



Special Prices to Marconi Employees Books on Wireless

A list of some of the best books pertaining to the wireless art. We have made arrangements whereby we can supply you with any book on wireless published in America at regular published price. We can also import on order any book published abroad. Send us your orders. They will receive prompt attention.

YEAR BOOK OF WIRELESS TELEGRAPHY (1916) pp. 1000. Contains a yearly record of the progress of wireless telegraphy; complete list of ship and shore stations throughout the world, their call letters, was		
lengths, range and hours of service, and articles by the greatest authorities on vital questions\$1.50	\$1.00	
HOW TO PASS U. S. GOV. WIRELESS EXAMINATION. 118 Actual Questions Answered. 72 pp. E. E. Bucher. The greatest wireless book	• -	
ever published for amateurs and prospective wireless operators	.40	
ments. Receiving Set and many other features	.40	
LIST OF RADIO STATIONS OF THE WORLD. 220 pp. Compiled by F. A. Hart, Chief Inspector of Marconi Wireless Telegraph Company of Am., and H. M. Short, Resident Inspector U. S. A. Marconi International Marine Com. Co. The only complete authoritative call list published 50	.40	
HAND BOOK OF TECHNICAL INSTRUCTIONS FOR WIRELESS TELEGRAPHISTS, pp. 295, blawkhead, J. S. Covering principally the practice of the Marconi Co. abroad and elementary explanation of the		
underlying principles	1.00	
TEXT BOOK ON WIRELESS TELEGRAPHY, pp. 3.52. Stanley, R. A. text book covering the elements of electricity and magnetism, with details of the very latest practice in wireless telegraphy in European count.ice-		
recommended to all workers in the art of radio telegraphy2.25	2.00	
PRACTICAL USES OF THE WAVEMETER IN WIRELESS TELE- GRAPHY. Mauborgne, J. O. Originally compiled for the Officers of the U. S. Signal Copps; comprises an explanation of the use of the wavenieter,		
the most complete publication on the subject so far produced1.00	1.00	
THE WIRELESS TELEGRAPHISTS' POCKETBOOK OF NOTES, FORMULAE AND CALCULATIONS, pp. 347, Dr. J. A. Fleming, Bound in full flexible, rich blue leather, stamped in gold, with round co ness and gold edges. A book of practical working formulae and calculations for the trule of radius reference.		
the student of radio telegraphy. Bound to be considered an indispensable part of the working equipment of every wireless student	1.00	
WIRELESS TELEGRAPHY, pp. 443, 461 illustrations, by Dr. J. Zenneck, Translated from the German, The work is the most scientific and thorough		
that has appeared on this subject. It covers all phases from physical		
PROCEEDINGS OF THE INSTITUTE OF RADIO ENGINEERS.	8.GO	
edited by Dr. Alfred N. Goldsmith. Nos. 3 and 4 - 1913; Nos. 1, 2, 3, 4, -1914, and Nos. 2 and 4 for 1915 sold singly at \$1.00 each. Volumes 11		
(1914) and (1915) Bound in Buckram, \$5.00 each. Subscription by year,	6.00	
WIRELESS TELEGRAPHY AND TELEPHONY, pp. 418, 350 illustrations. Eccles, W. H. A Handbook of Formulae, Data and Information. Also gives brief accounts of the nosition of modern thought and speculation.		
Also gives brief accounts of the position of modern thought and speculation, includes a number of detached essays on subjects that seem to have been perfected hitherto. Many formulas new published for the forther than the seem to have been perfected hitherto.		
neglected bitherto. Many formulae now published for the first time. A number of Abacs for facilitating the rapid application of formulae. A novel Abac for the calculation of wave-lengths of circuits. The information is		
classified on a simple, definite system and the scheme of cross-references		
classified on a simple, definite system and the scheme of cross-references is complete, a conious Index and a Clossary of the Scientific and Technical Teems, Words and Phrases used in Radio-telegraphy	8.50	
THE WIRELESS AGE. This is essentially YOUR magazine. You can	8.50	
help to make it more interesting and more widely known by introducing it on every opportunity to new readers. Your special rate will apply on		
it an every opportunity on the readers. You special rate will said on NEW subscriptions accured by you at full price \$2.00, you keeping the commission of 50 cents. Obviously EVERY Marcon employee should		
read the Wireless Age. Net to you	1.50	
Orders to THE WIRELESS PRESS, Inc., MEW	BROAD ST.	
Order to IIIL VVIRLLUSS FRUSS, IIIC., NEW YORK, N. Y.		

ON THE COVER-DAVID SARNOFF

A Brief Biographical Sketch of the Commercial Manager

In recording a brief biographical sketch of David Sarnoff, recently appointed manager of the commercial department, the first thought that arises is that he typifies, probably more than anyone else in the organization, the familiar designation, Marconi Man. Mr. Sarnoff has been comtinuously with the Company for eleven years, and with the celebration this month of his twenty-sixth birthday, he becomes one of the most important and active memhers of the executive staff.

His first employment was as office boy, six years after he arrived in this country from Russia. Through home study he mastered the key operation of both land wire and wireless telegraphy and within a year received an assignment to the Siasconset station. Service on various ships and at shore stations followed, winning for him promotion to the position of manager at Sea Gate. He returned later to sea service and made the trip to the Arctic icchelds, which he later described fully in The Wireless Age. For this voyage he equipped several sealing ships with the Marconi system and operated on one of the vessels throughout the trip.

Next in shore duty came an assignment as manager of the station at Wanamaker's, New York. It was during the period of this service that Mr. Sarnoff enrolled for a night course in electrical engineering at Pratt Institute and received the diploma which won recognition for him in the form of a promotion to the position of inspector at New York, Within a very short time he advanced to the chief

inspectorship and traveled extensively through the country inspecting and remodelling ship and shore stations.

In 1912, two years after his elevation to head of the inspection staff, he was called to the executive offices and has since risen successively through the positions of assistant to the chief engineer, assistant to the traffic manager, and contract manager. On January first he was appointed manager of the commercial department with entire charge of the handling of all contracts for ship and shore installations, the negotiating of all licensing agreements with manufacturers operating under Marconi patents, the supervision of maintenance, inspection and repair of all Company equipments, and the handling of all apparatus sales to the U. S. Government, as well as foreign nations and commercial companies.

