



From Arthur C. Jacoby - SWP # 62-P

THE OPEN DOOR
TO
OPPORTUNITY



MARCONI SCHOOL
OF
INSTRUCTION

NEW YORK
25 ELM STREET

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to
Opportunity



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of
Instruction

1916

New York
25 Elm Street



CLASS WORK

SCHOOL OF INSTRUCTION OF THE MARCONI WIRELESS TELEGRAPH COMPANY OF AMERICA

INDUCEMENTS—To young men desirous of entering an interesting field of endeavor the MARCONI WIRELESS TELEGRAPH COMPANY OF AMERICA offers extraordinary inducements. It may truly be said that no line of employment could be more congenial and beneficial than that of a WIRELESS TELEGRAPH OPERATOR on board ship, where he comes in contact with the better class of ocean travelers, and enjoys without expense the advantages of visiting various American and foreign ports.

The Marconi Company has a constant demand in its ship service for young men of good character who may enjoy these opportunities provided they qualify and conform to the Marconi Company's standards and pay strict attention to the Company's interests.

The work of a wireless telegraph operator is congenial but exacting. He therefore requires special training to master the intricacies of the art. For this reason the Marconi School is maintained.

It should be understood that a wireless operator performs his duties under international regulations. He must therefore be thoroughly reliable.

BEFORE BEING ACCEPTED the applicant must qualify as follows:

- (1) He must not be less than 18, nor more than 25 years of age.
- (2) American citizens are preferred, but men of any nationality may be accepted after examination.
- (3) A grammar school education is sufficient, but a high school education is an advantage, and desirable.
- (4) Two satisfactory letters of reference signed by responsible parties must be furnished.
- (5) The applicant must be of good bearing and neat appearance, able to readily conform to sea etiquette and formalities, and conduct himself with dignity.
- (6) The school is a department of the Marconi Company. Students are amenable to its discipline and must join any ship to which they may be assigned and hold themselves in readiness to assume active duty on short notice.
- (7) Applicants who can qualify as to the foregoing, and are willing to comply with the rules of the school, should apply in writing for admission. The names of applicants are placed on file and they are advised when they may join.

THE SCHOOL

LOCATION—The school is located at 25 Elm Street, New York City, in the same building with the Marconi Operating Department.

HOURS—The sessions are from 10 A. M. to 12 noon and from 1 to 4:30 P. M. Saturdays from 10 to 12 noon. The school is closed on holidays.

TUITION FEE—The tuition fee for the complete course is \$10 per month, payable in advance.

PURPOSE OF THE SCHOOL—The purpose of the school is to train operators thoroughly in the Marconi Wireless Telegraph System and the Marconi method of handling commercial wireless telegraphic traffic.

QUALIFICATIONS OF WIRELESS OPERATORS—Unlike the wire telegraph operator, the wireless operator must have a thorough technical knowledge of the circuits, and the construction and operation of his apparatus. He is required to obtain a Government License Certificate and must therefore be able to connect up a complete wireless telegraph equipment.

He must be able to draw a circuit diagram of the complete apparatus.

He must be able to effect a temporary repair of any part of equipment which may prove defective.

He must know how to trace and locate faults.

He must thoroughly understand the theory regarding the operation of each part of a wireless set.

He must know how to change wave lengths and to adjust a given set to resonance with a wavemeter.

An understanding of motor generators, accessory apparatus, etc., is required.

IMMEDIATELY AFTER APPLICANTS have been advised of their acceptance by the Marconi School, they should communicate with the Department of Commerce at Washington or the Government Radio Inspector in their district and secure the following books:

