be free on board such vessel to any male resident of the state, having the required qualifications; provided that an initial fee of ~~seventy-five~~ dollars, <sup>150</sup> may be charged as an admission fee for part cost of uniforms and equipment.” (Section 7, California Nautical School Act.)

*Heavy Type* — *In accordance with authority of the law*, the board of governors of the California Nautical School has established the terms and conditions upon which the pupils shall be received into the school as follows:

First—They must be of good repute.

Second—They must be legal residents of the State of California and citizens of the United States.

Third—Upon admission to the school they must be not less than seventeen years of age, nor over 21 years of age.

Fourth—They must be of normal size and weight, sound in body and free of physical defects. Prior to admission to the school they will be required to pass a physical examination similar to that given applicants for enlistment in the United States Navy. No candidate will be admitted until he submits a certificate from a reputable dentist showing he is in need of no dental treatment. Each candidate must sign an agreement that he will submit to vaccination and typhoid prophylaxis, and such other measures intended for the general health of the school as a whole.

Fifth—They must pass an educational examination, which will include the following subjects: Mathematics, to and including elementary algebra; grammar; composition; United States history and general information. The examination will be held at such points throughout the state as the board of governors may designate, and at such time as they may elect. To qualify for entrance a minimum grade of 70 per cent is required in every subject. Candidates will not be reexamined for admission to the same class.

Sixth—Prior to admission to the school, candidates will be required to provide themselves with certain designated articles of clothing, and must also make a deposit of \$~~50~~ to be applied to the purchase of uniforms and other necessary equipment. ~~\$150~~

Seventh—They must enter the school voluntarily, with a fixed and earnest purpose of completing the course, and becoming officers of the United States Merchant Marine.

Only boys of excellent character, rugged in physique, amenable to discipline, earnest in application, and who with an honest and sincere purpose will appreciate and voluntarily avail themselves of the instruction given, with a goal of becoming creditable officers of the American

\* It has been recommended to the state legislature that this amount be increased to \$150. Candidates should be prepared to pay a sum not in excess of \$150 as an admission fee.

Merchant Marine should apply for admission. *No applicant will be admitted to the school who in the opinion of the board of governors is unfitted for a life at sea; nor will any cadet be allowed to remain in the school unless he promptly, consistently, and willingly obeys all the rules and regulations for the government of the school, and makes consistent and satisfactory progress in his studies and training.*

*Cadets will be required to perform all work both in port and at sea incidental to the complete maintenance and operation of the ship.* Boys who are not resolute in spirit, or who wish to avoid hard and consistent mental and physical work, or the privations incidental to sea-faring life, are not suited to become cadets and should not apply for admission.

### **Equipment.**

The school will be maintained on the *U. S. S. California State*. This ship is a modern merchant type of vessel, admirably suited for a training ship. The *California State* was built in 1919 by the American Ship Building Company of Cleveland, Ohio, for the United States Shipping Board. On May 24, 1930, it was transferred to the United States Navy, and on August 22, 1930, it was further transferred to the State of California as a school ship.

The principal dimensions of the ship are: Length over all 261 feet; moulded breadth 43.5 feet; moulded depth 28 feet; gross tonnage 2592; net tonnage 1613.

Two single-ended oil burning Scotch boilers, furnish steam for a three-cylinder triple expansion reciprocating engine of approximately 1500 I.H.P.

The equipment includes: A complete outfit of Navy pulling, power and sailing boats; a machine shop fitted out with motor driven lathes, a shaper, a milling machine, a planer, a sensitive drill, a hack saw, a combination woodworking machine, together with bench and hand tools, as well as blacksmithing equipment; complete navigational outfit of sextants, compasses, chronometers, binnacles, books, charts, etc. a Sperry gyroscopic compass and a direction finder; modern cargo handling facilities; comfortable quarters for 120 cadets.

The shore base of the school will be at the Naval Fuel Depot at Tiburon, Marin County, California. This reservation includes fifty acres and is fitted with dormitories, machine shop, boiler shop, electrical shop, forge shop and foundry. It is accessible to San Francisco and is an admirable location for the school.

