

MARCONI SERVICE NEWS

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By and for Marconi Employees



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GOVERNMENT OWNERSHIP OF WIRELESS

Extracts from the address of the Hon. John W. Griggs, President of the
Marconi Company of America

PRESIDENT Griggs at his appearance before the House Committee, analyzed the provisions of the bill and pointed out what their effect would be on the commercial companies. He reasoned clearly that the measure was decidedly unjust to the commercial companies, especially a great, beneficent enterprise such as the Marconi Company of America. He stated that for fifteen or sixteen years the Marconi Company had been operating to develop wireless and its business enterprise for the purpose of making a profit for its investors—the stockholders. "It has developed," said Mr. Griggs, "what is known as the ship to shore business, so that in connection with its manufacturing of apparatus which is carried on at its factory, it is making at the present time a trifling profit over and above its expenses but not enough to justify a dividend upon its stock. It manufactures apparatus of small capacity and leases it to ships of American registry that trade on the high seas, furnishes the ship with the operator, and gets a monthly rental for that. The law of Congress requires the ships to be equipped with wireless apparatus, and I think almost all of the American fleet on the Atlantic coast is equipped with Marconi apparatus. In order to render this apparatus more valuable to the lessees, the wireless company has established coastal stations at various points from Maine to Texas. These stations serve not only as points of communication with ships going up and down the coast and in order to transmit intelligence to or receive intelligence from the mainland; but they also serve as supply

depots for the Marconi Company. And the lessees of the apparatus, when they sign a contract, are assured by our company that with these stations at designated points along the coast, at any time they put into the ports where these stations are located, they can get any new parts for their apparatus which they may need, or they can get their apparatus repaired by one of our experts who is there on the ground for that purpose. Or if their operator has been disabled, has died, or from any other reason is disqualified, we can furnish them with another operator. So you see that the system of coastal communication stations, while there has been some suggestion here that they did not do a toll business with the ships that paid, is as indispensable to our plan of doing business as is any part of the plan. And I may say right here, now, that if the Navy Department were alone allowed to carry on these coastal stations, they would not be able to provide supplies, make the repairs and furnish the additional operators which the Marconi Company does, and which it is a part of our contract to give the lessees of which I think there are now about 500 sailing the Atlantic from one port to another."

Mr. Griggs further asserted that it had been admitted at the hearings by Commander Todd and Captain Bullard, that the object of the bill was to coerce the Marconi Company into letting go of its business, particularly its coastal stations, and that the proposition was to give the Navy Department unlimited authority to do commercial business in competition with men who had put their money into a

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mercantile venture, and to so conduct the Government end of it that eventually, in five years, they would be glad to sell out.

"They have a provision in this bill," continued Mr. Griggs, "that is so directly aimed at the Marconi Company that I must think it was the bull's eye at which they were shooting. They say that no company shall be licensed, and if licensed, it shall lose its license to operate a wireless station, long distance or any other, if one-third of its stock is owned by aliens, or if any officer of the company is an alien. Will anybody suggest to me, gentlemen, what danger there is to this country because Mr. Marconi is the vice-president of the company I represent? Will anybody suggest to me what danger there is to this country because one-third of the stock is owned by aliens, either in Great Britain or Italy? The company is amenable to the laws of the United States. And with what face can the American Government, through its telegraph companies, go to foreign countries and ask for a concession to land its cable on their shores? The concession for the Western Union cable to Great Britain will expire in two or three years. Suppose the English Government says, when asked for the renewal of that right, 'Gentlemen, you do not allow any American company that has British stockholders to do business with you. You are an American company. We do not see fit to allow you to renew your concession.' Is that the kind of spirit that you wish to foster between the nations of the earth?"

"Read the list," exclaimed Mr. Griggs, "an enormous long list, of lives that have been saved from sinking ships at sea! The benefits to mankind and to the world, in saving property and life, of the Marconi

Company, are enough for the Government, if it had a right to recognize those things, to give it an enormous bounty. Not only has this enterprise and this company done good to the world, but nobody comes with any charge against it of monopoly and oppression and misconduct.

"You are asked now to make in time of peace the Navy Department superior in this important branch of communication to the civil interests of the country, to the commercial and business interests. We think the law of 1912 affords adequate legislation as administered, and we do not think it ought to be modified or changed, except we are willing that Congress should make any provision they think is wise, so that in time of war or great emergency or tumult, the stations of the wireless company may be taken over by the Government, and all the employees sworn into the service of the Government. Or, we will go further if it can be worked out. We will agree that every operator in a station on American soil shall be sworn into the reserve service of the United States, so that he is bound to respond to any military law when the exigency arises."

A VACATION TRIP

Vice President Bottomley has returned from a sea trip to Galveston and reports having had a most enjoyable voyage, visiting also Brownsville, Houston and New Orleans. He traveled on the "Henry R. Mallory" and the "Antilles" and was well pleased with each ship. In New Orleans he made the acquaintance of the celebrated gin fizz and pronounced it all right if administered conservatively.

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Be A Self-Propeller

By Seakay

IN '08 I had a berth on the Cuffey, Port Arthur for Beverly, with the barge Shenango in tow. Bob Haynes was in charge of the Shenango's equipment and everything ran smoothly until we drove in sight of Nantucket, when old Neptune rebelled and broke the towing cable. We tried to run another but failed, so sails were used to give the barge headway.

The wind blew a hurricane, the sea got nasty, the waves engulfed the barge from bow to stern. Along about two bells—middle watch—I signaled Bob to have the "Old Man" steer east quick, or he would be on St. George's shoal. Well, sir, ladders are made to be used, but not by Bob, no, sirree! With one leap he was in the pilot house. Then the Shenango's answer: "Our sails have blown away and we are drifting helplessly awaiting the first bump."