Incidental to the close application required for his success in the commercial world, Mr. Sarnoff has contributed a generous share to the advancement of scientific study of the radio art. He is now serving his third term as secretary of the Institute of Radio Engineers, for which body he prepared one of the most widely discussed papers ever presented to its membership. He also conducted the first tests in this country of the Marconi Bellini-Tosi Direction Finder and the experiments which resulted in the wireless train despatching system installed on Lackawanna railroad trains and stations. Mr. Sarnoff is a memher of the Association of Railway Telegraph Superintendents and the Maritime Exchange in New York.

Page Three

THE GROUNDING OF THE SIBIRIA

Every once in a while, an operator's log will be found to contain a report of a dramatic incident which is every bit as illuminating as a highly polished literary production. Such an instance is revealed in the following extract from the daily log of the Sibiria, telling of the grounding of the vessel on East Goodwin Shoals. Straits of Dover, England.

November 20th, 1916-6:45 a.m. Ran aground at 6:45 a.m. on East Goodwin Shoals, Straits of Dover. Sent 2nd operator to bridge and Captain gave order to send out SOS distress signals; ship hard and fast aground on Goodwin's and breaking up fast in heavy S.W. gale. We were unable to launch our own boats and ship going to pieces fast; shipping great seas over after deck and carrying everything away. Sent out distress calls until after 7:00 a.m. and was answered by nearly every English and French land station in the English Channel besides war vessels and patrols on all sides.

Established communication the British Naval station at Dover (RYL) and told him our position and the circumstances. He finally answered that help was coming. Gave our position to warships and patrols and kept in touch with Dover all day long.

Made several trips to bridge, but as tide went out and ship still held together, returned to wireless room. Torpedo boat destroyer stood by us until we left ship and I communicated with him throughout the day. Two lifeboats stood by us until 4 p.m., but as one was capsized and the other partly smashed, they were obliged to put back. At 4:15 p.m. sent MSG to GNF (North Foreland) and at 4:30 p.m. was obliged to abandon wireless room as tide was coming in and seas

breaking with great force across the after deck. Stood by with Morse light on bridge until lifeboat took crew off at 10:30 p.m. Worked light with destroyer nearby and gave him particulars about crew and ship and how we were standing the ham-

mering of the seas.

At 10:00 p.m. lifeboat from Kingsdown got alongside and the whole crew, 52 members, were transferred without accident. Returned to ship following day and managed to get part of clothes. Unable to get anything else from ship. She was broken in half, water in holes flush with deck. bulwarks smashed in. Sea sprang up the following day and salvage operations were impossible. Left Deal for London on 22nd and ship still smashing to pieces. On the 24th (November) Lloyd's report said hull was 18 feet in the sand. The following day the Chief Engineer arrived in London and reported the vessel broken in two and a hard gale blowing. No salvage was possible.

Left London for Liverpool on November 28th and embarked for New York on the 29th on the Baltic.

Herbert W. Blackstone, Sr. Opr. H. L. Potts, Jr. Op.

N.B. Dynamo stopped after ship had been ashore fifteen minutes but storage cells were fully charged and were used all day. On leaving ship, cells not over one-third discharged,

A GREETING FROM JAPAN

The following message from Japan, addressed to Marshall, was received on Christmas Eve. To Staff,

Marshall,

Merry Xmas and Happy New Year, may Santa Claus bring us good telephones and detectors as gifts, and expel statics and X's out of ethereal range. Love to all. J.J.C.

Page Four



Wherein A Fusion of Human Elements is Effected by DAVID SARNOFF

Are there OPPORTUNITIES for self development and advancement in the wireless business?

This question, frequently asked, is of supreme importance to us all.

My answer is, "yes." There are OPPORTUNITIES—lots of them

—with this, the youngest and most wonderful of all communication

mediums.

Just because the system is the youngest, it is in a continuous state of alteration, improvement and development.

It requires lots of friendly ADVICE, SUGGESTIONS, HELP, ENTHUSIASM, COOPERATION and INITIATIVE. And those who whink and are productive along these lines are:

"Taking all the swift advantage of the hours."

When seeking to establish relations with OPPORTUNITY, one must be "in tune," and the type of "tuning" that brings results is produced not only by striking the iron while it is hot, but striking it till it is made hot.

Persist, my friend, until you have accomplished something better, something greater than has heretofore been done in the particular branch where you are employed; and with your accomplishment will come SELF-DEVELOPMENT, INDIVIDUALITY and RECOGNITION; which, in due time, makes ADVANCEMENT absolutely certain.

Are you taking advantage of the existing OPPORTUNITIES?

Are you satisfied that the traffic at your station has reached its maximum, and that you have exhausted all efforts for increasing it?

Is the wireless equipment at your station beyond improvement?

Is there no quicker, simpler, better way to do the particular job you

are doing now?

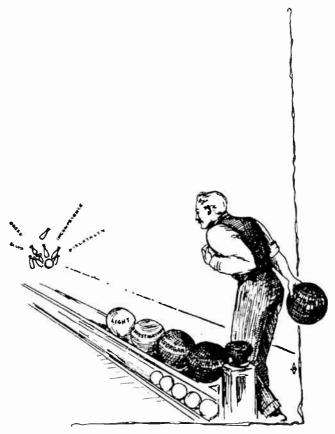
It is well to take care of the ESTABLISHED but bear in mind that invention and progress are based on that which IS NOT YET.

These are but a few general hints, showing that every day there are easily discernible opportunities to be found in this business if a man but THINKS, SEEKS and WORKS.

But the most successful seeker for opportunities is not the one who petitions for them; advancement of the permanent kind comes most surely to the one who follows the principle laid down by Bacon:

"A wise man will MAKE more OPPORTUNITIES than he FINDS."

Page Five



Dedicated To Whom It May Concern

Page Six

BRASS TACKS, DRIVEN BY C. J. ROSS



TO WHOM IT MAY CONCERN

That clever stuff, but mostly bluff,
Which you have just put over,
Will turn to seed and grow a weed
Amidst your bed of clover.

Misrepresent and you'll repent,
For there are always times when
Misstated facts to you come back
And you have got to face them.

The cleverest cheat cannot defeat

The forces of correction,

If you've not dealt fair—you'd best beware

Of ultimate detection.

