

RADIO NEWS

HAPPY NEW YEAR



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ATLANTIC CITY, N.J.

Club Copy

Editor-

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Office-

Union National Bank.

-Editorial-

The New Year Greetings flashed across the Country last Saturday night shows very clearly where the trouble lies in Radio Communication. The Amateurs have proved their worth and that in a case of necessity they are competent to lend a hand in the protection of the United States. Anyone who listened on this night will recall the rosy manner in which the commercial stations as a rule carry on their business. No system at all. Who ever can make the most noise gets his message thru. But as a result the amateur gets the blame for the interference caused. For self protection in the future it would be a good plan to take a logue of interference of commercial stations among themselves, because sooner or later, there is sure to be a big fuss scheduled, and more the evidence the better.

Our PAPER will keep you abreast of the work of the Teck' Committee.

--Notes of Interest--

The word "antenna", meaning a feeler, or to reach out and feel if O.K for receiving but not for transmitting wires. Let's stick to "aerial". JH

The looped aerial is a thing of the past. JH

Ford's wireless bill on the Oscar II was \$50,000. JH

In the Collin's arc system the current is 5000 v- DC.. JH

To calculate the working strain of hemp rope, square the circumference in inches and divide by 8 for the allowable strain in tons. Drexel Inst..

To find the safe strain for wire rope, multiply the square of the circumference in inches by .3 for iron and .8 for steel wire Result in tons. The breaking load is about three times the safe load. Drexel Inst.

No. 14 rubber covered copper wire should carry 12 amps.. No. carries 17 amps.. No. 10 carries 24 amps.. JH

Sal-ammoniac is a good flux for copper and brass. JH

-HAAS-

H- He wrote two dashes and a dot
A- And then a fly came 'long.
A- When he looked again he saw.
S- Such dots that must be wrong
"3RQ"

Digest of Talk

by

H J Jeffries

on

Source of Energy.

Lecture No.1

SUN source of energy.

The Universal Ether is the medium that conveys the energy to us.

Mode of conveyance wave motion. Matter that holds it as potential or latent energy until wanted.

Such as coal.

The sun is the center of our Solar system; it is also the primary source of manifest energy in matter on our planets. This energy is conveyed to us thru the universal ether. in waves of different lengths and frequencies. They all have the same speed, 186,000 miles per second.

The different lengths give them their different frequencies. These different frequencies produce different results and have been given various names, such as electric waves, heat waves, Red waves, Violet waves, X-rays & C..

You will notice that the short waves are generally termed rays, Heat waves if out into 3rds become red waves.; if into 4ths, a violet ray. The

etherical electric wave and heat waves must not be confused with heat and electric waves in matter as known by the layman for the electric and heat waves as they come to us from the sun dont have either heat or electricity in them, for neither heat or electricity will go thru a perfect vacuum.

These waves produce heat and electricity after they get here by coming in contact with certain forms of matter that by its construction, is an absorber and opaque to this form of wave. Glass is transparent to both

this as well as the light waves & rays and admits of their passage without any visible results. But glass will not admit by radiation the passage of either electricity or heat that is produced by these waves. Vegetation

is more or less opaque to these waves particularly the heat waves. It is also a good absorber of them, and we find a rich supply of this energy stored up in our coal deposits. It is given however a different name now and we still have the potential or latent energy locked up in the coal or kindred substance, and to get this unlocked and to work again from it's long sleep of centuries, and change it from this latent state in matter and put it in motion again.

How this is done will be show in the next lecture to be given by Mr Chas. Seymour.

Some will appear here in digest in our next issue.

-Casey-
SF

Mr Casey has purchased the 1st set of me Doughty. He will have the operation of this set as soon as he procures a license.

FS

Mr Smith will shortly purchase a new receiving tuner.

Deep Matter
NJ

- Every thing moves.
- In cycles.
- Nothing touches.
- Always interspaces.
- Transparent.
- Opaque.
- Absorbitive.
- Reflect.
- Retract.
- Conduct.
- Insulate.

NJ.

Minniek.

has a two wire aereal running from the flag pole on the Arkansas ave fire house.

Club Interests

SRQ has completed a 55 ft pole on the roof of his apartments. Two wire aerial will adorn the top of same. The pole is artistically painted black and white, alternatively every 12 inches. We did not know Mr Haas was a "Futurest".

Charles Abrams of New York was electrified at his home recently owing to high power wires coming in contact with his aerial.

Mr Casey of Connecticut Ave has a one wire aerial from his home to the top of the Pierpont Hotel. On the Hotel he has recently erected a pole about 30 feet in height. This is probably the highest mast in Atlantic City.