After some anxious moments we discovered St. George's shoal was forty miles away and would be cleared with ease. The barge was picked up and all saved—but, what a night!

The moral of this is that some men are like barges broken loose, drifting helplessly awaiting the first bump; and some are like steamboats getting along by virtue of the driving power within them. You may see a steamboat hauling a tow of barges, but you will never see a barge hauling a tow of steamboats. Similarly, you will often see a vital, self-propelling man hauling a lot of laden but lifeless hulks after him, but you will never see a lifeless hulk hauling a string of energetic or ambitious men in his wake. The self-propeller is always out in front and the barge drags in the rear.

Many a man acts like a barge when he is really qualified for the steamboat class. He has engines and propelling gear, but he has never used them. Are you one of this class?

Surely you have better stuff in you. You do not need to have someone else eternally leading you by the hand or lugging you along at the end of a rope. You have engines of your own use them. You have driving power inside your hull; use it.

The men this Company wants and the men that get ahead are self-propellers. Give your self-propelling power a chance. Don't tag along behind like a barge. Get out in front under your own power like a steamboat. Get up steam and forge ahead.



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TEAM WORK

by P. H. Boucheron

There are many conclusions in reference to mutual understanding between junior and senior operators, which are quite beyond the control of division officials.

Meeting ones' prospective co-worker for the first time with a warm friendly smile and the kind of hand-clasp that goes with it will do much toward the beginning of a perfect understanding. There are cases here and there where discord prevails. As an instance of how far apart two men may actually drift a story is told of a ship operator who, while ill with fever, lay unconscious in his bunk for three hours before the steward discovered his serious condition and reported it to the ship's doctor. In the adjoining operating room sat his partner on watch, totally ignorant of the other's condition. This was the result of a trifling dispute they had shortly after leaving the home port, and for the following five days they had not exchanged one word. When there was anything to be said about their duties, they resorted to the childish method of leaving notes in the "log". Otherwise, they ignored each other; neither willing to break the ice of belligerency. This, of course, is an unusual case but it may show to what serious proportion a little misunderstanding may grow. How much better had these two had it out like good fellows, shaken hands and had it over with the same day. It would certainly have prevented the harboring of rancor and future resentment. There must be some truth in the assertion that constant association invariably leads to one of two things - friendship and understanding, or mutual dislike; and there is no doubt that the latter is

often brought about by the wear and tear of petty wranglings and disagreements.

Consider for a moment the close association that actually exists among operators teams. They are together at all times in all moods, all sorts of weather, under all manner of conditions; and when their ship docks at a port, whether it be foreign or otherwise, they invariably go ashore together where they have the same opportunity of observing the strange sights of distant lands. Some of these lucky voyagers really observe things and retain vivid impressions of the places visited, while others do not. But if they be of the right stamp little is overlooked of the wonderful opportunities of travel, and Mr. Senior and Mr. Junior Operators have equal chances of observing, exchanging views and ambitions, co-operating with each other in many small ways, thus establishing a comradeship at once beneficial and inspiring. Some operators are so enthusiastic and interested in the wireless game and other kindred subjects that these desirable qualities become contagious to others who unconsciously imitate them and later develop latent possibilities leading to future success.

Was there ever such an opportunity as this for obtaining first-hand knowledge of the characteristics of our fellows? There is nothing like this ashore in the average business environments, where co-workers toil together for a number of hours each day under strictly business conditions. When off duty they lead totally different lives and rarely find out as much about each other's make-up as Messrs. Senior and Junior Operator do.

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BRASS TACKS, DRIVEN BY C. J. ROSS



WORK

There's a weary little fellow with a pencil in his hand,
Vainly struggling with a problem that he cannot understand;
Not a very complex problem, but the simplest little sum,
Is a great and dreadful labor when the answer will not come.
Anyway, he must keep trying, for there's dozens more to do
Many dreary pages of them, till one works the whole book through.
Where's the sense to all this study, when you find at every turn
That no matter what the task is there is still lots more to learn!

Later on, in a big office sits our subject awed with fright,
All around are others like him, striving on with all their might.
When he's learned the work allotted, gains the next place in his turn,
Still another's always leading, someone else's work to learn.
So he takes his stubby pencil with a brave determined smile,
And attacks the awkward figures he's arranged in rank and file;
There's no time to waste or squander, there's no time to play or fool,
For here the competition is found harder than in school.

Ten years more (he is the boss now) still he finds he cannot stop,
All the other work seems easy, since he's finally reached the top;
Each new day brings forth more problems, bigger things he must decide,
And at night he sits up thinking—stacks of papers by his side.
At his front gate stands an auto—how he longed for that machine—
But he finds no time to use it, days and nights pass like a dream;
"Never mind," I'll soon retire," says he, "Then I'll rest and play,
And the problems that perplex me like the mists will fade away."

—L'ENVOI—

Pretty tough to be a worker, pretty hard to do things right,
When one looks through years of labor and can see no end in sight;
You and I may stand beside him and can whisper in his ear
All the old and threadbare maxims well designed to carry cheer.
But we know we're talking idly, in our inmost hearts we know
That the way grows ever harder, never mind how far we go;
And though many is the number of the pages that we turn
In our endless Book of Knowledge, there is still so much to learn.

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CLIMBING THE MARCONI LADDER

What boy has not read that exciting book by Horatio Alger, regarding the office boy who raised himself to be one of the executives. Yet we have right in our midst just such an instance in real life in the person of Henry C. Heisel of the Auditors Office.

Wearing short trousers, Henry started with the Marconi Company in 1912 as office boy at 27 William Street.

New York, and has since advanced step by step to the rank of Auditor of Receipts, at the age of 21. He owes his advancement to his persistent, intelligent and faithful service.

What better incentive does a young man need to spur him on to higher things, or what better proof that the Marconi Company holds out great advantages for the future?