A crafty fool can sometimes school Himself into believing Before he's caught, the end he's sought Can be gained by deceiving.

But he whose rise is built on lies
Will find out to his sorrow,
That Justice, tho' she may be slow
Today—makes good tomorrow!

Page Seven

GOVERNMENT OWNERSHIP OF WIRELESS

The Opposing Argument of the Marconi Company as Presented by Edward J. Nally, Vice President and General Manager.

THE new legislation proposed for the regulation of radio communication and apparently designed for Government ownership and control, has been vigorously pushed forward by the Navy.

That the Bill has been designed to invade the existing commercial field is definitely disclosed in an official letter from Secretary Josephus Daniels, of the Navy Department, under date of December 26th.

"The bill," says Secretary Daniels, defining the attitude of the Navy Department, "covers the purchase of coastal stations only, that is, only those used to communicate with ships and, by permitting the Navy Department to open all of its stations to commercial business, discourages the extension of any existing commercial systems or the organization of new systems.

"The department strongly recommends that the committee provide for the purchase of all stations used for commercial purposes. In some eases the status of existing stations is constantly changing, and decisive action at this time will result in a saving of public funds. I recommend that Section 6 of the bill provide for the purchase, through the Navy Department, of all existing coastal and commercial stations in the United States, Alaska, Hawaii, Porto Rico, and the Swan Islands within two years at reasonable valuation, and that no license be granted to any such station for operation after two years from the date of the passage of the bill."

Secretary Daniels indorses the other provisions of the bill, especially

those relating to the ownership, the licensing, and the control of stations by the Department of Commerce.

Mr. Daniels explains that the Navy Department "is convinced that Government operation and control of all stations used for commercial purposes, other than those on board merchant ships, is necessary on account of the mutual interference between stations.

"One station or system," he says, "must wait for another to finish; there are many chances for disputes which sometimes are carried on between operators by radio, especially when the operators are not under strict control, adding to the time wasted; there is needless duplication of effort, and in cases of distress the confusion resulting from many interests attempting to render aid, get news, or satisfy curiosity, is very dangerous,

"Since only by the closest regulation can the best use of this art be obtained, not only for commerce and safety at sea, but for military purposes, radio telegraphy is a strict Government monopoly with the larger number of foreign nations, and in those foreign countries where commercial stations are permitted the Government control is generally so strong as to amount to a monopoly,

'Authority to take over and operate or to close commercial stations in time of war will not suffice. The stations must be in full Government operation before the first hint of possible hostilities."

Following the publication of this letter, Mr. Daniels added informally:

"I am firmly convinced that Government control of wireless is abso-

Page Eight

lutely necessary to the best interests of the nation. I deem the matter most urgent. Delay only will increase the difficulties under which we are working; delay will also mean an increased outlay to the Government when the step finally is decided upon."

This drow a published reply from Edward J. Nally, Vice-President and General Manager, Marconi Wireless Telegraph Company of America, substantially as follows:

Full Government supervision over wireless, or any other industry, is perfectly proper and in order with the progressive spirit of the times. This is provided for, however, in the present laws governing radio communi-For the United States to go cation. a step further, as the present Bill advocates, and make radio a Government monopoly, is not only a dangerous proceeding and one in violation of the rights of American citizens, but a proposal that calls for additional taxation to conduct a wireless telegraph business in time of peace, now more efficiently and cheaply handled by commercial interests.

When the public realizes the true state of affairs, a vigorous protest against the present Bill will be registered. Setting aside considerations of a doilar and cents aspect, it is not likely that Americans will sit idly by and see the possible destruction of the valuable humanitarian asset represented in Marconi's recorded service in safeguarding life at sea.

Mr. Nally further supported the arguments of the Marconi Company that Government ownership is Interactical, by appearing before the Committee in Washington on January 18th, at which time he presented under able facts in the following words:

"Much has been said during the hearing given by this Committee to the proponents of this Bill, about the willingness, even the anxiety, of the commercial companies to dispose of their coastal stations to the Government.

"So far as the Marconi Company is concerned, no one has been authorized to trake any such statement," he stated with emphasis, "and I can only think that, with the Navy Department, the wish is father to the thought.

"The Marconi Company's principal business is that of selling service. While it does manufacture some apparatus for sale, yet this branch of its business is merely collateral, and is not its principal object, which, I repeat, is to sell service.

"For this reason it does not sell apparatus to ships, but it sells ships certain service, for a certain sum per month, just as the telephone company, or electric light company, sells its service to a customer.

"In order to give perfect service and to make the apparatus which it installs on ships serviceable in the greatest degree, it has erected and maintains land, or coastal, stations, from the most Northerly point on the Atlantic Coast to the most Southerly point; also on the Gulf, on the Great Lakes, and on the Pacific Coast north to Alaska.

"These stations were erected, and are maintained as the essential, indeed, vital link in ship and shore service, and the long list of rescues at sea, and of lives and property saved because of the ready response which ships in distress at sea have been able to obtain by reason of these coastal stations, co-operating with other ships at sea, makes a long and honorable record, of which any company may well be proud. And this tremendous service in the salvation of life and property, already rendered

Page Nine

by wireless, has earned for it least the right to be developed and made useful and available to the fullest possible extent.

"Such development can only come through private enterprise," insisted the commercial authority, "It is irrpossible to formulate legislation which will foresee and provide for the future usefulness of radio communication. It is just as impossible to formulate legislation which will place on the Navy Department, or any other Government organization, the responsibility for increasing the commercial use of radio communication in its present state of availability. If the Navy Department had been given a monopoly of the telephone, when that means of communication was first developed, would the United States today have, as it has, the greatest telephonic development of any country? A'nd yet the telephone has not supplanted the telegraph. It occupies an entirely new field created for it hy the persistence of private enterprise.

"It is true, as the proponents of the Bill have stated (although they lay entirely too much stress and make too much of the fact), that these coastal stations, per se, are not money makers for the company, but as a part of the complete service they are essential, and what they contribute to

the service is vital.

"Are not telephone exchanges vital

to the telephone service?

"Are not terminal stations vital and necessary to the conduct of railroad service?