### **Course of Studies and Instruction.**

Three years are required to complete the course and obtain a certificate of graduation. The school year will consist of two terms of 15 weeks each devoted to academic work, and a sea term of 18 weeks to be spent in cruising. Whenever practical cruises will include foreign ports.

During the first year the same instruction is given all cadets, both in the navigating and engineering branches of the school. At the end of the first year the class will be divided by the board of governors, and cadets will specialize in the deck or engineering departments of the school. In making this division due weight will be given the

individual preferences of the cadets. Graduates of the school are eligible to apply to the United States Steamboat Inspection Service for license as third mate, or third assistant engineer. So licensed they are legally qualified to accept positions as officers of the United States Merchant Marine. The demand for schoolship graduates in the American Merchant Marine exceeds the supply.

**General Remarks to Parents and Guardians.**

Boys manifestly unfitted for a life at sea because of temperamental qualities, a disinclination to conform to rigid discipline and hard work, inadequate preliminary schooling or physical disqualifications should not be allowed to make application for admission. Constant application and consistent and progressive proficiency will be expected and exacted of all cadets.

Cadets are provided at the expense of the state with their board and tuition. Cadets must be provided with underclothing, shoes, etc., and other items at all times to the complete requirements of the school. These items, as well as a deposit of \$75\* must be obtained before a candidate is allowed to enter the school. Spending money, as well as money for laundry, barbering, and other necessaries and incidentals must be furnished by parents. No opportunities for cadets to earn money are available.

Articles belonging to the ship, being the property of the State of California, and in some cases of the federal government, and articles of clothing belonging to cadets or to the school, that are lost or injured through carelessness of cadets, must be replaced at their own expense.

On cruises the school will provide ordinary medical services, and while in port such arrangements as may be practicable will be made with existing state and federal agencies to furnish similar services.

**The State of California, its officers, employees, or agents, assume no liability for the results of sickness nor accidents involving personal injury to any cadet, whether incident to school or ship duties or not.**

The food ration is similar to that issued the United States Navy.

A report of scholarship and deportment will be mailed monthly to parents or guardians.

Cadets proficient in studies and deportment, whose services can be spared aboard ship, will be granted liberty on all legal holidays, and weekly from Saturday noon until Monday morning. Brief vacation periods, totaling about four weeks in all with be granted from time to time every year.

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#### CLOTHING LIST

The following equipment must be of a uniform color and pattern. Prior to admission to the school the Superintendent will arrange for candidates to purchase this equipment at cost:	The following equipment will be purchased from the \$75 deposit:
1 black cravat at 35 cents	1 blue dress uniform \$39.00
2 suits dungarees at \$2.15	1 cap with 2 white covers 6.00
4 drawers at 35 cents	1 mattress 5.57
4 undershirts at 25 cents	2 mattress covers at 77 cents 1.54
3 white hats at 40 cents	4 sheets at \$1.03 4.12
3 white jumpers at \$1.10	2 spreads at \$1.68 3.32
3 white trousers at \$1.30	1.00 2 blankets at \$3.18 6.36
1 blue jumper at \$4	1.20 1 pillow at 53 cents .53
1 blue trousers at \$7.30	3.30 2 pillow cases at 29 cents .58
1 silk neckerchief at \$1.40	3.90 6 bath towels at 43 cents 2.58
1 blue flannel shirt at \$4.25	4.00 6 face towels at 12 cents .72
1 raincoat at \$7.75	7.30 1 pair white gloves .65
1 pair overshoes at 95 cents	1.40 1 suit oilskins 4.00
1 jack knife at 35 cents	
Total	\$41.45
	\$74.97

The following items which need not be of a uniform design should be provided from outside sources:

- 2 pairs black shoes.
- 6 pairs black socks.
- 4 plain white shirts (without attached collars).
- 6 soft collars (white).
- 6 handkerchiefs.
- 1 bathing suit.
- 1 whiskbroom.
- 1 shoe blacking outfit.
- 1 set of toilet articles—soap, toothbrush, razor, etc.
- 1 belt.
- Needles, thread, buttons, scissors, etc.

N.B. Prices quoted are subject to minor fluctuations.