A RISING YOUNG ORATOR.

Mr. David Sarnoff, Commercial Manager, gave a talk recently before the officers and employees of the American Steel Export Company, New York, his subject being Commercial Wireless, past, present and future. There was a large attendance and much interest was manifested. Mr. Sarnoff is a gifted speaker.

A DISTINGUISHED VISITOR

M. Sayeki, engineer in charge of the Japanese high power station at Funahashi, near Tokyo, is making a tour of this country inspecting wireless plants, having been entertained at the Marconi stations in Hawaii and California. He will return home via the Siberian Railway.

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Advice on Abstracting

Conducted by

C. F. Krauter

Operators are cordially invited to direct questions to this official department, which is designed to clear up all points pertaining to the making up of abstracts. Questions on technical matters will not be answered. The Operator's name and division must accompany each inquiry, but will not be printed.

CORRECTION.—Due to an error in printing last month the third paragraph was not made clear. It should read:

Until further notice, all MSGs exchanged between agents of the Pacific Mail and China Mail steamship companies in Japan, and Pacific Mail and China Mail ship stations through the intermediary of Japanese coast stations, will be charged for as follows: etc.

T. E.—A paid service advice sent by a ship's operator to a Canadian coast station contained seven words. The Cape Race operator informed the ship that they would not charge a minimum on same. As it is my understanding that the United States Radio Laws stipulate that a minimum computed on a ten-word basis is applicable, will you kindly advise me whether a minimum is applicable to service messages or not?

Ans.—The International Regulations say:

"Paid services advices, and the prepaid replies themselves, shall be treated, in the radiotelegraphic accounts, in all respects like other radiotelegrams."

Therefore, if the ship and the shore station both apply a ten-word minimum for radiotelegrams the same minimum should be applied in paid service advices.

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Note.—We are advised that radiograms originating in or destined to countries other than the Gold Coast, and transmitted through the Accra coast station, are subject to an extra land line charge of four cents per word, in addition to the usual radio and cable charges.

The extra charge is for the land line service between the Accra coast station and the connecting cable office at Accra.

Example:

The total tax on a radiogram destined for New York and transmitted from a ship to the Accra coast station would be charged for as follows:

Ship tax.

Coast tax.

Land line: Accra radio to Accra cable office.

Cable: Accra cable office to New York.

Note.—When other line tolls are due on messages addressed to the Hydrographic Office, ship operators will show in the remarks column who the tolls are due from, in the following manner:

Due from Hydro, Washington.

Due from Hydro, Portland., etc.

John.—Is the New London (WLC) coast station operated by T. A. Scott Company, Inc.?

Ans.—No, it is operated by the National Electric Signaling Company.

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H. E. C.—Of what use is the accepted number on sent messages? Is accepted, or sent number used on cash receipts?

Ans.—Matter of record. The accepted number on sent messages and the accepted number on cash receipts must agree.

(2).—When abstracting a message received from a ship to be sent to a coast station, is the name of the coast station put under column four? In an ordinary received, THAT would indicate through which station the message CAME.

Ans.—The name of the coastal station is entered in both cases.

(3).—Refer to the three received messages following:

(a) Check 16

*Service instructions
Via Seagate*

John Jones
Steamer Newyork
Will meet you on arrival
Smith

(b) Check 12

*Service instructions
Via Seagate*

John Jones
Steamer Newyork
Will meet you on arrival
Smith

(c) Check 12

John Jones
Steamer Newyork
Via Seagate
Will meet you on arrival
Smith

is a, b, or c correct? Many stations do not put via so and so after the address; service instructions must be entered, hence there is a difference of two words in the check.

Ans.—Regardless of whether a coast station receives a radiogram over the telephone or land line, the operator will count and charge for

in the address, in addition to the name of the addressee and the name of the ship, THE NAME OF THE COASTAL STATION THROUGH WHICH IT IS TO BE TRANSMITTED.

Any message received by a ship without the name of the transmitting coastal station in the address, shall be challenged by the receiving operator.

The word "via" may be omitted at the option of the sender, but if sent, it must be counted and charged for.

Note—Abstracts shall not be made out in lead pencil or duplicating ink. Some operators have used the ship's Ocean Wireless News typewriter, which has a duplicating ribbon in it. SUCH ABSTRACTS WILL BE RETURNED FOR CORRECTION. Only ink and non-copying typewriter ribbons shall be used for the making up of abstracts.

Note—Reports coming into Head Office show debits, credits, and steamship companies under the heading of "Pacific Steamship Company," and upon investigation it is found that the only reason the heading "Pacific Steamship Company" was used, is because some one of the following companies had the word "Pacific" incorporated in its name:

Pacific Mail Steamship Company
Pacific Alaska Navigation Company
Pacific Coast Steamship Company
Pacific American Fisheries
Pacific Cable Company
Pacific Steam Navigation Company
North Pacific Steamship Company
Southern Pacific Steamship Company

and others. It is obvious that the heading "Pacific Steamship Company" is misleading. The full name of each steamship company must be spelled out.

THE
MELTING POT

Wherein A Fusion of Human Elements is Effected by DAVID SARNOFF

EXPRESSION

WE are here to express the forces which are within us; were this not so, it would be difficult to explain our existence. Hence we must cultivate the habit of expressing our ideas, our feelings, and our capabilities, each in a proper manner. If we fail to do this, who will know that we possess them? Of what value to ourselves or our fellows are the ideas born in our imagination and pregnant with possibilities, if allowed to die unexpressed? Our feelings are given us to excite to action. Unless we express them, do they not fail in their purpose?

Life abounds with channels for expression; the opportunities are many. If, through work, one seeks expression, one has, indeed, chosen the richest field of all, and one's acts will reveal in due time the inward forces which have inspired them. It matters not, whether your talents run to music, art, craftsmanship, literature, science or WIRELESS TELEGRAPHY.