"Do telephone exchanges, per se, or railroad terminal stations, per se, or the great main operating rooms of the different telegraph companies, per se, earn money for the telephone, the railroad, and the telegraph compan-

"They all contribute the vital and

necessary service to make the whole service complete. Who would think of separating the central exchange from the work that it performs for the subscriber, or the tenminal station from the railroad; or the main operating room of the telegraph company from the customer, or the branch office through which the customer deals? No one, save the Government.

"The Government could do such an unbusinesslike thing, because the Government is not in business. Government has not the experience to be gained only in business getting. The Government's sole function is to spend; it does not have to earn money before it can spend it. Its method is a complete reversal of business methods. It can spend money that it does not earn. Commercial companies must earn so that they can spend,"

Mr. Nally expressed the conviction that his company recognizes in the radio service there exists a potent power for defense in time of war.

and in preparation for war.

"On this point," he said, "it is acknowledged that in time of war, military necessity should not be under the slightest obligation to take into account the industrial or commercial welfare of the nation, but serious consideration is asked when it is proposed, on the ground of military necessity, to legislate the Government into the permanent monopolization of an industry.

"Particularly weak must be claim of military necessity to monopolize the commercial wireless business, inaumuch as Congress has but recently provided for more complete Federal control over radio communication than has been taken over any other industry. This control goes to the extent of providing that no radio station may be erected without a Federal license; he operation of any sta-

Page Ten

tion may be suspended under Federal authority, and any and all stations may, by order of the nation's Executive, be placed completely under the control and operation of Federal employees. Complete censorship may also be maintained by the Government over all international communications.

"Every one of these methods of control has been exercised by the Government during the present European war, and no lack of authority is complained of. It is a fair statement then, that the present request to have the Government take a monopoly of the commercial coast wireless business is not justified on any ground of military necessity."

He emphasized the fact that other great nations recognize that commercial companies have contributed to the value of the art. While England and Germany, and France, and Italy, and Canada, and other countries, have and are making the most of radio possibilities," he said, "still they have left the development of the art to commercial companies, even assisting them by subsidy, and financial allowance.

"England, for example, encouraged private companies to the extent that the Marconi Company, for instance, was able to build up an immense works at Chelmsford, employing thousands of men, which was immediately taken over by the Government for military purposes, and there practically all of the wireless apparatus needed for the war has been constructed.

"England also took over a large part of the staff, having held them in reserve for this purpose.

"Germany has done precisely as England did. Germany had encouraged the private companies, leaving the development and manufacture of

apparatus to such great concerns as the Siemens & Halske A. C., the Siemens Schuckertwerke G. m. b. H. and the Allgemaine Elektricitats Gesellschaft, utilizing their skill and product for its military purposes.

"Canada not only leaves the operation of the coast stations to the Canadian Marconi Company, which practically has a monopoly of the business in the Dominion, but has assisted the company by generous subsidy and allowance.

"The Marconi Company of America has never asked for subsidy, or assistance of any kind, except the right to carry on business and develop the art, just as other telegraph and telephone and public utilities, are doing.

"Radio communication is in the very infancy of its possibilities, yet there is already an investment of forty millions of dollars in its commercial development in the United States.

"Rightly considered, all of this investment, representing the latest and most powerful stations and trained organizations, is an adjunct to the Government in times of military necesity. If opportunity for development is left open, this investment, this equipment and the personnel will increase, and all are completely at the disposal of the Government in times of need!"

In view of these considerations, Mr. Nally noted, it would seem that "where the development of an industry lends itself naturally and completely to the possible military nassasiiss of the country, and over which the Government is exercising a complete control, there exists not a single valid reason for making such an industry a Government monopoly.

"There is also an important international phase of the radio problem,

Page Eleven

the solving of which requires the development of extended control of equipment standards, operating practice and language qualifications. If the ships of the sea are to develop among themselves and to the shore. universal intelligible communication, which is undoubtedly within the possibilities of radio development, a Government department, it will be admitted, can hardly be qualified to insist on the disciplining of an operator on a foreign ship who may be lax in duty or deficient in qualifica-There are daily possibilities here for the development of unpleasant and embarrassing international complications."

The Committee's attention was called to the fact that private enterprise is already rapidly working out this problem through the means of equipment contracts, binding ships to emoperators possessing only plov standardized qualifications as to language, etc., and amenable to a central discipline as to the observance of certain mechanical and operating reg-

ulations.

"The abandonment of the ideal of the universal intelligibility of wireless is to abandon its future development." said the Marconi executive, "but such abandonment is inherent in a Government monopoly of the art, as can readily be seen from the limitations of the jurisdiction of a Government, and the cumbersomeness of its international representation.

A good deal has been said at the hearing, by the proponents of the Bill, as to the need for taking over existing high power stations. Nally remarked that it is not clear whether they wish them solely for Government work or to do a commercial business in competition with the cables.

"If, for example," he argued. "this Government were to take over our

New Jersey stations, how could it operate them for commercial service with Great Britain, except through a connection with the Marconi Corpany of England, which owns the corresponding stations in Carnarvon and Towyn?

"If it takes over the Sayville and Tuckerton stations, now the property of private companies in America. would they continue to work with the privately owned stations in Germany? And in what way would the Navy, or the Government, benefit by such an arrangement?

"From every possible point of view, there is not a sound reason for placing the Government in the commercial radio business. There are controlling reasons of every character why this should not be done."

In closing Mr. Nally asked the Committee to consider that it is a matter of record that the Marconi Company has repeatedly offered to piace at the disposal of the nation, its stations and its operators, "even going so far," he noted, "as to secure from its operating personnel, individually signed expressions of readiness to enter Government service in event of war, which records were all turned over to the Navy.

Vera Cruz incident also brought forth a voluntary offer for the free use of Marconi stations for the battleship fleet, tendered to the Secretary of the Navy, and accepted.

The address concluded with this important statement as to national preparedness: "Before leaving New York I arranged, at the request of Rear Admiral Worthington, to furnish him with a list of all employees engaged in our Aldene Works, with the idea of constituting the entire force, including the official staff, a Naval Reserve, to be called upon by the Navy in time of emergency.'

Page Twelve



Conducted by

Abstracting

C. F. Kranter

Operators are cordially invited to direct questions to this official department, which is deligned to clear up all points pertaining to the making up of abatracts.

Questions on technical matters will not be answered.