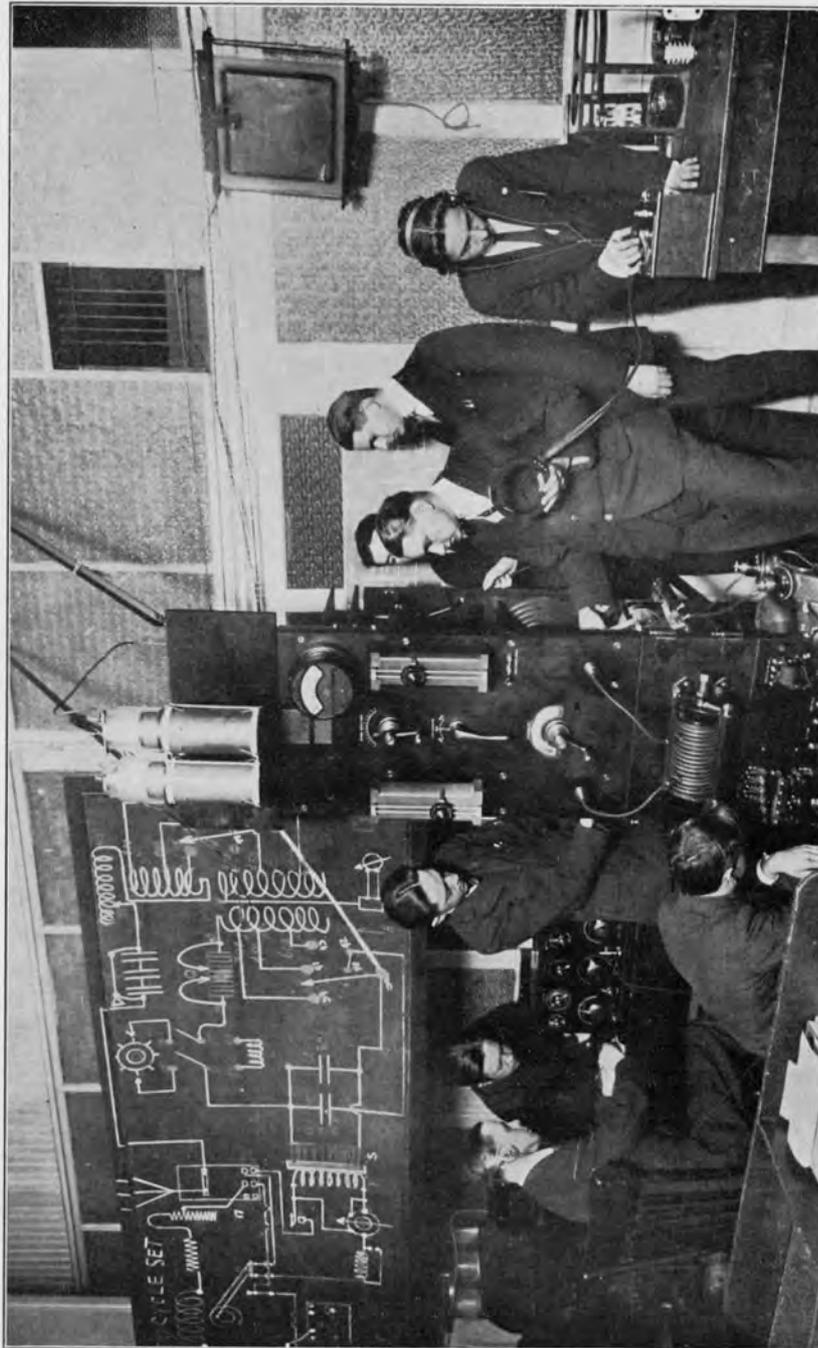
A—Radio Communication Laws of the United States. (Department of Commerce, July 27th, 1914.)

B—Commercial Traffic Regulations, U. S. Naval Radio Service, 1915.

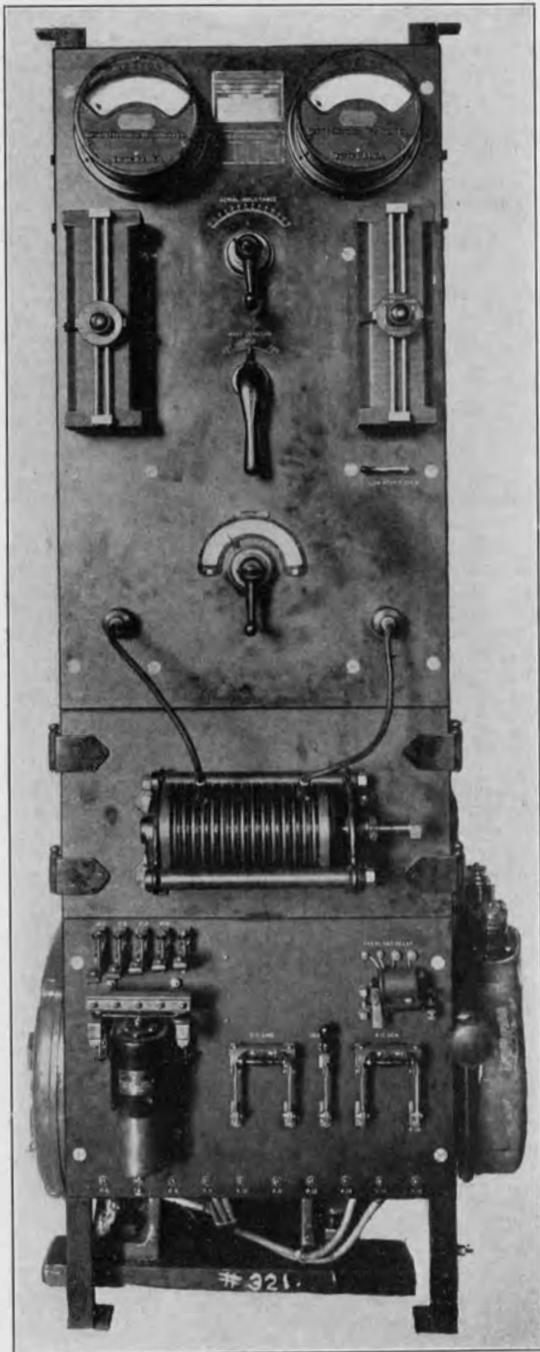
Students are expected to thoroughly familiarize themselves with the contents of these publications.