To succeed, you must give expression to your talents, for unexpressed, they are not talents. Let us aim to so express ourselves that others may understand clearly. Whether by speech or by action, let your method be direct and forceful, remembering that "knowledge is power," but its ultimate good must come through expression.

"Let your light so shine before men, that they may see your good works."

An optimist is a man who can make lemonade out of the lemons that are handed to him!

Born.—On New Year's day to Mr. and Mrs. H. E. Campbell, an eight pound daughter. Mr. Campbell is Acting Engineer-in-charge, at Bolinas, Cal.

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At Honolulu — Homeward bound

MARCONI MEN ON THE WING

*A Few Interesting Observations by E. B. PILLSBURY
(Conclusion)*

During the busy hours the transmission at Kahuku is by Wheatstone automatic. The staff has formed the Marconi Social Club for promoting entertainment, buying records, magazines, etc. The Company has provided a player piano, phonograph, billiard table, tennis courts, traveling rings, etc., and swimming parties are daily affairs, a fine beach being directly in front of the buildings. Mrs. Rau is the charming chatelaine of the station.

Koko Head, the receiving station, is 12 miles from the city, reached by automobile. Although completed, the station is not yet in commission, being held in reserve until duplex operation is required, when both

sending and receiving operators will be stationed here, the two stations being joined by overhead wires.

The Japanese service was inaugurated during our visit, and aroused the keenest interest in the city.

It was our privilege to act as hosts in entertaining as the guest of the company the eminent Japanese radio engineer and author, Mr. Eitaro Yokoyama, of the Ministry of Communications, Tokyo, who is traveling around the world in the interests of his department. He was a charming guest and left many souvenirs of Japan among the staff.

Advantage was taken of an oppor-

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tunity to pay a week-end visit to Kilauea, the largest active volcano in the world near Hilo, and it was certainly an awe-inspiring sight. The crater is a depression of considerable extent 300 feet below the surface, composed of dull colored molten lava, traversed in various directions by lurid streams of liquid fire, and dotted with a dozen or more fountains spurting liquid fire 50 or 60 feet into the air from a depth of 60 miles, continually dying out and belching forth in a new place. The whole molten area is rising at the rate of 3 feet per day and is expected to overflow in the near future.

We sailed away from the islands regretfully on the Great Northern loaded to the ears with Native floral wreaths, and in moving out from the dock broke innumerable strands of serpentine confetti ribbons plentifully supplied by the stewards, the shore ends being held by our friends, while Native swimmers surrounded the ship diving for coins, and boys of a larger growth dove and jumped from the upper deck for our entertainment. We came across in 3½ days and were happy to be greeted on landing, by Mr. De Sousa.

Together we proceeded to Marshall, 50 miles up the Coast, where our receiving station is finely located on a bluff with a picturesque bay at its base. Manager Baxter entertained us and introduced us to his staff comprising Messrs. Barsby, Lange, Mohl, Gilbert, Palmer and Schecklin, operators who were handling Hawaiian and Japanese traffic as steadily as on a cable.

Going thence to Bolinas, on a point projecting into the ocean 25 miles North of the Golden Gate, and reached by a spiral highway across a mountain range, we found our sending station for the transpacific cir-

cuit located on a bluff close by the beach, with mountains as a background. Only engineers are stationed here, the sending apparatus being controlled from Marshall by means of land wires. The staff consists of Engineer-in-charge, Isbell, and Messrs. Campbell, Baber, Forbes, Bailey, Riddle and Ritter; Chambers, machinist and Davidson, chief rigger, and a corps of riggers, oilers and firemen. The buildings and grounds are fully completed, presenting a handsome and homelike appearance. A social club known as the Hermits, is in a flourishing condition. The company has provided a player piano which, with a billiard table and fine tennis courts, help to while away the hours off duty and the result is a happy family, gracefully adorned by Mesdames Isbell, Davidson and Campbell.

We visited the marine station at Hill Crest in the outskirts of San Francisco and were rewarded for a stiff climb up the hill by a wonderful view of the city and the Golden Gate. This station communicates with ships far to the westward of Hawaii. The able manager is Mr. Shaw and his operating staff consists of Messrs. Johnstone and Peterson.

Returning to San Francisco, Mr. Winterbottom took up his new duties as Division Superintendent, while Mr. DeSousa and I proceeded homeward where we arrived somewhat jaded but eager for a reunion with our families and the Christmas holidays.

MARCONI NIGHT SCHOOL

The inauguration of an evening class at the Marconi School, 25 Elm street, N. Y., for the purpose of training future operators has met with great success, with thirty-five students enrolled, the average age being 21. The enthusiasm and progress

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already displayed is very commendable when it is considered that the majority of these men are employed during the day, and are willing to give five evenings a week to study. Their future services to the company will certainly prove to be valuable. The instructors are Messrs. Bucher and Cockett.

MERITED PROMOTIONS

C. E. Bence has been promoted from managership at Juneau, Alaska, to manager at Seattle and is succeeded at Juneau by W. J. Manahan, formerly operator at that station.

Frank Chapman, who has been manager at Miami nearly three years, has been appointed superintendent of the Southern Division in place of M. C. Morris, who has been granted indefinite leave of absence on account of ill health.

LINES TO BOWERS ON THE SINKING OF HIS SHIP

Hello, Al! We're glad to see you, looking none the worse for wear, when it comes to S. O. S.'s, say, believe me, you're right there.

'Twas no picnic? We believe you, when you tell us that the sea, may be all the rage in August but when the Thermo's minus three, and the wind is from the North'ard and a howling gale at that, no use going any further, Al, for here is where we doff our hat.