The Operator's name and division must accompany each inquiry, but will not be printed.

N.E.:—Has an operator the right to send a deadhead message via any station other than Marconi stations?

Ans.—Yes, but in that case only the transmitting ship's tax would be deadhead, the receiving station's charges would have to be paid.

Note:—Until further notice, all MSGs exchanged between agents of the Pacific Mail and China Mail Steamship companies in Japan, and Pacific Mail coast stations, will be charged for as follows:

Local delivery, i.e., messages to he delivered in the same town as the coast station—the radio and forwarding charge is collected on shore; not by the ship.

Messages for Japan, but not in the same town as the coast station—the coast tax is collected by the ship, and the forwarding charges from the addressee.

Messages destined outside of Japan—the coast tax and forwarding charges are collected on shipboard.

Messages to ships will not be charged for (except when not originating in Japan).

The foregoing ONLY applies to these two stearship companies' MSG traffic. All other vessels will charge for MSG traffic in accordance with our rules of accounting via foreign stations.

M.D.W.:—Who operates the Yacht Velero?

Ans.:--G. Allen Hancock.

H.H.:—I have no record of the Portrush. Can you help me out?
Ans.:—Yes. It is operated by the International (Marconi) Company.

Note—Many operators are in doubt as to just what ships the Atlantic Communication Company operates, the list was printed in the July number but it seems well to again print a list of the ships they operate.

City of Everett Herman Frasch

Rayo

Socony Sialia

Ed:—The operating company of the Baja California, please.

Ans:—C. Henry Smith San Gran

Ans:--C. Henry Smith, San Francisco.

P.L.:—Give me some information regarding the Ocean Falls station.

Ans:—Ocean Falls is a private station operated by the Pacific Mills, Limited. They are only permitted to work with the Canadian Government coast station, Triangle Island, and ships within a radius of twenty miles from Ocean Falls. All traffic must be routed that way. The rate from ships to Ocean Falls via Triangle Island is six cents per word, with an additional delivery charge of twenty-nve and two.

Page Thirteen

MARCONI MEN ON THE WING

A Few Interesting Observations by E. B. PILLSBURY

(Continued from the January issue)

Y E enjoyed a week-end trip to Skagway and over a narrow gauge railway through the fa-Lous White pass to White Horse on the Yukon and found the mountain scenery magnificent. At the divide, on Canadian frontier tablet marking latitude and longitude, and close by two flag staffs on which British and American flags are always flying. At White Horse the minimum unit of currency is the 25 cent piece, and in consequence tipping is unknown as the natives regard two bits as we regard a nickel. A pleasant hour was spent with Chief Operator Watson in the Dominion Government telegraph office where we observed the working of a circuit between Dawson and Vanconver through five repeaters, roughly 1700 miles, the line consisting of a solitary iron wire running mostly over mountains and through unbroken forests, where highways are un-

Coming down the Coast on the fine ship, Princess Alice, of the Canadian Pacific line, we rejoined our luggage at Vancouver and after "slicking up" proceeded across Paget Sound Seattle, stopping at Victoria for a couple of hours where we took a rubber neck ride. We were shown the Y. M. C. A. building which is closed on account of so many members joining the colors, and were told that it is filled with unclaimed personal effects sent there for storage by boys who will never return. At Vancouver we attended church and found it filled with women, with a sprinkling of old men and crippled soldiers.

The Seattle station is finely housed in the only sky-scraper in town, ad-

joining the offices of the Marine Superintendent. The excellent staff comprises Messrs. Christianson, Cowden. Wilson and Buchanan, and traffic is handled to the Queen's taste.

Going on to Astoria we found the station located on a small inlet from Columbia River in the outskirts of the City, in charge of Manager Julien and his enthusiastic staff comprising Messrs. Roy, DeChamplain and Hamilton. All traffic with Alaska is relayed here and we found Mr. and Mrs. Julien and their two fine children hospitable to the last degree. The marine station is located on a neighboring hill. Mr. A. M. Greenwell is manager, assisted by Messrs. Baxter, Obriadvic and Ticknor.

The Great Northern brought us unickly to San Francisco where we made a close connection with the good ship Matsonia to which we became warmly attached. In six days we sighted the fascinating Diamond Head and received a hearty welcome to Honolulu which proved to be attractive beyond our expectations. The climate is agreeable, the heat being tempered by constant trade winds and frequent brief sun showers, and the streets well shaded by fine old tropical trees. The houses are mostly of the wooden bungalow type and the buildings in the business section mainly concrete. The broad streets are well paved, the trolley service admirable and traffic is ably controlled by uniformed traffic officers, mostly The automatic telephone natives. service, the schools, fire department, postal service, etc., arc thoroughly up-to-date. A local wireless system provides good communication be-

Page Fourtecs

tween the principal islands of the group, and also with Samoa Tahiti. The hotels equal the high grade hotels on the Continent, both in quality and prices. Automobiles are everywhere in evidence. Any one who fails to take a dip at least once a day at Waikiki Beach is the excep-The warm water, fine beach with exhilerating combers, outrigger canoes and surf boards, combine to make it an alluring resort. enting is almost universal with both sexes even the youngsters of six taking to it like young ducks.

The Secretary of the Territory secured us an audience with the Governor whom we found most cordial and deeply interested in the success of Marconi and particularly in the approaching inauguration of the Japanese service, in which we invited him to participate. We were shown through the Capitol which was formerly the Queen's palace, the handsome throne room remaining undisturbed.

At the City office we found Manager Hawk ably assisted by operators Carlisle and Walsh with a clerk and three Chinese messengers. Messages are transmitted direct to the Coast. We were handsomely entertained by Mrs. Hawk and her two attractive daughters.

We went by automobile to Kahuku, 52 miles North over very good roads and through fine mountain scenery. This is the transmitting station, in charge of Engineer Rau. His staff comprises Messrs. Stopp, Eklund, Graff, Harvey, engineers, and Messrs. Gorpf, Supervisor of traffic, and Anderson. Moe, Allen and Lynch, operators, Hackenburg, mechanician Raymond, Chief rigger and a corps of firemet., oilers and riggers.