TEXT BOOK—The text book of the class is the "NAVAL MANUAL OF WIRELESS TELEGRAPHY FOR 1916," by Commander Robinson. This can be secured by sending \$1.50 to the Secretary and Treasurer of the Naval Institute at Annapolis, Md., or Marconi Publishing Corporation, 450 Fourth Avenue, N. Y.

Copies may also be purchased at the school.



LABORATORY WORK



PANEL SET—LATEST TYPE

- (6) Standard auxiliary, or emergency, equipment for use on ships (including storage cells).
- (7) Complete storage battery installation with switchboards and all accessory apparatus for instruction in the maintenance and care of storage cells.

The experimental apparatus includes a Fleming's cymometer for determining wave lengths and for high frequency measurements; several Marconi wavemeters for making rapid wave length measurements and obtaining resonance in wireless telegraph circuits; a Marconi decrementer for measuring the Logarithmic Decrement of Damping, etc.

Experimental apparatus is frequently constructed by the students as part of their course. Students who show particular ability in conducting experiments are allowed to make deeper investigations into radio telegraphic measurements, thereby fitting themselves for advanced work.

RECEIVING EQUIPMENT—The school is equipped with a complete set of all types of receiving apparatus in commercial use by the Marconi Wireless Telegraph Company of America. In addition, students receive instruction in the Marconi Radiogoniometer or Wireless Compass, thus fitting themselves for the use of this apparatus at sea.

THE TECHNICAL COURSE—Static Electricity—Electricity by chemical action—Magnetism and electro-magnetism—The construction and operation of dynamos and motors in connection with wireless telegraphy—Switchboard and appliances for wireless work—Study of the electrical units—The action of magnetism through space—The production of high frequency electrical oscillations—High frequency measurements—Measurements of Inductance and Capacity—Production of Electric Waves—General theory and construction of modern wireless apparatus—The practical operation of wireless apparatus.

The above outline covers only a small portion of the actual electrical course. It not only prepares the student for the practical operation of the Marconi wireless apparatus, but enables him to pass the Government license examination.

TIME REQUIRED—The time required for the complete course depends largely upon the capabilities of the student. Generally speaking the technical course requires 3½ months of continuous instruction. The time required to complete the code course cannot be stated in advance, but if the applicant is able to receive at a speed of ten words per minute upon joining, he should be able to qualify for the Marconi service in five months.

STUDENTS FROM OTHER SCHOOLS—Regardless of the fact that the applicant may have graduated from some outside school, he is required to take the finishing up course in the Marconi School and must also pass a technical and commercial examination before being admitted to this Company's service. The time necessary to complete the finishing up course depends entirely upon the previous training of the student.

The regular charge of \$10 per month is made for this instruction, payable in advance.

PROSPECTS—Students who complete the course will be given preference by the Marconi Company as ship Operators as soon as vacancies occur.

Operators who show unusual ability along special lines will be eligible for assignment to the Engineering, Manufacturing or Traffic Departments, or to shore stations.

SALARIES—The salaries of ship operators range from \$25.00 to \$60.00 per month, room and meals included. On messages a commission of 25% is allowed on the tolls accruing to the ship station. This is divided between the first and second operators on the following basis:

60% to first operator.

40% to second operator.

On passenger ships operators are also allowed a commission on the sales of the Ocean Wireless Newspaper.

EXAMINATIONS—In the final examinations, in order to qualify for the Marconi service, operators must be able to copy messages in the Continental code at a speed of 25 words per minute. A written examination is given in Radio Traffic, for which a rating must be received of not less than 85%. The same percentage applies to the technical examination, which covers the theory, construction and operation of practical commercial wireless telegraph equipment.

ASSISTANCE FROM STUDENTS—Students are expected to assist in any construction installation or experimental work that may be necessary during the course.

FOR OUT-OF-TOWN STUDENTS—The Company cannot undertake to secure boarding places for out-of-town students.

Address communications to INSTRUCTING ENGINEER

MARCONI WIRELESS TELEGRAPH COMPANY OF AMERICA

25 ELM STREET, NEW YORK