Bet in your mind you pictured "Loyall's tears a'streaming from his eyes, buying "Floral Decorations" with inscriptions of "Here Lies," and you thought of home and wifey and you vowed you'd never more (if old Davy didn't get you) leave again the "Blessed Shore."

But we're mighty glad, Al, that the

Fates were good and kind, and there isn't any "Gloom Cart" that we're walking slow behind.

So, Old Chap, congratulations, for you've proved yourself a man, by the way you handled traffic on the sinking "POWHATAN."

OUR NEW DIRECTOR

Mr. Edward Walker Harden, who succeeds the late Samuel Flood-Page on the board of directors is a native of Kansas. He has devoted many years to editorial work, having served the St. Louis Republic, Chicago Tribune, New York World, New York Commercial and other metropolitan journals. He was with Dewey at the battle of Manila as a special correspondent and his report, via Europe, was the first to reach America. Mr. Harden is well known as the author of "Financial and Industrial conditions in the Philippines", and is a director in the corporation of James B. Colgate and Co.

AN INSTANCE OF GOOD JUDGMENT IN TIME OF PERIL

WHILE the wireless operator on the Great Lakes does not have the opportunity for long distance communication given his fellow operators on vessels plying the Atlantic and Pacific Coasts, he does have frequent occasion to display his courage and judgment in times of disaster. Emergency situations are very frequent on the Great Lakes during the winter months, due to the heavy fogs, snow storms and ice jams.

Courage and good judgment of the familiar Marconi brand is once more displayed in the good work of Operator Willard Ferris, who was the lone operator on board the Carolina, when on December 3rd she ran aground on Stony Creek Reef at the entrance

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to Sturgeon Bay, Lake Michigan. Operator Ferris relates his experience as follows:

As we were nearing Sturgeon Bay we ran into a heavy fog. It was about 6:05 p.m., and I was preparing for supper. A sudden jolt and heavy grind told us that something had happened. I immediately returned to the wireless room and obtained our position and a few conditions from the captain. I then called "CQ" and was answered by the Milwaukee station, to whom I gave the information the captain had given me.

The ship was fast settling and her lower compartments were filling with water. Our captain sent word to get in touch with Manitowoc, and have them send a tug to our assistance immediately. I transmitted the message to Manitowoc, but could not get his O.K., by reason of the noise on the ship. I was about to call Manitowoc again, when the power went off.

As I started for the engine room I found that the water had flooded the lower decks, putting out our fires. Knowing we had a shipment of six automobiles on board, I got permission from the captain to remove the storage batteries from the machines, and with the assistance of some of the crew carried them to the wireless cabin.

The set aboard the Carolina is a 1-2 k.w. 120 cycle panel. I wired the batteries up, obtaining a total voltage of 36 volts, and by adjusting my rheostats for full power and using six gaps in the quench gap I obtained a reading on the hot wire ammeter of 1-4 ampere. It was also necessary to short circuit the auto-starter as there was not enough power to raise the solenoid. I also used a wire in place of the generator field blade of the double-pole switch, which also turned on the blower motor, thereby saving

any power which might have been used up in the blower motor for the motor generator itself.

I soon had the set working and was able to communicate with Manitowoc and Ludington, a distance of seventy-five miles. I then learned that our message requesting a tug had been picked up by the operator at the Milwaukee station, and he informed us that the tug Artic had left Manitowoc on her way to our assistance.

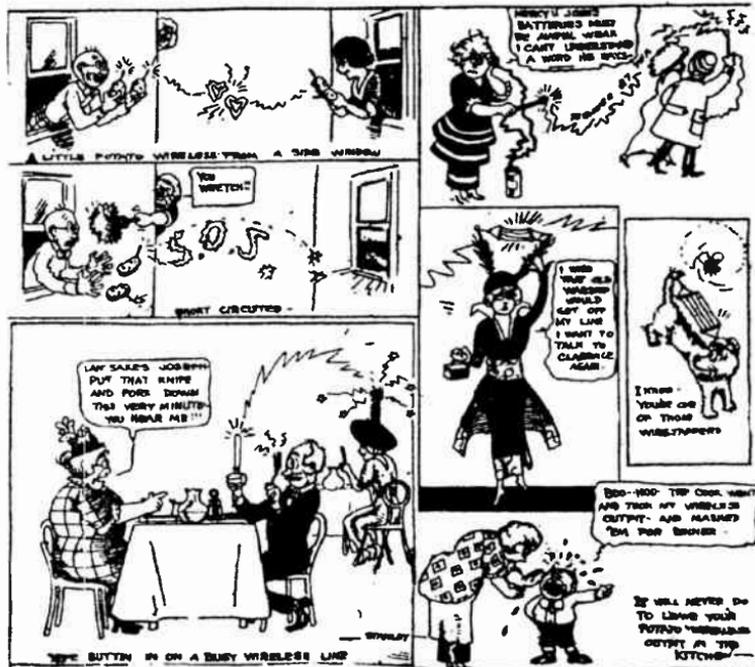
I was in constant communication with Ludington and Manitowoc all night. About noon the next day the tug Artic arrived and we received steam from her boilers to run our generator and the pumps located on the upper deck. On the following morning the steamer J. R. Crouse arrived with several large pumps and a couple of divers. They immediately set to work lightening what cargo was left on board, including the automobiles from which I had taken the storage batteries. I returned the batteries to the machines before they were taken off, as I had no further use for them.

It was an all-day job on the part of the crew and the wreckers to patch up the holes and pump the water out of the lower compartments. This was about accomplished when a heavy sou'wester came up and compelled the tug Artic to make for shelter. The J. R. Crouse stood by until 3:45 the following morning when our ship started pounding badly.

The captain gave orders for every one to leave. I notified Milwaukee and Ludington that our power would soon be off and that we were leaving for shore, leaving the Carolina to what we thought was her doom. She was later recovered, however, by the wrecker Favorite and safely towed to harbor.