(To be concluded)

Page Fifteen

POSITION REPORTS FROM BELLIGERENT SHIPS

In relation to the censorship of messages wherein helligerent ships report their positions to agents or owners, the Navy Department has announced that our stations may receive position reports from ships at sea and deliver these by land wire to addressees, but the transmission of such information by radio from our shore stations is not permitted.

EMPLOYEES' INSURANCE

Nearly a year ago the Marconi Coupany made an arrangement whereby employees in its service for a year or more should be insured in the sum of \$500; when in the service for five or more years, in the sum of \$1.000.

The Company also made an arrangement whereby operators on ships are insured against accident from the date of their employment until they have completed one year's service, after which the accident insurance ceases and they become insured under the Life Insurance Plan.

It should be borne in mind by all employees that while the Company, through its superintendents and other officers, endeavors to arrange that all employees shall make application for the insurance to which they are entitled under the Insurance Plan, it is the duty of each employee to make sure that such formal application is prepared, for the reason that until formal application is sent to the insurance companies, the insurance is not effective.

Any employees in the Company's service who have not prepared formal application for insurance should at once apply to the superintendent of their division.

WHEN EUREKA RECEIVED THE SOS OF THE SUBMARINE H-3



Survivor coming ashore; in breeches huoy; all abourd were saved



Sur! boat on its way to beach



H-3 ashore off Humboldt Bar Page Sixteen

Maintenance Matters

A Department for Technical Questions With Answers By P. B. Collison

All employees are invited to direct technical questions to this department

PERATORS arriving in New York are requested, before reporting to Mr. Duffy at 25 Elm Street, to hand to either Mr. Sawyer or to Mr. Collison a station report with one duplicate copy. One of these will be signed by this Department; it is then to be returned by the operator to Mr. Duffy, together with abstract reports. This method has been adopted to insure the M. R. I. Department obtaining a proper report.

Operators upon taking charge of another vessel report, in many instances, several tools of the spare box outfit missing. Let it be understood that these tools were supplied for the convenience of operators, and it is expected that proper care will be taken of them. Hereafter, if a portion of the spare box equipment is found missing, an investigation will be made and the missing articles charged to the responsible party.

W.C.T. asks:

Question (1) In connection with the 2 k.w. panel transmitting sets, is it permissable to use a primary power of 2500 watts?

Answer (1) The sot was designed for normal power rate of 2 k.w. and this is not to be exceeded under any circumstances. In case more than 2 k.w. is consumed the condensers receive excessive strain, which is bound to puncture them.

He adds "I have discovered a method of increasing the strength of received signals at the wave length of 600 meters. I have found that

grounding the antenna through the secondary winding of the transmitting oscillation transformer increases the strength of signals when receiving at the wave length of 600 meters.

This method has been tried out by a number of operators and seems to give good results. Grounding the aerial through the secondary winding decreases the self inductance of the primary circuit and permits a greater number of turns to be employed at the primary winding. This results in increased coupling, and may under certain circumstances, give increased strength of signal. This connection, however, has not proven efficient at wave lengths above 2000 meters.

F.W.B. asks:

Ques. (1) How often should I renew the gaskets of a quenched gap? Ans. (1) The gaskets need not be renewed unless they puncture. When the quenched gap is taken apart for cleaning, the gaskets should then be renewed and the plates thoroughly cleaned with hot water to remove any portion of the gaskets that may adhere. The plates of the quenched spark gap can be taken apart with less difficulty if the door on the casing of the rotary spark gap is opened and the transmitting key closed until the plates have wanned up.

Ques. (2) How can I determine when the quenched gap needs cleaning?

Ans. (2) This may be determined by several methods. A drop in the reading of the aerial ammeter generally indicates that the quenched gap is

Page Seventeen

not functioning properly. This can be proven positively by ohanging over the rotary gap, noting if normal antenna current is obtained with this gap.

A very reliable method is to use the gap tester furnished with A short cirspare box equipment. cuited plate can be determined in the following manner: Disconnect the aerial in order not to interfere with the operation of other stations; then hold down the key, at the same time bridging the spaces between the edges of the plates with the copper tip on the gap tester. If the sparking takes place at the gap tester, it is an indication that the plate is in good condition, particularly if a fairly good discharge is obtained. If no discharge is obtained, it is an indication that the gap is short circuited. If one or two gaps in the entire series are found to be short circuited, they should be cut out of the circuit by means of the small clips furnished especially for this work.

If it is necessary to take the gap apart, clean the plates with sandpaper, making sure that they lie on a smooth level surface, otherwise an uneveness may result which will seriously hinder the effectiveness of this particular gap. If possible, obtain polishing powder from the steward; by adding a little water, you can put a mirror-like finish on the sparking surfaces. When putting the plates back in the rack be careful not to take up the pressure too rapidly; wait a few moments to allow the pressure to become evenly distributed between the gaskets. Otherwise those plates nearest to the screw head will crush the gaskets, while those at the farther end will receive too little pressure to make an air tight joint.

EXECUTIVE OFFICE NOTES

The new Director of the Company, recently elected in the place of Major Samuel Flood Page, deceased, is Edward Walker Harden, of James B. Colgate & Co. Mr. Harden is a man of wide experience, having been financial editor of the New York Commercial and editor of the Chicago Daily Journal, as well as the vice-president and secretary of the last named publishing company.

L. E. Taufenback has been transferred from the Pacific Coast and is now assigned to the Head Office aud-

iting staff.

A. A. Isbell, of the Pacific Coast Division, has arrived in New York to spend a month or six weeks in the factory at Aldene.

EASTERN DIVISION NEWS

T. R. Hicks, a school man, is junior on the El Oriente.

John Doyle is back in the service as senior on the El Dia. Doyle tells us he is here to stay this time.

Some of the boys have caught hold of a rumor that Bill O'Neill, the king of the stationery room, is soon to be married.

Traveling Inspector N. J. Kearney is on duty on the Mexico. G. I. Martin is junior.

L. C. Nunn has been assigned to the Alamo.

Traveling Inspector E. N. Pickerill has returned to the Saratoga.

R. F. Guy is junior on the Northland. Louis Michael is in charge.

R. S. Henery, who recently came east from the Great Lakes, has been placed on the Gold Shell.

Carl Orloff has been transferred to the Suruga, bound for France. W. J. Neel is junior.

Pete Podell is holding down the job on the Jefferson.