#### TYPICAL ENTRANCE EXAMINATION

Subject: Mathematics.

Time allowed: Four hours.

1. Nine men complete a piece of work in 68 working days of  $9\frac{1}{2}$  hours. How long would it take fourteen men, working  $8\frac{1}{2}$  hours per working day to complete the same work?
2. What sum placed at simple interest at  $5\frac{1}{4}\%$  will at the end of 11 years, 5 months and 28 days amount to \$12,494?
3. The area of a circle is 3018.742 square inches. Compute in feet to four decimal places its circumference.
4. Given: 1 cubic foot of water weighs 62.5 pounds, and 231 cubic inches is the volume of a gallon. How many gallons will a cylindrical tank 30 inches in diameter, and 8 feet 6 inches long contain? Assuming the tank to be 65% full, what is the weight of its contents, the specific gravity of which is .93?
5. The radius of a circle is 1.43 meters. Working to 3 decimal places find the length in feet of an arc of the circle equal to 29 degrees, 37 minutes and 24 seconds.
6. Find the value of x and of y in the following simultaneous equations:  
$$x^2 - y^2 + 2 = 49.2827$$
$$x^2 + y^2 = 141.8481 - 2xy$$
7. Working to five decimals, what part of a 360-day year is 29 days, 22 hours, 59 minutes and 2 seconds?

✓ 8. A ship leaves San Francisco at 4 p.m. 18 August, making 10 knots. What time should a second ship leave San Francisco, steaming 18.35 knots, to arrive at Yokohama 4 hours ahead of the first ship? San Francisco-Yokohama 4536 miles.

✓ 9. What is the size of a square having the same area as a circle whose circumference is 39.37 inches?

✓ 10. A flagstaff casts a shadow of 108 feet; at the same time a pole 17 feet, 3 inches casts a shadow of 25 feet, 4 inches. What is the height of the flagstaff?

Subject: United States History.

Time allowed: Two hours, thirty minutes.

1. How were the following acquired by the United States:
  - (a) Alaska.
  - (b) Virgin Islands.
  - (c) Hawaii.
  - (d) Texas.
  - (e) Porto Rico.
2. For what are the following men famous:
  - (a) Leif Ericson.
  - (b) John Ericsson.
  - (c) Elias Howe.
  - (d) John Hancock.
  - (e) George Dewey.
3. What were the causes of the War of 1812?
4. Why is the Battle of Saratoga considered one of the decisive battles of history?
5. What is meant by:
  - (a) Hayes-Tilden controversy.
  - (b) Missouri Compromise.
  - (c) Monroe Doctrine.
  - (d) Reconstruction.
  - (e) Fourteen points.

Subject: Grammar and Rhetoric.

Time allowed: Two hours, thirty minutes.

1. What is a: (a) sentence; (b) paragraph; (c) phrase; (d) clause, and show in your answer to this question an example of each.
2. Name and define the parts of speech.
3. Punctuate and correct as necessary the following:  
a member of 21 cabinets and premier in eleven of them aristide briand is too day 1 of the most important and picturesk figures in french Political Life he is all so an out standing statesman in the arena of inter-national affairs the fall of his twentieth and his appointment to his 21st Cabinet as Foreign minister are the most recent developments in his astounding career
- 4 and 5. Write a letter to the Board of Governors, California Nautical School, giving a detailed account of all your previous school experience. Tell about your scholastic standing, your school and athletic activities.

Subject: General Information.

Time allowed: Two hours, thirty minutes.

1. Give the approximate population of California as ascertained by the 1930 census, and compare this figure with that of 1920; tell briefly the principal reasons for the increase.
2. Name the members of President Hoover's cabinet.
3. What is meant by:
  - (a) farm relief.
  - (b) television.
  - (c) sovietism.
  - (d) gliding.
  - (e) amateur athletics.

4. For what are the following people noted :
  - (a) Gandhi.
  - (b) Mme. Curie.
  - (c) Sir Thomas Lipton.
  - (d) Mussolini.
  - (e) Knute Rockne.
5. What is the electoral college, what are its duties, and how are its members elected or appointed?