MARCONI SERVICE NEWS

Carry Your Own Wireless Outfit



LOYALTY APPRECIATED

Carap Owen Birne, Texas,
January 30, 1917.

Mr. F. H. Mason,
Supt. Great Lakes Division Marconi
Company,
Cleveland, Ohio.

Dear Sir: I wish to express my appreciation of the good will which the company has shown toward me as one of its operators in the service of our country during the Mexican trouble.

The way in which the company has looked after the welfare of Mr. Main and myself, and the interest displayed in us while we have been on indefinite leave of absence, certainly will do more than anything else could, to make me swear fidelity to the Marconi.

Thanking you again, I remain
Yours respectfully,
Geo. P. Aldridge,
B Company Ohio Signal Corps,
Camp Owen Birne, Texas.

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MARCONI SERVICE NEWS

Maintenance Matters

A Department for Technical Questions With Answers

By P. B. COLLISON

All employees are invited to direct technical questions to this department

Ques. (3) How do you "season" a quenched gap?

Ans. (3) Allow the condenser to discharge through the gap for a period of one hour, making sure to disconnect the antenna. If a considerable amount of traffic is on hand, it may be dispatched without seasoning with some loss of efficiency; but a gradual seasoning will at the same time take place. During this test use a moderate amount of primary current in order that the plates shall not be excessively heated.

F.B.H. asks:

Ques. (1) Why is it necessary to have the local battery current flow through carborundum crystal in a certain definite direction?

Ans. (1) In order to take advantage of the peculiar volt amperage characteristic of the carborundum crystal the local battery current must flow through the crystal in the direction of minimum resistance. When an alternating current of radio frequency passes through the crystal its voltage is added on to that of the battery in one direction and subtracted from that of the battery in the opposite direction; hence, the head telephone experiences a change in current corresponding to the difference between the maximum E.M.F. and the minimum E.M.F. during a complete cycle.

The proper connection aboard ship is best determined by an experiment when a given station is transmitting.

In order to facilitate the taking of the inventory aboard ship, operators should leave all spare parts such as

leyden jars, fuses, insulators, motor brushes, etc., in plain sight in the operating room.

Please note that if the Inspectors find in the operating room apparatus other than that supplied by the Marconi Company, it will be taken up and brought to this office, and proper action taken. A general order issued by the Marconi Company forbids the use of apparatus other than that furnished by this Company.

There is no objection to the use of "pet" crystals of carborundum but the use of all other crystal or mineral detectors will not be permitted.

Ques. (5) Must the primary and secondary circuits of a quenched spark gap be set in resonance in order to obtain a uniform spark discharge?

Ans. (1) The capacity of unequal condensers connected in parallel is the sum of their individual capacity or $C = C_1 + C_2 + C_3$.

Ans. (2) For condensers in series:

$$C = \frac{1}{\frac{1}{C_1} + \frac{1}{C_2} + \frac{1}{C_3}}$$

Ans. (3) The transmitting key is not placed in the generator field circuit in any type of Marconi set.

Ans. (4) A quenched gap is seasoned by allowing the spark to discharge through it for one or two hours.

Ans. (5) A better note is obtained from the quenched transmitter when the primary and secondary circuits are in resonance.

F. B. C. WRITES

Ques. (1) In a receiving circuit a

MARCONI SERVICE NEWS

transmitter is .0005 microfarads. The variable condenser in series with the antenna circuit of a receiving set has maximum value of .0025 microfarads.

Ans. (3) The transmitting condensers generate high frequency oscillations which when transferred to the antenna circuit propagate the electromagnetic waves of wireless telegraphy. The condensers in a receiving circuit permit the receiving apparatus to be tuned to the frequency of the incoming waves, thereby assuring the maximum degree of efficiency.

Ans. (4) It takes the same amount of energy to charge condensers of equal capacity regardless of their size or shape. A condenser whose capacity is distributed over an unusually large surface may waste part of the charge by brush charge and corona losses.

W. H. B. inquiries concerning the type of apparatus now in use at Seagate Station.

Ans. The new transmitter at Seagate Station has a certain value of inductance and capacity give a certain wave length. Is this true regardless of the mechanical construction of the condenser?

Ques. (2) Is the total capacity of the short wave condenser in a transmitting set greater or less than that of the condenser in the primary circuit of the 106 tuner?

Ques. (3) Is the function of the condenser in a transmitting set any different than in the receiving set?

Ques. (4) Does it require more energy to charge a condenser, the capacity of which is distributed over a large area than one that is distributed through a small area, the capacity of the two condensers being the same in either case?

Ans. (1) Yes.

Ans. (2) The capacity of the

standard short wave condenser of the Seagate Station is a 3 K. W. non synchronous rotary spark set which gives a spark note of 1,000 per second. The note approximates that of a standard 500 cycle set. Seagate's transmitter is tuned to the three wave lengths just as in the case of the standard 2 K. W. set.

It would tend to eliminate interference if operators would make use of three standard waves. Seagate station can change instantly to any of the 3 waves when requested.

Our inspectors report that several of the operators are in the habit of slipping a piece of card board between the short circuit contacts of the antenna switches in order that they may hear the note of their spark while transmitting. These contacts were placed on the switches to protect the head telephones and detector and therefore, they should not be interfered with. This may account for operators turning in their crystals for renewal.

The note of the spark may be heard in the telephone by simply placing the head near to the aerial leads or quenched gap while transmitting. In sets having the new type "1" aerial switch, this is the only way the note can be heard.

Operators can wind up a coil of wire of three or four turns and connect a carborundum or any crystal and a pair of head telephones to it. If the coil is hung near the transmitting panel, the note of the spark will be reproduced with considerable strength.