Page Eighteen

Homer B. Ellis, of the Southern Division, was placed on board the Paulsboro by Mr. Heilig.

auisporo by Mr. Heilig. Plympton Berryman is now senior

on the Maracaibo.

E. Linton Martin was assigned to the Corning by Superintendent Morris, of Baltimore. Martin was in this Division once before.

I. Hoffman has returned from a trip to the West Indies on the yacht Diana. He is now on the Lysefjord. L. C. Waterstraut, a Great Lakes

L. C. Waterstraut, a Great Lakes man, is on the Munsomo, which trades to Cuban ports.

Stephen Hopk is visiting ports of the Atlantic Coast on the W. B.

Keene.

Wm. Varetoni is on the Margarcia. Louis Gallo, who was formerly in the service of the Gulf Division, has been assigned to the Proteus, as junior.

Tom Peskin was placed on the J. M. Guffey upon the lay-up of the

Wico.

R. S. Savage, who came east on the

Republic. has been transferred to the Lackawanna, a new-ly equipped ship. The Lackawanna is bound for Genoa.

W. E. Wood has left us to take up duty in the highpower service on the Pacific Coast.

Mitchell Gittleson is on the Radiant.

Dwight Howland is running to Galveston on the El Cid.

G. F. Wimpfheimer is junior on the Esperanza.

Page Nineteen

R. A. Worrell, an ex-Navy man, has been engaged for duty on the Matinicock

H. V. Grimshaw has been detached from the Coamo and is now working in our Elm Street shop.

H. A. Blackstone and H. L. Potts, late of the steamer Sibiria, are now on the City of Savannah. The Savannah has returned to the New York-Savannah run.

Paul S. Lewis has received an appointment to the Royal Arrow, a new Standard Oil boat.

R. S. Balzano is on the Healdton, running across.

E. T. Erickson has succeeded James Maresco as junior on the Comanche. Maresco returns to the Madison.

A. S. Snow, a Boston man, is making a voyage to South America on the Dawnite. The Dawnite is one of the fleet of new steamer schooners of the Standard Oil Company.

Roy Gardiner is on the William Rockefeller. This ship has just come out of the shipyard.



The Marconi station at Boston, located in the Filene Building, and a valuable adjunct to shipping in the busy New England port

E. A. Adickes is now junior on the City of Montgomery. Adickes is the best book-seller on the coast. C. D. Morgan was transfered from the City of Montgomery to the Apache. Jacksonville is nearer to Morgan's orange grove.

GREAT LAKES GOSSIP

Ship stations in the Lake Erie District have dwindled down to two: the Ashtabula and the Maitland No. 1, while Cleveland is the only land station in commission. Ice has been forming fast along the shores of Erie.

The wrecking tug Favorite has laid up for the season at St. Ignace, Mich., after successfully towing the Carolina to harbor. Operator Plaisted, of the Favorite, has been assigned to the second trick at Cleveland station, vice L. P. McPhail, resigned.

The Conneaut, with Operator Winslow Neely, recently departed from Port Huron for her winter moorings at Wyandotte, Mich. While passing through Lake St. Clair much ice was encountered, and while breaking her way through the ice fields she ran aground. Tugs and lighters were summoned from Detroit, and after lightering considerable cargo, with the aid of tugs she was safely towed to Wyandotte. Operator Neely is at his home in Rayland, Ohio, preparing for a trip to the Eastern Division.

M. J. Ellis, who has been temporarily in charge of the Duluth station, has entered the Ann Arbor service. E. S. Facks, second at the Duluth Station, has left for his home in Minneapolis.

The Chicago station has been moved to its new quarters at 1901 Transportation Building, and a new 2 k.w. 500 cycle panel set bas been installed.

SOUTHERN DIVISION NEWS

- H. M. Rodebaugh, of the Baltimore station, recently made a trip south on the Suwannee, relieving operator F. Hovelsrud, and was relieved on his return by H. H. O'Day, formerly of the late Powhatan.
- F. Hovelsrud has been assigned to the Ontario, relieving F. W. Feiler.
- T. A. Tierney, an Eastern Division man, has been assigned to the Delaware Sun, relieving operator A. K. Ault, who was bransferred to the Essex, relieving J. R. Lange.
- H. P. Jernigan was recently transferred from the Howard, at Providence, to the Tug Security at Wilmington, N. C., relieving P. H. Singewald. Noble relieved Jernigan on the Howard.
- G. E. Travis relieved G. E. Johnson on the Nantucket. Both are Boston operators.

Samuel Cissenfeld, who recently made a trip across the Atlantic on the Tug Britannia, upon returning was assigned to the Kershaw as senior operator, relieving Loyal W. Mc-Kee. Dr. Curtis is also on the Kershaw.

- R. W. Rice recently made a trip on the Borgestad to Tampico, relieving Adolph Doehler, who has again left the service to go into husiness ashore. Rice was relieved on his return by J. R. Lange, from the Essex.
- J. W. Brubaker, formerly junior on the Powhatam, has been assigned to the Cretan at Philadelphia, relieving J. F. Onens, resigned.

Allan Smith, a new man in the service, relieved F. C. Shelley as junior on the Merrimack.

- R. W. Rice has been assigned to the Grecian, relieving operator H. H. O'Day, who is now on the Suwannee.
 - T. M. Scharf, a new man in the ser-

Page Twenty



The Marconi station at Savannah, Ga. located at the Central of Georgia Railway terminal, George E. McEwen is manager.

vice, was assigned to the Juniata on the 12th of December last.

B. Wexler relieved II. B. Ellis on the Persian, as junior operator. Burh are new men in the service.

SAN FRANCISO CHANGES

J..M. Chapple and F. Hartman are acting senior and junior aboard the Alliance.

G. F. Shecklen, formerly of the highpower Marshall station, has been assigned senior on the Colusa bound for South American west parts

for South American west ports.
K. E. Soderstrom has joined the Cuzco as wireless operator and freight clerk, relieving A. V. Mattingly.

Page Twenty-one

J. E. Dickerson was assigned to the Norwegian ship Capto, when she was equipped with a P5 on Dec. 30th.

L. S. Grabow was placed in charge of the Governor on Dec. 16th. The position is now a combination wireless and freight clerk.