Mr Samaha now operates his coil on a 4 V storage battery.

Sun spots send out waves.

NJ

Telegraph lines have been known to have been put out of operation owing to the energy in the air. The batteries were disconnected and this energy used to operate the instruments.

NJ

G. Gramer says energy is created when object comes to a stop.

Open core transformers have proven to be the best for long distance work. Such as:-
Fire Island with a 5 kw can be read in the Gulf; Galveston Texas, off Cape May; West all over the coast. He uses a bank of old Marconi open core coils. His motor generator is 240 cycles, and the coil power 5 kw.

A lot of noise from the spark is no evidence of your getting exceptional distance.

The "big disturbance" in our midst and which was accused of being a fat German setting on his key has been found to be Dok. Wescott and his Krey coil. We wish it had been the Germans, then we could have had the noise canned.

Detectors under air-tight covers give the better results.

Telefunken receiving variable condensers are of the Doñots type of 48 plates, ten centimeters radius, one m.m. thick.

The French steamship La Province has a Bellini-Tosi direction finder.

Chas. Seymour has completed his aerial erection and is now the proud owner of a beautiful white mast about 55 ft high at the front of the garage where the station is located.

3if recently spent a week in Ocean City one Afternoon and took in the wireless.

The grip has not affected Haas to any great extent, if he ever had it as we note he has not as yet lost his voice.

Mr Burgeous, of Ocean City, has the N.A.W.A pennant flying from the top of his mast.

A little stretch of wire.
A little peice of coal.
A telephone receiver,
And then a ten foot pole.

II

A spark coil for ur Christmas.
Then a pair of plugs.
And every one who sees you
Will tell you that you are "bug".

JH

The German insisted they wireless in Germany 300 yrs ago, as against the 200 yrs claimed by the Englishman. He rests his claim on the fact that when an old castle was unearthed no wires were found under it which prove that they must have had wireless.

JE

Quenched Gap

J; Haas.

(Continued.)
(Last issue.)

These extra cooling plates are necessary since the spark can be quenched with better efficiency while the gap is cool.

While the gap is in operation the sound cannot be heard more than 10 ft from the gap. The power is supplied to the gap at a voltage of about 6000 v. and is furnished by a closed core transformer of very small dimensions. They use closed cores because it is amperage they want and not voltage. The efficiency of the transformer is very high, on account of the low secondary V.. A 500 cycle generator supplies the current at 110. This generator has two windings, both field and armature, mounted on pole pieces which are attached to the iron frame. Between the poles on which these windings are placed, a mass of laminated iron with many teeth, revolves, driven by an electric motor. The speed of the motor is variable changing the tone of the spark. This enables the quenched sets of the Germans to be disguised during war operations.

The military operators use a coil of wire mounted so as to be carried, connected with a buzzer and detector for determining the pitch of the signals.

The condenser has heavy paraffined paper for a dielectric. This is possible because the voltage is only 6000 V. Therefore large capacity is secured in small space. A heavy wire variometer is used for tuning.

On Army sets, 4 variometers are carried so that the wave length can be brought from 200 meters to 10,000 meters. The different wave lengths are calibrated and are shown by a pointer which moves over a scale.

The two KW sets give 18 amps in the aerial.

The receiving sets have a mono-tone receivers consisting of a strip of steel which is tuned to vibrate at a certain frequency. This enables absolute selectivity.

The fones have a small adjustable knob and a calibrated scale of frequency. When an operator wants a station he looks on the chart for the other station's frequency, then tunes his motor generator to that frequency.

With this system jamming is not experienced.

JH

German Wireless Sealed.

The wireless apparatus on the German steamer Bulgaria, interned at Baltimore, Md., was sealed by the United States Naval Officers from Washington on Dec. 13.

Greatest Depth.

The greatest depth yet sound ed is 31,200 ft. near the Island of Guam. The worlds highest mountain set in this place would be 2000 feet under water. The pressure is 10,000 pounds to the square inch. A pine beam which held upon the mouth of the trawl, 15 ft long, was crushed to a pulp at a depth of 18,000 feet. Fit-Bits.

Government Monopoly.

As a lesson from the war, Radio Chief recommends Federal Control of all coastal radio stations. The whole matter is being prepared by a board which will present their ideas to the Government, and great efforts will be made to impress the necessity of government control of all radio operations.

Illicit Plant.

To date no illicit plants have been discovered by the Navy Board. All the early complaints sent in to the government at the early stage of the present war, have been traced out, but nothing else has been found.

The art of radio has itself an air of mystery to the uninitiated, and it may be that this class of embryos are the cause of a great deal of excitement.

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