Note—The M. R. I. Division desires once more to call operators' attention to the fact that before requisitions for renewal of punctured Leyden jars, worn out phone cords, insensitive crystals etc., will receive recognition, such parts must be returned to the M. R. I. office at 25 Elm street.

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MARCONI SERVICE NEWS

EXECUTIVE OFFICE NOTES

As soon as the break in diplomatic relations with Germany was announced, the following telegram was sent to the President of the United States:

N. Y., February 3, 1917.

"His Excellency, Honorable Woodrow Wilson,

"President, U. S. of America,
Washington, D. C.

"The Marconi Wireless Telegraph Company of America, in accordance with the Act to Regulate Radio Communication approved August thirteenth, nineteen hundred and twelve, hereby places at the disposal of the Government for use in any emergency, its entire organization and personnel, including its high power and coastal stations wherever situated, its manufactories, workshops and trained staff. Myself, associate officials, and staff are subject to your orders or to the orders of any particular department of the Government which may need our services. I shall be glad to proceed to Washington for conference if you so desire.

(Signed) Edward J. Nally,

Vice Pres. and Gen. Manager.

Mr. E. J. Nally, Vice President and General Manager, has returned from Montreal, where he attended the quarterly meeting of the directors of the Canadian Marconi Company.

Mr. David Sarnoff, Commercial Manager, has returned from Washington, where he spent several days on business of the company.

EASTERN DIVISION NEWS.

Dan Duffield has returned to the service and is on the motor ship Brammell Point.

Henry Flack is on the steam schooner Sunlite, headed for South

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American ports.

Dwight Howland is on the Moreni, of the Standard Oil fleet.

N. J. Smith has been promoted to senior on the El Siglo. C. S. Rosenthal, a school graduate, is junior.

George Draper is on the Arapahoe with John Lohmann.

Charlie Gould is running to Galveston on the San Jacinto.

L. C. Nunn is senior on the Coamo.

A. G. Berg has returned from his Australian trip, and is now on the Silver Shell.

H. C. Bigelman is on the Frederick Luckenbach.

McIlvery Berryman, a brother of Plympton Berryman, has been engaged for service on the El Dia.

J. G. Woltal has been transferred from the Princess Anne to the Alamo. He is senior, of course.

J. Martineu and T. M. O'Herin are senior and junior, respectively, on the Atlantic transport liner Manchuria.

J. E. Cronney is on the Guiana, running to the West Indies.

H. P. Jernigan has been assigned to the Security by Superintendent Morris.

R. C. Steadman, an ex-navy man, is on the Philadelphia, Red D, as junior.

J. W. Roche has been appointed to the Kroonland as junior.

I. G. Philbrook, who comes from Boston District, is on the Mayaro, which runs to the British West Indies.

W. L. Hille is junior on the Antilles.

W. M. Wimpfheimer has followed in the footsteps of his brother Gustave and has become a commercial operator. He is on the El Sol.

R. F. Shipley is operator on the

MARCONI SERVICE NEWS

Harry Luckenbach bound for Australian ports.

Ben Lazarus and Thomas Cerio have been placed on the Crofton Hall as senior and junior. Cerio is fresh from school.

Frank Rosenquist and H. E. Cohen are on the Morro Castle.

Louis Martinez is senior on the Munamar.

P. J. Donohue is junior on the City of Memphis.

Paul Nisley is on the Bantu

H. L. Crandall and E. J. Ermatinger are on the Finland.

Leslie Hatton is on the Vacuum, bound for Liverpool.

Harry Slater has transferred to the Rio Grande. Slater likes this ship.

C. L. Fagan and P. H. Goldsmith are on the Cherokee. Goldsmith is a recent graduate of our school.

H. T. Solway has been re-engaged and is on the Byron.

W. C. Clarkin, a school man is junior on the El Oriente.

F. W. Payne is making a trans-Atlantic voyage on the Norwegian steamer Admiralen.

Wm. Sirkin has left the Apache for the City of St. Louis. Sirkin is senior. Boa is with him.

J. W. Allen has returned to this division; he was assigned to the Gulf Coast.

J. W. Leathers was engaged at Baltimore for the steamer Dayton.

H. H. Parker was placed on the Healdton by Mr. Heilig.

W. C. Beltz has received an appointment to the Philadelphia of the American Line. Beltz is junior.

R. W. Leason has returned from the Mexican border. Leason had been serving with one of the New York regiments. He is now operating out of Boston.

J. M. Bassett is on the one-man

ship Wilmore.

John F. Flagg is on the Lenape.

Lester Brown is on the Alabama, running south.

W. W. Neeley, a Great Lakes man, has been assigned to the Standard, plying between New York and Tampico.

H. B. West is on the Santa Catalina.

J. N. MacGowan, a Pacific Coast man, has succeeded J. F. McQuaide on the Lewis Luckenbach.

J. M. Boyle was assigned to the new Ward Line steamer Cauto by Superintendent Stevens. The Cauto is just out of the shipyard.

The steamer California, Operator H. S. Scher, on board, will be operated by the Eastern Division hereafter.

W. J. Varettoni has been transferred to the Gulf Division.

W. O. Smith, a Southern Division man, is on the Margarcia.

T. R. Hicks is on the Perfection.

E. A. Adickes has returned to the City of Monterey.

A. A. Crum is on the Navajo, a one-man ship.

Lester J. LaRue is on the Lamport and Holt liner Byron.

Charles Sandbach has been transferred to the high-power division. Sandbach is stationed at the Broad Street Office, New York.

F. J. Shannon is on the Westwego. Shannon is a newcomer from Philadelphia.

L. H. Graves, of the Gulf Division, was assigned to the Larimer by Superintendent Pohl.

A. W. Johnson, a new man, is junior on the Zulia.

E. T. Darlington was assigned to the Guantanamo owing to the lay-up of the Gargoyle.

MARCONI SERVICE NEWS

SOUTHERN DIVISION NOTES.