A. E. Evans has been recently transferred from the Marine Department to the San Francisco Construction Department.

H. W. Underwood has joined the Great Northern as Junior, relieving Evans.

J. H. Jensen, in charge of the Humboldt and a recent arrival from the Northern section, is now on his way to Balboa as operator in charge on the Geo. W. Elder.

H. G. Austin, who during the past month has spent considerable time at the hospital, was well enough to resume his dutier of operator and purser on the Hilonian, leaving San Francisco Jan. 13th.

F. W. Shaw, manager of the Hillcrest station, is on his belated 1916 vacation. A. W. Peterson is acting manager. R. Johnstone is on second trick, and E. T. Jorgensen covering third.

C. Lindh and E. Diamond are on the Lurline, as senior and junior respectively.

P. E. Riese and O. C. Belding are expected to join the Manoa as senior and junior respectively, on her next sailing from San Francisco.

F. M. Roy, of the semi-hi at Astoria, spent his annual vacation in San Francisco and vicinity. R. P. Woodford, formerly of the Marshalls high power station, acted as relief.

MARSHALL HIGH POWER STATION NOTES

So much has occurred since we last appeared in print it is hopeless to attempt to chronicle all of it. We will

therefore confine ourselves to a brief summary of the more important

Staff changes have been numerous and we extend a hearty welcome to Myron Walden, P. J. Townsend and W. E. Wood, the latter from the Eastern Division. As at preesn constituted, we have the nucleus of an excellent staff, and one that is well fitted to handle the large volume of traffic we confidently expect in the near future.

With the return of conditions to normal the KET Club resurces its activities and will do much to foster that esprit de corps which is so essential to the farmony of any staff, especially to one that is thrown upon its lossure hours. We intend to work enthusiastically with each other and pull together in a concerted attempt to make the KET staff a model for all the trans-oceanic stations.

The Christmas traffic surpassed all records and was disposed of in fine shape. Everybody worked with a will and the oheery personality of our division superintendent, who spent Christmas with us, gingered up the whole staff.

Bill Barsby has settled down to married life, made e'en more joyous by the heautiful silver and cut glass flower howl and stand presented by the KET Club

Fritz Schmiedecke and Ignatz Klock joined the staff during the early part of December and have since been handling the Western Union wire in a very satisfactory manner.

BETWEEN D'S AT KIE

The long looked-for Japan Service has onened, and every member of the staff is proud that his name may be enrolled as assisting in this great achievement.

The Marconi Social Club's Chairman will be pleased to receive correspondence and suggestions from the clubs of other stations.

Through the kindness of Mr. Nally, a Victrola has been installed in the hotel lobby and this, with our pianola, should thoroughly satisfy the musical cravings of all. Each menuer of the club is fined (unofficially) one record each time he goes to Honolulu. Our record supply is growing, even though some of the boys go to town on Sunday, when the music stores are closed.

Bill Anderson and his Cadillac are burning up gasolene and the roads lately to a considerable extent. Some one said that Bill was going to desert the four wheeler for a vehicle with two. Oid 1183 must have the dropsy or somethin, for a net is now installed underneath for the purpose of catching those parts which decide to leave without penvission.

Allan, a new grappler of atmospherics, is picking 'em out in nice style, but we are all quite worried, since he is such a nice looking chap, and does not mingle with the frivolous females, as he emphatically, but kindly, terms the fair sex.

Lynch, another new arrival, demonstrated his ability as a deep sea diver by doing some clever work in connection with the installation of a diving platform which the boys have recently constructed. Lynch stayed under water so long on several occasions that it was found necessary to send someone down to tell him it was time to come up.

OBITUARY.

George T. Williamson, aged 16, employed in the Aldene factory succumbed to heart disease on January 24th.

Page Twenty-two

Directors and Officers Marconi Wireless Telegraph Company OF AMERICA

WOOLWORTH BUILDING 233 BROADWAY, NEW YORK

Board of Directors

Sheffield & Betts Patent Counsel

Engineering Department

Roy A. Weagant Chief Engineer

Adam Stein, Jr.... Asst. Chief Eogr. Harry Shoemaker., Research Engineer

Auditing Department

Henry Heisel Auditor of Reccipts

Traffic Department

Hon. John W. Griggs

Senatore G. Marconi

Edward J. Nally John Bottomley

l late Dante diam	
John Bottomley	Commercial Department
J. Van Vechten Olcott	David Sarnoff Commercial Manager
Godfrey C. Isaacs	C Harold Poster
James W. Pyke	G. Harold Porter
	Asst. Commercial Manager
George S. De Sousa	Purchasing Department
James R. Sheffield	Purchasing Department
John L. Griggs	Lee LemonPurchasing Agent
Edward W. Harden	Manufacturing Deserve
- · - ·	Manufacturing Department
Executive Committee	Aldene, N. J.
Hon, John W. Griggs, Chairman	G. W. Hayes Superintendent
Senatore G. Marconi Edward J. Nally	
John Bottomley James R. Sheffield	Pacific Coast Division
	Insurance Exchange Bldg.,
James W. Pyke	San Francisco
How John W Criers Breeklant	William A. Winterbottom
Hon. John W. GriggsPresident	Division Suncrintendent
Thomas M Canana Masina Com	
Edward J. Nally	Thomas M. Stevens Marine Supt.
Vice President and General Manager	France Division
John Bottomley Vice President	
Secretary and Treasurer	Operating Department,
Secretary and Treasurer	25 Elm St., New York.
George S. De Sousa., Asst. Treasurer	Ernest T. Edwards Superintendent
	George W. Nicholls Dist. Supt.
M. H. Payne Asst. Treasurer	
Legal Department	Southern Division
	American Building, Baltimore, Md.
Hon, John W Griggs, General Counsel	
William B. Vansize. Patent Attorney	Maynard C. MorrisSuperintendent

F. Howard Mason....Superintendent Marconi School of Instruction 25 Elm St., New York Elmer E. Bucher Instructing Engineer George S. De Sousa.. Trassic Manager | Wm. Cockett...... Trassic Instructor

Gulf Division

303 Hennen Annex, New Orleans, La.

Julius A. Pohl.....Superintendent

Great Lakes Division Schofield Bldg., Cleveland, Ohio

Trans-oceanic Division

Charles H. Taylor Engineer

General Superintendent

Edw. B. Pillsbury....