J. J. Harrigan, Manager of the Virginia Beach Station, was wedded on January 23rd, to Miss Pauline Luebeck, of Baltimore, and has our heartfelt congratulations.

T. Edward McCauley has been relieved on the Kershaw by H. M. Batchelder, a new man in the service. McCauley was transferred to the Swanee as senior operator, relieving J. E. Bell.

The Gloucester is again in commission, the wireless being in charge of E. A. Brown, with John F. Sullivan as assistant.

S. Cissenfeld has been transferred from the Gloucester to the Howard, relieving V. Zito, who is on sick leave.

L. W. McKee and T. M. Scharf have been assigned to the Juniata as senior and junior respectively. The Juniata has just been placed in commission again.

A. L. Speace and D. Dudley are now on the Cretan in place of George Diehl and R. W. Leason.

J. H. Weikel, a new man in the service has been assigned to the Schooner Delaware Sun, relieving T. A. Tierney.

Walter Neumann, who was until recently on the Sucraso, has been detailed as junior on the Dorchester, relieving A. Russell, a new man in the service. Russell was assigned to the Sherman.

M. Ott has gone to the Santa Rita, relieving A. J. Tomasso.

J. W. Channell, a new man in the service, has been relieved on the Toledo by W. J. Ferris, at Philadelphia.

Geo. I. Gerson has just completed the installations of a two k.w. standard set on the W. G. Warden and auxiliary equipments on the British

Steamers Maple-leaf and Japanese Prince, at Newport News.

J. F. Wyble, Construction Engineer of Baltimore, recently equipped the Italian Steamer Tito Speri with a type C set, the Dutch Steamer Winterswik with a new $\frac{1}{4}$ k.w. set and the American Steamer Sherman with a standard two k.w. set.

E. M. Murray, Construction Engineer of Philadelphia, installed a type "C" equipment on the Motor-ship Sylene.

SPOKES FROM THE HUB OF THE UNIVERSE (BOSTON)

L. W. Sayward is now on the City of Augusta.

E. A. Brown, a new man, made one trip on the Augusta. Brown was several years in the Coast Guard service, and recently made several trips to France on the British steamer Arrino.

T. J. Welch and L. F. Kendall, both New York men, were assigned to the Nacoochee at Savannah.

H. E. Ingalls is on the waiting list, the good ship Halifax having been laid up at Halifax, N. S.

E. W. Frost is on the Prince Arthur, plying between Jacksonville and Nassau.

A. A. Grant is on the Prince George.

N. W. Wilson has returned to his old home, the steamer Belfast.

Operators Howland and Smith who came to Boston with the Bunker Hill have returned to New York.

Operator G. Washington Butterfield, formerly of the palatial steamer "Kroonland," made three trips on the "Calvin Austin."

A. E. Ridley is now on the Calvin Austin.

P. S. Killam, junior on the Governor Cobb, has been transferred to the Mascotte operated by the Gulf Division.

MARCONI SERVICE NEWS

NOTES FROM KAHUKU

Mr. Walter Eklund has been elected Chairman of the Marconi Social Club, which is now in full swing. The first dance was successfully pulled off on the 27th of January and was highly successful.

The pianola, victrola and pool table are well patronized and afford the staff much entertainment.

Mr. Stepp has added an automobile and Mr. Eklund a motor-cycle to the collection of machines. When the boys go out for a spin one can't see them for dust.

BOLINAS HIGH POWER NOTES

The entire staff regrets the recent departure of Mr. Ishell, to New York where he has gone on official business. Forbes is spending many thoughtful hours trying to decide if he shall replace the recently sold gasoline cycle with one of a similar disposition, or buy a nice gentle four wheel petrol burner. We recommend the latter, since it requires the minimum leg length, and maximum pocketbook, which fits A. C. to a T.

The local temple of education has opened for the spring semester with the result that Ed Howard is making tri-weekly pilgrimages to a valley not far away where resides the fair principal of the above. Most of the boys find it necessary to obtain their higher education via the correspondence route, but for some reason or other Howard is terribly strong on personal instruction which he says is the best method of obtaining an education, and in this case we doubt him not.

Every member of the staff is anxiously awaiting the first of the month, and one, more so than the rest. He has been appointed "In Charge" of the lately organized mess conducted

by the Hermits Club of this station. The principal function of this mortal is to see that the "Boys" are given an abundance of good things to eat at a minimum cost, and should figures compiled at the end of the month show a cost in excess of the minimum, it is likely that an exceedingly fast foot-race will be staged between the Station and depot, with the "In Charge" decidedly in the lead.

Honors seem to be divided evenly between Riddle and Bailey as the official speed burners of the station. They both have Excelsiors now but intend getting motorcycles later on.

Chief Rigger Davidson and his worthy assistants, Lundy and Lemberg have gone the renowned Mr. Lawson one better by discovering many "Leaks" in the Powerhouse. These by the way were in the window frames so it was water instead of information which leaked.

Campbell, Ritter and Chambers attended a New Year's Party, which was an entire success. The Marconi Boys carried off the honors of the evening. A high kicking contest was suggested, during a lull in the merry making, and Chief Hermit Ritter, being in a joyous mood, signified his willingness to compete. Needless to say, he won the contest hands down as it were, since in demonstrating his ability as high kicking artist, one of his trilbys became so entangled in one of the electrical fixtures, hung from the ceiling, that it required the combined electrical and mechanical ability of Campbell and Chambers to free him. Ritter says we will have to do our own kicking in the future.

Between tennis, motorbiking, cart-riding, pool, the pianola, and the recently received phonograph, the boys are enjoying the simple life.

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OF AMERICA
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233 BROADWAY, NEW YORK

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